# 1940 FORD V8 TRUCKS



3 TON

- 4 TON
- TON

## SPECIFICATIONS

ENGINE-100 H.P.: Bore 3-3/16 in., stroke 37 in. Piston displacement 239 cub. in. 3.H.P. 100. Engine torque over 180 ft. lbs. from 1.150 to 2.400 R.P.M. Taxable horsenower rating 32.5

\$5 H.P.: Bore 3-1/16 in., stroke 33 in. Piston displacement 221 cub. in. B.H.P. 95. Engine torque 170 ft. lbs. at 2,200 R.P.M. Taxable horsepower rating 30.

CLUTCH-Heavy duty type with plate pressure increased by centrifugal force. 5-Ton truck has special clutch of similar design built for greater engine torque transmission. Cushioned hub with vibration damper. Clutch diameter 11 in.

TRANSMISSION-Heavy duty type, 4 forward speeds. Ball and roller bearings in all forward gears. Power take-off opening, with power take-off optional as extra

UNIVERSAL JOINTS-Needle roller bearing type, fully enclosed and permanently protected against dust and mud. Centre universal is rubber mounted for greater anti-friction efficiency.

FRAMES—High carbon pressed steel for 3-ton units, elastic limit 42,000 lbs. per sq. in. 4 and 5-ton frames are dual section high carbon pressed steel outer frame with high tensile steel inner frame, elastic limit 54,000 lbs. per sq. in. 176 in. W.B. 3. 4. and 5-ton and 'bus chasses have high tensile channel and Inserts with special triple frame. 194 in. W.B. 5-ton frame is of special triple section, 9 in. deep, 3 in. wide, and 5/8 in. thick.

AXLES-Front: Carbon managenese steel, drop centre type, large I beam section. Rear: Full floating with spiral bevel gear drive, straddle mounted pinion and crown wheel thrust plate. Ratio 6.66 to 1 for 3 and 4-ton trucks (optional 2-speed axle ratios 5.83 and 8.11 to 1). 5.Ton truck has heavy duty 2-speed axle as standard equipment, ratios 6.3 and 8.81 to 1

SPRINGS-Heavy duty semi-elliptic front and rear. Auxiliary rear springs standard in all models. Total spring capacities: 3-ton, 15,450; 4-ton, 17,050; 5-ton. 18.800. C.O.E.: 3-ton. 16.200: 4-ton. 17.800: 5-ton. 19.850.

STEERING-Worm and roller type, ratio 18.4 to 1. Steering wheel 18 in, diameter.

WHEELS-3-ton 7 20 in. x 6 in. 4-ton models 2 20 in. x 6 in. front and 5 20 in. x 7 in. rear. 5-ton models 7 20in. x 7 in.

TYRES-3-ton 6 32 x 6, 10-ply. 4-ton 2 7.00 x 20 front and 4 34 x 7, 10-ply rear. 5-ton 6 34 x 7, 10-ply, 176 in, and 194 in, W.B. Bus: 6 7.50 x 18, 8-ply.

BRAKES-Powerful hydraulic. Front 14 in. x 2 in., rear 15 in. x 31/2 in. Independent handbrake system operating on drive shaft has lining area of 61.5 sq. in. Total braking area 365 sq. in.

GROSS VEHICLE CAPACITIES-3-ton: 14.500 lbs. 4-ton: 16.000 lbs. 5-ton: 18,000 lbs.

Ford Motor Company of Australia Pty. Ltd., whose policy is one of continuous improvement, reserves the right to change specifications and prices at any time without notice or incurring liability to purchasers.

FORD MOTOR COMPANY OF AUSTRALIA PTY, LTD, (INCORPORATED IN VICTORIA). REGD. OFFICE GEFLONG DM668,25M,40

#### LONG LIFE FEATURES OF FORD V-8 ECONOMY ENGINE



VALVE INSERTS are tungsten steel for both intake and exhaust valves—a unique Ford shaft, eliminating back lash V.R feature.

DISTRIBUTOR is direct driven from the front end of camand assuring correct timing. Is foolproof and waterproof.

MIRROR FINISHED CYLIN. DER WALLS permit of greater accuracy in fitting pistons and rings and result in smoother more efficient operation with loss cylinder and niston ring wear.

PHILL LENGTH WATER IACKETS completely encircle the cylinders from top to bottom and extend down the crankcase walls. Oil temperature is thus kept uniform providing better lubrication, retarding engine wear and giving longer life to all engine parts.

DETACHABLE MAIN BEAR. INGS (below). Radial tongues on the main hearing caps fit into corresponding grooves in the block-a costly but posttive method of securing perfect bearing alignment.

CAST ALLOY CRANKSHAFT. The crankshaft used for the Ford V-8 truck is of special cast allow steel, extremely hard, rigid and long wearing.





# AUSTRALIA'S MOST POPULAR HEAVY-DUTY TRUCKS . . . . NEWLY DESIGNED FOR BIGGER PAYLOADS . . . . GREATER ECONOMY





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SPECIFICATIONS



AUSTRALIA'S MOST POPULAR HEAVY-DUTY TRUCKS . . . . NEWLY DESIGNED FOR BIGGER PAYLOADS . . . .









Now, for 1940 the Ford heavy duty range is entirely NEW - with new wheelbase lengths, new frames, new semi-elliptic springs both front and rear, 2 new 2-speed axles, new, more striking appearance, new and greater engine accessibility, new driver comfort with redesigned all-steel cabs, pivot front quarter-windows for controllable, draught-free ventilation and screenwipers mounted at base of windscreen. Entirely new, also, is the Hotchkiss final drive with completely enclosed needle-roller bearing universal joints.

pound for pound, that discerning buyers have found in Ford V-8.

This host of new value features, the bigger range of models to choose from, the still further reduced upkeep and maintenance costs, make Ford V-8 undoubtedly your best buy for 1940. Safeguard your profits . . . invest in Ford V-8 - the one truck designed to meet the year's changed conditions, with still GREATER payloads at LOWER operating costs.

MONEY SAVING ENGINE EXCHANGE PLAN. Not only is an Engine Exchange under the Ford Engine

Not only is an Lagine Exchange under the Ford Lagine Exchange Plan lower in price than a complete engine overhaul, but also it pays for itself in time saved alone. For Bus Proprietors, Raulage Contractors, and all who cannot afford to have their vehicles off the road for long periods, the Engine Exchange Plan. exclusive to Ford owners, is a real

When the time comes for engine overhoul, arrange with your local Ford Dealer for an exchange engine. Leave your Truck with him and 6 or 7 hours later drive it away again with a factory reconditioned engine as good as new, carrying the same warranty as a new engine and giving, of course, the same warranty as a new engine and giving, of course, the same powerful economical performance. The Engine Exchange Plan is available irrespective of mileage, whether it be \$0.000 or 100.000 miles.



CUSHIONED DRIVE LINE Needle roller bearing universal toints are completely enclosed and permanently pro tected against dust and mud, and encased in rubber mountings for greater anti-friction

THE FORD V-8 HEAVY DUTY CHASSIS, 5-TON: Available in 134", 158", 176" and 194" wheelbases with heavy duty Ford V-8 engine of 3-3/16ths in. bore developing more than 180 ft. lb. torque. Helper springs and heavy duty 2-speed axle standard equipment.

#### SEMI-CENTRIFUGAL CLUTCH WORKS.

In the illustrated cross section L is one of the release levers. all three of which are shown in the smaller illustration helow Note weighted outer end W Each lever is mounted on the pressure plate by means of a pin and roller bearing B. The levers are also attached to the

clutch cover by flattened pin, and roller R. As the engine speed increases, centrifugal force, acting on the outer weighted ends of the levers, causes them to swing forward as indicated by the arrow, and evert increasing pressure against the clutch plate P. The centrifugal force action supplements the pressure normally exerted against the plate by the clutch springs, one of which, S, is shown. This increases the clamping action on the disc, which in turn increases the power transmitting ability

Ford semi-centrifugal clutches stand up in the hardest service because centrifugal action builds up their power transmitting capacity far in excess of maximum engine torque. Therefore, the clutch is capable of delivering full engine torque without slippage. Slippage during clutch engagement when the truck is getting under way is also reduced. As a result, wear on the clutch facings and pressure plate is minimised. Another feature of Ford clutches appreciated by every truck driver is the easy pedal pressure at gear shifting speeds. This is possible because

centrifugal force builds up the pressure on the plate so that the total spring pressure of the springs can be kept low. Release bearing and pilot bearing are prelubricated type.

Special cushioning springs are used between the clutch disc and facing to make clutch engagement easier when starting. This prevents chattering or grabbing. Elimingting lerky starts it gyoids unnecessary strain on drive line and rear axle, and in this way adds to the general reliability of the unit.

### HEAVY DUTY SPRINGS : These gre

fixed at the forward end and free shackled at rear. 5-Ton carrying capacities: Rear. 15,600 lbs.; front, 3,200 lbs.; total, 18,800 lbs. All six pins over the rear springs are interchangeable. Spring leaves are of chrome alloy steel. Helper springs are standard equipment on all 3, 4 and 5-ton models.

#### HEAVY DUTY REAR AXLE ASSEMBLY with straddle mounted driving

pinion and crown wheel thrust plate to ensure permanent alignment and long trouble-free life. Standard axle ratio for 3-4 ton units is





All Ford V-8 5-tonners have dual frames (right). 134", 158" W.B. and

dual type will with

service, the gears are big and sturdy as the shafts that carry them. All gears and main shaft are machined from high quality oil-hardened chrome alloy steel, carefully heat treated to provide a hard-resisting surface on the outside of the teeth; underneath this hard surface is a strong tough core to prevent breakage. This also is true of the splines in the centre of the gears and those of the main shaft on which the gears slide when



## TWO-SPEED AXLE: This cut-away section illustrates where the reduction takes place. Selector fork operated by flexible steel cable and rod from lever in the cab ensures quiet easy changes at all speeds. Gears are of the planetary type with splines cut on the inside of the measive crown wheel (illustrated below). Ask housings crecut on the inside of the massive crown wheel (illustrated below). Axis housings cros-lotsped from seamless steel (append and electrically weeked for super strength. Crown wheel diameter is increased to $12\frac{1}{2}$ in, and differential gears and platons are correspond-ingly increased in capacity by 20%. As in all Ford V-8 trucks, the platon is straddle mounted, and 4 differential gears are used.

#### 2 SEPARATE RRAKING SYSTEMS.

Big powerful hydraulic brakes mean smooth, straight stops all the time. Rear drums are 15 in, diameter, with shoes 3.5 in. wide (illustrated). Area of brake lining is 303 sq. in. In addition to this. rate hand brake with a drum 7.8 in. by 2.5 in., and a lining area of 61.5 sq. in., operates on the transmission shaft directly behind the gear box.





