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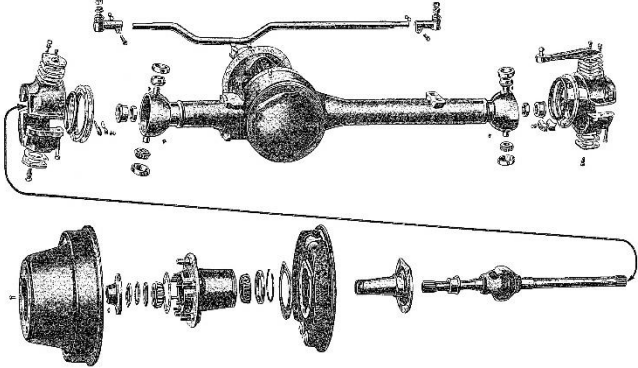
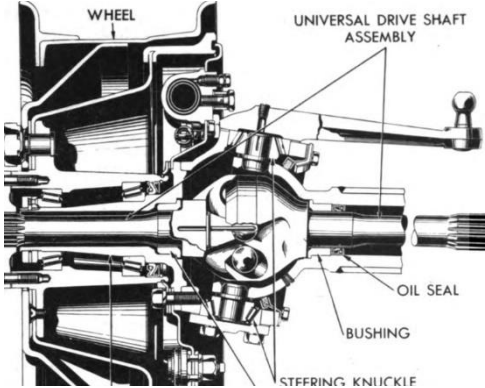
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DODGE CIVILIAN and MILITARY TRUCK MODELS												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
GROUP 1. FRONT AXLE												
												
TRACK WIDTH	61-3/8	64-3/4	64-3/4	64-3/4	64-3/4	64-3/4	64-3/4	64-3/4	64-3/4	64-3/4	62	64-3/4
Axle Differential Carrier Assembly Gasket	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Axle Differential Carrier Assembly Oil Seal	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Axle Differential Carrier Assembly-3rd Member	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes


DODGE CIVILIAN and MILITARY TRUCK MODELS

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Axle Differential Locker – LockRight Part Source		1210	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210
Axle Drive Flange	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Axle Drive Flange Gasket – Fel-Pro J26288	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Axle Housing Oil Seal	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Axle Locking Hub – Selectro Part Source	11027-01 (Discontinued - Interchanges w/1954-55 Chevy/GMC ½ ton Truck) Part Source	11022-01	11022-01	11022-01	11022-01	11022-01	11022-01	11022-01	11022-01	11022-01	11022-01	11022-01
Axle Locking Hub – Superwinch Part Source	N/A	400508	400508	400508	400508	400508	400508	400508	400508	400508	400508	400508
Warn M13 Style New Production Hubs Part Source		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Axle Locking Hub – AVM Part Source		408	408	408	408	408	408	408	408	408	408	408
CLARY FLANGE – Power Wagon, M-37/WC	Gov't Contract DA-04-200-ORD-448 by the CAM TOOL	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909	G-741-8327043 NSN# 5340-00-040-1909

DODGE CIVILIAN and MILITARY TRUCK MODELS


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	CO. Oakland CA—Dissolved Part Source											
Manual Locking Hub Protectors	<p align="center">If interested in a set, post a request on the forum, see TIPS Group for installation.</p> 											
Manual Locking Hub Protector Studs	<p align="center">https://arp-bolts.com/ Part - APJ2.500-1SB (Stud, 8740 Chromoly, Black Oxide, 7/16-14 in. Base Thread, 3/8-24 in. Top Thread, 2.5 in. Length)</p>											Part Source
Axle Shaft Inner	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Axle Shaft Outer	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Axle Shaft UJ	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Axle Steering Arm	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Axle Steering Arm Ball	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Axle Trunnion Pin	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Axle/Steering Knuckle Bronze Bushing	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Drag Link Tube	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Dust Cover Package – Axle End	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Dust Cover Package – Steering End	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

DODGE CIVILIAN and MILITARY TRUCK MODELS

MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Felt Pressure Spring-Retainer	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knuckle Flange Felt Seal-Joint	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knuckle Flange Felt Seal-Retainer	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knuckle Flange Bronze Upper Cone	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knuckle Flange Lower Cup	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knuckle Flange	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Link Package	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Pinion Oil Seal CC-856864 – Front/Rear	Yes											
Pinion Oil Seal CC-928114	Yes	Timken 6127, SKF 18950 – 1.875 Shaft Dia., Housing Bore Dia. 4.010, Seal Width 1.000 (Leather) 47.630mm 101.850mm 25.400mm										Part Source
Pinion Oil Seal	Yes	SKF 18924 – 1.875 Shaft Dia., Housing Bore Dia. 3.501, Seal Width .438 (Nitrile) 47.63mm 88.90mm 11.11mm										Part Source
Pinion Inner Oil Seal Upgrade to Nitrile Seal	No	This seal replaces the leather inner oil seal of the oil seal housing. It is a transmission double lip seal to replace leather seal prior to installation by driving the old seal out. The Double Lip Seal# is 472439 & 331227H.										 <p>Replaces leather seal</p>
Timken/National# 472439,		SPECS. = Bore – 1.875, Housing Bore – 2.623, O.D. - 2.629, Width – 0.312										
Timken/National# 331227H		SPECS. = Bore – 1.875, Housing Bore – 2.623, O.D. - 2.629, Width – 0.374										
CR(SKF)# 18580		SPECS. = Bore - 47.62MM, O.D. - 66.68MM, Width - 7.95MM										

DODGE CIVILIAN and MILITARY TRUCK MODELS												
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Pinion Yoke Speedi-Sleeve# 99187 Part Source	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dura Sleeve Parts Source												
Steering Knuckle - Front	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knuckle/Spindle - Rear Axle Housing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Steering Knuckle Speedi-Sleeve# 99281 Part Source	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Steering Knuckle Bushing	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tie Rod Ends	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tie Rod End Right – GMC CCKW 2.5 Ton	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Model-Chrysler F-375 - Full Floating Front Axle – WDX to WM300 Truck												
Dana 44, 3,000 Pound Front Axle – 1957 to 1971, W100 & W200 Trucks	Identified by 8 Bolt Ball Seals											
Dana 44, 3,500 Pound HD Front Axle – 1957 to	Identified by 12 Bolt Ball Seals											

[Part Source](#)

DODGE CIVILIAN and MILITARY TRUCK MODELS												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
1971, W100 & W200 Trucks												
Dana 60 – 1 st Generation	Identified by its straight axle tubes, passenger side differential drop, 10 bolt asymmetrical cover, a "60" cast into the housing, and 30 spline axles.											
Dana 70 – 4,500 Pound Front Axle – 1958 to 1974, W300 Truck												
Used Hubs, Parts, Rebuild Kits												
	Part Source											
Axles	Axles available from VPW, DC Truck Parts, Veterans Vehicles, and Torque King- see link											
	Part Source											
Axle Conversations	Conversion to Dana 60 Axles - Discussion											
	Article											
DynaTrack ProRock 80	Axle conversion to 60 front, 80 rear - Article											
	Article											
Knuckle Grease	Steelco 488-1 is an excellent grease, no oil separation and very clingy.											
	Part Source											
Drag Link End Plug 1/2" Socket Set	Walden 1130 (15/16 x 1/8) and 1131 (1-1/8 x 1/8). 1130 is used on WC 1/2, 3/4, ton, FFPW, M601/614. 1131 used on WC 1.5 ton, M37, M43											
												
1940 TO 1978 THIRD MEMBER PART INTERCHANGE												
	1940 (1 TON) VD20, VD21	41-47 (1 Ton) WD20, WD21	41-43 WC (3/4 Ton), 2 nd Series	48-56 (1-1/2 Ton) Route Van, EU Series	54-56 (1 Ton) C1D6, C1D8, C3D6, C3D8, Route Van – DU Models	46-78 (1 Ton) WDX, (X3-WM300), M37, M43, M601, M615						
Housing	Yes	Yes	No	No	Yes	No						
Differential Case – 8-3/4 Ring Gear (4.30)	No	No	No	No	Yes	No						

DODGE CIVILIAN and MILITARY TRUCK MODELS												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Differential Case – 8-3/4 Ring Gear (4.88)			No	No	No	No	No	No	Yes		No	
Ring & Pinion, 4.30 Ratio			Yes	Yes	No	No	No	Yes		No		
Ring & Pinion, 4.88 Ratio			Yes	Yes	No	No	No	Yes		No		
Pinion Shaft (Long)			Yes	Yes	Yes	Yes	Yes	Yes		Yes		
Pinion Shaft (Short)			Yes	Yes	Yes	Yes	Yes	Yes		Yes		
Side Gear (2), 16 Splines			Yes	Yes	Yes	Yes	Yes	Yes		Yes		
Side Pinion (4)			Yes	Yes	Yes	Yes	Yes	Yes		Yes		
Side Gear Thrust Washers (2)			Yes	Yes	Yes	Yes	Yes	Yes		Yes		
Side Pinion Thrust Washers (4)			Yes	Yes	Yes	Yes	Yes	Yes		Yes		
Housing			No	No	Yes	Yes	Yes	No		Yes		
Differential Case – 9-5/8 Ring Gear			No	No	Yes	Yes	Yes	No		Yes		
Ring & Pinion, 4.89 Ratio			No	No	Yes	Yes	Yes	No		Yes		
Ring & Pinion, 5.83 Ratio			No	No	Yes	Yes	Yes	No		Yes		
Gear, Tire Size, Engine Speed Calculator	When changing parts to determine impact.										Calculator	
Best MPG	Combination of tire size and gear ratio.										Chart	
GROUP 2. REAR AXLE												
Axle Shaft Long Left	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Axle Shaft Short Right	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Pinion Yoke Speedi-Sleeve# 99187 Part Source	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Model-Chrysler R-65 - Full Floating Rear Axle – WDX to WM300 Truck												
Dana 60, 1959 to 1971 Trucks												

DODGE CIVILIAN and MILITARY TRUCK MODELS

MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
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Dana 70, 1957 to 1971 Trucks

WC/PW/M37 Flange Gasket Fel-Pro# 4390

4,000 Pound HD Axle 6 Bolt Flange Gasket W300 Truck and M375 Motor Home (1 ton) Fel-Pro# 55046

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GROUP 3. HAND BRAKE

Hand Brake Band	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hand Brake Band	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hand Brake Drum	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hand Brake Drum Yoke Speedi-Sleeve# 99212 Part Source	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hand Brake Lever Assembly	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Pawl Rod Assembly	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

GROUP 4. HYDRAULIC BRAKES

Brake Hose Front – Raybestos BH4900	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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DODGE CIVILIAN and MILITARY TRUCK MODELS

MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Part Source												
Brake Hose Rear – Raybestos BH4900	Yes	No	No	No	No	No	No	No	No	No	No	No
Brake Hose Rear – Raybestos BH8116 Part Source	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brake Shoes – Raybestos 89 (Discontinued)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Master Cylinder – Raybestos 22976 Part Source	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
Master Cylinder – Raybestos 544 up to 1966 (Bore 1.250) Part Source	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Master Cylinder – Raybestos 36359 (1967-71)	No	No	No	No	No	No	No	No	Yes	Yes	No	No
Master Cylinder – Raybestos 785 (Bore 1.500)												
Master Cylinder Kit – Raybestos MK1 Part Source	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes
Master Cylinder Kit – Raybestos MK199 Part Source	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No

DODGE CIVILIAN and MILITARY TRUCK MODELS

MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Master Cylinder Kit – Raybestos MK71 Part Source	No	No	No	No	No	No	Yes	No	No	No	No	No
Wheel Cylinder – Front Left – 3597 (Discontinued)	Yes	No	No	No	No	No	No	No	No	No	No	No
Wheel Cylinder – Front Right – 3598 (Discontinued)	Yes	No	No	No	No	No	No	No	No	No	No	No
Wheel Cylinder – Rear Left – 3595 Part Source	Yes	No	No	No	No	No	No	No	No	No	No	No
Wheel Cylinder – Rear Right – 3596 Part Source	Yes	No	No	No	No	No	No	No	No	No	No	No
Wheel Cylinder – Front/Rear Left – 9375 Part Source	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wheel Cylinder – Front/Rear Right – 9376 Part Source	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wheel Cylinder Repair Kit, Front – Raybestos WK7 (Discontinued)	Yes	No	No	No	No	No	No	No	No	No	No	No
Wheel Cylinder Repair Kit, Rear – Raybestos WK6 Part Source	Yes	No	No	No	No	No	No	No	No	No	No	No

DODGE CIVILIAN and MILITARY TRUCK MODELS												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Wheel Cylinder Repair Kit – Raybestos WK6 Parts Source	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pre-bent Stainless-Steel Brake Tubes (5/16 From MC to Frame Tee, all other lines 1/4 inch) Part Source	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Bleeder Screw	NAPA# UP11410 (Hex/Tread size 7/16-20)										Part Source	
SS Speed Bleeder Screw	Speed Bleeder# SB71620										Part Source	
SS Cylinder Slewing	Karp's Power Brake, Upland, CA (1-909-985-0800)										Service	
Brake Booster Rebuild Company	Power Brake X-Change, Inc., 336 Lamont Place, Pittsburgh, PA, 15232, (412) 441-5729 or 800-580-5729										Part Source	
Adjustment of Brake Shoes	<p>1. With the wheel off the ground and the inspection covers removed, turn the cam adjusters so that a 0.006-inch feeler gauge is a snug fit between the upper end (toe) of each brake shoe lining and drum.</p> <p>2. Turn the anchor bolts (bottom bolts) inward (towards axle) to decrease the clearance between the lower end (heel) of the brake shoe lining and the drum to 0.006-inch. This will cause the brake shoe to move down and out, increasing the clearance at the toe of the lining to approximately 0.012-inch, resulting in proper centralization of the brake shoe.</p> <p>3. Hold the anchor bolts and tighten both anchor bolt nuts to 90-110 pound-feet of torque after completing the adjustment.</p> <p>NOTE: FFPW Inside diameter of new brake drum is 14.155 to 14.165, max wear limit is 14.220</p>											

DODGE CIVILIAN and MILITARY TRUCK MODELS

MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
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Problems with Leaky Brake Cylinder Connections											
	<p>If you have a connection that leaks at the brake hose after you installed style tip 2, you will also need to install a new connection. Style tip 2 will not seal if the inverted flare is scored inside the connection, it's too short. Type 1 will seal a scored inverted flare.</p>										

Disk Brake Conversion Kits	<u>DC Truck Parts - Job Rated & Vintage Power Wagons</u>											
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New 14" Brake Drums	<u>Midwest Military</u>											
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Banjo Bolt Sealing Washers	When regular copper, brass, or crush washers will not seal the brake fluid around the banjo bolt. Inside washer is 7/16 ID or 11.1MM and 1/2 ID or 12.7MM.											<u>Part Source</u>
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Shoes and Stainless Steel MC/WC Lining	Brake and Equipment Warehouse, Minneapolis, MN											<u>Service</u>
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U.S.A. Made Brake Parts	Brake Performance 1-866-756-5536. Provide OEM part number for cross-reference.											<u>Part Source</u>
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GROUP 5. CLUTCH												
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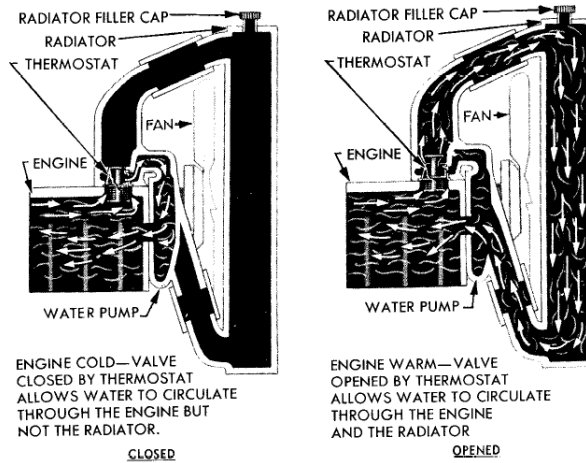
10/10.5 Clutch Disk/Cover (10 Splines x 1 inch)	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clutch Bearing Sleeve	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clutch Pedal Rod	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

DODGE CIVILIAN and MILITARY TRUCK MODELS												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Clutch Pedal Shaft Lever	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clutch Pedal Shaft/Bushing (Early 56)	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Clutch Pedal Shaft/Bushing (Late 56)	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	Yes
Clutch Release Bearing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clutch Release Fork (Right End - .753 to .755) [Wear Limit - .750] (Left End - .748 to .750) [Wear Limit - .745]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Clutch Release Fork Flange	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clutch Release Fork Flange Bushing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clutch Release Fork Lever	Yes	No	No	No	No	No	No	No	No	No	Yes	No
Clutch Sleeve Tension Spring	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Housing (Late 56)	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	Yes
Housing (Up-to early 56)	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Clutch Kit (10", 10 splines, 1"D)	1477, 1728											

DODGE CIVILIAN and MILITARY TRUCK MODELS												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
(Discontinued)												
Clutch Disk Alignment Tool (1" Dia.)	Pioneer# TAT5349										Part Source	
Clutch Pilot Bearing (Crankshaft)	SKF# B286, BCA# PB286HD										Part Source	
Clutch Release Bearing	SKF# N1087, Timken# 2065, NAPA# 1087										Part Source	
Flywheel Ring Gear (146 teeth)	Pioneer# FRG146XF (6V & 12V), NAPA# 6003010										Part Source	
For Older Dodge Trucks	H.R. Clutch										Part Source	

GROUP 6. COOLING

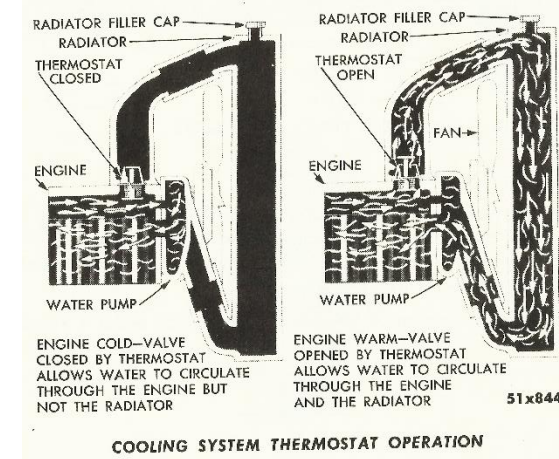
“Job Rated Era” – 1946 to Early 1952



1946 to 1960 Radiator
CC-1189699



Late 1952 to 1971








1961 to 1971 251 Engine
Radiator CC-935263



Desert Water Bag	CANVAS SPECIALTY, PO Box 22268, Los Angeles, CA 90022-0268 – (323)-722-1156	Part Source
Fan Belt (M37)	[CC# 1268843] Gates# TR24562 (Military Spec. Belt) or NAPA# NBH2524562 (56 O.D. x 3/4W), U.S. Army Tank Automotive Command# 8699828, Gates# 7565 (Military Spec. Belt - multiple belt application)	Part Source
Fan Belt (WC ½ Ton 6V)	[CC# 617171] Gates# TR24515 (Radio Body)	Part Source
	[CC# 614966] Gates# TR24489 (All except Radio Body)	Part Source
Fan Belt (WC ¾ Ton 12V)	[CC# 965923] U.S. Army Tank Automotive Command# 8699828, Gates# TR24530 (Military Spec. Belt) or NAPA# NBH2524530 (53-5/8 O.D. x 3/4W) [3/4 Ton Carryall and Command]	Part Source
	[CC# 617171] Gates# TR24515 (Military Spec. Belt) or NAPA# NBH2524515 (52 O.D. x 3/4W) [3/4 Ton Carryall, Command and Weapon Carrier]	Part Source
	[CC# 614966] Gates# TR24489 (Military Spec. Belt) or NAPA# NBH2524489 (49-1/2 O.D. x 3/4W) [3/4 Ton Weapon Carrier, Weapon Carrier w/Winch, Ambulances, Gun Motor Carriage]	Part Source
Fan Belt (WC ¾ Ton 6V)	[CC# 1191449] Gates# TR24476 (Military Spec. Belt) or NAPA# NBH2524476 (48-1/4 O.D. x 3/4W) [3/4 Ton]	Part Source
Fan Belt (WC 1.5 Ton 6V)	[CC# 928408] Gates# TR24489 (Fan & Generator)	Part Source
Fan Belt (WDX – WM300 1960)	[CC# 1191449] Gates# TR24476 (Military Spec. Belt) or NAPA# NBH2524476 (48-1/4 O.D. x 3/4W)	Part Source
Fan Belt (WM300 1961 – 1968)	[CC# 4173458] Gates# 7570 or NAPA# NBH259570 (57-5/8 O.D. x 3/8W)	Part Source
Fan Belt (X3-WM300 1969 – 1971)	[CC#2843277] Gates# 7575 or NAPA# NBH257575 (57-1/2 O.D.)	Part Source

Governor Belt - King Seeley Governor	Gates# 6839 or industry# 6839 (39 O.D. x 1/2W) [Grounds Maintenance Equipment]	Part Source
Radiator Cap (Early 1/2 Ton, Non-Pressure)	[CC# 776379] Gasket – Unknown, Models - T-202, T-203 & T-207 (early 1/2 ton's)	
Radiator Cap (Early 3/4 Tons, Pressure)	[CC# 923006] -- NSN# 2930-00-734-9034, Gasket - CC# 920746, Models - T-214 (early 3/4 ton with deep filler neck). To use the later 3/4 ton cap you must use a 1/2 inch spacer.	
Radiator Cap (Later 1/2 Ton, Pressure)	[CC# 919077] Gasket -CC# 920746 -- NSN# 5330-00-424-3475, Models - T-211 & T-215 (later 1/2 ton's)	
Radiator Cap (Later 3/4, 1.5 Tons, Pressure)	[CC# 927692] -- NSN# 2930-00-734-2405 [Stant# AAH0801], Gasket - CC# 920746, Models - T-214 (later 3/4 ton) & T223 1.5 Ton. This cap will work with all 1/2 ton's and later 3/4 tons. The gasket fits in the bottom of the filler neck and is separate from the cap unless stated.	
Radiator Cap (WDX to Early 56, Non-Pressure)	[CC# 1501880], Gasket - In Cap, Models - WDX to C3 PW Models (47-56)	
Radiator Caps	These are the various caps used on MV & PW Dodge Trucks since 01/01/40 through the fifties. The third cap for a radiator with a 1-1/4 deep filler neck is the only non-standard cap used. The later 3/4 ton radiator corrected the problem and the fourth cap become the standard interchangeable cap except for the early 3/4 ton.	
Radiator Filler Neck	2-1/4 O.D. Neck Non-Pressure Cap NAPA 7031400 STANT 10203	Part Source
	2-11/16 O.D. Neck Non-Pressure Cap NAPA 7031475 STANT 10232	Part Source
	The 7031475 cap requires modification (narrowing of the engagement lugs) to match the radiator filler neck. 2-11/16 O.D. Neck Pressurized 4lbs Cap 7031419(four ear design). 10281(four ear design)	Part Source
Radiator Water Hose	Upper radiator hose used with water outlet elbow (requires a 7" stick hose) - Gates# 24032, NAPA# 613 (2" I.D. sold in 12" lengths)	Part Source
	Upper Radiator Hose used with straight outlet – Flexible hose, Gates# 26504 (1-3/4"x2"x16-1/2") - NAPA# FM77	Part Source
	Lower Radiator Hose - Stick Hose, Gates# 24024 (1-1/2 I.D.) 12" length - NAPA# 609 (cut - 4" upper, 8" lower)	Part Source
Thermostat 160 Degrees	Gates# 33036, NAPA# 91, Stant# 13476 or 35476 (all 63MM base) See Group 25, TECHNICAL/GENERAL INFORMATION/PART SOURCES for Classic Power-Wagons link to images of outlets and thermostats for each under Cooling Section. M37 uses the THM 55, 155.	Part Source
	“Job Rated” era up to engine T137-21560, M37	Part Source
Thermostat 180 Degrees	Gates# 33038, NAPA# 191, Stant# 13478 or 35478	Part Source
	“Job Rated” era up to engine T137-21560, M37 - AutoZone# 3928, NAPA# 155 (all 63MM base)	Part Source
Water Distribution Tube	1935-60 218/230 Engine - Pioneer# PC753A (23 inches long) or Dorman# 593-001	Vintage Power Wagons Or Midwest Military
Water Outlet Gasket	218/230/237/251/265 Engine, Fel-Pro# 33625, NAPA# 1040ST	Part Source
Water Pump 230/265	NAPA# 58459 (230 Early pump w/grease Cap tapped holes, rear plate. Identical to Original)	Part Source
	NAPA# 598134 (requires switching out the square hole back plate and replacing it with the crescent hole back plate) NAPA# 598558, BOSCH# 98002, AutoZone# P47-3	Part Source
Water Pump Body Housing Mounting Gasket to Engine Block	Fel-Pro# 4267	Part Source

Water Pump Body Cover Plate Gasket	CC# 1326324		
Water Pump 251	NAPA# 58175, AutoZone# 120-1060		Part Source
Water Pump Body Housing Mounting Gasket to Engine Block	Fel-Pro# 4267		Part Source
Water Pump to Body Gasket	Circular w/4 bolt holes -- CC# 1674702		Part Source
Molded Radiator Hose	WM300 58-60, M601, M615, (C-1662497), (I.D. 1.750"; Length 21, cut to length when installing), Part: Dayco C70438, 72904	 	Part Source Part Source Part Source
Molded Radiator Hose	1961 – 1968 WM300 (I.D. 1.750"; Length 21, cut to length when installing), Part: Dayco C70438, 72904		Part Source
Molded Radiator Hose	1969 – 1971 X3-WM300 Upper, C-1881812 Lower, C-2233803 (Gates 20209)		Part Source Part Source
Radiator Support Shims	The WDX – X3-WM300 parts books list the shims as washers Code 7-29-1, part numbers C-120390, OR9 G502 lists it as a shim. The WDX – X3-WM300 shim is (3/16thk x 2" wide), ¾ & 1.5 Tons are (7/64thk x 1.375" wide) NSN 5310-00-012-0390.		
Aluminum Radiator	CG&J Heat Transfer 1-800-223-4299		Part Source

HEATING		
Heater Valve		Part Source
Heater Unit Model 61, 62, & 65	6V	Part Source
Heater Unit Model 75	12V	
Heater Unit Model 97	M601, M615	
Heater Unit, Model 61, 62, & 65, 75 12V Replacement Motor	Comfort Temp, by Four Seasons #35576, NAPA# 937150, 6551022. The motor's shaft requires shortening and it has studs at both ends of the motor. You will need to cut off the ones at the shaft end. It is reversable, but use the orange wire for hot, black for ground.	Part Source
Switch (Heater)	Universal, 6 Volt -- SMP# HS-92 	Part Source
	Universal, 12 Volts -- SMP# HS-98 	Part Source
SMP Heater Blower Motors (6V, 12V, & 24V)		Part Source
Universal Heater (6V)		
Universal Heater (12V)	Kats Heater Part# 38700 Maradyne Tucson Part# H-503012 Old Air Products Part# IP-165H 	Part Source Part Source Part Source
Universal Heater (24V)	Kats Heater Part# 39700	Part Source



	Maradyne Tucson Part# H-503024	

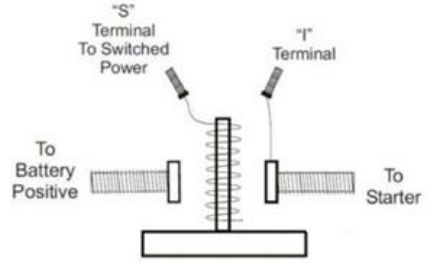
GROUP 7. ELECTRICAL

a. REPLACEMENT PARTS

Batteries	Military Type#	Volts	Length	Width	Height	Civilian Group Equivalent	MFT-Delco
	2H	6	10-3/8	7-1/8	9-3/8	2	417A
	2HN	12	10-1/4	5-5/16	9	22NF	351
Battery Life Extender							Part Source
Pertronix Electronic Ignition	The Pertronix part number for the 251 engine is 1362 for the small cap distributor with vacuum advance. Also, the Ignitor II version which prevents the component burn out if ignition is left on is 91362.						Part Source
Military Voltage Regulators (Generators)	WC ½ Ton	Auto-Lite (AL): VRH-4104-A1, VRY-4303G, (6V, 40 amp., RED Plate) Condenser: Auto-Lite, IGW-31-38 Auto-Lite (12V, 60 amp) Condenser:	Gauge VRY-4303G is available from Jeepest.com in France.	See Rare Parts group for image.	Part Source Currency Exchange Rate Converter		
	WC ¾ TON	AL: VRY-4203A (6V, 40 amp., RED Plate) [WC-51, 52, 54, 55, 59] AL: VRH-4101-D1, VRH-4104-A1, (12V, GREEN Plate) [WC-53, 56, 57, 58] Condenser: Auto-Lite, IGW-31-38	Gauge VRH-4101D-1 is available from Jeepest.com in France.	See Rare Parts group for image.	Part Source		
	WC 1.5 TON	AL: VRY-4203B (6V, 40 amp., RED Plate) [WC-60, 61, 62, 63] Condenser:					
Voltage Regulators (Generators)	40-41 SMP# (V.R.Y.-4202A) (6V, 30 Amp.) (Discontinued)						
		42-49 SMP# VR-2 (6V, 35 Amp.)					Part Source
		VR-25 (12V, 35 Amp.)					Part Source
			49-55 SMP# VR-4 (6V, Amp.)				Part Source
					56-62 SMP# VR-15 (12V, 35-45 Amp.) or VR-17 (12V, 40 Amp.)		Part Source Or Part Source
Voltage Regulators (Delco Alternator)	63-68 SMP# VR-119 (12V, 55 Amp.)						Part Source
Voltage Regulators (Chrysler Alternator)	60-68 SMP# VR-101 (12V, 55 Amp.)						Part Source
Generator (1/2 Ton, 6 Volt)	Autolite# AL-GEW4806						
Generator (T214 3/4 Ton, 6 Volt)	Autolite# AL-GEG5002, Up-to-Engine# 154156 -- 6 Volt -- Brush Set - NAPA# R419						Part Source
	Front Ball Bearing NAPA# 62032ZJ						Part Source
	Rear Bushing NAPA# 4278						Part Source
Generator (T214 3/4 Ton, 6 Volt)	Autolite# AL-GEG5101, After-Engine# 154156 -- 6 Volt -- Brush Set - NAPA# R419, Front Ball Bearing NAPA# 62032ZJ, Rear Bushing NAPA# 4278						

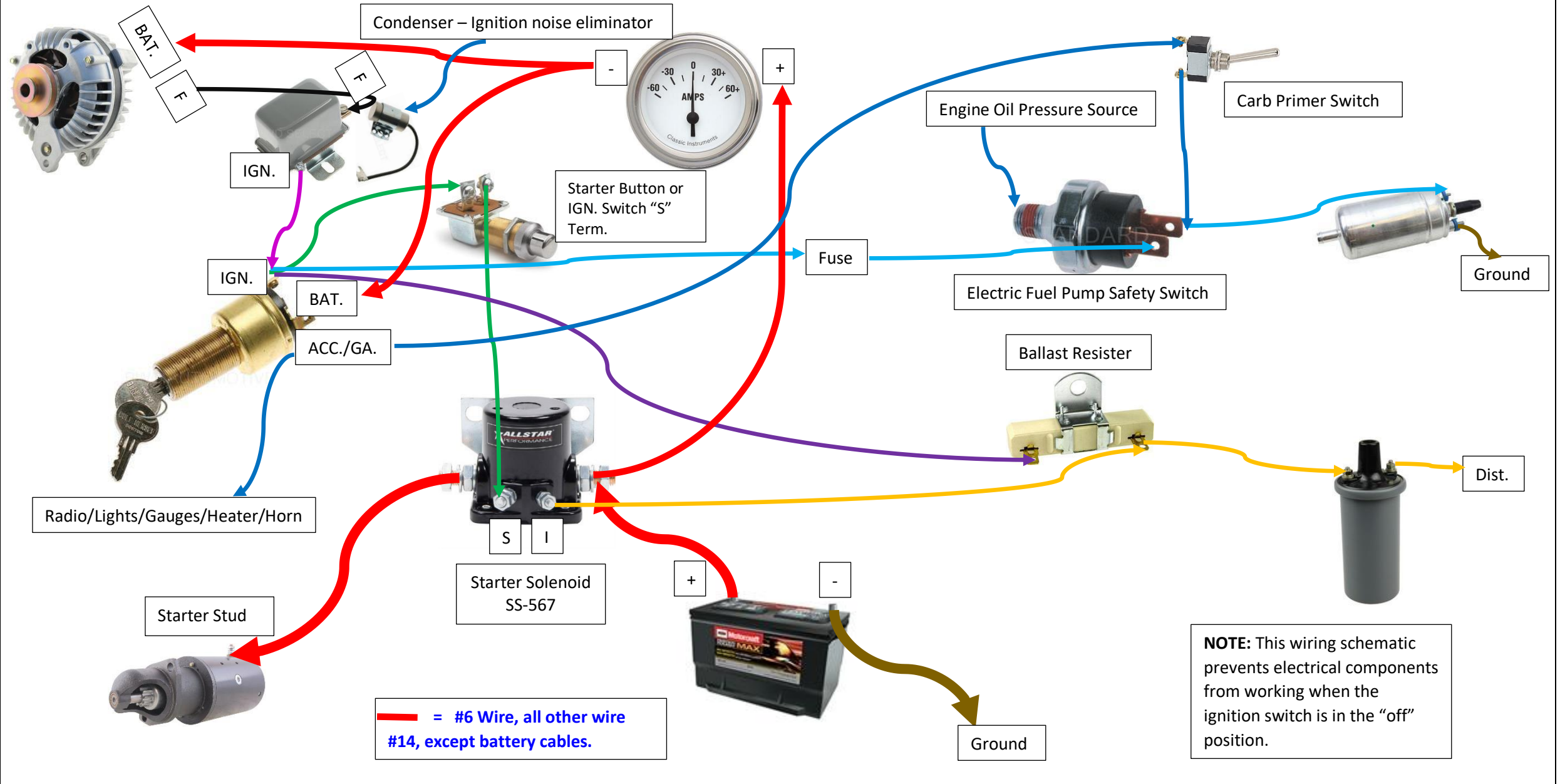
Generator (3/4 Ton Carryall & Command, 12 Volt)	Autolite# AL-GDJ4808, CARRYALL/COMMAND# -- 12 Volt -- Brush Set - NAPA# A419 (Discontinued)	
	EX-57, EX-59 (2 sets)	Part Source
	Front Ball Bearing NAPA# 305J	Part Source
	Rear Bearing NAPA# 6205ZJ	Part Source
Generator (T223 1.5 Ton, 6 Volt)	AL-GEG-5101, AL-GEG-5002 (40 Amp.)	
Generator (FFPW 1 Ton, 6 Volt)	Up-to-Serial# 83921061, 32-amps -- Brush Set - NAPA#, N/A, Front Ball Bearing NAPA# 6203J	Part Source
	Rear Bushing NAPA# 4264	Part Source
Generator (FFPW 1 Ton, 6 Volt)	After-Engine# T137-16311, 45-amps -- Brush Set - NAPA# A410 or A430	Part Source
	Front Ball Bearing NAPA# 6203J, Rear Bushing NAPA# 4347	Part Source
Generator (FFPW 1 Ton, 6 Volt)	Up-to-Engine# T137-16311, 35-amps -- Brush Set - NAPA# A410 or A430, Front Ball Bearing NAPA# 6203J, Rear Bushing NAPA# 4278	
Generator (FFPW 1 Ton, 6 Volt)	After-Serial# 83921061, 35-amps -- Brush Set - NAPA# A410 or A430, Front Ball Bearing NAPA# 6203J, Rear Bushing NAPA# 4347	
Generator (FFPW 1 Ton, 6 Volt)	After-Serial# 83921061, 50-amps -- Brush Set - NAPA# A410 or A430, Front Ball Bearing NAPA# 6204J, Rear Bushing NAPA# 4347	Part Source
Generator (FFPW 1 Ton, 6 Volt)	After-Serial# 83921061, 55-amps -- Brush Set - NAPA#, N/A, Front Ball Bearing NAPA# 6203J, Rear Bearing NAPA# 6303J	Part Source
Generator (FFPW 1 Ton, 12 Volt)	After-Serial# 83921061, 30-amps -- Brush Set - NAPA# A434, Front Ball Bearing NAPA# 6203J, Rear Bushing NAPA# 4264	Part Source
Generator (FFPW 1 Ton, 12 Volt)	After-Serial# 83921061, 40-amps -- Brush Set - NAPA# SD707, Front Ball Bearing NAPA# 6203J, Rear Bushing NAPA# 4264	Part Source
Generator (M37 3/4 Ton, 24 Volt)	AL-GHA4802UT, 24 Volt -- Brush Set - NAPA# N/A, Front Ball Bearing NAPA# 63032RSJ, Rear Bearing NAPA# BR87503 (Discontinued)	Part Source
Generators	46-47 WDX (GDZ-4801D), 47 WDX (GDZ-4801R), 48-49 B-1-PW (GDZ-4801R), 49 B-1-PW (GGW-6001A), 50 B-2-PW (GGW-6001B), 51-53 B-3-PW (GGW-6001A), 53 B4-PW, 54 C-1-PW, 55-56 C-3-PW, 56 C-4-PW, 57 W300M, 58-60 WM300	
Generator	M601/615 (GJC-7401S, GJM-7401-S1)	
Starter (T214, 3/4 Ton, 6 Volt)	(AL-GEG-5101) -- Brush Set - NAPA# A505, Front Bushing NAPA# 4264, Rear Bushing NAPA# 4264	Part Source
Starter (3/4 Ton Carryall & Command, 12 Volt)	(AL-GDJ-4808) -- Brush Set - NAPA# N/A, Front Bushing NAPA# 4264, Rear Bushing NAPA# 4264	
Starter (1.5 Ton T223, 6 Volt)	(AL-MAW-4029)	
Starter (FFPW 1 Ton, 6 Volt)	(Up-to-Engine# T137-21240) -- Brush Set - NAPA# A514, Front Bushing NAPA# 4264, Rear Bushing NAPA# 4264	Part Source
Starter (FFPW 1 Ton, 6 Volt)	(After-Engine# T137-21240) -- Brush Set - NAPA# A514, Front Bushing NAPA# 4264, Rear Bushing NAPA# 4264	Part Source
Starter (FFPW 1 Ton, 12 Volt)	(MDU-6002/6003/7001, MDG-6001/6002, Prestolite 3410 [requires 4 position ignition switch, or starter button, and remote solenoid]) Brush Set - NAPA# N/A, Front Bushing NAPA# 4264, Rear Bushing NAPA# 4264, BBB-3375 6V (9 tooth).	
Starter (M37, 24 Volt)	(AL-MCS4301UT) -- Brush Set - NAPA# N/A, Front Bushing NAPA# 4264, Rear Bearing NAPA# 4264	

Starters (9 Tooth)	46-47 WDX (MAW-4044), 48-50 B-1/B2-PW (MAW-4029), 51-52 B-3-PW (MCH-5106), 53 B4-PW, 54 C-1-PW, 55-56 C-3-PW (MDG-6003), 56 C-4-PW, 57 W300M, 58-60 WM300 (MDG6001, MDK6002, MDG6002, MDF6002)			
Starter	M601/615 (MDU-6003)			
230 12V High Torque Starter	New Starter			Part Source
265 Engine in FFPW	<p>You may need to use a different starter that has a shorter clutch housing than the 230 engine starters. Some options are:</p> <p>6V Wilson Part # 91-06-1821 6V Wilson Part # 91-06-1873 – Requires use of a starter button. 12V Wilson Part # 91-06-1825 12V Wilson Part # 91-06-1906</p> 			
Cap (6 Volt)	(1940-41) Distributor-IGC -- SMP# AL-96			Part Source
Cap (6 Volt)	(1941-56) Distributors-IGC, IGS -- SMP# AL-96			
Cap (6 Volt)	(1941-56) Distributors-IAY -- SMP# AL-138			Part Source
Cap (12 Volt)	(1955-?) Distributors-IAP, IAD, IAO -- SMP# AL-130			Part Source
Cap (12 Volt)	(1956-68) Distributors-IAY, IAT, IBR -- SMP# AL-138			
Cap (24 Volt)	Autolite# IAU-1055			
Coil (6 Volt)	SMP# UC-14X			Part Source
Coil (12 Volt)	External Resistor – SMP# UC-12X			Part Source
	External Resistor -- SMP# RU-11			Part Source
	Internal Resister – SMP#UC15T			Part Source
Coil (24 Volt)	Autolite# CT4002			
Condenser (6 Volt)	(1940-41) Distributor-IGC -- SMP# AL-118X			Part Source
Condenser (6 Volt)	(1941-44) Distributors-IAP, IGS -- SMP# AL-118X			Part Source
Condenser (6, 12, 24 Volt)	(1945-56) Distributors-IGC, IAO, IAD, IAY, IGC -- SMP# AL-106X			Part Source
Distributor	1946-49 WDX-B-1-PW (IAD-4201-1), 1949-50-B-2-PW (IAO-4201-1), 1951-52-B-3-PW (IAY-4003A-1),			
Distributor	M601/M615 (MDU-6003)			
NOTE!	There are 3 different length shafts with around 1/8" difference between them, the 218/230 being the shortest, long engines with KEW prefix engine numbers are 1/8" longer and the USA/Canada 25" engines 1/8" longer again. Military and Lucas distributors have off-set tangs so if you plan to change to 12V systems, in addition to replacing the distributor to a civilian, you also must install a civilian oil pump.			
Rebuilt Distributor – 251 C.I.D.	Landon's Stovebolt – SKU 38-7283			Part Source
Points (6 Volts)	Distributors-IAT-4004A, IAT-4011, IAT-4012A, IAT-4101B, C -- SMP# AL-4652XP, GAP=.020			Part Source

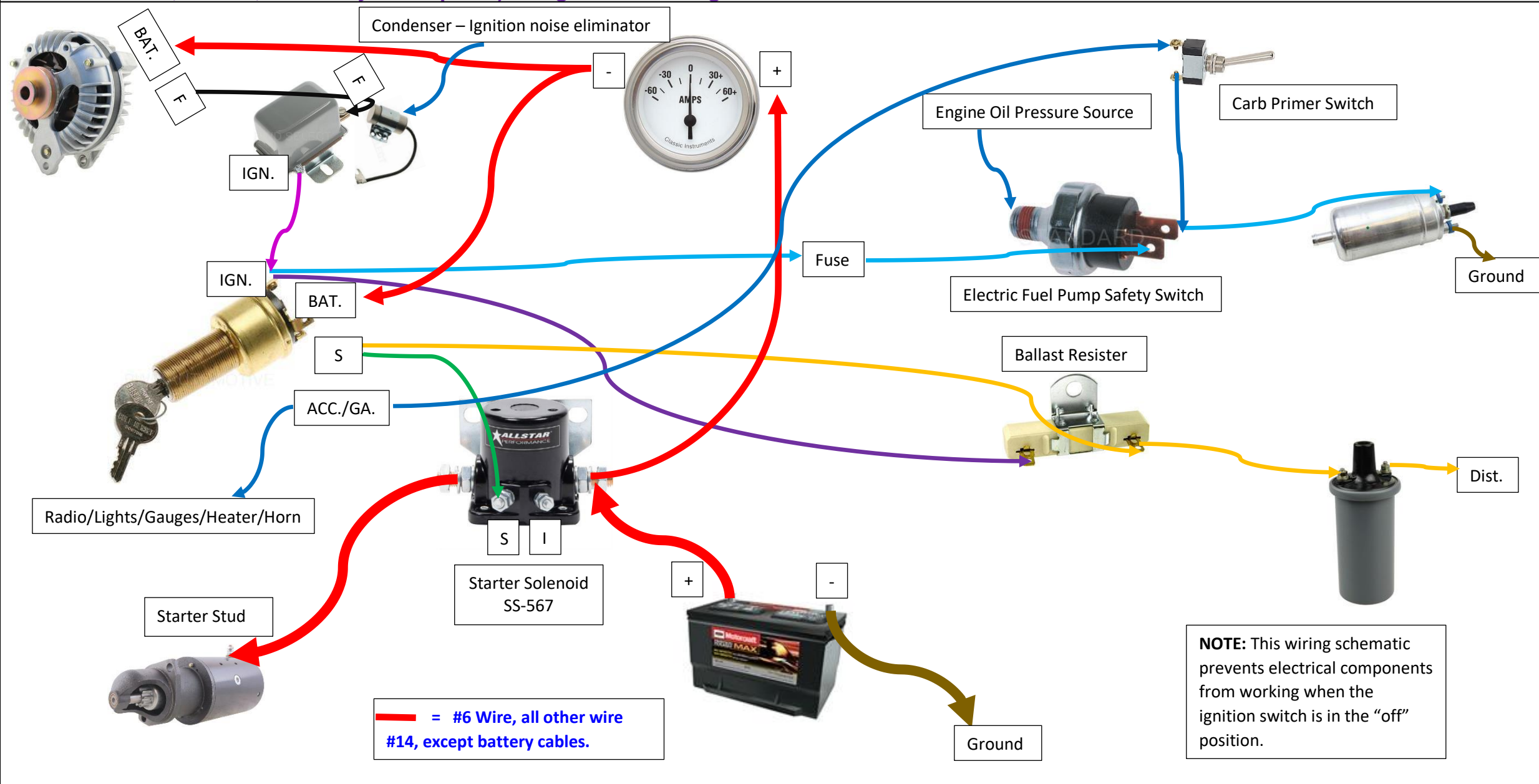
Points (6 Volts)	Distributors-IA0, IAD, IAP, IAY, IAT, IGC, IGS -- SMP# AL-4556XP, GAP=.020	Part Source
Points (12 Volts)	Distributors-IAT, IBR -- SMP# AL-4652XP, GAP=.020	
Points (12 Volts)	Distributors-IAY -- SMP# AL-4556XP, GAP=.020	
Points (24 Volts)	Distributors? -- SMP# AL-4556XP, GAP=.020	
Rotor (6 Volts)	(1941-55) Distributors-IGC, IGS, IAP, IAD, IAO -- SMP# AL-98	Part Source
Rotor (6 Volts)	(1941-55) Distributors-IAY -- SMP# AL-151	Part Source
Rotor (12 Volts)	(1955-68) Distributors-IAY, IAT, IBR -- SMP# AL-151	Part Source
Rotor (24 Volts)	SMP# AL-150	Part Source
Reducer	12v to 6v -- SMP# RU-100	Part Source
Reducer	24v to 12v -- SMP# RU-101 (Rated to 28 watts which is 2 amps draw)	Part Source
Reducer	24v to 12v -- SMP# RU-102 SMP# RU-102 (Rated to 52 watts or 4.3 amps continuous, 6.5 amps peak)	Part Source
Reducer	External Ballast Resister -- SMP# RU-10 (Ignition Coil 12v to 9v)	Part Source
Wire Set (6- & 12-Volt Ignition)	Universal -- SMP# 3600	Part Source
Spark Plug	Autolite# 295, AC Delco# R45	Part Source
Spark Plug – M37	Autolite# 2225	Part Source
Switch (Headlight Dimmer)	47-56 -- SMP# DS-52 , 57-68 -- SMP# DS-66 (Discontinued)	Part Source
Switch (Ignition)	Universal -- SMP# US-50, US-129 ("ACC"- "OFF"-IGN&ACC"- "START"). Mounting stem is "13/16 x 1-7/32" long. Switch will require a "3/32 Wall x 1.0"L sleeve. NAPA – KS6041 ("ACC"- "OFF"-IGN&ACC"). Mounting stem is "3/4, x 7/8" long. Switch will require a "1/4 Wall x 7/8"L sleeve Original switch is 1.0"Dx1.0"L, 3 spade terminals (nut size 10x32)	US-129 Part Source KS6041 Part Source
Switch (Ignition Cylinder Key)	ILCO# 1125H	Part Source
Switch (Starter Motor)	6 & 12 Volts (mounts to starter housing) -- SMP# SS-529	Part Source
Switch (Stoplight)	38-53 SMP# SLS-25	Part Source
	54-68 SMP# SLS-28	Part Source
Switch (Horn Button)	Universal, 6 & 12 Volt -- SMP# HB-6	Part Source
Switch (Headlight/ Taillight)	Universal, 6 Volt -- SMP# DS-121	Part Source
	Universal, 12 Volts -- SMP# DS-135	Part Source
Switch (Panel Lights)	Universal, 6 & 12 Volt -- SMP# DS-234	Part Source
Switch (Solenoid)	Universal, 6 Volt -- SMP# SS-544A (3 posts)	Part Source
	Universal, 12 Volt -- SMP# SS-567, SS-581 (4 posts)	 Part Source
Universal Turn Signal Switch Kit (12V)		Kit Source

Universal Turn Signal Switch Kit (6V)		<u>Kit Source</u>
Universal Wiring Diagram		<u>Wiring Diagram</u>
Electrical Wiring/Connector Sources	Yesterday's Parts The Brillman Company	<u>Part Source</u> <u>Part Source</u>
24V to 12V Trailer Converters	XM381	<u>Part Source</u>

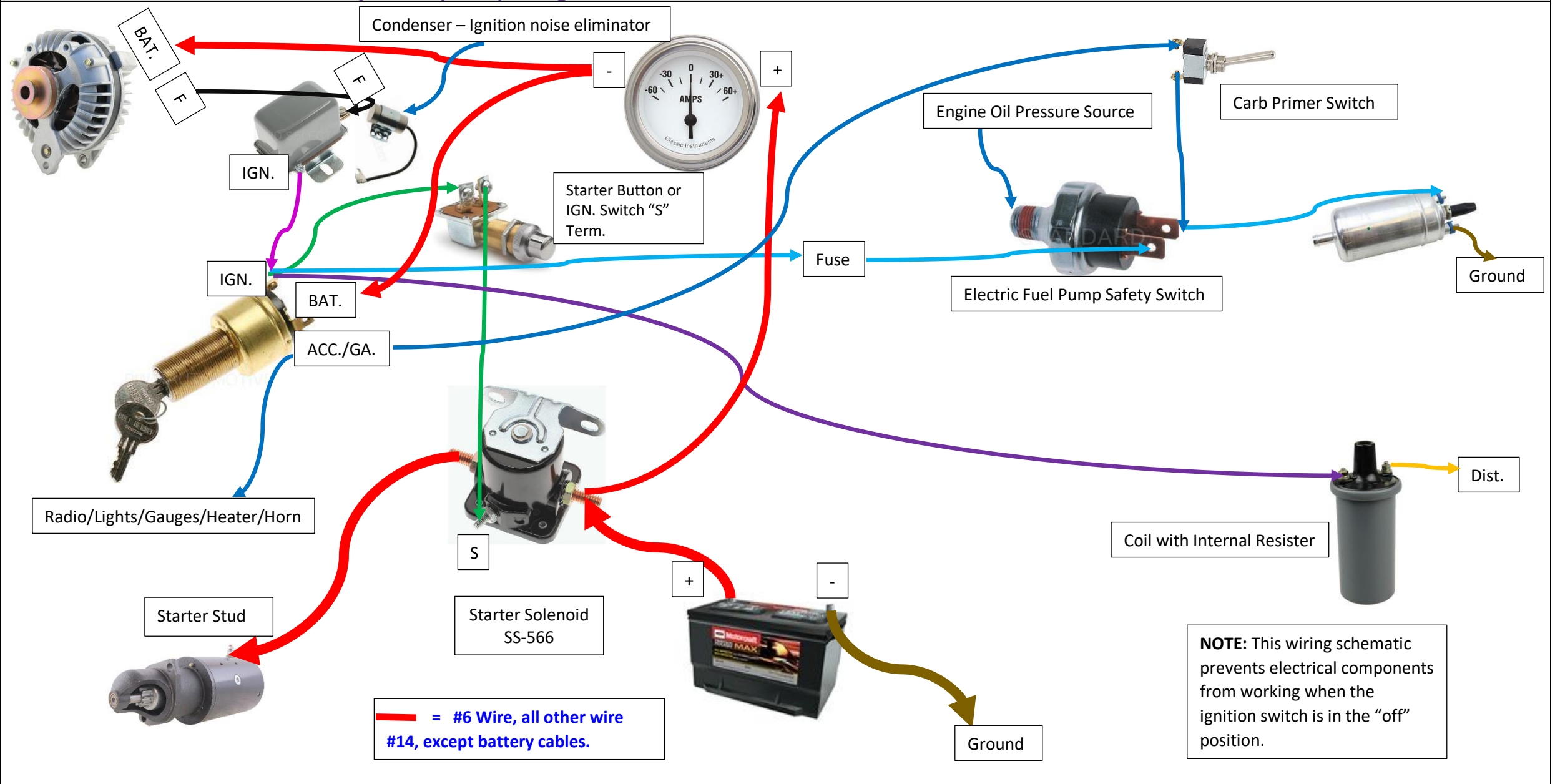
b. ELECTRICAL WIRING – Generator to Alternator Conversion (Ignition/Charging/Fuel Pump Safety & Carb Primer Switch Circuit; Mopar 55 amp. Alternator, 12 Volt, 1965 Chrysler Imperial) using an External Ballast Resistor



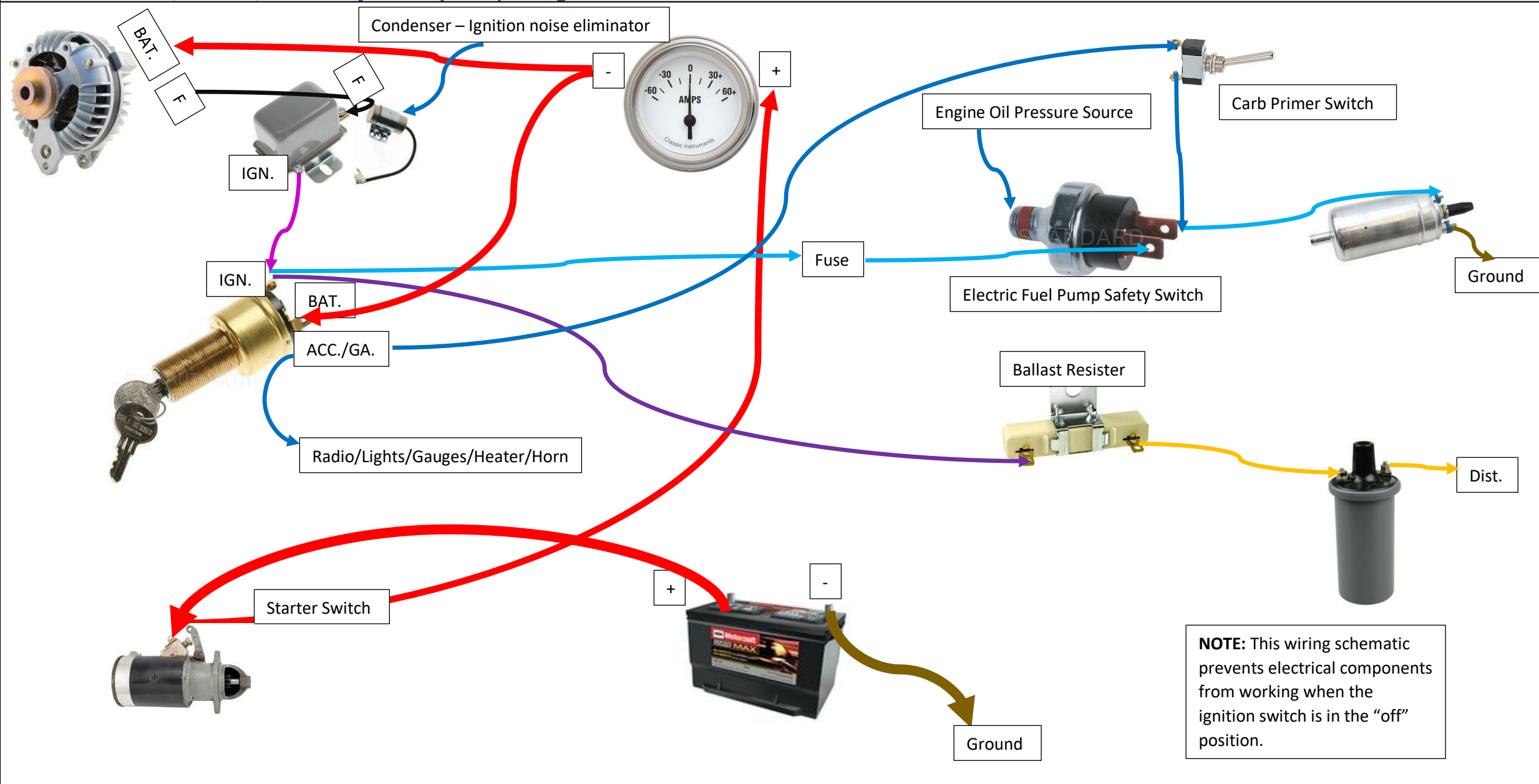
c. ELECTRICAL WIRING – Generator to Alternator Conversion (Ignition/Charging/Fuel Pump Safety & Carb Primer Switch Circuit; Mopar 55 amp. Alternator, 12 Volt, 1965 Chrysler Imperial) using a 4 Position Ignition Starter Switch



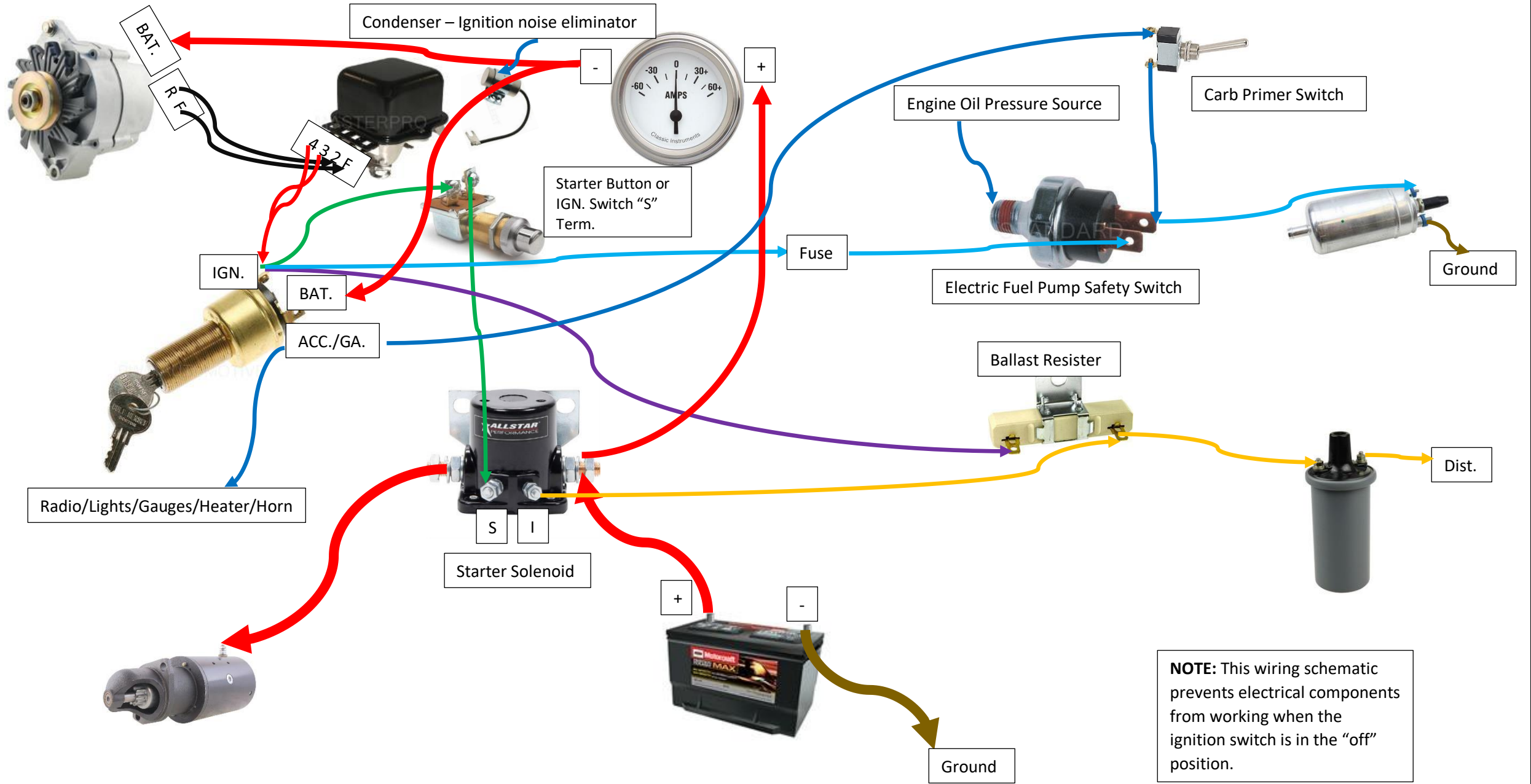
d. ELECTRICAL WIRING – Generator to Alternator Conversion (Ignition/Charging/Fuel Pump Safety & Carb Primer Switch Circuit; Mopar 55 amp. Alternator, 12 Volt, 1965 Chrysler Imperial) using an Internal Coil Resister



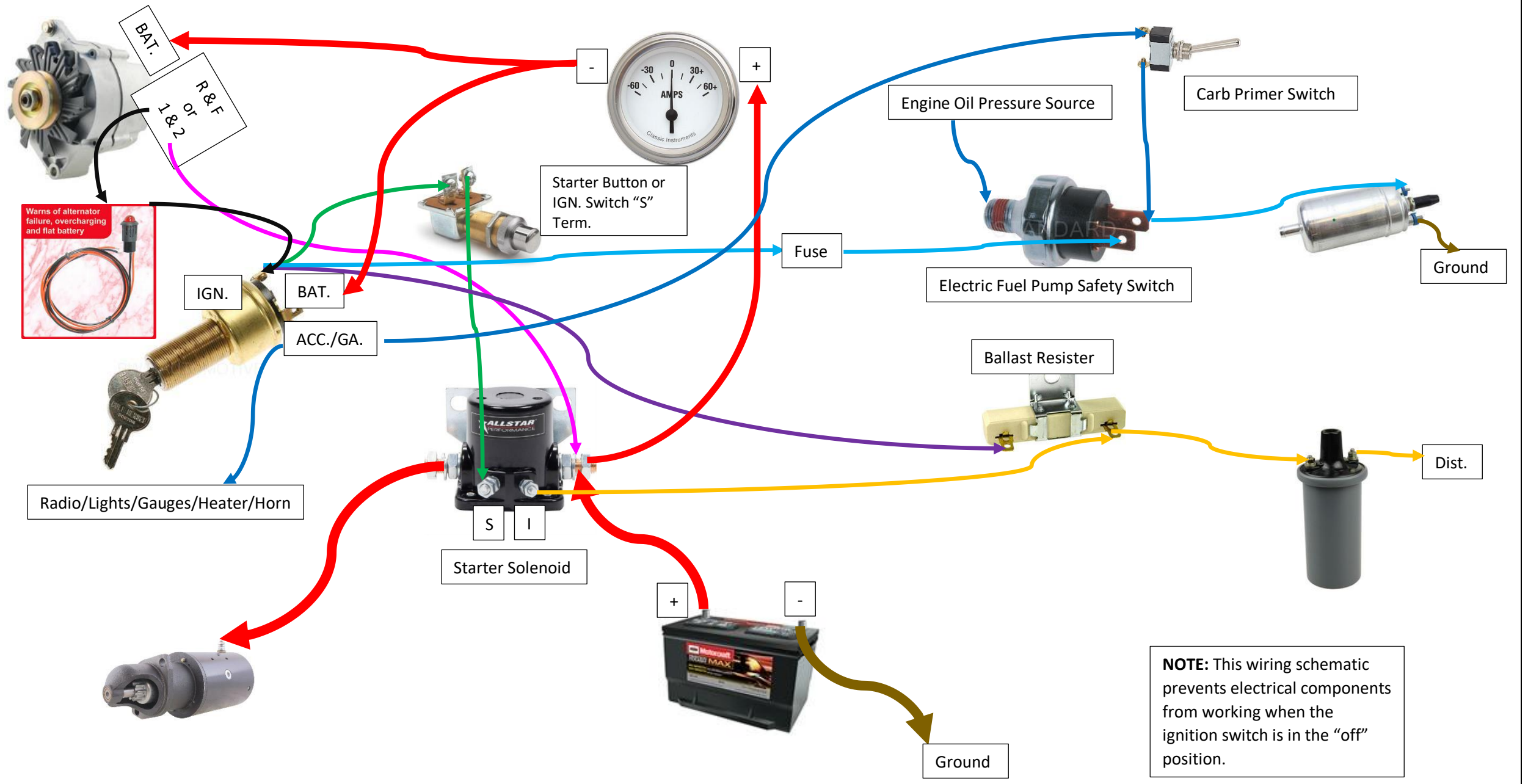
e. ELECTRICAL WIRING – Generator to Alternator Conversion (Ignition/Charging/Fuel Pump Safety & Carb Primer Switch Circuit; Mopar 55 amp. Alternator, 12 Volt, 1965 Chrysler Imperial) using the Stock FFPW Foot Pedal Starter Switch and an External Ballast Resistor



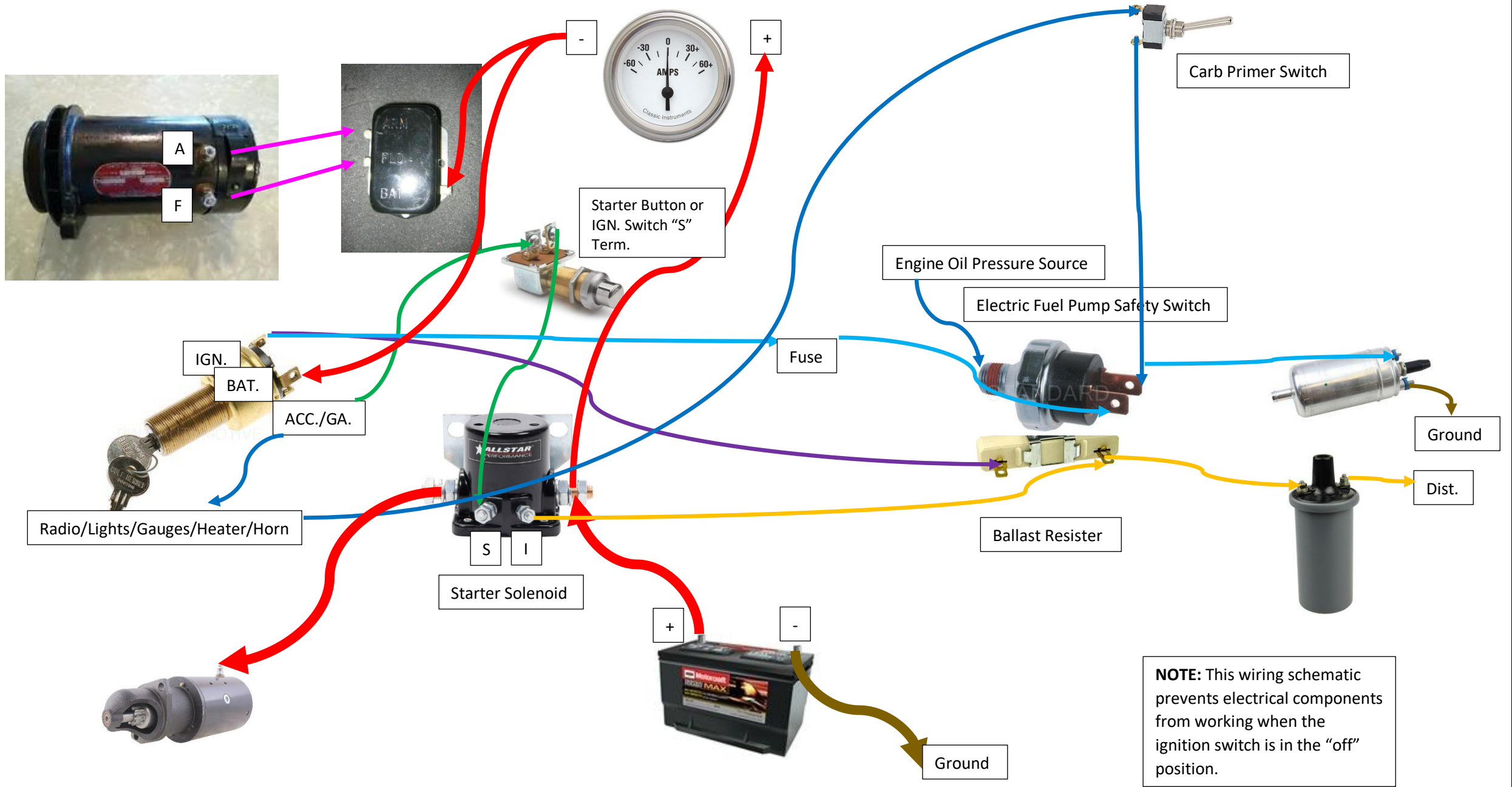
f. ELECTRICAL WIRING - Generator to Alternator Conversion (Ignition/Charging/Fuel Pump Safety & Carb Primer Switch Circuit; GM 55 amp. Alternator, 12 Volt, 1965 Chevy Impala, O'Reilly Part Number - R111616A) using an External Ballast Resister



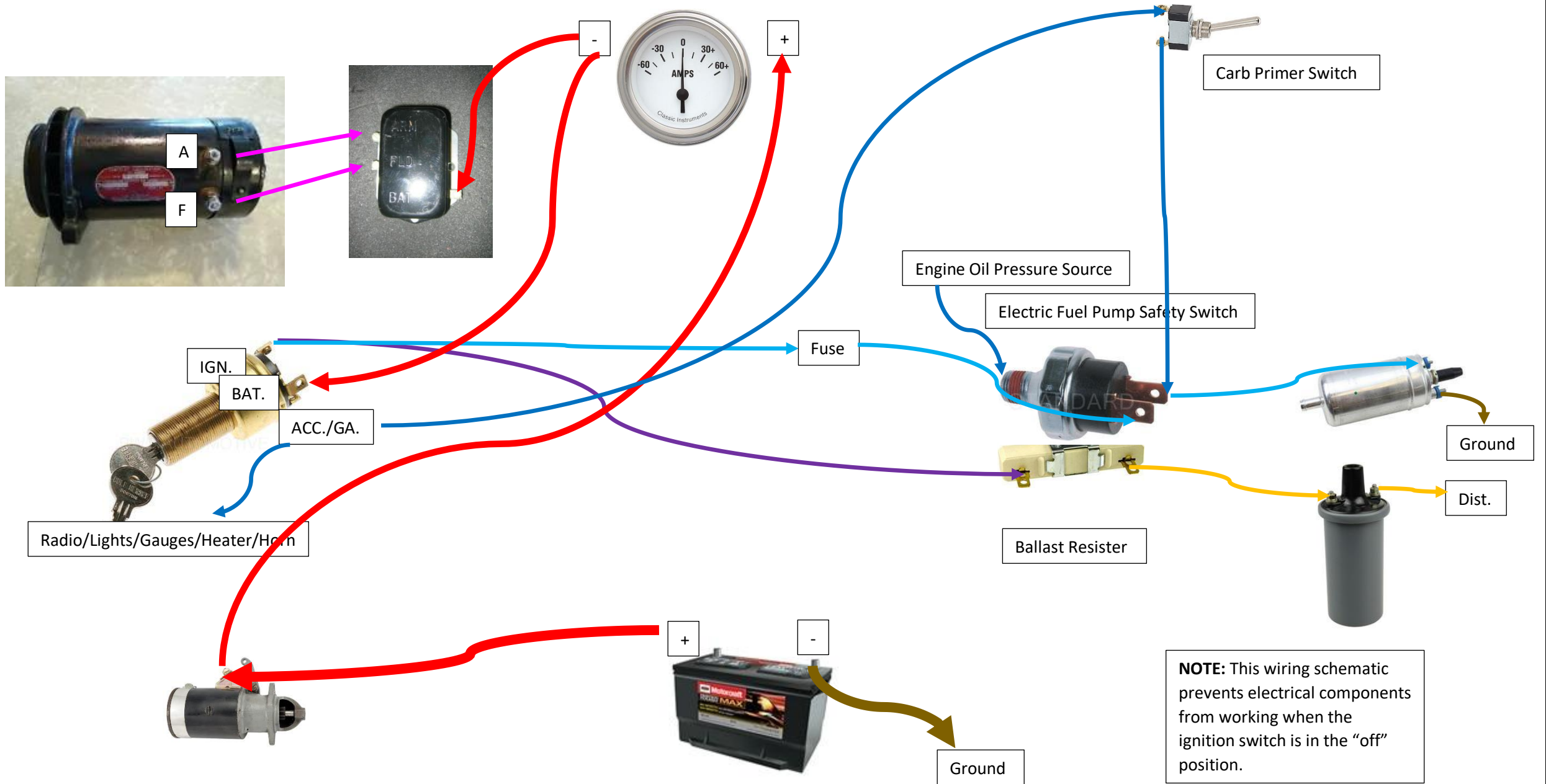
g. ELECTRICAL WIRING - Generator to Alternator Conversion (Ignition/Charging/Fuel Pump Safety & Carb Primer Switch Circuit; GM 63 amp. Alternator w/Internal Voltage Regulator, 12 Volt, 10-SI Series, O'Reilly Part Number - R111621A) using an External Ballast Resistor



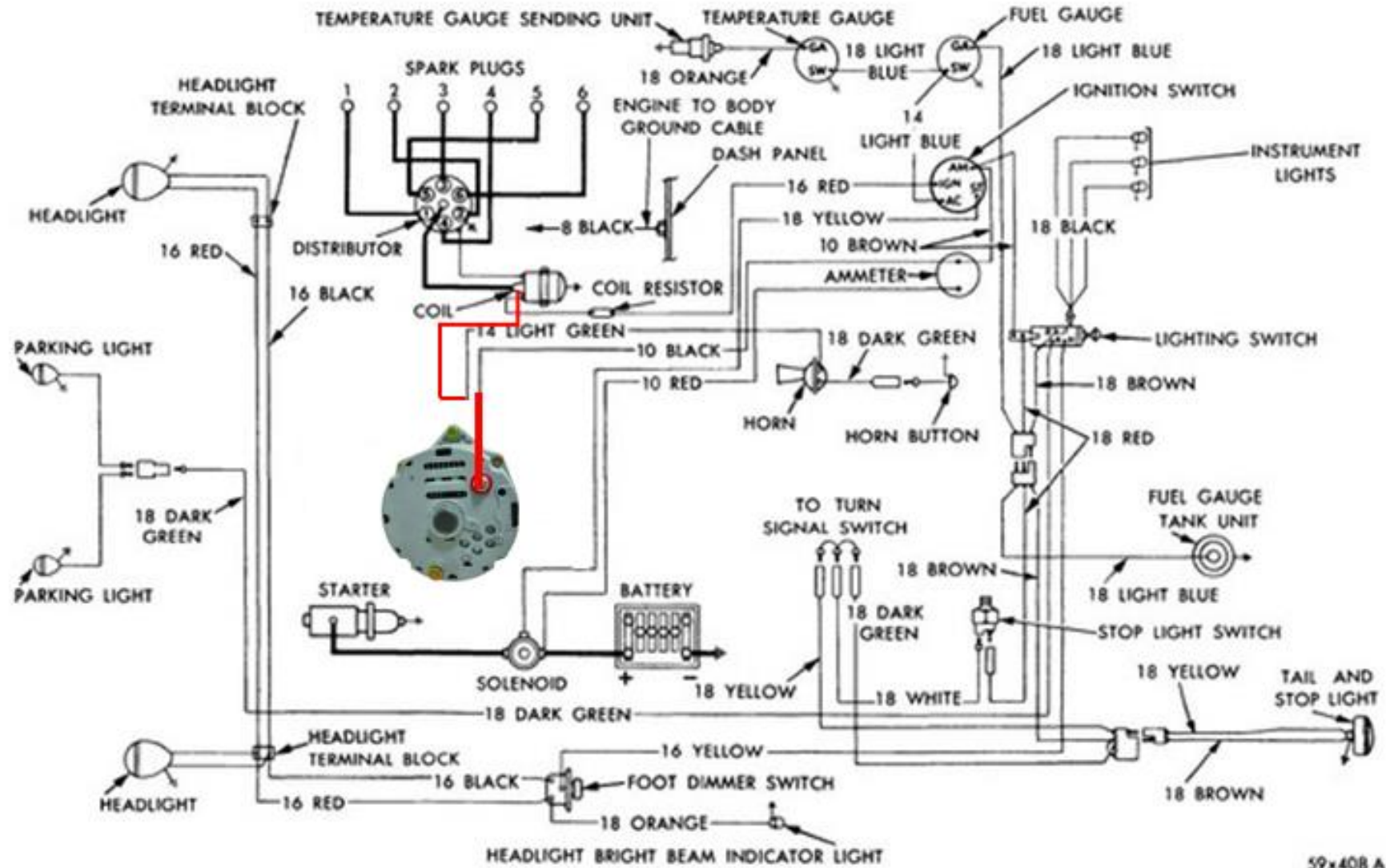
h. ELECTRICAL WIRING – 6V to 12V Generator Conversion using 6V or 12V Starter and a Starter Button using an External Ballast Resistor



i. ELECTRICAL WIRING – 6V to 12V Generator Conversion using 6V or 12V Starter and Foot Pedal using an External Ballast Resistor



j. ELECTRICAL WIRING – WM300 12V Generator Conversion to One Wire Alternator w/Internal Voltage Regulator Using Existing Wiring Harness



NOTE: The alternator is illustration only and may not represent the Chrysler Alternator you are installing. Remove the generator and voltage regulator and integrate into the existing wiring.

WM300 Chassis Wiring

59x40B A

k. ELECTRICAL WIRING – WDX 6V Generator Conversion to One Wire 6V Alternator w/Internal Voltage Regulator Using Existing Wiring Harness

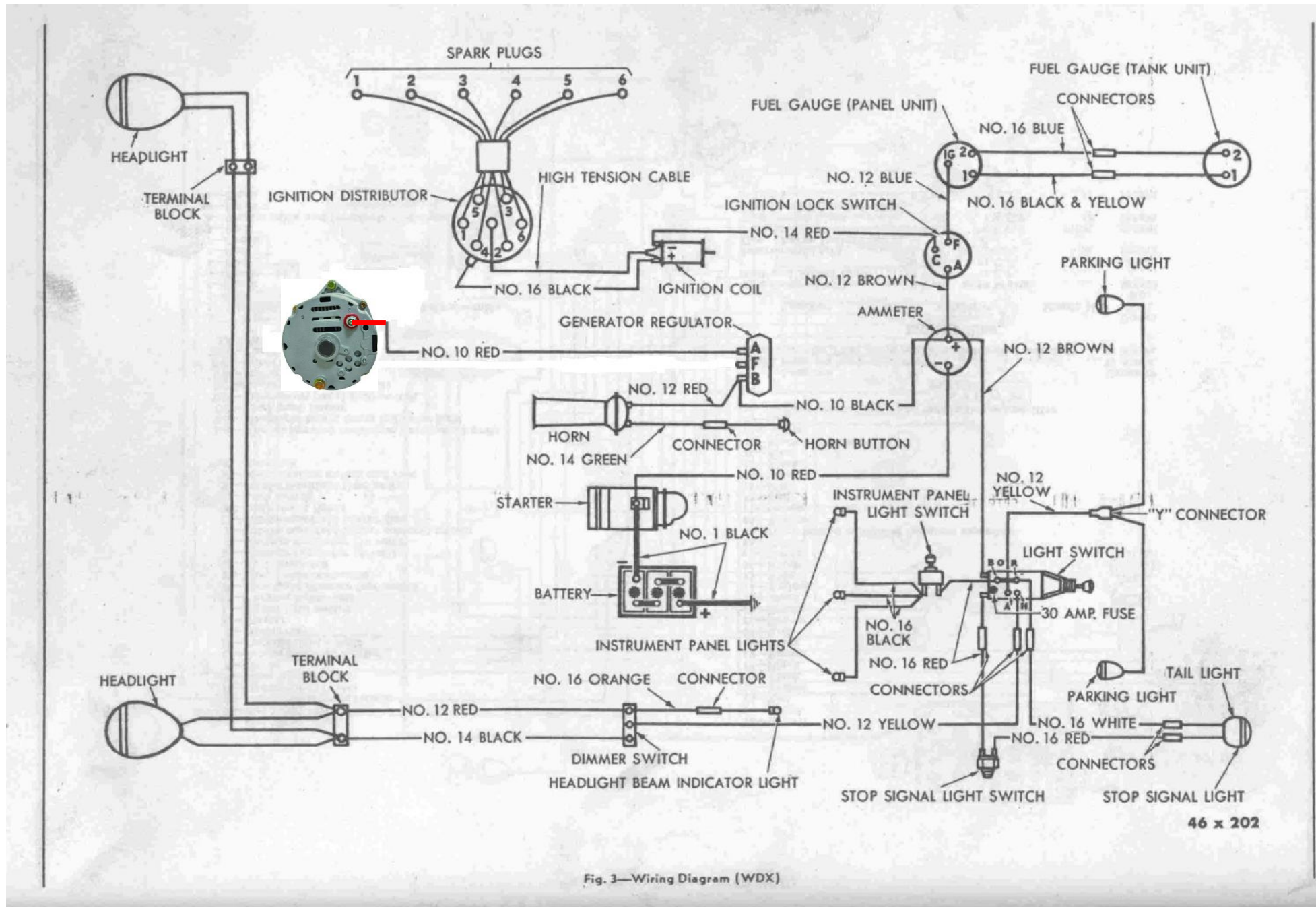
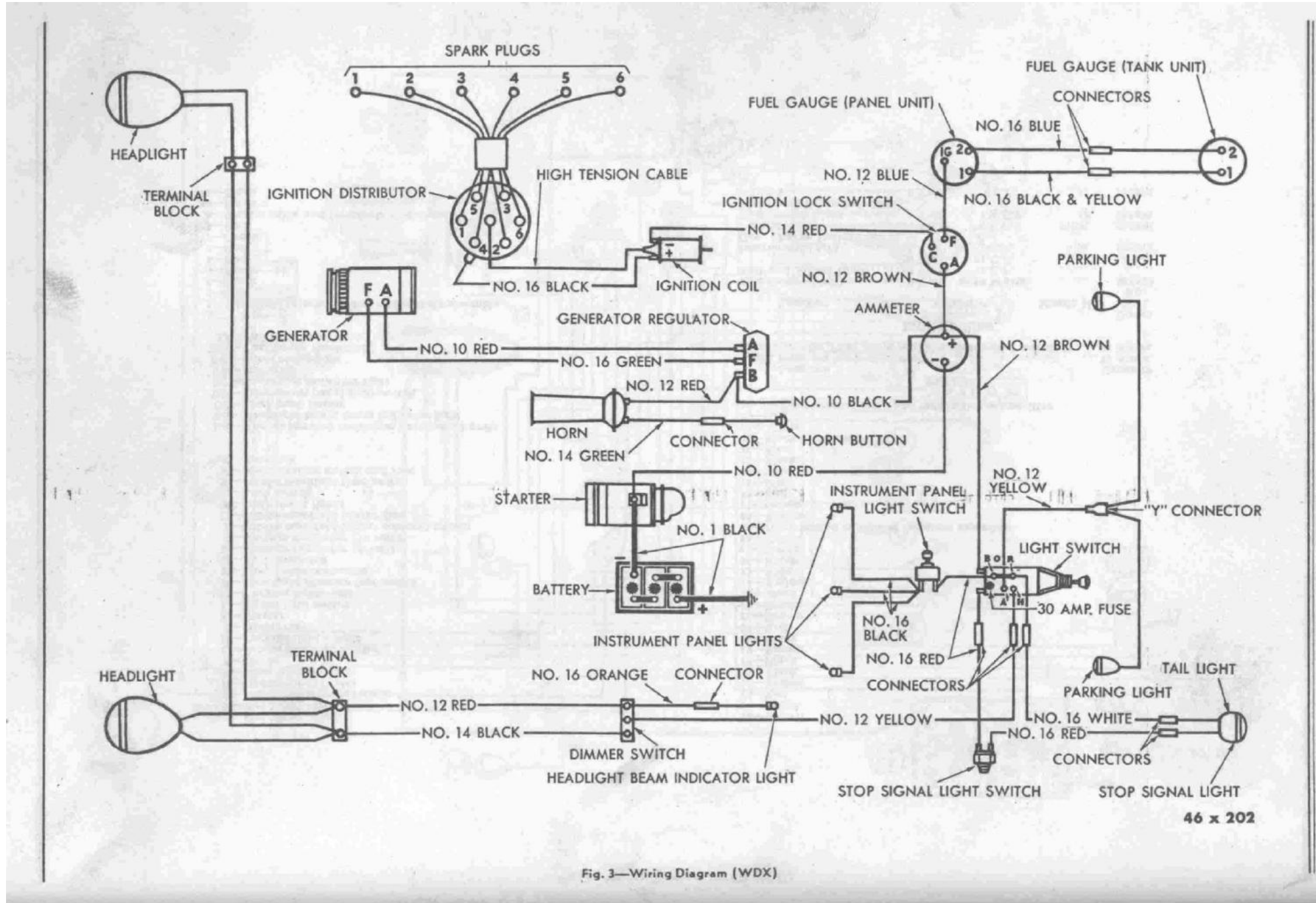


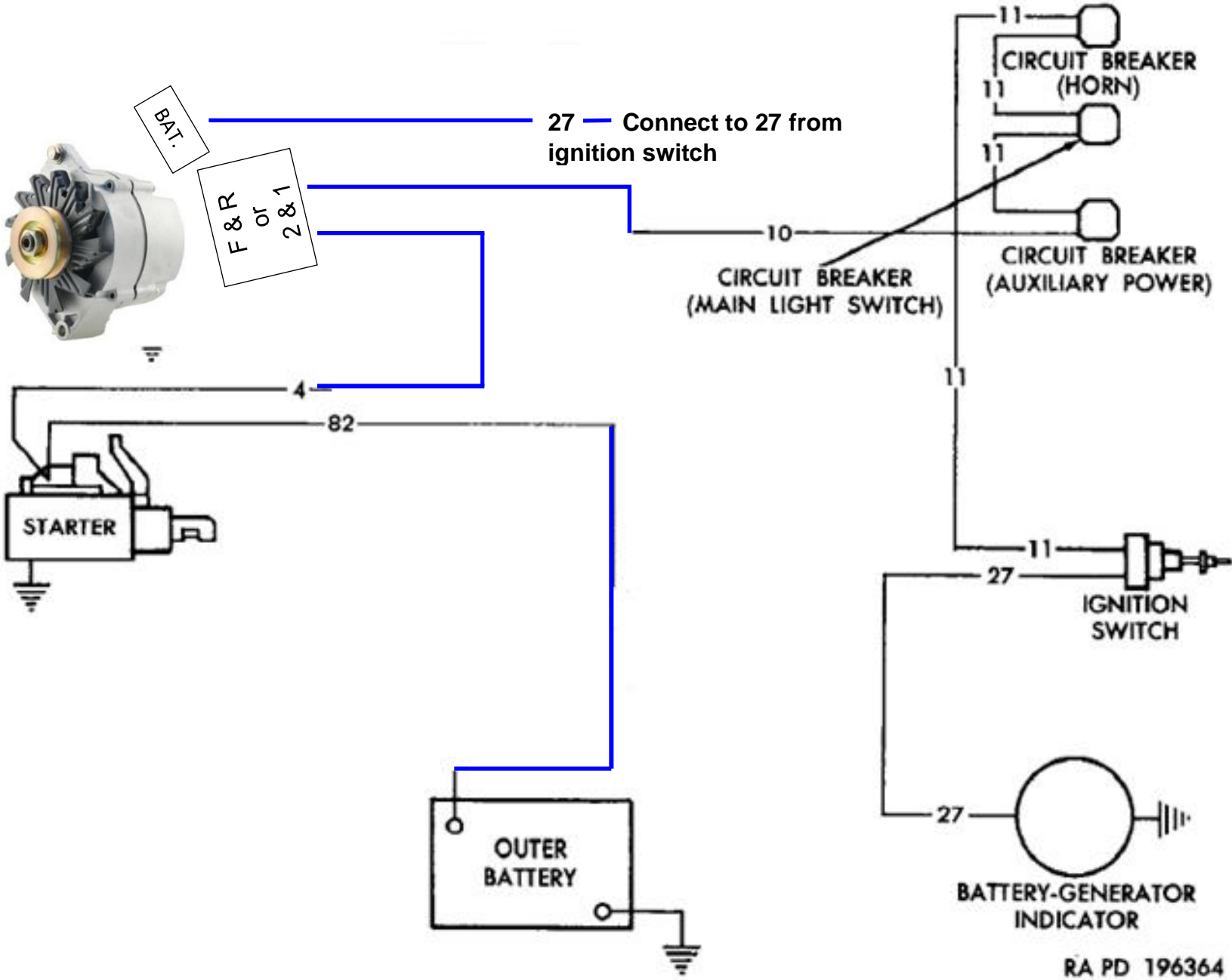
Fig. 3—Wiring Diagram (WDX)

NOTE: The alternator is illustration only and may not represent the Chrysler Alternator you are installing. Remove the generator and integrate into the existing wiring using the regulator or you can remove the regulator and connect the alternator directly to the No. 10 black wire. Connect the horn No. 12 red wire to the No.10 black wire as well. The "F" wire is no longer used. If installing a "negative" ground alternator, reverse the ammeter and coil wires from positive to the negative side.

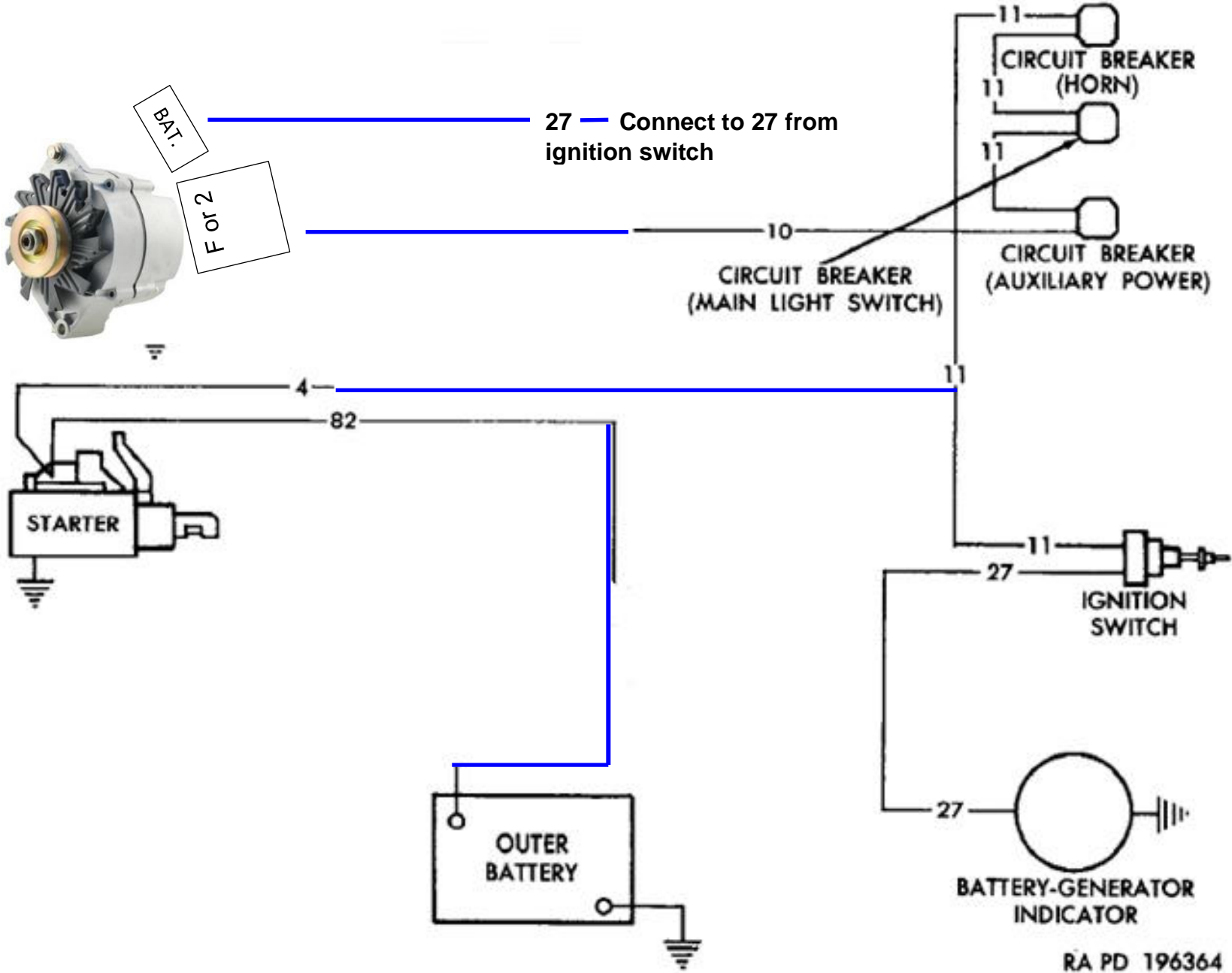
I. WDX-PW WIRING DIAGRAM



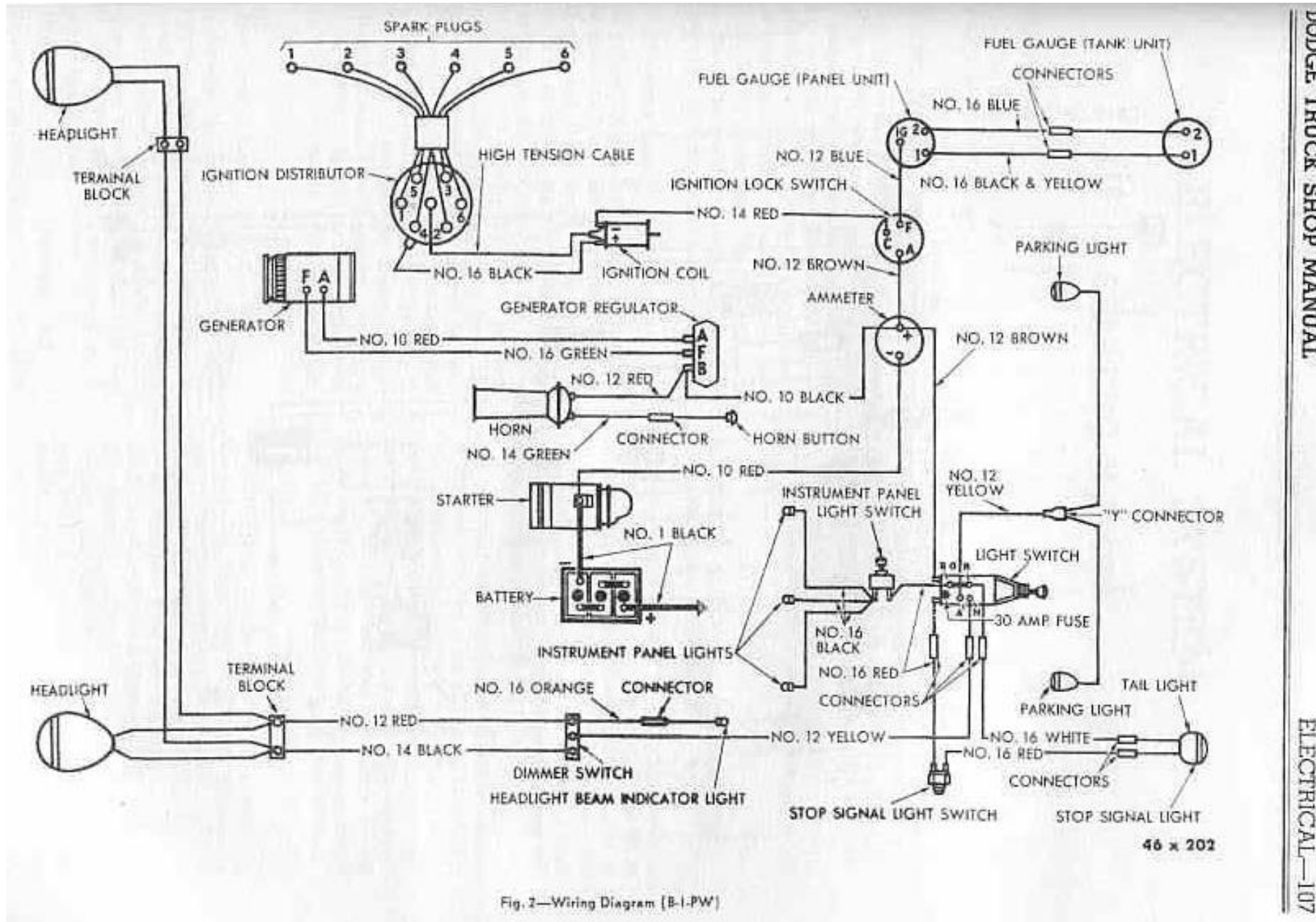
m. M37 CONVERSION TO 12V TWO WIRE ALTERNATOR W/INTERNAL REGULATOR



n. M37 CONVERSION TO 12V ONE WIRE ALTERNATOR W/INTERNAL REGULATOR



o. 1952 B-1-PW WIRING DIAGRAM



p. 1955 C-3-PW WIRING DIAGRAM

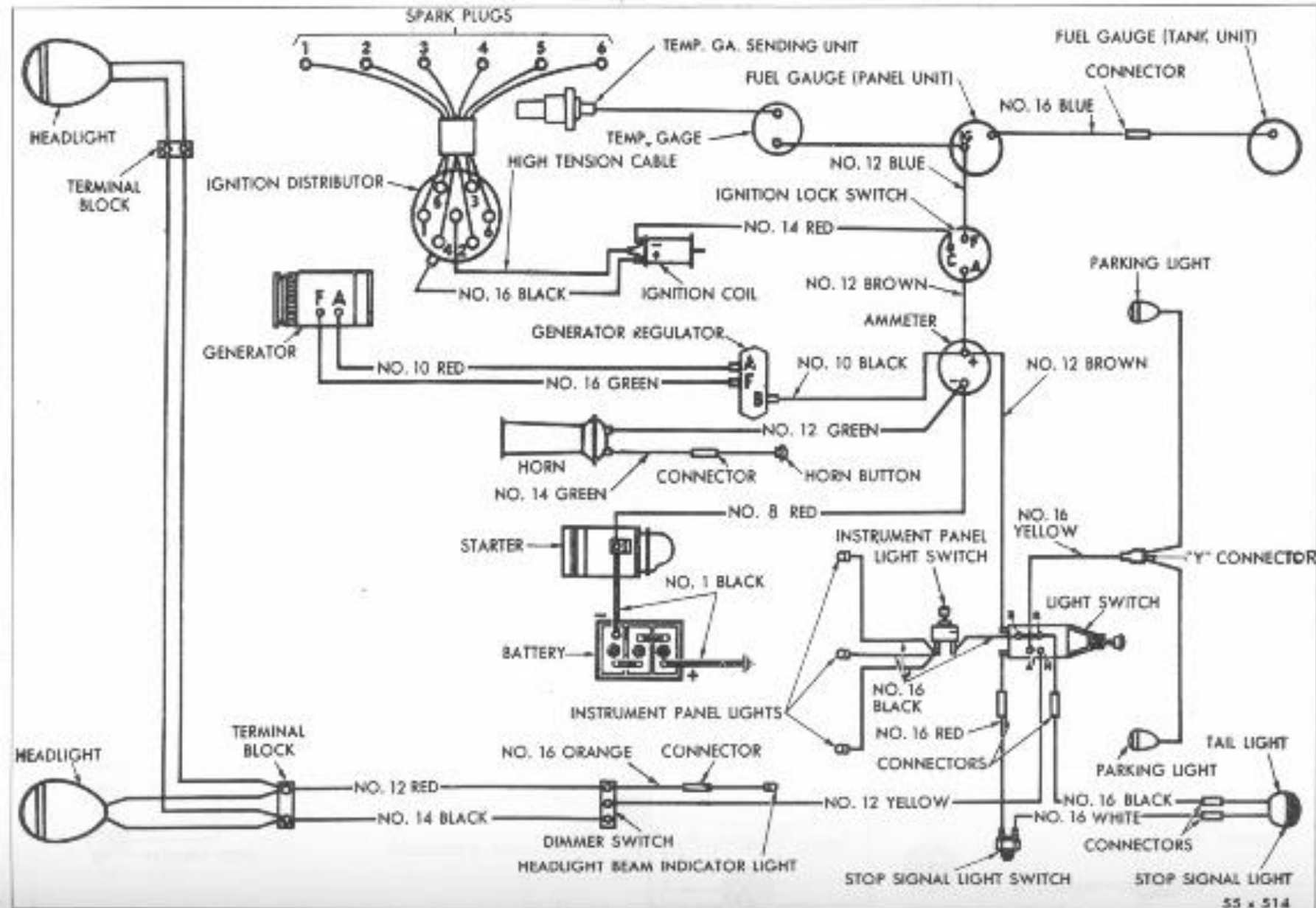


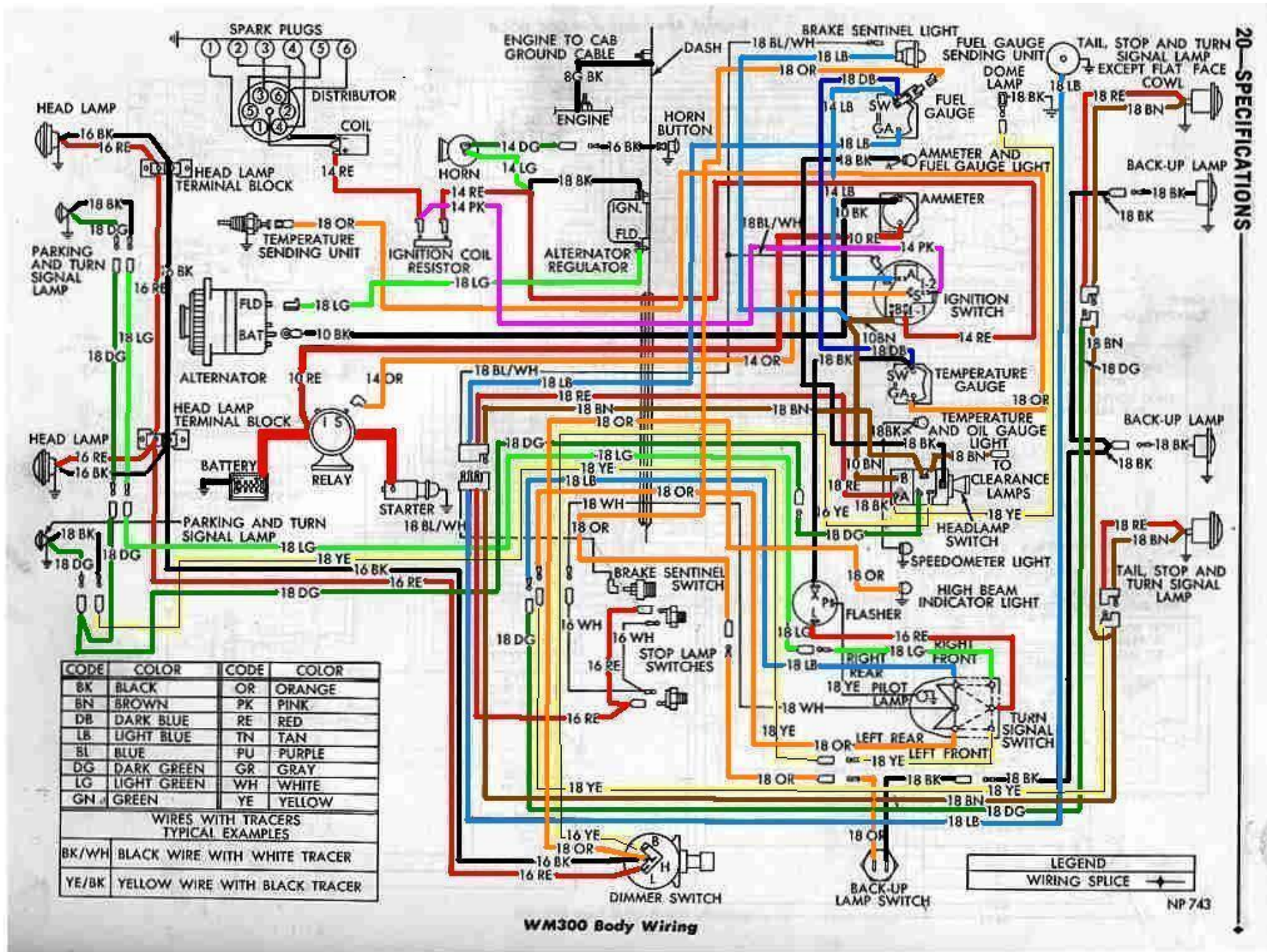
Fig. 15—Wiring Diagram 16 Volt System
C3 Series—Power Wagon

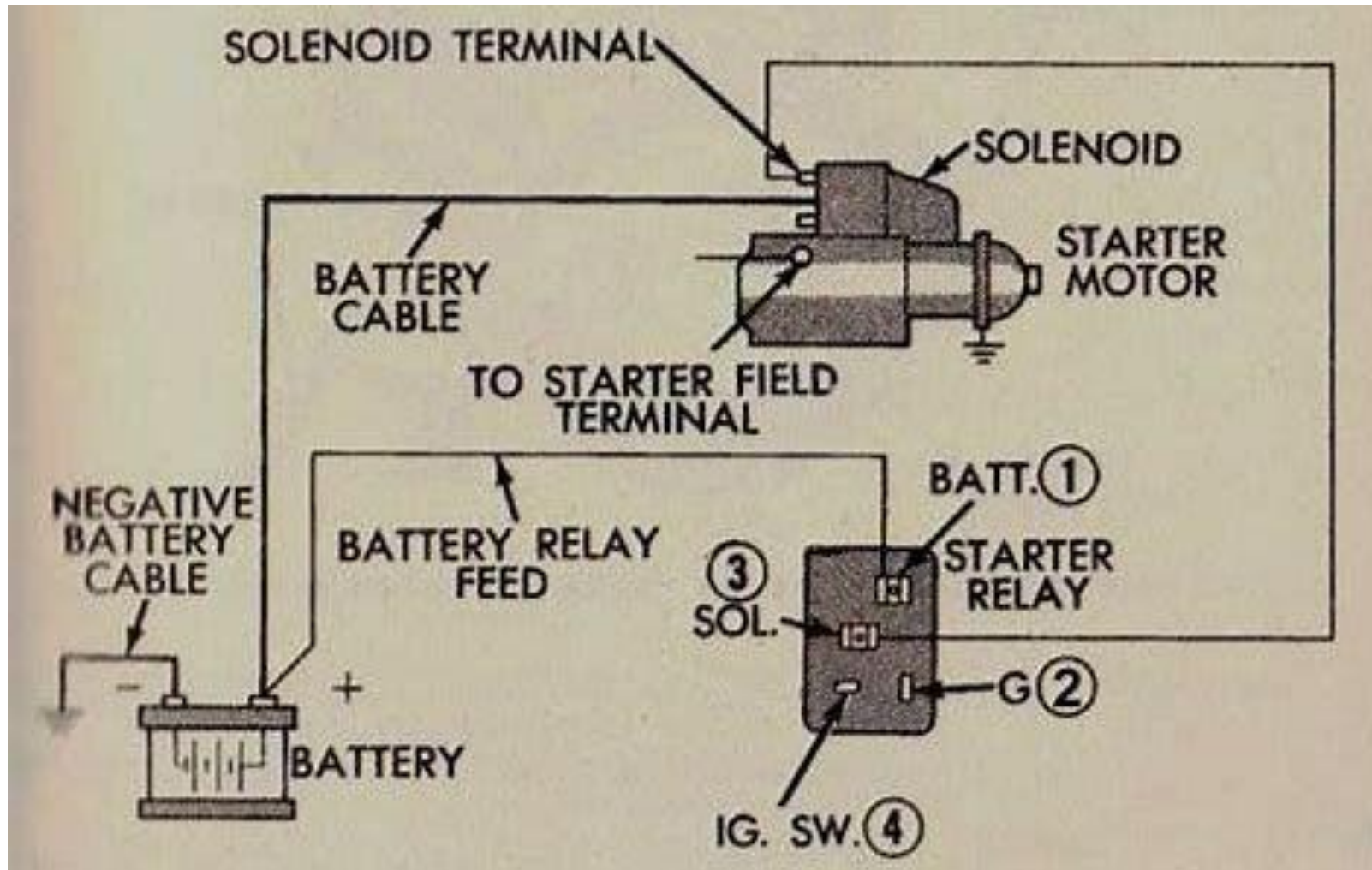
6-14—ELECTRICAL

TRUCK SHOP MANUAL

55 x 514

q. WM300-PW WIRING DIAGRAM





MEASURING FUEL LEVEL SENDER RESISTANCE

- Fuel-level gauges are designed to work with specific fuel-level senders.
- On two wire sending units, post “2” is “power wire” from gauge, “1” is ground.
- On one wire gauges, set multi meter to ohms and connect one lead of the multi meter to gauge post, the other to gauge body.
- On two wire systems, connect one lead of the multi meter to gauge post, the other to gauge ground post.
- Move sender level arm up and down to read ohms range of gauge, compare to table.
- When converting from 6V to 12V, use a voltage reducer for gauge. No reducer is required for tank sending unit.
- If gauge does not work after installing sending unit, check to see if gauge is grounded via tank by:
 - a. One wire gauge - Find a good ground on frame and using a wire, touch frame and body of gauge. If gauge works, bad ground with tank.
 - b. Two wire gauge - Find a good ground on frame and using a wire, touch frame and gauge ground post. If gauge works, bad ground wire to gauge.

Ohms/Resistance (Empty/Full)


Popular Models

0-90 Ohms

WDX to X3-WM300, M37, M601/M615.

240-33 Ohms

Universal Sender/Gauge

t. GENERATOR to ALTERNATOR CONVERSION PARTS		
5/8 Wide Pulley		<u>Part Source</u>
Generator to Alternator Mounting Bracket (Mounts alternator to generator bracket)		<u>Part Source</u>
Belt Adjustment Bracket – Some Mod required.		<u>Part Source</u>
Voltage Regulator Connector - Chevy		<u>Part Source</u>
Voltage Regulator Connector - Chrysler		<u>Part Source</u>
Conversion Kit		<u>Part Source</u>
Conversion Kits and Parts		<u>Part Source</u>
12V Alternator w/Vacuum Pump	<p>Can be used to run windshield vacuum motors</p> <p>NPR 2000-12336</p> <div style="text-align: center;">  </div>	<u>Part Source</u>
u. ELECTRICAL WIRING – Generator Charging Circuit Testing		
Polarizing the Generator charging system	<ol style="list-style-type: none"> 1. Use a piece of wire 1/16 thick (minimum) and 8 inches long. 2. Hold one end of wire against screw head in regulator "BAT" terminal. 3. Touch other end of wire to screw head in regulator terminal marked "ARM" for a maximum of 2 seconds. CAUTION do not touch the "FLD" or any metal part with the wire. 	
Determine if generator is working	With the engine at a fast idle, and using a piece of 1/16 inch wire, hold one end on the "A" terminal of the generator and touch the other end to a ground. There should be a spark, if not generator is not working.	
To determine if regulator is working	Test with engine at a fast idle. Disconnect the wire from the "BAT" terminal and connect in an ammeter that will read 0-50 amps.	
Grounded Field Circuit	Disconnect the "F" terminal wire from the regulator. This opens the field circuit and the output should normally drop to zero. If the output does not drop to zero, the generator field circuit is grounded either inside the generator frame or the wiring harness. To determine where the ground is, remove the lead from the generator field terminal. If the output fails to drop to zero, the field coils are grounded. If the output drops off, the ground is in the wiring harness.	

Poor Ground at Regulator	With all wires in normal connected condition, and using the ammeter, connect one lead between the regulator base and one lead on the generator frame. If output changes, there is a ground between the generator frame and regulator base.
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v. ELECTRICAL WIRING – Fuse Guide

From Ignition Switch ACC Terminal or Terminal Fuse Block	Light Switch	30 Amp	If adding more lights than standard lights, increase fuse amp.	Part Source
	Radio	5+ AMP	Follow manufacturer’s instructions.	Part Source
	Heater	10 Amp		Part Source
	Wiper Motors	10 Amp		
From Light Switch	Taillights	10 Amp		
	Park Lights	10 AMP		
	Panel Lights	10 Amp		
	Headlights	15 AMP		Part Source
From Ignition Switch Terminal	Fuel Pump Safety Switch	10 Amp		

w. ELECTRICAL WIRING – Bulb Guide

Bulb	Candle Power	6V	12V
Dome Light			
Headlight – 5-3/4” Round – PAR-46, 4020 (WW2 Motorcycles Only)		LMP4020 Part Source	
Headlight – 5-3/4” Round – PAR-46, 4031 (Jeep & WC Trucks)		4031 (Higher Candlepower) Part Source	LMP4431N Part Source
Headlight – 7” Round – PAR-56, 6006,		H6006 Part Source	H6024 Part Source
Instrument Panel	1 Original	LMP51 Part Source	LMP 53 Part Source
	2	LMP55 Part Source	LMP 57 Part Source
Parking Light	3	LMP 63 Part Source	LMP 67 Part Source
	4	N/A	LMP 97 Part Source

	6	LMP 81 Part Source	LMP 631 Part Source
Turn Signal	15	LMP 87 Part Source	LMP 1003 Part Source
	21	LMP 1129N Part Source	LMP 1141 Part Source
	32	N/A	LMP 1156 Part Source
Stop Light		LMP 1154N Part Source	LMP 1157 Part Source
Multi-Voltage Lights	10 – 30 volts		Part Source

x. POLARIZING 6V & 12V GENERATOR VOLTAGE REGULATORS

	Standard Motor Products – Applies to all Chrysler/Willy’s Generators – See installations instructions on web page.	Source
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y. 12V ALTERNATOR VOLTAGE REGULATORS

	Standard Motor Products – Applies to all Chrysler, Ford, and GM Alternators – See installations instructions on web page.	Source
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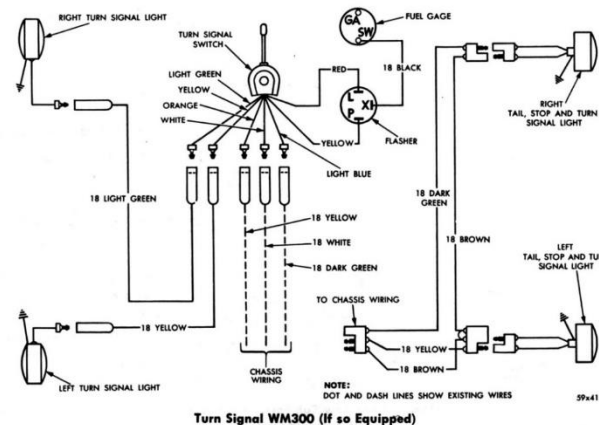
z. COMPLETE WIRING HARNESSES/REGULATORS

	Brillman Co. – 1941-1947 Dodge Truck WC, WD, WF, WG, WH, 1946-50 PW	Part Source
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aa. TURN SIGNAL WIRING DIAGRAM, UNIVERSAL AND LINK TO VARIOUS POWER WAGON MODEL WIRING DIAGRAMS

	Wiring Diagrams	Wiring
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1960 Turn Signal Diagram

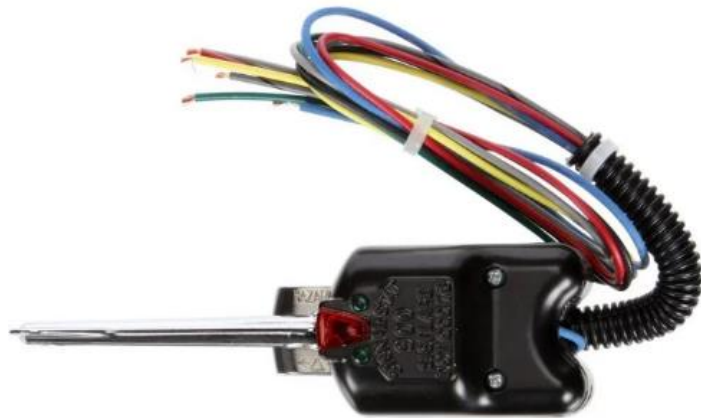


UNIVERSAL TURN SIGNAL SWITCH

for

6V, 12V, and 24V Systems

TRUCK-LITE SS900-S (NAPA# LIT 900)



USE TRUCK-LITE CONNECTOR PART #: 9186 (NAPA# 120 but does not have in-line fuse holder)




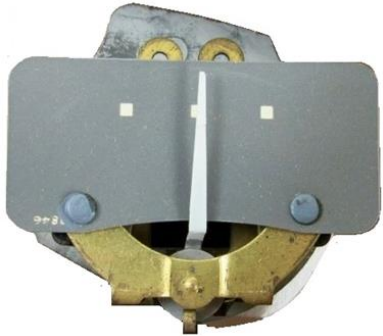

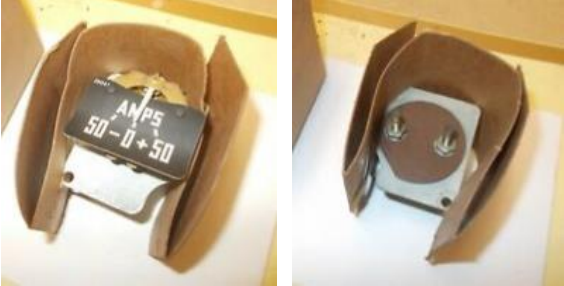
263f_6

NOTE: The STAT 900 Switch may not work properly with the 263 Flasher, if it does not, use NAPA NF 550 Flasher, it does work with the STAT 900 Switch.












bb. **INSTRUMENT GAUGES/SWITCHES/ SWITCH KNOBS/CIRCUIT BREAKERS**





Temperature	Temperature (Capillary Type)	Temperature (6V Electric)	Temperature (12V Electric)
WDX, B1, B2, B3 Series (C-591988)	B3, B4 Series (C-1502682)	B1, B2, B3, B4, C1 Series (C-1507051)	C3 – WM300 Series (C-1660853)
			
Oil	Oil	Oil	
WDX, B1, B2 Series (C-591989)	B3, B4 Series (C-1272352)	C1, C3 – WM300 Series (C-1509659)	
			



<p>Ammeter WDX Series (C-596900)</p>	<p>Ammeter B1, B2, B3 Series (C-1265017)</p>	<p>Ammeter B3, B4, C1 Series (C-1272351)</p>	<p>Ammeter C1, C3 Series (C-1500380) 6V</p>
			

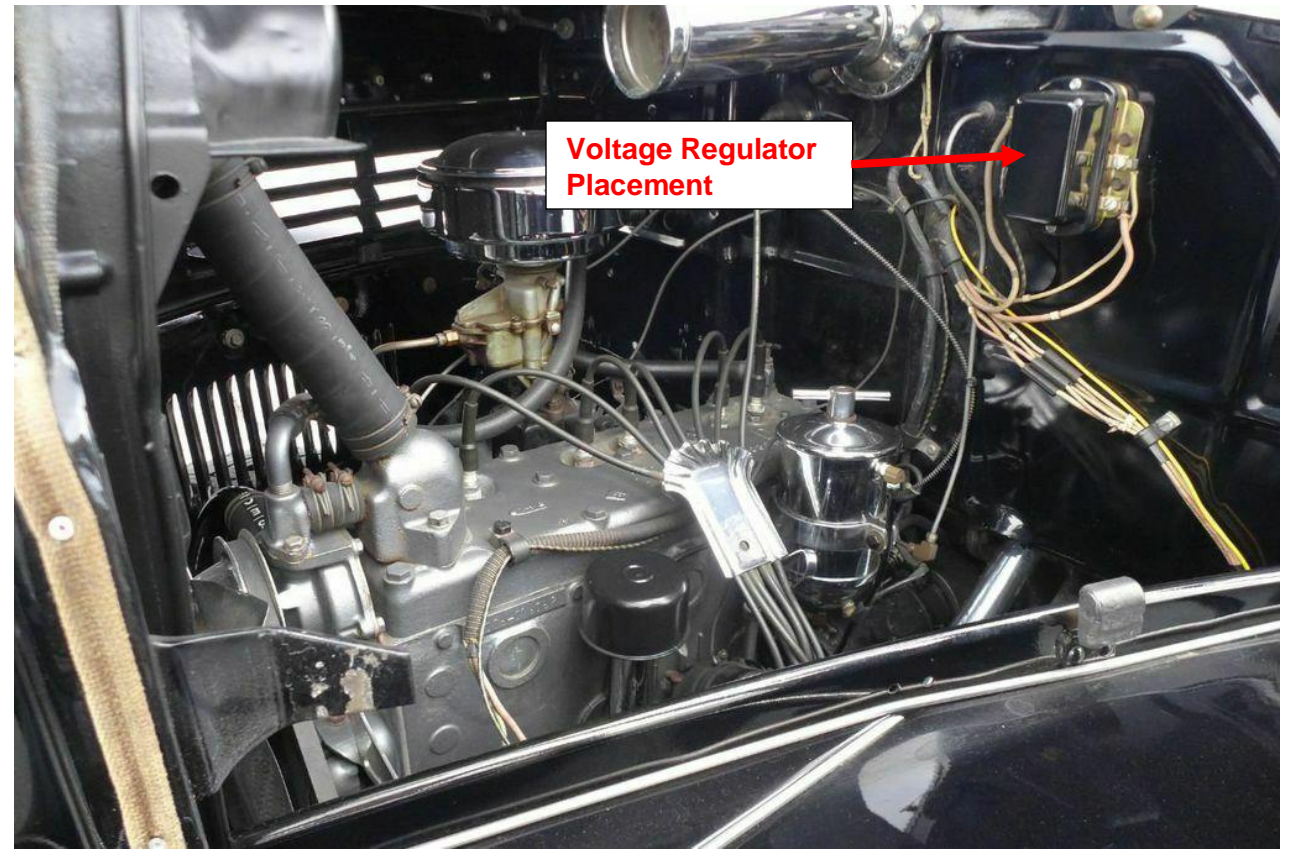
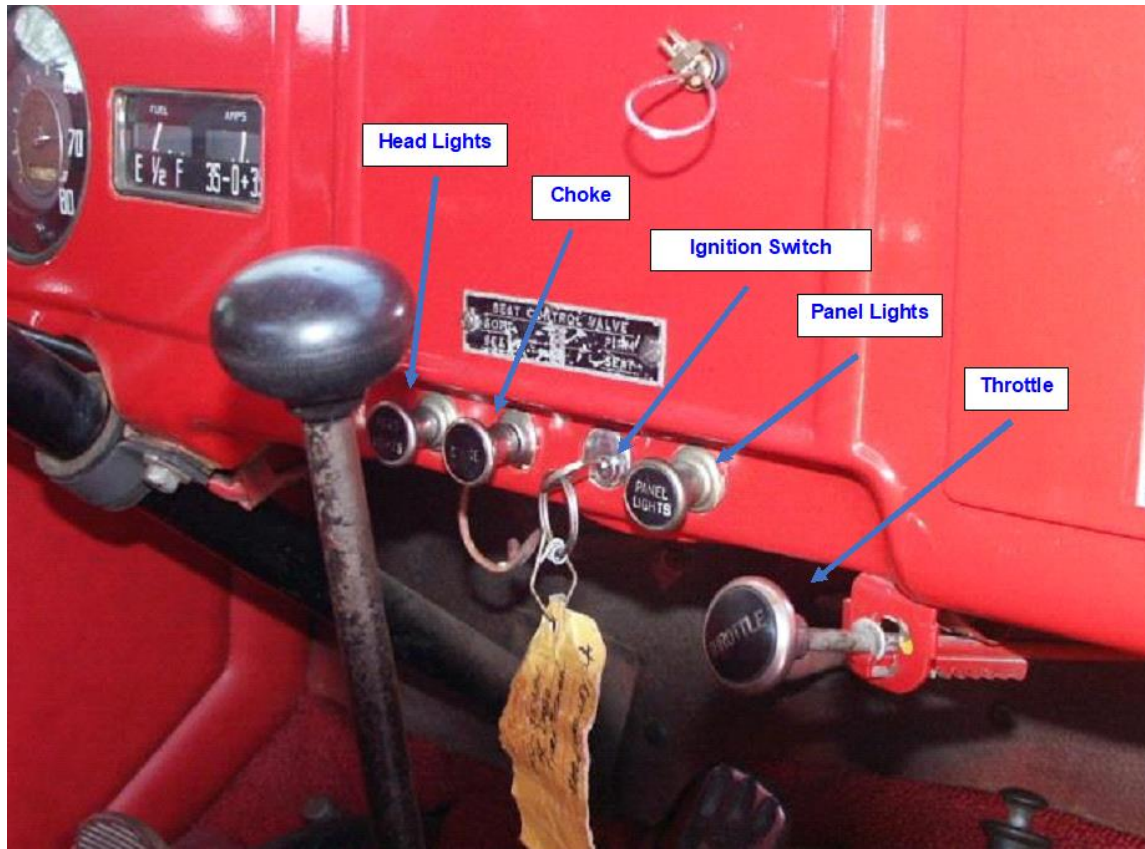
<p>Ammeter</p>	<p>Ammeter</p>	<p>Ammeter</p>	<p>Ammeter C3, WM300 Series (C-1660852) 12V</p>

<p align="center">Fuel WDX, B1, B2 Series (C-591990)</p>	<p align="center">Fuel B3, B4, Series (C-1272353)</p>	<p align="center">Fuel C1, C3 Series (C-1500379) 6V</p>	<p align="center">Fuel C3, K6-W300, WM300 Series (C-1660854) 12V</p>
			

<p align="center">Headlamp Switch (6v)</p>	<p align="center">Headlamp Switch (12v)</p>	<p align="center">Instrument Panel Light Switch</p>	<p align="center">Ignition Switch/Housing Ignition Switch/Key Package</p>
<p align="center">(C-1260727)</p>	<p align="center">(C-1660525)</p>	<p align="center">(C-853127)</p>	<p align="center">Switch (C-1232508) Key/Cylinder (C-1189676)</p>
			 <p>Blank Key = HY Series (Independent Lock Co. Key Number: 1125H)</p>  <p align="right">(C-1189666) (1125H)</p>

Circuit Breaker (6v, 30 amp.) (C-1370395)	Circuit Breaker (12v) (C-1540427)	Starter Switch (6v) (C-641462)	Starter Switch (12v) (C-1390061)
			

Headlight Terminal Block-3P (C-683955)	Headlight Terminal Block-2P (C-683955)	Headlight Beam Indicator (C-1149850)	(C-)
			



BALLAST RESISTERS(BR)

Here is the theory behind a BR so you understand its operation. Forcing more current through the primary windings of a coil will result in more secondary voltage produced when the points open. The way you get current through the coil windings is to increase the electrical pressure or voltage. Placing a BR in the circuit reduces the electrical pressure and that cuts the amount of current going to and through the coil windings. So, what is the effect?

1. You have less current to generate high voltage to the plugs during cold starts when fuel ratio is higher, and you need it the most. Fuel/air are resistance that requires more electrical pressure to generate a spark that will jump the spark plugs electrode gap.
2. When the engine is running, the electrical pressure drops to 9-volts extending the life of the coil and points.
3. As RPMs increase, the resistor gets hotter generating more resistance and less spark to the plugs. As RPMs drop, resistor cools increasing spark to the plugs.

So, the BR really controls the spark to the plugs and extends point and coil life and to rectify number 1., you must create a BR by-pass, so you get the full 12-volts pressure to the coil during startups. This is done using a 4-post solenoid and running a wire from the "I" post and connecting it to the wire going to the "+" side of the coil from the BR. When you start cranking the engine, a full 12-volts by-passes the BR and goes directly to the coil and once the engine starts, the by-pass is cut-off by the solenoid reverting to 9-volts of pressure going to the coil.

REGULATORS

The purpose of the regulator is to limit the amount of current flowing in the generator or alternator field windings. There are basically three windings or parts to the regulator:

Cutout Relay - Controls the current between the generator and the battery. It closes the circuit when the generator is producing current. When the engine is off, it opens the circuit to prevent battery drain through the generator/alternator.

Current Regulator - Keeps the generator/alternator output within the maximum level by rapidly opening and closing points based on circuit demands. For example, when you have a low charged battery, this winding kicks in to cause the generator to produce maximum output to charge the battery and run circuit components, ignition, lights, and accessories.

Voltage Regulator - Reduces the generator/alternator output level based on circuit demands. For example, once the battery charge level is increased, the current regulator kicks off, and the voltage regulator takes over to regulate the circuit based on demand.

GROUP 8. ENGINE												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Rubber Insulator (Front) Pioneer# 602018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Rubber Insulator (Rear Upper) Pioneer# 602014	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
MASTER ENGINE REBUILDING KITS											<u>Part Source</u>	
225/6(3.7L) Engine												
Crankshaft Rod Bearing	Clevite# CB-1214A.STD											
Main Bearings	Clevite# MS-1419AL-20, 30											
Camshaft Bearings	Clevite# SH-874S.STD											
Pistons	Power Seal# 224-1397-STD, .020, .030, 040, .060											
218(3.6L)/230(3.8L) Engine												
Air Cleaner Mount Gasket, 1942-1960 (230), Square Top 1 Barrel Carburetor	Victor Reinz# G26540										<u>Part Source</u>	
Block Expansion Plug -- Cylinder Block, 1 5/8", Brass	NAPA# 2196014										<u>Part Source</u>	
Block Expansion Plug -- Cylinder Block, 1-5/8", Stainless Steel	NAPA# 2195126										<u>Part Source</u>	
Block Expansion Plug -- Cylinder Block, 1-5/8", Steel	NAPA# 2191014										<u>Part Source</u>	
Block Expansion Plug -- Rear of Camshaft, 1-3/8", Brass	NAPA# 2196012										<u>Part Source</u>	
Block Expansion Plug -- Rear of Camshaft, 1-3/8", Steel	NAPA# 2191012										<u>Part Source</u>	
Head Expansion Plug -- 1-1/16", Steel												
Head Expansion Plug -- 1-3/16", Steel												
How to install steel expansion plugs											<u>Instructions</u>	
Crankshaft Main Bearing Set	Clevite# MS523P, MS523P10, 20, 30, 40, 50, 60											
Crankshaft Rod Bearing (Old Numbers)	Clevite# CB60G, CB60G10, 20, 30, 40											
Crankshaft Rod Bearing (New Numbers)	Clevite# CB60G, CB60G10, 20, 30											

Cylinder Repair Sleeve	NAPA# 2268026	Part Source	
Exhaust Valve -- 1.13/32" HEAD DIA, .340-.341" STEM DIA, 0.0" O.A.L.	Clevite# 261351, 211-1591	Part Source	
Exhaust Valve Guide -- .0" ID, 0" O.A.L.	Clevite# 28420, 217-3337	Part Source	
Exhaust Valve Seat -- 0.0" OD, 0.0" ID, .0" DEPTH	Clevite# 2715161, 218-7487 (Discontinued)		
Exhaust Valve Spring w/ROTOCAP -- 0.0" FREE HEIGHT	Clevite# 24304, VS506, 212-1072	Part Source	
Exhaust Valve Spring w/o/ROTOCAP -- 0.0" FREE HEIGHT	Clevite# VS304, 212-1011	Part Source	
Gasket -- Air Cleaner Mount Gasket 1942-1954 (218), Except PW Series, 1 Barrel Carburetor	Victor Reinz# G26540	Part Source	
Gasket -- Air Cleaner Sleeve 1942-1954 (218/230), C Clamp Flange	Victor Reinz# G25936	Part Source	
Gasket -- Carb. Mount Gasket 1951-1954 (218/230)	Victor Reinz# G5349AD	Part Source	
Gasket -- Exhaust Pipe Gasket, 1942-1954 (Flange Type) (218/230)	Victor Reinz# F5438AK	Part Source	
Gasket -- Fuel Pump Bowl Gasket, 1948-1950 (218/230)	Victor Reinz# D35288	Part Source	
Gasket -- Full Set (Timing Cover and Rear Main Seal Sets Not Included)	Victor Reinz# FS1059C	Part Source	
Gasket -- Head Set	Victor Reinz# HS1059C	Part Source	
Gasket -- Manifold Set (Int./Exh.)	Victor Reinz# MS18005	Part Source	
Gasket -- Manifold, Between Exhaust/Intake Manifolds (4 bolt)	Victor Reinz# B17186	Part Source	
Gasket -- Oil Drain Plug Gasket, 1942-1960 (230) 22MM	NAPA# 7041966	Part Source	
Gasket -- Oil Pan Set	Victor Reinz# OS30893	Part Source	
Gasket -- Oil Pressure Relief Gasket 1942-1960 (230)	Fel-Pro# 3122	Part Source	
Gasket -- Push Rod Cover Set, 1942-1954 (218)	Victor Reinz# VS36054	Part Source	
Gasket -- Rear Main Seal Set 1942-1952 (218), 1942-1953 Up-To T137-25992 (230)	Victor Reinz# JV134-6	Part Source	
Gasket -- Rear Main Seal Set 1953-1954 (218), 1954-1960 After T137-25992 (230)	Victor Reinz# JV134-9	Part Source	
Gasket -- Timing Cover Dust Seal, 1953-1954 (218/230)	Victor Reinz# 42379	Discontinued, packaged in sets	
Gasket -- Timing Cover Set, 1942-1946 (218), 1942-1946 (230)	Victor Reinz# JV755		
Gasket -- Timing Cover Set, 1947-1952 (218), 1947-1953 (230)	Victor Reinz# JV757	Part Source	
Gasket -- Timing Cover Set, 1953-1954 (218), 1954-1960 (230)	Victor Reinz# JV826	Part Source	
Gasket -- Water Outlet Gasket, 1942-1954 (218)	Victor Reinz# C24109	Part Source	
Gasket -- Water Outlet Gasket, 1942-1960 (230)	Victor Reinz# C25487	Part Source	
Gasket -- Water Pump Mount Gasket, 1942-1954 (218/230)	Victor Reinz# K25845	Part Source	
Intake Valve -- 1.17/32" HEAD DIA, .340-.341" STEM DIA, 0.0" O.A.L.	Clevite# 251416, 211-1226	Part Source	
Intake Valve Guide -- .0" ID, 0.0" O.A.L.	Clevite# 28420, 217-3338	Part Source	
Intake Valve Seat -- 0.0" OD, 0.0" ID, .0" DEPTH	Clevite# 218-7535 (.005, .010, .015 oversize)	Part Source	
Intake Valve Spring -- 0.0" FREE HEIGHT	Clevite# 24304, VS506, 212-1072	Part Source	
Intake Valve Spring w/o/ROTOCAP -- 0.0" FREE HEIGHT	Clevite# VS304, 212-1011	Part Source	
Iron Cam Gear	UP TO Engine No. T137-48040, Clevite# S126 - AFTER Engine No. T137-48040, Clevite# S265	Part Source	
Iron Crankshaft Gear	UP TO Engine No. T137-48040, Clevite# S127 - AFTER Engine No. T137-48040, Clevite# S266	Part Source	
Oil Pump	Clevite# P37, 601-1065	Part Source	

Piston (Old Numbers)						Sealed Power# 9128PT, 9128PT20, 30, 40, 50, 60, 80							
Piston (New Numbers)						Sealed Power# 9128PT, 9128PT30, 40, 60							
Piston Pin -- .0015" Oversize (Old Number)						NAPA# 2231356001, Clevite# 223-1356.001							
Piston Pin -- .003" Oversize (Old Number)						NAPA# 2231356003							
Piston Pin -- STD (New Number)						Clevite# 223-3349							
Piston Pin Lock Ring						Mahle# 2042968						Part Source	
Piston Pin Bushing -- FULL ROUND - .0055" O/S BUSHING						Sealed Power# 8649XAS						Part Source	
Piston Pin Bushing -- FULL ROUND BUSHING						Sealed Power# 8649XA						Part Source	
Piston Pin Bushing -- SPLIT TYPE BUSHING						Clevite# 01051A						Part Source	
Piston Pin Bushing -- SPLIT TYPE BUSHING - .020" EXTRA BORE STOCK						Sealed Power# 8649V20						Part Source	
PISTON RING SETS						PART NUMBERS							
Piston Ring Sets -- BORE 3.25 in./82.5 mm (3.6L, 3.8L, 218/230 C.I.D.)	Manufacturer	Ring Type	Groove	Ring Material	Ring Surface Treatment	STD.	.010	.020	.030	.040	.050	.060	
Full Piston Set (includes the 4 rings for 6 pistons)	Hastings	Top	3/32 in.	Grey Iron	Phosphate	144			144030	144040		144060	
		2 ND Top	3/32 in.	Grey Iron	Phosphate								
		1 st Oil	5/32 in.	Steel Rail/ Stainless Exp.	Chrome Rail								
		2 nd Oil	5/32 in.	Grey Iron	Phosphate								
Single Piston Set (includes the 4 rings)						144S			144S030	144S040		144S060	
Single Piston Set (includes the 4 rings)	Perfect Circle (Plain - Cast Iron)			Cast Iron		539.STD		539.020	539.030	539.040		539.060	
	Perfect Circle (Premium - Ductile iron or steel plasma-moly filled top ring)			Chrome		439.STD		439.020	439.030	439.040		439.060	
Single Piston Set (includes the 4 rings)													
Timing Chain						UP TO Engine No. T137-48040, Clevite# C401, 9-401						Part Source	
Timing Chain						AFTER Engine No. T137-48040, Clevite# C401, 9-490						Part Source	
Valve Keeper/Lock						Clevite# 3463, 216-5081						Part Source	
251(4.1L)/265(4.3L)													
Block Expansion Plug - Cylinder Block, 1 5/8", Brass										NAPA# 2196014			
Block Expansion Plug - Cylinder Block, 1 5/8", Stainless Steel										Part Source			
Block Expansion Plug - Cylinder Block, 1 5/8", Stainless Steel										NAPA# 2195126			

	Part Source
Block Expansion Plug - Cylinder Block, 1 5/8", Steel	NAPA# 2191014 Part Source
Block Expansion Plug - Rear of Camshaft, 1 3/8", Brass	NAPA# 2196012 Part Source
Block Expansion Plug - Rear of Camshaft, 1 3/8", Steel	NAPA# 2191012 Part Source
How to install steel expansion plugs	Instructions
Cam Bearing Set (Old Numbers)	Clevite# SH37S, SH37S10
Cam Bearing Set (New Numbers)	Clevite# SH37S
Crankshaft Main Bearing Set (Old Numbers)	Clevite# MS107P, MS107P10, 20, 30, 40
Crankshaft Rod Bearing (Old Numbers)	Clevite# CB90P, CB90P10, 20, 30, 40, 50
Distributor	NAPA# 483610, AutoZone# 30-3610 Part Source
Exhaust Valve 1.5010" HEAD DIA, .3400" STEM DIA, 4.8450" O.A.L.	Clevite# 261004, 211-1195 Part Source
Exhaust Valve Guide .3445" ID, 2.8130" O.A.L.	Clevite# 28419, 217-3337 Part Source
Exhaust Valve Guide .4370" ID, 2.1870" O.A.L.	Clevite# 28438
Exhaust Valve Seat 1.6395" OD, 1.3750" ID, .2480" DEPTH	Clevite# 2716401, 2716401010, 2716401020 Part Source
Exhaust Valve Spring w/ROTOCAP - 1.8570" FREE HEIGHT	Clevite# 24506, 212-1011 Part Source
Exhaust Valve Spring w/oROTOCAP - 1.8570" FREE HEIGHT	Clevite# 24506, VS506, 212-1072 Part Source
Gasket -- Air Cleaner Mount Gasket, 1961-1962 (251/265)	Victor Reinz# G26540 Part Source
Gasket -- Air Cleaner Sleeve, 1963-1968 (251) (4 bolt gasket)	NAPA# 27717 Part Source
Gasket -- Cylinder Head Gasket, 1961-1968 (251)	Victor Reinz# 3029 Discontinued, packaged in sets
Gasket -- Cylinder Head Gasket, 1961-1968 (265)	Victor Reinz# 4922 Discontinued, packaged in sets
Gasket -- Exhaust Pipe Gasket, 1961-1968 (Flange Type) (251/265)	Victor Reinz# F7153 Part Source
Gasket -- Full Set, 1961-1968, (251) Timing Cover and Rear Main Seal Sets Not Included	Victor Reinz# FS3029X Part Source

Gasket -- Full Set, 1961-1968, (265) Timing Cover and Rear Main Seal Sets Not Included	Victor Reinz# FS4922 Part Source
Gasket -- Head Set, 1961-1960 (265)	Victor Reinz# HS4922 Part Source
Gasket -- Head Set, 1961-1968 (251)	Victor Reinz# HS3029
Gasket -- Manifold Set (Int./Exh.), 1961-1968 (251/265)	Victor Reinz# MS15029 Part Source
Gasket -- Oil Drain Plug Gasket (7/8" Rubber) (251/265)	Fel-Pro# 70822 Part Source
Gasket -- Oil Pan Set, 1961-1968 (251/265)	Victor Reinz# OS30899 Part Source
Gasket -- Oil Pressure Relief Gasket (251/265)	Fel-Pro# 3122 Part Source
Gasket -- Push Rod Cover Set, 1961-1968 (251/265)	Victor Reinz# VS38219
Gasket -- Rear Main Seal Set, 1961-1968 (251/265)	Victor Reinz# JV134-9 Part Source
Gasket -- Timing Cover Dust Seal, 1961-1962 (251)	Victor Reinz# 42379
Gasket -- Timing Cover Set, 1953 (265)	Victor Reinz# JV757 Part Source
Gasket -- Timing Cover Set, 1961-1968 (251/265)	Victor Reinz# JV826 Part Source
Gasket -- Water Outlet Gasket, 1961-1968 (251/265)	Victor Reinz# C25487 Part Source
Gasket -- Water Pump Mounting Gasket (251)	NAPA# Discontinued, packaged in sets
Gasket -- Water Pump Mounting Gasket (265)	Victor Reinz# K25845 Discontinued, packaged in sets
Intake Valve 1.7180" HEAD DIA, .3410" STEM DIA, 4.8450" O.A.L.	Clevite# 251005, 211-1094 Part Source
Intake Valve Guide .3425" ID, 2.1830" O.A.L.	Clevite# 28420, 217-3338 Part Source
Intake Valve Seat 1.8175" OD, 1.5625" ID, .2480" DEPTH	Clevite# 2718121, 218-7651 Part Source
Intake Valve Seat 1.8180" OD, 1.5625" ID, .2480" DEPTH	Clevite# 2718121N, 218-7537 Part Source
Intake Valve Spring 2.0000" FREE HEIGHT, w/Rotorcap Assembly	Clevite# 24304, 212-1011 Part Source
Intake Valve Spring 2.0000" FREE HEIGHT, w/o/Rotorcap Assembly	Clevite# 212-1012
Iron Cam Gear	Clevite# S302 Part Source
Iron Crankshaft Gear	Clevite# S303
Oil Pump	Clevite# P37

											Part Source	
Piston (Old Numbers)											Sealed Power# 32NP, 32NP20, 32NP30, 32NP40, 32NP50, 32NP60	
Piston (New Numbers) – SILV-O-LITE, Part Number – 1281, STD to .060											Part Source	
Piston Pin .0015" Oversize (Old Number)											NAPA# 2231360001	
Piston Pin (New Number)											Discontinued	
Piston Pin .003" Oversize											NAPA# 2231360003	
Piston Pin (New Number)											Discontinued	
Piston Pin Bushing FULL ROUND - .0055" O/S BUSHING											Sealed Power# 8649XAS Part Source	
Piston Pin Bushing FULL ROUND BUSHING											Sealed Power# 8649XA Part Source	
Piston Pin Bushing SPLIT TYPE BUSHING											Clevite# 01051A Part Source	
Piston Pin Bushing SPLIT TYPE BUSHING - .020" EXTRA BORE STOCK											Sealed Power# 8649V20 Part Source	
PISTON RING SETS						PART NUMBERS						
Piston Ring Sets -- BORE 3.438 in./87.3 mm (4.1L, 4.3L, 251/265 C.I.D.)	Manufacturer	Ring Type	Groove	Ring Material	Ring Surface Treatment	STD.	.010	.020	.030	.040	.050	.060
Full Piston Set (includes the 4 rings for 6 pistons)	Hastings	Top	5/64 in.	Grey Iron	Phosphate	663			663030			
		2 ND Top	3/32 in.	Grey Iron	Phosphate							
		1 ST Oil	3/16 in.	Steel Rail/ Stainless Exp.	Chrome Rail							
Single Piston Set (includes the 4 rings)						663S			663S030			
Full Piston Set (includes the 4 rings for 6 pistons)	Perfect Circle (Plain)			Cast Iron		533.STD		533.020	533.030	533.040		533.060
	Perfect Circle (Premium)			Ductile iron or steel plasma-moly filled top ring		433.STD		433.020	433.030	433.040		433.060
Single Piston Set (includes the 4 rings)												
Timing Chain											Clevite# C494, 9-401 Part Source	
Valve Keeper/Lock											Clevite# 3463, 216-5081 Part Source	

Chrysler Industrial 265 C.I.D., 4.3L Engine Parts Source		These engines were also used in the Massey Ferguson 101 Tractor, Super 82 & 92 Combines, Oliver 430, 431, 535, 545 Combines, Continental 4 Cylinder Gas Z134, and Minneapolis Moline 3490,3496,4290,4296 Combines.		Part Source
Engine Redline	<p>After searching the internet for engine Redline data for the 230 C.I.D. engine, and finding none other than opinions, the formula used by Roadkill Customs is probably a good guide to use. Here it is:</p> <ul style="list-style-type: none"> - Formula for determining engine redline is Stroke x RPM divided by 6 = Piston Speed Per Minute (PSPM). Max PSPM is 4,000 for slightly modified engine. - If we use 5,000 RPM, and 4.625 for the stroke and apply the formula, we get 3854 PSPM which is probably a good figure for the stock 230 engines. - The maximum sustained cruising RPM for engines is generally 60% of redline which if we use 5,000 RPM x .60 = 3,000 RPM - Based on tire height (35 inches), gear ratio (5.83) and a speed of 55 MPH, engine will turn 3,078 RPM - Based on this, and the tag on your glove box, you should be able to cruise at 55 MPH all day. <p>You can also use a vacuum gauge to determine the best part throttle vacuum which would be the best cruising RPM for engine and MPG.</p>			Formula Gear Ratio Calculator
EFI Conversion Kits – I6				Part Source
V8 Conversion Kits	DC Truck Parts - Job Rated	Vintage Power Wagons		
Engine Rebuilding – 1934 to 1960 Dodge Flathead				Source
230 Head Bolt Kit	<p>7/16-14NC x 2-13/16 (21 bolts in kit)</p> <p>Dorman part# 675-060 (10 bolt box), 675-060BX ((7/16-14 X 2.953 In. (2-15/16), Hex Head 11/16 In.)), 14 bolt box, [Buick 1976-75, Oldsmobile 1982-75]. Both the 675-060 and 675-060BX are the same bolt.</p> <p>These bolts are a little over 1/8 longer than stock bolts, so you might want to grind some off to match the stock bolt length.</p>		Part Source Part Source	

Differences in Exhaust Manifolds, early and late. They are interchangeable between 46 and 60 and will require exhaust pipe modification. The difference is the location of the dump.

Before T137-13892



C-620954, 622497, 644081 (Military and Civilian Vehicles)

After T137-13892

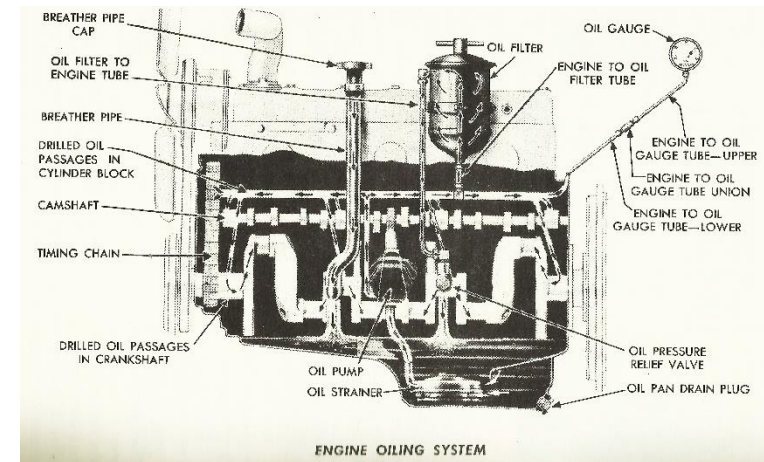
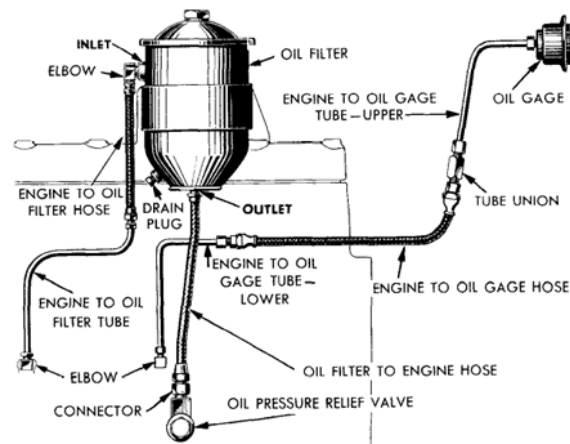


C-1314398 (Civilian Vehicles)

Crank Casting Numbers (CCN)	Dodge/Plymouth (D/P)	Block Casting Numbers	DeSoto	Block Casting Numbers	Chrysler/Dodge (C/D)	Block Casting Numbers
Car	218 CID 856080 (4 Hole) 952068 (4 Hole) 864719 (8 hole) 1316540 (8 Hole)	1119729 1326299 1326299 1484929	237 CID (Bore 3.438 x Stroke 4.250), 870716	1557736		
Truck & Industrial	218 CID 856080 (4 Hole) 870001 (4 Hole) 952068 (4 Hole)	1119729 1326299				
Car	230 CID 868929 (8 Hole) 1557707 (8 Hole)	1119729 1326299	251 CID (Bore 3.438 x 4.500), 870745	1557736		

	1557708 (8 Hole)	1484929					
Truck & Industrial	230 CID 868929 (8 Hole) 1557707 (8 Hole) 1557708 (8 Hole)	1119729 1326299 1484929					
Car					251 CID - 870745	1409632	
Truck & Industrial					251 CID - 864718, 870715, 1400188	1115829 1138129 1400229	
Car					265 CID - 1400187	1409632	
Truck & Industrial					265 CID - 870744, 1400188	1400229	
Engine Performance Parts	Landon's Stovebolt 6					Part Source	

GROUP 9. ENGINE OILING



	Car Quest	Baldwin	WIX	Fram	NAPA	Purolator	Hastings	Cummins
1/2 Ton, Early WW2 Dodge [Can Type Replaceable Element w/Pull-Out Bail Handle]		P67						
1/2 Ton Late, 3/4 & 1.5 Ton, WW2 Dodge [Can Type Replaceable Element w/Pull-Out Bail Handle]		P53	51100	C4P	1100	L20051	LF373	
M37 - Purolator Cannister# 26708, Element# 38733			51100					

M37 - Deluxe Cannister# DX-1368-20, Element# 1271101			51100					
M37 - Fram Cannister# 5310-2, Element# 5625			51100					
1946-60 Civilian Power Wagon (230) [Can Type Replaceable Element w/Pull-Out Bail Handle]		P73	51080	C134PL	1080	L30001	LF128	
1946-60 Civilian Power Wagon (230) [Sock Type Replaceable Element w/Pull-Out Bail Handle] Filter I.D = 9/16 inches Filter O.D. = 4 inches Filter Height = 5-1/4 inches (Careful – Some manufacturer filters are 5-5/8 high which makes installation difficult, check before buying)	85011	JC405	51011	C120E (Obsolete)	1011	(Obsolete)	LF501 (Obsolete) JC405 (Current)	LF505 Part Source
1961-68 Civilian Power Wagon (251) [Can Type Replaceable Element w/Pull-Out Bail Handle]		P73	51080	C134PL	1080	L30001	LF128	
Israeli 251 Military Engine W/Spin-on Filter			51515					
265 Engine -- [Can Type Replaceable Element w/Pull-Out Bail Handle]		P60	51062	CH192PL	1061	L40082	LF309	
1969-71 X3-WM300 225/6			51515XP					
Oil Pump Housing Mounting Paper Gasket to Engine Block, Gasket Part Number CC# 695442	Gasket Sources		Midwest Military		Vintage Power Wagons		Silke's Auto Parts	
Early Pump, 6 Bolt Cover, Paper Gasket, Gasket Part Number CC# 50744	Gasket Sources		Midwest Military		Vintage Power Wagons		Deception Pass Motor Parts	
Later Pump, 5 Bolt Cover, Rubber "O" Ring Gasket, Gasket Part Number CC# 1124984, Victor Reinz# B44458, NAPA# FPG 13338	Gasket Sources		Midwest Military		Vintage Power Wagons		NAPA	
Custom Oil Gauge Hose for 61-68 Dodge Trucks - (55" version)							Part Source	
Toilet Paper Oil Filter – Frantz Filter Assembly							Part Source	
BALDWIN JC405 replacement filters							Part Search	


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GROUP 10. EXHAUST

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Stainless Steel Muffler – Walker# 21028



Part Number: 21028

AUTOMOTIVE ITEM GRADE	DEM STANDARD PART	MUFFLER INLET DIAMETER 1	2.000"
MUFFLER BODY HEIGHT	5.000"	MUFFLER INLET DIAMETER DESIGNATION	INSIDE DIAMETER
MUFFLER BODY LENGTH	21.000"	MUFFLER INLET CONNECTION TYPE	PIPE CONNECTION
MUFFLER BODY WIDTH	5.000"	MUFFLER OUTLET CONFIGURATION	CENTERED
MUFFLER SHAPE	ROUND	MUFFLER OUTLET COUNT	1
FITMENT	DIRECT OE REPLACEMENT	MUFFLER OUTLET DIAMETER	1.813"
MUFFLER TYPE	COMBINATION	MUFFLER OUTLET DIAMETER DESIGNATION	OUTSIDE DIAMETER
MUFFLER BODY MATERIAL	STEEL	MUFFLER OUTLET CONNECTION TYPE	PIPE CONNECTION
MUFFLER INLET CONFIGURATION	CENTERED	MUFFLER OVERALL LENGTH	25.750"
MUFFLER INLET COUNT	1	MUFFLER REVERSIBLE	NO

GROUP 11. FENDERS and SHEET METAL												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3-WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
				1 st Series Bed 1946 – Early 50		2 nd Series Bed Late 1950 – Early 56 1954 – 80 Stepside Tailgate		3 rd Series Bed Late 1956 – 71 1954 – 80 Stepside Crossmember				3 rd Series Bed
Fender – Front Support	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Fender – Front Support Brace	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Fender – Rear Support	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Fenders - Front	No	Yes	Yes	No	No	No	No	No	No	No	No	No
Fenders - Front	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Fenders - Rear	No	No	No	Yes	Yes	No	No	No	No	No	No	No
Fenders - Rear	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Shield - Engine	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Shield - Splash	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Steel Revit – Front Support		Truss Revit – 13/16 x 5/16 x 7/8 .813 x .313 x .875										Parts Source

GROUP 12. FRAME												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1 /M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Bumper – Mounting Brackets, Support/ Reinforcement	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Bumper – Non-Winch Model	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Bumperettes – Winch Model	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Crossmember - Rear	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Draw Bar	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Mounting Bracket – Spare Tire	No	Yes	Yes	No	No	No	No	No	No	No	No	No
Mounting Bracket – Spare Tire	No	No	No	Yes	Yes	No	No	No	No	No	No	No
Pintle Hook Assembly Pintle Hook# 375	Yes	No	No	No	No	No	No	No	No	No	No	No
Pintle Hook Assembly Pintle Hook# 330	No	Yes	Yes	No	No	No	No	No	No	No	No	No
Pintle Hook Assembly Pintle Hook# 380 See Group 28 - Rare Part Section for Images	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Tow Hooks - Non-Winch Models	No	Yes	Yes	No	No	No	No	No	No	No	No	No
Tow Hooks - Non-Winch Models	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Tow Hooks – Winch Models	No	Yes	Yes	No	No	No	No	No	No	No	No	No
Tow Hooks – Winch Models	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Pintle Hook Assemblies	Holland Hitch Co. Coupling Products Selection Guide											<u>Part Source</u>

GROUP 13. FUEL												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1 /M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Carburetor Rebuilding Kit - SMP HYGRADE Kit# 101A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Carter B&B ETW1 - Kit# AFLA 2049M	No	No	No	No	No	No	No	No	No	No	Yes	No
Carburetor Rebuilding Service	Parts & Service Parts & Service - Several on the forum have used with positive results											
Carburetor by Year & Model Truck	Information Source											
Fuel Pump (225/6 Engine) Precision M16124	No	No	No	No	No	No	No	No	No	Yes	No	No
Fuel Pump (218/230 Engine) Carter# M2090 or M2091, Airtex 9543, Airtex 587	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Fuel Pump (251/265 Engine) NAPA# M847, Airtex 711	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No

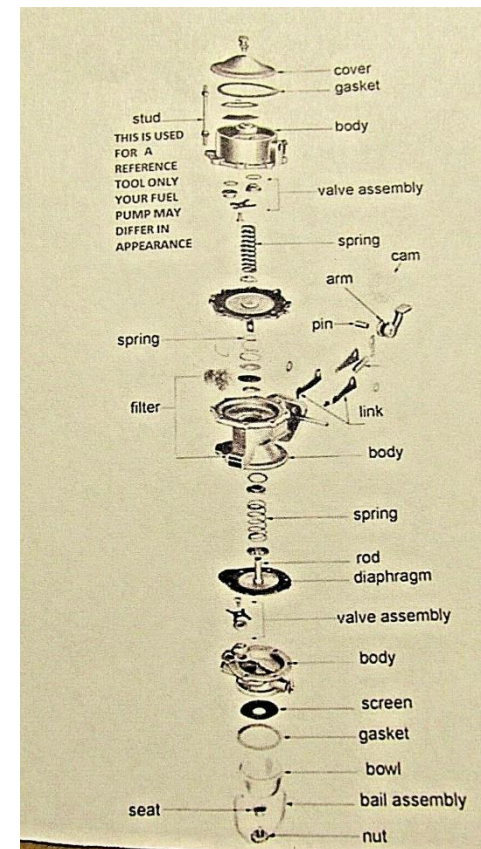
Dual Pump - Airtex 9418

Works on 218, 230, 237, 251, and 265 Engine using vacuum wiper motors.



Dual Pump Kit

Vintage Parts of Arizona, 1-800-732-0076, kit# 180



[Link](#)

Note on Pumps

Match up your current pump to the images below, or visit the Carter Website [Part Source](#)



Carter M2090



Carter M2091



Airtex 9543



Airtex 587



Precision M16124

1954 Chrysler Windsor w/251 Engine – Pump C-1552890. Replacement Pump, Carter M847



Carter M847

Fuel Pump Test

How to determine if the mechanical fuel pump is working

[Instructions](#)

Electric Fuel Pump (12V) - AC# EP12S	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No
Electric Pump Safety Switch - SMP#PS-135	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No

Glass Bowl Paper Element Filter – NAPA# FIL 3943

[Part Source](#)

Fuel Bowl Gasket – Fel-Pro 12473 (rubber) for the carb bowl, and Fel-Pro 773 (cork) for fuel pump bowl



Airtex BG102



Airtex FP1271

Gas Sealer

[Part Source](#)

GROUP 14. HOOD												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1 /M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Hood	No	Yes	Yes	No	No	No	No	No	No	No	No	No
Hood	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Handle	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
GROUP 15. PROPELLER SHAFTS and UNIVERSAL JOINTS												
T-203 – Precision# 414 (Obsolete) See Part Image Section	Yes	No	No	No	No	No	No	No	No	No	No	No
T-207, 211, & 215 – Dana-Spicer Part Source	P534G	No	No	No	No	No	No	No	No	No	No	No
T-202, 207 & 211 Part Source	305	305	305	305	305	305	305	305	305	305	305	305
305 Specs.	Inside Lock Up -- Length (In): 2 Inch, 50.8mm, Bearing Cap Type: 4 Grooved, Bearing Cap Diameter O.D.(In): 1.231 Inch, 31.242mm, Series: Detroit 5160 – Interchange w/Dodge 1 Ton, W300 60-74 (Neapco# 2-1400), (Spicer# 5-3251X) 2 Inch Yokes											
T-112 - Dana-Spicer Part Source	5-2031X	No	No	No	No	No	No	No	No	No	No	No
Front Propeller Shaft		305	305	305	305	305	305	305	305	305	305	305
Intermediate Shaft Part Source		304	304	304	304	304	304	304	304	304	304	304
304 Specs.	Inside Lock Up -- Length (In): 3.001 Inch, 75.413mm, Bearing Cap Type: 4 Grooved, Bearing Cap Diameter O.D.(In): 1.231 Inch, 31.242mm, Series: Detroit 5380 – Interchange w/Dodge 1 Ton, W3500, 83-89, Rear Shaft (Neapco# 3-0056), (Spicer# 5-1301X) 3 Inch Yokes											
Rear Propeller Shaft		305	305	305	305	305	305	305	305	305	305	305
FFPW Yokes	5380 Series 10 splines (U-Joint 3 X 3 - 1.231, inside c clip, 304 UJ), trans. and TC intermediate shaft. 5160 series 10 splines (U-Joint 1.999 X 1.999 - 1.231, inside c clip, 305 UJ) front/rear pinion yokes, and TC.											
W100 &W200 Yokes	7260 Series											
W300	The 5380 yoke is obsolete. You will need to use a 1410 series with a NEAPCO 2-3190 UJ combination. Used on transmissions, transfer cases, and front/rear ends on Dodge 2WD and Dodge 4WD trucks approximately 1957 to 1981.											
Conversion UJ's	Part Source											
Custom Flange	Part Source											

GROUP 16. SPRINGS									
SOURCE FOR THE FOLLOWING SPRING DATA - PARTS TARGET									
WC ½ Ton	<p>FRONT – C-920695, except Ambulance and WC41, Ambulance C-916554, WC41 C-920219. No Data</p> <p>REAR – C-599106, except Ambulance and WC41, Ambulance C-916555, WC41 C-920204. No Data</p>								
WC ¾ Ton	<p>FRONT – 7 leaf, Spring Steel Material Composition - 9260 overall, 0000 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000 (C-920814, NSN- 5360-00-423-2619)</p> <p>REAR – 12 leaf, Spring Steel Material Composition - 9260 overall, 0000 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000 (C-920988, NSN- 5360-00-423-2620)</p> <p>AMBULANCE FRONT – 7 leaf, Spring Steel Material Composition - 9260 overall, 0000 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000, (C-921187, NSN-5360-00-423-2634)</p> <p>AMBULANCE REAR – 12 leaf, Spring Steel Material Composition - 9260 overall, 0000 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000, (C-920992, NSN-2510-00-423-2621)</p>								
WC 1.5 Ton	<p>FRONT – 7 leaf, Spring Steel Material Composition - 9260 overall, 0000 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000, (C-920813, C-1088007, NSN-2510-00-737-8240)</p> <p>REAR – 00 leaf, Spring Steel Material Composition - 9260 overall, Spring Deflection Rate –1500 pounds per inch, Spring length under load 41.875 to 42.125 (C-926170, NSN-2510-00-278-6575)</p>								
WDX – X3-WM300	<p>FRONT – 7 leaf, Spring Steel Material Composition - 9260 overall, 1110 lb. capacity, Spring Deflection Rate – 330.000 lb. minimum to 370.000 pounds per inch maximum, Spring length under load 39.000 to 00.000 (C-1090570, NSN-2510-00-737-8278)</p> <p>FRONT – 8 leaf, Spring Steel Material Composition - 61500 overall, 1150 lb. capacity, Spring Deflection Rate – 405.000 minimum to 465.000 pounds per inch maximum, Spring length under load 39.000 to 00.000 (C-1272998, NSN-2510-00-541-1248)</p> <p>FRONT – 11 leaf, Spring Steel Material Composition - 9260 overall, 1600 lb. capacity, Spring Deflection Rate – 0000 lb. capacity, Spring Deflection Rate –000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000 (C-1273201, NSN-0000-00-000-0000)</p>								

	<p>REAR – 11 leaf, Spring Steel Material Composition - 9260 overall, 2500 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000 (C-1189875, NSN-0000-00-000-0000)</p> <p>REAR – 12 leaf, Spring Steel Material Composition - 9260 overall, 2500 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000 (C-1273003, NSN-0000-00-000-0000)</p> <p>REAR – 14 leaf, Spring Steel Material Composition - 9260 overall, 2500 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000 (C-1189425, NSN-0000-00-000-0000)</p> <p>REAR – 14 leaf, Spring Steel Material Composition - 9260 overall, 3000 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000 (C-1271367, NSN-2510-00-646-6907)</p>			
M601/615	<p>FRONT – 8 leaf, Spring Steel Material Composition - 61500 overall, 1150 lb. capacity, Spring Deflection Rate – 405.000 minimum to 465.000 pounds per inch maximum, Spring length under load 39.000 to 00.000 (C-1272998, C-1928177, NSN- 2510-00-541-1248)</p> <p>REAR – 11 leaf, Spring Steel Material Composition - 9260 overall, 2200 lb. capacity, Spring Deflection Rate – 000.000 minimum to 000.000 pounds per inch maximum, Spring length under load 00.000 to 00.000 (C-2237342, NSN-0000-00-000-0000)</p> <p>REAR – 12 leaf, Spring Steel Material Composition - 9260 overall, 2500 lb. capacity, Spring Deflection Rate – 276.000 minimum to 318.000 pounds per inch maximum, Spring length under load 55.875 to 56.125 (C-1391099, NSN-2510-00-737-6832)</p>			
M37	<p>FRONT – 07 leaf, Spring Steel Material Composition - 9260 overall, 0000 lb. capacity, Spring Deflection Rate – 0000 lb. capacity, Spring Deflection Rate – 295.000 minimum to 339.000 pounds per inch maximum, Spring length under load 45.875 to 46.125 (C-1268099, NSN- 2510-00-733-9463) [M37/42/43]</p> <p>REAR – 11 leaf, Spring Steel Material Composition - 9260 overall, 0000 lb. capacity, Spring Deflection Rate – 235.000 minimum to 271.000 pounds per inch maximum, Spring length under load 55.875 to 56.125 (C-1268102, NSN- 2510-00-737-3761) [M37/42]</p>			
For OEM/NOS Leaf Springs	<p>Vintage Power Wagons</p> <p>Midwest Military</p> <p>DC Truck Parts</p>			
Reproduction Springs	<p>If you plan on having springs made, some questions you may want to ask:</p> <p>- What spring material is used?</p>			

	<ul style="list-style-type: none"> - What will the spring deflection rate be? - Is the work performed in-house or is it sub-contracted out? If contracted out, you may want to look for a different company. - What guarantee is offered? 			
	ATS Suspension Products (W100 to W300) Trucks			Part Source
	Stengel Bros.			Part Source
	Pohl Spring Works (members have used)			Part Source
	General Spring, KC (members have used)			Parts Link
Bronze Bushing – Front Frame Shackle Hanger [.628 I.D. x .752 O.D. x 2-1/4 lgh.]	<p>CC# 576030</p> <p>T202 - 1940, VC1, VC2, VC3, VC4, VC5, VC6, USA, ½ Ton</p> <p>T207 - 1940-41, WC1, WC3, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC11, ½ Ton</p> <p>T211 - 1941, WC12, WC13, WC14, WC15, WC16, WC17, WC18, C19, WC20, ½ Ton</p> <p>T214 – 1942-45, WC51, WC52, WC53, WC54, WC56, WC57, WC58, WC59, WC60, ¾ Ton</p> <p>T215 - 1941, WC21, WC22, WC23, WC24, WC25, WC26, WC27, WC40, WC41, ½ Ton</p> <p>T215 - 1942, WC21, WC23, WC24, WC25, WC26, WC27, WC41, WC43, ½ Ton</p> <p>WDX – WM300 (1946 – 1971)</p>		No	Yes
Bronze Bushing – Front Spring Eye [.753 I.D. x 1.002 O.D. x 1-3/4 lgh.]	<p>CC# 576042, NAPA# RPC35819</p> <p>T112 – 1941, WC36, WC37, WC38, WC39, WC47, WC48, WC49, WC50, ½ Ton (front spring eye only)</p> <p>T201 – 1938-39, RE31-USA, 1-½ Ton (Front Spring, Front Eye Bushing Only)</p> <p>T202 - 1940, VC1, VC2, VC3, VC4, VC5, VC6, USA, ½ Ton</p> <p>T207 - 1940-41, WC1, WC3, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC11, ½ Ton</p> <p>T211 - 1941, WC12, WC13, WC14, WC15, WC16, WC17, WC18, C19, WC20, ½ Ton</p> <p>T214 – 1942-45, WC51, WC52, WC53, WC54, WC56, WC57, WC58, WC59, WC60, ¾ Ton</p> <p>T215 - 1941, WC21, WC22, WC23, WC24, WC25, WC26, WC27, WC40, WC41, ½ Ton</p> <p>T215 - 1942, WC21, WC23, WC24, WC25, WC26, WC27, WC41, WC43, ½ Ton</p> <p>WDX – WM300 (1946 – 1971)</p>		No	Yes
Bronze Bushing – Rear Frame Shackle Hanger [.7485 I.D. x .8755 O.D. x 1.730 lgh.]	<p>CC# 576030</p> <p>T202 - 1940, VC1, VC2, VC3, VC4, VC5, VC6, USA, ½ Ton</p> <p>T207 - 1940-41, WC1, WC3, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC11, ½ Ton</p> <p>T211 - 1941, WC12, WC13, WC14, WC15, WC16, WC17, WC18, C19, WC20, ½ Ton</p> <p>T214 – 1942-45, WC51, WC52, WC53, WC54, WC56, WC57, WC58, WC59, WC60, ¾ Ton</p> <p>T215 - 1941, WC21, WC22, WC23, WC24, WC25, WC26, WC27, WC40, WC41, ½ Ton</p> <p>T215 - 1942, WC21, WC23, WC24, WC25, WC26, WC27, WC41, WC43, ½ Ton</p> <p>WDX – WM300 (1946 – 1971)</p>		No	Yes
Bronze Bushing – Rear Spring Eye [.753 I.D. x 1.002 O.D. x 1-3/4 lgh.]	<p>CC# 576042, NAPA# RPC35819</p> <p>T112 – 1941, WC36, WC37, WC38, WC39, WC47, WC48, WC49, WC50, ½ Ton (front spring eye only)</p> <p>T201 – 1938-39, RE31-USA, 1-½ Ton (Front Spring, Front Eye Bushing Only)</p> <p>T202 - 1940, VC1, VC2, VC3, VC4, VC5, VC6, USA, ½ Ton</p> <p>T207 - 1940-41, WC1, WC3, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC11, ½ Ton</p>		No	Yes

	T211 - 1941, WC12, WC13, WC14, WC15, WC16, WC17, WC18, C19, WC20, ½ Ton T214 – 1942-45, WC51, WC52, WC53, WC54, WC56, WC57, WC58, WC59, WC60, ¾ Ton T215 - 1941, WC21, WC22, WC23, WC24, WC25, WC26, WC27, WC40, WC41, ½ Ton T215 - 1942, WC21, WC23, WC24, WC25, WC26, WC27, WC41, WC43, ½ Ton WDX – WM300 (1946 – 1971)												
Front Spring – Frame Spring Bumper	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Front Spring – Leaf Center Bolt	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Front Spring – Lower Shackle Bolt	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Front Spring – Rear Eye Bolt	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Front Spring – Upper Shackle Bolt	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Rear Spring – Frame Spring Bumper	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Rear Spring – Leaf Center Bolt	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Rear Spring – Upper Shackle Bolt, Lower Shackle Bolt, Rear Spring – Eye Bolt (McQuay Norris SK4640 Part Source , Moog K150301, ACDelco 45G16008)	CC# 590419, 925267, NAPA# NCP2744640 T112 – 1941, WC36, WC37, WC38, WC39, WC47, WC48, WC49, WC50, ½ Ton (front spring eye only) T202 - 1940, VC1, VC2, VC3, VC4, VC5, VC6, USA, ½ Ton T207 - 1940-41, WC1, WC3, WC4, WC5, WC6, WC7, WC8, WC9, WC10, WC11, ½ Ton T211 - 1941, WC12, WC13, WC14, WC15, WC16, WC17, WC18, C19, WC20, ½ Ton T214 – 1942-45, WC51, WC52, WC53, WC54, WC56, WC57, WC58, WC59, WC60, ¾ Ton T215 - 1941, WC21, WC22, WC23, WC24, WC25, WC26, WC27, WC40, WC41, ½ Ton T215 - 1942, WC21, WC23, WC24, WC25, WC26, WC27, WC41, WC43, ½ Ton WDX – WM300 (1946 – 1971) B1C, B1D, B2B, B2C, B2D, B3B, B3C, B3D, B4B, B4C, B4D, C1B, C1C, C1D, C3B, C3BL, C3C, C3CN, C3D, C3DN, C3DNL, C3DL, 1 Ton – (1948 – 1956) D200, W200, ¾ Ton – (1957-1958)											No	Yes
Shocks - Front – NAPA (Monroe Bus/Truck) - Front #66707 Part Source	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shocks – Rear – NAPA (Monroe Bus/Truck) - Rear #66707	No	No	No	Yes	Yes Up-to C-1-PW	No	No	No	No	Yes	Yes	Yes	Yes
C-3-PW – WM300	No	No	No	No	No Up-to C-1-PW	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Monroe Gas Magnum - 34853 (compressed = 13.25" & extended = 21.125" & Bushing ID = 11/16")													

Clips or U-Bolt Lengths Thread lengths vary from 2.25 to 3 inches long. All widths are from inside of leg to inside of leg - 1.8125 inches. All lengths are measured from the underside flat of the saddle to the ends of the legs:

'47 WDX rear U-bolts - 9 inches long
'51 B3PW rear U-bolts - 9.25 inches long

'47 WDX front driver side U-bolts - 8 inches long
'51 B3PW front driver side U-bolts - 7.50 inches long

'47 WDX front passenger side U-bolts - 8.25 inches long
'51 B3PW front passenger side U-bolts - 8.25 inches long

All U-bolts have cut threads. The non-threaded portions of the shanks measure from .560 to .566 in diameter. The thread major diameters measure from .554 to .558 diameter.

Original NOS overload kit (uninstalled) includes 9/16-18 threaded U-bolts. They have rolled threads. The widths between the legs measure the same - 1.8125 inches, however the non-threaded shank portions measure .525 diameter. The thread major diameters are right at .558 inches.

Different springs with different rates, U-bolts vary only slightly in length. It appears the parts lists also measure the overall length instead of from bottom flat on saddle.


Courtesy of Clint Dixon

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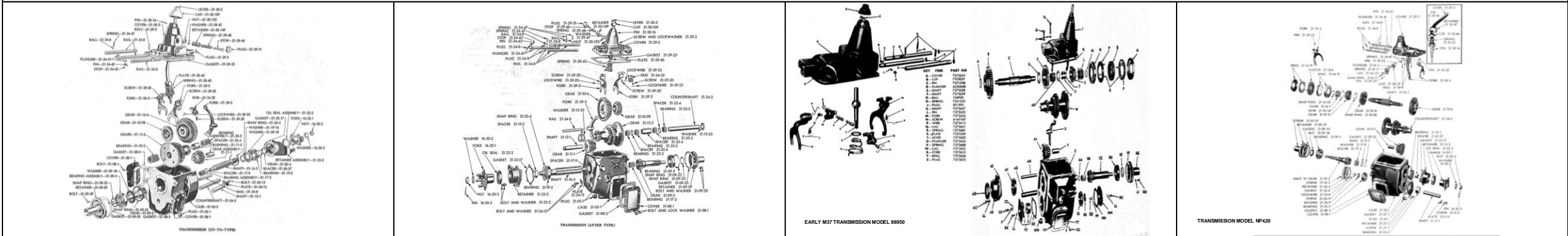
GROUP 17. STEERING

MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1 /M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Bronze Bushings - Bracket	No	Yes	Yes	Yes	No	No	No	No	No		No	No
Gemmer 14000	Yes	No	No	No	No	No	No	No	No		No	No
Gemmer 17090	No	Yes	Yes	No	No	No	No	No	No		No	No
Gemmer 6113	No	No	No	No	No	No	No	No	No		Yes	No
Gemmer B6030	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Horn Button Assembly	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Steering Column Clamp Insulator	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Steering Gear Arm	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1 /M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Steering Gear Seal – Metric (32x48x7) Timken# 324808XX	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Steering Gear Sector Shaft	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Steering Wheel	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Worm Shaft	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Cage, Upper Thrust Bearing, w/Rollers – “Up-To” D-83900294, L.A. 88750006 & 88750027 (Timken# 15BA)	No	Yes	Yes	Yes	No	No	No	No	No		No	No
Cage, Upper Thrust Bearing, w/Rollers – “After” D-83900294, L.A. 88750006 & 88750027 (Timken# 11BA)	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cage, Lower Thrust Bearing, w/Rollers – “Up-To” D-83900294, L.A. 88750006 & 88750027 (Timken# 15BA)	No	Yes	Yes	Yes	No	No	No	No	No		No	No
Cage, Lower Thrust Bearing, w/Rollers – “After” D-83900294, L.A. 88750006 & 88750027 (Timken# 11BC)	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cup, Upper Thrust Bearing – “Up-To” D- 83900294, L.A. 88750006 & 88750027 (Timken#)	No	Yes	Yes	Yes	No	No	No	No	No		No	No

MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1968	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1 /M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Cup, Upper Thrust Bearing – “After” D-83900294, L.A. 88750006 & 88750027 (Timken# 16)	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cup, Lower Thrust Bearing – “Up-To” D-83900294, L.A. 88750006 & 88750027 (Timken#)	No	Yes	Yes	Yes	No	No	No	No	No		No	No
Cup, Upper Thrust Bearing – “After” D-83900294, L.A. 88750006 & 88750027 (Timken# 14C)	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power Steering Conversions	<u>Part Source</u>											
Steering Wheel Puller	ROCO NSN No. 5120-00-620-0020 											

GROUP 18. TRANSMISSIONS



	Up-to-Type Spur Gear to Early 52 (NP-35661, NP-38126, NP-39010)				After-Type to Early 56 (NP-38711) (NP420 Spur Gear)		NP420 Late 56 (NP-88671 (early), NP-93511 (late)) (NP420 Helical Gears-Synchronized)						
1st Speed Stop Check Lock Nut	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No			No	No
1st Speed Stop Plunger Spring	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No			No	No
Ball Cap	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No			No	No
Ball Friction Plate	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No			No	No
Ball – Poppet	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes
Interchange	T-90 Jeep Transmission (3/8 dia.) C-104920												
Gear – Cluster [Wear Limit = .002]	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No			No	No
Gear – Cluster [Housing Bore 1.508] [Wear Limit = .002]	No	No	No	No	No	Yes	No	No	No			No	No
Gear – Cluster Rollers (88) [Length = 1.000 Dia. = 0.1875]	No	No	No	No	No	Yes	Yes	No	No			No	No
Gear – Cluster	No	No	No	No	No	No	Yes	Yes	Yes			Yes	Yes
Gear – Low & Second	No	No	No	No	No	No	Yes	Yes	Yes			Yes	Yes
Gear – Low & Second, Sliding	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No			No	No
Gear – Low & Second, Sliding	No	No	No	No	No	Yes	Yes	No	No			No	No
Gear – Main Drive [Housing Bore = 1.3125]	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No			No	No

Shaft Diam. = 0.8125 Wear Limit = .002]												
Gear – Main Drive [Housing Bore = 1.3125 Shaft Diam. = 0.9375 Wear Limit = .002]	No	No	No	No	Yes	Yes	No	No	No		No	No
Gear – Main Drive (Outside dia. Bushing end - .747 to .748) [Wear Limit - .745, Inside Dia. Of Gear = 1.5478-5484, Wear Limit = 1.5504]	No	No	No	No	No	No	Yes	Yes	Yes		Yes	Yes
Gear – Second Speed	Yes	Yes	Yes	Yes	Yes	No	No	No	No		No	No
Gear – Second Speed	No	No	No	No	Yes	Yes	No	No	No		No	No
Gear – Second Speed	No	No	No	No	No	No	Yes	Yes	Yes		Yes	Yes
Gear – Third & Direct	No	No	No	No	No	No	Yes	Yes	Yes		Yes	Yes
Gear – Third & Direct, Sliding	Yes	Yes	Yes	Yes	Yes	No	No	No	No		No	No
Gear – Third & Direct, Sliding	No	No	No	No	Yes	Yes	No	No	No		No	No
Gear – Third Speed	Yes	Yes	Yes	Yes	Yes	No	No	No	No		No	No
Gear – Third Speed	No	No	No	No	Yes	Yes	No	No	No		No	No
Gear – Third Speed	No	No	No	No	No	No	Yes	Yes	Yes		Yes	Yes
Gear Bearing Retainer	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Gear - Input Bearing Retainer Gasket (.011 thk.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Gear, Reverse [Bushing Wear Limit = .006]	Yes	Yes	Yes	Yes	Yes	No	No	No	No		No	No
Gear, Reverse [Bushing Wear Limit = .006]	No	No	No	No	Yes	Yes	No	No	No		No	No
Gear, Reverse [Bushing Wear Limit = .006]	No	No	No	No	No	No	Yes	Yes	Yes		Yes	Yes
Gearshift Cover – Rubber	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Gearshift Fork Reverse Shift	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Gearshift Lever Knob	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes

Need a Knob?	When you cannot find one, have one made by EPCO Shift Knobs.											Part Source
Gearshift Rail Reverse Shift Ball	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Guide Pin Spring	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Interlock Pin	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Interlock Pin Stop	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Interlock Plug	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Interlock Plug	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Interlock Plunger	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Interchange	New Venture Gear 35660 Interchanges – T8-86, 556882 (Power Wagon – Spur Gear/NP420), 677842, c4tz-7247-a, 2462228, 150513, 517120, 312688c1, 8400148											
Main Drive Gear - Bearing	1209A	1209A	1209A	1209A	1209SL	1209SL	1209SL	1209SL	1209SL		1209SL	1209SL
Main Drive Gear Snap Ring	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Main Shaft Pilot Bearing [Width = 1.5000 Housing Bore = 1.3125 Shaft Diam. = 0.8125 Roller Dia. = .2500]	Yes	Yes	Yes	Yes	No	No	No	No	No		No	No
Main Shaft Pilot Bearing [Width = 1.4531 Housing Bore = 1.3125 Shaft Dia. = 0.9375 Roller Dia. =]	No	No	No	No	Yes	Yes	No	No	No		No	No
Main Shaft Bearing Retainer Gasket	No	No	No	No	No	Yes	Yes	Yes	Yes		Yes	Yes
Main Shaft Rear Bearing	307L	307L	307L	307L	1307SL	1307SL	1307SL	1307SL	1307SL		1307SL	1307SL
Main Shaft Rear Bearing Oil Seal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Main Shaft Rear Bearing Retainer	No	No	No	No	No	Yes	Yes	Yes	Yes		Yes	Yes
Main Shaft Rear Bearing Retainer	Yes	Yes	Yes	Yes	Yes	No	No	No	No		No	No
Main Shaft Rear Bearing Retainer Gasket (.011 thk.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Reverse Shift End	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Reverse Shift Stop	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No

Reverse Shift Stop Plug	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Reverse Shift Stop Plunger Spring	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Reverse Shift Stop Plunger Washer	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Shaft – Cluster Gear (.9995 to 1.0000 O.D.) [Wear Limit = .002]	Yes	Yes	Yes	Yes	Yes	No	No	No	No		No	No
Shaft – Cluster Gear (1.134 O.D. to 1.1345 X 10-5/16 L.) [Wear Limit = .002]	No	No	No	No	Yes	Yes	No	No	No		No	No
Shaft – Reverse Gear (.987 O.D. x) [Wear Limit = .002]	Yes	Yes	Yes	Yes	Yes	No	No	No	No		No	No
Shaft – Reverse Gear (.9872 to 9877 O.D. x 5-11/16 L.) [Wear Limit = .002]	No	No	No	No	Yes	Yes	No	No	No		No	No
Shaft – Reverse Gear (.9872 to 9877 O.D. x 5-6/16 L.) [Wear Limit = .002]	No	No	No	No	No	No	Yes	Yes	Yes		Yes	Yes
Spacer (When Speedometer Gear Not Used) [1-11/16 O.D. X 14/16 L. X 1-7/16 I.D.]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Yoke Speedi-Sleeve# 99212	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Transmission Case Number 35661	1941 to 1951 (WC's, FFPW), Main Drive Gear, 17 Teeth (CC583300)											
Heavy Duty Transmission Case Number 38711	1952 to Early 1956 (FFPW), Main Drive Gear, 17 Teeth (CC1189801)											
Transmission Case Number 38750	1940 to 1947, Main Drive Gear, 17 Teeth (CC1091489). Rest of Gears/Shafts same as 38711											
Transmission Case Number 38780	1954 to 1956, Main Drive Gear, 17 Teeth (CC1392824). Rest of Gears/Shafts same as 38711											
Part Sources	Northwest Transmissions											Part Source

a. 1933 – 1951 DODGE TRUCK PARTS INTERCHANGE BETWEEN THE WARNER T9 SPUR GEAR AND NEW PROCESS SPUR GEAR TRANSMISSIONS, 35661, AND 38126 AS INDICATED BY PART NUMBERS

	Year	Model	Capacity Rating (Tons)	Engine Displacement	Engine Symbol	Year	Model	Capacity Rating (Tons)	Engine Displacement	Engine Symbol
	1933-46					1941	WC	½	218	T207 T211
	1941-47	WC	½	221	T112	1942-45	WC	¾	230	T114
	1941-47	WD15	¾	221	T112/T114	1943-45	WC	1-1/2	230	T223
	1941-47	WD20, 21	1	233	T116	1946-47	WDX	1	230	T137
	1941-47	WF30, 31, 32, 33, 34, 36	1-1/2	239	T118	1948-49	B-1-PW	1	230	T137
	1941-47	WFM35, 37, 39	1-1/2	239	T128	1950	B-2-PW	1	230	T137
		WC UP TO NO. 81126289								
		WD15 UP TO NO. 83300001								
		WD20, WD21, UP TO NO. 81211001								
		WF UP TO NO. 81335001								
		WFM UP TO NO. 83500001								
Part Description	4 Speed Transmission Spur Gear Warner T9 (1933 to 1946)					4 Speed Transmission Spur Gear 35661, 38126 (1941 to 1951)				
Transmission Small Parts Package	939736					939736				
Transmission Gasket Package						996446				
Transmission Case and Gears						921869				
Transmission Case						921853				
Power Take-Off Cover	556875					556875				
Power Take-Off Cover Gasket	567500					567500				
Transmission Drive Pinion or Gear	598479 (1-3/8" – 10 Spl., 17 teeth)					583300 (1" – 10 Spl., 17 teeth)				
Bearing	620520					620520				
Retainer						556778				
Gasket						556834				
Snap Ring Gear - Front	556883					556833				
Snap Ring Bearing - Front						598231				
Snap Ring Bearing - Rear						598232				
Washer						556892				
Transmission Mainshaft						556830				
Sliding Gear (3 rd and 4 th)	556868 (24)					556868 (24)				

Sliding Gear (1st and 2nd)	556831 (43-33)	556831 (43-33)
Mainshaft Pilot Bearing	141852	141852
Mainshaft Pilot Bearing Spacer	556873	556873
Mainshaft Rear Bearing		564742
Rear Bearing Retainer		567316
Rear Bearing Retainer Gasket	556871	556871
Rear Bearing Oil Seal	593596	593596
Transmission Cluster Gear	598482 (43-36-27-17)	598482 (43-36-27-17)
Transmission Counter Shaft	556881	556881
Counter Shaft Rollers	556911	556911
Transmission Reverse Idler Gear	556836 (22-18)	556836 (22-18)
Transmission Reverse Idler Gear Bushing	556848	556848
Idler Gear Shaft	556833	556833
Lock Plate	556888	556888
Transmission Gear Shift Cover		921854
Cover Gasket	556947	996947
Lever		921855
knob	42971	42971
Spring	584309	584309
Rail (1st and 2nd)	556839	556839
Rail (3rd and 4th)	556840	556840
Rail (Reverse Shift)	556841	556841
Rail (Reverse Fork)	556903	556903
Interlock Plunger	556882	556882
Interlock Pin	556890	556890
Poppet Ball	104920	104920
Spring	517373	517373
End, Reverse Shift	556902	556902
Fork (1st and 2nd)	556842	556842
Fork (3rd and 4th)	556843	556843
Fork (Reverse)	556844	556844
Lug Screw	517362	517362
Speedometer Drive Cable and Housing		

b. 1940 – 1951 OTHER TRUCK PARTS INTERCHANGE BETWEEN THE WARNER T9 SPUR GEAR AND NEW PROCESS SPUR GEAR TRANSMISSIONS, 35661, AND 38126 AS INDICATED BY PART NUMBERS

Part Description	4 Speed Transmission Spur Gear 35661, 38126 (1941 to 1951)	4 Speed Transmission Spur Gear Warner T9			
	Dodge	Federal 1947-49, 18M	I.H.C. (L130-1-2, L150-1-2-3) 1940-46 (KS4)	Studebaker (3R14, 3R15, E13&14, E15, 2E13&14, M5, M15, MA15)	White 1953-55
Transmission Small Parts Package	939736				
Transmission Gasket Package	996446				
Transmission Case and Gears	921869				
Transmission Case	921853				
Power Take-Off Cover	556875				
Power Take-Off Cover Gasket	567500				
Transmission Drive Pinion or Gear	583300 (1" – 10 Spl., 17 teeth)				
Bearing	620520				
Retainer	556778				
Gasket	556834				
Snap Ring Gear - Front	556833				
Snap Ring Bearing - Front	598231				
Snap Ring Bearing - Rear	598232				
Washer	556892				
Transmission Mainshaft	556830		27068HA	639227	Same
Sliding Gear (3 rd and 4 th)	556868 (24)	Same	62899H	630365	Same
Sliding Gear (1 st and 2 nd)	556831 (43-33)	Same	72975H	664510	
Mainshaft Pilot Bearing	141852				
Mainshaft Pilot Bearing Spacer	556873				
Mainshaft Rear Bearing	564742				
Rear Bearing Retainer	567316				
Rear Bearing Retainer Gasket	556871				
Rear Bearing Oil Seal	593596				
Transmission Cluster Gear	598482 (43-36-27-17)	Same	72976H	639229	
Transmission Counter Shaft	556881	Same	27069H	639228	Same
Counter Shaft Rollers	556911				
Transmission Reverse Idler Gear	556836 (22-18)	Same	62902HAX	630367	Same

Transmission Reverse Idler Gear Bushing	556848				
Idler Gear Shaft	556833	Same		630369	Same
Lock Plate	556888				
Transmission Gear Shift Cover	921854				
Cover Gasket	996947				
Lever	921855				
knob	42971				
Spring	584309				
Rail (1st and 2nd)	556839				
Rail (3rd and 4th)	556840				
Rail (Reverse Shift)	556841				
Rail (Reverse Fork)	556903				
Interlock Plunger	556882				
Interlock Pin	556890				
Poppet Ball	104920				
Spring	517373				
End, Reverse Shift	556902				
Fork (1st and 2nd)	556842				
Fork (3rd and 4th)	556843				
Fork (Reverse)	556844				
Lug Screw	517362				
Speedometer Drive Cable and Housing					

c. 1941 – 1956 DODGE TRUCK PARTS INTERCHANGE BETWEEN THE 38711 HEAVY DUTY TRANSMISSION, 38750, AND 38780 AS INDICATED BY PART NUMBERS

	Year	Model	Capacity Rating (Tons)	C.I.D.	Engine Symbol	Year	Model	Capacity Rating (Tons)	C.I.D.	Engine Symbol	Year	Model
	1941-47	WC	½	221	T112	1948-49	B-1-B	½	221	T142	1951	B-3-PW
	1941-47	WD15	¾	221	T112/T114	1948-49	B-1-C	¾	221	T142	1952-53	B-4-PW
	1941-47	WD20, 21	1	233	T116	1948-49	B-1-D	1	233	T146	1953	C-1-PW
	1941-47	WF30, 31, 32, 33, 34, 36	1-1/2	239	T118	1948-49	B-1-F, B-1-H, B-1-HH	1-1/2	239	T148	1955-56	C-3-PW
	1946-47	WFX31, 32, 34, 36	1-1/2	239	T118	1948-49	B-1-FM, B-1-HM, B-1-HHM	1-1/2	239	T152		
	1941-47	WFM35, 37, 39	1-1/2	239	T128	1950	B-2-B	½	221	T172		
	1946-47	WFMX35, 37, 38	1-1/2	239	T128	1950	B-2-C	¾	221	T172		
						1950	B-2-D	1	233	T176		
						1950	B-2-F	1-1/2	233	T178		
						1951	B-3-B	½	221	T306		
						1951	B-3-C	¾	221	T306		
						1951	B-3-D	1	233	T310		
						1951	B-3-F	1-1/2	239	T314		
	WC AFTER NO. 81126289											
	WD15 AFTER NO. 83300001											
	WD20, WD21, AFTER NO. 81211001											
	WF AFTER NO. 81335001											
	WFX (ALL)											
	WFM AFTER NO. 83500001											
	WFMX (ALL)											
Part Description	4 Speed Transmission Spur Gear 38750 (1944 to 1955)					4 Speed Transmission Spur Gear 38780					4 Speed Transmission Spur Gear 38711	
Transmission Gasket Package						1243622					1243622	
Transmission Case and Gears												

Transmission Case			
Power Take-Off Cover	556875	556875	556875
Power Take-Off Cover Gasket	567500	567500	567500
Transmission Drive Pinion or Gear	1189801 (17 teeth)	1189801 (17 teeth)	1189801 (17 teeth)
Bearing			
Retainer			
Gasket	1090121	1090121	1090121
Snap Ring Gear - Front	556833	556833	556833
Snap Ring Bearing - Front			
Snap Ring Bearing - Rear	1090125	1090125	1090125
Transmission Mainshaft	1091851	1091851	1091851
Sliding Gear (3 rd and 4 th)	1091490 (24)	1091490 (24)	1091490 (24)
Sliding Gear (1 st and 2 nd)	1090123 (33-43)	1090123 (33-43)	1090123 (33-43)
Mainshaft Pilot Bearing	1091903	1091903	1091903
Mainshaft Pilot Bearing Spacer	1091904	1091904	1091904
Mainshaft Rear Bearing	957846	957846	957846
Rear Bearing Retainer			
Rear Bearing Retainer Gasket	1090129	1090129	1090129
Rear Bearing Oil Seal	593596	593596	593596
Transmission Cluster Gears	1090132 (43-36-27-17)	1090132 (43-36-27-17)	1090132 (43-36-27-17)
Transmission Counter Shaft	1090133	1090133	1090133
Counter Shaft Rollers (88)	565291	565291	565291
Transmission Reverse Idler Gear	1090139 (22-18)	1090139 (22-18)	1090139 (22-18)
Idler Gear Shaft	1090141	1090141	1090141
Lock Plate	556888	556888	556888
Transmission Gear Shift Cover	1090144		1090144
Cover Gasket		1196668	1196668
Lever			
knob	42971	42971	42971
Spring	584309	584309	584309
Rail (1 st and 2 nd)	1090148		1090148
Rail (3 rd and 4 th)	1090146		1090146
Rail (Reverse Shift)	1090147		1090147
Rail (Reverse Fork)		1266022	1266022
Interlock Plunger	556882	556882	556882
Interlock Pin	556890		556890
Poppet Ball	104920	104920	104920

Spring			
End, Reverse Shift	556902		556902
Fork (1st and 2nd)	1090149		1090149
Fork (3rd and 4th)	1090150		1090150
Fork (Reverse)	556844		556844
Lug Screw	517362	517362	517362
Speedometer Drive Cable and Housing			
Speedometer Drive Cable			

d. IMAGES OF NEW GEARS



Military Cluster Gear#: G121-01-96110, Chrysler#: 556869

WC 1/2, 3/4, & 1.5 Ton

FFPW 46 to early 51

e. AFTERMARKET TRANSMISSION GEARS by BORG-WARNER & PERFECTION GEAR COMPANIES (B&P) – PART NUMBERS

Transmission Part	NP-35661, NP-38126, NP-39010 VC, WC ½, ¾, 1.5, and PW (Up-to-Type Spur Gear)		NP-38711 PW (After-Type NP420 Spur Gear)	
	Chrysler Number	B&P	Chrysler Number	B&P
Main Drive Gear (1"-10 Spl.) 17T	583300	WT163-16R	1091489	WT251-16
Main Shaft	556830/598478 (6 Spl.)	WT163-2G	1090122/1091851 (6 Spl.)	WT251-2
Syn. Clutch Gear				
Syn. Sliding Clutch				
Ring, Stop, Syn. Inner w/Pins				
Ring, Stop, Syn. Outter				
Cluster Gear Counter Shaft	556881	WT163-3P	1090133	WT251-3
Cluster Gear 43-36-27-17T	556869/598482	WT163-8	1090132	WT251-8
Rev. Idler Gear 22-18T	556836/598483	WT163-10	1090139	WT251-10
3 rd & Direct 24T	556868/598481	WT163-11	1091490	WT251-11
Gear 3 rd Speed 24-24T				
1 ST , 2 nd , & Rev. Gear 33-43T	556831/598480	WT163-12	1090123	WT251-12
1 ST , 2 nd , Sliding Gear 24-33T				
2 nd Speed Gear 24-33T				
Rev. Gear Idler Shaft	556883	WT163-35	1090141	WT251-35
Parts	If you can't find the part from DC Truck Parts, Midwest Military, Vintage Power Wagons or other sources you use, contact Northwest Transmissions; provide case number, OEM number, number of teeth, and B&P number.			<u>Part Source</u>

f. DIFFERENCE BETWEEN THE EARLY M37 TRANSMISSION MODEL 88950 AND LATE M37B1 MODEL 4201 AND K6-W300-X3-WM300 TRANSMISSION MODEL NP420

CASE NUMBER 88671 Early M37 (51-55), Model 88950 Heavy Duty Helical Gear Synchronized Transmission	CASE NUMBER 93511 M37B1 (58-68), Model 4201 (NP420) Mounting Holes Same as Early Transmission	CASE NUMBER 93511 FFPW/M601/M615 (Late 56 to 71), Model NP420 Mounting Holes Different from M37 and its Variants)
Parts Manual – ORD 9 SNL G-741, Dated January 1954 Repair Manual – TM 9-8031-2 TO 19-75-A-100, Dated May 1953	Parts/Repair Manual –TM 9-2520-232-35, Dated July 1959	Parts Manuals 47-56, 57-68 FFPW Parts Manual M601 - TM9-2320-214-24P, Dated October 1958 Repair Manual M601 – TM 9-8855, Dated January 1958

INTERCHANGEABILITY AS AN ASSEMBLY

Models will interchange between the M37 Series Trucks, and WC ¾ and 1.5 Ton Trucks and Civilian Power Wagon up to early 1956 using bellhousing 921197	The M37 series Model 4201 has different mounting ear pattern and will not interchange as an assembly however individual part components will interchange	
Transmission Assembly – NSN 2520-00-737-3390 C-1270358, Superseded by Transmission Assembly – NSN 2520-00-741-2496 C-1392441	Transmission Assembly – NSN 2520-00-627-8308 C-Unknown	Transmission Assembly – NSN 2520-00-602-0857 C-1794977

DESCRIPTION	CHRYSLER PART NUMBER	PERFECTION/WARNER GEAR NUMBER	DESCRIPTION	CHRYSLER PART NUMBER	PERFECTION/WARNER GEAR NUMBER	DESCRIPTION	CHRYSLER PART NUMBER	PERFECTION/WARNER GEAR NUMBER
Transmission Case	C-1270360		Transmission Case	C-1796969		Transmission Case	C-1666548	
Cover, PTO	C-556875		Cover, PTO	C-556875		Cover, PTO	C-556875	
Gasket, Cover	C-567500		Gasket, Cover	C-567500		Gasket, Cover	C-567500	
Pipe Plug, ¾ in.			Pipe Plug, ¾ in.			Pipe Plug, ¾ in.		
Spacer, Hand Brake Lever (13/32 IDx3/4 ODx19/32 lg)	C-1273633		Spacer, Hand Brake Lever (13/32 IDx3/4 ODx19/32 lg)	C-1273633		Spacer, Hand Brake Lever (13/32 IDx3/4 ODx19/32 lg)	C-1273633	

INPUT SHAFT, BEARINGS, AND BEARING RETAINER

Ball Bearing, Input Shaft	C-1090119 Timken 1209SL		Ball Bearing, Main Drive Gear	C-1502045 Timken 1209SL		Ball Bearing, Main Drive Gear	C-1502045 Timken 1209SL	
Nut Retaining, Input Shaft Bearing (1-3/4-16NF)	C-1265637 C-1669887		Nut Retaining, Input Shaft Bearing (1-3/4-16NF)	C-1265637 C-1669887		Nut Retaining, Input Shaft Bearing (1-3/4-16NF)	C-1265637 C-1669887	
Retainer, Input Shaft Bearing	C-1265638		Retainer, Gear Bearing	C-1666551		Retainer, Gear Bearing	C-1666551	
Gasket, Retainer	C-1090121		Gasket, Retainer	C-1090121		Gasket, Retainer	C-1090121	

Shaft, Input w/Integral Gear (17T, 9-9/16 long, 1"-10 splines)	C-1270361	WT258-16E	Shaft, Input w/Integral Gear (Drive Gear) (17T, 9-21/32" long, 1"-10 splines)	C-1666549	WT275-16B	Shaft, Input w/Integral Gear (Drive Gear) (17T, 9-21/32" long, 1"-10 splines)	C-1666549	WT275-16B
MAIN SHAFT, GEARS, BEARINGS, BEARING RETAINER, AND SEAL								
Ball Bearing	C-864009 Timken 307SL		Main Shaft, Rear Bearing	C-1090126 Temkin 1307SL		Main Shaft, Rear Bearing	C-1090126 Temkin 1307SL	
Bearing, Bushing Type, 3 rd Speed Gear	C-1265994							
Pin, Retaining (3/16 lgh)	C-1265655							
Bearing, Roller	C-1091903 Timken J301248		Rollers (14)	C-1664327 Timken Q15902		Rollers (14)	C-1664327 Timken Q15902	
Clutch, Sliding Synchronizer	C-1270988	WT258-15A	Clutch, Synchronizer, Sliding	C-1664334	WT275-15	Clutch, Synchronizer, Sliding	C-1664334	WT275-15
Gear, Second Speed, Main Shaft 24-33T	C-1265996	WT258-31	Gear, Second Speed 22-27T	C-1664320	WT275-31	Gear, Second Speed 22-27T	C-1664320	WT275-31
Gear, Sliding, First & Second Speed, Main Shaft 24-33T	C-1265998	WT258-12A	Gear, Sliding, First or Second Speed 37T	C-1664322	WT275-12	Gear, Sliding, First or Second Speed 37T	C-1664322	WT275-12
Gear, Synchronizer, Clutch	C-1270987	WT258-2½A	Gear, Synchronizer	C-1664335	WT275-2-1/2	Gear, Synchronizer	C-1664335	WT275-2-1/2
Gear, Third Speed, Main Shaft 24-24T	C-1270985	WT258-18C	Gear, Third Speed 24-24T	C-1664323	WT275-18	Gear, Third Speed 24-24T	C-1664323	WT275-18
Retainer, Main Shaft Rear Bearing	C-1265426							
			Ring, Snap, Second Gear	C-1664321		Ring, Snap, Second Gear	C-1664321	
Ring, Snap, Synchronizer 0.086-0.088	C-1265649		Snap Ring, Synchronizer 0.086-0.088	C-1507786		Snap Ring, Synchronizer 0.086-0.088	C-1507786	
Ring, Snap, Synchronizer 0.089-0.091	C-1265650		Snap Ring, Synchronizer 0.089-0.091	C-1507787		Snap Ring, Synchronizer 0.089-0.091	C-1507787	

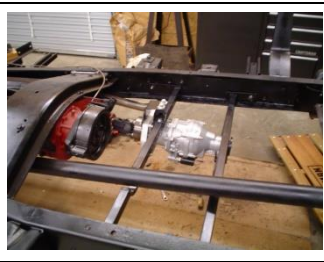
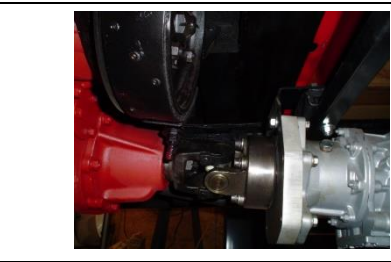

Ring, Snap, Synchronizer 0.092-0.094	C-1265651		Snap Ring, Synchronizer 0.092-0.094	C-1507788		Snap Ring, Synchronizer 0.092-0.094	C-1507788	
Ring, Snap, Synchronizer 0.095-0.097	C-1265652		Snap Ring, Synchronizer 0.095-0.097	C-1507789		Snap Ring, Synchronizer 0.095-0.097	C-1507789	
Ring, Stop, Synchronizer Inner	C-1265644		Ring, Synchronizer, w/Pins, Inner	C-1664331 C-1669891	WT275-14	Ring, Synchronizer, w/Pins, Inner	C-1664331 C-1669891	WT275-14
Ring, Stop, Synchronizer Outer	C-1265645 C-1501653 C-1669893 C-3637172	WT258-14	Ring, Stop, Synchronizer Outer	C-1265645 C-1501653 C-1669893 C-3637172	WT258-14	Ring, Stop, Synchronizer Outer	C-1265645 C-1501653 C-1669893 C-3637172	WT258-14
Pin	C-1265643							
Ring, Stop, Syn. Inner w/Pins	1265642	WT258-14A						
Roller, Needle Bearing, Main Shaft Second Gear	C-1265658 Timken B1316Q							
			Shim, Third Speed Gear, Thin	C-1664325		Shim, Third Speed Gear, Thin	C-1664325	
			Shim, Third Speed Gear, Thick	C-1664326		Shim, Third Speed Gear, Thick	C-1664326	
Oil Seal, Rear Bearing Retainer, Main Shaft	C-593596 Timken 450308		Oil Seal, Rear Bearing Retainer, Main Shaft	C-593596 Timken 450308		Oil Seal, Rear Bearing Retainer, Main Shaft	C-593596 Timken 450308	
Shaft, Main	C-1265991 (13-25/32" long)	WT258-2B	Shaft, Main	C-1664319 (13-1/16" long)	WT275-2	Shaft, Main	C-1664319 (13-1/16" long)	WT275-2
Shim, Main Shaft Rear Bearing (0.014)	C-1265992							
Spacer, Main Shaft, Roller Pilot Bearing (wire)	C-1091904		Snap Ring	C-1664329		Snap Ring	C-1664329	
Spacer, Speedometer Gear	C-1269283		Spacer, Speedometer Gear	C-1269283		Spacer, Speedometer Gear	C-1269283	
Washer, Locating Main Shaft, Third Speed Gear	C-1265995							
Washer, Locating Main Shaft, Second Speed Gear	C-1265997							

IDLER SHAFT, COUNTERSHAFT, GEARS, BEARINGS, & RETAINERS								
Bearing, Ball, Countershaft Front	C-619167 Timken 1207SL		Bearing, Countershaft Front	C-856455 Timken 1207SL		Bearing, Countershaft Front	C-856455 Timken 1207SL	
Bearing, Needle, Countershaft Rear	C-1265674 Timken M28161		Bearing, Countershaft Rear	C-1265674 Timken M28161		Bearing, Countershaft Rear	C-1265674 Timken M28161	
Bearing, Bushing Type, Reverse Idler Gear	C-1270365		Bushing	C-1664341		Bushing	C-1664341	
Countershaft (43-36-27-17T)	C-1270362	WT258-8B	Countershaft, w/Gears, Integral (43-36-22-14T)	C-1664336	WT275-8	Countershaft, w/Gears, Integral (43-36-22-14T)	C-1664336	WT275-8
Gear, Idler Reverse	C-1270364		Gear, Idler Reverse	C-1664340		Gear, Idler Reverse	C-1664340	
Gear, Idler Reverse W/Bearing 22-18T	C-1270363	WT258-10B	Gear, Reverse Idler w/Bearing 17-21T	C-1664339	WT275-10	Gear, Reverse Idler w/Bearing 17-21T	C-1664339	WT275-10
Plate, Locking, Reverse Idler Gear Shaft	C-1266009		Plate, Countershaft, and Idler Lock	C-1266009		Plate, Countershaft, and Idler Lock	C-1266009	
Retainer, Countershaft Front Bearing	C-1266000		Retainer, Countershaft Front Bearing	C-1266000		Retainer, Countershaft Front Bearing	C-1266000	
Retainer, Countershaft Rear Bearing	C-1266003		Retainer, Countershaft Rear Bearing	C-1264338		Retainer, Countershaft Rear Bearing	C-1264338	
Shaft, Reverse Idler Gear	C-1266008	WT258-35A	Shaft, Reverse Idler Gear	C-1266008	WT258-35A	Shaft, Reverse Idler Gear	C-1266008	WT258-35A
TOP COVER, SHIFT LEVERS, SHAFT, FORKS, AND LUGS								
Ball, Gearshift, Shift Shaft Poppet	C-104920		Ball, Gearshift, Shift Shaft Poppet	C-104920		Ball, Gearshift, Shift Shaft Poppet	C-104920	
Cap, Shift Lever Ball (Rubber)	C-317448		Cap, Shift Lever Ball (Rubber)	C-317448		Cap, Shift Lever Ball (Rubber)	C-317448	
Cover, Transmission Case	C-1270370		Cover, Case	C-1666553		Cover, Case	C-1666553	
Cover, Transmission Case Assy.	C-1270369		Cover, Transmission Case Assy.	C-1666552		Cover, Transmission Case Assy.		
Fork, Shifter, First and Second Speed Gear	C-1266020		Fork, Shifter, First and Second Speed Gear	C-1664350		Fork, Shifter, First and Second Speed Gear	C-1664350	
Fork, Shift Reverse	C-1270371		Fork, Shift Reverse	C-1664356		Fork, Shift Reverse	C-1664356	

Fork, Shifter, Third and Direct Speed Gear	C-1266019		Fork, Shifter, Third and Direct Speed Gear	C-1664351		Fork, Shifter, Third and Direct Speed Gear	C-1664351	
Gasket, Top Cover	C-1266012		Gasket, Top Cover	C-1266012		Gasket, Top Cover	C-1266012	
Knob, Gear Shift Lever	C-42971		Knob, Gear Shift Lever	C-42971		Knob, Gear Shift Lever	C-42971	
Lever, Gear Shift Lower	C-1270372		Lever, Gear Shift Lower	C-1796705				
Lever, Gear Shift Upper	C-1269429		Lever, Gear Shift	C-				
Lever, Gear Shift						Lever, Gear Shift	C-1666523	
Lug, First and Second Speed Shifter Shaft	C-1194341		Lug, First and Second Speed Shifter Shaft	C-1664352		Lug, First and Second Speed Shifter Shaft	C-1664352	
Lug, Reverse Shifter Shaft	C-1266018		Lug, Reverse Shifter Shaft	C-1664354		Lug, Reverse Shifter Shaft	C-1664354	
Pin, Guide, Gearshift Lever	C-571390		Pin, Guide, Gearshift Lever	C-1664361		Pin, Guide, Gearshift Lever	C-1664361	
Plate, Friction, Gear Shift Lever Ball	C-571391		Cup, Lever Ball Spring	C-1664359		Cup, Lever Ball Spring	C-1664359	
Plunger, Interlock, Shifter Shaft	C-556882		Plunger, Interlock, Shifter Shaft	C-556882		Plunger, Interlock, Shifter Shaft	C-556882	
Pin, Interlock	C-1265694		Pin, Interlock	C-1265694		Pin, Interlock	C-1265694	
Plunger, Reverse Shifter Shaft Lug, (used w/ring)	C-1265689							
Plunger, Reverse Shifter Shaft Lug, (used w/washer)	C-1500335		Plunger, Latch, Low and Reverse Shifter Shaft Lug	C-1500335		Plunger, Latch, Low and Reverse Shifter Shaft Lug	C-1500335	
Ring, Snap, Reverse Shift Shaft Lug Plunger	C-1265690		Ring, Snap, Reverse Shift Shaft Lug Latch Plunger	C-313514		Ring, Snap, Reverse Shift Shaft Lug Latch Plunger	C-313514	
Shaft, First and Second Speed	C-1266015		Shaft, First and Second Speed	C-1664349		Shaft, First and Second Speed	C-1664349	
Shaft, Shifter, Reverse Gear	C-1266016		Shaft, Shifter, Reverse Gear	C-1664348		Shaft, Shifter, Reverse Gear	C-1664348	
Shaft, Shifter Reverse Fork	C-1266022							
Shaft, Shifter, Third and Direct Speed	C-1266014		Shaft, Shifter, Third and Direct Speed	C-1664347		Shaft, Shifter, Third and Direct Speed	C-1664347	
Spring, Shifter Shaft Ball	C-517373		Spring, Poppet	C-1409551		Spring, Poppet	C-1409551	

Spring, Gearshift Lever	C-1268587		Spring, Gearshift Lever	C-1664360		Spring, Gearshift Lever	C-1664360	
Spring, Reverse Shifter Shaft Lug Plunger	C-1268587		Spring, Reverse Shifter Shaft Lug Plunger	C-567499		Spring, Reverse Shifter Shaft Lug Plunger	C-567499	
Washer, Reverse Shifter Shaft Lug Plunger	C-313514		Snap Ring, Reverse Shifter Shaft Lug Plunger	C-313514		Snap Ring, Reverse Shifter Shaft Lug Plunger	C-313514	
PTO Interchangeability	The PTO between the Model 88950 and Model NP420 will not directly interchange as assemblies. To interchange PTO's, the idler gear must be changed due to the difference in countershaft teeth between these two transmissions.							
	Model 88950 PTO Idler Gear – NSN 2502-00-737-4902, C-1270170				Model NP420 Idler Gear – NSN 2520-00-630-3077, C-1668742			
g. TRANSMISSION REPAIR MANUAL REFERENCE NUMBERS								
WC 3/4, 1.5 and 46 to early 56 (TM 9-1808B)	Applicable to both the early and late spur gear transmission.							Source
M37 (TM 9-8031-2)	1951 to 1954 Transmission (NP420)							Source
M37 ((TM 9-2520-232-35)	1955 to 1971 Transmission (NP420), M37, M601/M615, and Civilian Dodge Power Wagon							Source

h. OVERDRIVE UNITS

<p>Gear Vendor</p>	<p>Bolted behind Transfer Case (works only in 2WD)</p>				<p>Part Source</p>
<p>Ranger</p>	<p>Bolted behind GM engines (gear splitter, works in both 2WD and 4WD)</p>				<p>Part Source</p>
<p>U.S. Gear</p>	<p>Bolted behind transmission (U.S. Gear Corporation, 9420 Stony Island Ave., Chicago, IL 60617 -- Phone 800-874-3271)</p>				
<p>Brownie Auxiliary Transmission</p>	<p>Spicer Units (works only in 2WD)</p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 20px;">Transmission Gearshift Lever</div>  <div style="border: 1px solid black; padding: 5px; margin-left: 20px;">Brownie Gearshift Lever</div> </div>				<p>Information Source</p>
<p>Chevy S10 T5 O/D Transmission</p>	<p>Vintage Metal Works (Dodge 218/230)</p> <p>There are two basic gearsets available in the S10 T-5:</p> <p>1st - 4.03 2nd - 2.37 3rd - 1.49 4th - 1.00 5th - 0.86 – Prior to 1986 1st - 3.76 2nd - 2.18 3rd - 1.41 4th - 1.00 5th - 0.72 – After 1986</p>				<p>Part Source</p>

GROUP 19. TRANSFER CASE

MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1971	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B 1/M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
	C-37832 (Single Speed 1:1:1 Ratio)	NP-38145 (Single Speed 1:1:1 Ratio)	NP-38600/ 38620 (Two Speed 1:5:1 Ratio)	NP-38631 (Two Speed 1:96:1 Ratio)	NP-38631 (Two Speed 1:96:1 Ratio)	NP-38631 (Two Speed 1:96:1 Ratio)	NP-38631 (Two Speed 1:96:1 Ratio)	NP-38631 (Two Speed 1:96:1 Ratio)	NP-38631 (Two Speed 1:96:1 Ratio)	NP-38631 (Two Speed 1:96:1 Ratio)	NP-38631 (Two Speed 1:96:1 Ratio)	NP-38631 (Two Speed 1:96:1 Ratio)
Rubber Insulators (Rubber, 1 x 3-1/8 x 1/8, 2 holes, 7/16 diam.)	No	Yes	No	No	No	No	No	No	No	No	No	No
Rubber Insulators	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Case, Complete	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yoke Speedi-Sleeve# 99212	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NP203/205 Part Source

[Part Source](#)

GLYPTAL RED ENAMEL

Glyptal is the sealant to use for sealing stud holes if you have removed it from inside the case.

[Part Source](#)

Changing Gear Ratio from 5.83 to 4.89 for requires changing the Speedometer Gear to a 5 Tooth for Correct Speedometer Reading



Let's look at the gear ratio mathematically:

- 14/4 = 3:5 (5:83 R&P)
- 14/5 = 2:8 (4:89 R&P)

3200 Engine RPM/3.5 = 914.3 Pinion RPM
 3200 Engine RPM/2.8 = 1,142.9 Pinion RPM

914.3/1,142.9 = 80% or a 20% gain in Pinion RPM to Offset the 20% Reduction in Pinion RPM from Installing 4:89 Gears so Speedometer will Read more accurately.



GROUP 20. PTO												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1971	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1 /M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
	Up-to-Type to Early 52 (Detroit Harvester 6201A, 4100Q, 4100G)					After- Type to Early 56 - Housing# 12525	NP420 Late 56 (Housing# 12546, 12533 (M37))					
Bearings - Reverse Gear [Assembly Width 1.2031, Housing Dia. 1.375, Shaft Dia. 0.875, roller Dia. 0.250]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cover	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cover Gasket	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fork - Reverse Gear	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gear - Idler	No	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No
Gear - Idler (24T)	No	No	No	No	No	Yes	No	No	No	No	No	No

Gear - Reverse Gear (1.375 to 1.376) [Wear Limit = .002]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gear - Sliding	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Loose Roller Bearing Source	DC Truck Parts Vintage Power Wagons											Part Source Part Source
Loose Roller Bearings - Idler Gear Shaft (18) [Dia. = 0.025 x 1.5 Lgh., 6.35mm X 38.10mm, NSK# F-236-Q]	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Revit – Reverse Gear Shaft (7/32 x 2-1/4)	Available from, The Fastener Stop, 2106 Harrison Ave., Latrobe, PA 15650. Part# FS251209											Part Source
Shaft – Drive (38-1/2” lgh.)	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Shaft - Idler Gear Shaft	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No
Shaft - Idler Gear Shaft (Dia. = 1.0325 to 1.032 x 4-7/8 lgh.) [Wear Limit = .0015]	No	No	No	No	No	Yes	No	No	No	No	No	No
Shaft – Reverse Fork Shifter	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shaft - Reverse Gear (.8745 to .875 x 4.703) [Wear Limit = .0015]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1/4 Inch Cast Iron Spacer Plate	For mounting a Detroit Harvester 12525 PTO to the 1 st Series Transmission, see PTO Catalog.											Part Source

The Different PTOs



Dodge G502/G507, Detroit Harvester Case number: 4101C, C-924236.



Only Front Output Shaft, no Rear.

PTO to Drive Rear Equipment, mounted to right side of Transmission.

Braden/Arrow Gear PTO Model BHD 7 mounted to an NP420 on a WM300.



Detroit Harvester PTO Model 12533 used on the M37 88950 Transmission.



Detroit Harvester PTO Model 12533 used on the M37 NP420 Transmission.



Fabricated bracket/lever to replace cable-controlled PTO.



Detroit Harvester PTO Model 12546 used on the FFPW NP420 Transmission.



GROUP 21. WINCH												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960- 1971	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/ M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
	Braden MU	Braden MU-2									Braden LU- 4	Braden MU-2
Bearing Leg Bushing - MU-133B	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Cable Drum Retaining Ring - MU-139	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Clutch - MU-141	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Clutch Key - MU-141A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Clutch Shifter Fork Handle Stem - MU- 143B	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Clutch Shifter Fork Spring - MU-143S	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Clutch Shifter Handle Knob - MU-143D	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Clutch Shifter Pivot Pin - MU-143B	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Drag Brake Block Assembly - MU-131-0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Drag Brake Link - MU- 141L	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Drag Brake Link Pin - MU-131B	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Drive Shaft – Front (38-1/4)	No	No	No	No	No	No	No	No	No		Yes	No
Drive Shaft – Front (40-13/16)	No	No	No	No	No	No	No	No	Yes		No	Yes
Drive Shaft – Front (41-1/2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		No	No
MU2 Winch driveshaft grease fitting - 5/16-32 TPI, not NPT threads.	<u>Part Source</u>											

GROUP 21. WINCH												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960- 1971	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/ M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Part# H-5163265 from SAE Products												
Drive Shaft – Front Rear (79-1/2 inches” long)	N/A	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Yes		N/A	N/A
Drive Shaft – Rear, Rear (44-5/8ths long) (WC ¾ Ton, except Ambulance, Carryall)	N/A	Yes	N/A	Yes	Yes	Yes	Yes	Yes	Yes		N/A	N/A
Drive Shaft Universal Joint – Front/Front. See Part Image Section Part Source	915848 [Rockwell 1FR], MOOG 853	996426 Rockwell 1FR, MOOG 853	915848 Rockwell 1FR, MOOG 853	1263955 Rockwell 1FR, MOOG 853	1263955 Rockwell 1FR, MOOG 853	1263955 Rockwell 1FR, MOOG 853	1263955 Rockwell 1FR, MOOG 853	1263955 Rockwell 1FR, MOOG 853	1263955 Rockwell 1FR, MOOG 853		1263955 Rockwell 1FR, MOOG 853	1263955 Rockwell 1FR, MOOG 853
Drive Shaft Universal Joint – Front/Rear	915849 Rockwell 1FR, MOOG 853	996426 Rockwell 1FR, MOOG 853	915849 Rockwell 1FR, MOOG 853	1263958 Rockwell 1FR, MOOG 853	1263958 Rockwell 1FR, MOOG 853	1263958 Rockwell 1FR, MOOG 853	1263958 Rockwell 1FR, MOOG 853	1263958 Rockwell 1FR, MOOG 853	1263958 Rockwell 1FR, MOOG 853		1263958 Rockwell 1FR, MOOG 853	1263958 Rockwell 1FR, MOOG 853
Shims	Shims to shim the plate on the drive shaft UJ plate when using the 853											Part Source
Drive Shaft Universal Joints – All Rear Shafts	N/A	N/A	N/A	305	305	305	305	305	305		N/A	N/A
Safety Brake Band Assembly - MU-152-0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Safety Brake Band Spring - MU-156	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Safety Brake Drum - MU-151	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Safety Brake Housing - MU-248	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Splined Yoke – Rear Drive Shaft (1.125 Dia.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Worm - MU-100R	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes

GROUP 21. WINCH												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960- 1971	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/ M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Worm Bearing Container - MU-149	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Worm Bearing Container Gasket - MU-149G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Worm Gear - MU-101R	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Worm Grease Seal - MU-149A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Worm Housing Bushing - MU-134B	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Worm Housing Cover & Bushing - MU-144-0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Worm Housing Cover Gasket - MU-144G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Worm Shaft Key - MU-100A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Worm Shaft Spacer - MU-102S	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Worm Thrust Bearing Cone - MU-103A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Worm Thrust Bearing Cup - MU-103B	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Yoke – Front Drive Shaft	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Yoke – PTO Front - Caps	Yes	Yes	Yes	Yes	No	No	No	No	No		No	No
Yoke – PTO Front - Clips	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Yoke – PTO Rear Shafts	N/A	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Yes		N/A	Yes
Yoke – Winch Worm Shaft	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes

GROUP 21. WINCH												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1971	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1/ M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Rebuilding Instructions												Instructions
Adjusting the Winch Brake	<p>In reviewing the manuals, TM-9-1808B, says to adjust the brake to “Normal Load,” Well, what is normal load, truck weight plus payload? This and how we intend to use our trucks should be considered when adjusting the winch brake.</p> <p>During winch assembly, place the band's long adjusting screw/nut top right corner when looking at the open side, or towards driver side. This allows easy access to the nuts. The winch brake should be adjusted to prevent the drum from rotating in reverse when the PTO is placed in neutral during normal loads. Here are some basic guidelines although not all inclusive you might want to consider adjusting the brake:</p> <ul style="list-style-type: none"> - If you only use your truck with an “A” frame to lift to move items around, determine max load you would want to lift, say 1,000 pounds. Find an item that matches close to that poundage and lift it. If the winch reverses, tighten the band by turning the adjusting nut clockwise, 1/2 turn. Do this until the winch brake can hold the load. You might want to turn the adjusting nut an additional 1/2 as a safety measure. - If you pull items with your truck such as trees or rocks, you will want to maintain tension on your truck. For example, pull against a tree. Place a string between your thumb and index finger of both hands. Stand back 25-50 yards from the tree, place one hand thumb at the base of a tree, the other at the top to measure the height distance of the tree. Add an additional 15-20 feet to the hand at the top of the tree and rotate it right or left moving it to ground level. This is the point to stage your truck. You want to ensure you have enough distance that if the tree snaps, it will not damage your truck. Anchor the cable chain to the tree at its base. Pull your truck against the tree locking the brakes until the truck skids on its tires a foot or two. Continue to hold vehicle brakes and press in the clutch, if which drum rotates reverse direction, tighten the brake, repeat until winch brake holds tension and add an additional 1/2 turn of the adjusting nut for safety. You may want to do this on dirt and not payment. - If you off-road in mud conditions, bury the truck to its frame in mud until it can't move under its own ability. Most Power-Wagons weight about 5500 pounds and the winch is rated at 10,000 pounds which means it can drag a block weighing 10,000 pounds. This is to compensate the weight of the vehicle and the amount of resistance in mud due to the fact you are dragging dead weight. Follow the procedures above to adjust the amount of tension on the winch brake. - If off-road in hilly terrain, climb a hill that is steep enough that the truck cannot climb – 65+ degrees vertical. Follow the procedures above to adjust the amount of tension on the winch brake. <p>Assistance from a buddy is helpful in doing this. The whole purpose of the brake is safety and to prevent backlash in the cable and possible damage to it. You should always try to maintain tight cable on the drum.</p>											

GROUP 22. BELT PULLEY												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1971	X3- WM300 X37BC2 (1 Ton 4x4) 1969-1971	M37/M37B1 /M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Input Shaft Speedi-Sleeve# 99210	N/A	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Yes		N/A	N/A
Pulley Speedi-Sleeve# 99180	N/A	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Yes		N/A	N/A

GROUP 23. WHEELS

LUG NUTS – NAPA# 641-2006, WA2006 (RH), 641-2007, WA2007 (LH) Euclid part no: E5652R (RH), E5652L (LH)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WHEEL STUDS - NAPA# 641-1047, (RH), NAPA# 641-1048 (LH)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WHEEL STUD NUT SOCKET - (2-9/16, 8 point hexagonal)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

½ Ton WC Truck Tube (7.50 x 16 – TR150 Rubber Stem)

According to the War Department's TM 31-200, Maintenance and Care of Pneumatic Tires and Rubber Treads issued 4/1/1943, the correct tube for the 1/2-ton trucks, is a tube with a "Hand Bendable" rubber covered valve stem. This stem is found on 7.50x16 LT tubes and is straight and can be bent using a "Bending Tool" before the tube is installed, or a block of wood and your hands after the tube is installed and aired to the proper pounds. Make sure it is the long stem tube for a truck that you use.





If you bend it yourself, place a 3/4thk. x 1-1/2wide x 6" inches long block of wood with end against the stem to keep it in the straight position, and with your other hand, bend the stem towards the outside of the tire to the desired angle. You can only bend the stem one way. If you bend the stem back to correct the angle, it will break the stem via cracks, however you can continue to bend the stem to get the angle you want.

Red Barn Custom 20" Wheels

Rim thickness = .187 = 3/16 thk.



[Part Source](#)

<p>Coker Tire 71027</p>	<p>10.50-16, 38" Tall</p> 	
<p>Samson S&M Super Duty Tires</p>		<p>Part Source</p>
<p>Interco Super Swampers</p>	<p>It has been reported by forum members, tires work ok on stock PW rims and overall a good tire.</p>  <p><small>13 x 38 x 16 Bias Ply, Tube Type, Super Swampers</small></p>	<p>Part Source</p>
<p>10.50-16 STA</p>		<p>Part Source</p>
<p>Radial Tubes w/Brass Stems, Flaps</p>	<p>Tube with valve stem assembly No. TR-177A</p>	<p>Part Source</p>
<p>Speedway NDT</p>		<p>Part Source</p>
<p>11.00-16 Tube w/TR177A Stem</p>	<p>UK – Exchange Rate Conversion</p>	<p>Part Source</p>
<p>Wheel Alignment Toe Gauge (WA0361, 46" to 74" inches)</p>	<p>Wheel-A-Matic Gauge</p> <p>Part Source</p>	
<p>Wheel/Ratio/RPM Calculator</p>	<p>Calculator</p>	
<p>Wheel Savers</p>	<p>Prevents Flat Spots in Long Term Storage Part Source</p>	
<p>2-9/16, 6 Point Knuckle Nut Wrench</p>	<p>NAPA - BK 7769135</p> 	

Pop the side of a Michelin 1100/85R/16

If you step into the tire and put your shoes on the lower bead and pull up on the upper bead with your hands, you can pop the side of the tire to make installing the tube and flap much easier. Add some air, check the flap to ensure its flat on the underside of the tube, place tire on the rim, align the tube stem, and step on the side to push the side down.



For Technical Data on Rims see Military Standard Group.

Wheel Studs


- C-924628 (Right) 2-1/4**
- E-4988R
- M-102
- W-101
- 13-1502R
- 641-1047
- DAYTON PARTS 13-1502-R
- AUTOMANN 201.6263R
- EUCLID E-4988-R
- BWP M-102
- MERITOR R004988R
- DAYTON PARTS 13-1502R
- NAPA 641-1047
- EUCLID E-4988R
- LELAND W-101

- C-924629 (Left) 2-1/4.**
- E-4988L
- M-103
- 101
- 13-1502L
- DAYTON PARTS 13-1502-L
- AUTOMANN 201.6263L
- EUCLID E-4988-L


- C-1261180 (Right) 2-29/64**
- TDAR005618R
- BWP-NSI M-258
- WORLD AMERICAN WA07-5187
- M138A-24V
- BWP M258
- DANA 501205R
- NATIONAL WHEEL & RIM X1666


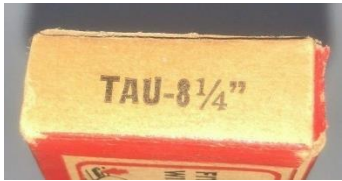







- C-1261181 (Left) 2-29/64.**
- E-5618-L
- M-259
- W-402
- 13-1506-L
- DAYTON PARTS 13-1506-L
- AUTOMANN 201.6265L
- EUCLID E-5618-L
- BWP M-259
- MERITOR R005618L
- LELAND W-402

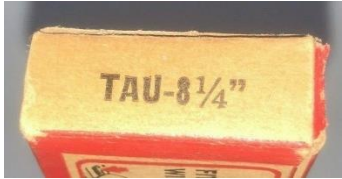







[Part Source](#)

	<ul style="list-style-type: none"> - BWP M-103 - MERITOR R004988L - SIRCO INDUSTRIES 101 - DAYTON PARTS 13-1502L - EUCLID E-4988L 		
Axle Torque Computer	Used when changing engines, transmission, ring & pinions, and tire size.		Computer
Mounting the 1100/85R/16 on the Spare Tire Carrier	Use an M37 mounting channel cut to match the rim dish.		

GROUP 24. BODY												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1971	X3- WM300 X37BC2 (1 Ton 4x4) 1969- 1971	M37/M37B1/ M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
				1 st Series Bed 1946 – Early 50	2 nd Series Bed Late 1950 – Early 56 Stepside Tailgate	3 rd Series Bed Late 1956 – 71 1954 – 80 Stepside Crossmember					3 rd Series Bed	
Bed Panel - Front	No	No	No	No	Yes	No	No	No	No		No	No
Bed Panel – Front	No	No	No	Yes	Yes	No	No	No	No		No	No
Bed Panel – Sides – 1 st	No	No	No	Yes	Yes	No	No	No	No		No	No
Bed Panel – Sides – 2 nd	No	No	No	No	Yes	Yes	No	No	No		No	No
Bed Panel – Sides – 3 rd	No	No	No	No	No	No	Yes	Yes	Yes		No	Yes
Cab – Floor Pans	No	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Cab – Glove Box	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Cab – Transmission Floor Cover	No	Yes	Yes	Yes	Yes	Yes	No	No	No		No	No
Cab Closed – Doors	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Cab Rubber Insulators/Wood Blocks and Bolts	Information on insulators and installing springs/bolts.											Information
Deluxe Heater – Model 36	No	No	No	Yes	No	No	No	No	No		No	No
Deluxe Heater – Model 62	No	No	No	No	Yes	Yes	No	No	No		No	No
Mounting Bracket – Spare Tire	No	No	No	No	No	Yes	Yes	Yes	Yes		No	Yes
Shell - Radiator	No	Yes	Yes	No	No	No	No	No	No		No	No
Shell - Radiator	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes		No	Yes
Tailgate	No	Yes	Yes	No	No	No	No	No	No		No	No
Tailgate – 1 st	No	No	No	Yes	Yes	No	No	No	No		No	No
Tailgate – 2 nd	No	No	No	No	Yes	Yes	No	No	No		No	No
Tailgate – 3 rd	No	No	No	No	No	No	Yes	Yes	Yes		No	Yes
Vacuum Wiper Motor (KSB-463 (DS))	Motor kit Interchanges with Ford											Part Source

GROUP 24. BODY												
MODULE COMPONENTS	PRE/WWII (1/2 Ton 4x4) VC 1-6 VF 401-407 WC 1-50 1940-42	WWII (3/4 Ton 4x4) WC 51-60 1942-45	WWII (1.5 Ton 6x6) WC 62-63 1943-45	WDX (1 Ton 4x4) 1946-48	B1-B3 (1 Ton 4x4) 1948-53 F2PW, F3PW (1 Ton 4x4) Fargo 1950-51	C1-C4 (1 Ton 4x4) 1954-56	K-6-300 (1 Ton 4x4) 1957	W300M (1 Ton 4x4) 1958-59	WM300 (1 Ton 4x4) 1960-1971	X3- WM300 X37BC2 (1 Ton 4x4) 1969- 1971	M37/M37B1/ M43 (3/4 Ton 4x4) 1950-71	M601/M615 (1 Ton 4x4) 1958-1978
Vacuum Wiper Motor Arm (DS-82622-1C)	ANCO# 41-01 (both sides), NAPA# NOE 8195837											Part Source
Vacuum Wiper Motor Blade (86590”C – 8-1/4)	ANCO# 20-09 (both sides), 9 Inch											Part Source
Arm & Blade Kit	ANCO# 41-02/20-12											Part Source
Vacuum Wiper Motor (KSB-463-1 (PS))	Motor kit Interchanges with Ford											Part Source
Vacuum Wiper Motor Arm (DS-82623-1C)												
Vacuum Wiper Motor Blade (86590”C – 8-1/4)												
NAPA Classic Wiper	NAPA Number 60-1033, WIP 60116, 10”											Part Source
												
Plastic 1-1/2 Flexible Defrost Hose												Part Source
Metal 1-1/2 Flexible Defrost Hose												Part Source
Aircraft 1-1/2 Flexible Defrost Hose												Part Source
Weatherstrip Sealant	Permatex Black Adhesive Sealant# 81158											Part Source
Seat Fabric	SMS Auto Fabrics, 350 South Redwood Street, Canby, OR 97013 (503) 263-3535											Part Source
Bench Seat	Dodge Dakota, or Ford Rangers are a good fit											

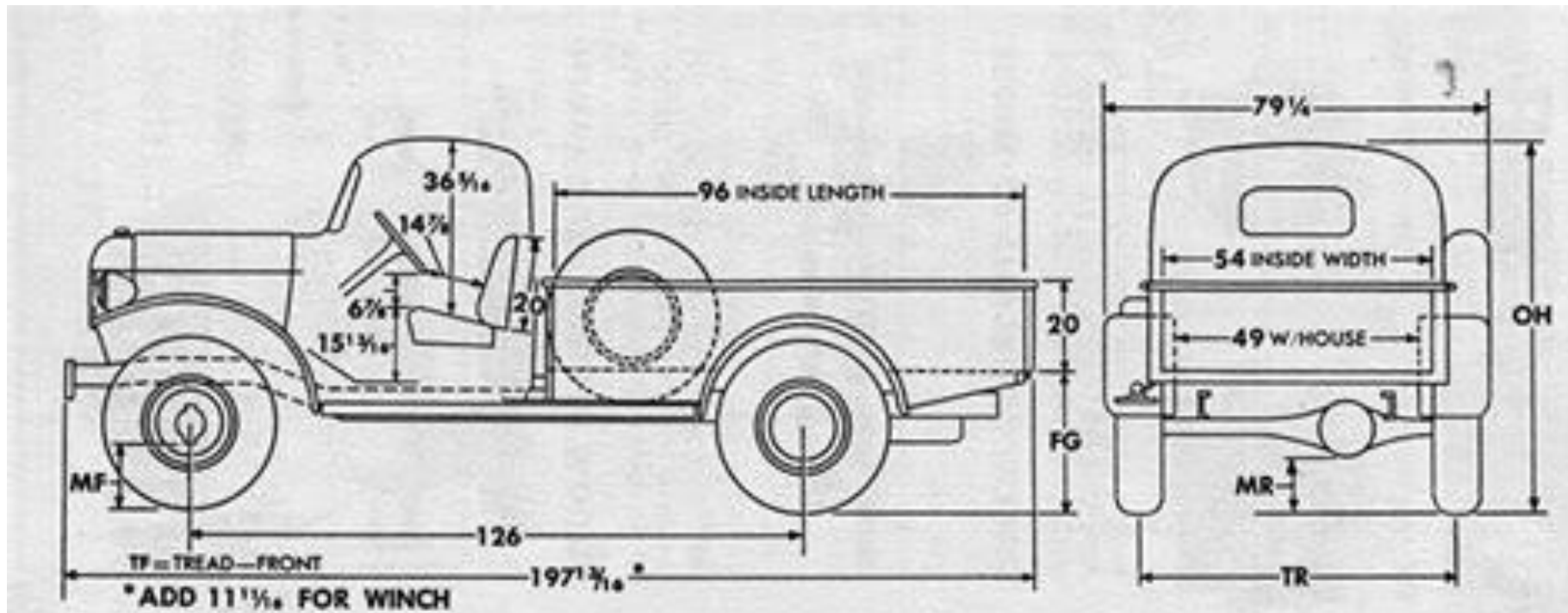
	BLADE TAU-8-1/4 or WLA-778-8-1/4-C	ARM AL-150	MOTORS	Can Use	KSB KIT		
Original TRICO Part Numbers/Parts for Electric Motors	Same as Vacuum Motor Blade	 <p>NOTE: These arms fit the knurled driver of an electric motor. NSN-2540-00-274-6693</p>					
Original & Service TRICO Part Numbers for Vacuum Motors 1946 - 1949	OEM BLADE WL-778-30C (L) SERVICE BLADE TAU-8-1/4 or WLA-778-8-1/4-C	OEM ARM 82622-1XC (L) 82623-1XC (R) SERVICE ARM AL-60	OEM MOTORS KSB-463, KSB-463-1	SERVICE MOTORS KSB-600-2L, KSB-600-3R	CAN USE SERVICE MOTORS KSB-406* , KSB-406-1*	KSB KIT	INTERCHANGE (Motor, Arm, Blades)
  	 <p>NOTE: These arms fit the knurled driver of a vacuum motor. When looking to purchase, make sure the kit includes the wrist action (curved) end connector. The wrist action connector is used on flat windshields and allows for wrist action on the blade when the PW windshield is cranked out. This minimizes</p>	KSB-463 	2L NSN2540-00-767-9360 3R NSN2540-00-767-9376	KSB-406  KSB-406-1 		FF Power Wagon 1946 - 71 Dodge Truck All Models 1941 - 47 Ford Truck Swing out Shield 1941 - 46 Ford C.O.E. 1941 - 47 Plymouth 1/2 Ton Pick-Up 1941	

		undue stress of the arm on the motor shaft.			* Requires Special 4851 Arm Adaptor Package.		
	OEM BLADE 87400-30XC SERVICE BLADE TAU-8-1/4	OEM ARM 82622-1XC (L) 82623-1XC (R) SERVICE ARM AL-60	OEM MOTORS KSB-463, KSB-463-1	SERVICE MOTORS KSB-600-2L, KSB-600-3R	CAN USE SERVICE MOTORS KSB-406*, KSB-406-1*	KSB KIT	INTERCHANGE (Motor, Arm, Blades)
Original & Service TRICO Part Numbers for Vacuum Motors 1950 – 1966	  	 <p>NOTE: These arms fit the knurled driver of a vacuum motor. When looking to purchase, make sure the kit includes the wrist action (curved) end connector. The wrist action connector is used on flat windshields and allows for wrist action on the blade when the PW windshield is cranked out. This minimizes undue stress of the arm on the motor shaft.</p>		<p>2L NSN2540-00-767-9360 3R NSN2540-00-767-9376</p>	 		<p>FF Power Wagon 1946 - 71</p> <p>Dodge Truck All Models 1941 - 47</p> <p>Ford Truck Swing out Shield 1941 - 46</p> <p>Ford C.O.E. 1941 - 47</p> <p>Plymouth 1/2 Ton Pick-Up 1941</p>
	Organic Rust Removal	Ratio - 4ozs. of Molosses to 28ozs. of water and pressure washer.					
Cowl Male Door Hinge Interchange	Here are the CC numbers for upper and lower Male hinges. Left top – FFPW: CC-785743, Left Top – WC 1/2 & 3/4 Ton; Closed Cab/Ambulance/Carryall: CC-919535 Right Top – FFPW, WC 1/2 & 3/4 Ton; Closed Cab/Ambulance/Carryall: CC-785742 Left Bottom – FFPW, WC 1/2 & 3/4 Ton; Closed Cab/Ambulance/Carryall: CC-785748						

Right Bottom – FFPW, WC ½ & ¾ Ton; Closed Cab/Ambulance/Carryall: CC-785747 Pin: CC-708167 (NSN 5315-00-735-1047), (0.2805 x 3-1/32) Pin (used w/mirror): CC-797331, CC-919235, CC-950428 (1/4-20 x 3-9/32)	

GROUP 25. TECHNICAL/GENERAL INFORMATION/PART SOURCES	
Classic Power-Wagons	Web Site
Power Wagon Part Pictures	Web Site
Dodge Truck Paint Codes	Source
Distinguishing Bolts from Screws	When is a bolt a bolt and a screw a screw? Source
Thread Fit Class	If you refer to Military Manual, you may have noticed a 2 or 3 at the end of descriptions for Bolts, Nuts, or Studs. This is the “Fit Class” for how tight or loose the fastener fits in threads. Source

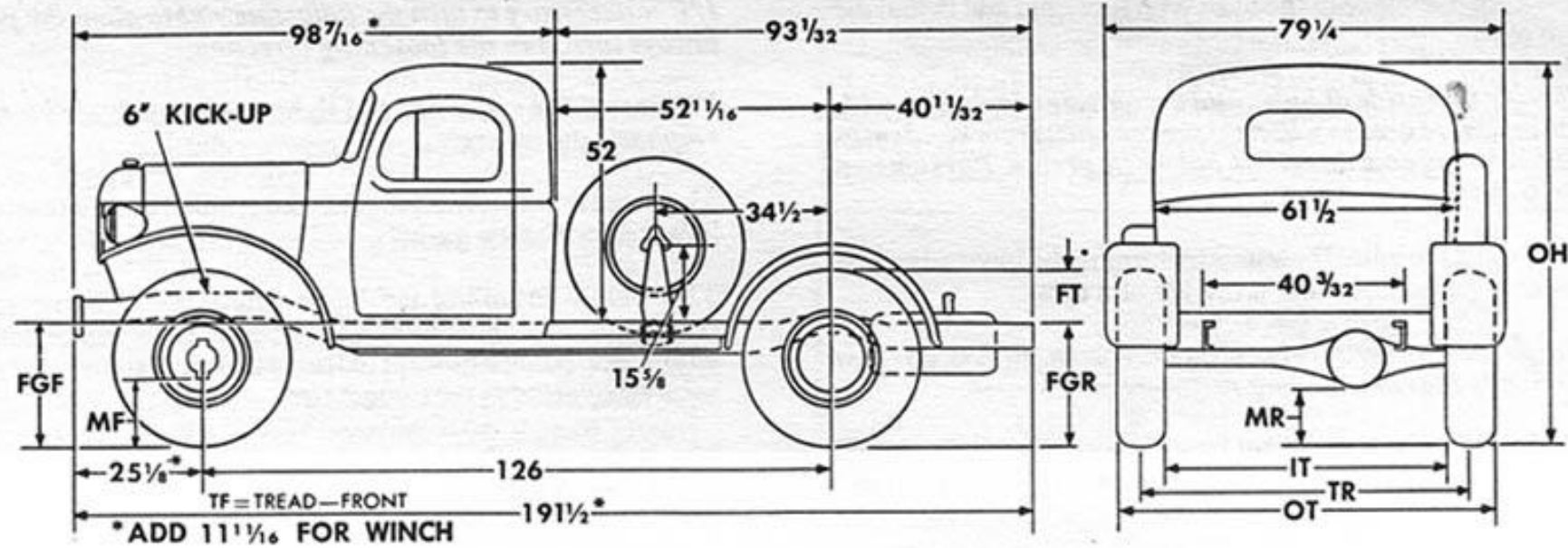
a. DIMENSIONS AFFECTED BY GROSS VEHICLE WEIGHT & BODY BUILDER LAYOUTS



VARIABLE DIMENSIONS AFFECTED BY GROSS VEHICLE WEIGHT

G.V.W.	8,700 lbs.		9,500 lbs.	
	Loaded	No Load	Loaded	No Load
FG—Floor to ground @ rear of body	28 3/16"	32 7/16"	28 11/32"	32 11/16"
OH—Over-all height	81 1/4"	82 17/32"	81 9/32"	82 5/8"
MF—Front axle ground clearance	10 23/32"		10 23/32"	
MR—Rear axle ground clearance	10 1/8"		10 1/8"	
TF—Tread, front	64 3/4"		64 3/4"	
TR—Tread, rear	64 3/4"		64 3/4"	

NOTE: All dimensions based on shortest wheelbase model with equipment for that G.V.W. shown.



VARIABLE DIMENSIONS AFFECTED BY GROSS VEHICLE WEIGHT

G.V.W.	8,700 lbs.		9,500 lbs.	
	Loaded	No Load	Loaded	No Load
FGF—Frame to ground, front, @ C/L of axle	31 11/32"	31 13/32"	31 11/32"	31 7/16"
FGR—Frame to ground, rear, @ C/L of axle	26"	29 9/16"	26 1/8"	29 3/4"
OH —Over-all height	81 1/4"	82 23/32"	81 9/32"	82 25/32"
FT —Frame to top of tire (bump position)	10 15/32"		10 15/32"	
IT —Inside of rear tires	55 11/32"		55 11/32"	
OT —Outside of rear tires*	74 1/8"		74 1/8"	
MF —Front axle ground clearance	10 23/32"		10 23/32"	
MR —Rear axle ground clearance	10 1/8"		10 1/8"	
TF —Tread, front	64 3/4"		64 3/4"	
TR —Tread, rear	64 3/4"		64 3/4"	

NOTE: All dimensions based on shortest wheelbase model with equipment for that G.V.W. rating.

* Maximum over hubs.

b. FRAME DIMENSIONS CHART

3. FRAME DIMENSIONS CHART (C-1-PW)

MODEL DESIGNATION AND WHEELBASE (Refer to Figure 3)	C-1-PW 126" WB.
2.....	33 ³ / ₃₂ "
3.....	40 ³ / ₃₂ "
4.....	50 ⁵ / ₁₆ "
5.....	33 ¹ / ₂ "
6.....	185"
7.....	118 ¹⁵ / ₁₆ "
8.....	50 ²⁷ / ₃₂ "
9.....	1 ⁷ / ₁₆ "
10.....	6"
11.....	2 ⁷ / ₁₆ "
12.....	18 ²¹ / ₃₂ "
13.....	38 ³ / ₈ "
14.....	126"

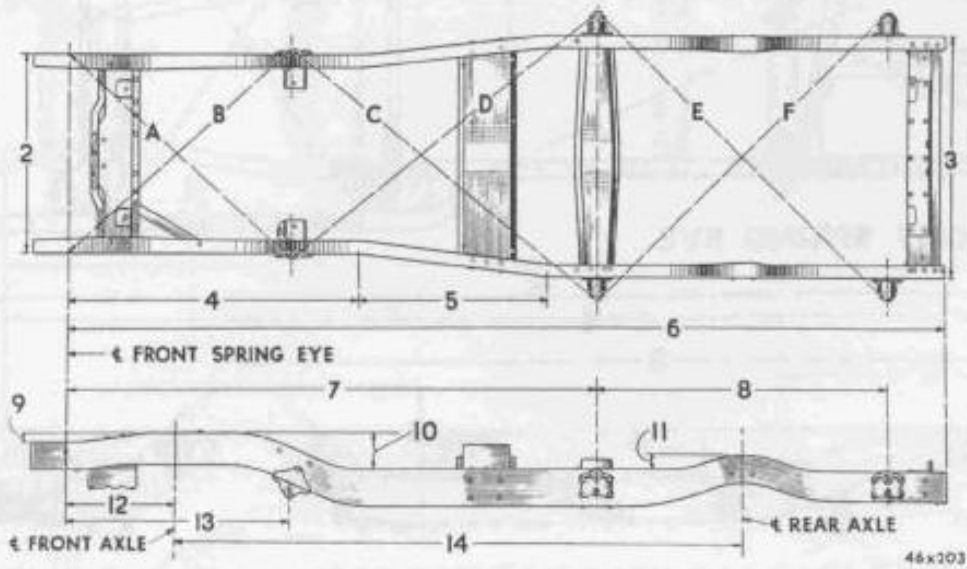
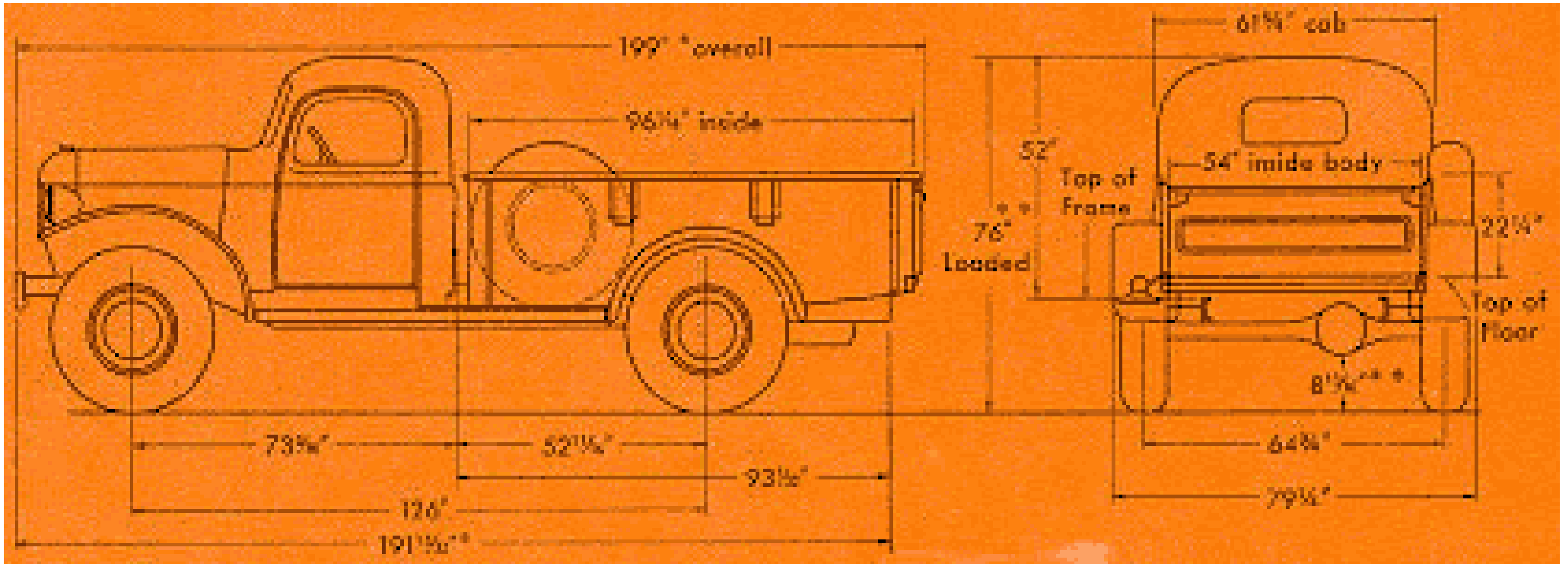
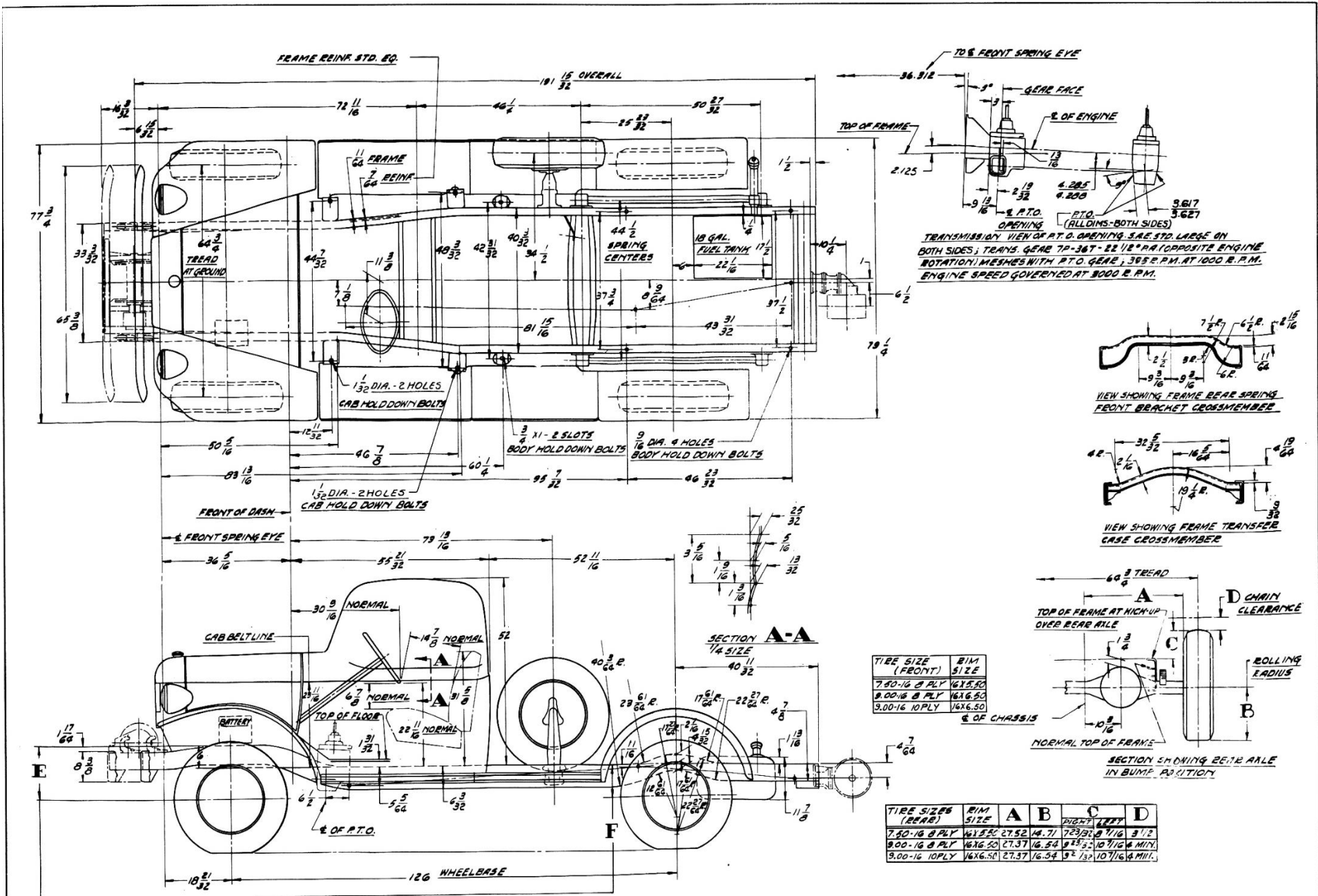


Fig. 3—Frame Alignment (C-1-PW) (Dimensions Given In Inches)





TIRE SIZE (FRONT)	RIM SIZE
7.50-16 8 PLY	16X6.50
8.00-16 8 PLY	16X6.50
9.00-16 10PLY	16X6.50

TIRE SIZE (REAR)	RIM SIZE	A	B	C	D
7.50-16 8 PLY	16X6.50	27.52	14.71	7.23	3.71
8.00-16 8 PLY	16X6.50	27.37	16.54	9.23	3.12
9.00-16 10PLY	16X6.50	27.37	16.54	9.23	3.12

E	FRONT SPRING		
	LOAD LBS.	RATE LBS. SPRING IN/8 PER SPRING PER INCH	SPRING NO.
14 23/32	1150	405-465	1272998
16 0/32	1600	571-657	1273201

F	REAR SPRING		
	LOAD LBS.	RATE LBS. SPRING IN/8 PER SPRING PER INCH	SPRING NO.
9 9/16	2900	469-539	1273003
9 5/16	3000	564-648	1271367

BODY BUILDERS LAYOUT
P.W.-126-126" W.B.
 POWER WAGON

PRINT # 1189180

c. GEAR LUBRICANT

SOURCE - Exert from the **Military Specification MIL-L-2105D dated 8-7-87** for Lubrication oil, Gear, Multipurpose for the following grades: 75W – GO-75, 80W-90 – GO 80W/90, 85W-140 – GO 85W/140.

- **COMPATIBILITY** – compatibility with other gear oils,
- **MOISTURE CORROSION** – prevent or minimize corrosion to gear components in the present of moisture,
- **THERMAL OXIDATION STABILITY** – oil shall resist chemical and thermal oxidation,
- **LOAD CARRYING, EXTREME PRESSURE AND DEPOSIT CHARACTERISTIC** – oil shall prevent or minimize gear distress and lubricant deposits,
- **GEAR SCORING** – oil shall minimize gear scoring,
- **GEAR DISTRESS AND DEPOSITS** – oil shall prevent gear tooth ridging, rippling, pitting, welding and excessive wear and does not produce excessive wear, pitting or corrosion of bearing rollers, races, or thrust washers.
- **COPPER CORROSION** – oil shall minimize copper corrosion.

This product meets the MIL standard – Sta-Lube Hypoid Gear Oil [Link](#)

NOTE: The Transmission Lubricant is for a Spur Gear Transmission. S.A.E. 90 Gear Oil in Synchronized Transmissions.

On trucks, except WC and WD-15 models, equipped with full floating rear axle, remove hub and bearings, clean out old lubricant, pack the bearings (force grease between rollers, inner race and cage), and coat the inside of hub as illustrated in figure 5. Do not fill the hub with grease.

EVERY 15,000 MILES AND PRIOR TO ANTICIPATED TEMPERATURE CHANGES

50. TRANSMISSION

Gear Lubricant

Drain plug and filler plug located at the bottom and side of transmission case. Drain and refill to bottom of filler plug hole.

If the anticipated atmospheric temperature will be:

- Above +32° F.....S.A.E. 140
- As low as -10° F.....S.A.E. 90
- Below -10° F.....S.A.E. 90
blended with 20% of 10W Engine Oil or S.A.E. 80 Gear Lubricant.

51. TRANSFER CASE (POWER WAGON)

Gear Lubricant

Drain plug and filler plug located at the bottom and side of transfer case. Drain and refill to 1/2 inch below bottom of filler plug hole.

If the anticipated atmospheric temperature will be:

- Above +32° F.....S.A.E. 140
- As low as -10° F.....S.A.E. 90
- Below -10° F.....S.A.E. 90
blended with 20% of 10W Engine Oil or S.A.E. 80 Gear Lubricant.

52. AXLE DIFFERENTIAL

The rear axle differential (also front axle differential on Power Wagon) should be drained, flushed with flushing oil and refilled with a non-corrosive TRUCK DUTY Hypoid Lubricant or

a non-corrosive type of Hypoid Lubricant satisfactory for field servicing of both truck and passenger car hypoid rear axles, using the proper S.A.E. grades for atmospheric temperatures as shown below.

Hypoid Single Speed Single Reduction Axles (Truck models WC, WD, WG, WH, WJ, WK beginning with serial No. 81785001, WR and WDX).

S.A.E. 90, except where atmospheric temperatures average below -10° F. for extended periods, when on S.A.E. 90 blended with 20% of 10W Engine Oil, or a straight S.A.E. 80 lubricant should be used.

Spiral Bevel Single Speed Single Reduction Axles.

(Models WK before serial No. 81785001, WL and Diesel and Spiral Bevel Two Speed Single Reduction Axles.)

(Models WF, WG, WH, WK before serial No. 81785001, WL and Diesel).

This two speed axle should be filled until lubricant flows from overflow plug hole. (This requires about 7 1/2 quarts or 15 lbs. of lubricant.) Insert plug. Then add one pint of lubricant, using filler hole at top of carrier, to supply the extra lubricant required to fill the differential and planetary unit. Do not over fill.

- Above +100° F.....S.A.E. 140
- As low as -10° F.....S.A.E. 90
- Below -10° F.....S.A.E. 90 blended with 20% of 10W Engine Oil or a straight S.A.E. 80 Lubricant.

Single Speed Double Reduction Axles (Models WG, WH, WJ, WK, WL, WR and Diesel).

Two Speed Double Reduction Axles (Models WJ, WK beginning serial No. 81785001 and WR).

Fill to bottom of filler plug hole then install filler plug. Remove pipe plug in pinion cage and add one pint of lubricant.

- Above +32° F.....S.A.E. 140
- As low as -10° F.....S.A.E. 90
- Below -10° F.....S.A.E. 90 blended with 20% of 10W Engine Oil or a straight S.A.E. 80 Lubricant.

MISCELLANEOUS LUBRICATION INFORMATION

SPEEDOMETER CABLE

Disconnect at the instrument, remove the shaft and coat with Semi-Fluid Chassis Lubricant.

CLUTCH RELEASE BEARING

This bearing is lubricated at time of assembly and does not require further lubrication.

Pintle height (all models except M43)

Empty	25-1/8 in.
Loaded	21-7/8 in.

Weight (net):

Cargo truck M37, M37B1 (w/o winch)	5,687 lb
Cargo truck M37, M37B1 (w/winch)	5,917 lb
Ambulance truck M43, M43B1	7,150 lb
Telephone maintenance truck M201, M201B1	6,950 lb

b. Performance.

Allowable speed:

Transfer:	<u>1st</u>	<u>2d</u>	<u>3d</u>	<u>4th</u>	<u>Reverse</u>
High range	9	18	33	55	7-mph
Low range	4	9	17	28	4-mph

Cruising range (loaded) 225 miles

Fording depth (max.):

W/O fording kit	42 in.
W/fording kit	84 in.

Payload (all models except ambulance truck M43, M43B1):

Cross-country	1,500 lb
Highway	2,000 lb

Payload (ambulance truck M43, M43B1) 1,400 lb

Recommended towed load (max.):

Cross-country	4,000 lb
Highway	6,000 lb

Turning circle (dia.) right or left (min.) 50 ft

Winch capacity 7,500 lb



e. 1/2 Ton WC and CIVILIAN BED SUBFRAME WOOD DEMENSIONS

- **Right frame rail wood dimensions: 2-3/4" x 1-3/4" x 74".**
- **Left frame rail wood dimensions: 2-3/4" x 1-3/4" x 53-3/16". For the gas tank filler neck space, a small 16-1/4" wood piece. The space between the two pieces for the gas tank filler neck can be adjusted a little bit.**
- **The cross-wood dimensions are 2 x 2 x 48-1/2" for the 6 cross pieces and 2 x 2 x 51" for the rear cross piece that is under the tailgate.**

GROUP 26. U. S. MILITARY TRUCKS, WWII & KOREA ERA MODELS – UNIVERSAL JOINTS

POSITION		ORIGINAL EQUIPMENT				
1	Transfer Case to Front Axel	9	Brake to Rear Axle	* = Discontinued	C = CLEVELAND D = DETROIT M = MECHANICS S = SPICER	
2	Transfer Case to Rear Axle	10	Midship Bearing to 1 st Rear Axle			
3	Transmission to Transfer Case	11	Auxiliary Transmission to 1 st Rear Axle			
4	Transmission to Rear Axle	12	Transmission to Auxiliary Transmission			
5	1 st Rear Axle to 2 nd Rear Axle	13	Transmission to 1 st Rear Axle			
6	Transfer Case to 1 st Rear Axle	14	Transmission to Pump			
7	Power Take-Off to Winch	15	Pump to Rear Axle			
8	Power Take-Off to Pump					
YEAR	MODEL	POSITION	ORIGINAL EQUIPMENT	SUPPLIER	PART No.	PART SOURCE
¼ Ton Military Trucks – Made by Ford and Willys						
41-52	¼ Ton, 4x4 Jeep MC-38 (1950-52) MB, GPW (1941-45)	1, 2	S	SKF	10200	Source
52-53	¼ Ton, 4x4 Jeep MD (Willy's Only)	1, 2	S	SKF	10200	Source
½ Ton Military Trucks – Made by Dodge						
40-41	T-202, T-207, T-211		D	SKF	305	Source
41-42	T-112 (Detroit No. 52) – See Rare Parts		D		*	
41-46	T-207, T-211, T-215 (Mechanics No. 114-3013) – See Rare Parts		M		*	
½ Ton Military Trucks – Made by International						
41	M-1-4					
¾ Ton Military Trucks – Made by Chevrolet						
41-42	4x2, 20D, 21D, 21E, 21F (Chevrolet No. 609515,	1			*	
41-42	4x2, 20D, 21D, 21E, 21F	4	S	SKF	331	Source
¾ Ton Military Trucks – Made by Dodge						
42	T-214B		D	SKF	305	Source
43-45	T-214B; 1.5 Ton, 6x6, T-223	3	D	SKF	304	Source
43-45	T-214B; 1.5 Ton, 6x6, T-223					
51-54	M-37CDN, M-43CDN, (T-249) (Canada)	1, 2	D	SKF	305	Source
51-54	M-37, M-43 (T-245)					

GROUP 26. U. S. MILITARY TRUCKS, WWII & KOREA ERA MODELS – UNIVERSAL JOINTS

POSITION				ORIGINAL EQUIPMENT		
1	Transfer Case to Front Axel	9	Brake to Rear Axle	* = Discontinued	C = CLEVELAND D = DETROIT M = MECHANICS S = SPICER	
2	Transfer Case to Rear Axle	10	Midship Bearing to 1 st Rear Axle			
3	Transmission to Transfer Case	11	Auxiliary Transmission to 1 st Rear Axle			
4	Transmission to Rear Axle	12	Transmission to Auxiliary Transmission			
5	1 st Rear Axle to 2 nd Rear Axle	13	Transmission to 1 st Rear Axle			
6	Transfer Case to 1 st Rear Axle	14	Transmission to Pump			
7	Power Take-Off to Winch	15	Pump to Rear Axle			
8	Power Take-Off to Pump					

YEAR	MODEL	POSITION	ORIGINAL EQUIPMENT	SUPPLIER	PART No.	PART SOURCE
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1 Ton Military Trucks – Made by International

	M-2-4-233					
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1-1/2 Ton Military Trucks – Made by Chevrolet

41-42	4x2, All “30” Models		S	Precision	331	Source
41-43	4x4, All N, Y, Z Models		S	Precision	331	Source
41-43	4x4, All N, Y, Z Models with Power Take-Off		S	SKF	10200	Source

1-1/2 Ton Military Trucks – Made by Dodge

40-41	1-1/2 Ton, 4x4, T-203 (Cleveland No. R96-55) – See Rare Parts		C		*	
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2-1/2 Ton Military Trucks – Made by International

41-45	4x2 (K7 Models)					
42	6x4 wo/w Cargo					

2-1/2, 3 Ton Military Truck – Made by International

40	6x6 Low Silhouette (DF6x6 Model)					
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2-1/2 Ton Military Trucks – Made by Reo & Studebaker

42-45	6x4, US-6X4; 6X6, US-6X6		S	SKF	484	Source
42-45	6x4, US-6X4; 6X6, US-6X6	7	S	SKF	10200	Source

GROUP 26. U. S. MILITARY TRUCKS, WWII & KOREA ERA MODELS – UNIVERSAL JOINTS

POSITION		ORIGINAL EQUIPMENT				
1	Transfer Case to Front Axle	9	Brake to Rear Axle	* = Discontinued	C = CLEVELAND D = DETROIT M = MECHANICS S = SPICER	
2	Transfer Case to Rear Axle	10	Midship Bearing to 1 st Rear Axle			
3	Transmission to Transfer Case	11	Auxiliary Transmission to 1 st Rear Axle			
4	Transmission to Rear Axle	12	Transmission to Auxiliary Transmission			
5	1 st Rear Axle to 2 nd Rear Axle	13	Transmission to 1 st Rear Axle			
6	Transfer Case to 1 st Rear Axle	14	Transmission to Pump			
7	Power Take-Off to Winch	15	Pump to Rear Axle			
8	Power Take-Off to Pump					
YEAR	MODEL	POSITION	ORIGINAL EQUIPMENT	SUPPLIER	PART No.	PART SOURCE
50-53	6x6, M-34, M-35, M-36, M-44, M-45, M-46, M-47, M-48, M-49, M-50, M-59, M-60, M-108, M-109, XM-110, XM-275 with Spicer 3052 Trans.	1, 5	S	SKF	484	Source
		3, 6	S	SKF	332	Source
		7, 8	S	SKF	10200	Source
2-1/2 Ton Military Trucks – Made by GMC						
40-45	6X6, DUKW-353 Amphibian, ACKWX-353, AFKWX-353		S	SKF	484	Source
41-45	6X6, CCKW-352, CCKW-353, CCKWX-353		S	SKF	484	Source
51-53	6X6, M-135, M-211, M-215, M-217, M-220, M-221, M-222	All exc. 3	S	SKF	484	Source
51-53	6X6, M-135, M-211, M-215, M-217, M-220, M-221, M-222	3	S	SKF	332	Source
3 Ton Military Truck – Made by International						
40	6x6 Low Silhouette (DF4x4 Model)					
3-1/2 Ton Military Truck – Made by International						
41	4x2 Chassis and Tractor					
4 Ton Military Trucks – Made by Diamond T						
40-45	6x6, 967, 968, 968A, 968B, 969B, 969A, 970, 970A, 975, 975A	5, 1	S	SKF	332	Source
40-45	6x6, 967, 968, 968A, 968B, 969B, 969A, 970, 970A, 975, 975A	All exc. 5, 1	S	Precision	333	Source
4-5 Ton Military Trucks – Made by Autocar, White, Federal						
41-45	4x4 Tractor, U7144T, 444T, 94X43B & C	1	S	SKF	332	Source
41-45	4x4 Tractor, U7144T, 444T, 94X43B & C	2, 3	S	Precision	333	Source

GROUP 26. U. S. MILITARY TRUCKS, WWII & KOREA ERA MODELS – UNIVERSAL JOINTS

POSITION				ORIGINAL EQUIPMENT		
1	Transfer Case to Front Axel	9	Brake to Rear Axle	* = Discontinued	C = CLEVELAND D = DETROIT M = MECHANICS S = SPICER	
2	Transfer Case to Rear Axle	10	Midship Bearing to 1 st Rear Axle			
3	Transmission to Transfer Case	11	Auxiliary Transmission to 1 st Rear Axle			
4	Transmission to Rear Axle	12	Transmission to Auxiliary Transmission			
5	1 st Rear Axle to 2 nd Rear Axle	13	Transmission to 1 st Rear Axle			
6	Transfer Case to 1 st Rear Axle	14	Transmission to Pump			
7	Power Take-Off to Winch	15	Pump to Rear Axle			
8	Power Take-Off to Pump					

YEAR	MODEL	POSITION	ORIGINAL EQUIPMENT	SUPPLIER	PART No.	PART SOURCE
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5 Ton Military Trucks – Made by Diamond T, Int. Har., & Mack

52-53	6x6, M-40, M-41, M-54, M-62, (179" W.B.), M-51, M-52, M-61, (167" W.B.), M-63, M-64, M-139, M-246, (215" W.B.) Spicer Joints	All exc. 6, 7	S	Precision	333	Source
52-53	6x6, M-40, M-41, M-54, M-62, (179" W.B.), M-51, M-52, M-61, (167" W.B.), M-63, M-64, M-139, M-246, (215" W.B.) Spicer Joints	6	S	Precision	334	Source
52-53	6x6, M-40, M-41, M-54, M-62, (179" W.B.), M-51, M-52, M-61, (167" W.B.), M-63, M-64, M-139, M-246, (215" W.B.) Spicer Joints	7	S	SKF	10200	Source

5-6 Ton Military Trucks – Made by Autocar

41-45	4x4, Ponton Truck Tractor, U8144T	1	S	SKF	332	Source
41-45	4x4, Ponton Truck Tractor, U8144T	2, 3	S	Precision	333	Source

5-6 Ton Military Trucks – Made by Coleman

41-43	4x4, G-55-A – For Quickway Shovel or Dragline		S	Precision	333	Source
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6 Ton Military Trucks – Made by Brockway, Four-Wheel-Drive & White

42-45	6x6, Bridge or Crane Truck, 666, 666CE, B-666, C-666	2, 3	S	Precision	334	Source
42-45	6x6, Bridge or Crane Truck, 666, 666CE, B-666, C-666	1, 5	S	Precision	333	Source

6 Ton Military Trucks – Made by Mack

40-45	6x6, NM	1, 3, 5	S	Precision	333	Source
40-45	6x6, NM	6	S	Precision	334	Source

GROUP 26. U. S. MILITARY TRUCKS, WWII & KOREA ERA MODELS – UNIVERSAL JOINTS

POSITION				ORIGINAL EQUIPMENT		
1	Transfer Case to Front Axel	9	Brake to Rear Axle	* = Discontinued	C = CLEVELAND D = DETROIT M = MECHANICS S = SPICER	
2	Transfer Case to Rear Axle	10	Midship Bearing to 1 st Rear Axle			
3	Transmission to Transfer Case	11	Auxiliary Transmission to 1 st Rear Axle			
4	Transmission to Rear Axle	12	Transmission to Auxiliary Transmission			
5	1 st Rear Axle to 2 nd Rear Axle	13	Transmission to 1 st Rear Axle			
6	Transfer Case to 1 st Rear Axle	14	Transmission to Pump			
7	Power Take-Off to Winch	15	Pump to Rear Axle			
8	Power Take-Off to Pump					

YEAR	MODEL	POSITION	ORIGINAL EQUIPMENT	SUPPLIER	PART No.	PART SOURCE
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7-1/2 Ton Military Trucks – Made by Biederman

41-43	6x6, Fuel Servicing, F1	1, 3	S	Precision	333	Source
41-43	6x6, Fuel Servicing, F1	6	S	Precision	334	Source
41-43	6x6, Fuel Servicing, F1	5	S	Precision	334	Source
44-45	6x6 Wrecker, P1	1, 3, 5	S	Precision	333	Source
44-45	6x6 Wrecker, P1	6	S	Precision	334	Source

7-1/2 & 10 Ton Military Trucks – Made by Mack

42-45	6x6, Prime Mover, No. 2	1	S	Precision	333	Source
42-45	6x6, Prime Mover, No. 2	6	S	Precision	335	Source
42-45	6x6, Prime Mover, No. 2	5	S	Precision	334	Source
53	6x6, XM-121, XM-123, XM-125, XM-125-E1	6	S	Precision	335	Source
53	6x6, XM-121, XM-123, XM-125, XM-125-E1	1, 5	S	Precision	334	Source

10 Ton Military Trucks – Made by Mack & White

41-45	6x4, NR, 1064	9, 10	S	Precision	334	Source
41-45	6x4, NR, 1064	5	S	Precision	333	Source

12 Ton Military Trucks – Made by Diamond T & Four-Wheel-Drive

42-45	6x4, 980, 981	11, 12	S	Precision	334	Source
42-45	6x4, 980, 981	5	S	Precision	333	Source

GROUP 26. U. S. MILITARY TRUCKS, WWII & KOREA ERA MODELS – UNIVERSAL JOINTS

POSITION					ORIGINAL EQUIPMENT		
1	Transfer Case to Front Axel	9	Brake to Rear Axle	* = Discontinued			C = CLEVELAND D = DETROIT M = MECHANICS S = SPICER
2	Transfer Case to Rear Axle	10	Midship Bearing to 1 st Rear Axle				
3	Transmission to Transfer Case	11	Auxiliary Transmission to 1 st Rear Axle				
4	Transmission to Rear Axle	12	Transmission to Auxiliary Transmission				
5	1 st Rear Axle to 2 nd Rear Axle	13	Transmission to 1 st Rear Axle				
6	Transfer Case to 1 st Rear Axle	14	Transmission to Pump				
7	Power Take-Off to Winch	15	Pump to Rear Axle				
8	Power Take-Off to Pump						
YEAR	MODEL		POSITION	ORIGINAL EQUIPMENT	SUPPLIER	PART No.	PART SOURCE
12 & 20 Ton Military Trucks – Made by Federal							
41-45	12 Ton, 6x6 Wrecker & Fuel Servicing 605, 606		3, 6	S	Precision	334	Source
41-45	12 Ton, 6x6 Wrecker & Fuel Servicing 605, 606		1, 5	S	Precision	333	Source
42-45	20 Ton, 6x4 Diesel, 604		13	S	Precision	334	Source
42-45	20 Ton, 6x4 Diesel, 604		5	S	Precision	333	Source
10 Ton Crane Carriers or ¾ Yard Power Shovel – Made by Available and P. & H.							
42-43	6x4, C-700-DSW		5, 12	S	Precision	333	Source
42-43	6x4, C-700-DSW		11	S	Precision	334	Source
43-45	6x4, CS-700-SW, 225-A		5, 12	S	Precision	333	Source
43-45	6x4, CS-700-SW, 225-A		11	S	Precision	334	Source
43-45	6x4, CS-600-SW, CS-600L-SW			S	Precision	333	Source
20 Ton Crane Carriers– Made by Four-Wheel-Drive							
51-52	6x6, MUC			S	Precision	333	Source
20 Ton Crane Carriers– Made by Available and Hendrickson							
51-52	6x6, Crane Carrier, QW63M, 500 F1		6	S	Precision	334	Source
51-52	6x6, Crane Carrier, QW63M, 500 F1		All exc. 6	S	Precision	333	Source
51-52	6x6, Crane Carrier, 360-4-T		All exc. 5	S	Precision	334	Source
51-52	6x6, Crane Carrier, 360-4-T		5	S	Precision	333	Source

GROUP 26. U. S. MILITARY TRUCKS, WWII & KOREA ERA MODELS – UNIVERSAL JOINTS

POSITION				ORIGINAL EQUIPMENT		
1	Transfer Case to Front Axel	9	Brake to Rear Axle	* = Discontinued	C = CLEVELAND D = DETROIT M = MECHANICS S = SPICER	
2	Transfer Case to Rear Axle	10	Midship Bearing to 1 st Rear Axle			
3	Transmission to Transfer Case	11	Auxiliary Transmission to 1 st Rear Axle			
4	Transmission to Rear Axle	12	Transmission to Auxiliary Transmission			
5	1 st Rear Axle to 2 nd Rear Axle	13	Transmission to 1 st Rear Axle			
6	Transfer Case to 1 st Rear Axle	14	Transmission to Pump			
7	Power Take-Off to Winch	15	Pump to Rear Axle			
8	Power Take-Off to Pump					

YEAR	MODEL	POSITION	ORIGINAL EQUIPMENT	SUPPLIER	PART No.	PART SOURCE
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6X6 Crash Trucks – Made by Biederman, American La France & Marmon-Herrington

50-53	6x6 Crash Trucks, FT-FF, O-10	All exc. 1, 5	S	Precision	333	Source
50-53	6x6 Crash Trucks, FT-FF, O-10	1, 5	S	SKF	332	Source
51-53	6x6 Crash Truck, O-12 - (American La France)	All exc. 3, 6	S	Precision	333	Source
51-53	6x6 Crash Truck, O-12 - (American La France)	3, 6	S	Precision	334	Source

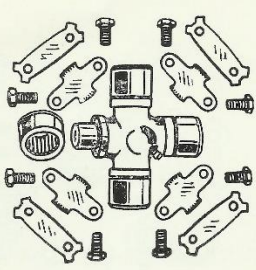
Transporters, Tow Tractors & Fire Trucks

43-45	4x4 Tractor, M-25 (Made by Pacific Car & Foundry)	1, 3	S	Precision	334	Source
43-45	4x4 Tractor, M-25 (Made by Pacific Car & Foundry)	2	S	SKF	335	Source
51-52	8x8 Transporter, T-10 (Made by Kenworth)	All exc. 4	S	Precision	334	Source
51-52	8x8 Transporter, T-10 (Made by Kenworth)	4	S	SKF	335	Source
51-53	4x4 Tow Tractor, CF55-AF, TT-11 (Made by Coleman & Federal)		S	Precision	333	Source
51-53	4x4 Tow Tractor, CF55-AF Only	7	S	SKF	331	Source
53	4x2 Fire Truck, FT-45 (Made by Federal)	14	S	Precision	333	Source
53	4x2 Fire Truck, FT-45 (Made by Federal)	15	S	SKF	332	Source

a. Universal Joints

Cleveland No. R96-55

UNIVERSAL JOINTS



**CLEVELAND TYPE
JOURNAL ASSEMBLIES**

NUMERICAL LISTING

M

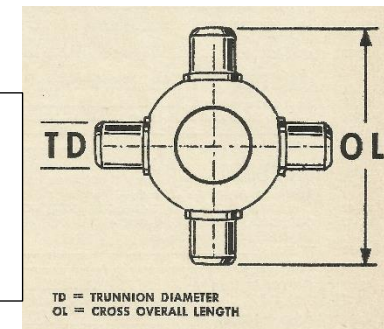
Our No.	Cleveland No.	Illus.	Cross Dimensions		General Application*	
			Overall Length	Trunnion Diam.	Year	Car
JS53-55	S53-55	M	2-41/64"	21/32"	1954-55	Willys Sed. Del., Sta. Wag., 3/4 T.
JS96-55	S96-55	M	2-41/64"	21/32"	1951-53	Willys Sed. Del., Sta. Wag., 3/4 T.
JP96-55-1	P96-55-1	M	2-7/8"	23/32"	1941-50	Dodge 1/2 Ton
					1946-50	Dodge 3/4 Ton
JR96-55	R96-55	M	3-3/8"	23/32"	1940-47	Dodge Truck

R96-55, JR96-55, 947552, U300, R19655, 28057X, RG96-55, 414, CB-R96, 660196, NR965,

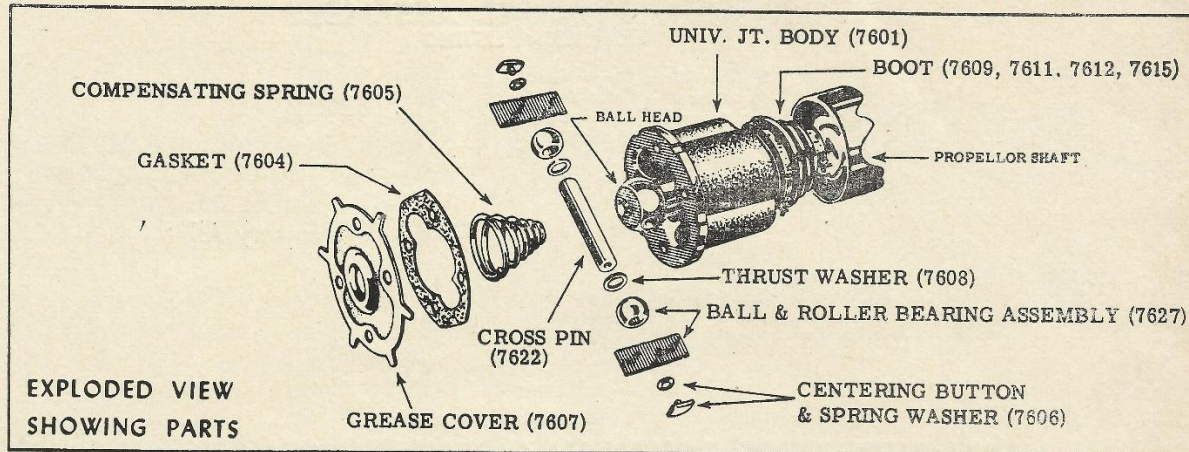
Dodge No. 926426



In order to identify a replacement part for Cleveland and Mechanics type journal assemblies, take the measurements of the cross section only, as shown in the illustration.



UNIVERSAL JOINTS



EXPLODED VIEW
SHOWING PARTS

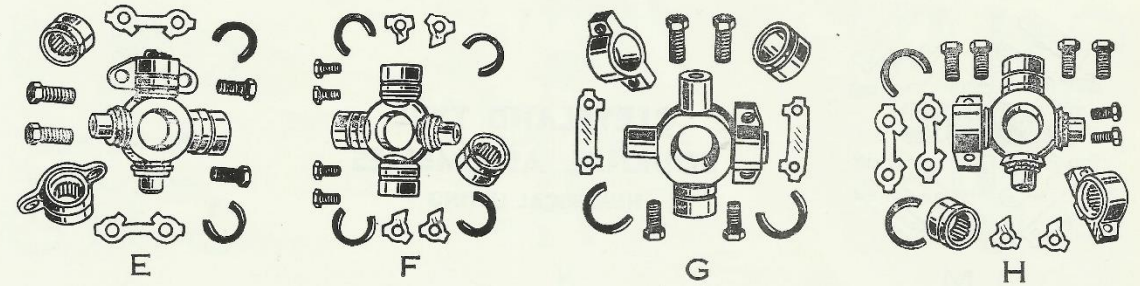
DETROIT "BALL" TYPE UNIVERSAL JOINTS & REPAIR KITS NUMERICAL LISTING

Our No.	Detroit No.	Description
U52	52	Kit Complete with Body and Lace Type Leather Boot
UR52	R52	Kit Complete with Body and Neoprene Boot Assembly
J52-A	52-A	Kit Less Body, with Lace Type Leather Boot
JR52-A	R52-A	Kit Less Body, with Neoprene Boot Assembly

52, U52, 324, D124, U405, 11354, D4252, G52, 324, AD-5200, D4200. W/O BODY – J-54A, 54-A, D4141X, RG-54A, 306, AD-5400A, D4410, 117164, 801578. Interchange for the 52, Source [Part Source](#), [Part Source](#)

Conversion to Flange Yoke [Part Source](#)

UNIVERSAL JOINTS



MECHANICS TYPE JOURNAL ASSEMBLIES NUMERICAL LISTING

Our No.	Mech. No.	Illus.	Cross Dimensions		General Application*	
			Overall Length	Trunnion Diam.	Year	Car
J2198	114-2198	H	2 ⁷ / ₈ "	37/64"	1953-56	Oldsmobile
J3000	114-3000	C	3-5/16"	19/32"	1936-49	Cadillac
	114-3001				1935-40	Nash
J3008	114-3008	F	3-5/16"	19/32"	1948-54	Packard
					1950-56	Cadillac
J3012	114-3012	H	3-5/16"	19/32"	1954-56	Oldsmobile
	114-3019				1950-56	Cadillac
J3013	114-3013	H [®]	3-5/16"	19/32"	1954-56	Oldsmobile
					1946-53	Packard
					1941-49	International
					1941-46	U. S. Military (Dodge 1/2 Ton)

114-3013 (3C), J3013, 532, 313, U212, 14313, RG3013, CB-3013

b. Rubber Transmission Pad



Transmission draft pad used on G121 - WW2 Dodge WC ¾ Ton Series (W55 [T214], Fargo Dodge) vehicles w/winch and WC-64, and KD Ambulance w/o winch and WC-54 Ambulance after S/N 81625758.

c. Military Dodge Regulators

VRY-4203A (6V, 40 amp)



VRH-4104F1 (12V, 55 amp)



C-922487, VRY-4303G (6V, 35 amp)



C-913344, VRH-4101D-1 (12V, 55 amp)



d. Rear PTO Shaft Center Bearing Insulator



e. Cab Rubber Insulators



B2 to C4 Models, Lower Insulator



f. Pintle Hooks

Dodge WC ½ Ton (WC21, 23, 24, 25, 26, and 27 4x4) Pintle Hook, Except Carry-All, and WC41 cab, [Holland Hitch Co. No. 375, CC-598456].

The frame on the FFPW will not permit the lever on the pintle hook to completely release unless mounted upside down with release on the bottom.



Dodge WC G502 3/4 Ton (T-214 4x4) Pintle Hook, Ambulance, Command, Gun Motor Carriage, Telephone Maintenance, and Installation and Weapons Carrier [Stock No. G121-0217660, NSN 2540-00-737-6784, Holland Hitch Co. No. 330, CC-920762]



Dodge WC G507 1.5 Ton (Personnel and Cargo T-223 6x6) Pintle Hook [Stock No. G507-7412163, NSN 2540-00-741-2163, Holland Hitch Co. No. L09482, CC-929330, Casting Number T131]



Dodge Power Wagon General Purpose 1 Ton (Models WDX-WM300 T-137 4x4) Pintle Hook [Holland Hitch Co. No. 380, CC-920762]. [Part Source](#)



Dodge M37 Cargo Truck, M42 Command Truck, M271/V41 Maintenance Truck (T-245 4x4) Pintle Hook Assembly [Stock No. G503-77073209, FSN 2540-707-3209, NSN 2540-00-835-9039, Holland Hitch Co. No. A86A10, CC-1268500]

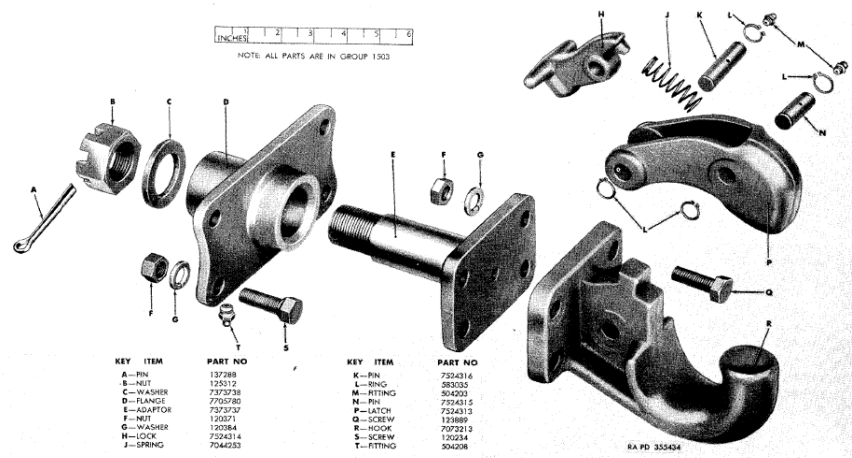
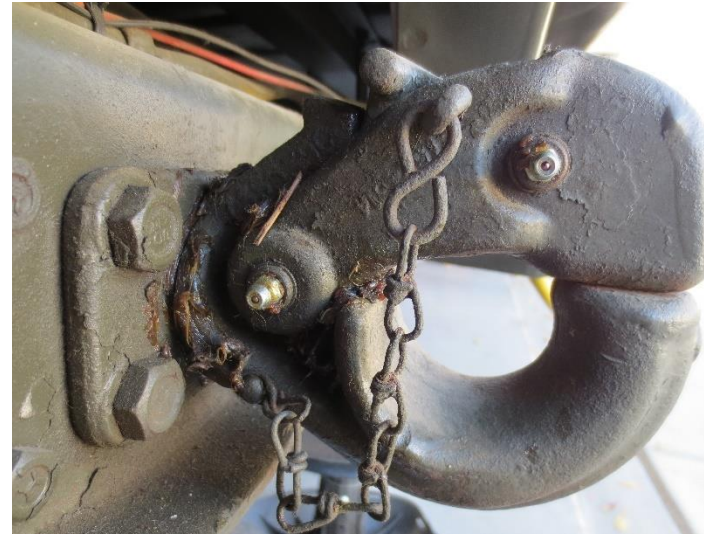


Figure 15-8. Pintle hook—exploded view.



Dodge M601 (A Modified T-137 WM300 Power Wagon) Cargo Truck, Models G834BA w/o winch, G834BB w/winch, Ambulance G834BC (4x4) Pintle Hook Assembly [Holland Hitch Co. No. 380, MPN: MS51335-2, Superseded by A-A-52550, NSN: 2540-00-835-9039, CC-1268500, 18,000 Pound Towing Capacity]



Product Details

NATO Stock Number
2540-00-835-9039

Sold in multiples of
1 EA

DEMIL
NO

Mounting Type
Flange

Width
4.500 inches

Overall Height
5.625 inches

Bolt Hole Diameter
0.531 inches

Design Type
Rigid

Flange Bolt Hole Quantity
4

Coupler Type
Manual

Length From Flange To Throat Center
3.688 inches

Throat Opening Size
1.875 inches

Dodge WC ¾ Ton, Dodge Power Wagon General Purpose 1 Ton (Models WDX-WM300 T-137 4x4), and M601 Pintle Hook [Holland Hitch Co. No. 430, CC-920762] – Next Generation



For more pintle hook information, see [Military Standards Group](#).

g. Thermostat Elbows



Dodge WC ½ Ton (WC21, 23, 24, 25, 26, and 27 4x4), C-855449



Dodge WC ¾ Ton, PW up to Engine T137-21560, C-922834



Dodge PW, from Engine T137-21560 to Ser. No. 83931055, C-1327124



Dodge PW, from Ser. No. 83931055 to Ser. No. 83947778, C-853969.



Dodge PW, after Ser. No. 83947778, and M601/M615, C-1406151 230 CID



Dodge PW 1961-1968, C-1142442 251 CID



Dodge X3-WM300 PW 1969-1971 C-2121524 225 CID

h. 218/230 Exhaust Manifolds

EARLY



LATE



PERFORMANCE

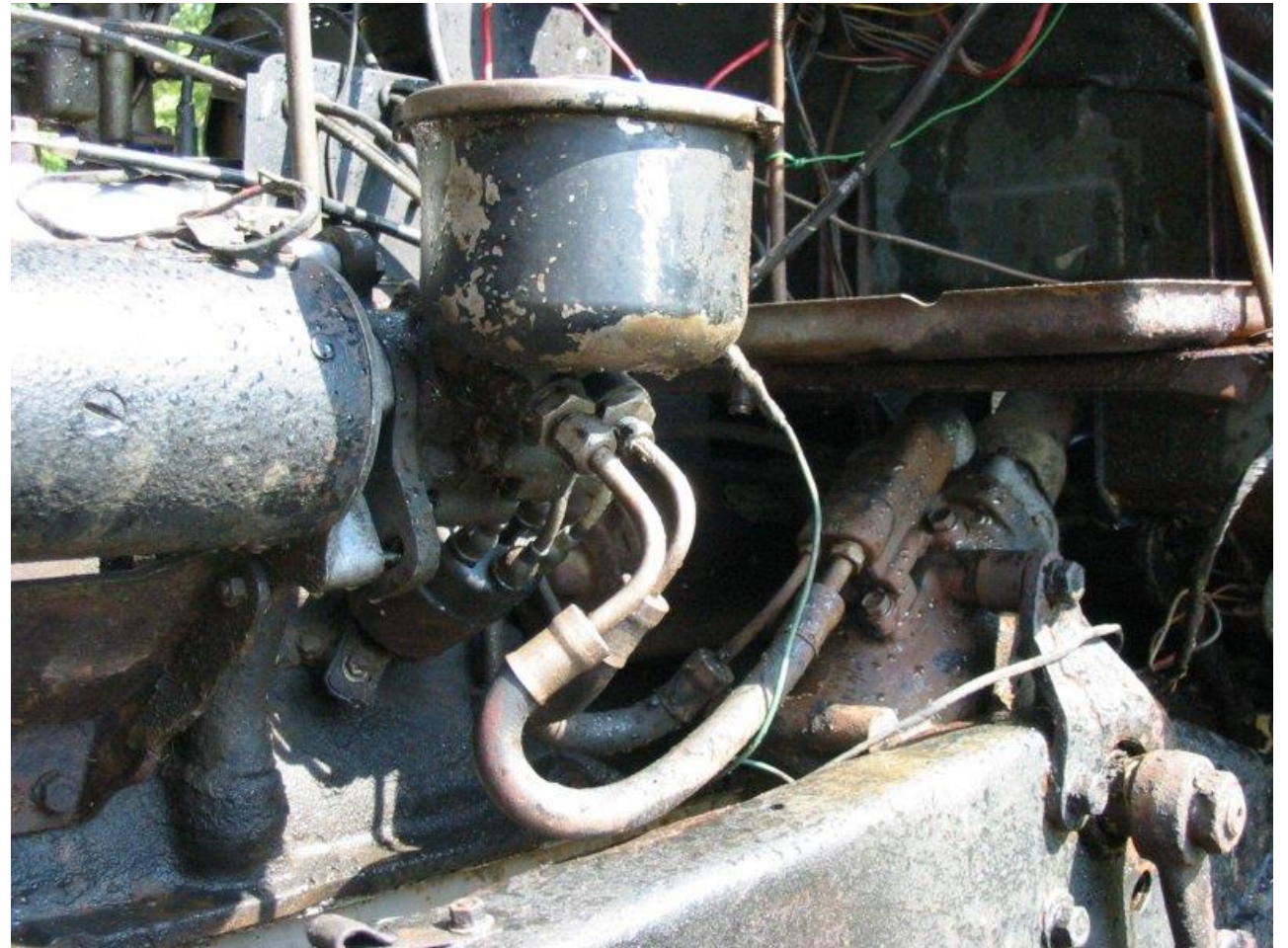


In addition to parts source listed on the first page, if you are looking for custom or performance parts, visit these sites:

- Reds Headers - [Link](#)
- Manifolds by Moose - [Link](#)
- Mopar Montana - [Link](#)
- Edgy Products - [Link](#)
- Hanksville Hot Rods - [Link](#)
- Langdon's Stovebolt - [Link](#)

i. OEM FFPW Power Steering Units

1957 W300 Model Power Wagon



j. 251 Engine

251 with Diamond Shape Mount for setting up full flow oil system using an Aluminum mount and spin-on filter.

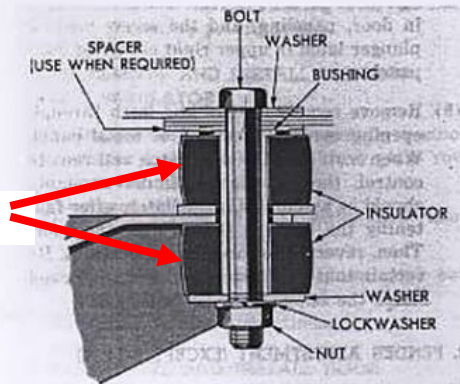


k. **Reproduction Body Mount Rubber Insulators**

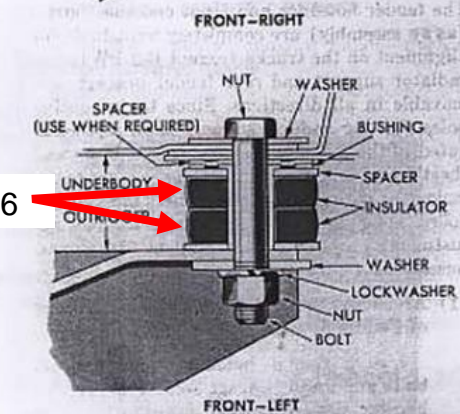
Sources: W100, W200 [Link](#), B-1-PW to WM300 [Link](#) , VPW [Link](#)



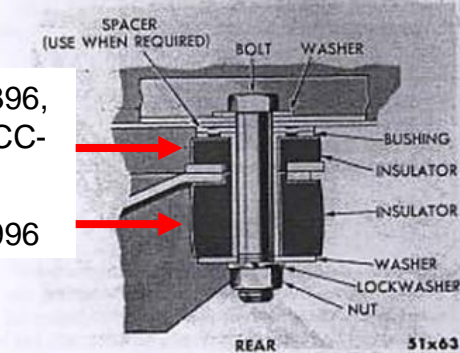
Urethane Kits available from Chris Case



CC-1277996



CC-1195396



CC-1195396, after C3, CC-1277977

CC-1277996

Fig. 15 Cab Mounting Insulators (Later Models) 51x631

A drain tube runs from the cowl drain trough downward and through the dash. Sometimes this tube is bent upward in the center when working under the cowl. The tube should be pointing on a continuous downward slant in order to let the water run out.

- 1. Replacement of Ventilator Lid.** Remove the two screws that attach the lid to the lid hinge, and the two screws that attach the lid to the linkage, and lift off the lid. To install, insert the two screws with lock washers that attach the lid to lid hinge, and the two screws with lock washers that attach the lid linkage to lid, but do not tighten until the lid is adjusted (Step 2 below).
- 2. Adjustment of Ventilator Lid.** Loosen the two screws that attach the lid to the hinge, and the two screws that attach the lid to the linkage. Adjust as necessary and tighten screws.
- 3. Replacement of Ventilator Weatherstrip.** Remove ventilator lid (Step 1 above) and insert a screwdriver between the ends of the weatherstrip. Pull the weatherstrip out of the cowl recess and clean out the recess thoroughly. Coat the recess and contacting surface of weatherstrip with cement, and install the weatherstrip in the recess, so the two ends are butted together at the front of the ventilator. Install ventilator lid (Step 1 above), and adjust (Step 2 above).

Tail Gate

Removal

Removal of the express body tail gate is performed as follows:

1. Separate master links and remove tail gate chains (Fig. 16).
2. Remove the bolts from the two outer hinges. There are two or four bolts at each hinge.
3. Remove the two bolts attaching the center hinge to the box, and remove the two screws attaching the center hinge to the box floor. Then remove the two outer hinges, the center hinge, and the tail gate.

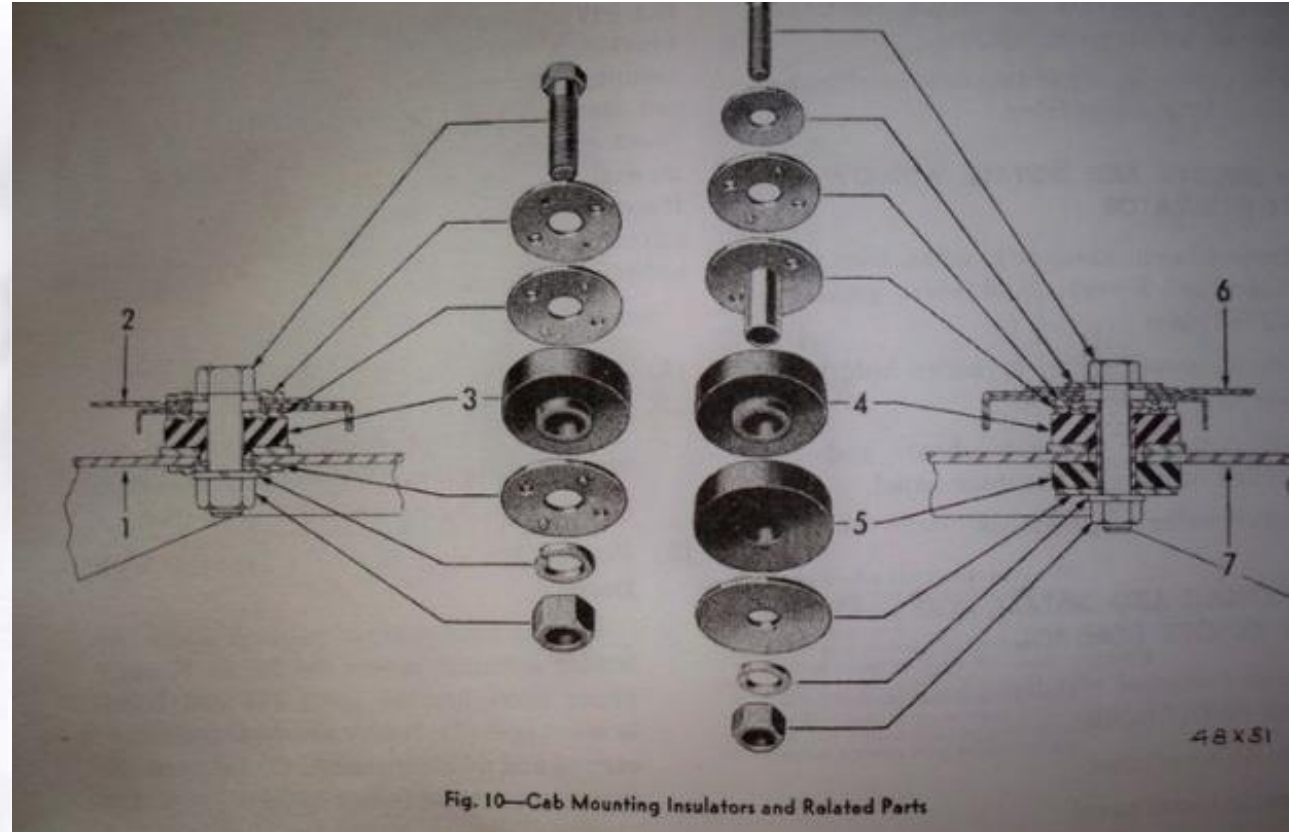


Fig. 10—Cab Mounting Insulators and Related Parts

Image Above to Illustrate Various Parts



Upper - C-1195396

Lower C-1277996

Applying VPW Kit (1950 B-3-PW to X3-WM300 Trucks Only)



Front Left, both above the Frame Bracket.



Front Right, two above and two below the Frame Bracket.



Rear Left, one above and two below the Frame Bracket



Rear Right, one above and two below the Frame Bracket

Unfortunately, the Part Manuals do not show a break-down of the parts, only list description and part numbers. Listing may not be 100% correct:

½ Ton Dodge, Closed Cab:

- Pad (Wood Filler Block), CC-903096, as needed
- Pad (Wood Filler Block), CC-903097, as needed
- Spring (Front Right), CC-844661, (Qty. 1)
- Spring (Rear Left/Right), CC-711110, (Qty. 2)

WDX – B-1-PW (1946-1949)

- Pad (Wood Filler Block, Front Left), CC-711122 (Qty. 1 plus one CC-119931 3/8 spacer between block and frame bracket)
- Pad (Wood Filler Block, Front Right), CC-711120 (Qty. 1 plus one CC-119931 3/8 spacer between block and frame bracket)
- Spacer (fiber pad) CC-1199331 (3/8 thk., Rear, use as required to have equal line space between hood and cowl downside of cab)
- Spring (Front, Rear Left/Right), CC-711110, (Qty. 3)

B-3-PW – C-3-PW (1950 – Early 1956)

- Thin Insulator, Body to Frame, CC-1195396, (Qty. 4)
- Thick Insulator, Body to Frame, CC-1277996, (Qty. 4)

C-4-PW – X3-WM300 (Late 1956 to 1971)

- Insulator, Body to Frame, CC-1195396, (Qty. 2)
- Insulator, Body to Frame, CC-1277996, (Qty. 4)
- Insulator, Body to Frame, CC-1277977, (Qty. 2), Rear thinner Insulator

Check numbers on old insulators. Image above shows early and later models insulators.

The key to the number of rubber/fiber shims added to the upper insulator is the clearance between the top of the transmission and cab transmission floor cover. If the top of the transmission gearshift tower area has a ring worn around it from cab transmission cover, you will need to add shim(s) to the insulator. Install insulators, install cab transmission floor cover, and check clearance between the cover and transmission. You want at least a 1/4-inch gap between the cab transmission cover and transmission cover to prevent the cab transmission cover hitting the transmission while driving. Check all the way around the shift lever tower for this. Additional information on frame bracket locations can be found at the link. [Information](#)

I. STARTERS

C-1889260



a. Waking a Sleepy Truck

The best place to start is a ground up restoration to replace all bad parts and get your various modules in good order. You can also work on individual modules at a time to bring them into good order.

- 1 - Rebuild the brake system.
- 2 - Replace all gear oil in the modules; transmission/transfer case 140, differentials 90, steering box make sure it is full to the top of the plug hole with 90 (straight WAE).
- 3 - Grease everything that has a grease zert fitting.
- 4 – Oil your generator and distributor with 30WAE. You will see a lift cap on each with felt underneath.
- 5 - Replace your points, distributor cap, wire, and plugs.
- 6 - Replace your fan belt, water hoses and antifreeze.
- 7 - Adjust your wheel bearings.
- 8 - Lube the back of your speedometer. There is a long screw that has a felt in it that must be oiled with 10WAE or 3-in-1. Also squirt some gun oil in the hole to revive the old grease.
- 9 - Replace your battery cables and battery.
- 10 - Air your tires.
- 11 - Check the cab transmission floor cover to determine if it rests on top of the transmission. If it does, you will need to add 1/4-inch slab rubber to raise up the cab until it is off the transmission.
- 12 - Look at the emergency brake rod to see if it rests on top of the transfer case. If it does you will need to replace the hanger's upper rubber insulators.
- 13 - If the emergency brake yoke does not move when you grab it and try a side-to-side movement, then adjust your band .010 to .030 off the drum.

After completing the above, you are ready to drive the truck and work out any remaining problems/bugs moving towards a restoration.

b. Storing a Truck Long Term

1. Change out all running gear oil to fresh oil and add half a bottle of STP to each module.
2. Give your truck a good run to burn out all water from the crankcase then change your engine oil and filter.
3. Bleed the brakes to make sure you have all the air out of the wheel cylinders, fill the master cylinder, and fully back off the brake shoes.
4. Cover and tie the end of the tail pipe with a plastic bag and, also the air cleaner. Also, the breathing vents of each module.
5. Drain the cooling system and leave the radiator cap off but cover with a piece of screen wire and the water drain cocks open.
6. Take the battery out of the truck.
7. Jack the tires up and block them off the ground.
8. Drain the gas tank and carburetor.
9. Leave the key in the ignition switch. 10 years is a long time.
10. Make sure all windows are up and vents closed.
11. Store it in a building if possible, or under a car port.

c. Axles

When installing the third member, be sure to use bronze Thrust washers inside the carrier instead of fiber washers. Bronze last longer and are available from Bob Stahl/Veteran Vehicles [Part Source](#).

d. Body

Bed 14ga. Cab and fenders are 16ga.

BED INTERCHANGES -- You can modify a 9-foot bed by cutting 7-5/16" off front and 5-11/16" off the rear. You also need to shorten and re-bend the forward lower area of the sides to clear the WM running boards. Re-attach the stake pockets. Fill in any extra fender holes. The under-bed steel supports are a bit different (lighter duty) but workable. A similar modification can be said for second series boxes from a 1-ton 2x4's.

WINDSHIELD FRAME DISASSEMBLY

1. Use a 1/16th drill for a pilot hole (no deeper than 5/16);
2. Then use a 5/32 drill, to drill new holes.
3. Use a 10-32 tap for new threads, chatter with a 5/16 drill (side bars if required).
4. Use 10-32x1/4 flat head Phillip screws for the sides, top and round head Phillips for the regulator.
5. Use an anti-seize lubricant on re-assembly.

Tailgate -- Look for any Utiline fender side Dodge with a 54" wide tailgate. It is the only one with a center hinge. It is the most common tailgate found on the following 2wd's: '48-'60 1 ton's, '54-'60 3/4 tons, all '61-'71 1/2, 3/4, and 1 ton. The tailgate was used up to the middle.

80's without the Dodge embossed in.

COWL LIGHTS - The Power Wagon uses some of the same cowl light parts as the 1934 Ford. The reflector, lens and paper gasket will fit into the Power Wagon.

Starting with the '48 thru '55, the 1-ton 2wd Dodges used the 9' long x 54" wide box with flare board top rails. Any Dodge tailgate with a center hinge slot is of the wider (54") variety and will work for PW's post '50. Post '55 are similar but have a flat top. You will need to remove stake pockets shorten side length and re-attach them. Also, the lower front will have to be brought up to work with the running boards. '51 and up PW fenders will work fine, they have the inside lip. The 2nd series box is hardest to find (for PW's) and repo and the 1-ton 2wd's seem to reflect low parts truck prices. As far as W300's they also used a 9' box but of the flat top variety, so cut as you wish.

CABS

The biggest difference is that the military cab has an angled cowl lip where the back of the hood rests. A civilian cab is level at this point. Using a civilian cab in place of a military cab forces the rear of the hood up a little bit, leaving a noticeable gap. The civilian cab has holes on the cowl just ahead of the doors for cowl lights. A military cab lacks these. A civilian cab has a centrally located crank on the dash to crack the windshield open. A military cab has finger knobs on each windshield pillar and can open completely up. If I recall right, a civilian cab has a fuel tank filler spout opening on one of the rear corners, while the military cab has no hole, the fuel tank filler spout being behind the driver's side rear fender. A 41 1/2-ton military cab is not the same as a 41 1/2-ton civilian cab, although they are for the most part swappable (I do not know about the 2-1/2-ton cabs).

e. Manuals

[Link](#)

MAINTENANCE

f. Trouble Shooting

SPUR GEAR TRANSMISSIONS

- Bent Reverse Gear Fork – This will cause a clicking of gears in first gear when descending steep hills.
- Worn Counter Shafts or Gear Roller Bearing Surface – This will produce knocking of gears in first, second or reverse gear, and a hard knocking in 4th above 40 mph.
- Worn Reverse Gear Shaft or Gear Bushing – This will produce a knocking of gears in first or reverse gear.
- Worn PTO Idler Shaft/Gear – This will produce knocking of gears in third gear.

FRONT AXLE

- Front End Shaking – This can be caused by tires out-of-balance or worn steering knuckle trunion bearings.

g. Spicer Parts to Make a Front PTO Shaft

- Winch Shaft Yoke, Spicer # 10-4-443;
- PTO Yoke, Spicer # 10-4-103;
- (2) Shaft Yokes, Spicer # 10-4-193;
- (2) Universal Joints, Spicer # 5-170X;
- 6' PTO Shaft, round with keyways, Spicer # 1579
- Set Screw # 1588

h. Steering Adjustment

SECTOR TOOTH AND WORM CONTACT

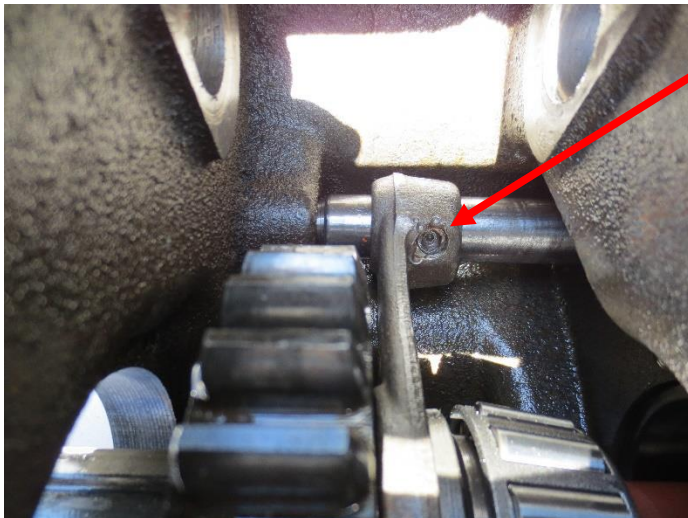
1. Take off the drag link at the steering gear arm.
2. Remove the adjusting screw lock nut.
3. Slide off the lock plate beyond the boss on the cover.

4. Back off the adjustment screw until you can turn the steering wheel full travel: end-to-end of the sector shaft travel.
5. Center the steering wheel by turning it all the way to the right or left until it stops, then turn it all the way to the opposite direction till it stops counting the number of full turns, then turn opposite direction half the number of turns to center the steering wheel.
6. Turn the adjustment screw just enough to eliminate any free play between the sector shaft and worm. You can pull/push on the sector to check.
7. Install the lock plate you may have to back off the adjustment screw slightly so the plate lines up with the boss to slide to cover.
8. Install and tighten the lock nut.
9. Check the steering gear operation for any binding and backlash, turn all the way right and left to end points.
10. Using an inch pound torque wrench, turn the steering wheel end point to end point. Reading should be between 5 – 10-inch pounds, anymore and the sector has been moved in too far and will need to be backed off slightly and rechecked.
11. Once adjustment is correct, reinstall drag link.

i. PTO Reassembly

Blew are step-by-step instructions for reassembly of the 12525 PTO unit. These parts for the earlier transmission PTO's will interchange with the NP420 PTO: Sliding Gear, Fork, Set Screw, Shifter Shaft, ball, Spring & Plug, Tapered Roller Bearings/Cups for the Driven Shaft, Reverse Gear Shaft and Caged Roller Bearings, Rivet, Reverse Gear, and all Oil Seals.

1. Start with a clean PTO housing and parts.
2. Install the shifter shaft seals. Coat the seal surface going into the housing with a sealer. After you start the seal, use a block of hard wood and hammer to drive the seal in. This will help prevent distortion of the seal.
3. Spread assembly lube or oil on the shifter port in the housing. Install the shifter shaft, fork and sliding gear. Use thread lock on the set screw, tighten, then use a center punch to flare the metal around the screw to prevent it from backing out in the event it becomes loose.



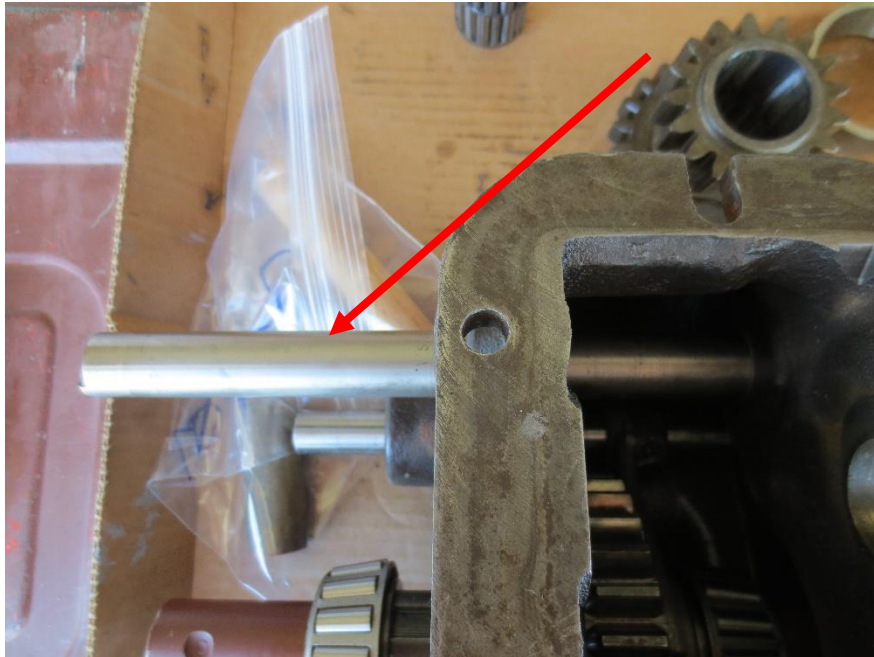
New Shifter Shaft, ORD# 7705755, CC# 1193747



New Shifter Shaft will work on the following transmission PTO:

- Up-to-Type Transmission Case# 38126
- After-Type Transmission Case# 38711
- Early NP420 Transmission Case# 88671
- Late NP420 Transmission Case# 93511

4. Install the reverse gear, caged rollers, and idler shaft. Use a shaft that fits snug in the shaft ports to align the gear/caged roller bearings to avoid damaging the roller cage. I use a Chevy countershaft (Chevy# 590626, Borg Warner# WT184-3A) from a 1936 Chevy Coupe or ½ ton truck 3 speed trans, it works perfectly. Start the PTO reverse gear shaft and drive or press to the inner edge of the PTO housing. Lube and install the rollers in the gear and place unit in the housing. Using the Chevy or other temporary alignment shaft, work it into the housing and move the gear around to line the temporary alignment shaft and bearings, then push the temporary alignment shaft in till hitting the reverse gear shaft. Put pressure on the temporary alignment shaft using a hand and drive or press the PTO reverse gear shaft to the inner side of the PTO housing driving out the temporary alignment shaft. Before setting the reverse gear shaft, cover the inside of the shaft port and outside of the shaft with Gascacinch [Sealer](#) or other sealer to seal the idler shaft and drive the idler shaft in till you can line up the rivet hole.



5. The shafts in the image are M37 PTO shafts and there are two size shafts. Shaft 1 will drive in easy, shaft 3 is a hard drive or press through the housing at the start so it is extremely critical that you use a snug fitting temporary shaft to align the reverse gear & bearings to prevent damage to the roller bearing cage. Shaft 3 is black when sold new. Shaft 2 shows imperfections from manufacturing that you might run into, I don't suggest you use, but I see those used on PTO's and they seem to work ok. They are normally sold in Silver packaging material.



6. Install the shaft lock Revit (7/32 x 2-1/4). You may have to drive the reverse gear shaft in till the Revit goes through the housing and past the shaft, then bend the Revit. See PTO Section for part source.

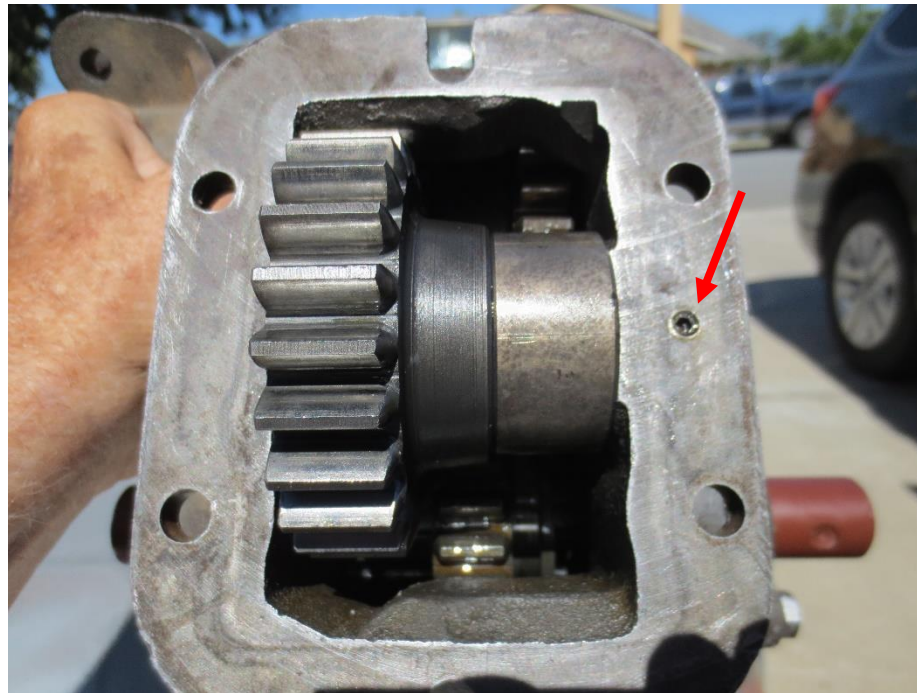


7. Install the drive shaft. Take one of the old, tapered bearings and cut the cage off. Using the remaining bearing will create a spacer to help press the new bearing on without damage to the new bearing cage. Clean all bearings in clean solvent, and dry, do not oil. Press one tapered roller bearing on the drive shaft, and then slide through the sliding gear. Using the remaining bearing press on the other tapered roller bearing. Drive the cups in the housing. You will need to drive in the cup on the end plate side (shift lever) farther since the end plate has a ridge that protrudes into the housing. Adjust the bearings using gaskets until there is no side or end play in the bearings. Usually, one thick and one thin gasket under the end plate side and a thick gasket under the end plate on the opposite side works for good adjustment of the bearings. Install plates using a sealer. I like using Permatex Ultra Gray [Sealer](#) for sealing gaskets, machine surfaces with no gasket, and bolt threads. Install the shifter shaft seals. Coat the seal surface going into the plates with a sealer and install using a block of wood and hammer to prevent damage to seal and shaft. Once installed, squirt oil on the bearings inside the housing.



8. Install the Idler Shaft, Gear and Loose Roller Bearings. I use a temporary wood dowel shaft cut to the inside width of the housing. This allows you to install the washer, gear, loose rollers, and spacer on the temporary shaft. Start the PTO idler gear shaft and drive or press to the inner edge of the PTO housing. Lube and install the washer, rollers, inside gear, spacer and temporary wood dowel and place unit in the housing. Use your fingers to keep pressure on the dowel and to prevent the washer from dropping in the housing and move the gear around till it aligns with the idler gear shaft. You may need to lightly tap the idler gear shaft to align it. Put pressure on the temporary alignment shaft using a hand and drive or press the PTO idler gear shaft to the inner side of the PTO housing driving out the temporary alignment shaft. Before setting the idler gear shaft, cover the inside of the shaft port and outside of the shaft with gasket cinch or other sealer to seal the idler shaft and drive the idler shaft in till you can line up the set screw hole. Install the set screw and tighten.

9. You have now completed reassembly of the PTO, congratulations!



Dodge 51 to early 56 Civilian Power Wagon. PTO Case number: 12525, C-1265551, Transmission Case Number 38711.

j. DIY PTO 60 Degree Conical Screws

The procedures below will allow you to produce 60 degrees conical screws for the alignment of the PTO if stock bolts cannot be found using 82 degrees 3/8-16 x 1-1/4 conical [Screws](#).

1. The first thing you want to do is setup a makeshift lathe that you can use to turn the screw while you grind a new angle. Here I used a 3/8 drill, two 4x6, one 2x4, one 1x2 and two plastic ties. This allows you to secure the drill and lock the drill trigger to spin the screw while grinding it to the angle of 30 degrees using a 4" die grinder.



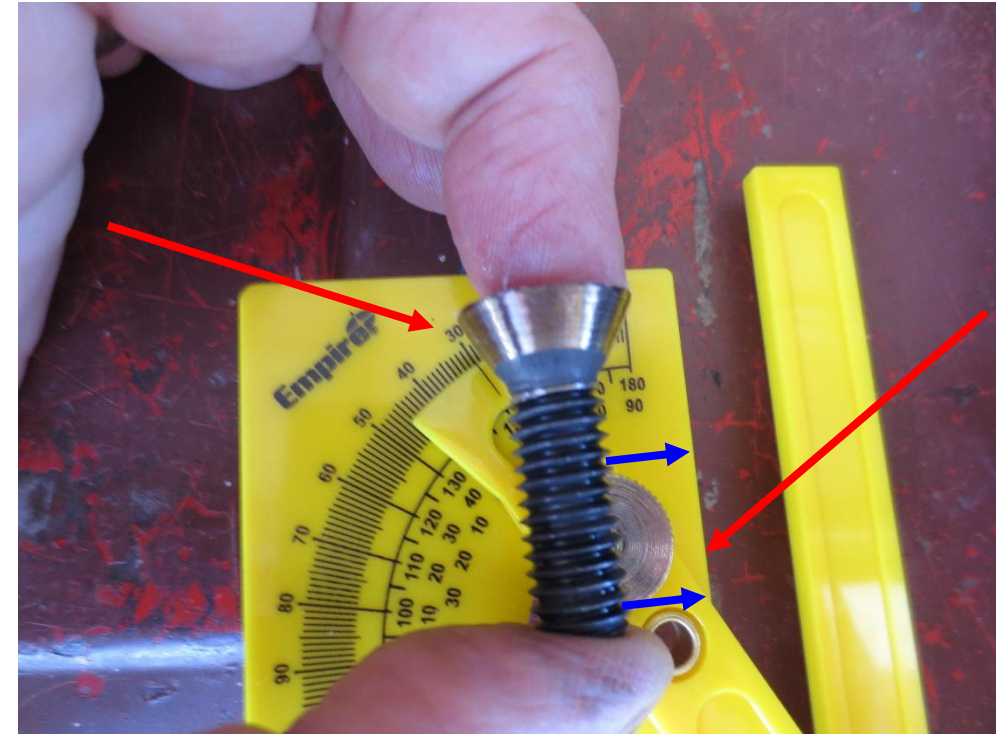
2. Next, make a mark 1/32 inch from the side of the screw on the screw head to be used as a limiter to grind to when angling the grinder during grinding.



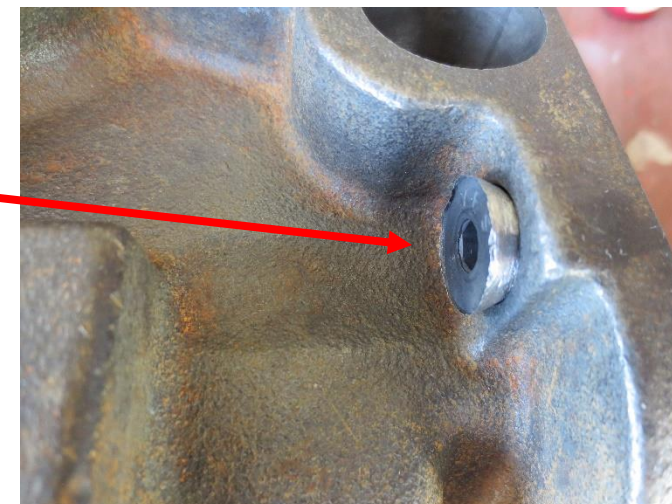
3. Using the grinder, eye a $1/32$ gap at the bottom of the cone as close as possible to $1/32$ and try to hold that angle as you grind. Periodically check the mark on the head to you meet it.



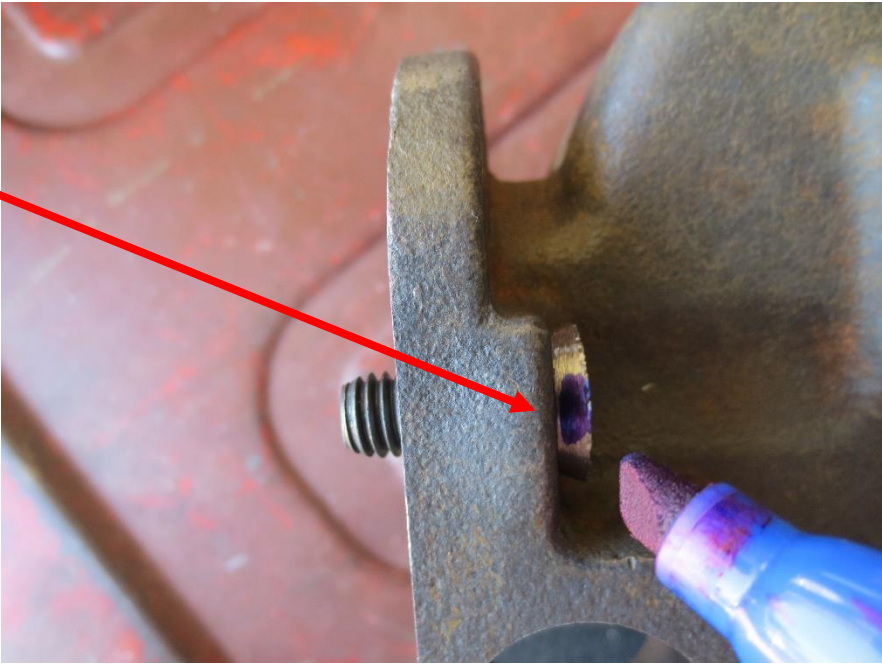
4. Periodically remove the screw and check the angle to see if any adjustment in grinding angle is required. You can use an angle finder for this purpose. Compare against the degrees as well as the side of the finder, line the screw up with the side of the finder.



5. Check the fit in the PTO housing.



6. Next, mark the screw using a felt pin for a side grind.

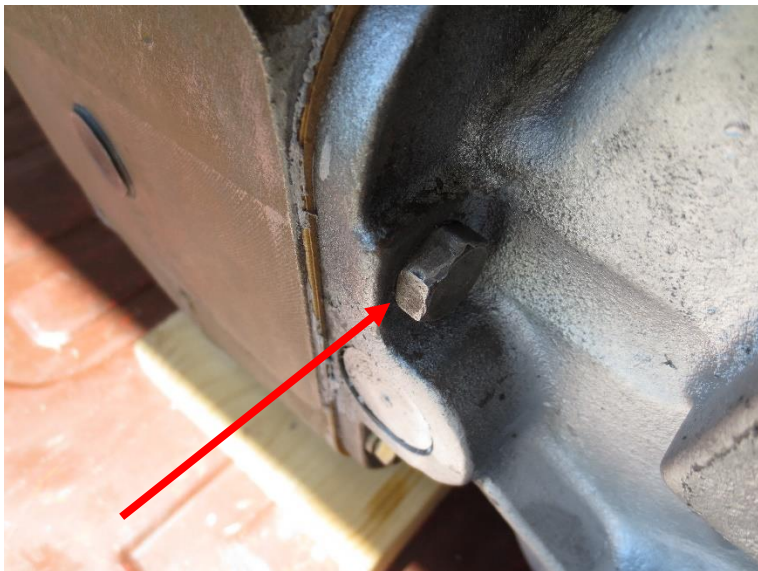
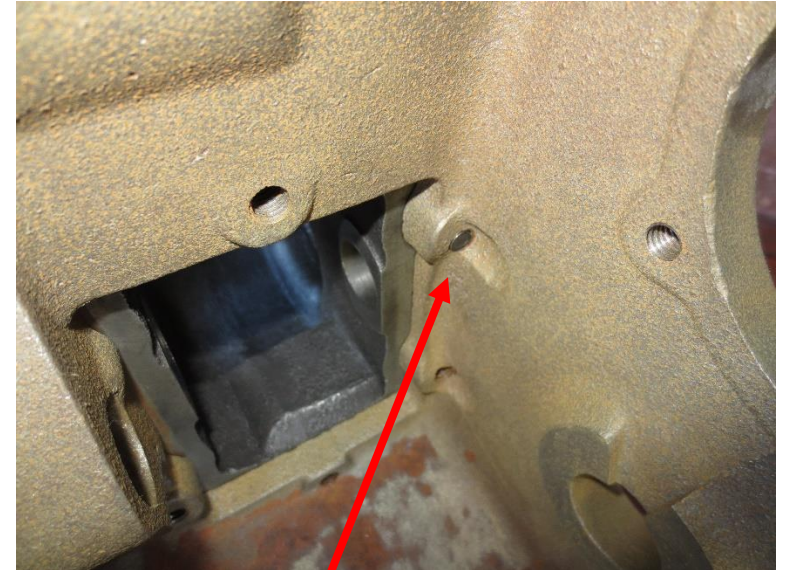
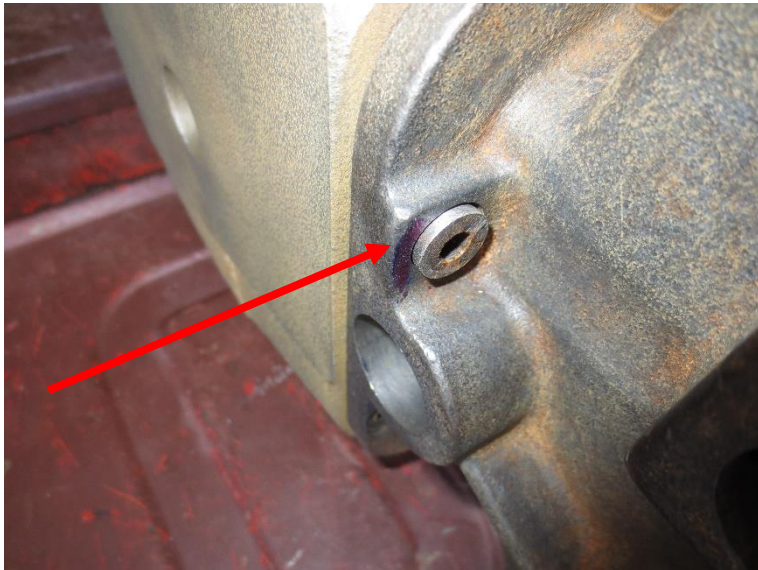


7. Next, use a file to clean the head and side of grind burrs.

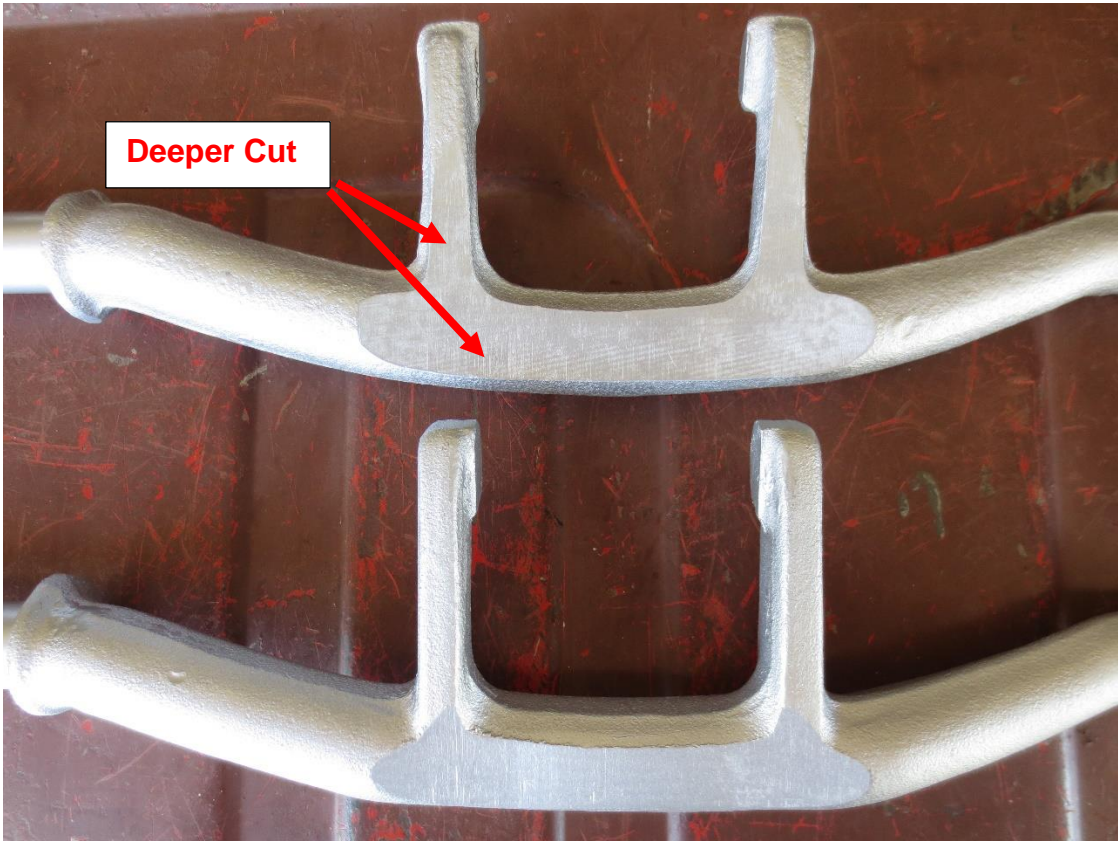
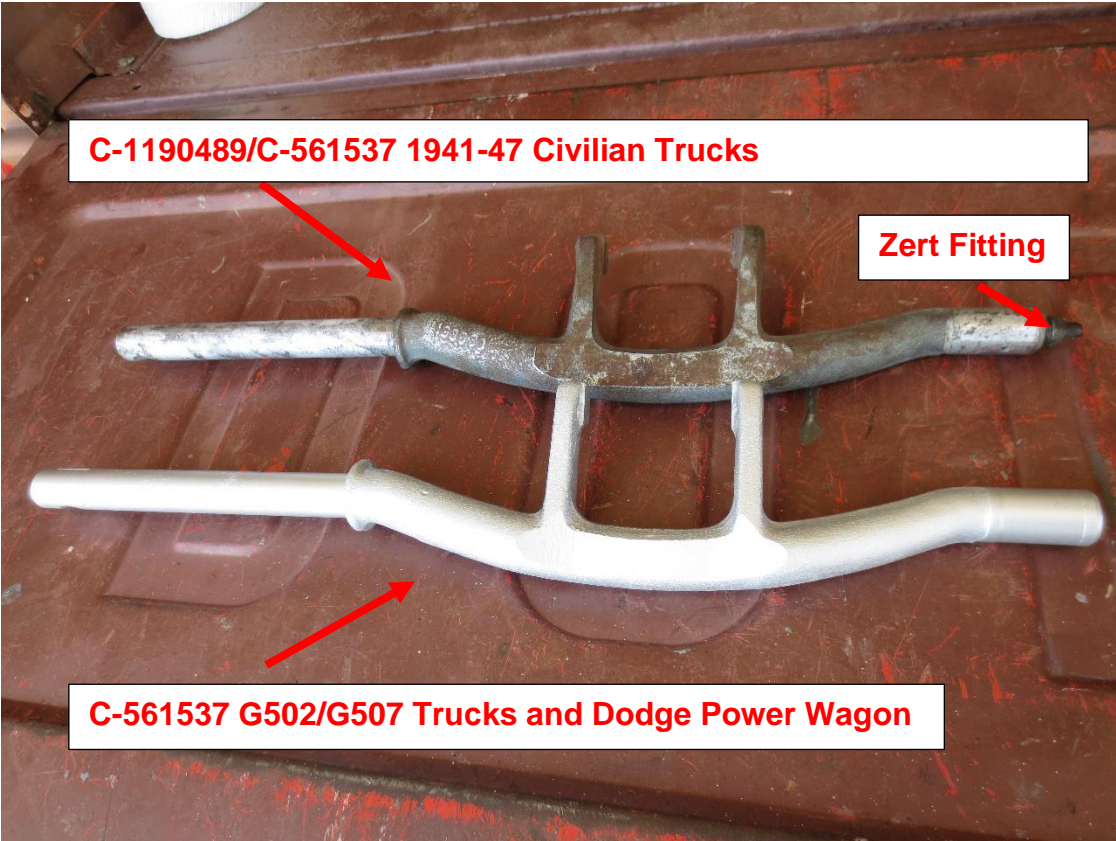


8. Now you have a nice custom looking screw that is functional! See next page.





Difference Between Military and Civilian Clutch Forks

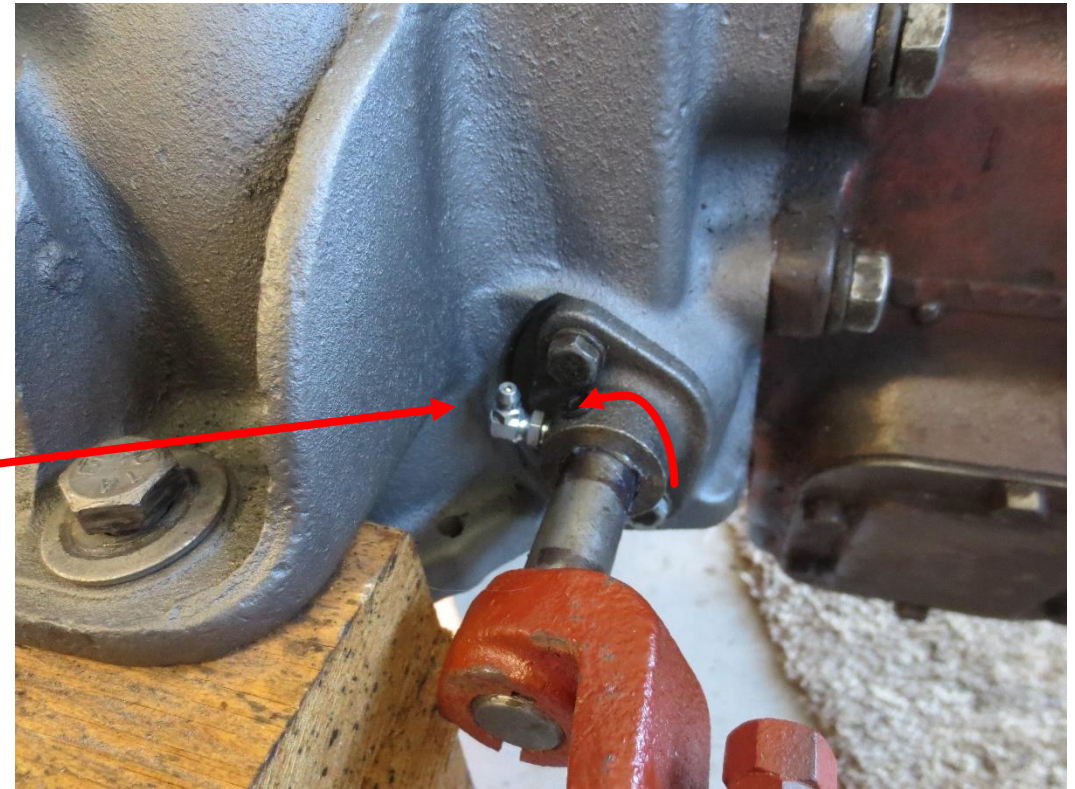


k. Converting the clutch fork flange from oil to grease.

If you want to convert from an oil/felt system to grease, start with a clean flange/bushing.

1. Drill a 13/64 hole approximately 1/2 inch from the original oil port in the flange.
2. Use a 1/4 - 28 thread tap to thread the new port to accept the zert fitting, clean and install fitting.
3. To plug the original oil port, use a 21/64 drill to enlarge the hole.
4. Using a 1/8-27 pipe tap, thread the hole, clean and install a 90 degrees 1/8 pipe plug.
5. Clean inside of bushing of any burrs from drilling/taping.

Original Oil Port



Placement of the zert fitting allows grease on the pressure side of the fork from rotation when depressing the clutch for better lubrication.

I. Disassembly/Assembly of the After-Type Transmission (Big Spur Gear), Case# 38711

FORWORD

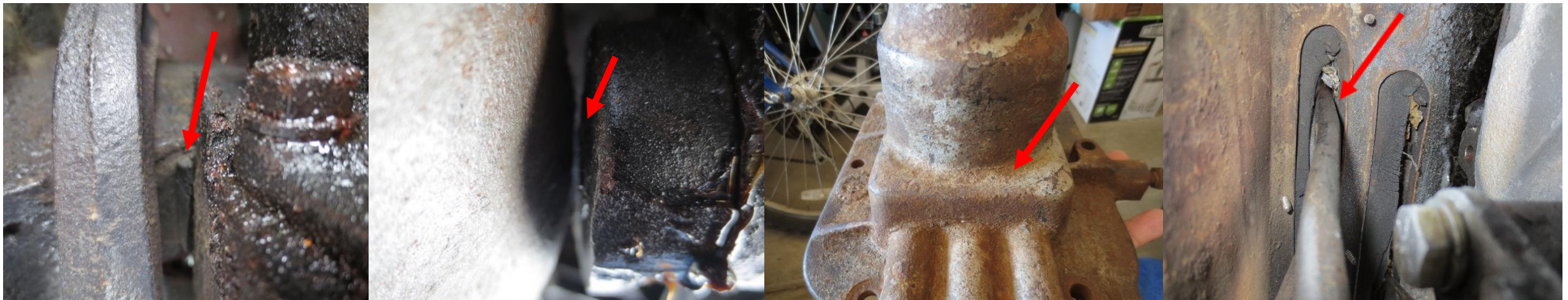
If you are lucky enough to acquire one of these trucks, there are some things to check that can be easily fixed to make for a more pleasant ride. A lot of people think these trucks are cool, but very noisy to the point you need ear plugs and for the most part, they are correct. These trucks were purchased, worked hard, and parked worn out in most cases, so you are starting with a worn-out truck that will be noisy until certain items are corrected. Here are things to check. If any of these fail a check, drivetrain noise will be prevalent in the cab and will make for a noisy ride. As far as the transmission, look for galling of bearing surfaces or pits, check clearances of parts found in the transmission section and worn bearings, and replace parts as needed. Here is a short video you may want to watch before you get started [Transmission Performance](#)

Upper rear engine mounts. This one needs replacing, it's cracked and worn thin.

Clearance between the PTO and brake frame mount, transmission 38711 or 1951 to 1956 PW, it needs clearance between those parts.

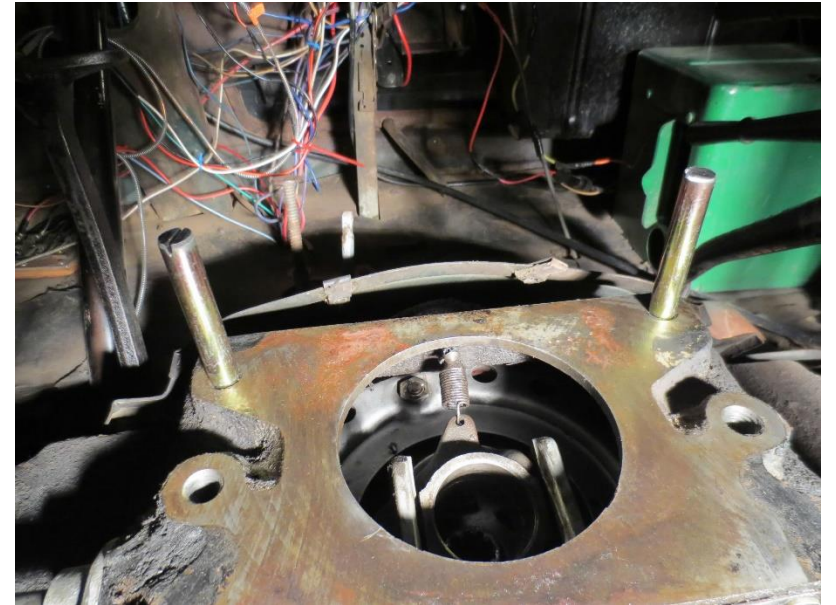
Clearance between the cab transmission cover and the top of the gearshift lever housing. If you cannot get a 1/16 wire between the housing and cab trans cover all the way around, you need to add rubber shims to raise the cab.

If the transfer case levers ride against the side of the cab transmission cover, you can add thin washers to tighten up the clearance, so they stay within the slot.



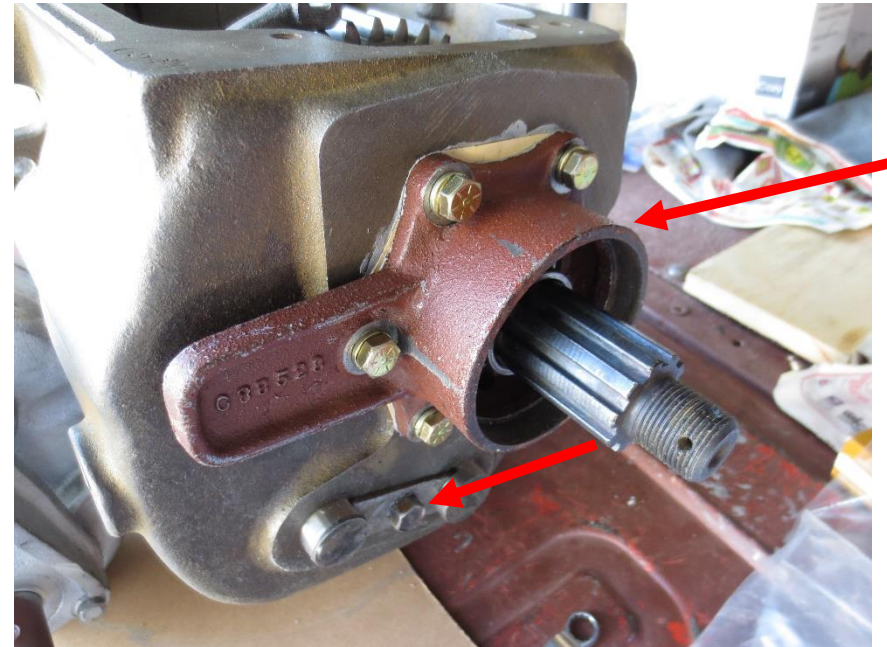
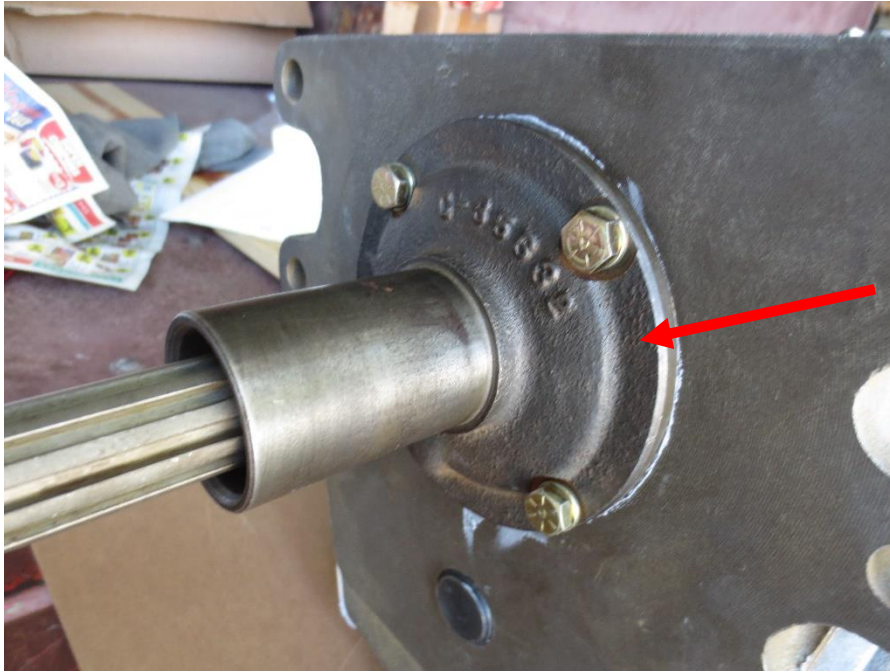
REMOVAL FROM CLUTCH HOUSING

To facilitate removal from the clutch housing, use 9/16 x 5NC grade 8 bolts, cut heads off to make studs, and slot studs for screwdriver. Remove the upper mounting bolts, one at a time, and screw in studs till seated. This allows alignment of transmission removal and installation. Avoid handling the transmission by holding onto the driven shaft or bearing retainer which can slightly deform due to transmission weight.

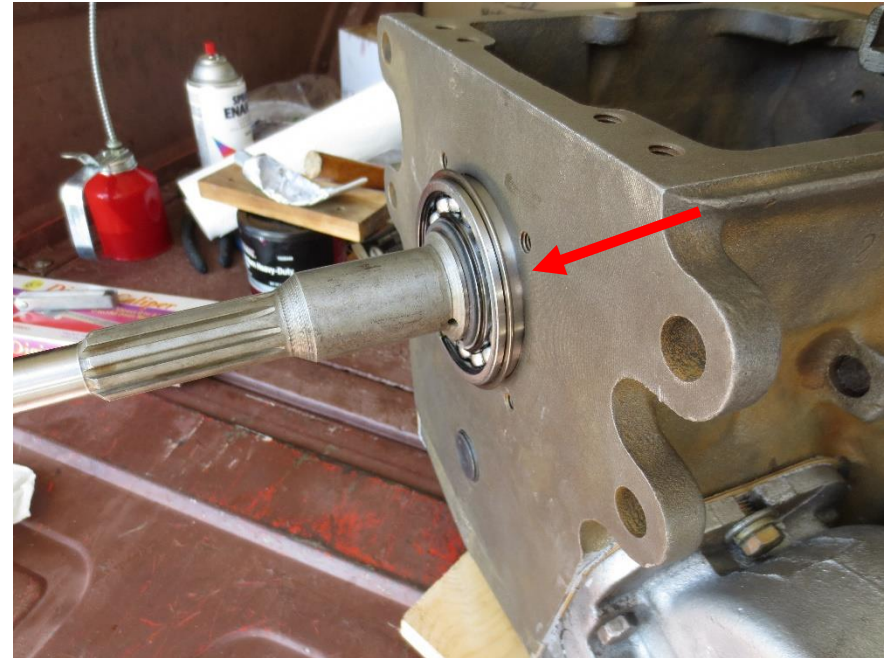
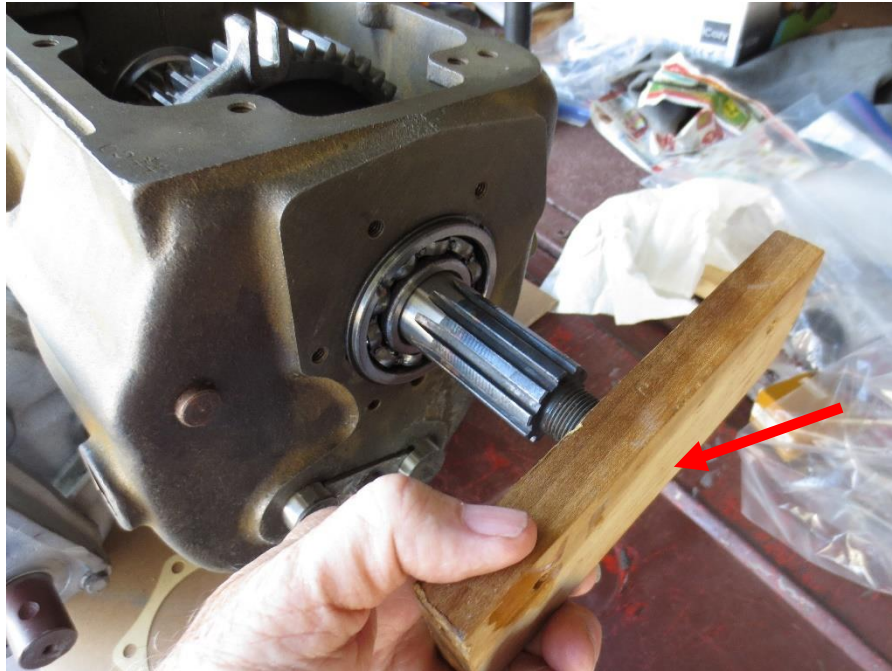


DISASSEMBLY

- a. After removing the transmission, remove the retainers and lock.

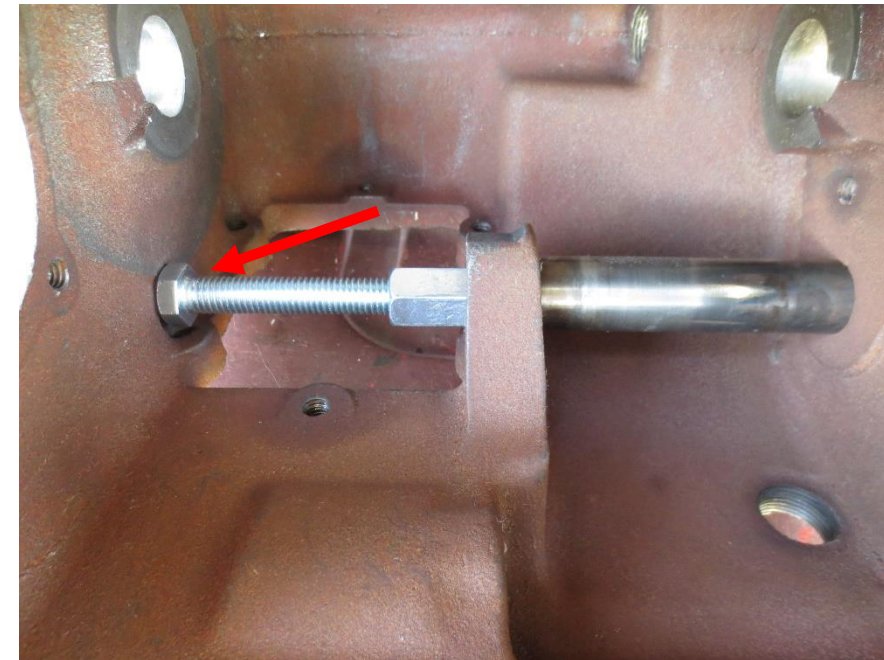
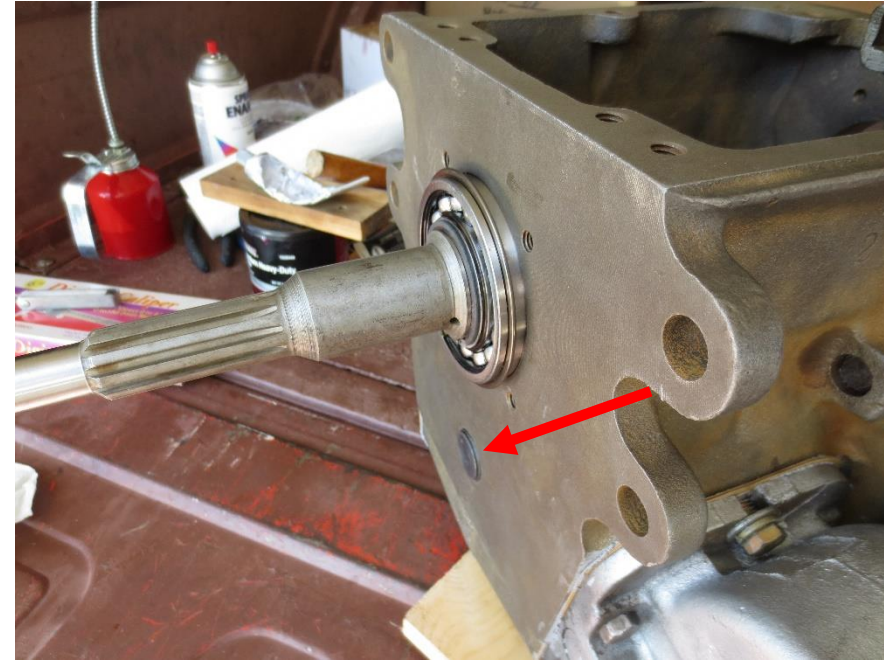


- b. Using a hard wood block against the main shaft, tap the shaft forward using a hammer or other tool to drive out the driven shaft and bearing out the front of the transmission. The main shaft will slip through the rear bearing as it drives out the driven gear shaft.

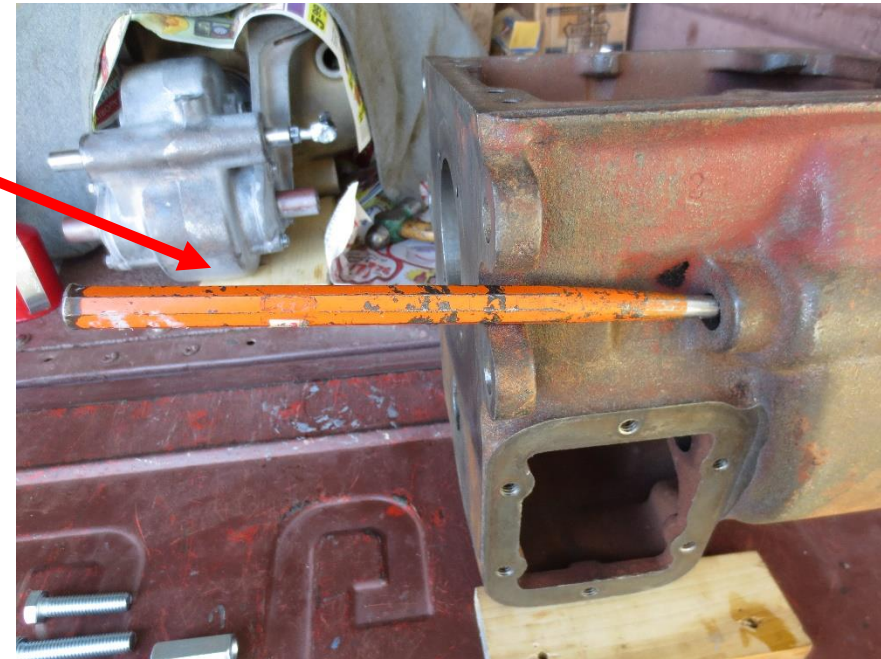


c. Once the driven shaft, gears and main shaft are removed, press or drive out the counter shaft towards the rear of the transmission and remove the cluster gear, washers and bearings.

d. Using a ½ inch joint nut and bolts 2-1/4 through 4-1/4, press the reverse gear shaft out the rear of the transmission while holding the bolt head and turning the nut. Once the shaft is out, remove the reverse gear.



- e. If the reverse gear fork must be replaced, drive out the reverse gear shaft using a long blunt end punch.

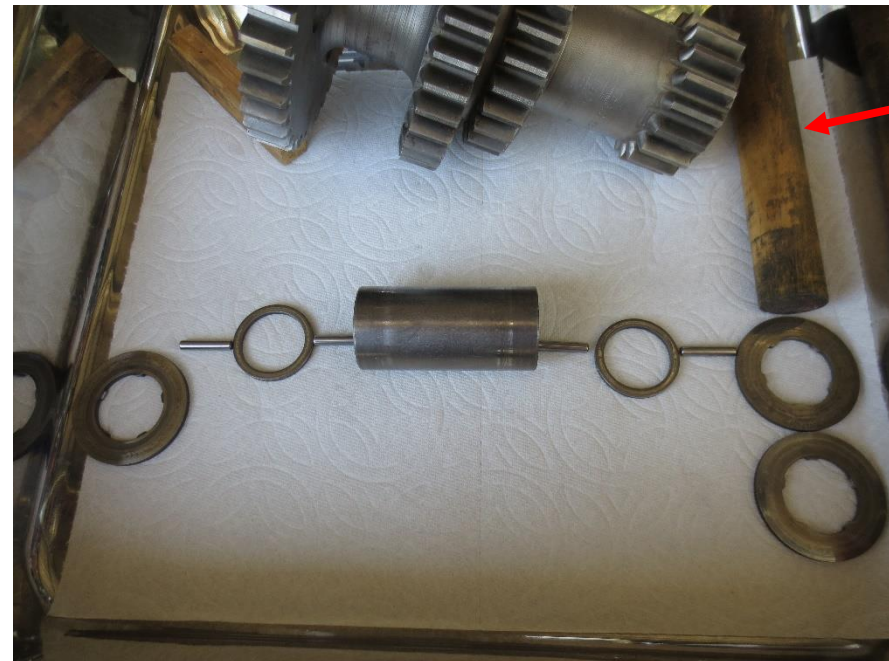


ASSEMBLY

1. Start with a clean case and parts. All parts in Image at right are NOS parts that required cleaning prior to installation including the 88 loose roller bearings. I use Paint Solvent as the cleaner, however other liquids can be used for that purpose.



2. Image at right shows the items that go inside the cluster gear tunnel and their layout; long spacer, four sets of 22 loose roller bearings, narrow spacers, and flat washers. One flat washer at the front or large gear and two washers at the rear or small gear on the cluster. Some mechanics will advise you use heavy thick grease to hold the loose rollers and flat washers in place in the cluster gear tunnel, however I do not trust that approach because you have to drive the countershaft with a hammer before the countershaft reaches the port hole at opposite end of the case and you run the risk of rollers falling in the tunnel and washer falling in the case. I use a wood dowel cut the length of the inside of the case where the cluster gear goes (1-inch dia. x 7-11/16lgh.). Using the wood temp shaft keeps everything in place.

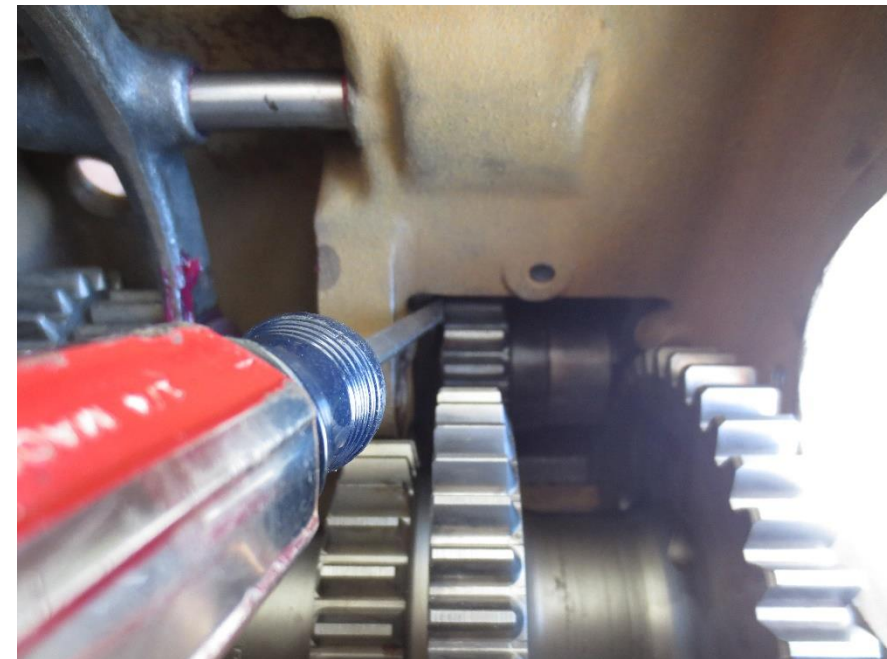
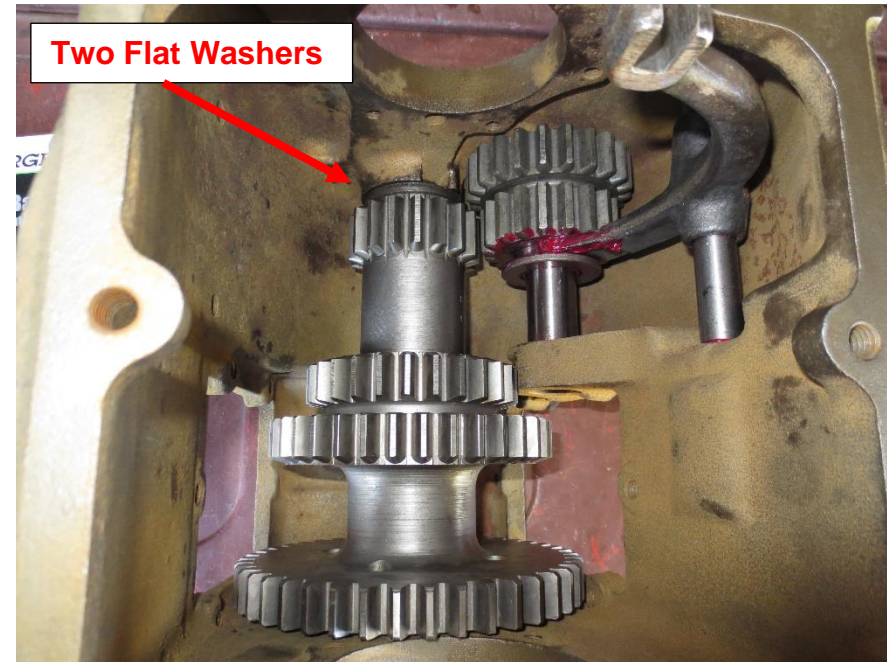


Wood Dowel

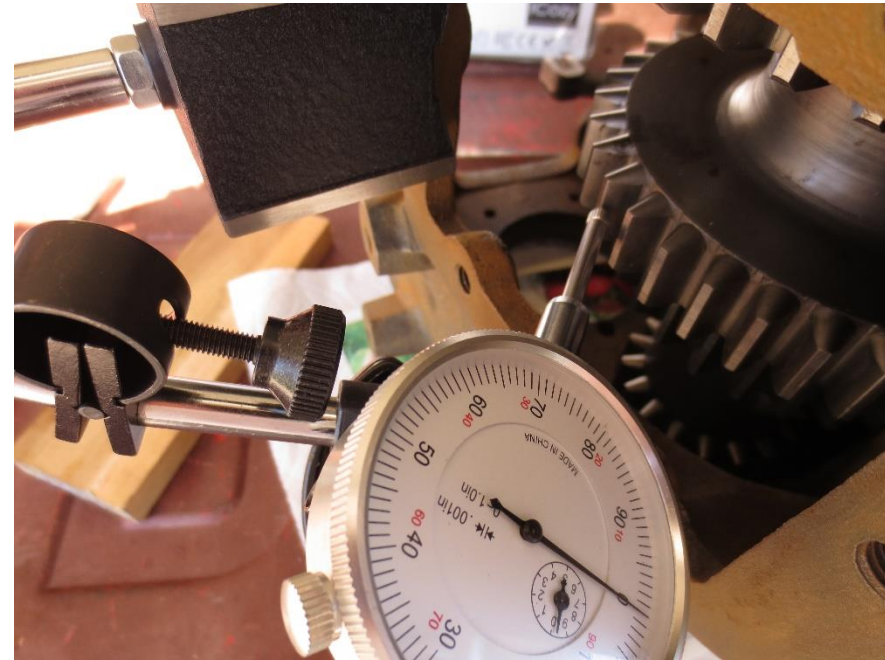
3. When you start assembling the items in the cluster gear, lube everything, tunnel, rollers, spacers, and washers. Use oil, or grease as you prefer, and feed each part in piece-by-piece.



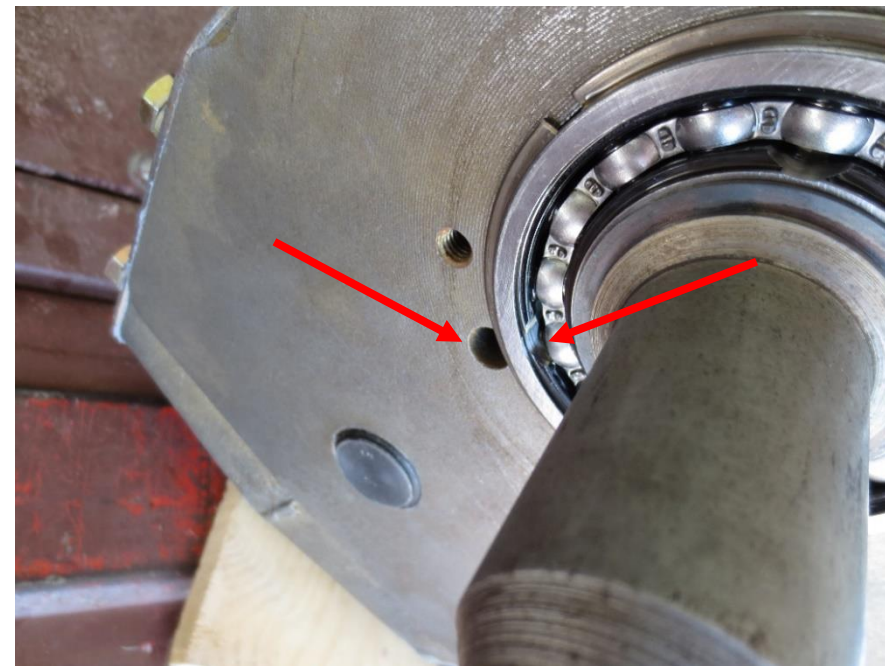
4. When ready to install the cluster gear, you drop the small gear in first followed by the large gear end. Grab and hold washers and temp shaft in place as you do this, or the washers will drop to the bottom of the case and the wooden shaft will slide out. Once the gear is in place, line up the temp shaft with the counter shaft port and slide the new countershaft till you just start into the cluster gear, then put pressure on the wooden shaft to prevent it from coming out as you push or drive in the countershaft. Once the countershaft has reached the opposite end in the port, coat the countershaft port hole and the countershaft end with lock slot with Gasket Cinch or other sealer and press shaft in. When pressing the countershaft in, place the lock in the shaft notch and a 3/8x3 inch bolt to help align the shaft, you will need to periodically check alignment, if you don't, you may not be lined up properly for the lock/bolt to secure it.
5. Install the reverse gear, shaft, and lock are installed, then the reverse gear shift fork and shaft. Use sealer on ends of shafts exposed to outside of transmission housing.
6. Setup up the PTO backlash using .030 and .015 gaskets, do not use gasket sealer at this point, you may have to switch out gaskets several times before you achieve desired backlash. Use a screwdriver or other tool through the opposite PTO port to lock the PTO idler gear by sliding it between the housing and gear, then press gear to side.



- Using a dial indicator, rock the cluster gear back and forth to check backlash. Backlash should be set between .003 and .008. Once desired backlash is achieved, use gasket cement on gaskets and bolt threads when installing PTO.



- After you install the bearing and retainer clip on the driven or pinion gear install the unit lining up the bearing notch to the case oil drain hole.

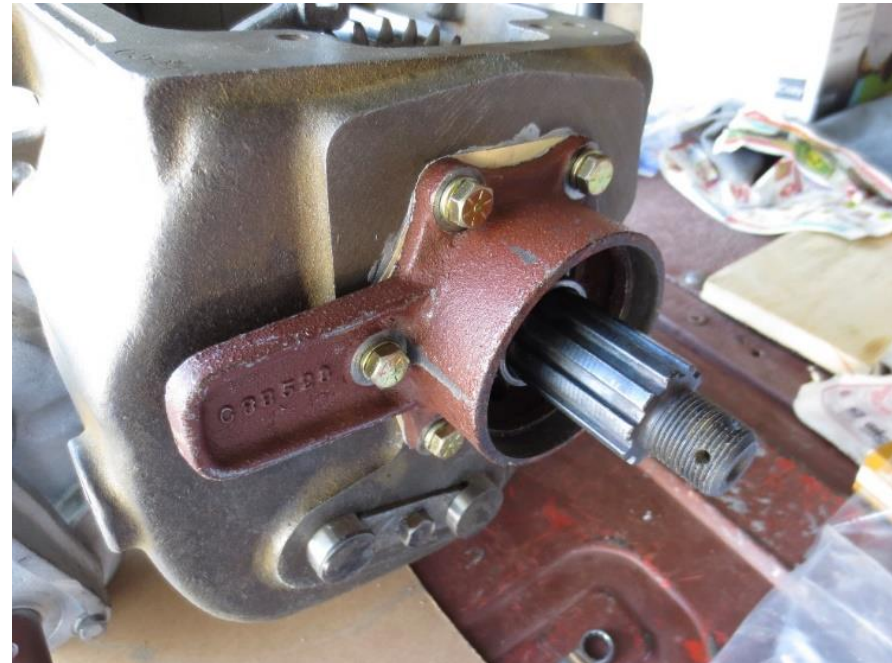


9. Place the retainer on the bearing w/o the gasket, press the retainer against the bearing and measure the clearance using a feeler gauge – see rear retainer next page. Once standard clearance of .005 is achieved, bolt on retainer.

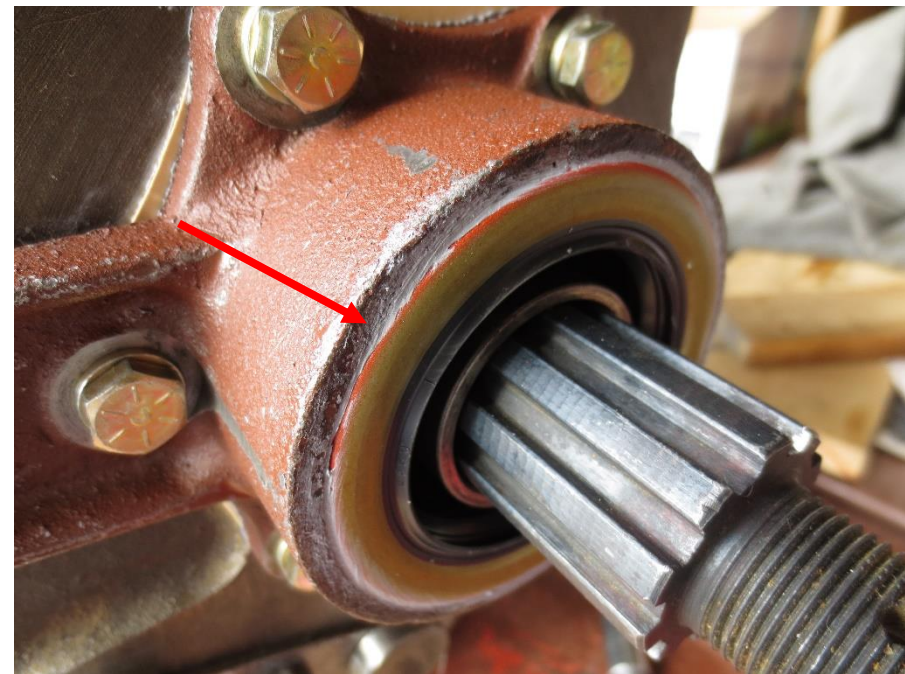
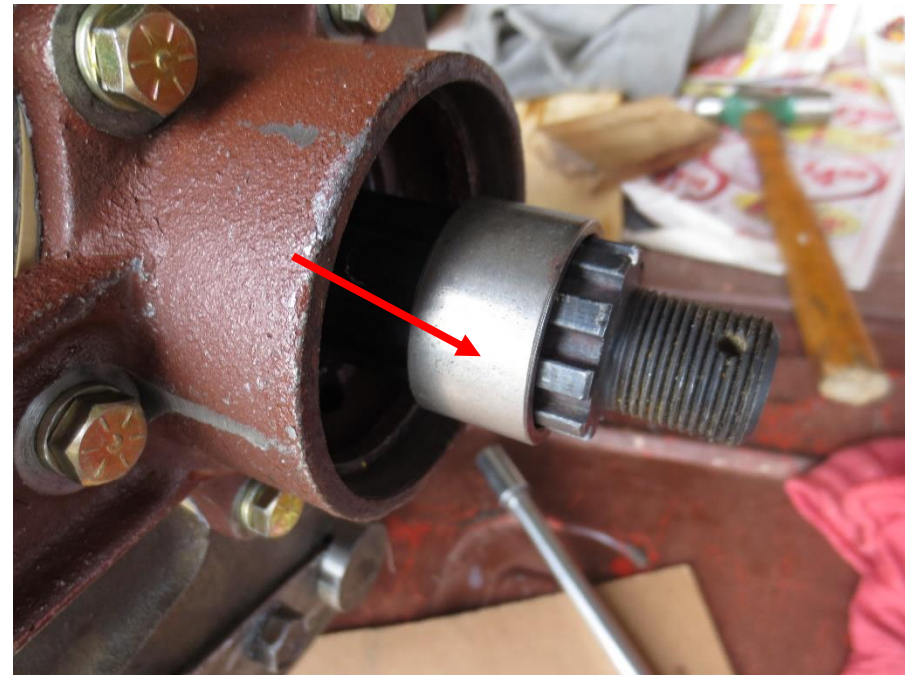


10. Press or drive the rear bearing on the main shaft then install the 3rd/direct gear and 1st/2nd gear on the main shaft and install in transmission. There is no notch on the bearing race to line up with the oil return hole. Place the retainer on the bearing and check the clearance. In the example below, the clearance is .015. To get a standard clearance of .005, two .010 gaskets will need to be added. Measure your gaskets for the size needed. Once clearance is achieved, bolt on retainer.

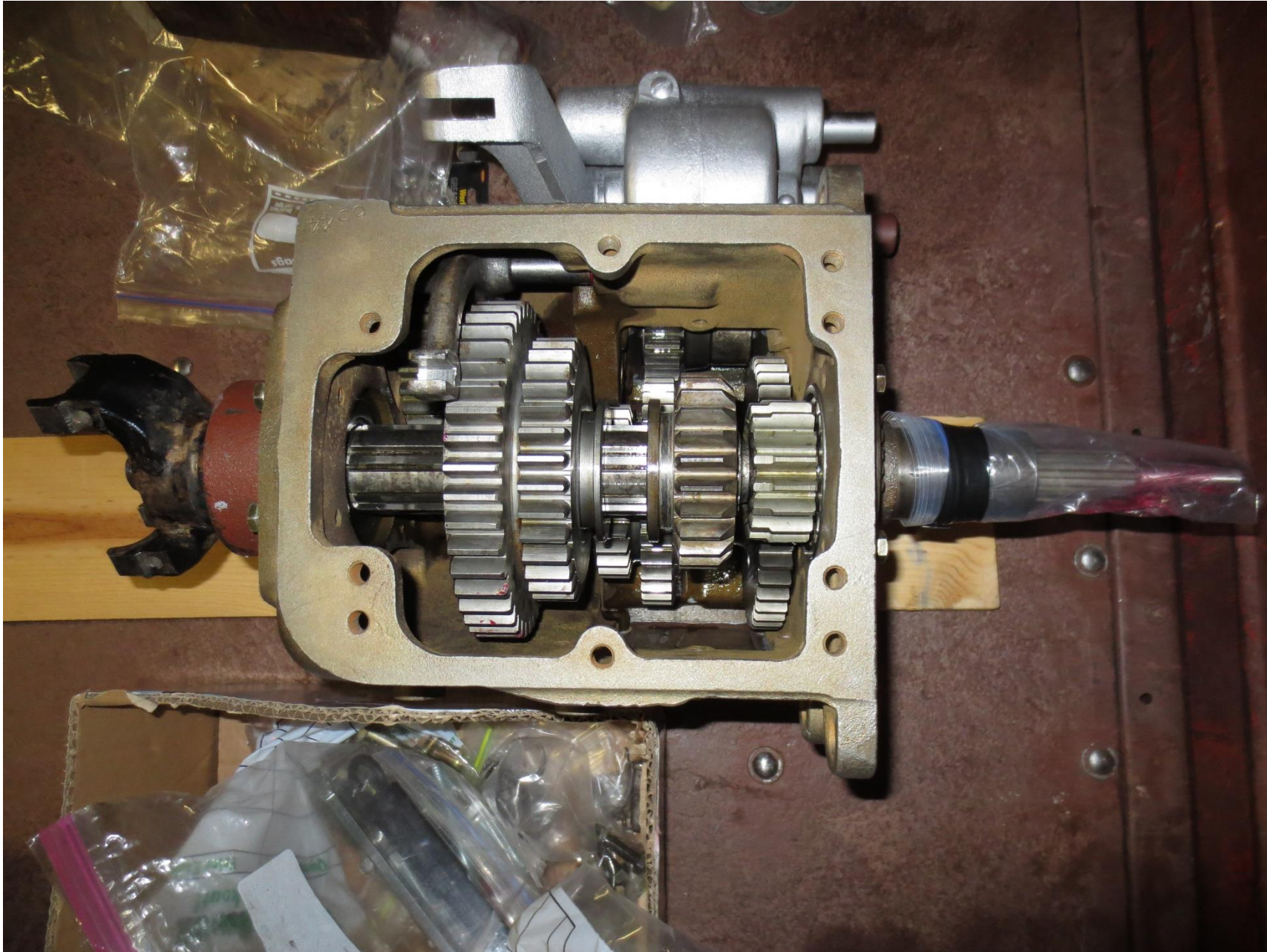


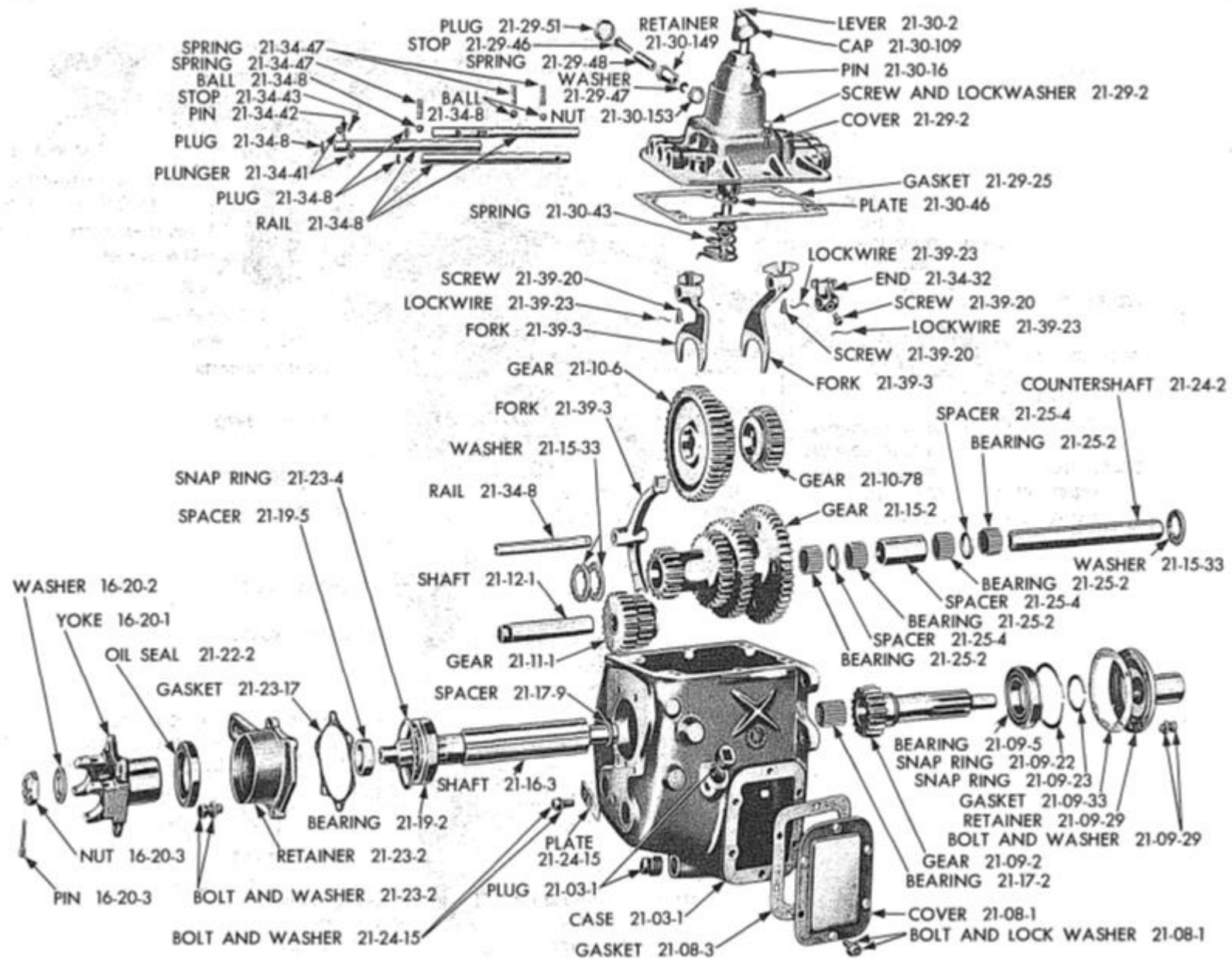


11. Install the spacer on the main shaft. Then install the oil seal. Apply sealer to the seal's side before driving in the retainer. Install the yoke, washer, tighten, and install the carter pin.



12. You now have assembled the transmission.





TRANSMISSION (AFTER TYPE)

BOLTS

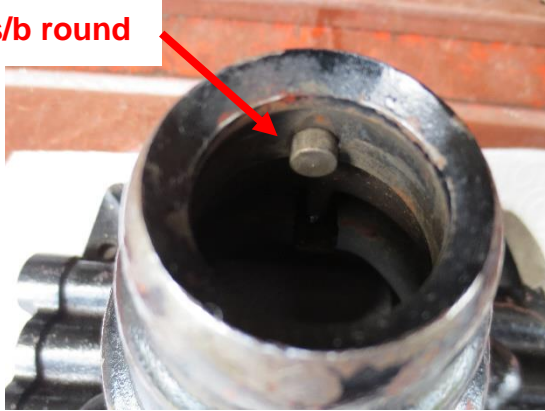
Transmission to Clutch Housing	(4) 9/16-12NC x 1-3/4
Front Retainer	(2) 5/16 x 3/4 (top bolts)
	(2) 5/16 x 5/8 (bottom bolts, thin head – C180077)
Rear Retainer	(5) 5/16 x 1
PTO Housing	(6) 3/8 x 1
PTO Cover	(6) 3/8 x 3/4
Gearshift Housing	(4) 3/8 x 1-1/2
Gearshift Housing	(2) 3/8 x 1

m. Disassembly/Assembly of the After-Type Transmission (Big Spur Gear), Case# 38711 Gearshift Lever Housing

This section covers the disassembly of a 1941-47 Dodge Gearshift Lever Housing to switch out the straight gearshift lever to the typical "S" shape lever found on the Power Wagon spur gear transmissions. The gearshift housing is not complicated to work on, and these series of images and notes should help you work through the process. The image to the right is a C-38651 housing and the C-36501 housing is also the same and will work on the 38711 transmission with minor modification as explained later in this section.



Guide s/b round

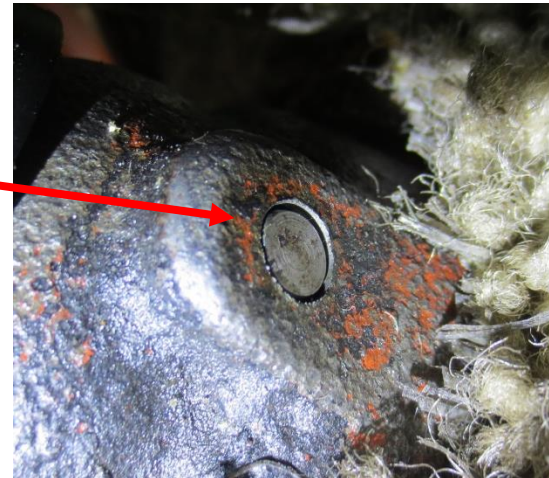


Tight Guide



1. One of the checks you should make is checking the gearshift lever guide for looseness prior to separating the lever housing from the transmission housing. You can do this by moving the lever back and forth, shifting through the gears, reverse, and watching the guide for any movement. You can tighten the guide by inserting the pointed end of an anvil, placing the guide on it, and striking it with a hammer. Whichever way you tighten it, the guide must be tight in the housing, resulting in no play in the guide. This check and repair should be part of any transmission rebuild. In the images below you can see just how worn/loose the guide is. This impacts how well you can shift the transmission through its gears.

Loose Guide



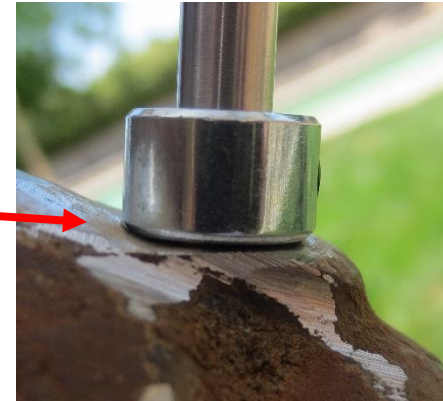
Guide Pin C-571390



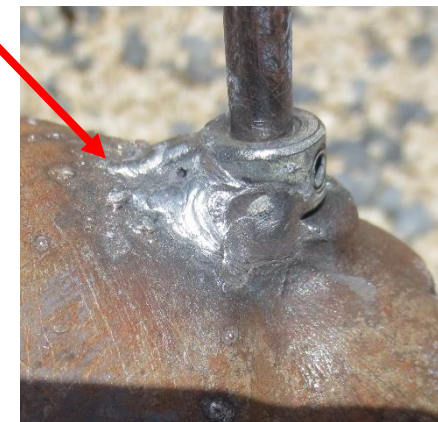
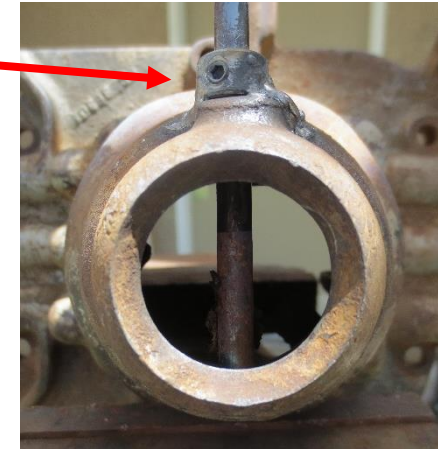
[Part Source](#)

Part# 98378A834,
Core Pin

2. Grind the outer head off the pin and punch it out the housing.
3. Grind the side of the housing until a ¼ shaft collar rests flat against the housing.



4. Align the collar using a ¼ inch shaft and tack or weld the collar in place.



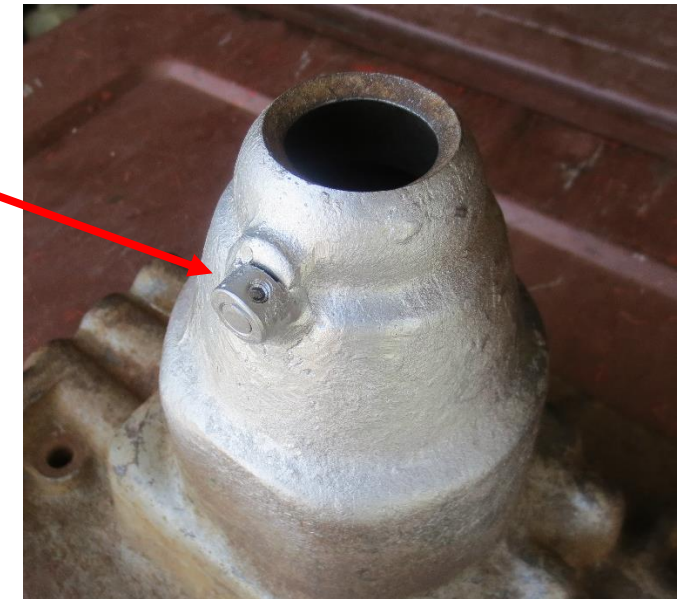
5. Measure the length from inside the housing wall to outside the collar and cut the new pin to length using a high-speed cut-off tool.



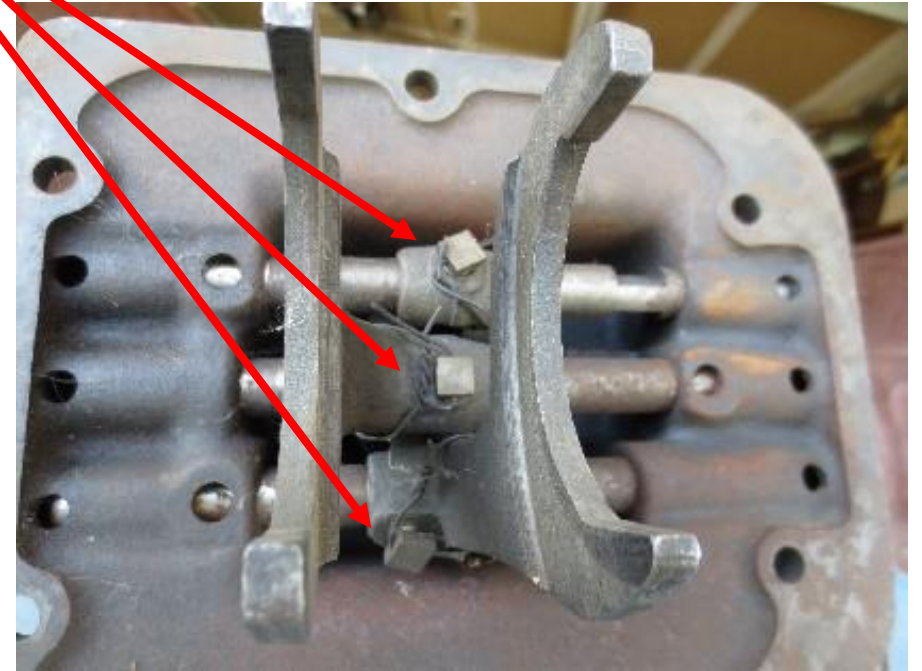
6. Using the ¼ shaft determine the length from inside the housing wall and set screw hole and mark the pin using a permanent marker or other method. Cut the mark using a high-speed cut-off tool. Fit the pin in the pin hole to check the alignment of the notch to the set screw hole. Any adjustment should be cut towards the outer end of the pin.



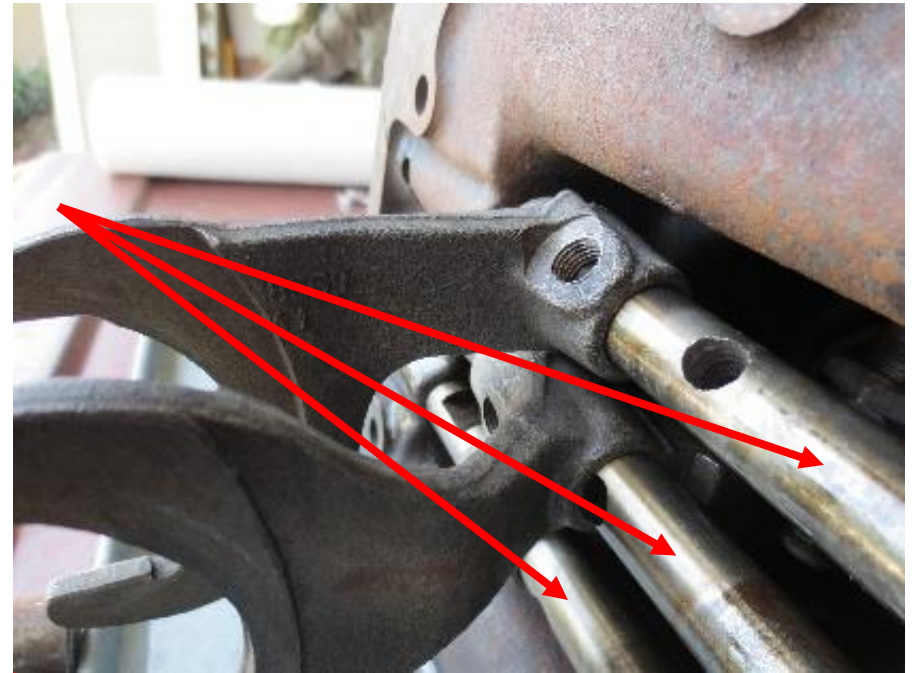
7. Install the set screw using thread lock and tighten in place.



1. The first step after separating the housing from the transmission is to remove the lock wires and shift fork lock screws.

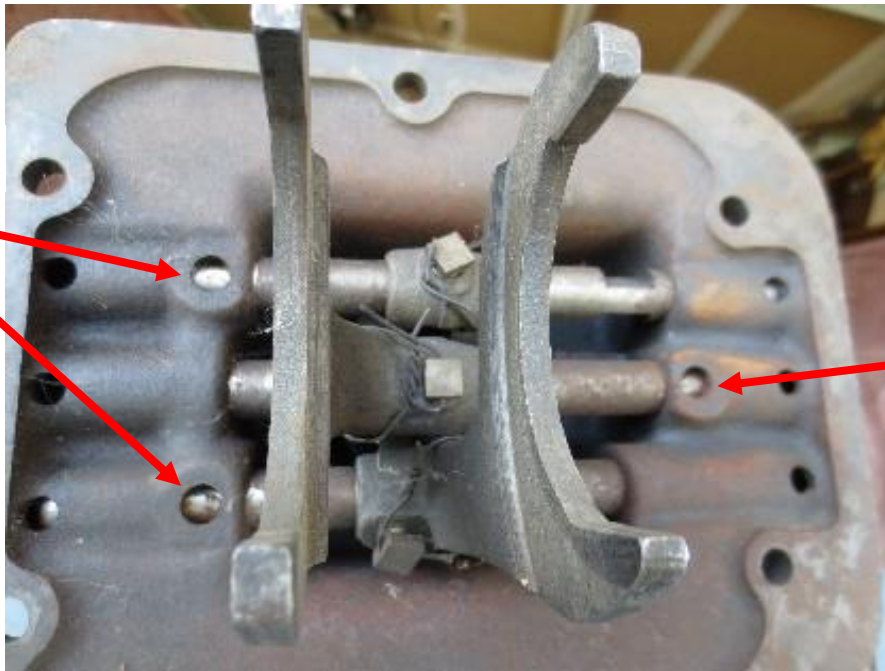


- Next clean the shift rails using a brass brush and steel wool to remove rust and other material. This is important before driving out the shift rails to prevent damage to the rails and rail housing tunnels.
- There are .750 expansion plugs at the end of each rail tunnel of the housing that will need to be removed before the rails can be push out. You can either drill and pry them out or you can use a blunt end punch placed in the lock screw hole and drive them out using a hammer and blunt end punch. They punch out easy. Once plugs are removed, place a thumb over the ball poppet hole to prevent the ball from shooting out and push out the rails to remove rails and forks.

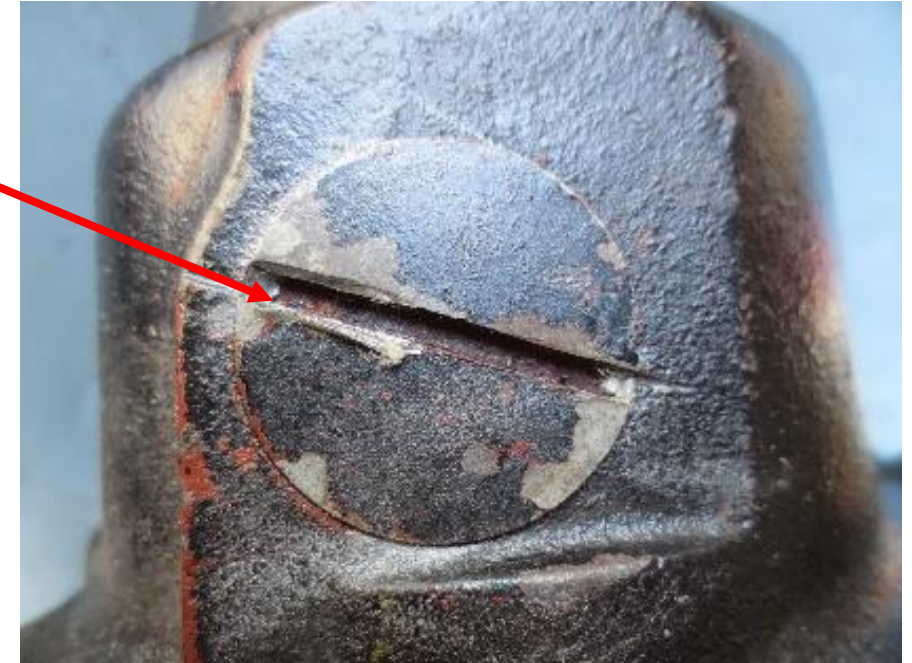


Expansion Plugs

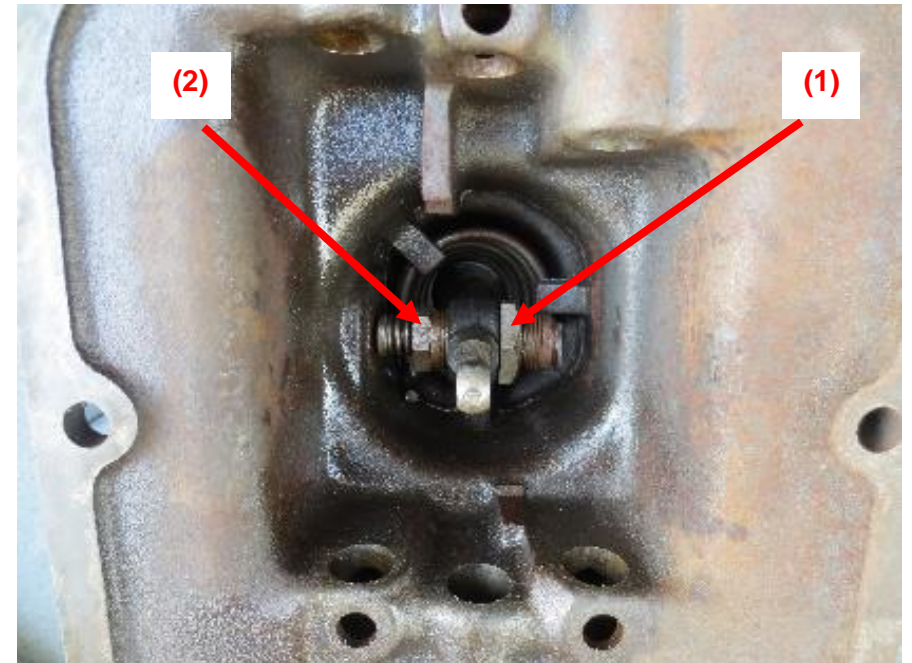
Ball Poppet Holes



4. Next, remove the reverse stop plug located on the side of the housing. If the plug is stuck, use a chisel to loosen the plug. Place it on either end of the plug and strike it with a hammer. It can also be used to tighten the plug. You can see the chisel marks in the image.



5. Next remove the stop retainer check nut (1) and stop retainer assembly (2).



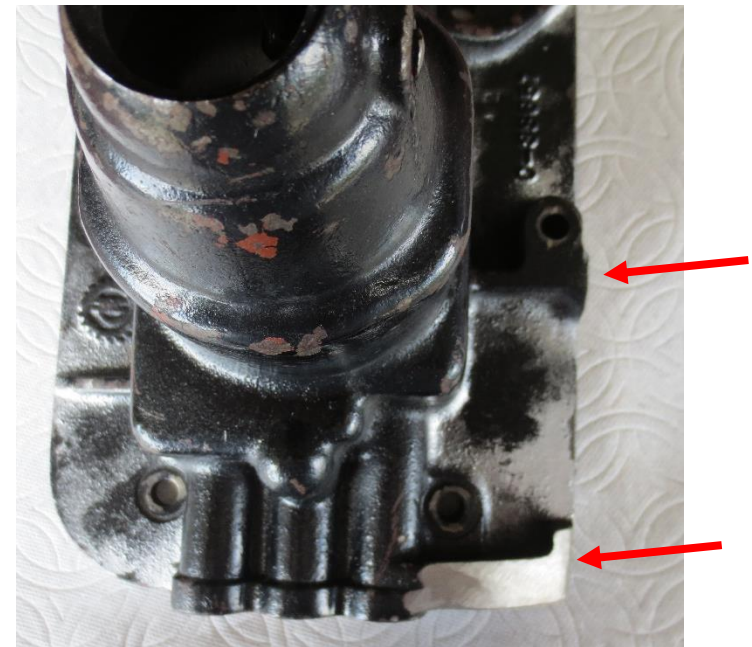
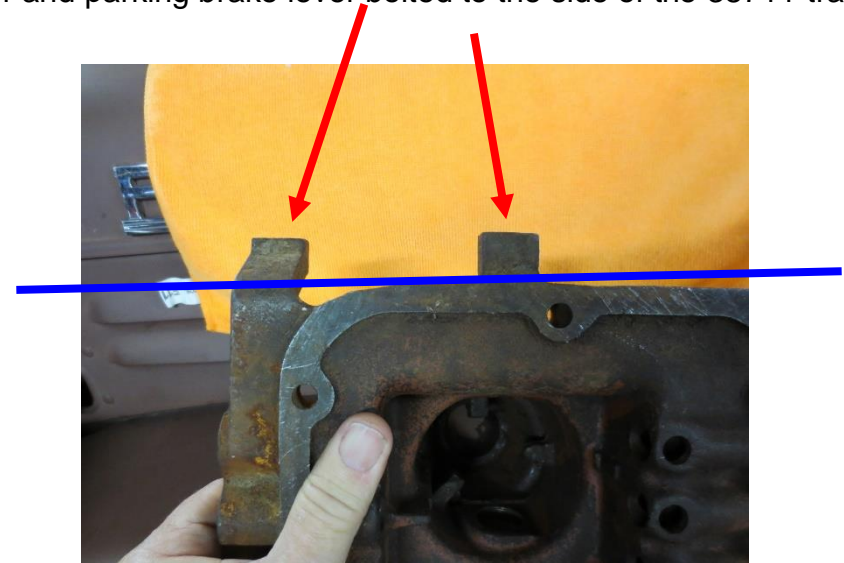
6. Next remove the Gearshift Lever Spring using plyers and turning the spring counterclockwise to remove and clockwise to install. After the spring is removed, remove the level ball friction plate and push out the lever. You now have the housing disassembled and ready for cleaning and inspection.



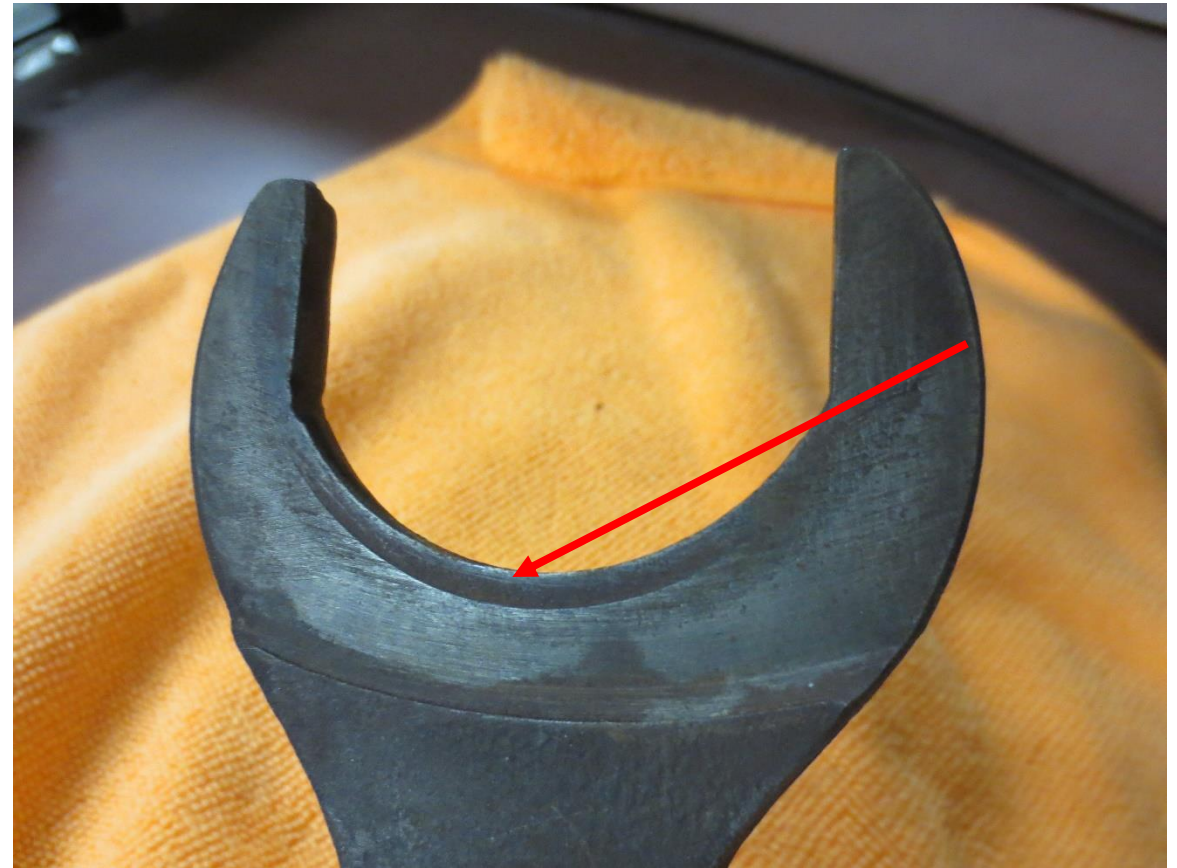
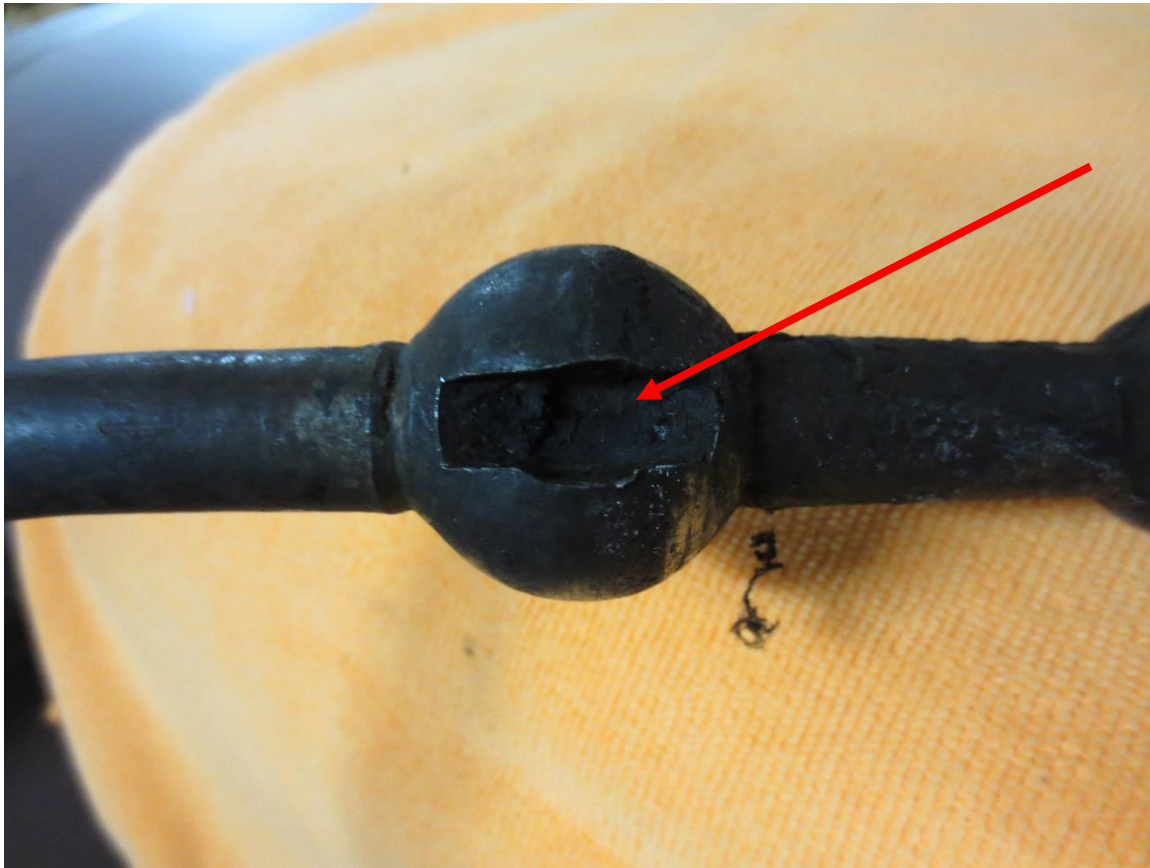
Friction Plate



7. If you plan to install this housing on case# 38711, 51 to early 56 PW, you will need to cut off the parking brake mounting ears from the gearshift housing flush with its side as illustrated by the blue lines or they will interfere with the cab transmission cover and parking brake lever bolted to the side of the 38711-transmission case, otherwise the housing will work fine. Images below show the modified housing.



8. Inspect parts for wear. Here are two examples: a worn pin slot in the gearshift lever and worn area of the fork.



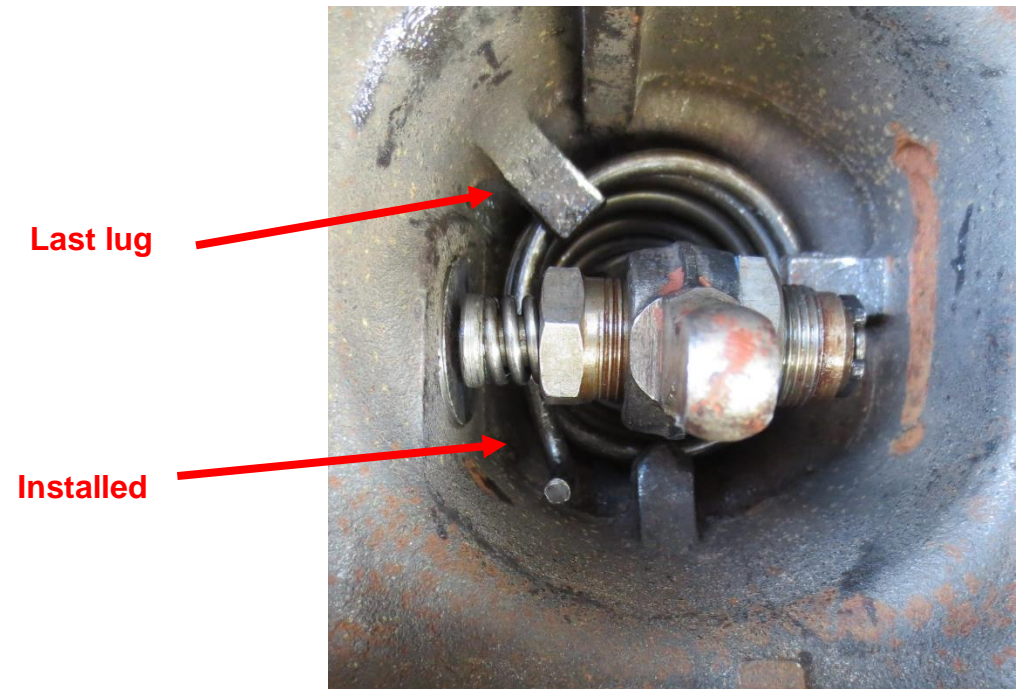
9. When starting reassembly, look for and remove any burrs in the expansion plug holes. This is important to prevent scoring when installing new plugs. Use a blunt end punch and hammer to reshape burrs back to tunnel wall.



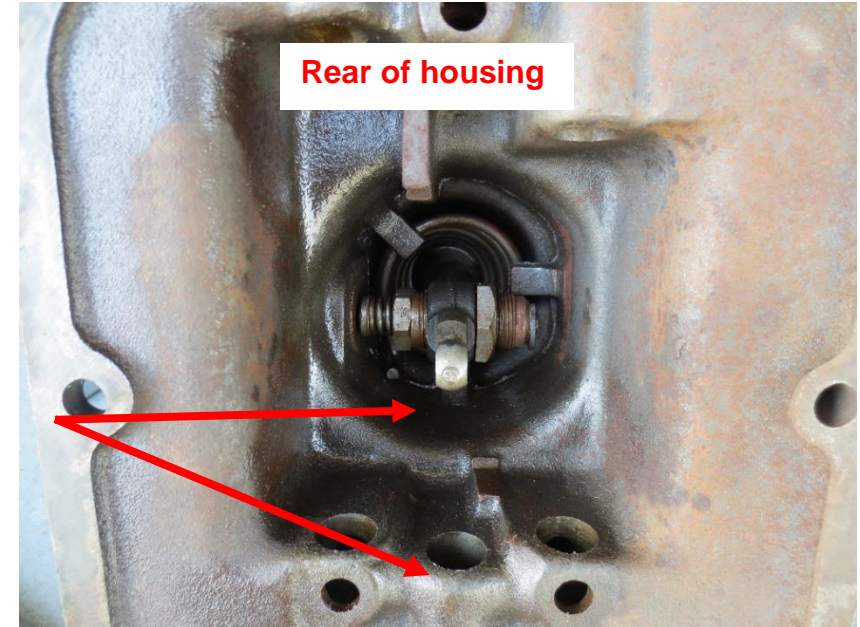
10. Install the gearshift lever with the friction plate flange side toward spring.



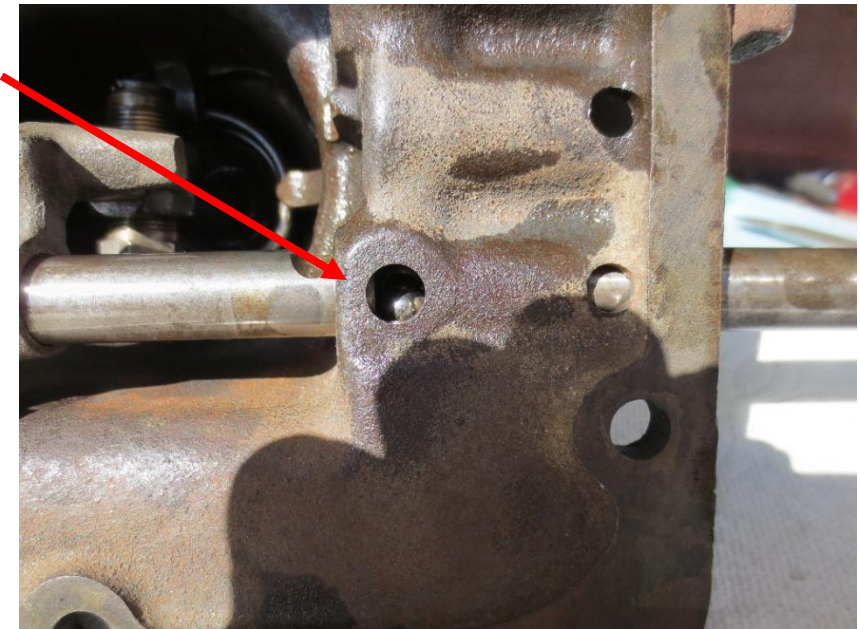
11. Next, install the spring turning it clockwise until the spring is under all the lugs in the housing. Make sure friction plate flange is properly seated in spring and continue installing spring. You will need to use screwdrivers to help work the spring under the last lug.



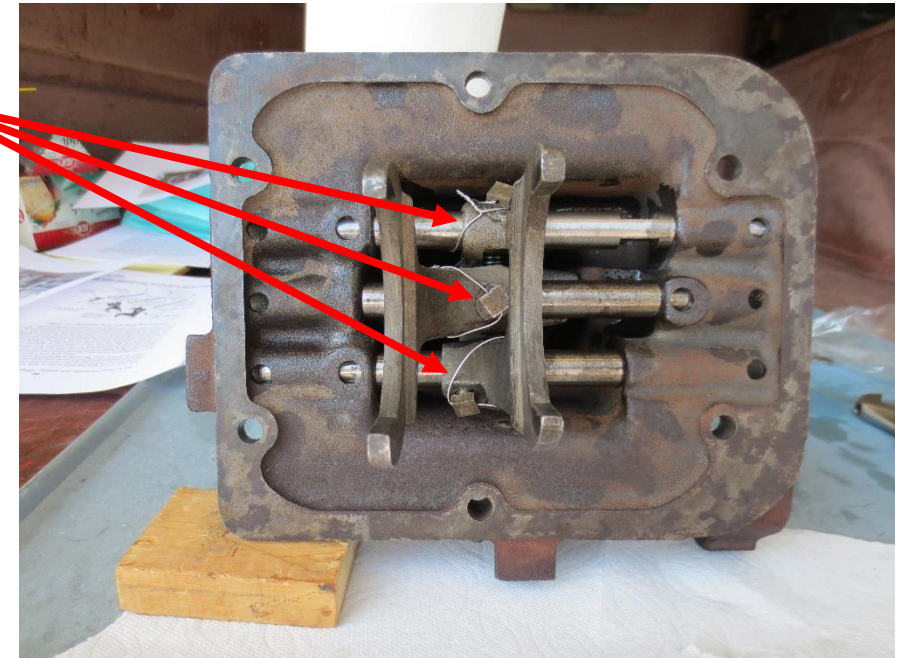
12. Next, install the reverse stop plug, center the gearshift lever in the housing turning the stop retainer assembly. Apply Loctite to the stop retainer check nut once centered and tighten. A good way to align the lever is to look through the center rail tunnel to the center of the lever and align to center of each.



13. One of the more difficult steps is installing the interlock plungers, and poppet balls. I used two different size blunt punches to press against the ball, one 1/4 inch and one 1/8th inch. Press the ball in the tunnel against the spring depressing the spring and then push the shift rail in against the ball with good pressure. If you do not the spring will push the ball pushing the rail back popping out the ball. Then use the narrower punch to depress the ball/spring and push the rail past the ball removing the punch. I used a rail in the opposite direction to hold the ball in the rail tunnel. I suggest you do this step in a control area so if the ball pops out, it will be contained and easily found. Once you install a side rail, install the interlock plunger, see parts illustration next few pages.



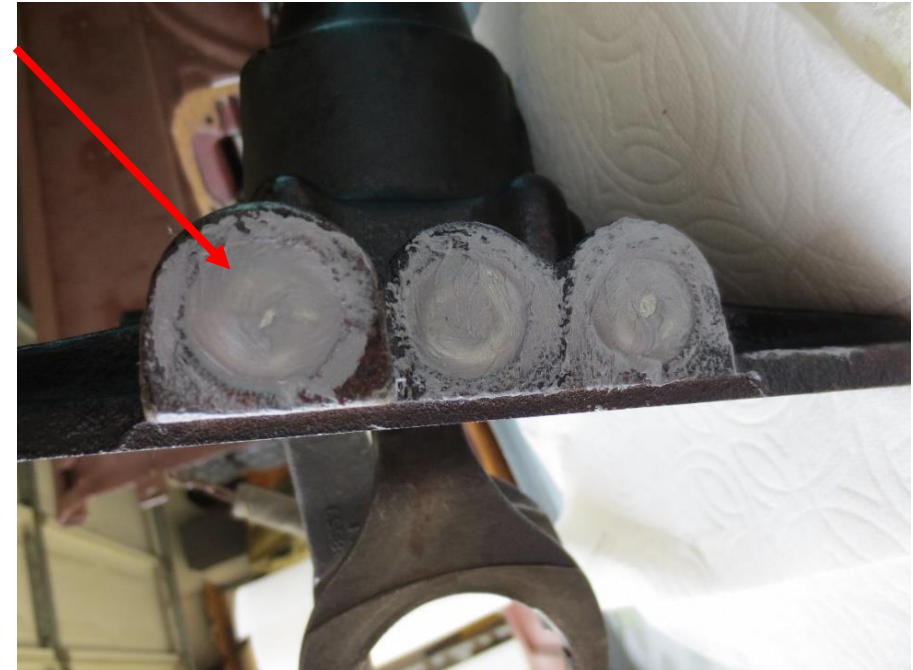
14. After installing the shift rails, and forks, lock the shift fork lock screws using mechanic's wire.

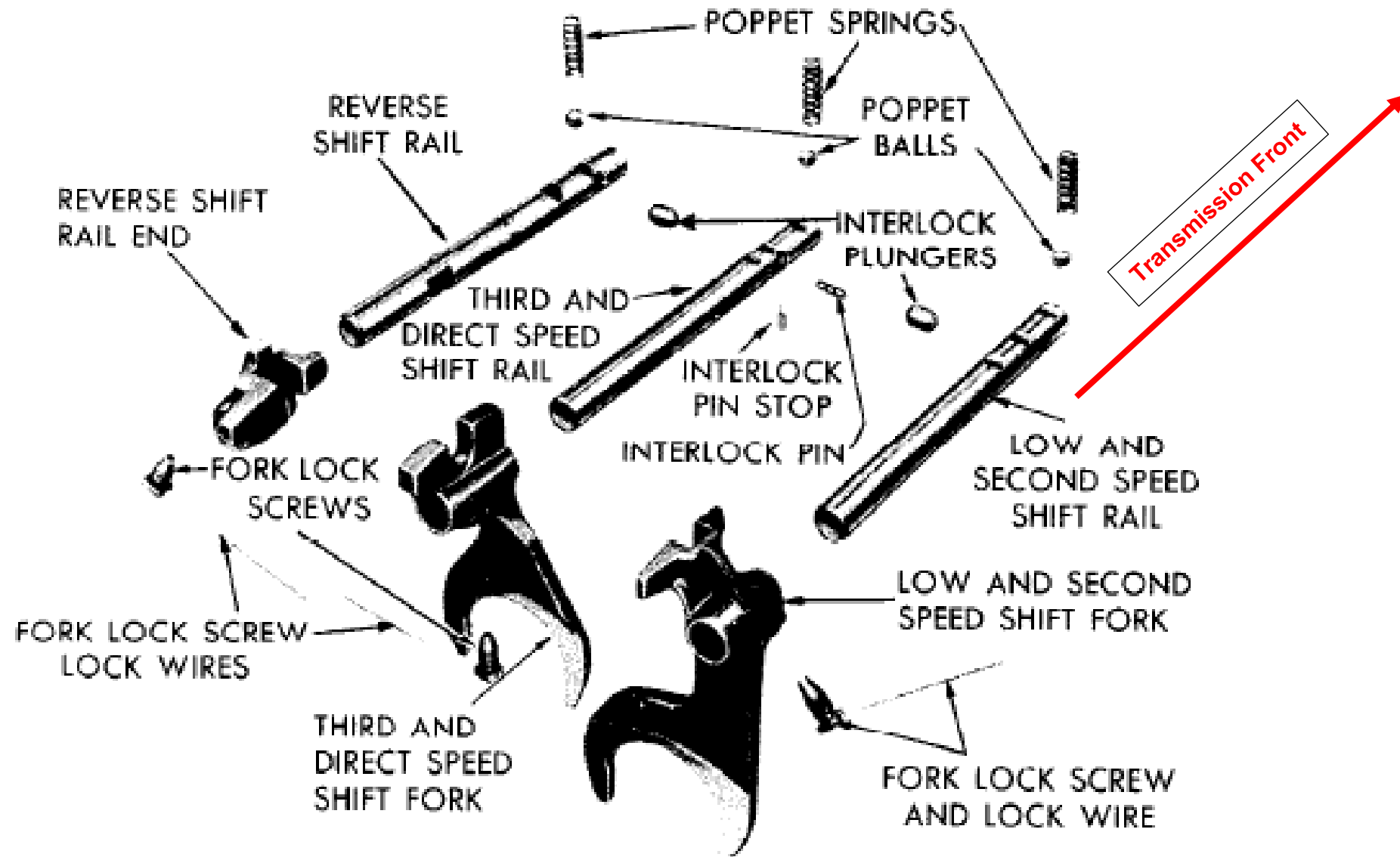


15. Now you are ready for the last steps. Using Dorman Steel Concave Expansion Plugs# 550-007, 10 to a box, install in the gearshift rail tunnel. Apply a little silicone gasket maker or other sealer and apply in a small amount around the recess where the plug goes, cleaning out any excess in the rail tunnel.



16. Using a hammer, tap in the plug until it is seated all around, a blunt punch can help correct any misalignments, and then give a good tap to cave the plug slightly. If you want a little more sealing, spread some silicone around the plug and you are done assembling the gearshift lever housing.





RA PD 53421

Figure 15—Gearshift Forks and Rails Disassembled

n. Installing a TorqueFlite Back-up Light Switch on a Spur Gear Transmission

Back-up light switch - BWD# S290Z or SMP# NS11 (TorqueFlite neutral safety and back up light switch, 1963-1990).

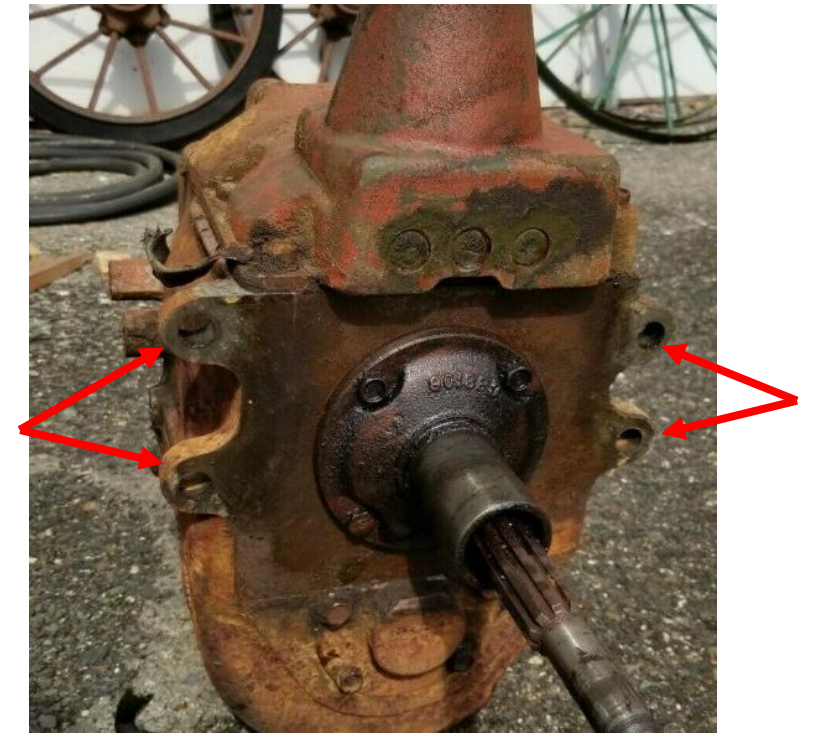
Knock out the left shift rail front end plug, thread hole for 3/4x16 thread, and screw switch in.

o. Transmission Interchange

M37 transmission will interchange with the early PW spur gear transmissions. Note same mounting ear pattern.



C-38611 – NP420 found on M37's



NP435 and FFW Intermediate Shaft – Conversion requires the use of a 5-357X Universal Joint. This will allow the NP435 Spice 1410 series yoke to work with the intermediate driveshaft Detroit 5380 series yoke. Compare the lockup of the 304 UJ to the 5-357. If the new joint matches up with the 304, you may find that the retaining groove on the cup will not allow the “C” clips to be installed on the 5-357X UJ once the UJ appears installed in the 5380 yoke – too narrow. When you are pressing the UJ in, tension can build up as you are pressing. Try tapping the flange with a hammer, do not really "whack" it, just tap it. That will release the built-up tension allowing it to seat properly. Until you determine it really does not fit, if you grind material off the “C” clip, it may result in play and vibration in the joint.

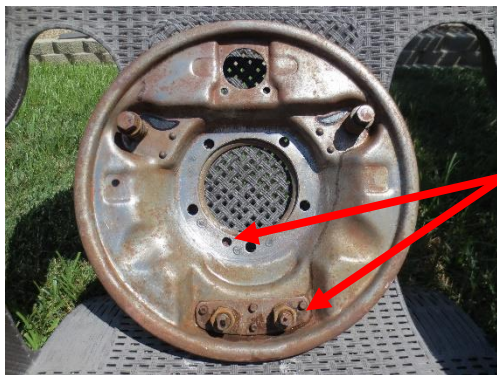
If you are installing a 318 that was using an automatic transmission, you will need the needle Pilot Bearing that fits in the torque converter recess (94 and newer, part number BCA #FC69907, or Mopar # 53009180AB). For parts contact: [Parts Source](#)

p. Dry Ice Cleaning

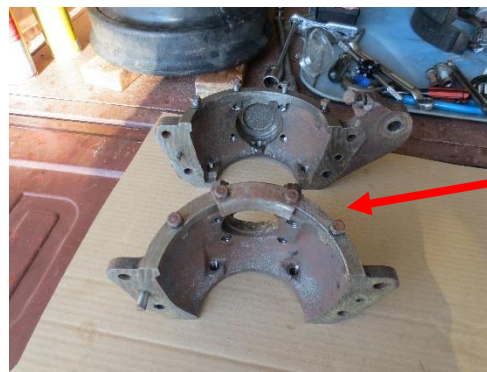
For cleaning parts with no damage to base metal. [Service](#)

q. Steering Knuckle Assembly

- Before taking the steering knuckles apart and after the tie rod end is separated, move the steering knuckle to center point if not already, and slightly move it back and forth. This is a check to see if you have a worn key cut in the trunnion pin. When checking pin key for play, movement should be smooth when turning steering knuckles back and forth a short distance, if you feel slight play in movement, or steering knuckle key or cut is worn, and you will need to shim the pin key using shim stock or replace the pin during reassembly.
- If replacing the upper bronze cone, make sure you drive it on straight, in other words, check to make sure the distance between the bottom of the trunnion pin and bottom of the cone are equal all around, and continue to check as you drive on the cone. If you see slivers of the cone around the top of the pin as you drive, that is an indication you are not driving it equally and need to make adjustment. Use the old cone on top of the new to strike with the hammer.
- If replacing the trunnion bushing and oil seal, drive the oil seal and bushing into the axle housing together, do not drive separately. Whatever tool (drift) you are using to drive the bushing, drive until the tool bounces back after driving with a hammer. This is an indication the bushing is fully seated. Do this for the trunnion and knuckle (spindle).
- Use [Gasgacinch](#) on the machined surfaces of the steering knuckles to seal in oil and water out. Once you have the steering knuckle halves assembled, install the inner axle, UJ, outer axle and knuckle. Just tap knuckle into the machine surface of the steering knuckle until seated, do not bolt, and turn the steering knuckle by hand to the right or left until it stops. Turn the axle by hand, if it can be turned 360 degrees without locking up, bushings are seated. If axle locks, take out axles and drive trunnion bushing until seated, then recheck.
- Tighten the lower cap bolts, 4 steering knuckle bolts, and upper knuckle bolts to 80 - 85 feet pounds. **MAKE SURE KNUCKLE HALVES BOLT HOLES AND ALL BOLTS ARE CLEAN AND DRY, NO OIL OR GREASE ON THREADS!** Any oil or grease will result in overtightening and stressing the bolts.



Make sure oil drain hole and cam bolts/nuts are free.



Clean all bolt holes, bolts and nuts threads with tap and die to achieve proper torque before assembling.

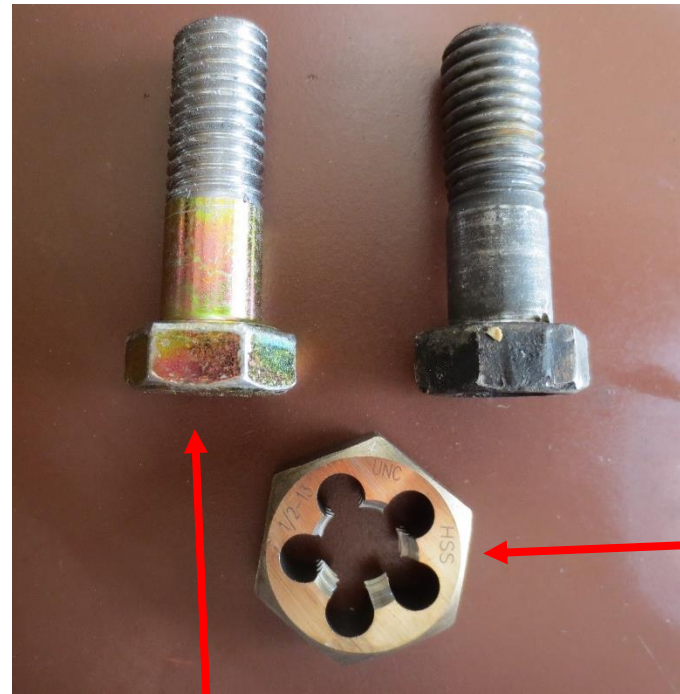


- Check bolts/screws for stressed areas and replace any stretched parts – see image below.
- Oil soak all felts and apply grease to moving parts: bushings, axle bushing surface, UJ, etc.
- I apply Gascacinch to all machined surface of the steering knuckle when assembling except for the big felt retainer, Use silicone gasket maker for that.
- Once knuckles are assembled, fill each knuckle with grease, 2.5 tubes of #2 grease or your preferred grease. Remove the lower trunnion plug, upper grease zert fitting and install your grease gun rubber hose, pump in grease from bottom. A pneumatic grease gun is suggested for this.



**Std Knuckle Bolt, Grade 5
(180177)**

Stretched Knuckle Bolt



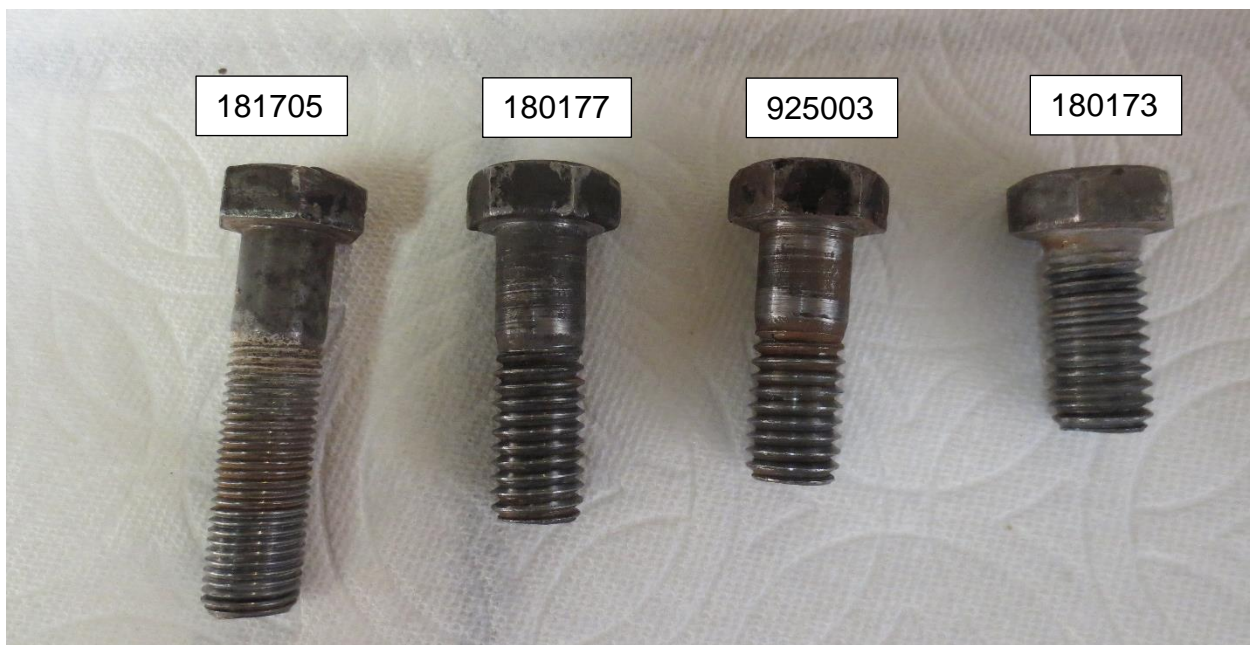
Cut Knuckle Bolt, Grade 8

HSS 1/2-13 Die

PART NUMBERS FROM 47-56 FFPW PARTS BOOK.

RIGHT KNUCKLE

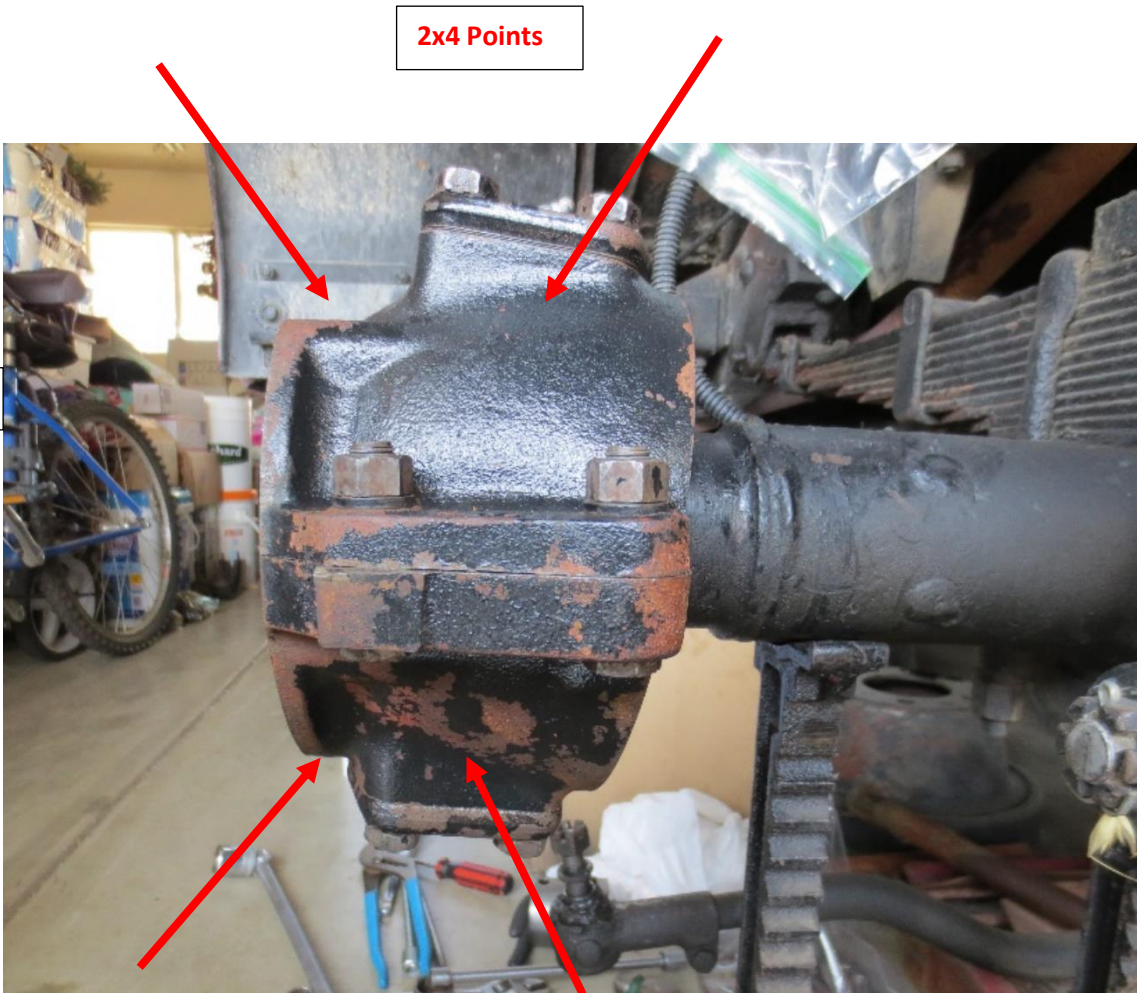
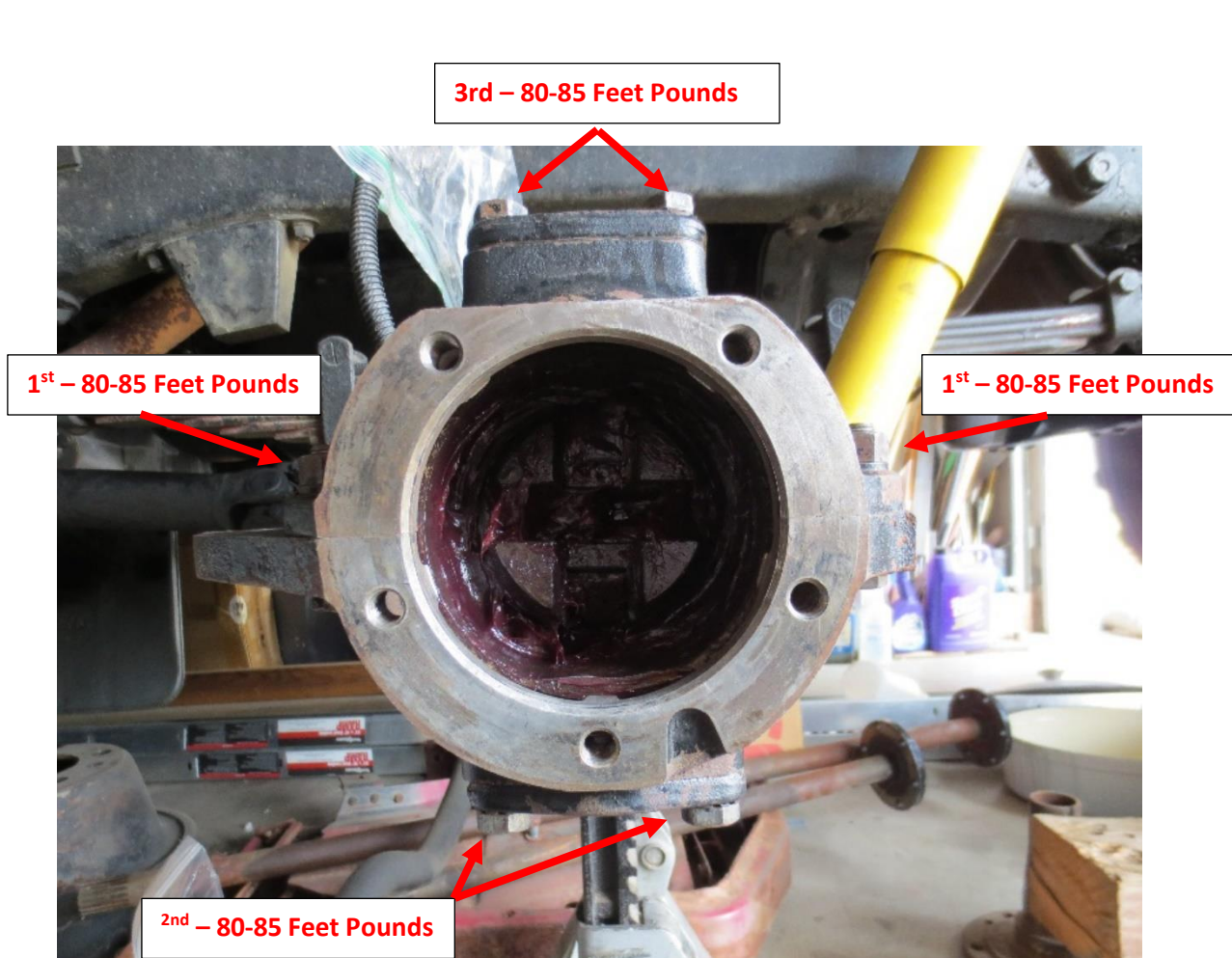
Code	Part Number	Description	Quantity
2-03-3	180177	Bolt, 1/2"-13 x 1-1/2" (knuckle to Steering Flange)	5
2-13-3	181705	STEERING KNUCKLE FLANGE, Right, Bolt, 1/2"-20 x 2"	4
2-13-19	180173	Bolt, Bearing Cap, Lower, 1/2"-13 x 1"	4
2-13-25	925003	SCREW, Bearing Cap, Upper, 1/2"-13 x 15/16")	4



LEFT KNUCKLE

Code	Part Number	Description	Quantity
2-03-3	180177	Bolt, 1/2"-13 x 1-1/2" (knuckle to Steering Flange)	5
2-13-3	181705	STEERING KNUCKLE FLANGE, Left, Bolt, 1/2"-20 x 2"	4
2-13-19	180173	Bolt, Bearing Cap, Lower, 1/2"-13 x 1"	4
2-13-25	925003	SCREW, Bearing Steering Arm Cap, Upper, 1/2"-13 x 15/16")	4

- When you are ready to assemble, I suggest the sequence below using the original shims. After you torque the screws and bolts, you need to shock the bearings by placing a 2x4 on the areas indicated and striking with a hammer, do not strike the caps. This is to seat the cone roller bearing against the trunnion pin and the cup against the caps. If you do not do this, you will get a false bearing adjustment when turning the steering knuckle to check the feet pounds (25-28) with a torque wrench, and the knuckles will loosen once the truck is on the road. After you shock the bearings, adjust the steering knuckle drag. After you do that install the felt seals.



WC & M Series ¾ TON, 1.5 TON, AND 1 TON FFPW & M SERIES STEERING KNUCKLE BOLTS/NUTS TORQUE

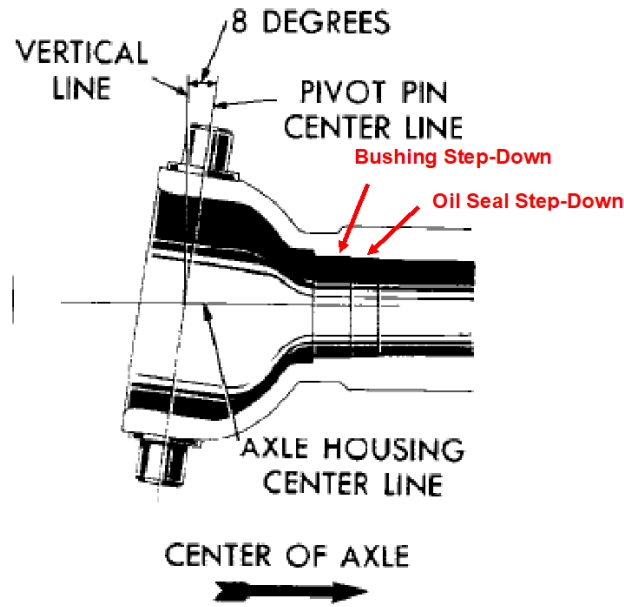
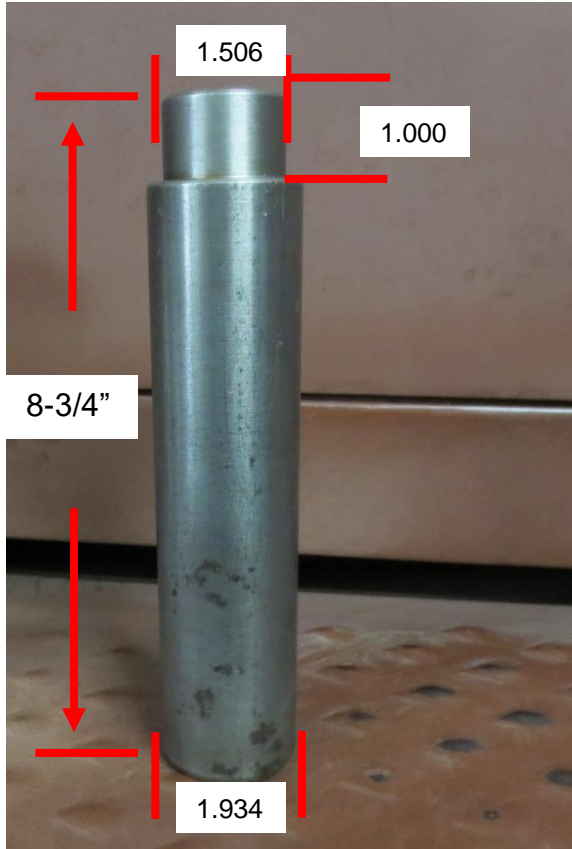
Per Army Technical Manual TM 9-2320-212-20

- Steering Knuckle 5 Bolts – Tighten to 80-85 foot-pounds torque.
- Drive Flange Stud Nuts (6) – Tighten to 30-35 foot-pounds torque.

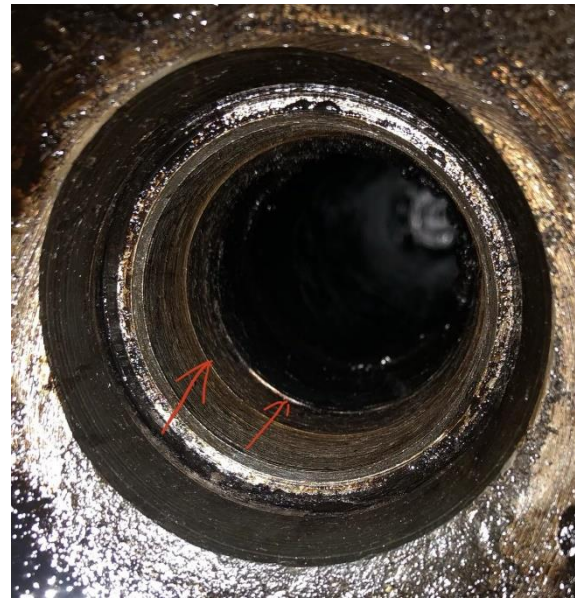
Per Army Technical Manual TM 9-8031-2

- Steering Knuckle Arm Screws (4) and Right Upper Bearing Cap Screws (4) – Tighten to 60-80 foot-pounds torque.
- Flange Lower Bearing Cap Screws (4) – Tighten to 60-80 foot-pounds torque.
- Upper/Lower Flange Haves Bolts/Nuts – Tighten to 80-85 foot-pounds torque.
- Felt Oil Seal Retainers 5/16 Cap Screws – Tighten till tight.

Steel Drift to drive bushing/seal in together.



RA PD 53462



Drift to drive lower cone bearing onto trunnion pin made using old cone race and bolt. Make sure you leave space when welding bolt, so you do not hit pin when driving on new cone bearing.

**TM 9-1808B
49**

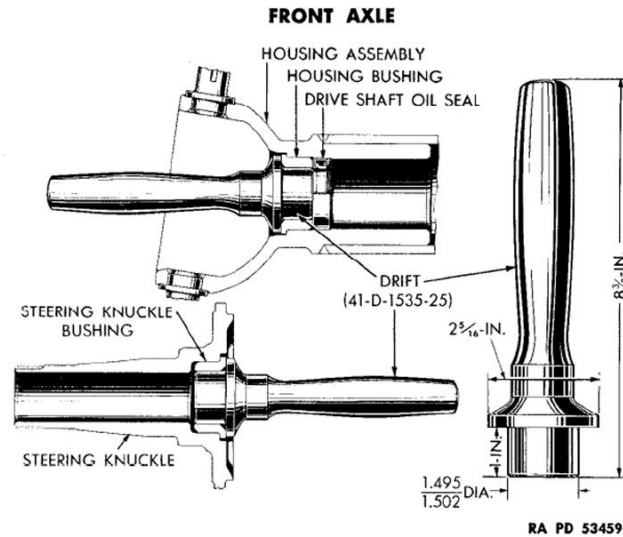


Figure 56—Oil Seal and Bushing Installation

RA PD 53459

RA PD 53462



Retainer, Spring and Felt Seal Assembly:

- Looking at the spring, it is cone angled. Place the large side of the cone in the retainer spring groove opposite side of retainer that attaches to the knuckle.

- Start the spring at one end of the retainer and feed it into the groove, do not try to feed it into the retainer by slipping it around the groove, and do not overlap the retainer joint with the spring, it must match the ends of the retainer. You may need to push against the spring end to adjust the ends. If the spring overlaps the joint, and you install it that way, you will have to remove the seal and spring before you can it get off the axle the next time.

- Soak the felt seals (long/short) in motor oil before installing the long seal in retainer.

- Start the felt seal at one end joint of the retainer and apply a good amount of pressure to press the seal into the groove. The seal will tend to flare out and hang against the sides of the groove, so have a flat screwdriver handy to press against the sides of the seal while pressing on the seal, working it, to slip it in. Press in till the seal stops and continue working it in around the retainer.

- Once the seal is in and you are at the next joint end, the felt seal may be a little long, if so, cut off flush to the retainer end.

- Twist the retainer to get it over the axle to install.

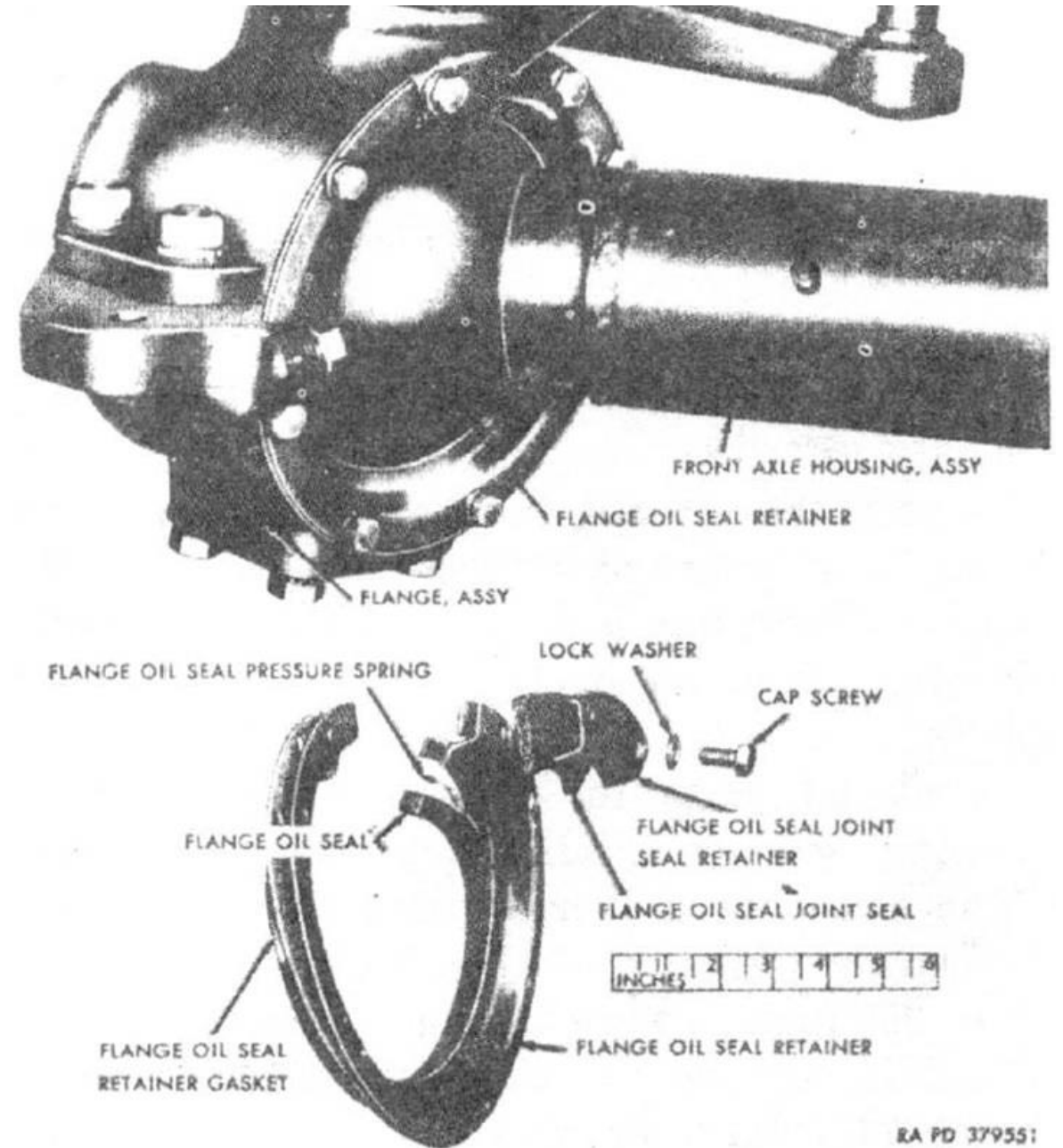


Figure 2. Steering knuckle flange oil seal assembly.

r. Installing Stainless Steel Balancing Beads and Valves



Remove the stem valve. You will need a fish tank vacuum to place beads in and gently feed into tube. Cut off the end of a plastic valve cap, screw it on the valve stem so hose will fit snugly over it to hold hose. Hold tube at an angle so beads will gather at end of tube at hose point. Gently tap end with finger to align beads in single file to enter tube.

[Stainless Steel Balancing Beads](#)

[Stainless Steel Balancing Beads Valve Core - Filtered](#)



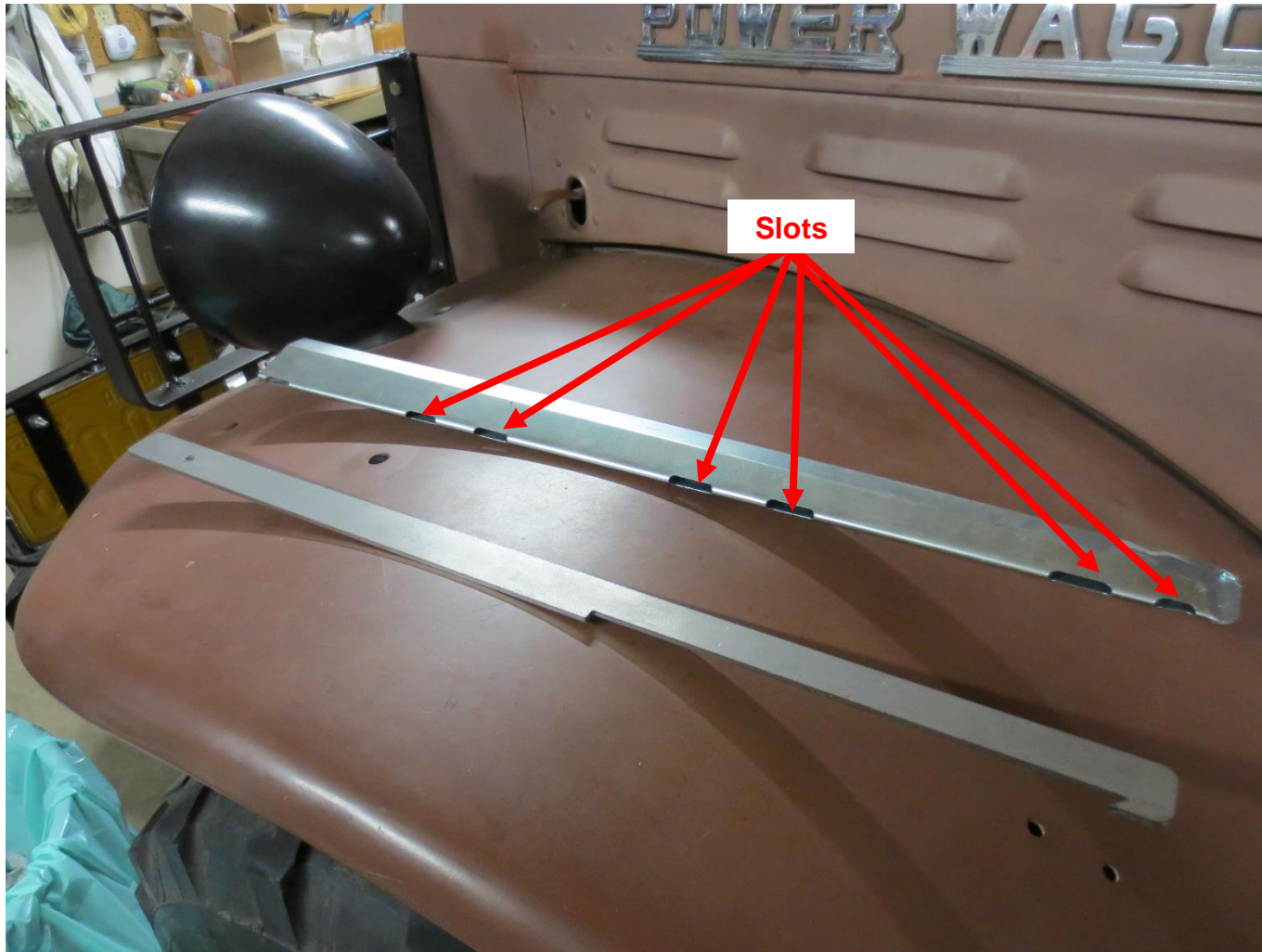
s. Installing a Locking Gas Cap

To install a Stant 10491 locking gas cap, you must remove about 1/2 inch off the air vent pipe. The material is hard, and the easiest way is to cut the material away from the tube using a plasma cutter or welder.

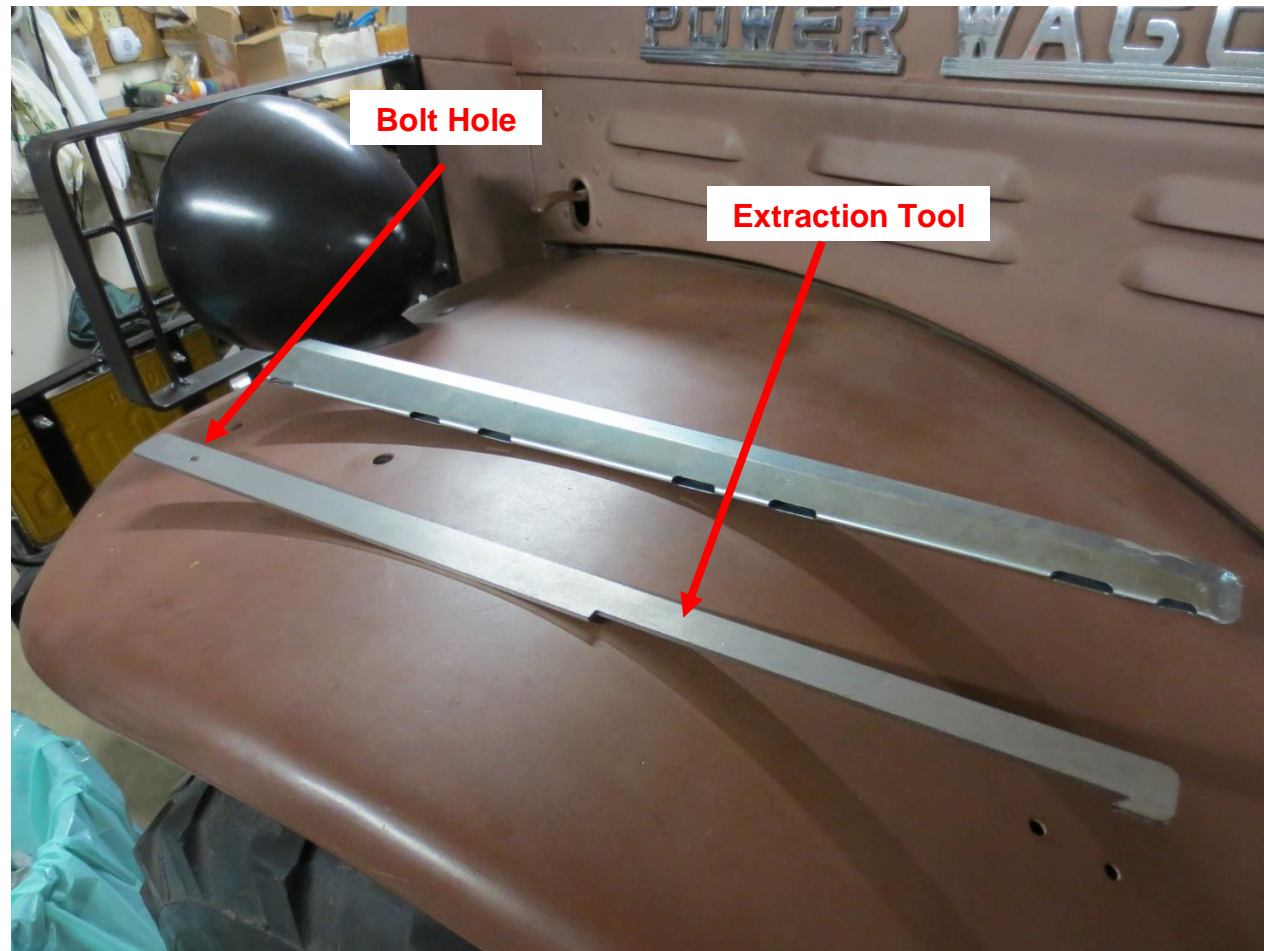


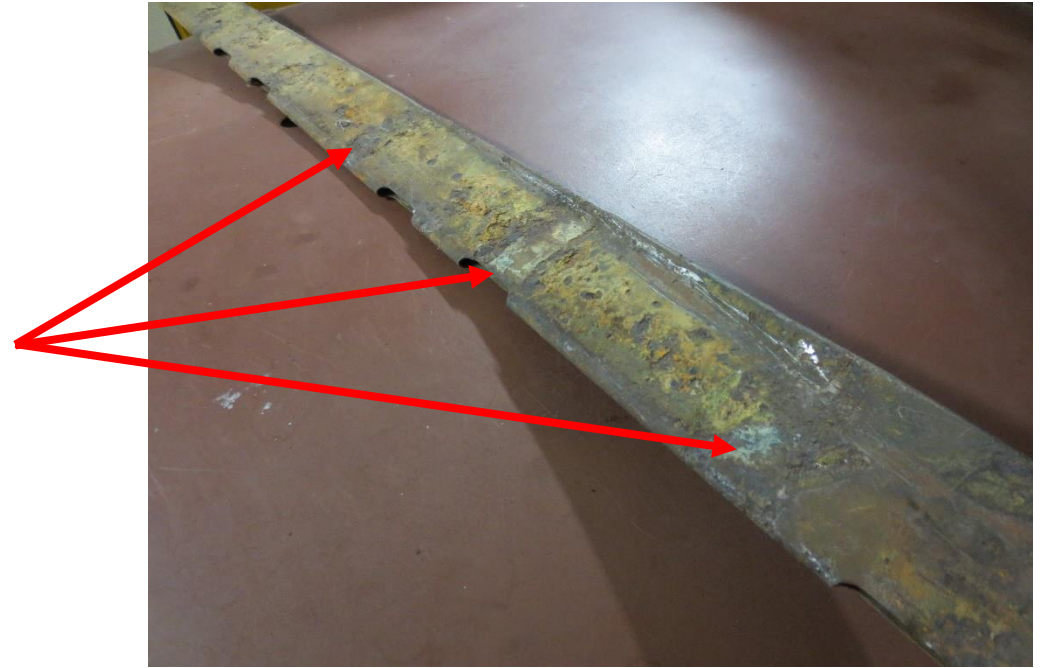
t. Water Distributor Tube Removal/Installation

These tubes come in two lengths: one for the 201, 218, and 230 engines and one for the 251 and 265 engines. The purpose of this tube is to pressure coolant to the exhaust valve seats to cool the seats and aid in circulation of coolant. There are six slots in the tube below to achieve this.



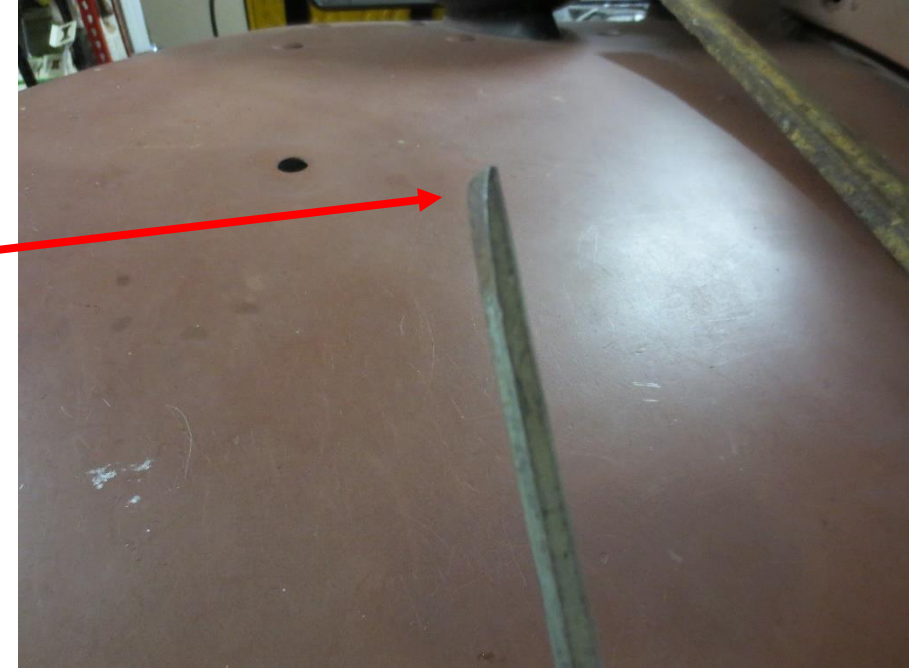
Depending how long the tube has been in the engine, it can really be rusted and stuck to the block. The image below shows where it was rusted to cylinder walls. In that condition, the tubes can be extremely hard to extract. Some suppliers provide a tool along with the tube to help extract the tube, and when that fails to extract the tube, there are other ways to do it as discussed in the next pages. You can also try installing a 3/8ths bolt to tap against with a hammer.





To loosen the tube from the block, use a 36" x 1/4" rod, sharpen one end to a chisel point to tap along the tube on both sides to break it away from the block. You can see the score marks on the tube that was removed from an engine on the image below.

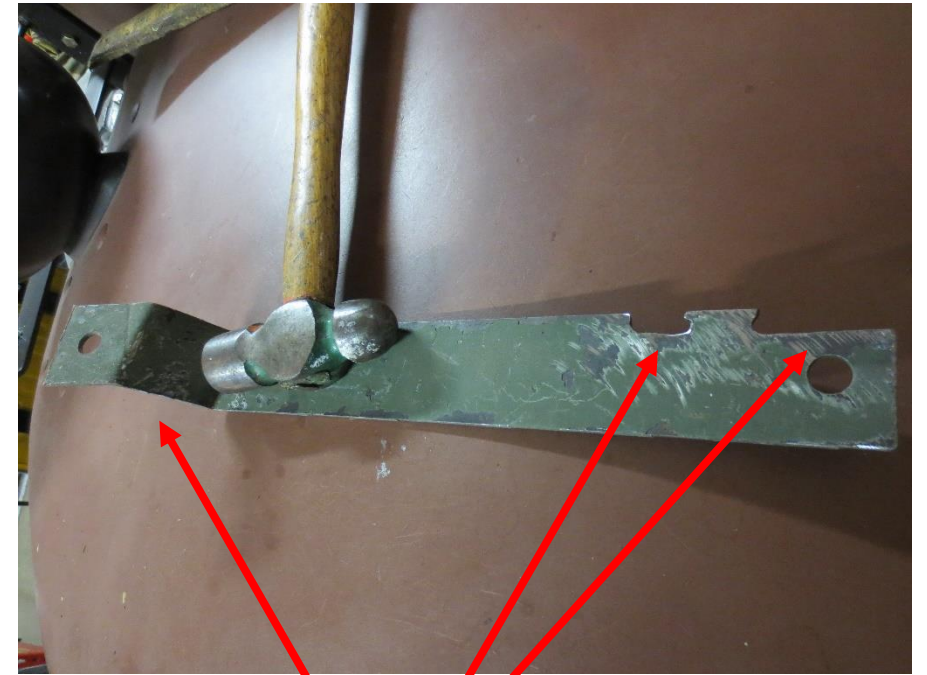
Chisel Point



Score Mark



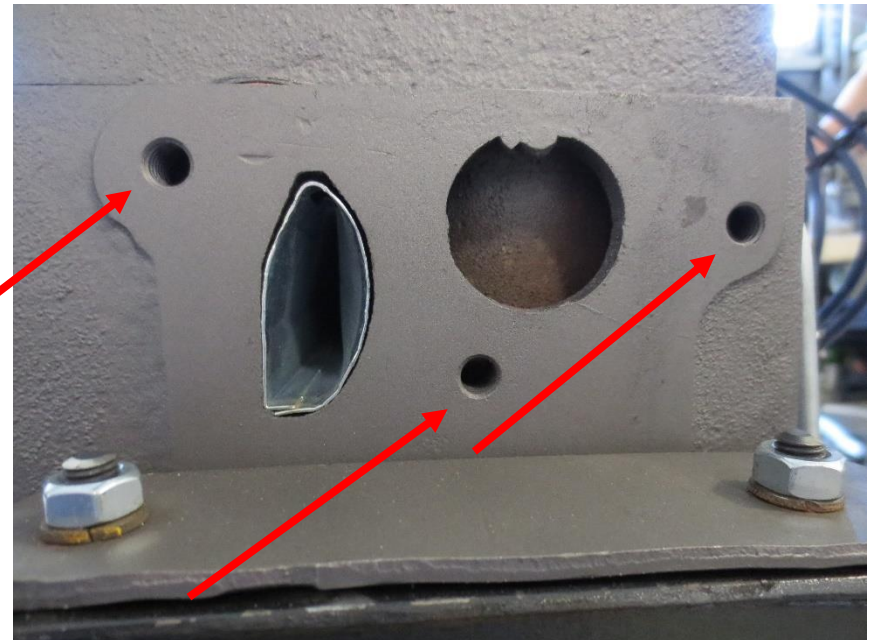
You can make a tool using a piece of flat stock that will slip into the tube. Cut a notch at one end to insert in the tube at the first cut and bend 90 degrees on the other end to strike with a hammer close to the flat stock. This method will easily remove a stubborn tube. Once the old tube is out, tap the new tube in using a hammer and block of hard wood.



Typical installation requires the tube to be flush with the engine block. The tube in the image to the right would be considered installed.



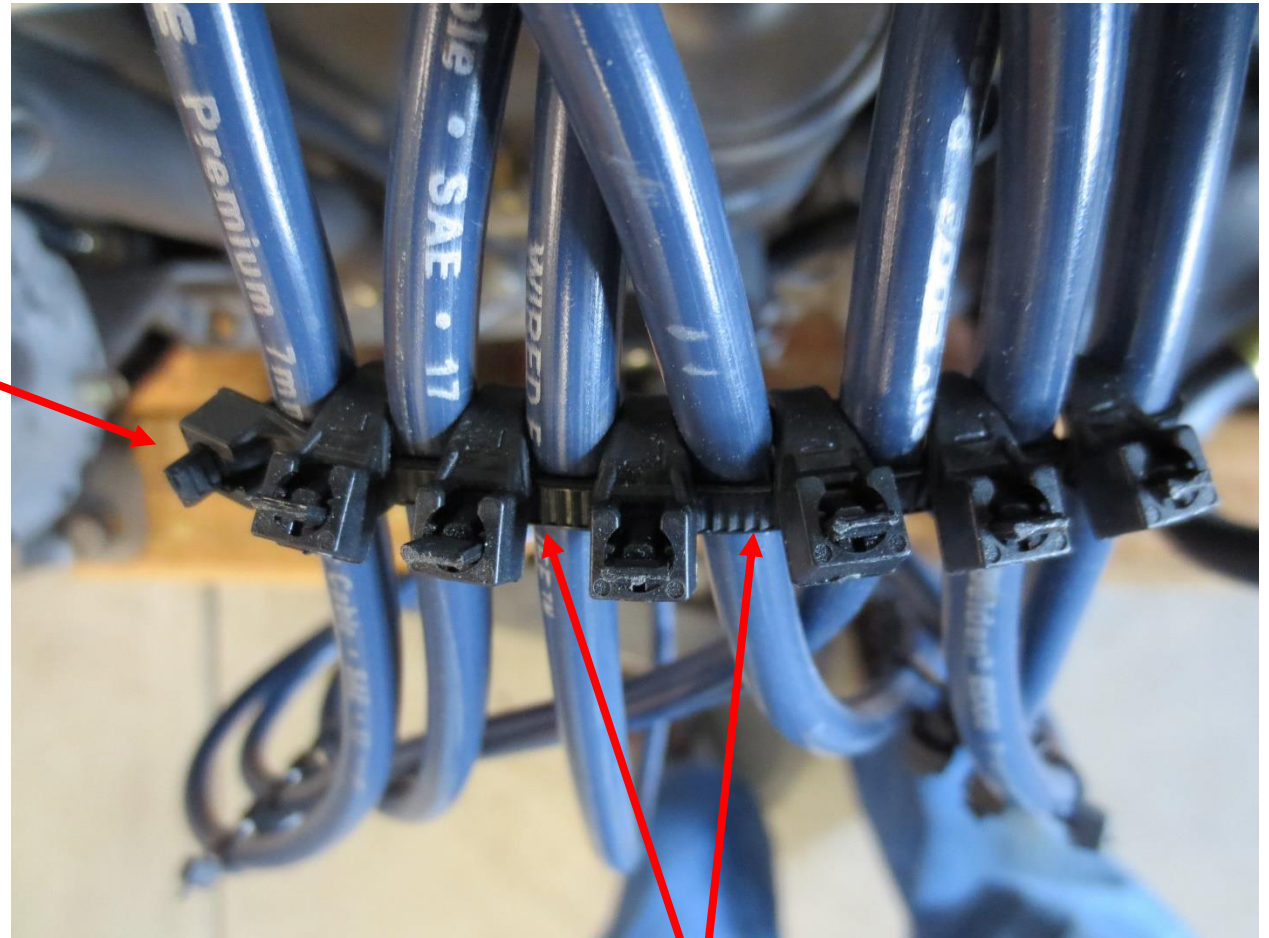
For those of you who may want improved cooling, take a blunt punch, and flare the tube to the side of the block. This will force more coolant to the exhaust valve seats and aid in coolant circulation. Consider replacing the three water pump steel bolts with stainless steel.



u. Use Plastic Zip Ties to Separate Ignition Wires

1. A neat way to separate ignition wires to prevent cross over, is to use plastic zip ties to separate the wires. Use one tie to span the wires, connect, but keep loose. Then use a tie to separate each wire. Once all wires are separated, tighten the spanned tie.

Spanned tie



Spanned tie

v. Knuckle/Spindle Redi-Sleeve Installation (under development)

Here are some instructions for installing a Redi-Sleeve on a knuckle or spindle that has a groove worn by oil seals.

1. In this image there are two worn grooves caused by using a double lip oil seal. To provide a good seal surface the spindle will be prepared for a Redi-sleeve.



2. To install the Redi-sleeve, you will need a tool in addition to the tool that comes in the kit. Cut the cage off old wheel hub bearings and use the races. Cut two flat stock pieces 2.5 inches long. Place the pieces together as shown in the image to the right. If the flat stock is not cut to equal lengths, the short piece will fall off. Cut a little off the end of the long piece till both remain on the spindle. Use the wheel bearing nut and turn the nut to press on the sleeve.



w. **Truck Build Card Contact**

Build card contact: danielle.szostak@fcagroup.com

x. DIY Transfer Case Lever Mounting Shaft Replacement

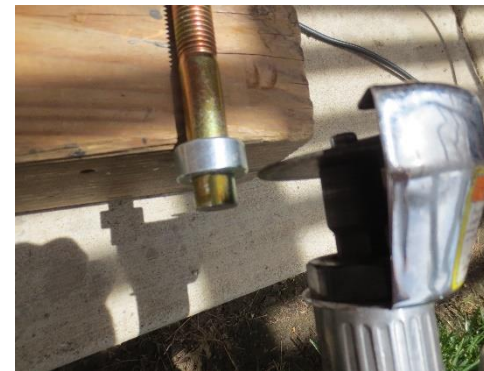
1. Start with a $\frac{3}{4}$ x 5-inch bolt and cut the head off.



2. Measure to the old shaft and ensure the length of the shaft is long enough to accommodate the lever bushings. Use a shaft collar as a guide to cut consistent groove around the shaft.



3. Using a cut-off tool or other tool, cut a groove around the shaft the depth of the old shaft.



4. Next, you are ready to grind the end to the old shaft diameter. Be sure to keep the grinder parallel to the shaft for a straight grind. You can roll the shaft back and forth on a block of wood to facilitate grinding.



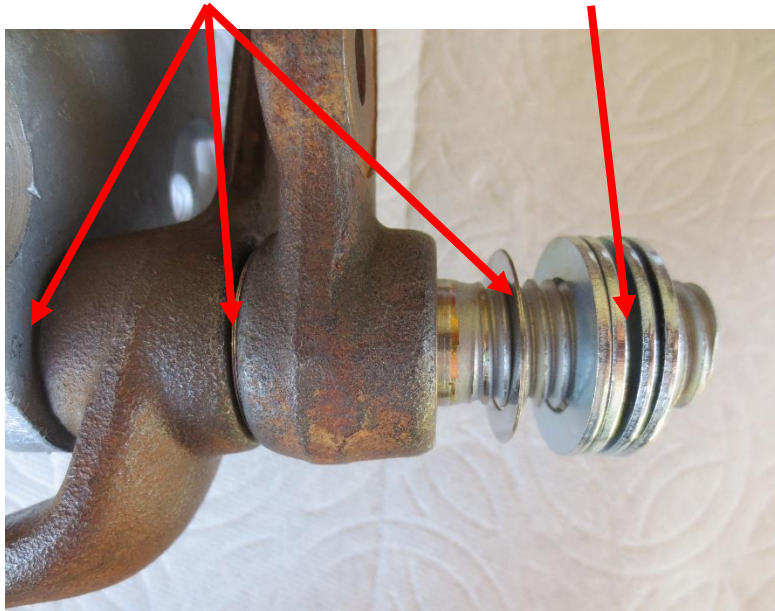
5. Next, check for straightness to the plate, and weld up.



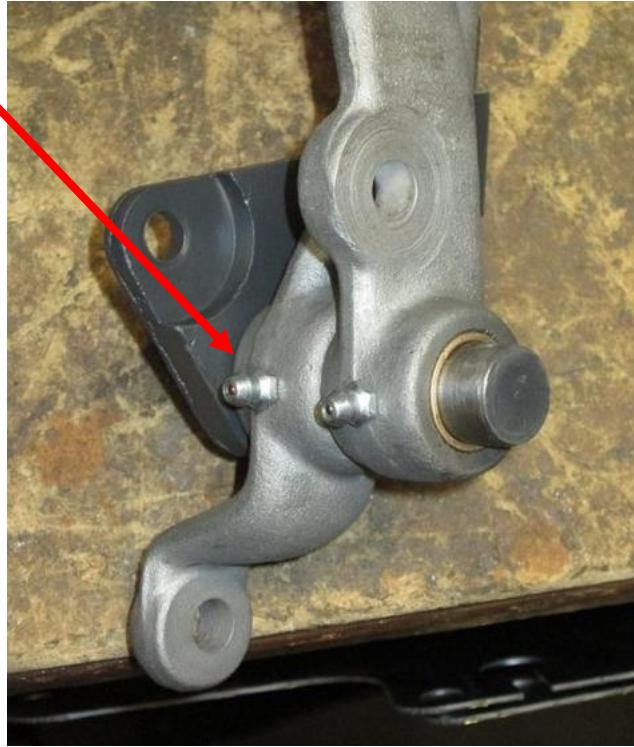
6. Next, assemble the pieces and tighten till levers cannot be moved, and back off $\frac{1}{4}$ turn or until you get the desired tightness. This fix allows turning the extreme vibration lock nut as needed to keep the desired tension on the levers to prevent lever vibration. Wear on shaft and lever bushing is do to the levers vibrating side-to-side. The next page shows steps others have taken to prevent vibration.

Two 0.010 SS Shims

Four Machine Bushings



**Zert fittings
installed.**



**Wave or tension washer between the
levers and studed spherical rod ends on
the rods.**

y. Working with Larger Electrical Cables

1. Some items to remember:

- A good crimp is superior to a poor solder joint and vice versa.
- A good crimp is superior to a good solder joint. Soldering heats the wire making it more brittle. This is more important the finer the individual strands of wire and applications with vibration. The transition between soldered wire and non-soldered wire is where it breaks.
- A dimpled crimp is NOT a good crimp. If you cut a good crimp apart you cannot tell where the ferrule ends, and the wire begins or pick out individual strands of wire. You need a hydraulic crimper to accomplish a good crimp (they are not expensive) or you can order your choice of wire to length with crimped on ends.

2. A comparison of 1 Gauge Automotive cable and 2/0 Welding cable.



z. Installing Rear Main Seals, Oil Pan Gasket, and Oil Pump

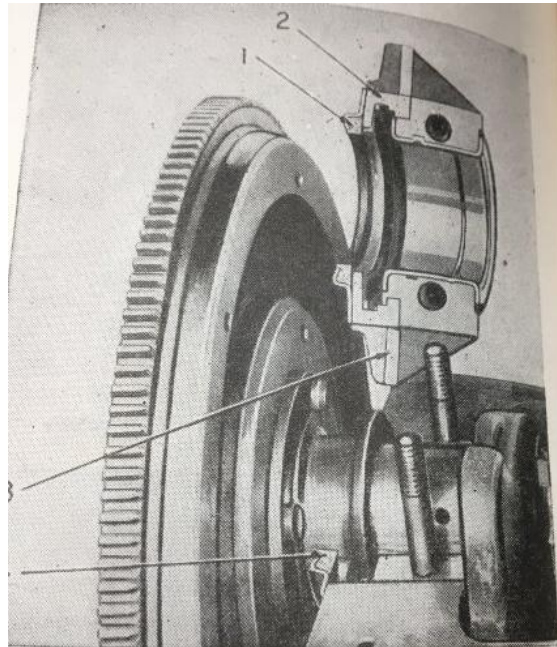
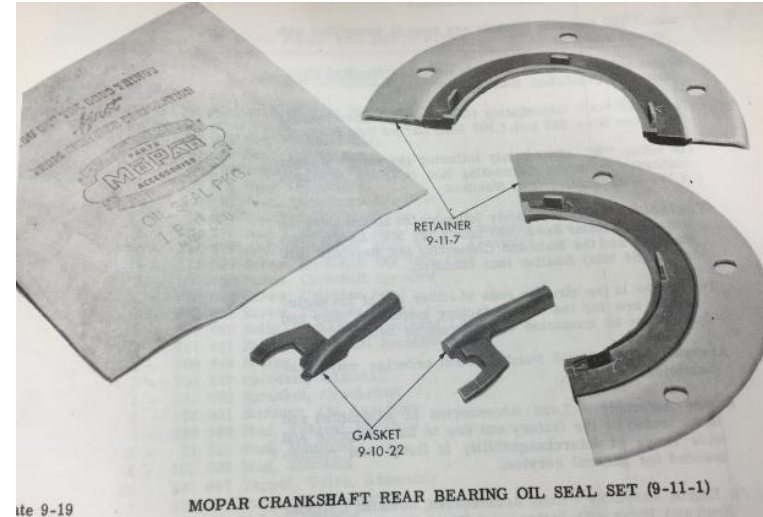


Fig. 20 Crankshaft rear oil seal. 1935-50 six-cylinder and 1935-38 Chrysler eights. 1 and 4. Bearing oil seal. 1 and 3. Gaskets

MAIN BEARING OIL SEALS

Chrysler, De Soto, Dodge, Plymouth, 1935-50—Locate the seals and gaskets carefully before the cap is installed, as shown in Fig. 20. To replace the upper seal, it is necessary to remove the fly-wheel.

On 1939-50 Chrysler Eights, the front and rear main bearing caps have square cut grooves in their sides in which rubber seals are inserted ("1" in Fig. 16). When installing these seals, use a prick-punch at an angle to upset the bottom of the groove in the cap slightly so that the rubber seal will not slide out of place while the cap is being installed.



ite 9-19

MOPAR CRANKSHAFT REAR BEARING OIL SEAL SET (9-11-1)

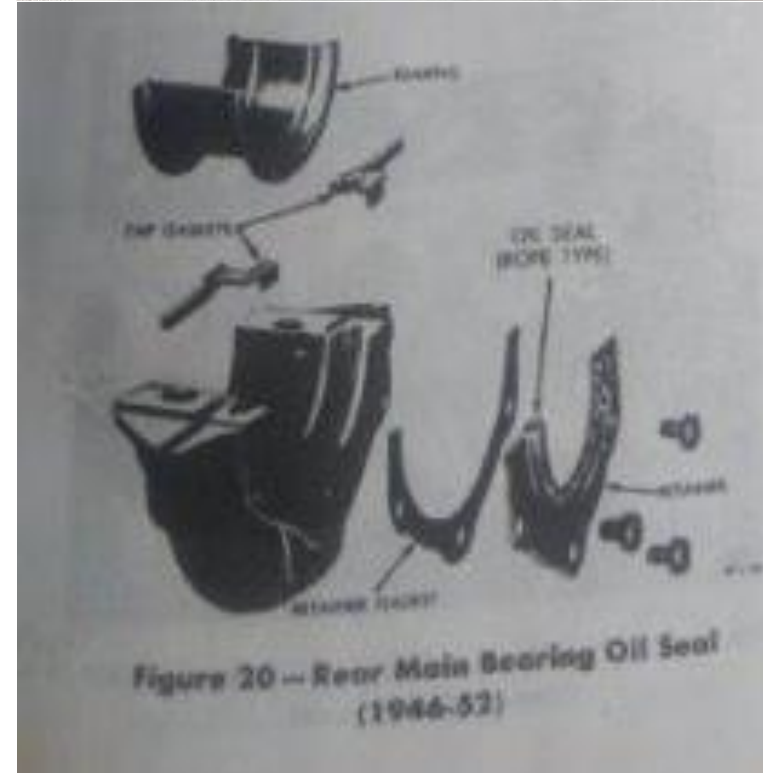
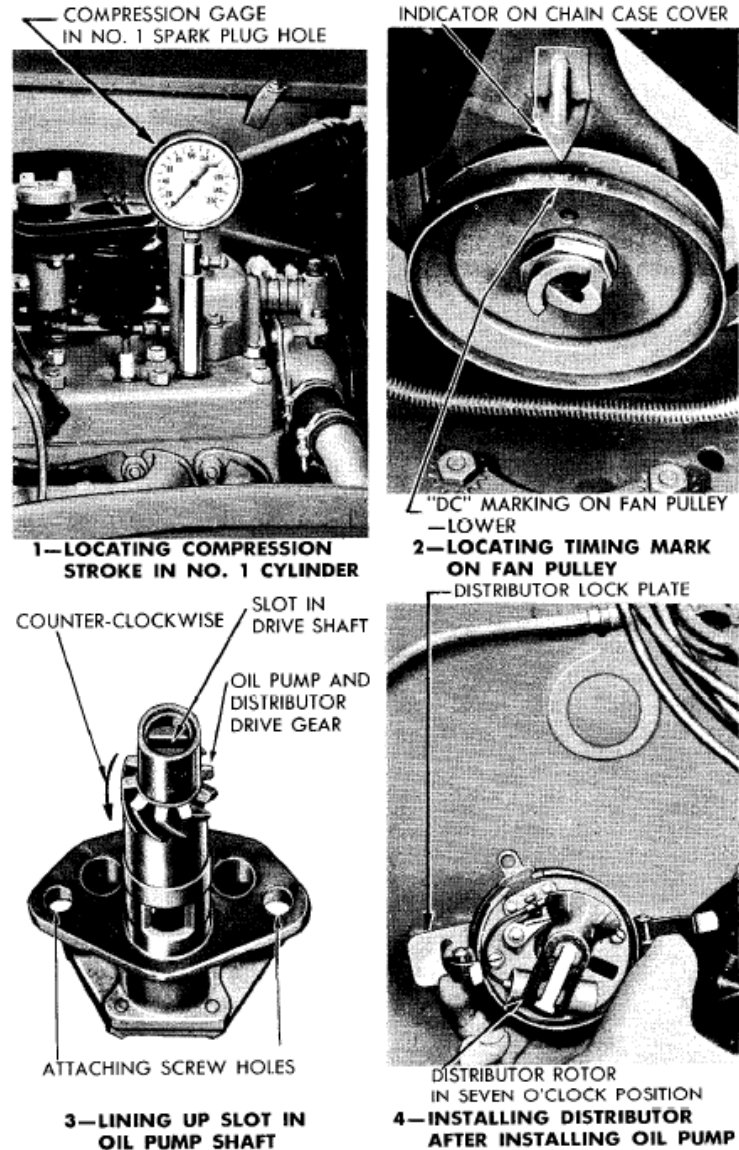


Figure 20 - Rear Main Bearing Oil Seal (1946-52)

**ENGINE—DESCRIPTION, MAINTENANCE, AND ADJUSTMENT
IN VEHICLE**

60. OIL PAN.

**ENGINE—DESCRIPTION, MAINTENANCE, AND ADJUSTMENT
IN VEHICLE**



¾-TON 4 x 4 TRUCK (DODGE)

the side gaskets in place with heavy cup grease or tie in place with light string through several bolt holes. Lift the pan into position,

¾-TON 4 x 4 TRUCK (DODGE)

arrester to frame side member. Lower dust pan sufficiently to permit removal of oil pump. Remove the two cap screws from the oil pump mounting flange and remove pump.

e. Installation of Oil Pump (fig. 69).

(1) **SET CRANKSHAFT IN PROPER POSITION.** Remove distributor cap and disconnect the primary lead wire at the distributor. Remove the distributor lock plate screw and lift out the distributor. Remove No. 1 spark plug. Crank engine by hand and check for compression on No. 1 cylinder by holding thumb tightly over spark plug hole or by installing a compression gage in hole. When compression is felt by thumb or shows on gage, turn crank until indicator points to "DC" on crankshaft fan pulley (fig. 69).

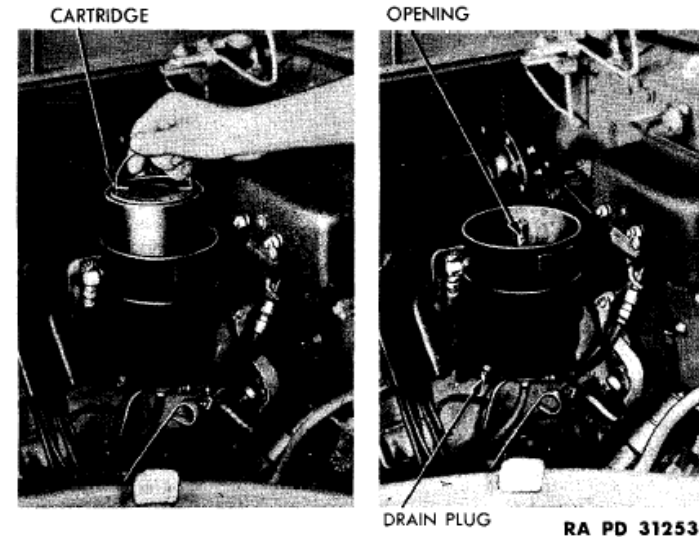


Figure 70—Oil Filter

(2) **INSTALL OIL PUMP.** Turn pump drive shaft until the slot in end of drive shaft lines up with the bolt holes in mounting flange. Then turn drive shaft gear one tooth counterclockwise. Install pump in cylinder block, being careful not to turn pump drive gear.

(3) **INSTALL DISTRIBUTOR.** Install distributor with the lock plate in position. Turn distributor rotor so that it points to seven o'clock. Rotate the rotor a little one way or the other to allow the distributor shaft to mesh with the oil pump shaft. Install the distributor lock plate screw. Attach distributor primary lead wire to distributor filter and install distributor cap. Install spark plug. Adjust ignition timing

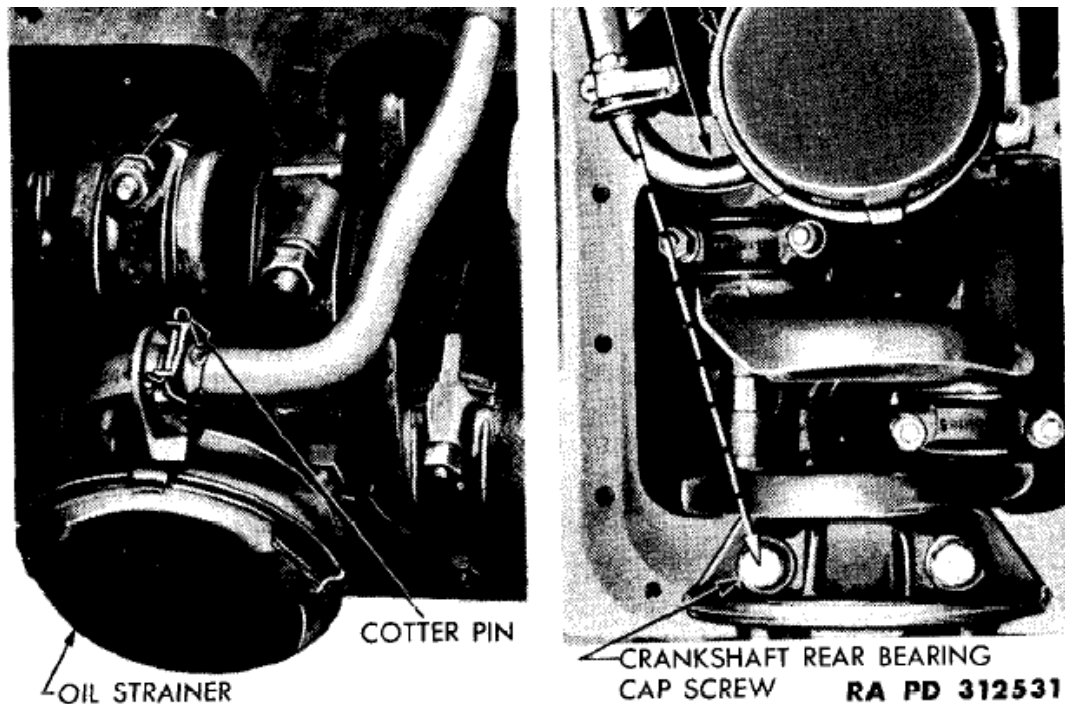


Figure 66—Floating Oil Strainer

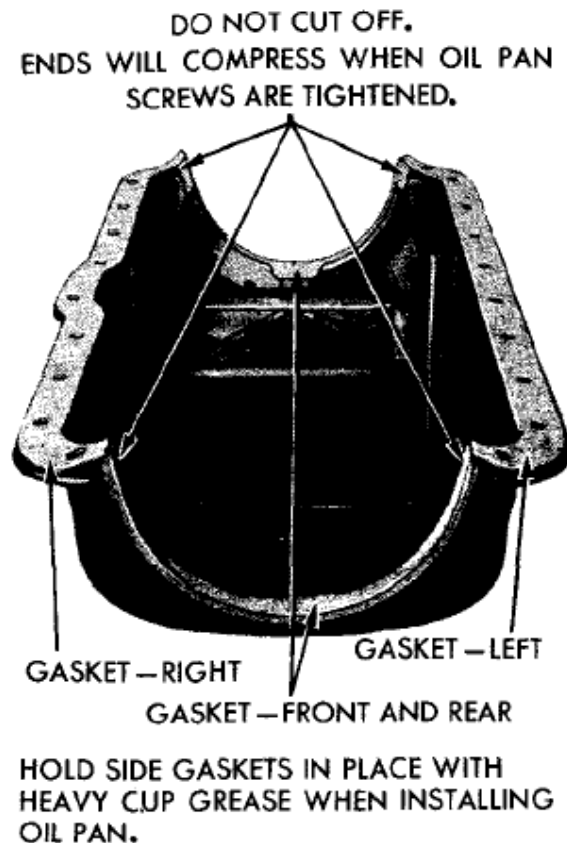
b. **Cleaning.** Scrape all traces of the old gaskets from the oil pan. Clean and wash strainer and oil pan thoroughly with dry-cleaning solvent.

c. Installation.

(1) **INSTALL OIL STRAINER** (fig. 66). Position plate on strainer and close the plate lips. Then connect strainer to the oil pump suction pipe and insert new cotter pin. Make sure the strainer is positioned so that its movement is not restricted by the oil pan baffles. Aline strainer assembly so that pipe is in relation to crankshaft rear bearing cap screw as shown in figure 66.

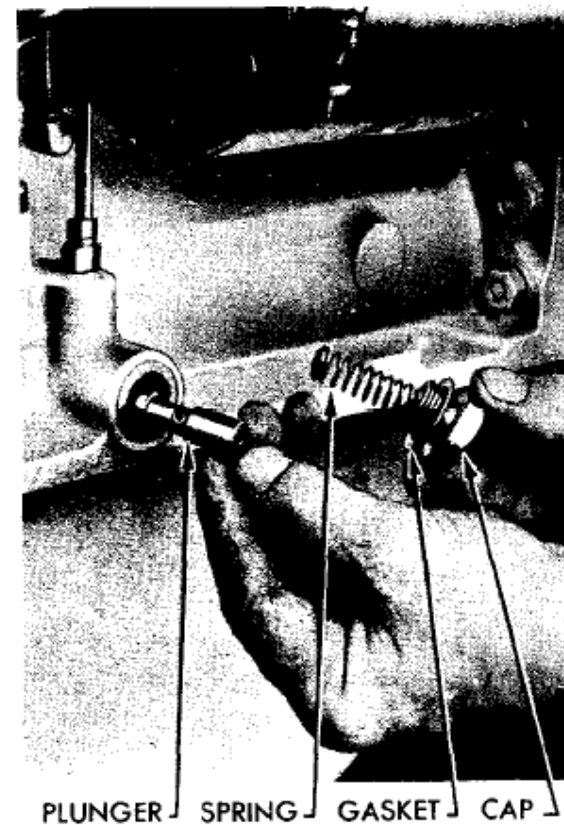
(2) **INSTALL OIL PAN GASKETS AND OIL PAN** (fig. 67). Install new gaskets on the pan. Install the end gaskets first. They will protrude $\frac{1}{8}$ inch to $\frac{1}{4}$ inch above the oil pan. Do not cut off the ends of the gaskets as they will compress into place when the oil pan screws are tightened. Place side gaskets over the ends of end gaskets. Hold

the side gaskets in place with heavy cup grease or tie in place with light string through several bolt holes. Lift the pan into position, being careful that the pan gaskets remain in position and that the felt dust seal at the clutch housing is not interfered with. Install and tighten the attaching cap screws with lock washers. Remove the breather pipe air cleaner and fill the crankcase with engine oil (par. 24). Install oil level indicator.



RA PD 52780

Figure 67—Oil Pan Gaskets



RA PD 52889

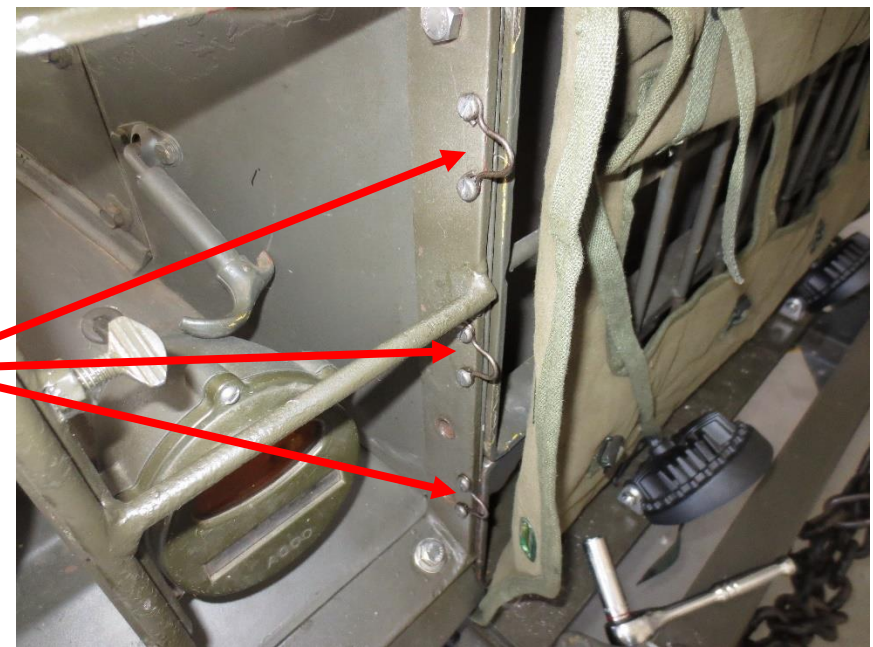
Figure 68—Oil Pressure Relief Valve

aa. **Installing the Artic Radiator Cover on the M37 Truck**

1. The first thing you want to do is install the flat loops at the top of the radiator grill. Using a marker, mark the grill where holes should be drilled to attach the loops. The top four flat loops are centered at each bolt. Using a 5/32 drill, drill the holes for the screws. Using a 10-24 tap, thread the holes for the screws. Install the four flat loops using screws. Use a threadlocker such as Permatex Orange Threadlocker to secure the screws. Attach the cover using the four brass slotted grommets and lace the hold down straps through the four grommets. The TB 9-2855-45 Army Manual was used to install the cover.



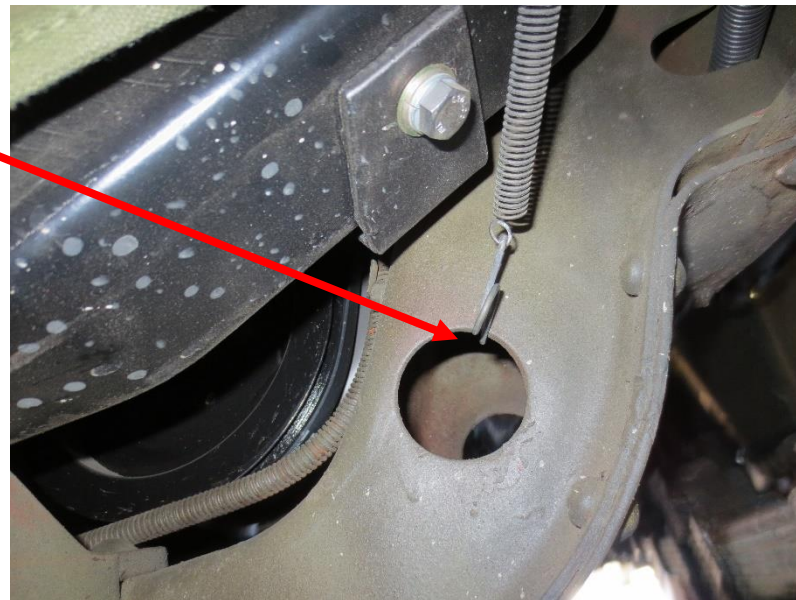
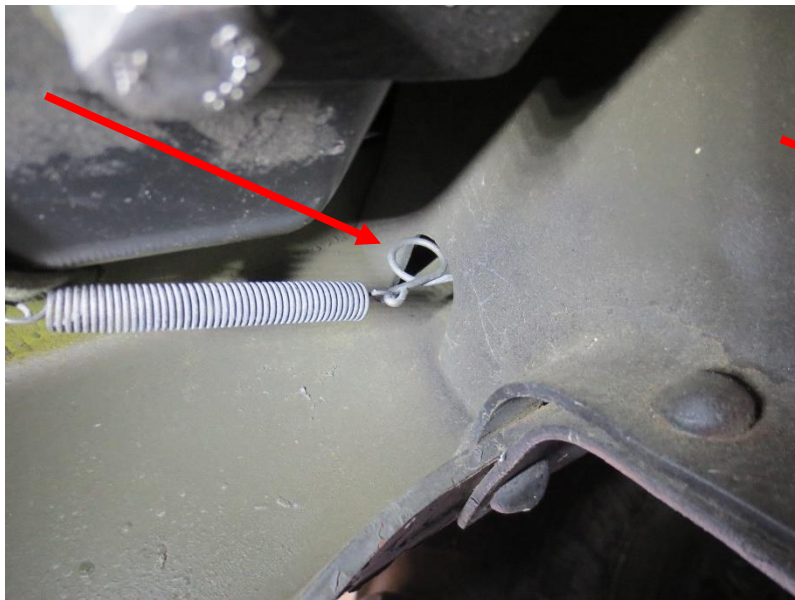
2. The next step is marking the side flat loops by placing the loop on the headlight guard, lining up the brass slot grommet with the loop and marking the holes. Remove the guard, mark drill points on the opposite side of the guard to facilitate drilling and taping. Install the brass grommets on the flat loops and lace the hold down straps. Complete both guards. The angled wire loops and sheet metal screws are not used.



3. Next, lace the hold down straps down through the loops and secure at clip at bottom looping the strap around the wire lock.



4. Next attached the left retaining spring to the left hole of the cross member, and the right retaining spring to the right crossmember hole. Installation is now complete.

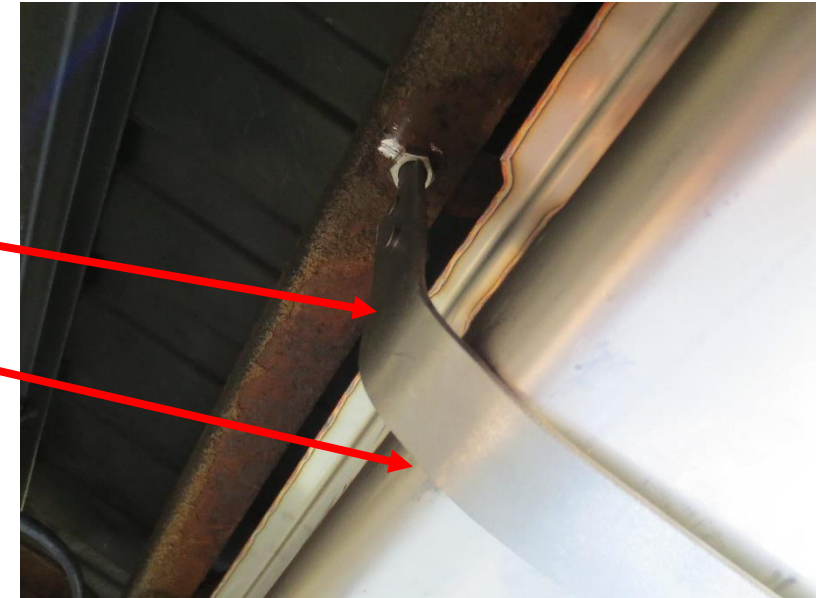


bb. **Installing the SS Fuel Tank on the M37 Truck.**

Installing the tank is straight forward, however, you will have to re-bend the lower tank straps of both the original and reproduction straps. The SS tank is larger requiring this step.

Original Bend

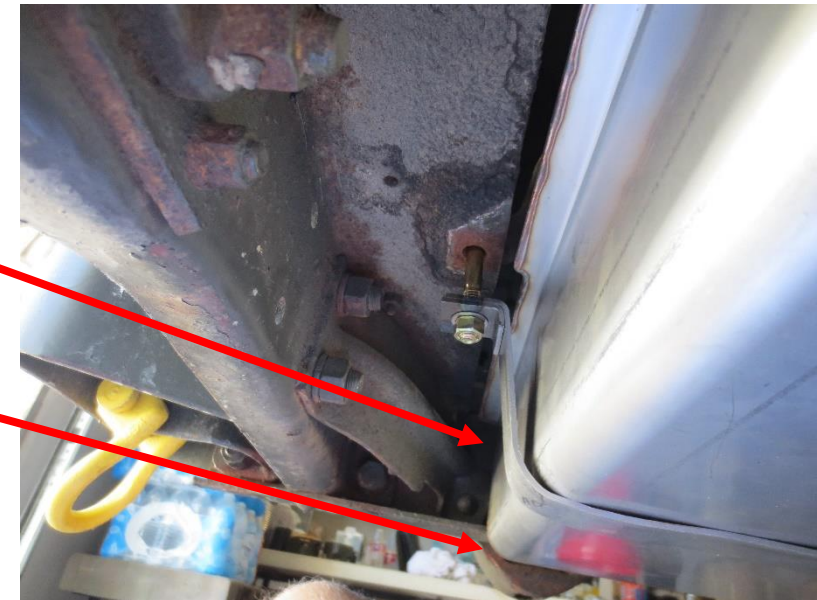
New Bend



Stage the tank in the upper straps and hold the tank in place using a jack or other means. Using two large "C" clamps and a buddy, re-bend the straps. As you can see, the straps are about 1-1/2 inch shorter do to the size of the SS tank. Use 3/8 bolts and self-locking nuts or add metal to lengthen the strap to attach to the original bracket.

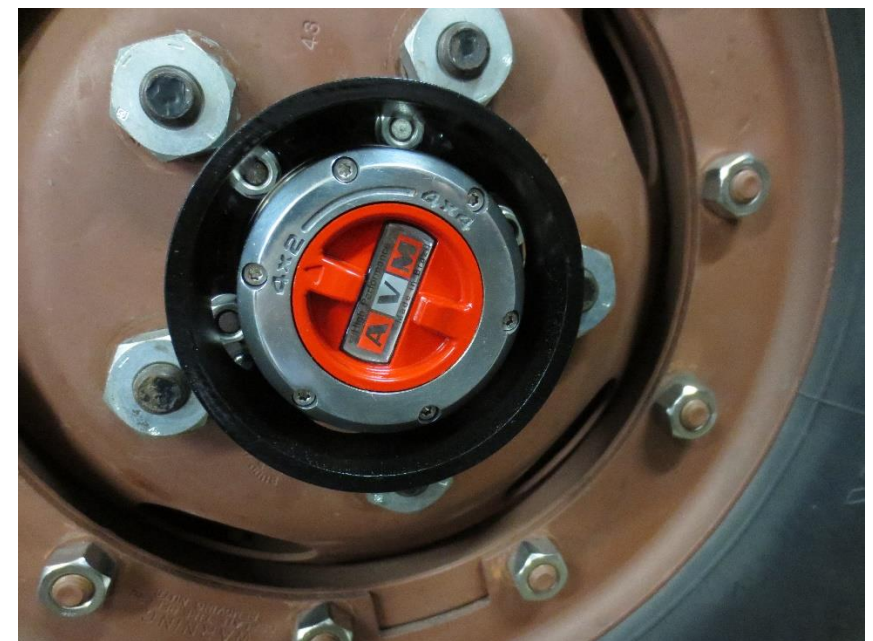
Original Bend

New Bend



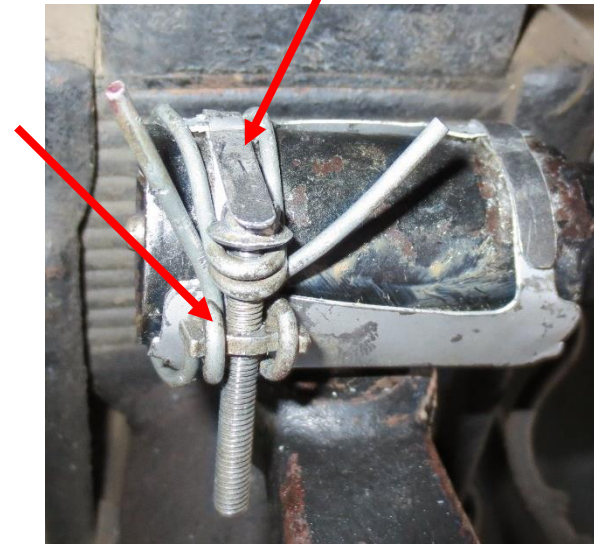
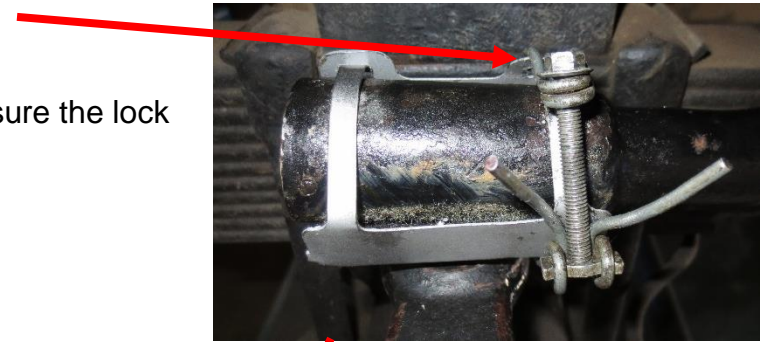
cc. Installing Manual Hub Protectors.

When installing hub protectors, you want to get as many threads of the nut on the stud as possible. Using thin SS internal lock washers will allow you to use the stock nut with approximately 90% of the threads for a secure hub. SS internal washers used here that comply with Military Standards and hold better than the original split lock washer. The internal SS lock washers are available from McMaster-Carr part # MS-35333-76. You can use internal or external as you prefer. Make sure you tighten the hub protector before you install the outer portion of the manual hub or you may not have access to the nuts.



dd. **Installing Drag Link Dust Covers for a Tight Fit**

- 1) Using a coolant wire clamp, open the clamp till it fits over the tube, slip it on the metal cover. Make sure the lock strip is between the wires.
- 2) Periodically grab the lock strip with channel locks and push towards engine to take out slack.
- 3) Continue to tighten until clamp is tight. Before releasing clamp, bend the lock strip to lock tension.



- 4) You now have a tight cover when finished.



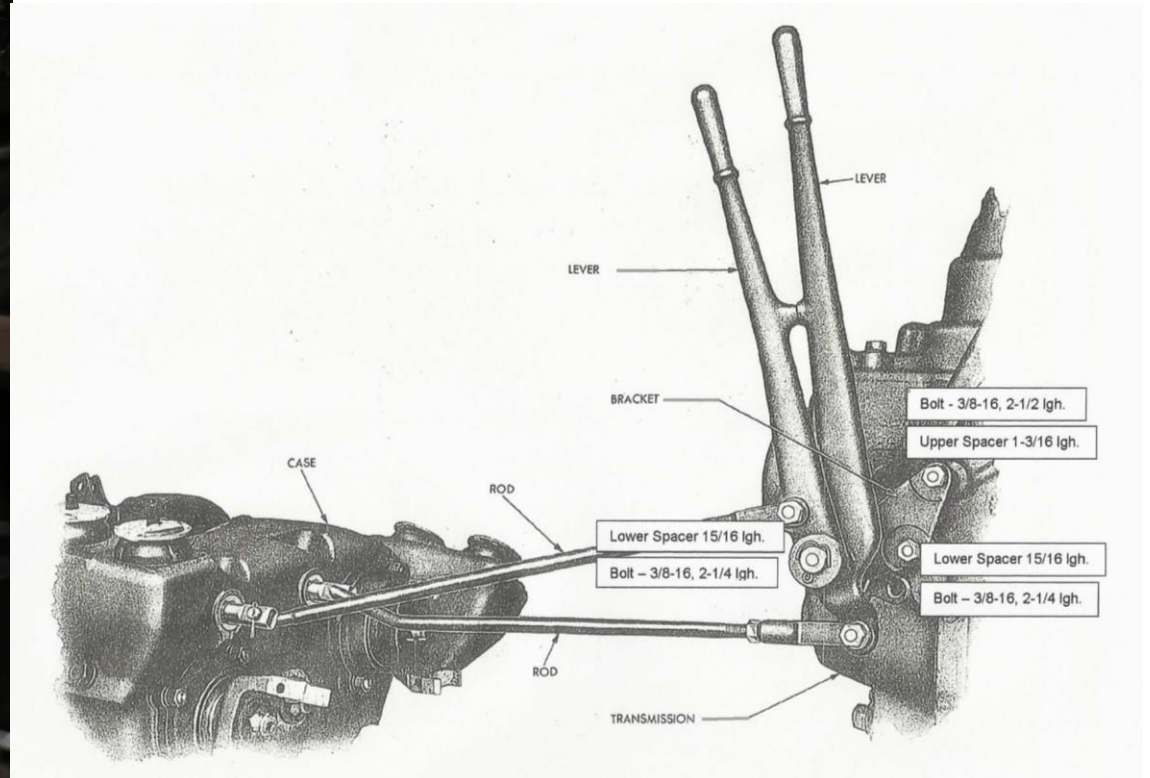
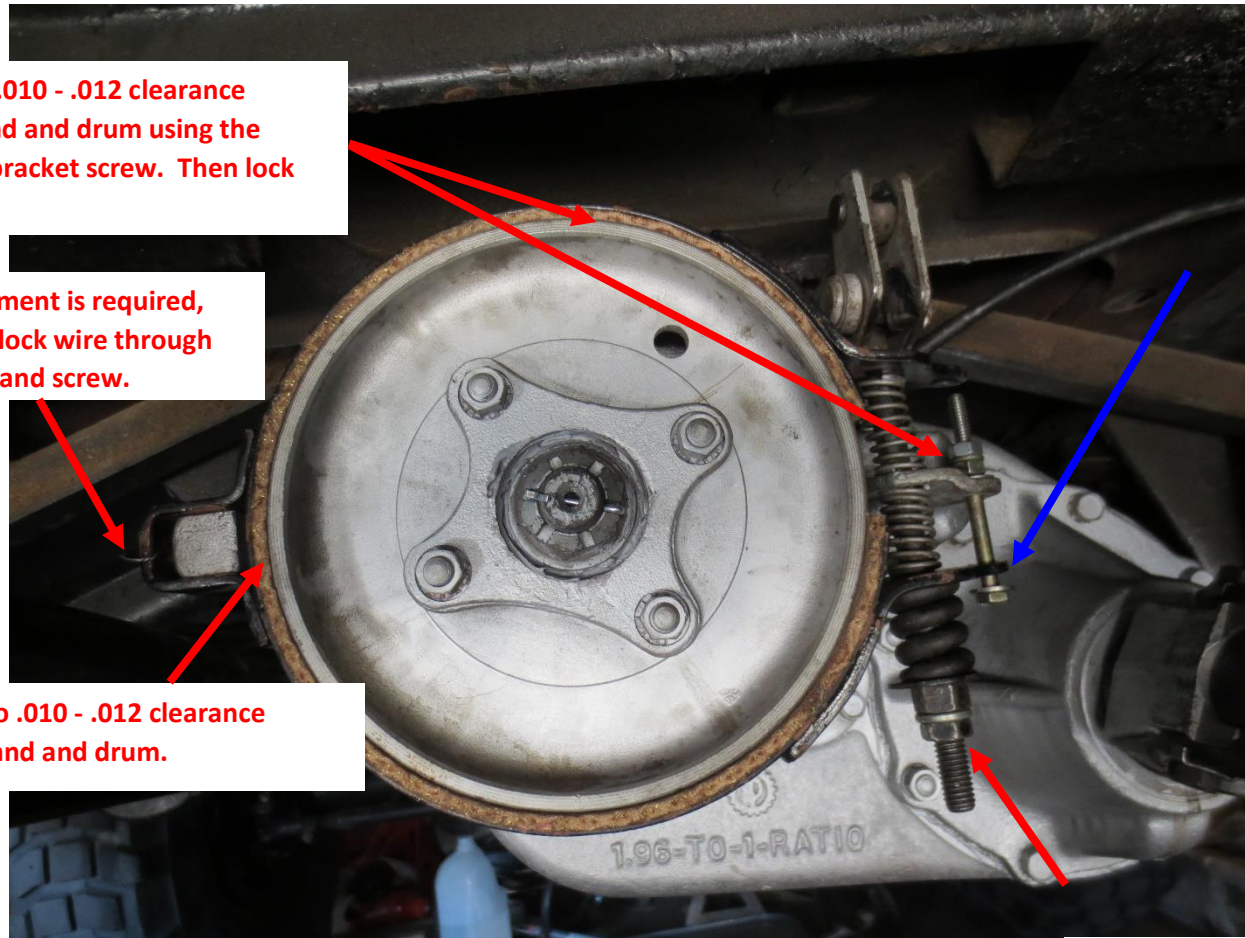
ee. **Parking Brake Adjustment**

1. Make sure the brake lever is fully released and all the way forward before adjusting the band. **Note – the hand brake has been pulled back on this image showing more clearance on the adjusting bracket screw than normal.**

C. Adjust to .010 - .012 clearance between band and drum using the adjustment bracket screw. Then lock down nuts.

B. If adjustment is required, install new lock wire through anchor clip and screw.

A. Adjust to .010 - .012 clearance between band and drum.



D. Turn adjusting bolt nuts until adjust bracket screw is just relieved of tension, then tighten.



ff. Installing B-3-PW to X3-WM300 and M601/M615 New Rear Engine Mount Rubber Insulators using M37 Parts.

1. The following parts can be used to replace broken and worn engine mount rear insulators using parts for the M37.



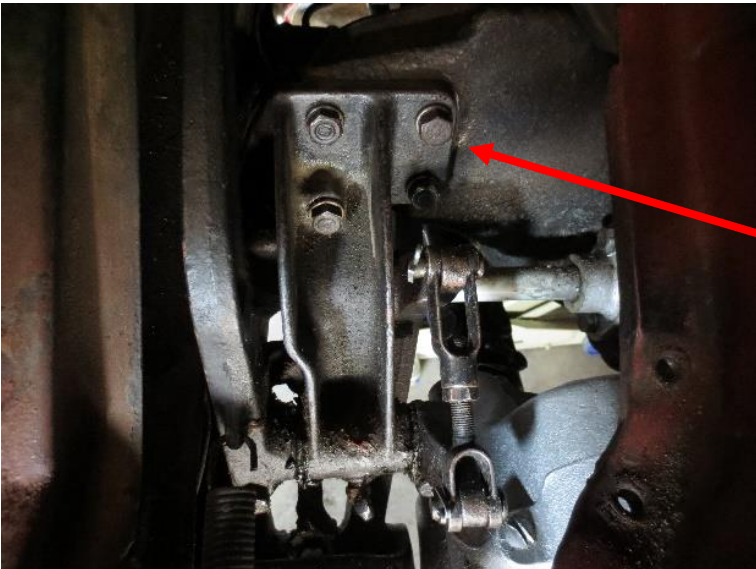
Spacer: C-1269528
NSN – 5365-00-737-3658



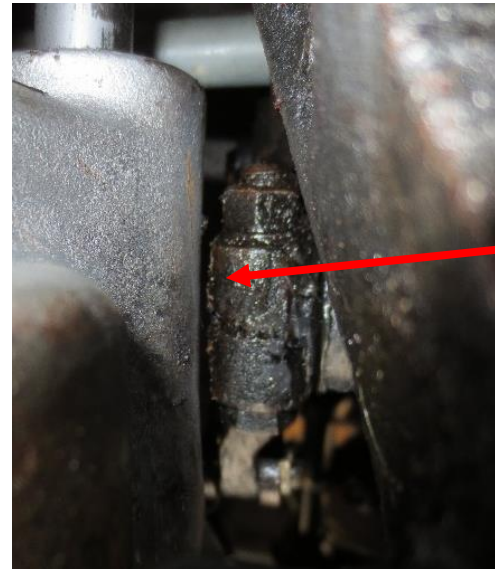
Upper Insulator: C-1269527
NSN – 5342-00-737-3655

Lower Insulator: C-1269525
NSN – 5310-00-737-3654

2. Release the Parking Brake Lever and push it all the way forward. It is helpful to remove the driver side cab floor plate to give access to the engine mount bolt, and clutch pedal mount. It is important to loosen the four bolts to adjust for maximum clearance between the PTO shift shaft housing area and the clutch fork lever.



Loosen the four bolts, grab the clutch pedal at the top and push to the passenger side. This will move the mount away from the PTO housing to prevent gear noise from transferring into the cab. Re-tighten the four bolts.

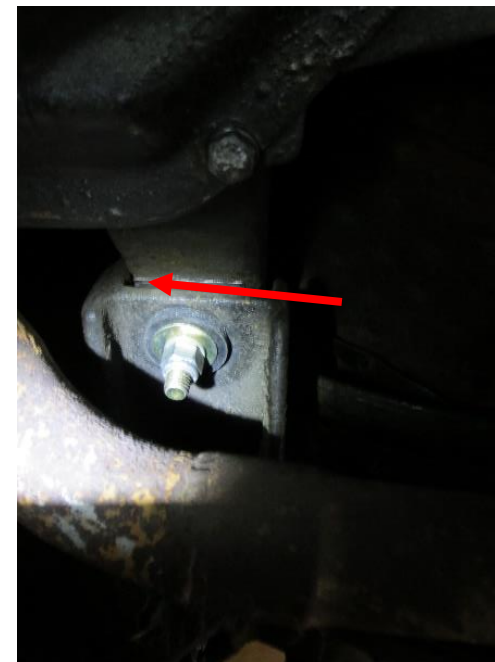


The image to the left shows the gap created by re-adjusting the mount. This is especially important if you have the After-Type or Big Spur Gear transmission.

3. To remove the spacers and rubber insulators, you may need to loosen the nuts on the front cab hold down bolts depending how low the cab sits.
4. Remove the bolts and nuts that hold the engine to the frame engine brackets.
5. Place a 2x4 between the transmission and clutch cover to rest against the bell housing. Using a floor jack, raise the engine enough to slide out the spacer and insulator. Placing the 2x4 on the side of the below the cover bolt will make it easier to lift only a side at a time. **DO NOT PLACE FINGERS BETWEEN ENGINE AND FRAME MOUNTS WHEN REMOVING/INSTALLING INSULATORS, USE SCREWDRIVER, WIRE OR OTHER TOOLS TO WORK INSULATORS OUT AND IN.**



Remove the spacer and insulator from the side of the mount. You Will need to work it down between levers. Arrow indicates direction.



Remove the spacer and insulator from the side of the mount and up past the bell housing.

6. After the old spacers and insulators have been removed from the driver's side, you will need to cut the lower washer and rubber insulator using a grinder to clear the frame engine bracket. Notice the gaps or cuts are different widths for the metal and rubber washers.



Make sure the insulator sits evenly in the frame mount when installed.



Make sure the insulator clears the side of the mount, and in the spacer. Tighten bolt/nut till tight. **Option** – Use a lock washer and nylon locking nut.

7. Images below show the insulators installed and the gaps between the PTO housing and the clutch fork lever.



gg. **Homemade TOOLS**

Rear Spring Bolt Extraction Tool - If bolt will not extract easily, use a 5/8ths blunt rod/hammer to drive bolt inward slightly to loosen, spray with penetration lubricant, then extract.



Hub Puller - Pulls front and rear hubs by switching the joint nuts/bolts to the opposite side.



Pinion Oil Seal Puller - Pulls front and rear seals. Use a 21/64 drill, then tap holes using 3/8-24 tap. Tighten bolts in seal before pulling.



Pinion Oil Seal Puller – Another method is to weld a pipe to the seal and then wiggle it out.



hh. **Exhaust Manifold Heat Riser Repair**

See link -- [Repair](#)



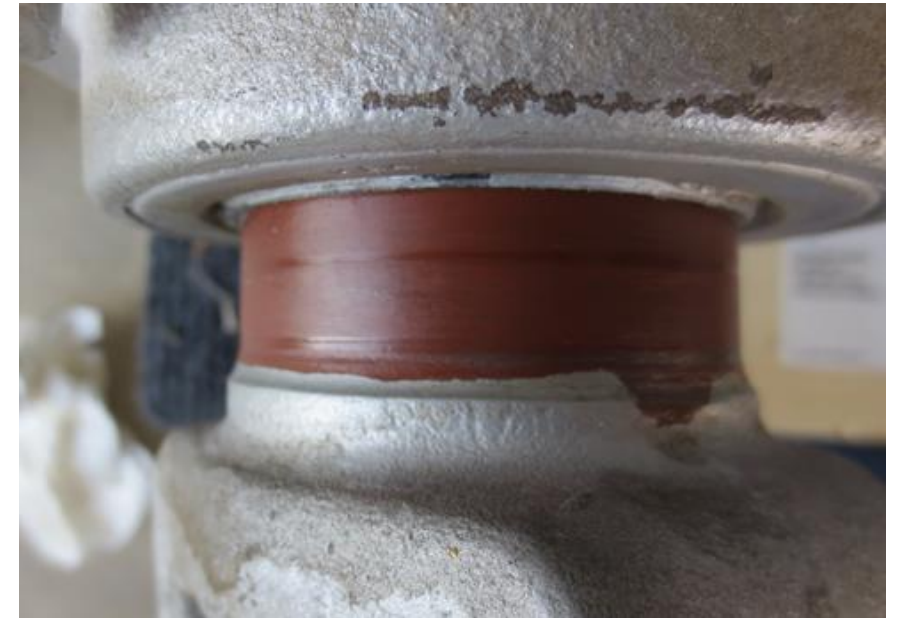
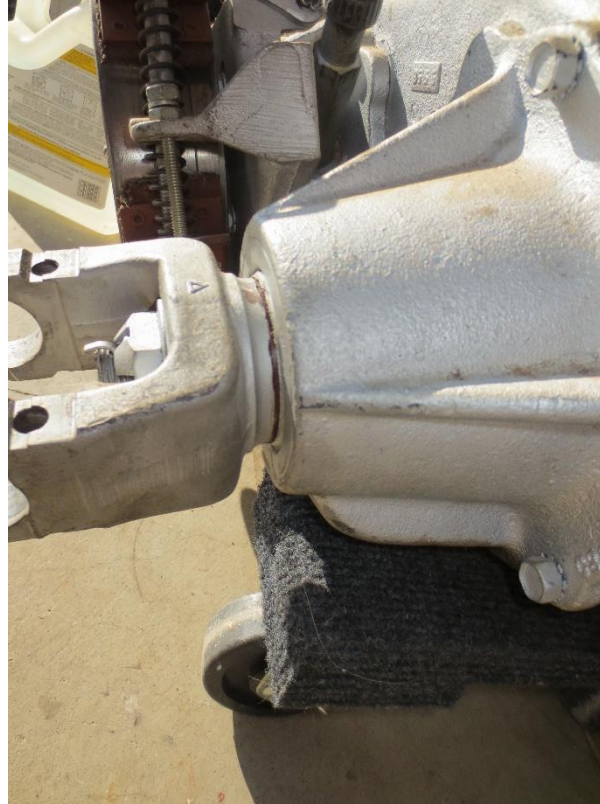
ii. Crankshaft Pulley Redi-Sleeve Repair

Two sleeves are available, Timken 88218 and National 99218. When installing apply liquid steel or JB Weld to the worn area to prevent the sleeve from deforming to the wear groove.



jj. Fixing Minor shaft/Yoke Pitting with Paint

The yokes were sprayed with Rust-Oleum Rusty Metal Primer #7769. As you can see, they do not leak using double seals and the one image of the yoke with paint shows the paint is still on after 1,000 miles of use. This is to show that if you have a shaft or yoke that is pitted, it does not necessarily mean you must use a Redi-Sleeve to fix it. This method is an inexpensive simple fix for parts that have been pitted from rust and it will even repair wear grooves that are not too deep. There are times a Redi-Sleeve is the best choice however on mild items this is a satisfactory fix.



kk. NP200 Transfer Case (TC) Re-assembly

The first thing you need to do is create a $\frac{31}{32}$ (.969) thick spacer for the intermediate shaft to adjust the intermediate gear bearings. The spacer represents the TC wall thickness plus a $\frac{1}{32}$ recess for adjustment. The TC wall is $\frac{28}{32}$ thick. You can either have a spacer machined or you can purchase a set of Ring Shims from McMaster Carr - [Link](#). You get 10 shims per pack for 3088A519 ($\frac{1}{8}$ thk. X $1\frac{3}{8}$ ths ID), and 3088A439 (0.0310 thk. x $1\frac{3}{8}$ ths ID). You may need to purchase shim pack 3088A939 for a variety of sizes and use some of the shims included in the pack to reach the .969 requirement.

If installing new bearing cones and cups, you will need to start with shims .004, .005, .0125 and .015. These shims are included in shim pack 3088A939. Shims in this pack are also used to adjust the sub-assemblies or the driven gear bearings.

To drive new cups into the intermediate gear, grind the side of an old cup until it will slip easily inside the gear or can use oil seal/bearing driver if you have one that fits. This can be done for driven gear bearings as well.



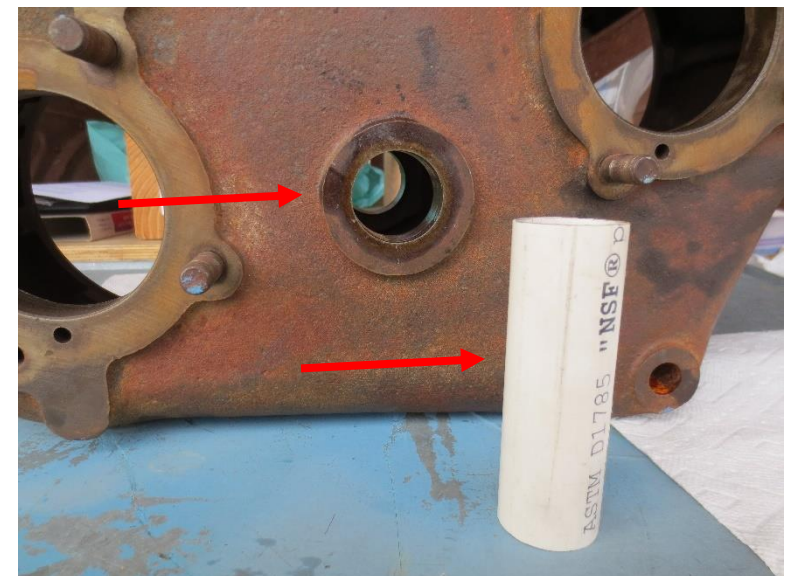
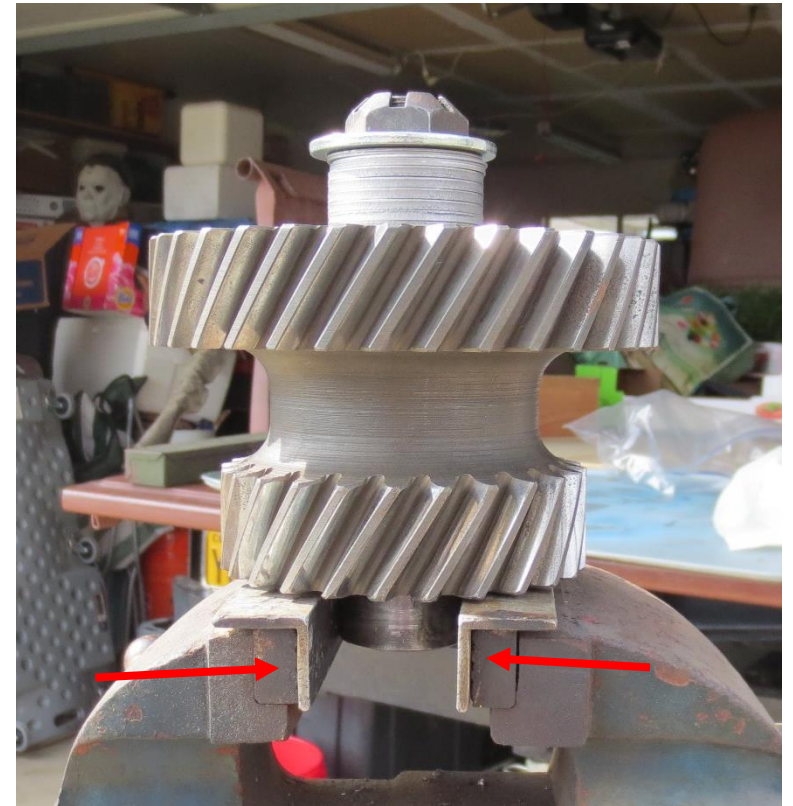
Shims are installed between the gear spacer and rear bearing cone of the shouldered shaft.



Assemble the shaft, bearings, spacer, shims, and nut, and place in a vice. Make sure you use soft metal to hold the shaft in the jaws. After you tighten the nut, open the vice jaws past the bearing cone and take a brass punch and hammer and seat the bearings by striking each end of the shaft.

Once the bearings are adjusted, you are ready to install in the case. You can make a dummy shaft to hold the bearings, shims and spacer in place using 1-1/4 OD PVC pipe 3-15/16 long or you can buy a dummy shaft to use. Lube the shaft and housing holes to avoid friction build-up to allow the shaft to move easily when driven in using a brass drift and hammer. Drive enough to get the washer and nut on to finish pulling the shaft through, DO NOT PRESS through.

A dummy idler shaft can be ordered from Torque King 4x4, part number QT2073 [Link](#)



Lay the TC on its side, slip the gear in and move the gear around till the pipe falls out of the shaft hole in the case. Center the gear bearings in the TC shaft hole and install the idler shaft. It is not recommended the shaft be pressed in place to take up play in the bearings. If you still have play, take the gear out and go through the process again.



The space between the shaft and housing is to allow movement of the shaft. You can lay the TC on its side and drive the shaft in using a punch and hammer. Once you have enough threads for the washer and nut, use the nut to pull the shaft in till it seats. You can back off the nut to apply some sealant to prevent oil leakage and then tighten the nut to the nearest hole, but do not back it off the align a hole.





It is important that these studs are in place, they are used to align and provide proper clearance between the idler and driven gears, **DO NOT USE BOLTS.** If bad or missing, stud (C-113247, NSN-5307-00-011-3247) is available in a kit from Oshkosh Equipment Sales [Part Source](#). Use a thread sealer when installing.

C-113247, NSN-5307-00-011-3247 (M37/43, WC 1.5 Ton and WDX-X3-WM300, M601/615) Rear Bearing Retainer and Parking Brake Bracket

3/8-16NC (9/16) X 3/8-24NF-2[2A NUT THREAD] (5/8) X 1-7/16



C-103217, C-151386, NSN-5307-00-010-3217 (WC 3/4, M37/43, WC 1.5 Ton, WDX-X3-WM300, M601/615) Front Bearing Retainer

7/16-14NC (11/16) X 7/16-20NF-2[2A NUT THREAD] (3/4) X 1-11/16



If changing the Ring & Pinion 5:83 ratio to 4:89 or installing larger tires, you will need to install a C-561816 Ring Gear in the TC so the speedometer will display the MPH more accurately. You can see from the image below, that it is difficult to determine which gear is 4 teeth or 5 teeth. The only way to know for sure is to read the part number on the side of the gear.



C-561816, Stewart Warner: SW-72434, (5 Tooth, 4:89 Ratio)



C-561651 (4 Tooth, 5:83 Ratio)



Because transfer cases may have had several mechanics work on them over the years, it is highly recommended you remove the studs to look for raised threads. You can see from the photo at the right the raised area around the stud hole resulting from over tightening nuts.

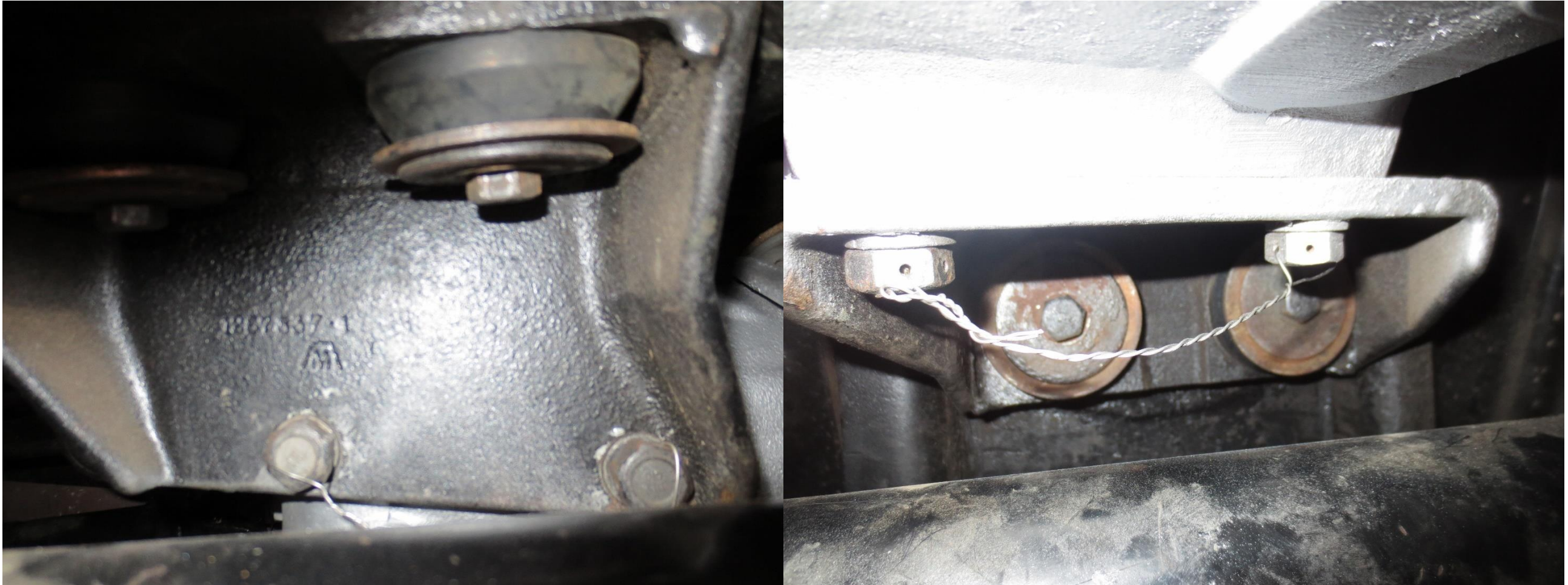


As you can see in this photo, light grinding, and chamfering was performed to correct the condition allowing the brake bracket to mesh with the retainer and seal properly.



Drivers side Mounting in case you need to know which mount goes on which side.

← Towards Engine



2" dia. Washer installed as indicated. Spacer installed at top insulator.

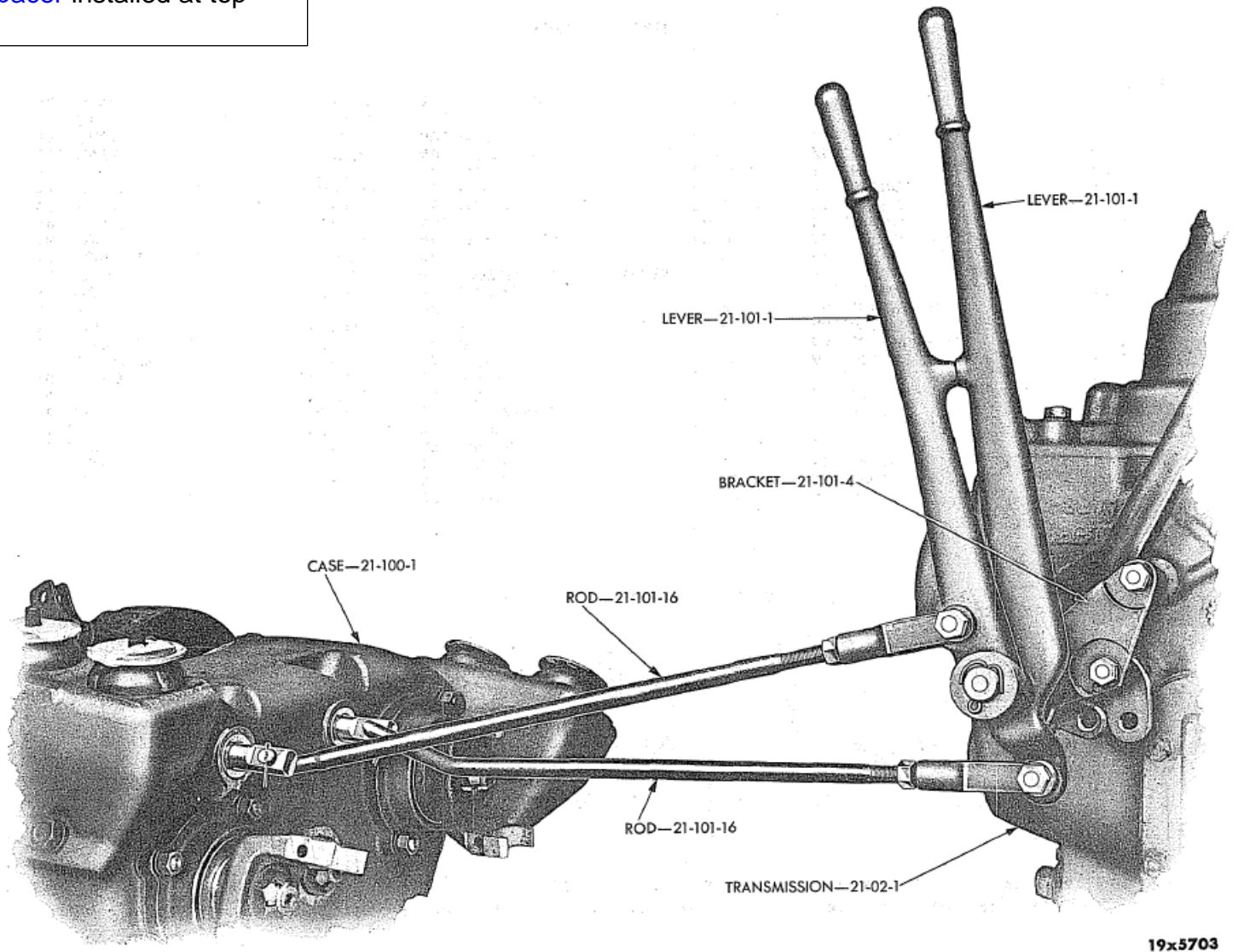
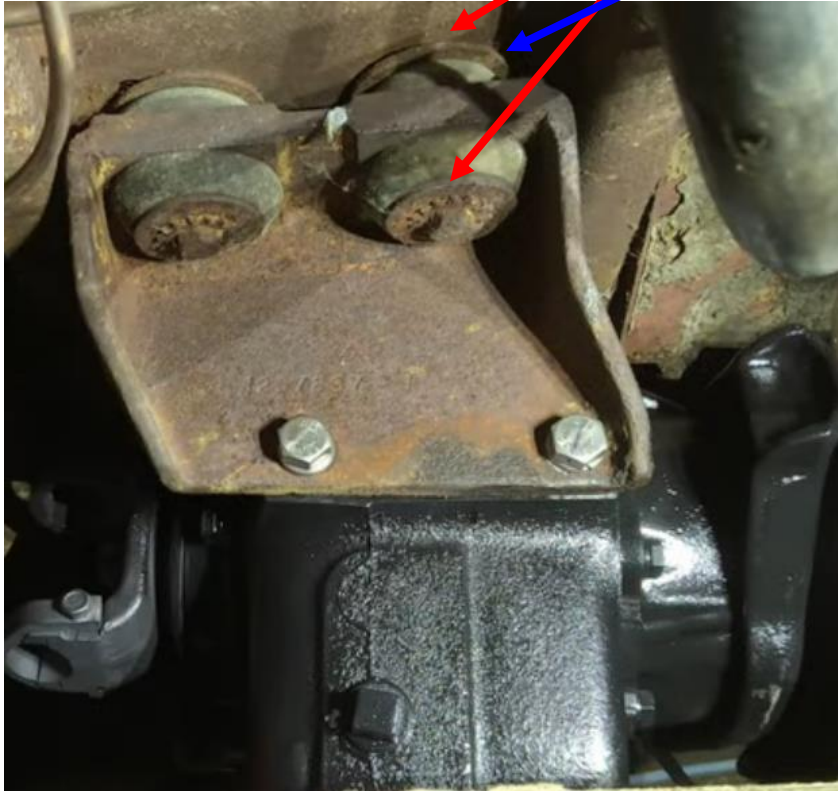


Plate 21-4

TRANSFER CASE CONTROLS

19x5703

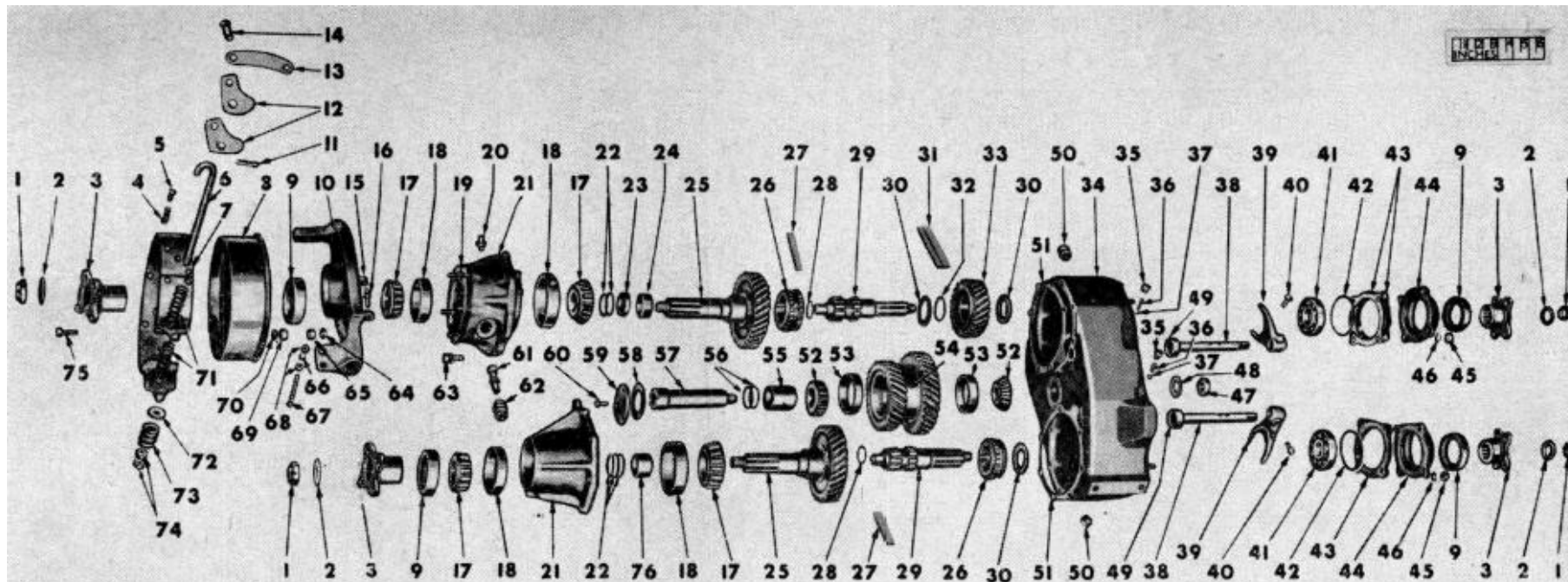
Torque Tightening Specifications			
Part Name	Chrysler Part Number	NSN	Torque (Foot-Pounds)
Front Drive Gear Shaft Flange or Yoke Retaining Nut			140-160
Front Drive Gear Shaft Bearing Retainer Stud (7/16)	151386, 912401	5307-00-227-1818	40-50
Front Drive Gear Shaft Bearing Retainer Nut (7/16)	120370, 271506	5310-00-012-0370	40-50
Front Axle Drive Gear Shaft Flange or Yoke Retaining Nut	562536	5310-00-360-6911	140-160
Front Axle Output Shaft Bearing Retainer Stud (7/16)	151386, 912401	5307-00-227-1818	40-50
Front Axle Output Shaft Bearing Retainer Nut (7/16)	271506	5310-00-132-7819	40-50
Idler Shaft Cover Bolt (5/16)	122007, 180077	5306-00-226-4825	17 (suggested)
Idler Shaft Retaining Nut	562536	5310-00-360-6911	140-160
Military Bearing Preload W/Bearings Lubed (Oil)			Free Rolling, But No End Play
Civilian Bearing Preload W/Bearings Dry (No Oil)			Free Rolling, No Side-to-Side or End Play
Rear Driven Gear Shaft Bearing Retainer Stud (3/8)	120362, 113247	5307-00-011-3247	30-35
Rear Driven Gear Shaft Bearing Retainer Bolt/Nut (3/8)			30-35
Rear Parking Brake Bracket Stud (3/8)			30-35
Rear Parking Brake Bracket Nut (3/8)			30-35
Rear Driven Gear Shaft Nut			140-160
Military Bearing Preload W/Bearings Lubed (Oil)			15-30 Inch Pounds
Civilian Bearing Preload W/Bearings Dry (No Oil)			Free Rolling, No Side-to-Side or End Play
TC Mounting Screws to Bracket (1/2) (4 used), Mechanics Wire to Secure.	1192706	5305-00-614-1501	75 (suggested)

NOTE:

Suggested torque foot pounds based on ASTM A449/Grade 5 Bolt (plain). All other torque information taken from TM9-8855, Ordnance Maintenance Manual, 1 Ton 4x4 Cargo Truck, M601 (Modified M37), Dated January 1958. 7/16 Bolt/Nut torque taken from Front/Rear Carrier Housing Studs/Nuts torque requirement.

Do not use grease to hold roller gearings in place, it will not dissolve and may plug oil lubrication holes, use oil or STP.

Oil seals should not be installed when adjusting bearing pre-load.



REF. NO.	PART NAME	PART TYPE CODE	REF. NO.	PART NAME	PART TYPE CODE	REF. NO.	PART NAME	PART TYPE CODE
1	NUT	16-20-3	27	ROLLER	21-103-19	53	CUP	21-104-12
2	WASHER	16-20-2	28	SNAP RING	21-103-20	54	GEAR ASSY	21-104-1
3	YOKE	16-20-1	29	SHAFT	21-102-5	55	SPACER	21-104-28
4	SPRING	4-06-11	30	WASHER	21-102-18	56	SHIM	21-104-27
5	SCREW	4-06-3	31	ROLLER	21-102-25	57	SHAFT	21-104-5
6	BOLT	4-07-1	32	SPACER	21-102-26	58	GASKET	21-104-7
7	BAND ASSY	4-03-1	33	GEAR	21-102-1	59	COVER	21-104-6
8	DRUM	4-01-1	34	CASE ASSY	21-100-1	60	BOLT	21-104-6
9	OIL SEAL ASSY	16-20-30	35	SCREW	21-109-13	61	PINION	21-85-5
10	SUPPORT	4-29-1	36	SPRING	21-109-17	62	NUT	21-85-60
11	COTTER PIN	4-26-2	37	BALL	21-109-5	63	BOLT	21-103-22
12	LEVER	4-26-1	38	RAIL	21-109-5	64	LOCKWASHER	4-29-1
13	LINK	4-26-11	39	FORK	21-109-1	65	NUT	4-29-1
14	PIN	4-26-2	40	SCREW	21-109-2	66	LOCKWASHER	4-03-1
15	NUT	4-26-12	41	BEARING ASSY	21-102-7	67	SCREW	4-03-1
16	STUD	4-26-12	42	RING (PART OF BEARING ASSY)	21-102-7	68	NUT	4-03-1
17	CONE ASSY	21-103-11	43	GASKET	21-102-16	69	NUT	4-01-2
18	CUP	21-103-10	44	RETAINER ASSY	21-102-14	70	LOCKWASHER	4-01-2
19	GASKET	4-29-2	45	NUT	21-102-14	71	SPRING	4-07-4
20	NIPPLE	21-100-23	46	LOCKWASHER	21-102-14	72	WASHER	4-07-1
21	RETAINER ASSY	21-103-22	47	NUT	21-104-32	73	SPRING	4-07-5
22	SHIM	21-103-24	48	WASHER	21-104-33	74	NUT	4-07-1
23	SPACER	21-85-27	49	OIL SEAL ASSY	21-109-10	75	BOLT	4-01-2
24	GEAR	21-85-4	50	PLUG	21-100-1	76	SPACER	21-103-7
25	SHAFT	21-103-6	51	GASKET	21-103-23			
26	GEAR	21-111-2	52	CONE ASSY	21-104-13			

RA PD 378457

II. Propeller (Driveline) Vibration

If you are experiencing vibration, you can do a couple of things:

1. See the Service Bulletin to the right to reangle the engine,
2. Purchase an inexpensive driveshaft angle finder and read article on measuring driveshaft angles - see link.
3. Recheck the intermediate shaft UJ angle once you have added washers.

To check your truck's driveshaft:

1. Pull one of the rear axles out past the diff's side gear so you can rotate the driveshaft.
To correct:
 - a. You can shim the axle housing perches or,
 - b. Weld new perches or,
 - c. Add washers between the TC cross-member and front or rear insulators.
 - d. Recheck the intermediate shaft UJ angle and readjust both shafts as needed.

- [link](#)

DODGE TRUCK *Service Bulletin*

TRUCK SERVICE DEPARTMENT • DODGE DIVISION • CHRYSLER CORP.

C-1 SERIES

TO ALL DODGE TRUCK DIRECT DEALERS AND DEALERS:

In order to eliminate or reduce propeller shaft vibration, the front of the engine in the Power Wagon has been raised approximately one half inch. This can be accomplished on Power Wagons in the field, that may have drive line vibrations, by installing four plain washers Part No. 120390 between the engine front support plate and the front crossmember on each side.

W. L. SCOTT
Truck Service Manager
DODGE DIVISION



Jan. 5, 1955

No. T-74

PROPELLER
SHAFT

Vibration

MODEL:
Power Wagon

READ & CHECK

DEALER	
MANAGER	
SERVICE MGR.	
PARTS MGR.	
MECHANICS	

5397

Printed in U.S.A.

mm. Ventilator Wing Weatherstrip Replacement

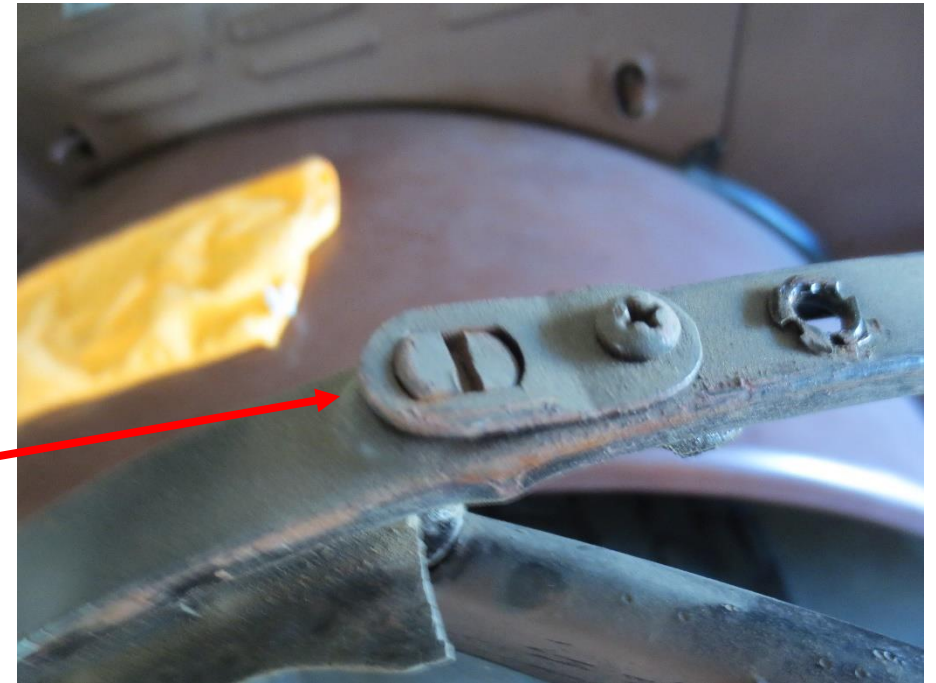
1. The ventilator wing has four screws as indicated by the arrows. There are four screws that hold the frame in place, all screws will need to be back out before the wing can be removed.



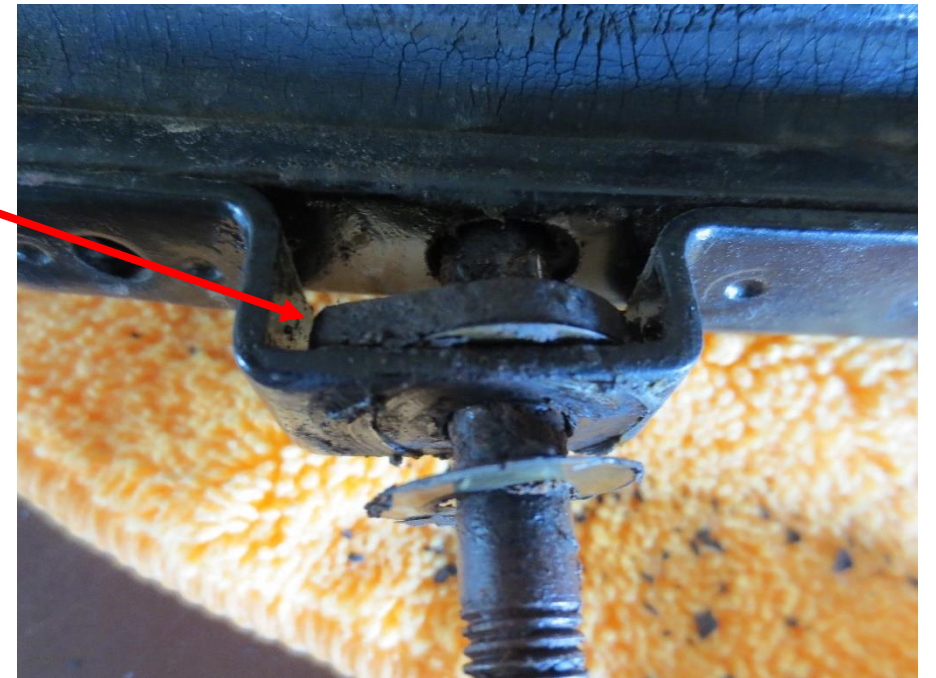
2. Once the screws are removed, roll the wing towards to rear of the truck. You may need to open the window to facilitate removing the wing and spring the frame some.



3. Next remove the screw and lock and back off the adjustment screw until the wing frame can be separated from the pivot adjustment screw.



4. Next remove the nut and spring from the lower pivot stud. You may need to use a flat screwdriver between the frame and upper stop to help separate it from the shaft. Once that is done, you can slip the wing window out.



5. Once the frame is empty, you can pull out the old rubber weatherstripping.



6. After you pull the old weatherstrip out, remove the brass spacers to install in the new weatherstrip. Below are 5mm spacers that will work available from [Part Source](#), see next page.





20 Sets 4mm to 17mm Eyelet Grommet Clothing Leather Banner Craft

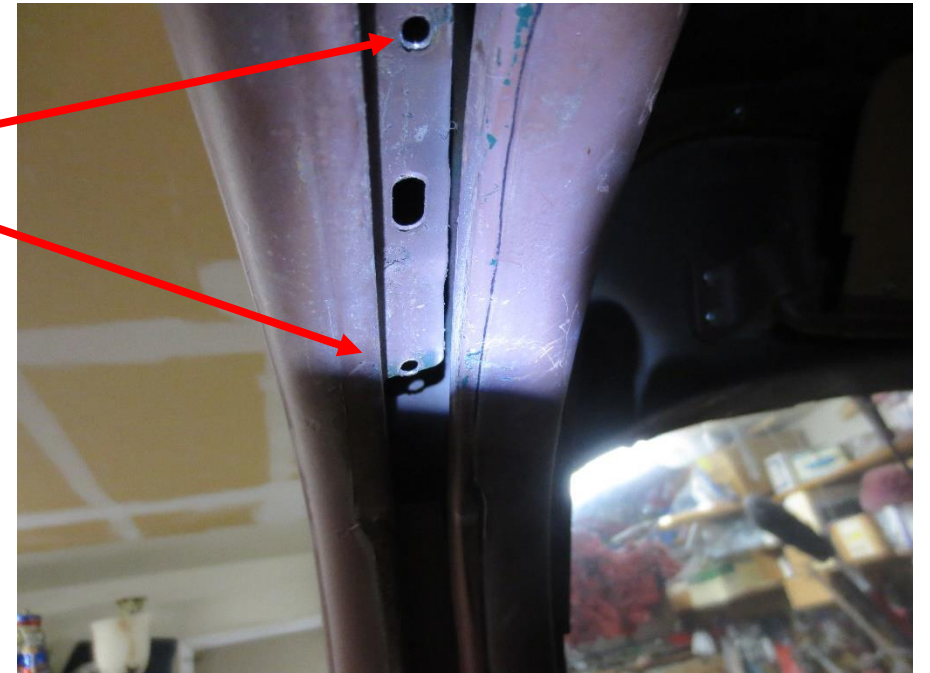
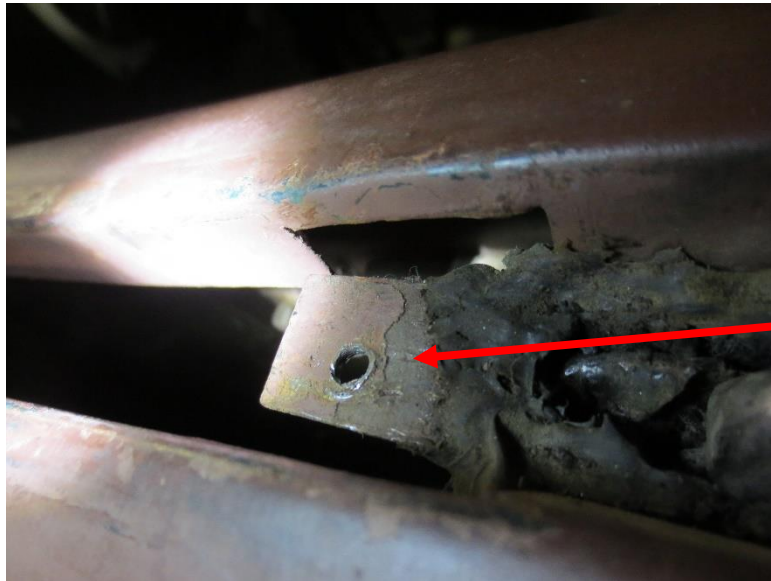
Eyelet Color: Copper

Size: 5mm

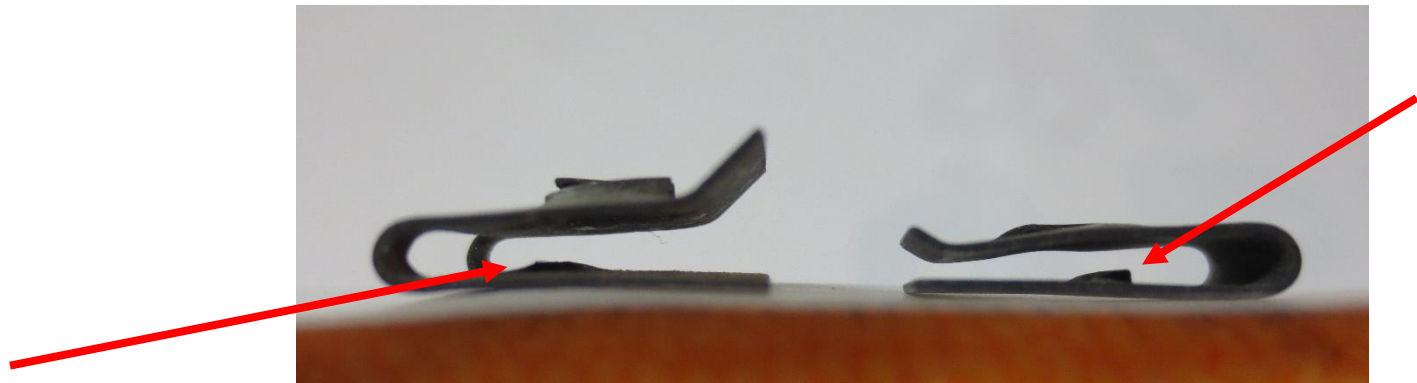
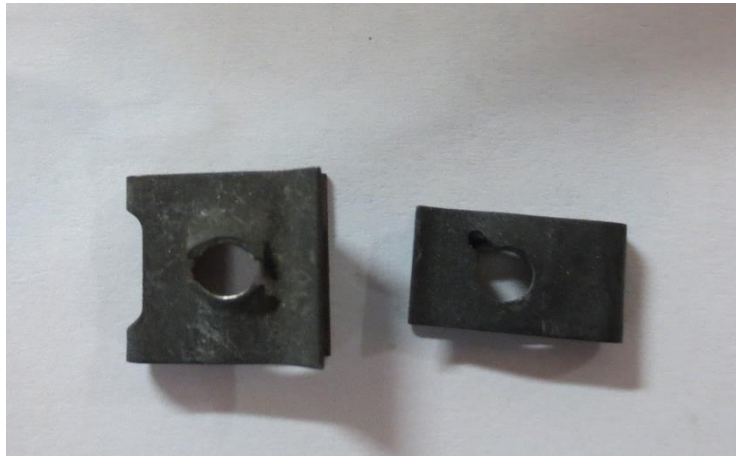
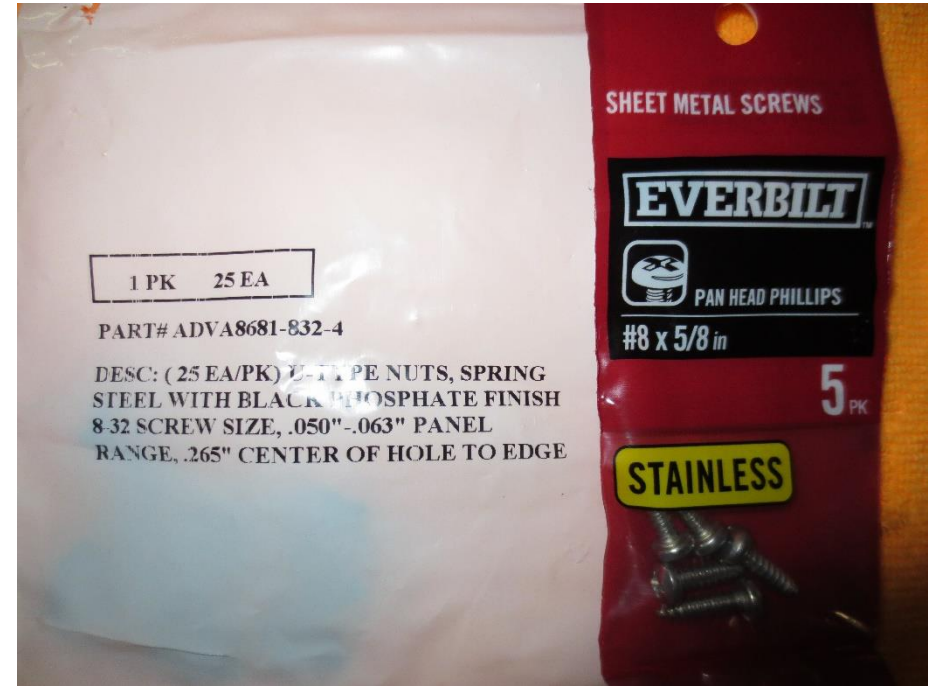
Review this item ★★★★★

Buy this again \$1.99

7. Inspect the upper and lower door frame holes for missing clips. Any that are missing may be in the bottom of the door.



8. If you are missing clips, you will need to replace them. Clips can be purchased from McMaster-Carr, Part# 94808A148. In the images below, the original clip is on the left, replacement clips on the right. The originals do not have a tooth to hold them in place, replacements do. If you have a mixture of screws that were used to hold the vent frame in place, use pan head screws 8x5/8 or 8x3/4 as replacements. VPW sells the clip kit with 10x58 screw, insulator, and clip. The screw/insulator are too big to fit in the hole in the rubber, so I suggest you use #8 screw only.



9. The new weatherstrip will need to be cut, take a knife and cut the rubber so the frame bracket can slip through.



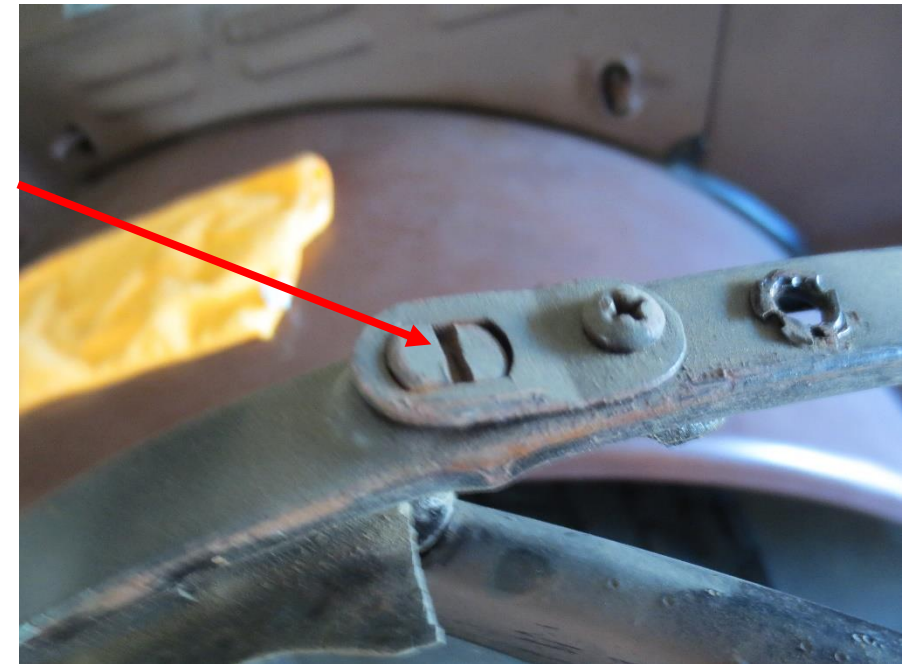
10. This image shows the weatherstrip installed in the frame, slipped over the frame bracket. Continue to push the weatherstrip into the wing frame until fully installed.



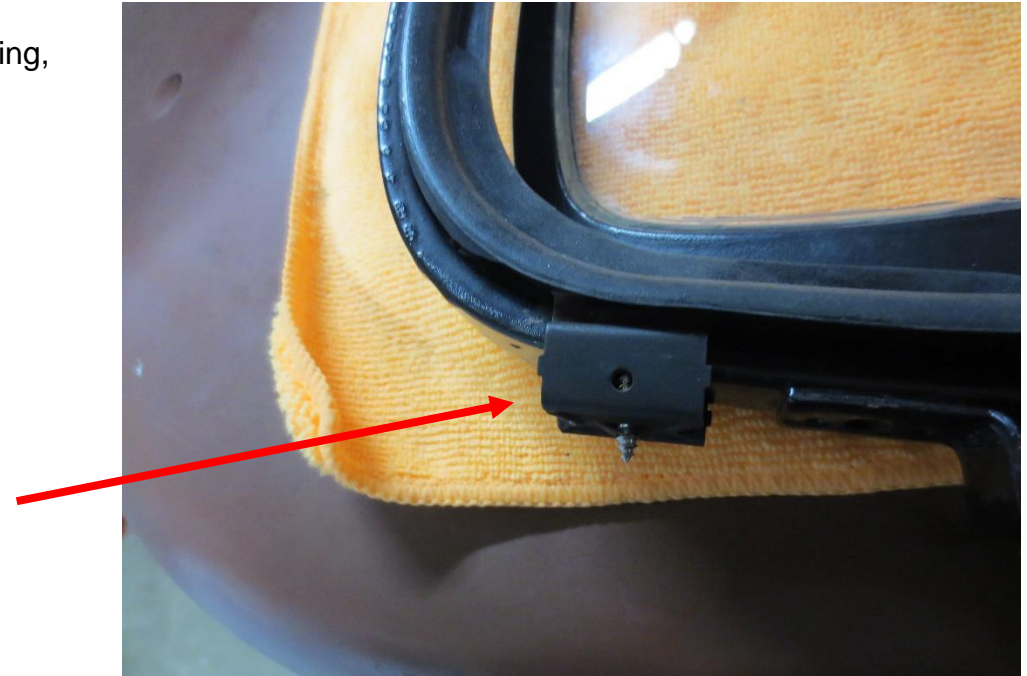
11. Once the vent window is back in the frame, install the stops, brass washers, spring, washer, and nut. You will want to apply some grease rotating surface areas. Turn the nut until sufficient tension is on the wing to prevent the wind from moving it back. Usually, 1/8 between bottom of nut to end of stud is sufficient.



12. Next, seat the pivot adjustment screw and back off until the lock can be installed or 1/2 additional turn to give good clearance. Then install the lock and screw. You may want to use some anti-seize on screw threads.



13. It is suggested that you install the screw and clip together. When you install the ventilation wing, you will hear a click when the clip is seated in the channel.



14. Roll the ventilator wing back in place and secure. Check weatherstrip to ensure it fits properly on door frame.



15. If after you install the ventilator, you find that there is not enough clearance between the frame and weatherstrip at the points indicated, the frame is probably sprung by Auto Glass Technicians using tools to remove the glass in prior repairs. To correct, you will need to remove the glass from the frame while the frame is installed.



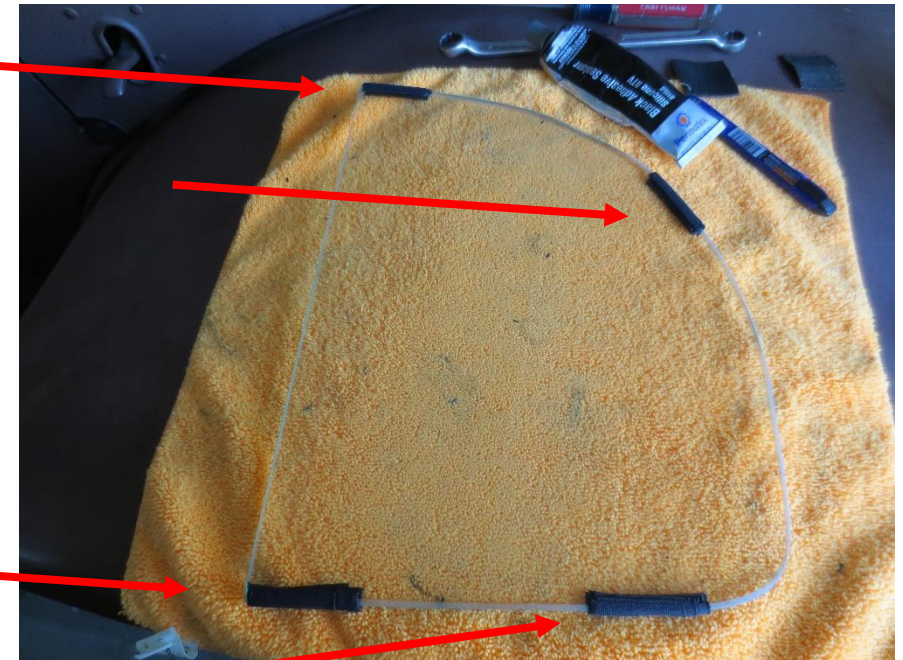
16. Use a small pipe wrench and a crescent wrench gigantic or other suitable tool. Hold the pipe wrench to prevent tension on the pivot screws while spring the frame. The frame metal is tempered and does not bend easily.



17. Repeat the process until the frame slide easily over the weatherstrip, then re-installed the glass.



18. When you are ready to re-install the glass, you can do it two ways: 1. Use glass setting tape 1/16 thick, apply a lubricant to the tape, and hammer the glass into the frame using a rubber mallet, 2. use friction tape at key points. It takes six layers of friction tape for the glass to fit snug in the channel frame. The advantage of this method is that it will not distort the channel frame, you simply apply silicone to the tape and slide the glass into the frame. This is sufficient to hold the glass. Go around both sides of the glass and frame with silicone to seal the gaps, then go along the frame and glass with a finger to smooth the silicone, see image next page.



19. Do not worry about making a mess, excess silicone is removed by a safety razor blade for a nice clean look. The images below have been shaved using a safety razor blade. Any residual silicone can be cleaned off using Powder Blast, Gun Oil, or WD40 prior to using a glass cleaner.



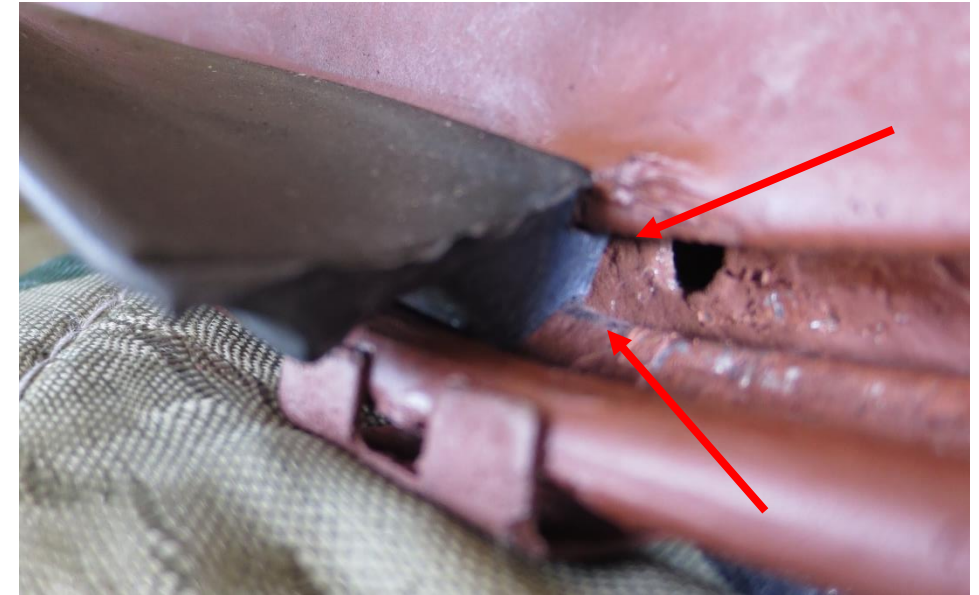
20. This area needs additional attention to ensure the weatherstrip fits on the frame. There is a channel in the weatherstrip.





nn. Windshield Outer Gasket Installation.

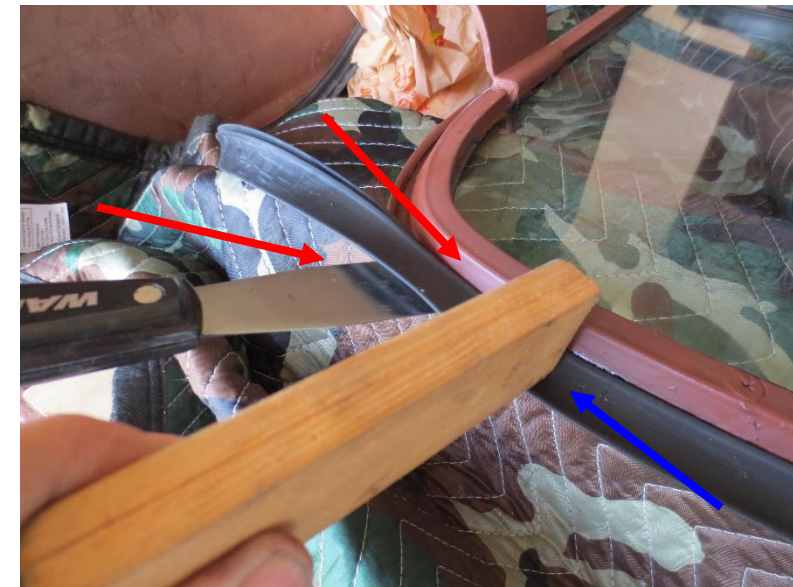
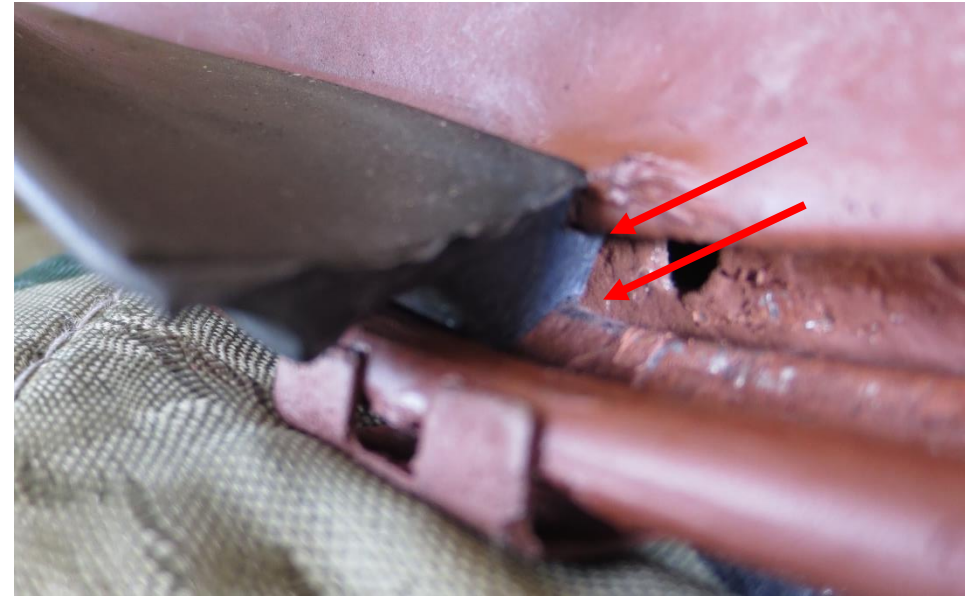
1. It is imperative that both gasket ribs get locked into the channel and you must approach this from both sides of the gasket. If you are only popping in the back side rib on the frame/gasket's back side, it may look installed, but you are only installing it 1/2 way. It will not automatically pop both ribs into the gasket channel.
2. You must use a lubricant, Water/soap Mixture, Jell Lubricant, Dialectic Grease, Glycerin or any other lubricant that is slippery, yet friendly to rubber to get those ribs in, to lock. Tools to have available are a small paint brush to lube the gasket and frame, steel putty knife to compress the gasket, your thumbs or a block of wood to push the gasket in place.
3. It is a slow process working compressing the gasket, then using a piece of wood or your thumb to pop the gasket in place as you move along the frame.



4. When the gasket is locked in place, the gasket will fit tight against the frame.



5. Process is to slide the rear gasket outer and inner **grooves** into the windshield frame. On the front side of the gasket, slide steel putty knife tool under gasket following the contour of the frame, compress and push tool into channel. If done correctly, gasket will hold tool in place. Use wood or your thumb to pop **gasket** into channel. Best technique is to work rear of frame into gasket channel, work putty knife under gasket on front side of frame, push knife into channel, push gasket above knife towards channel with thumb or block of wood, and quickly pull knife out to lock the gasket. Must use lubrication or the knife will pull gasket back out.



6. You will not be able to do this with the frame installed on truck. It is a slow process, the corners and hinge brackets being the difficult areas to get the gasket in the channel. On the corners, the sides of the channel get very thin, and you may not be able to get the gasket in. If you find that to be the case, shave the front rib off and use RTV Silicone to hold the gasket in place.



7. The gasket at the corners will tend to fold towards the front of the truck. This can be corrected by adding a piece of rubber under frame and gasket.



8. As you can see, this will straighten to gasket out for better sealing. RTV Silicone can be applied to hold the rubber in place.



9. If you are installing a non-continuous gasket, you will need to cut off any excess length and fill the gap. RTV Silicone works well to do this.



Your thumbs will get sore from working the gasket so expect that. This one of several ways of installing the gasket.

a. Engine Backfires

These are the conditions that cause an engine to backfire:

- Ignition timing off
- Spark plugs of wrong heat range
- Excessively rich or lean mixture
- Overheating engine
- Carbon in engine
- Valves hot or sticking
- Cracked distributor cap

A condition that causes a backfire at the muffler is usually a rich mixture of fuel from high float level.

b. Vapor Lock

When the temperature gets hot out, during the vacuum phase of the pump, the boiling point, or vaporizing temperature of the fuel goes down, resulting in more vapors - thus vapor lock in some cases. Elevation and engine temperature play a big role in this, the hotter the engine runs, the more heat under the hood, the more fuel will vaporize. Look at these items in troubled shooting:

- If the pump is NOS, how old is the pump? The diaphragm and or valves could be deteriorated from shelf life.
- How hot does the truck run? Is the thermostat 180 or 160? Temperatures will be down using a 160 thermostat.

- Do you have the pump heat shield on the exhaust manifold. This protects the pump from heat.

- Is the fuel line from the pump to the carb., always pointing up, no high points resulting in a downward feed?

- If you have an anti-vibration loop in the carb. line, is the loop on the bottom side of the line?

- Is the routing of the carb. fuel line in front of the exhaust manifold to facilitate cooling of the fuel by the fan - see image below?

- Is the radiator in good shape?

- Is the water distributor tube in good shape?

- Is the “ceramic stone” or paper fuel filter(s) clean?

- The higher the elevation, the lower the point of the fuel, so depending on where you live, this must be taken into consideration.

- To check suction of the pump, put your finger on the intake port and have someone crank the engine. If you do not feel much suction, you could have a worn cam lobe. You can pull the pump, welded a bead down the side of the arm that rides against the cam, install, and recheck. You want 3 to 5.5 pounds of pressure at the carburetor.

Keep the temperature in the engine compartment down, fuel filters clean, the less likely you will experience vapor lock.



c. Engine Stalls

Possible causes:

- Bad or loose ignition switch. Take the switch out and wiggle the Bakelite body, if loose, tighten the fingers using a blunt punch and hammer, re-install.
- Carburetor adjusted incorrectly. Adjust the air screw located by the throttle linkage, turn screw in till it seats, back off 1-1/2 turns, start engine. If idle is low, adjust throttle idle screw till engine idles 450-500 rpm.
- Once engine is at operating temperature, make final air screw adjustment. Turn air screw left or right till you get fastest idle speed. Turn screw right till engine just starts to slow down, then turn left until engine just starts to slow down. Turn screw to middle of adjustment slow points.
- Loose wire at the ammeter gauge.

d. Alternator Good, Not Charging Battery

If you installed a one belt alternator that uses the 3/8th wide pulley and a 7/16th wide belt and you experience battery drain, the belt may be slipping on the alternator pulley. You can check this by warming the engine, turning it off, placing your hand on the alternator, and then on the alternator fan. If the alt. fan is hot, the belt is slipping even though the belt does not squeal. The ammeter may not show a positive or negative charge. You can solve this by installing Smith Co. 2V pulley part number: 7940-1107. Belts are NAPA Premium XL, number 25-9540.

The following was used to order the 2V Pulley:

Alternator

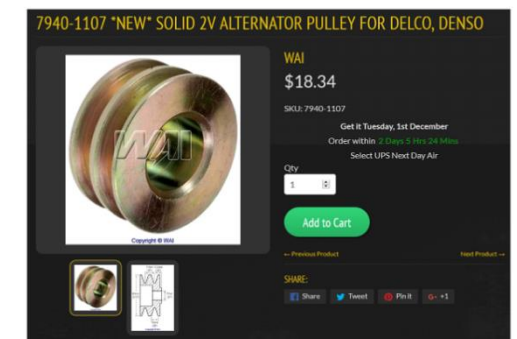
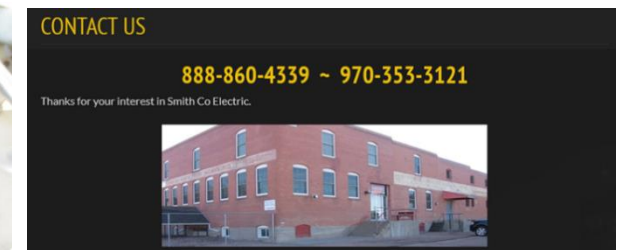
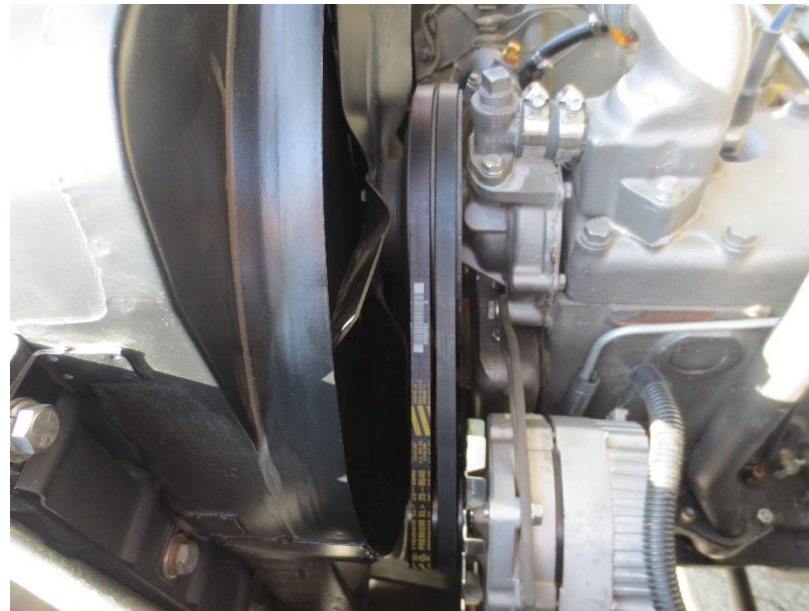
O'Reilly Part Number - R111621A, Ultra 63 amp., 10-SI Series

Pulley Diameter – 2.5 inches

V-Belt Width – 7/16 inch

Vehicle

Chevrolet, 1976, C10 Pickup, RWD, 350 C.I.D. Engine



e. New Lug Nut Seats

One of the problems you find with combat and standard rims are elongated or out-of-round lug nut seats. If you find rims that are in otherwise good condition, they can be repaired by filling the old holes and drilling new ones. Any company that makes rims can cut new holes and seats. Below are examples of rims with new holes/seats.



f. **New Item**

GROUP 30. Power/Drivetrain Conversions

a. Early Hemi/Poly Engine Bellhousing

If you want to convert to a Hemi/Poly V8 and retain the original clutch pedal and linkage, this is the bell housing you need to find. Fits Hemi/Poly engines up to 1961.



Hemi Engines – 1951-55, 315 C.I.D., 331 C.I.D. casting number 1323329, 1956, 354 C.I.D casting numbers 1551629/1619629, 1957-58, 392 C.I.D. casting number 1619829. Look for 392 blocks with foundry-ID A1, supposedly they have consistently thicker cylinder walls and may have been cast with higher nickel content. A1 is cast in several places, including in the rear face as shown here. How to example for clutch and rear brake master cylinder setup. - [Clutch Setup](#)



GROUP 31. MILITARY STANDARDS

b. Rim – Army DWG. No. 7388452 (Rim assembly 2530-00-784-4437 cancelled on October 2, 1996, with a cancelled status of "Item is Cancelled WITHOUT Replacement")

FED. SUP CLASS
2530

**TABLE I
WHEEL DIMENSIONAL DATA**

ARMY DWG. NO	RIM SIZE		OFFSET C	D DIA BOLT CIRCLE	E HUB BORE	F NO HOLES	RING MS NO
	A	B					
7388452	16	6.5	4	6.875	4.975	5	MS 53045-2
7355436	16	6.5	5-7/8	6.875	4.975	5	MS 53045-2
7389618	20	7.5	5-1/8	8.750	6.471	6	MS 53045-3
7389621	20	7.5	6-3/16	8.750	6.471	6	MS 53045-3
7388820	20	7.5	6-1/16	11.250	8.727	10	MS 53045-5
7353762	20	10	8-7/8	11.250	8.727	10	MS 53045-4
7355439	24	10	8-7/8	13.189	10.671	10	MS 53045-5

APPROVED 9 OCT 1962 REVISED 5 MAY 1964 3 17 FEB 1977 6 14 OCT 87

FED. SUP CLASS
2530

P.A. ARMY-AT
Other Cust
Navy - MC
AF-99

TITLE
WHEEL, PNEUMATIC TIRE-DISK TYPE,
WITH RING,
FOR TACTICAL WHEELED VEHICLES

MILITARY STANDARD
MS 53044
SHEET 1 OF 2

PROCUREMENT SPECIFICATION
NONE

SUPERSEDES

DD FORM 1, 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

2530-0285

REVISIONS ACTIVITY: DA-45
USER ACTIVITIES: ARMY-AE

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design work and for repetitive use shall be made from this document when appropriate.

**TABLE II
WHEEL APPLICATION DATA**

ARMY DWG NO	TIRE APPLICATION		DUAL OR SINGLE	MAXIMUM RECOMMENDED LOAD
	SIZE	PLY		
7388452	9.00-16	8	SINGLE	2640
7355436	9.00-16	10	DUAL	2920
7389618	11.00-20	12	SINGLE	5150
	11.00-20	14	SINGLE	5730
7389621	12.50-20	12	SINGLE	5330
	9.00-20	8	DUAL	3240
7388820	9.00-20	10	DUAL	3960
	10.00-20	12	DUAL	4590
	10.00-20	14	DUAL	5210
	11.00-20	12	DUAL	5150
7353762	11.00-20	14	SINGLE	5730
	14.00-20	20	DUAL	9030
7355439	14.75-20	12	SINGLE	6330
	14.00-24	20	DUAL	10,050

NOTES:

1. REFERENCED LOAD CAPACITIES SHOWN IN TABLE II CONFORM TO MIL-T-12458.
2. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
3. DIMENSIONS SHOWN ARE IN INCHES AND ARE FOR ENGINEERING REFERENCE ONLY.
4. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
5. MARKING SHALL CONSIST OF THE MS PART NUMBER AND MANUFACTURER'S IDENTIFICATION IN ACCORDANCE WITH MIL-STD-130.
6. DETAILS OF THESE ASSEMBLIES SHALL BE IN ACCORDANCE WITH REFERENCED DRAWINGS, COPIES OF WHICH MAY BE OBTAINED FROM: US ARMY TANK-AUTOMOTIVE COMMAND, ATTN: DISTR-655, WARREN, MICHIGAN 48090.
7. THIS MS SHEET IS FOR SELECTION OF COMPONENT USE ONLY. FABRICATION OF THIS ITEM SHALL BE IN ACCORDANCE WITH LISTED ARMY DRAWINGS.
8. THE USE OF RECYCLED MATERIALS WHICH MEET THE REQUIREMENTS OF THE APPLICABLE MATERIAL SPECIFICATIONS WITHOUT JEOPARDIZING THE INTENDED USE OF THE ITEM SHALL BE ENCOURAGED.

APPROVED 9 OCTOBER 1962 REVISED 6 FOR CHANGES SEE SHEETS 1 & 2

P.A. ARMY -AT
Other Cust
Navy - MC
AF-99

TITLE
WHEEL, PNEUMATIC TIRE-DISK TYPE
WITH RING
FOR TACTICAL WHEELED VEHICLES

MILITARY STANDARD
MS 53044
SHEET 2 OF 2

PROCUREMENT SPECIFICATION
NONE

SUPERSEDES

DD FORM 1, 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

**2530-00-738-8452 (4875001, C48750D1, 7388452)
Superseded by 2530-00-738-9625 (48750, 61460,
7389625) Data – Single Rim**

2530-00-738-8452 (2530007388452) NSN Information

NSN	FSC	NIIN	ITEM NAME	INC
2530-00-738-8452	2530	007388452	Wheel, Pneumatic Tire	17959

2530-00-738-8452 Features

MRC	PARAMETER	CHARACTERISTICS
ABGA	Groove Depth	1.608 inches nominal
ABMK	Overall Width	7.217 inches minimum and 7.395 inches maximum
ABTB	Mounting Hole Diameter	0.750 inches nominal
ABTJ	Mounting Hole Quantity	5
ACXD	Ring Style	Rim side ring slotted
AEUA	Effective Width	6.249 inches nominal
AFFL	Mounting Bolt Circle Diameter	6.871 inches minimum and 6.879 inches maximum
AHEG	Pilot Hole Diameter	4.970 inches minimum and 4.980 inches maximum
APGF	Design Type	Integral rim
ARJD	Design Form	DISK
ASBL	Hub	Not included
AWJQ	Bearings	Not included
AXPR	Ring	Included
BCNX	Mounting Type for Which Designed	Single tire
BFYT	Hole Location	Located in center of rim
BPLM	Disk Type	Single
BXSJ	Lightening Hole	Included
CDMC	Valve Hole Shape	Slotted
CFHQ	Tire RIM Nominal Diameter	16.000 inches
CFHR	Tire	Not included
CFHS	Mounting Face Type	Convex
CFHT	Offset Distance from RIM Centerline to Outside Wheel Mounting Face	4.000 inches minimum and 4.125 inches maximum
CFJF	Ring Type for Which Designed	SIDE
CFJG	Bolt/Stud Mounting Facility	Not included
CFJH	Hub Characteristic	Demountable
CNJK	Lightening Hole Quantity	5
CNJL	Lightening Hole Hub Cap Mounting Feature	Not included

**2530-00-287-8230 (7355436, MS53044-3, 66730D1) Data
– Duel Rim**

2530-00-287-8230 (2530002878230) NSN Information

NSN	FSC	NIIN	ITEM NAME	INC
2530-00-287-8230	2530	002878230	Wheel, Pneumatic Tire	17959

2530-00-287-8230 Features

MRC	PARAMETER	CHARACTERISTICS
ABGA	Groove Depth	1.625 inches nominal
ABMK	Overall Width	7.125 inches nominal
ABTB	Mounting Hole Diameter	1.250 inches nominal
ABTJ	Mounting Hole Quantity	5
ACXD	Ring Style	Rim side ring slotted
AEUA	Effective Width	6.250 inches nominal
AFFL	Mounting Bolt Circle Diameter	6.871 inches minimum and 6.879 inches maximum
AHEG	Pilot Hole Diameter	4.970 inches minimum and 4.980 inches maximum
APGF	Design Type	Integral rim
ARJD	Design Form	DISK
ASBL	Hub	Not included
AWJQ	Bearings	Not included
AXPR	Ring	Included
BCNX	Mounting Type for Which Designed	Single tire
BPLM	Disk Type	Single
BXSJ	Lightening Hole	Included
CDMC	Valve Hole Shape	Slotted
CFHQ	Tire RIM Nominal Diameter	16.000 inches
CFHR	Tire	Not included
CFHS	Mounting Face Type	Convex
CFHT	Offset Distance from RIM Centerline to Outside Wheel Mounting Face	5.875 inches nominal
CFJF	Ring Type for Which Designed	SIDE
CFJG	Bolt/Stud Mounting Facility	Not included
CFJH	Hub Characteristic	Demountable
CNJK	Lightening Hole Quantity	5
CNJL	Lightening Hole Hub Cap Mounting Feature	Not included

c. WW2 Run Flat or Combat Rim – Army DWG. No. Unknown (CC-924617)

2530-00-052-0937 (922408, 5606478, 520937) Data

2530-00-052-0937 (2530000520937) NSN Information

NSN	FSC	NIIN	ITEM NAME	INC
2530-00-052-0937	2530	000520937	Beadlock, Pneumatic Tire	11336

2530-00-278-2241 (5591567, C91567, 924622) Data

2530-00-278-2241 (2530002782241) NSN Information

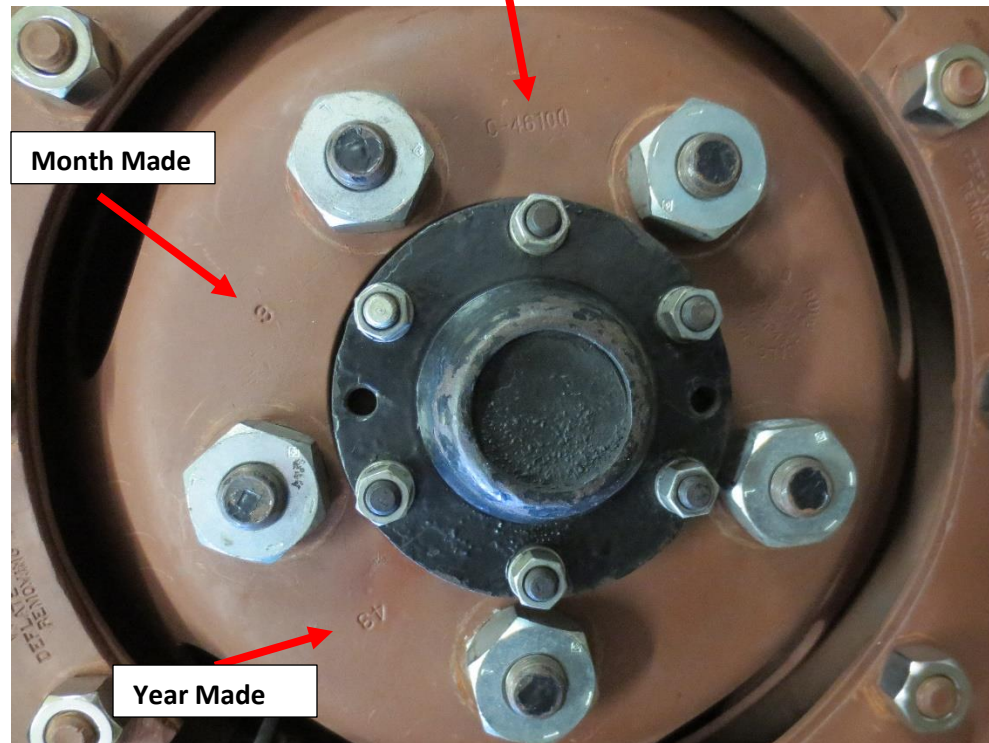
NSN	FSC	NIIN	ITEM NAME	INC
2530-00-278-2241	2530	002782241	Ring, Side, Automotive Wheel	10969

2530-00-278-2241 Features

MRC	PARAMETER	CHARACTERISTICS
AAGR	Cross-Sectional Shape Style	Rim side ring key
AARX	Inside Diameter	15.313 inches minimum and 15.343 inches maximum
AAZT	Slot Depth	0.187 inches nominal
ABKW	Overall Height	2.764 inches minimum and 2.780 inches maximum
AJXE	Size Designator	16X6.5
ALXY	Mounting Hole Spacing	Equally spaced on a 14-5/16 in. bolt circle
APGF	Design Type	Endless plain
ASXK	Hole Quantity	10
BQYZ	Inside Circumference	48.107 inches minimum and 48.201 inches maximum
CDLS	Valve Clearance Notch Quantity	2
CDLT	Leverage Slot	Not included
MATT	Material	Steel comp 1030
MDCL	Material Document and Classification	QQ-S-633, FS1030-CANCELED fed spec single material response

Budd Wheel Co.#

BW-C46100-D-1



d. M37 Pintle Hook

REVIEW ACTIVITY: DLA-GS
 USER ACTIVITY: ARMY-ME, NAVY-MC

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

FED. SUP CLASS 2540

REQUIREMENTS:

1. THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/2.
2. APPLICABLE PROVISIONS OF ASCC AIR STD 11/8, QSTAG-264 AND STANAG 4101 ARE MARKED *. THIS DIMENSION SHALL BE OF SUCH SIZE THAT IT WILL ACCEPT A 3" X 1.66" LUNETTE (SEE MS51336).
3. MARKING SHALL CONSIST OF THE MS PART NUMBER AND THE MANUFACTURER'S IDENTIFICATION IN ACCORDANCE WITH MIL-STD-130.

NOTES:

1. DIMENSIONS ARE IN INCHES AND ARE SHOWN FOR ENGINEERING REFERENCE ONLY.
2. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
3. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS OR REQUEST FOR PROPOSAL, EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.
4. THE USE OF RECYCLED MATERIALS WHICH MEET THE REQUIREMENTS OF THE APPLICABLE MATERIAL SPECIFICATION WITHOUT JEOPARDIZING THE INTENDED USE OF THE ITEM SHALL BE ENCOURAGED.

* CERTAIN PROVISIONS OF THIS STANDARD ARE THE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENTS ASCC AIR STD 11/8, QSTAG-264 AND STANAG 4101. WHEN REVISION OR CANCELLATION OF THIS STANDARD IS PROPOSED WHICH WILL AFFECT OR VIOLATE THE INTERNATIONAL AGREEMENT CONCERNED, THE PREPARING ACTIVITY WILL TAKE APPROPRIATE RECONCILIATION ACTION THROUGH INTERNATIONAL STANDARDIZATION CHANNELS, INCLUDING DEPARTMENTAL STANDARDIZATION OFFICES, IF REQUIRED.

U.S. GOVERNMENT PRINTING OFFICE: 1981-505-022/8237

(F) DENOTES CHANGES

MS PART NO.	REFERENCE DRAWING
MS 51335-1	8380199

P.A. ARMY-AI Other Cust NAVY-YD AF-99	INTERNATIONAL INTEREST (SEE *)	TITLE PINTLE ASSEMBLY, TOWING, 18,000 LBS. CAPACITY, MANUAL RELEASE	MILITARY STANDARD MS 51335
PROCUREMENT SPECIFICATION NONE	SUPERSEDES: MS 51116 (ORD)	SHEET 1 OF 2	

DD FORM 1 SEP 67 672-1 (Continued) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE. 2540-0306

FED. SUP CLASS 2540

REQUIREMENTS:

1. THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/2.
2. APPLICABLE PROVISIONS OF ASCC AIR STD 11/8, QSTAG-264 AND STANAG 4101 ARE MARKED *. THIS DIMENSION SHALL BE OF SUCH SIZE THAT IT WILL ACCEPT A 3" X 1.66" LUNETTE (SEE MS51336).
3. MARKING SHALL CONSIST OF THE MS PART NUMBER AND THE MANUFACTURER'S IDENTIFICATION IN ACCORDANCE WITH MIL-STD-130.

NOTES:

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MS PART NO.	REFERENCE DRAWING
MS 51335-2	8380199

P.A. ARMY-AI Other Cust	INTERNATIONAL INTEREST (SEE *)	TITLE PINTLE ASSEMBLY, TOWING, 18,000 LBS. CAPACITY, MANUAL RELEASE	MILITARY STANDARD MS 51335
PROCUREMENT SPECIFICATION	SUPERSEDES: MS 51116 (ORD)	SHEET 2 OF 2	

DD FORM 1 SEP 67 672-1 (Continued) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

GROUP 32. MILITARY TOOLS

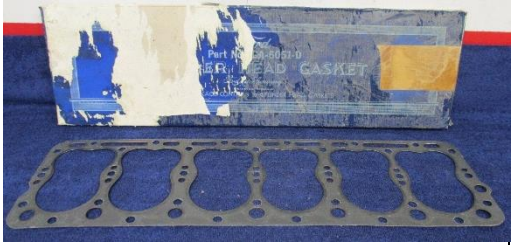
Tools that are used on the following Dodge vehicles: WC ½, ¾, 1-1/2 tons, WDX – X3-WM300, M37/43, M601/M615 trucks.

Oil Seal Remover – NSN 5120-00-795-0120.
Sold on Ebay, 1/18/2021, \$128.50.



GROUP 33. OTHER MILITARY TRUCKS

FORD GTB-G622 CARGO TRUCK (BURMA JEEP)


Military Truck		1943 Ford GTB-G622 Cargo Truck, Symbol U, Wheelbase = 115"		
NOTE: Part source, FordGTB.com - Link and those listed.				
ENGINE (226 C.I.D.), G Series 1941 to Early 1947				
PART	FORD PART NUMBER			
Gasket Set - Engine	2GA-18390-A		Edge RS531SA	Part Source
Gasket Set - Engine	2GA-18390-A		Best Gaskets	Part Source
Gasket – Cylinder Head	IGA 6051-D			Part Source
Gasket – Intake/Exhaust Manifold			Fel-Pro MS8793 B	
Cartridge – Oil Filter	2GAS -18662		NAPA TWD P53	2940-00-141-9025
CLUTCH				
Disk – Clutch, 11"	81B-7550		Dennis Carpenter	Part Source
Cover – Pressure Plate and Cover Assy.	81B-7563			

Bearing – Clutch Release (3-3/16 Dia.)	78-7580		SKF N1087	
Bushing – Clutch Release Shaft	40-7508-A			2520-00-374-4784
Fork – Clutch Release Shaft	48-7515			2520-00-215-7190
Hub – Clutch Release Bearing	48-7561			2520-00-028-2574
Spring – Clutch Release Bearing	48-7562			5360-00-246-9900
Spring – Clutch Pedal Retracting	81W-7523			5360-00-597-2315
Bearing – Clutch Pilot w/Oil Shield	B-7600-A			3110-00-555-5339
FUEL				
Carburetor	GTB-9510			
Kit – Carb. Gaskets	GTB-18352			
Kit – Carb Repair	GTB-18357-B			
Pump Assy - Fuel	GTB-9350	Airtex Part# 543AX		
Kit – Fuel Pump Repair	GTB-18373			2910-00-390-8779
Gasket – Carburetor Mounting			Fel-Pro 8013	
Gasket – Fuel Pump Mounting			Fel-Pro 6579	

EXHAUST

Gasket – Exhaust Pipe Flange			Fel-Pro 60052	

COOLING

Cap – Radiator Cap Assy., Pressure Type	GPW-8100-A			
Thermostat - Water	IGA-8575-A			Part Source
Gasket - Thermostat	IGA-8590			
Pump - Water	2GA-8501		All Ford Parts Part Source	2930-00-424-3868 7371652
Gasket – Pump mounting to Block	2GA-8543			
Belt - Fan	GTB-8620-A		Gates TR28346	

ELECTRICAL

Bearing Assy. – Generator	GPW-10094		NAPA P62032ZJ	
Brush – Generator Main	GPW-10069		NAPA SD728	5977-00-296-1457
Regulator – 6-8 Volt System	GPW-10505		SMP VR-10	
Regulator – 6-8 Volt	GPW-10505-B		SMP	2920-00-294-2606

			VR-10	
Brushes – Starter Set	18-11057		NAPA F502	5977-00-284-7880
Plate – Starter Rear End	18-11130-B			
Distributor	GTB12100	IGC-4706A		
Cap Assy. - Distributor	GTB-12105		NAPA AL63	2920-00-362-0583
Rotor - Distributor	GTB-12200		NAPA AL62	2920-00-362-3002
Breaker Points - Distributor	GPW-18354		NAPA CS725A	
Condenser - Distributor	GTB-12300		NAPA RR174SB	
Coil & Bracket Assy., 6-8 Volts	GPW-12000		NAPA IC7SB	
Kit – Spark Plug and Coil Wires	GTB-18364			

TRANSMISSION


NOTE: 1930 to 1939, Main Shaft – WT-196-2. 1040 to 1952, Main Shaft – WT196D-2




Transmission Cast Part Number		1GYS-7001, 1GYS-7005, 1GYS-7005-B		
Transmission Part	Ford Part Number	Republic Catalog CG-7 Gear Numbers (1929 - 47)	Warner/Perfection Gear, Catalogs G1956/R16 Numbers (1937 – 55)	SKF/Timken Bearings
Clutch Pilot Bushing	B7600-A			203S
Main Drive Gear-(7-3/4 long)-17T	BB7017-A	K153-1	WT196-16C or WT196-16	
Bearing, Main Drive Gear (Ball)	BB7025			209BB
Main Shaft	01T-7061-A	DISCONTINUED	WT196D-2	

Bearing – Main Shaft (Ball)	BB7065			307TB
Bearing – Main Shaft (Roller)	BB7120-A			J261648
Oil Seal – Main Shaft Retainer				
Cluster Gear Counter Shaft	517111	K153-10	WT196-3C	
Bearing - Cluster Gear Shaft Roller	BB7118-A			J322080
Cluster Gear 43-36-27-17T	BB7113-A	K153-11	WT196-8	
Rev. Idler Gear 22-18T	BB7141	K153-8	WT196-10	
3rd & Direct 24T	BB7101	K153-2	WT196-11	
1ST, 2nd, & Rev. Gear 33-43T	BB7100	K153-3	WT196-12	
Rev. Gear Idler Shaft	BB7140	K153-12	WT196-35	
Gasket – Power Take-off Cover	BB-7166			5330-00-599-7619
Gasket – Transmission Power Take-off Cover	BB-7166-B			
Gasket – Transmission Main Drive Gear Bearing Retainer	BB-7051			5330-00-358-8568
Gasket – Transmission Main Shaft Rear Bearing Retainer	01T-7086			
Gasket – Housing Cap	40-7207			5330-00-297-6106
Gasket – Gear Shift Housing	BB-7223			5330-00-378-7243
Gasket Set				Part Source
PART SOURCE: Northwest Transmission Parts, 13500 US Highway 62 Winchester, Ohio 45697, 1-800-327-1955, https://nwtparts.com/				
TRANSFER CASE				
Case Assy. - Transfer	GTB-7700			
Shim – Transfer Case Side Cover - .001 Thk.	GTB-7753-C			

Shim – Transfer Case Side Cover - .003 Thk.	GTB-7753-A			
Shim – Transfer Case Side Cover - .005 Thk.	GTB-7753-B			
Cage – Transfer Case Main Drive Gear Bearing	GTB-7772			
Cone & Roller Assy. - Transfer Case Drive Shaft Bearing	GTB-7876		NAPA 339	3110-00-100-0206
Cone & Roller Assy. - Transfer Case Drive Shaft Inner Bearing	GTB-7873		NAPA 342S	3110-00-142-4364
Cup - Transfer Case Drive Shaft Bearing	GTB-7872		NAPA 332	3110-00-100-0799
Cup - Transfer Case Main Drive Bearing	GTB-7875		NAPA BR3720	3110-00-100-0376
Oil Seal – Transfer Case Main Drive Gear	GTB-7798			
Shim – Transfer Case Drive Gear Bearing - .020 Thk.	GTB-7813-A			
Shim – Transfer Case Drive Gear Bearing - .026 Thk.	GTB-7813-B			
Shim – Transfer Case Drive Gear Bearing - .030 Thk.	GTB-7813-C			
Shim – Transfer Case Drive Gear Bearing - .034 Thk.	GTB-7813-D			
Oil Seal – Transfer Case Driven Shaft	GTB-7725-A			
Shim – Transfer Case Idler Bearing Cap Front - .001 Thk.	GTB-7753-C			





Shim – Transfer Case Idler Bearing Cap Front - .002 Thk.	GTB-7753-D			
Shim – Transfer Case Idler Bearing Cap Front - .003 Thk.	GTB-7753-A			
Shim – Transfer Case Idler Bearing Cap Front - .005 Thk.	GTB-7753-B			
Shim – Transfer Case Declutch Carrier Cover - .001 Thk.	GTB-7782-C			
Shim – Transfer Case Declutch Carrier Cover - .003 Thk.	GTB-7782-A			
Shim – Transfer Case Declutch Carrier Cover - .005 Thk.	GTB-7782-B			
Bearing – Transfer Shift Lever	GTB-7850			
Packing – Transfer Case Gear Shift Shaft	GTB-7815			5330-00-285-5121
Gasket – Transfer Case Brake Bracket	GTB-7812			
Gasket – Transfer Case Cap	GTB-7756			
Gasket – Transfer Case Cover	GTB-7707			
Gasket – Transfer Case Shifter Hole Cover	GTB-7709			
Gasket – Transfer Case Drive Gear Bearing Cage	GTB-7773			
Gasket – Transfer Case Idler Shaft Front Cap	GTB-7814			5330-00-678-7305
Gasket – Transfer Case Declutch Carrier	GTB-7746			

Gasket – Transfer Case Declutch Carrier Cover	GTB-7769			
PROPELLER SHAFTS				
Joint Assy. – Transfer Case to Front Axle	GTB-3365		NAPA P331	
Kit – Universal Joint Assembly	01T-18397		NAPA NPJ P369	2520-00-530-7544
FRONT AXLE				
Front Axle Assy.	GTB-3002			
Cone & Roller Assy. – Front Axle Differential	BB-4221-B		NAPA BR3984	3110-00-100-3095
Cup – Front Axle Differential Bearing	BB-4222		NAPA BR3920	3930-00-017-0269
Bearing Assy. – Drive Pinion Pilot	81B-4625-A		SKF RS5305-W	3110-00-158-7247
Cone & Roller Assy. – Front Axle Driving Pinion	BB-4621-B		NAPA BR53176	3110-00-142-4351
Cup – Front Axle Driving Pinion Bearing	BB-4616-B		NAPA BR53375	3110-00-100-0598
Pinion & Pilot Bearing – Front Axle Driving Pinion	01T-4609-A			
Gear, Pinion and Diff. Case Assy., Front	01T-4203-A (6.666 Ratio)			
Bearing Assy. - Front Drive Pinion Pilot	A1B-4625-A		NAPA RS5305-W	3110-00-158-7247
Bushing – Universal Drive Shaft	GTB-3205			

Cone & Roller Assy. – Front Spindle Pivot Bearing	GTB-3151		NAPA BR23100	3110-00-100-3535
Cup – Front Spindle Pivot Bearing	GP-3162		NAPA BR11520	3110-00-100-0509
Seal – Front Axle Pivot	GTB-3135			
Shim – Front Axle Pivot Bearing, 0.005 Thk.	GTB-3163-C			
Shim – Front Axle Pivot Bearing, 0.010 Thk.	GTB-3163-A			
Shim – Front Axle Pivot Bearing, 0.025 Thk.	GTB-3163-B			
Spring – Front Axle Pivot Seal	GTB-3136			
Gasket – Front Differential Housing	BB-4035		AXLETECH 2208H112 Part Source	5330-00-358-9872
Gasket – Front Axle Diving Pinion Bearing Sleeve	BB-4662			5330-00-298-0373
Gasket – Front Pivot Oil Seal Retainer to Spindle	GTB-1092			
REAR AXLE				
Gasket – Rear Differential Housing	BB-4035		AXLETECH 2208H112 Part Source	5330-00-358-9872

Gasket – Rear Axle Diving Pinion Bearing Sleeve	BB-4662			5330-00-298-0373
BRAKES				
Band and Lining – Hand Brake	01T-2648			2530-00-734-8290
Brake – Master Cylinder	91T-2140		NAPA M4572	2530-00-312-1349
Cylinder – Front Wheel Brake	92Y-2261			
Cylinder – Front Wheel Brake (1-3/8 Dia.)	92Y-2192		NAPA 4571	2530-00-616-7703
Cylinder – Rear Wheel Brake (1-1/2 Dia.)	91T-9192			
Cylinder – Rear Wheel Brake	91T-2261		NAPA 4511	2530-00-737-1894
Hose Assy. – Front Brake (15.72 Long)	21TS2079		NAPA 7600	2530-00-737-2359
Hose Assy. – Rear Brake (18-3/4 Long)	21TS2078		NAPA 6222	4720-00-774-4040
Repair Kit – Hydrovac Vacuum Cylinder Repair	GTB-18344-B		Bendix Hydraulic Div. 373381	2530-00-530-3369
WHEEL ASSY, BEARINGS, RETAINERS, ETC.				
Cone & Roller – Rear Wheel Outer Bearing	BB-1240-A		NAPA BR462	3110-00-100-0248
Cone & Roller – Rear Wheel Inner Bearing	BB-4221-B		NAPA BR3984	3110-00-100-3095
Cone & Roller – Front Wheel Inner Bearing	GTB-1201		NAPA BR33281	3110-00-100-3576
Cone & Roller – Front Wheel Outer Bearing	GTB-1216		NAPA 399A	3110-00-100-0236


Cup – Rear Wheel Outer Bearing	BB-1239-A		NAPA 453XVP	3110-00-142-4387
Cup – Rear Wheel Inner Bearing	BB-4222		NAPA BR3920	
Cup – Front Wheel Inner Bearing	GTB-1202		NAPA BR33462	3110-00-100-0572
Cup – Front Wheel Outer Bearing	GTB-1217		NAPA 394AVP	3110-00-100-0305
Rim – Tire Wheel	GTB-1015-A			2530-00-278-2248
Retainer Assy. – Front Hub Grease	GTB-1175		NAPA NOS 35012	
Retainer Assy. – Rear Hub Grease	BB-1175-C		NAPA CR 31323	5330-00-286-6873
STEERING				
Bearing – Steering Column	703517-A			<u>Part Source</u>
Bushing – Steering Worm Sector	GTB-3576			3120-00-423-2722
Cone & Roller Assy. – Steering Gear Worm Bearing	703571			3110-00-117-4713
Cup – Steering Gear Sector Shaft Bearing, Inner	70-3588			
Cup – Steering Gear Worm Bearing, Short	70-552			3110-00-142-4415
Cup – Steering Gear Worm Bearing, Long	GTB-3553			
Cup – Steering Gear Sector Shaft Bearing, Outer	81TF3587-B			
Seal – Steering Gear Housing Oil	703591			

Gasket – Steering Gear Housing Cover	GTB-3581		C & G Ford Parts Part Source	
SPRINGS				
Bushing – Front/Rear Spring Eyes	615791-A		C & G Ford Parts Part Source	
Bushing – Rear Spring Shackle	21C5791-A			3120-00-733-9201
Bushing – Rear Spring Shackle	BB5791-A		VANPELT Sales LLC Part Source	3120-00-737-1255
Bolt – Front Spring Shackle	21W5465		MOOG K150306	Smart Miles Auto Part Source
Pin – Rear Spring Shackle	01T-5780	.996-.998 O.D., 4.280 Lgh. 	Mac's Auto Supply Part Source	2510-00-737-1322
WINCH				
Bearing – Winch Worm Shaft Ball	GTB-5383		NAPA 6309J	3110-00-144-8669
Bearing – Winch Worm Shaft Ball	GTB-5388		NAPA 6309ZJ	3110-00-156-6844 3110-00-156-8062

Bearing & Lock Ring Assy., Winch Drive Shaft Center	GTB-5653		FAFNIR 6Y1121	3110-00-301-4679
Bearing & Lock Ring Assy., Winch Universal Joint	GTB-5974			
Bushing – Winch Gear Case	GTB-5371			3120-00-383-5103
Bushing – Winch Drum	GTB-5380			3110-00-301-4679
Bushing – Winch Bearing Sleeve	GTB-5391			
Bushing – Winch Roller	GTB-5422			
Universal Joint Assy. – Winch Center	GTB-5662			1680-00-355-6374
Universal Joint Assy. – Winch Front	GTB-5661			2520-00-318-0697
Universal Joint Assy. – Winch Rear	GTB-5663			
Seal – Winch Oil	GTB-5398		NAPA NOS 17653	
Seal – Winch Center Universal Joint	GTB-5669			
Seal – Winch Center Universal Bearing Housing	GTB-5975			
Gasket – Winch Worm Shaft Bearing Cap	GTB-5395			5330-00-700-0811
Gasket – Winch Gear Case	GTB-5372			5330-00-700-0808

POWER TAKE-OFF

Bearing – Power Take-Off Drive Shaft, Ball	GTB-7285		NAPA BRG 3207EC3VP	
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Bearing – Idler Gear Pin Roller	GTB-7286		John Deere JD7533H	3110-00-120-4276
Bearing – Idler Shaft Roller	GTB-7287		Federal Mogul J321652	3110-00-120-4273
Bearing Assy. – Power Take-off Gear, Ball	GPA-7271		NAPA BRG 6205J	
Bearing Assy. – Power Take-off, Ball	GTB-7271		NAPA BRG 6207J	
Seal – Power Take-Off Drive Shaft, Oil	GTB-7274		NAPA NOS 13738	
Seal – Power Take-Off Shift Rod, Oil	GTB-7269		NAPA NOS 10049	
Gasket – Power Take-off Gear Case Cover	GTB-7290			5330-00-383-5110
Gasket – Power Take-off Shaft Cover	GTB-7284			5330-00-545-1324

CHEVROLET 1-1/2 TON 4X4, (SNL-G506) TRUCK, BOMB SERVICE, M6 (SNL G-85, VOL. IV)

Vehicles Covered by This Parts List

SYMBOL PREFIX					
N	Y	Z	N	Y	Z
1942-3	1941	1941	1942-3	1941	1942
A	Tel. w/WINCH		M Cargo w/WINCH	Cargo w/WINCH	Cargo w/WINCH
B	Tel. less WINCH		N C.O.E Stake	C.O.E Stake	
C	Tel. w/WINCH and Earth Borer		P Lg. Cargo		
E Cab		Cab	Q Bomb Service	Lg. Cargo	Lg. Cargo
F Field Lighting			R Tel. w/WINCH and Earth Borer		
G Panel	Panel	Panel	S Tel. w/WINCH		
H Dump	Dump	Dump	X C.O.E. Fire Truck		
J Cargo	Cargo		Z Crash Truck	Air Service	
K Tractor	Tractor	Tractor			
L Dump w/WINCH	Dump w/WINCH	Dump w/WINCH			


NOTE: Part source, Vehicles of Victory - [Link](#) and those listed.


ENGINE (OHV, 235 C.I.D.)

Part	Original Chevy Number	TIMKEN Number	NAPA Number	Fel-Pro	NSN
Gasket Set – Engine Overhaul - ALL	CV-608428			FS-7276 B-2	
Gasket – Exhaust Manifold to Pipe				8592	
Gasket – Fuel Pump Mounting				6579	
Gasket – Fuel Pump Bowl				5019	
Gasket – Water Pump Mounting				5131	

Gasket Set – Timing Cover				TCS 45114	
Gasket Set – Push Rod Cover				PS 5004 D	
Gasket Set – Oil Pan				OS 5041 C	
Gasket – Engine Drain Plug				70822	
Gasket – Engine Intake to Exhaust				8597	
Oil Seal Kit – Engine Crankshaft, Rear				BS 5048	
Gasket – Thermostat Housing Mounting Gasket				5021	
Gasket – Thermostat Outlet				35062	
Gasket – Carburetor Mounting to Manifold				9520	
Gasket – Carburetor to Governor				9066	
Gasket – Carburetor Mounting				8812	
Gasket Set – Intake/Exhaust Manifold Mounting				MS 8590 B-1	
Gasket Set – Valve Cover				VS 50189 C	
Gasket Set – Engine Cylinder Head				HS 7276 B	
Gasket – Cylinder Head				7276 B	
Oil Seal – Crankshaft Harmonic Balancer, Front - ALL	CV-603158	6936S			
Oil Seal – Crankshaft Rear Bearing - ALL	CV-839129	5419			
Element – Oil Filter – ALL N, Z	A327506 AC-1595502		TWD P52		
Element – Oil Filter, Type C11 – ALL Y, Except YN	AC-1535309		FIL 1005		G085-0100430

Element – Oil Filter, Type S11 – YN	AC-853108		FIL 1005		3500-853108 2940-00-505-6711
Very Early Models			FIL 1001		
Cushion – Engine Side Support – ALL	CV-3680520				G085-3006080 2805-00-495-4053
CLUTCH					
Bushing – Clutch Pilot – ALL	OD-412562 (1-15/16 x 9/16 I.D. x ¾ Lg.)		NOE 61500371		3500-412562 3120-00-447-2852
Bearing – Ball, Clutch Release – ALL	ND-909422	614037			
FUEL SYSTEM					
Kit – Carburetor Repair – ALL (Exc. NN, NX, YN)	CV-608447 Carter – Model BB-1		Carter 1360		G085-3400472 2910-00-176-4861
Kit – Carburetor Repair – NE, NJ, YN, NR, NS	CV-609329 Zenith – Model 63AW-11		Carter 1347		G085- 2910-00-732-6134
Pump – Fuel – ALL	AC-1537714		NAPA NNP B0006P		
COOLING SYSTEM					
Gasket – Water Outlet – ALL	CV-838341		Gates 33624		
Thermostat - Outlet Housing – ALL	HR-3108579		Gates 33008S (180 Degrees) 33006S (160 Degrees)		
Gasket – Water Pump – ALL	CV-839470		NAPA FPG 5131		
Pump – Water – ALL	CV-3660335			Airtex WP-9524	G085-3004440 2930-00-176-4285

					
Belt – WP, Fan, Generator – ALL	CV-3679186	Gates TR28423			
ELECTRICAL SYSTEM					
Bearing – Ball, Generator Drive End	ND-903203	Timken 203AB	0.6693 Bore, 1.5748 O.D., 0.4724 Width		
Bearing – Ball, Generator Drive End	ND-954143	Timken 88503	0.6693 Bore, 1.5748 O.D., 0.3536 Width		
Bearing – Ball, Generator Commutator End	ND-954259	Timken 87503	0.6693 Bore, 1.5748 O.D., 0.563 Width		
Bushing – Generator Frame, Commutator End – ALL	DR-812823	NAPA AD1238			
Brush – Commutator End – ALL	DR-1878209	SMP RX-51 (Brush Set)			
Regulator – 40 AMP.	DR-1118504				2920-00-248-5402
Regulator – 25 AMP.	DR-1118505				2920-00-706-9290
Brush - Cranking Motor– ALL	DR-1857960	NAPA R503			
Bushing – Cranking Motor Drive Housing – ALL	DR-1839345	NAPA 4265			
Switch – Cranking Motor – ALL	DR-820052	NAPA ST11			

Switch – Cranking Motor, Reversing – ALL, Y, Z	DR-1884827				
Cap – Distributor – ALL, Y, Z	DR-824735	NAPA RR95			
Cap – Distributor – ALL, N	A214665	NAPA RR142			
Condenser - Distributor – ALL, Y, Z	DR-1882239	NAPA RR174SB			
Condenser – Distributor – ALL, N	DR-1869704	NAPA RR174			
Condenser – Distributor – NE, NJ, NM, NR, NS	DR-1900272	NAPA RR176SB			
Point Set - Contact, Distributor – ALL, Y, Z	DR-1882391	NAPA CS779A			
Point Set - Contact, Distributor – ALL, N	A282015	NAPA CS779A			
Rotor - Distributor – ALL, Y, Z	A820445	NAPA RR83SB			
Rotor - Distributor – ALL, N	DR-214669	NAPA RR99			
Rotor – Distributor, Corrosion Proof – ALL, N	DR-1905590	NAPA RR83SB			
Coil – Ignition – ALL, Y	DR-1115144	SMP UC-14			
Coil - Ignition – ALL, Z	DR-1115146	SMP UC-14			
Coil - Ignition – ALL, N	DR-1115149	SMP UC-14			
Plug, Spark, #104	AC-1557938	ACDelco R43			
Plug, Spark #108	AC-1557942	ACDelco			

R45

TRANSMISSION

NOTE: Two Types of Transmissions used on “Y” Jobs. The first type having different reverse and first speed gear, than the second type. First speed gear on first type has 43 teeth and first speed gear on second type has 42 teeth.

PART SOURCE: Northwest Transmission Parts, 13500 US Highway 62 Winchester, Ohio 45697, 1-800-327-1955, <https://nwtparts.com/>


		Republic Gear Co. Number	Warn/Perfection Gear Co's. Number	
Gasket Set - ALL	CV-608442			G085-3201710 Marx Parts Kit 7023 Part Source
Bearing – Ball, Transmission Main Drive Gear	ND-903209	Timken 209BB		
Gear – Transmission Main Drive (17T) - ALL	CV-590941	K177-1A	WT185-16A	
Bearing – Roller, Transmission Main Drive Gear	GM-141854	Timken J281248		
Shaft – Main Transmission Sliding Gear Shaft, 10-7/8 long - ALL	CV-605023	K177-9A	WT185-2A	
Bearing – Ball, Main Transmission Sliding Gear Shaft, Rear	ND-903307	Timken 307TB		
Gear – Transmission Counter Shaft, Second Speed (23T)- ALL	CV-590501	K177-5	WT185-9	
Gear – Transmission Counter Shaft, Third Speed (33T) - ALL	CV-590502	K177-18	WT185-34	
Gear – Transmission Counter Shaft, Reverse (23T) - ALL	CV-590503	K177-7	WT185-14	
Gear – Transmission Counter Shaft, Driven (40T) - ALL	CV-590504	K177-4 K177-11 (One piece cluster Replacing Gears K177-4-5-7-15a-18 [14, 23, 23, 33, 40T])	WT185-8 WT185-8A (One piece cluster [14, 23, 23, 33, 40T])	

Bearing – Transmission Counter Shaft, Front	GM-142260	SKF M1206-UV	Timken M1206EL	
Bearing – Transmission Counter Shaft, Rear	GM-121856	SKF M1207-TV	Timken M1207EL	
Shaft – Transmission Reverse Idler- ALL	CV-590496	K177-12	WT185-35	
Gear – Transmission Main Shaft, Third and Fourth Speed (24T) - ALL	CV-590493	K177-16	WT185-11	
Gear – Transmission Main Shaft, First, Second Speed, 43 Teeth in Large Gear (34-43T). 1st Type only on Y Trucks	CV-364193	K177-20	WT185-12	
Gear – Transmission Main Shaft, First, Second, and Reverse Speed, 42 Teeth in Large Gear. 2nd Type only on Y Trucks (34-42T)	CV-605555	K177-20A	WT185-12A	
Gear – Transmission Counter Shaft, First Speed, w/SHAFT, 14T, 1 st Type - Y	CV-590500	K177-15	WT185-3	
Gear – Transmission Counter Shaft, First Speed, w/SHAFT, 14T, 2 nd Type - Y	CV-591263	K177-15A	WT185-3A	
Gear – Transmission Counter Shaft, Reverse Idler, (16-26T), 1 st type - Y	CV-590494	K177-8	WT185-10	
Gear – Transmission Counter Shaft, Reverse Idler (2 grooves at 16 teeth gear end), [16-26T], 2 nd type - Y	CV-591264	K177-8A	WT185-10A	
Oil Seal – Main Shaft Bearing Retainer - ALL	YT-2063383	Shaft 1.625, Housing Bore 4.307, Width 0.468 41.28mm, 109.54mm, 11.91mm  	DISCONTINUED	5330-00-297-6435
Gasket Set				

TRANSFER CASE				
Gasket Set - Transfer - ALL	CV-608475			G085-3594033 5330-00-449-6498
Bearing – Ball, Transfer Idler Shaft, Front - ALL	ND-954260		Timken 1208L	
Bearing – Ball, Transfer Idler Shaft, Rear - ALL	ND-954262		Timken 1308L	
Bearing – Ball, Transfer Mainshaft Front and Rear – ALL N, Z (exc. NR, NS)	ND-954260		Timken 1208L	
Bearing – Ball, Transfer Mainshaft Front – NR, NS, All Y	ND-954260		Timken 1208L	
Bearing – Ball, Transfer Mainshaft Extension Front – ALL N, Z (exc. NR, NS)	ND-954262		Timken 1308L	
Bearing – Ball, Transfer Mainshaft Rear – NR, NS, All Y	ND-954262		Timken 1308L	
Bearing – Ball, Transfer Mainshaft Extension Rear – ALL N, Z (exc. NR, NS)	ND-901208		SKF 208-J	
Bearing – Needle Roller, Flat Ends, Transfer Main Shaft Gear – NR, NS, All Y	CV-3659551	3/16 Diam. x 1-3/4 Lgh. .188 x 1.750 4.76MM x 44.50MM	Part Source Frank von Rosenstiel 243329 Weir's Sideroad Pefferlaw, Ontario, Canada, L0E 1N0 Phone 705 437-3757 fax 705 437-3186 listed e-mail vonrosenstiel@globalserve.net	Part Source H012-0709403 3110-00-1839754
Bearing – Ball, Transfer Mainshaft Front and Rear – ALL	ND-954262		Timken 1308L	

Bearing – Ball, Axle Front Driveshaft Front and Rear – ALL	ND-954260		Timken 1208L	
Bearing – Ball, Axle Rear Driveshaft Front and Rear – ALL	ND-954262		Timken 1308L	
Bearing – Needle Roller, Flat Ends, Front Axle Driveshaft Gear – ALL	CV-3659551	3/16 Diam. x 1-3/4 Lgh.	Part Source Frank von Rosenstiel 243329 Weir's Sideroad Pefferlaw, Ontario, Canada, LOE 1N0 Phone 705 437-3757 fax 705 437-3186 listed e-mail vonrosenstiel@globalserve.net	Part Source H012-0709403 3110-00-1839754
Oil Seal – Bearing Retainers - ALL	CV-3659542	Bore 2.000, O.D. 3.006, Width 0.311	Timken 470530 or 410085	
Oil Seal – Low Speed Shifter Shaft - ALL	CV-3659559	Shaft 0.750, O.D. 1.071, Width 0.188	Timken 240816	
PROPELLER SHAFTS				
Universal Joint – See Group 26 above.				
FRONT AXLE (Bango Type)				
NOTE! First Type Axle (Brake Drums Inside of Hub Flange). Second Type Axle (Brake Drums Outside of Hub Flange)				
Part	Original Chevy Number	Superseded Number	NAPA Number	NSN
STEERING KNUCKLE				
Gasket Set – Steering Knuckle - ALL	CV-608433			G085-3107350 2530-00-737-7156
Bearing – Trunnion Cone - ALL	GM-144506		BR41125	

Bearing – Trunnion Cup - ALL	GM-144505		BR41286	
Bushing – Front Axle Shaft, Inner/Outer	CV-3659778			G085-3103500 3120-00-447-2681
Oil Seal – Inner Axle - ALL	CV-3659486		NOS16650	
DIFERENTIAL CARRIER				
Gasket Set – Axle Housing - ALL	CV-608838			G085-3594032 2530-00-737-7156
Bearing – Ball, Pinion Rear - ALL	ND-954237		5310WA	
Bearing, Roller/Race, Differential Side - ALL	GM-148399		KA11820Z	
Bearing – Roller, Pinion Front - ALL	GM-144553		MU1306UM23	
Gear and Pinion Set – Differential Side - ALL	CV-605559			G085-3106360 2520-00-737-7420
Gear and Pinion Set – Drive Axle (6-40) - ALL	CV-3659672 CV-608434 CV-605790	VC-605790 Superseded by CV-608434, Superseded by CV-3659672 (CV-3659672, Warner/Perfection Gear Co's., Part Number - WX2517). See transmission Part Source		G085-3115031 2520-00-737-7433
Oil Seal – Pinion Gear Yoke - ALL	CV-3653618		Timken 411330N	
REAR AXLE – See Front Axle				
DIFERENTIAL CARRIER				
BRAKES				
Facing Set – Front Brake Shoes w/Rivets - ALL	CV-605379			G085-3105480 2530-00-289-7264
Shoe – Front Axle, w/Facing Assembly - ALL	CV-3660054			G085-3113220 2530-00-737-7423
Shoe – Rear Axle, w/Facing Assembly - ALL	CV-3660048			G085-3112040
Cylinder – Front Brake Assembly - ALL	DB-5450619	1-1/4 Diam.	Raybestos WC3406 WK	

			8	
Cylinder - Master - ALL	CV-605010		Raybestos 4355 MK 33	
Cylinder – Front Brake Assembly - ALL	DB-5450553	1-1/2 Diam.	NAPA 3677	
Hose - Brake - ALL	CV-476719			
WHEEL ASSEMBLY, BEARINGS, SEALS, STUDS, AND NUTS				
Bearing – Front Inner Cone - ALL	GM-186574	(2.750 bore, 1.1875 Width)	BR33275	
Bearing – Front Outer Cone - ALL	GM-144507	(2.6875 bore, 0.8661 Width)	BRG399A	
Bearing – Front Inner Cup - ALL	GM-186573	(4.7244 O.D., 0.923 Width)	BR33472	
Bearing – Front Outer Cup - ALL	GM-142224	(4.3307 O.D., 0.8661 Width)	BRG394AVP	
Oil Seal – Inner Bearing Assembly – 1 st Type	CV-3661191	3665138	NOS36220	
Oil Seal – Inner Bearing Assembly – 2 nd Type	CV-3665138		NOS36220	
Gasket – Axle Flange – ALL	CV-3659733			5330-00-039-6075
Bearing – Rear Inner Cone - ALL	GM-144528	(2.6252 bore, 4.4688 O.D., 0.975 Width) [Superseded by Bearing GM-144527]	KD12051Z	
Bearing – Rear Inner Cup - ALL	GM-127631	(4.4684 O.D., 0.784 Width) [Superseded by Bearing GM-144527]	KD12051Z	
Bearing – Rear Inner Cone/Cup - ALL	GM-144527	(2.6262 bore, 0.975 Width) [Supersedes Race GM-127631, Bearing GM-144528]	KD12051Z	
Bearing – Rear Outer Cone/Cup - ALL	GM-144526	(2.2502 bore, 3.8754 O.D., 0.900 Width) [Superseded by Bearing GM-144525]	KB11786Y	

Bearing – Rear Outer Cone/Cup - ALL	GM-144525	(2.2502 bore, 0.900 Width) [Supersedes Race GM-127627, Bearing GM-144526]	KB11786Y	
Bearing – Rear Outer Cone - ALL	GM-127627	(3.8754 O.D., 0.700 Width) [Superseded by Bearing GM-144525]	KD12051Z	
Oil Seal – Inner Bearing - ALL	CV-599847		NOS31870	
Oil Seal – Outer Bearing - ALL	CV-3660089		Timken 6090S	

Gasket – Rear Wheel Hub - ALL	CV-3660100			G085-3106160
Gasket – Rear Hub Oil Deflector (Drums Inside of Hub Flange) - ALL	CV-3660029			G085-3106200 5330-00-534-8528

STEERING CONTROLS


Bearing – Steering Shaft, Upper Assembly – ALL Y	SSG-262288			7760-262288 3110-00-227-4838
Bushing – Steering Pitman Arm Shaft – ALL (exc. NN, NX, YN)	SSG-267082	Bz., 1.250 I.D., 1.375 O.D., 1.00 lgh.		G085-3103520 3120-00-287-7128
Bushing – Steering Pitman Arm Shaft – NN, NX, YN	SSG-266036	Bz., 1.250 I.D., 1.375 O.D., 1.50 lgh.		G057-0128029 3120-00-662-2181
Kit – Repair, Steering Connecting Rod - ALL	CV-608840			G085-3661487 2530-00-737-7105

Race – Bearing Outter, Steering Gear Housing Bearing – YN, ALL N, Z	GM-178479			H012-078617 3110-00-159-1360
Race – Bearing Outter, Used w/upper Bearing Only – ALL Y (exc. YN)	GM-179290			H012-0708616 3110-00-159-1359
Packing – Steering Gear Pitman Shaft – ALL (exc. NN, NX, YN)	SSG-269299	1-7/32 I.D., 1-41/84 O.D., 13/16 thk. 1.219 x 1.679 x 0.813 30.96MM x 42.86MM x 20.64MM	Timken Oil Seal 474278 or 480356	7760-269299 5310-00-291-9909
Packing – Steering Gear Pitman Shaft – NN, NX, YN	SSG-265283	Shaft Dia. 1.25, Housing Bore 1.688 x 0.312 Width	Timken Oil Seal 474278 or 480356	H013-0500033 5330-00-505-6066
Packing – Steering Gear Pitman Shaft – YN, ALL N, Z	SSG-269038		Timken Oil Seal 474278 or 480356	H013-0500033 5330-00-692-9761
Yoke – Steering Tie Rod, L.H.	CV-3659769		Part Source	
Yoke – Steering Tie Rod, R.H.	CV-3659770			2530-00-615-6065
SPRINGS & SHOCK ABSORBERS				
Bushing – Front Spring Eye - ALL	CV-596854		NAPA RPC 35834 Filling Station Part Source	G085-3103420 3120-00-678-5946
Bushing – Front and Rear Spring Shackle - ALL	CV-594664		Part Source	G085-0100316 2510-00-039-5854
Bushing – Rear Spring Eye - ALL	CV-369721		Part Source	G085-3103480 3120-00-395-5146

Pin – Rear Spring Shackle - ALL	CV-3656669		G085-3109780
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Shackle – Rear Spring w/Bushing	CV-3656690		5315-00-537-2063
Bolt – Front Spring Shackle - ALL	CV-3660698		4030-00-737-7238
Repair Kit – Front Shock Absorber - ALL	DP-5380898	Sleeve Link	G085-3661480
Repair Kit – Front Shock Absorber - ALL	DP-5380897	Piston Cup	G085-3501051
Repair Kit – Rear Shock Absorber - ALL	DP-5380899		G085-3501050



CAB & BODY

Motor – Windshield Wiper TRI-KSB 450-1 - ALL N (exc. NQ)	CV-3665706		3500-3665706 2540-00-753-8495
Motor – Windshield Wiper TRI-KSB 453 - NQ	CV-3666533		G085-3108480 2540-00-737-7421
Motor – Windshield Wiper L.H.	CV-3661573		8800-KSB425-2G 2540-00-391-4324

TRI-KSB 425-2G - ALL Y, Z, (exc. YA, YB, YC, YN)				
Motor – Windshield Wiper R.H. TRI-KSB 425-3G - ALL Y, Z, (exc. YA, YB, YC, YN)	CV-3661574			G617-7000129 DISCONTINUED
Motor – Windshield Wiper TRI-KSB 425-3G - YA, YB, YC, YN	CV-3664765			3500-3664765 DISCONTINUED
Arm – Windshield Wiper - ALL N (exc. NQ)	CV-3665707	TRICO# 78468-69ZE, AL-60		3500-3665707 2540-00-753-8496
Arm – Windshield Wiper - NQ	CV-3666537	AL-60		G085-3111960 DISCONTINUED
Arm – Windshield Wiper L.H. - ALL Y, Z, (exc. YA, YB, YC, YN)	CV-3661577	AL-60		3500-3661577 DISCONTINUED
Arm – Windshield Wiper R.H. - ALL Y, Z, (exc. YA, YB, YC, YN)	CV-3661578	AL-60		3500-3661578 DISCONTINUED
Blade – Windshield Wiper (8-1/4 long), 8-B-1065 - ALL	CV-608824	TAU-8-1/4 or U-778-8-1/4”C		G085-3515952 DISCONTINUED
Kit – Repair, Windshield Wiper Motor, TRI-SP 1065-X - ALL Y, Z, (exc. YA, YB, YC, YN)	CV-608483	TRICO# SP1065X		G085-3661488 2540-00-773-5360
Kit – Repair, Windshield Wiper Motor, TRI-SP 1062-X - NQ	CV-608900	TRICO# SP1062X		G085-3661476 2540-00-532-7347
WINCH, POWER TAKE-OFF, HOIST				
CARGO & DUMP WINCH				
Bearing – Ball, Winch Worm Brake End – NL, NM, YL, YM, ZL, ZM	ND-954316	1.177 bore, 2.9370 O.D., 0.9843 Width	Timken SET 20 Bearing/Race	H012-0312045 3110-00-156-6844
Bearing – Needle Roller, Winch Universal Joint Trunnion – NL, NM, YL, YM, ZL, ZM	CV-606868	0.0935 Diam., 0.416 lgh.		DISCONTINUED
Bushing – Winch Cable Roller – NL, NM, YL, YM, ZL, ZM	YT-2188843	DISCONTINUED		3120-00-517-0396

Bushing – Winch Drum, First Type – NL, NM, YL, YM, ZL, ZM	CV-608892	DISCONTINUED		
Bushing – Worm Gear Case – NL, NM, YL, YM, ZL, ZM	YT-2186348	DISCONTINUED	Part Source	
Bearing – Needle Roller, Winch Worm Front – NR, NS, YA, YC	GM-190164	1.500 Bore, 2.625 O.D., 2.000 Width		H012-0708212 3110-00-151-8314
Oil Seal – Winch Worm Shaft – NL, NM, YL, YM, ZL, ZM	YT-2075286	Cargo and Dump Winch and Parts	Timken 471141 or 450291	
TELEPHONE and EARTH BORER WINCH				
Bushing – Winch Drum Shaft Hanger – NR, NS, YA, YC	CV-607563			3500-607563 3120-00-734-0526
Bushing – Worm Gear Housing – NR, NS, YA, YC	CV-607572			0380-104E76 3120-00-770-1750
Cone – Winch Worm Rear Bearing – NR, NS, YA, YC	GM-190487		Timken 53177	
Cup – Winch Worm Rear Bearing – NR, NS, YA, YC	GM-120728		Timken 53387	
Oil Seal – Winch Worm Shaft – NR, NS, YA, YC	CV-607569	Telephone and Earth Borer Winch	Timken 470530 or 450085	
Oil Seal – Winch Worm Shaft Bearing Retainer – NR, NS, YA, YC	CV-607589	Telephone and Earth Borer Winch	Timken 455147 or 415449	
BOMB SERVICE WINCH PARTS (1 ST Type Holan Winch I.D. – “TWO TON HOLAN WINCH” 2 nd Type Holan Winch I.D. – “HOLAN – 2 TON – MODEL 2”				
Bushing – Winch Drum, Drum Side (Holan Model 2) - NQ	CV-609226			DISCONTINUED
Bushing – Winch Drum, Gear Side (Holan Model 2) - NQ	CV-609225			DISCONTINUED

POWER TAKE-OFF UNITS

Bearing – Ball, Annular, Double Row, Winch PTO Drive Shaft, Front - NL, NM, NX, YL, YM, ZL, ZM	ND-954265	1.387 Bore, 2.8346 O.D., 0.875 Width		New Departure Division E207	H012-190035 3110-00-554-3673 Part Source
Bearing – Ball, Annular, Double Row, Winch PTO Drive Shaft - NX	ND-954265	1.387 Bore, 2.8346 O.D., 0.875 Width		New Departure Division E207	H012-190035 3110-00-554-3673
Bearing – Ball, Annular, Double Row, PTO Shaft - NX	ND-905207	1.387 Bore, 2.8346 O.D., 1.0625 Width		SKF 5207-E	H012-1900035 3110-00-156-5451
Bearing – Ball, Annular, Single Row, Winch PTO Drive Shaft, Rear - NL, NM, NX, YL, YM, ZL, ZM	ND-903207	1.387 Bore, 2.8346 O.D., 0.6693 Width		Timken 207	H012-1303035
Bearing – Ball, Annular, Single Row, PTO Idler Gear – NR, NS, YA, YC	ND-901309	1.7717 Bore, 3.9370 O.D., 0.9843 Width		Timken 1309	H012-1301045 3110-00-554-3288
Bearing – Ball, Annular, Single Row, PTO Sliding Gear Shaft, Open End – NR, NS, YA, YC	ND-901309	1.7717 Bore, 3.9370 O.D., 0.9843 Width		Timken 1309	H012-1301045 3110-00-554-3288
Bearing – Ball, Annular, Single Row, PTO Earth Borer Drive Shaft – NR, NS, YA, YC	ND-901309	1.7717 Bore, 3.9370 O.D., 0.9843 Width		Timken 1309	H012-1301045 3110-00-554-3288
Bearing – Ball, Annular, Single Row, PTO Earth Borer Drive Shaft – NZ, YZ	ND-903306	1.1811 Bore, 2.8346 O.D., 0.7480 Width		Timken 306TB	H012-1304030 3110-00-293-9302
Bearing – Needle, Annular, PTO Shaft Front and Rear - NL, NM, NX, YL, YM, ZL, ZM	GM-173557	0.875 Bore, 1.1250 O.D., 1.00 Width		Timken B1412	H012-0709427 3110-00-120-3100
Bearing – Needle, Annular, PTO Idler Gear Shaft - NL, NM, NX, YL, YM, ZL, ZM	VC-605810	1.000 Bore, 1.250 O.D., 1.00 Width GM 1971-1972 Chevy Vega Manual Steering Gear Housing Thrust Bearing		Torrington B1616 KOYO & Timken B1616	H012-0709429
Bearing – Needle, Annular, PTO Hoist Drive Shaft - NL, YL, ZL	GM-173563	1.250 Bore, 1.375 O.D., 1.00 Width		Timken B1816	H012-0709433
Bearing – Roller, PTO Intermediate Gear Assembly - NZ, YZ	GM-138124	0.750 Bore, 2.00 O.D., 2.00 Width		Hyatt 26314	H012-0707697 3110-00-151-8317

Bearing – Roller Assembly, PTO Earth Borer Drive Shaft - NR, YC	GM-121362	1.7492 Bore, 3.1501 O.D., 1.997 Width	Hyatt NC307	H012-0707605
Bearing – Roller Assembly, PTO Idler Gear Shaft, Garwood Only - NL, NM, NX, YL, YM, ZL, ZM	GM-141864	1.00 Bore, 1.1250 O.D., 1.625 Width	Timken J321652	H012-0708230 3110-00-120-4273
Bearing – Roller Assembly, PTO Intermediate Gear, Garwood Only - NL, NM, NX, YL, YM, ZL, ZM	GM-141862	1.00 Bore, 1.150 O.D., 1.00 Width	Timken J321652	H012-0708229 3110-00-120-4268
Bearing – Roller Assembly, PTO Intermediate Gear, Spicer Only – NR, NS, YA, YC	GM-188134	0.750 Bore, 1.250 O.D., 2.125 Width	Hyatt 94334	H012-0708220
Bearing – Roller Assembly, PTO Intermediate Gear, Spicer Only – NR, NS, YA, YC	GM-115525	1.00 Bore, 1.750 O.D., 1.00 Width	Hyatt SRA403	H012-0707606
Bearing – Roller Assembly, PTO Intermediate Gear Shaft – NX	GM-178284	0.750 Bore, 1.250 O.D., 2.374 Width	Timken J241676	H012-0708221 3110-00-158-8569
Bearing – Roller Assembly, PTO Low Speed Idler Gear Shaft, Spicer Only - NL, NM, NX, YL, YM, ZL, ZM	GM-188957	1.375 Bore, 1.750 O.D., 1.500 Width	Hyatt 93824	H012-0708217
Bearing – Needle, Roller Assembly, PTO Sliding Gear Shaft, Pilot – NR, NS, YA, YC	GM-113773	1.500 Bore, 2.500 O.D., 1.1875 Width	Hyatt RA306	H012-0708203
PTO Oil Seal – Dual Power Hoist and Winch Shift Rod – NL, YL, ZL	CV-605836	Gar Wood Dual Power Take-Off Parts for Either Hercules or Heil Dump Body with Winch	Timken 471224 or 470120	
PTO Oil Seal – Winch Drive Shaft – NL, YL, ZL	CV-605816	Gar Wood Dual Power Take-Off Parts for Either Hercules or Heil Dump Body with Winch	Timken 473215	
PTO Oil Seal – Winch Drive Shaft Open End - NL, NM, NX, YL, YM, ZL, ZM	YT-2096357	Spicer Dual Power Take-Off Parts for Either Hercules or Heil Dump Body with Winch	Timken 471787	
PTO Oil Seal – Dual Power Hoist Shifter Shaft – NL, YL, ZL	YT-2069210	Spicer Dual Power Take-Off Parts for Either Hercules or Heil Dump Body with Winch	Spicer 28P6	
PTO Oil Seal – Winch Drive Shaft – NL, NM, YL, YM, ZL, ZM	CV-605816	Gar Wood Single Power Take-Off Parts for Either Hercules or Heil Dump Body with Winch	Timken 473215	
PTO Oil Seal – Winch Shift Rod – NM, YM, ZM	CV-605823	Gar Wood Single Power Take-Off Parts for Either Hercules or Heil Dump Body with Winch	Timken 450593	

PTO Oil Seal – Idler Cluster Gear Bearing, Open End, Assembly – NR, NS, YA, YC	CV-607538	American Coach and Body Power Take-Off Parts	Timken 455004 or 417316	
PTO Oil Seal – Earth Borer Sliding Gear Shaft Bearing, Open End, Assembly – NR, NS, YA, YC	YT-081369	American Coach and Body Power Take-Off Parts	Timken 450183 or 472179	
PTO Oil Seal – Winch Shifter Shaft – NL, NM, NX, YL, YM, ZL, ZM	YT-2096367	Spicer Single Power Take-Off Parts for Cargo Body with Winch	Timken 450025 or 471553	
PTO Oil Seal – Winch Drive Shaft, Open End - NL, NM, NX, YL, YM, ZL, ZM	YT-2096357	Spicer Single Power Take-Off Parts for Cargo Body with Winch	Timken 471787	
PTO Oil Seal – Shifter Shaft – NH, YH, ZH	CV-605686	Central Fibre Single Power Take-Off Parts for Dump Trucks Not Using Winch	Timken 471231	

Date: January 27, 2022

Vaughn P.

Hanford, CA