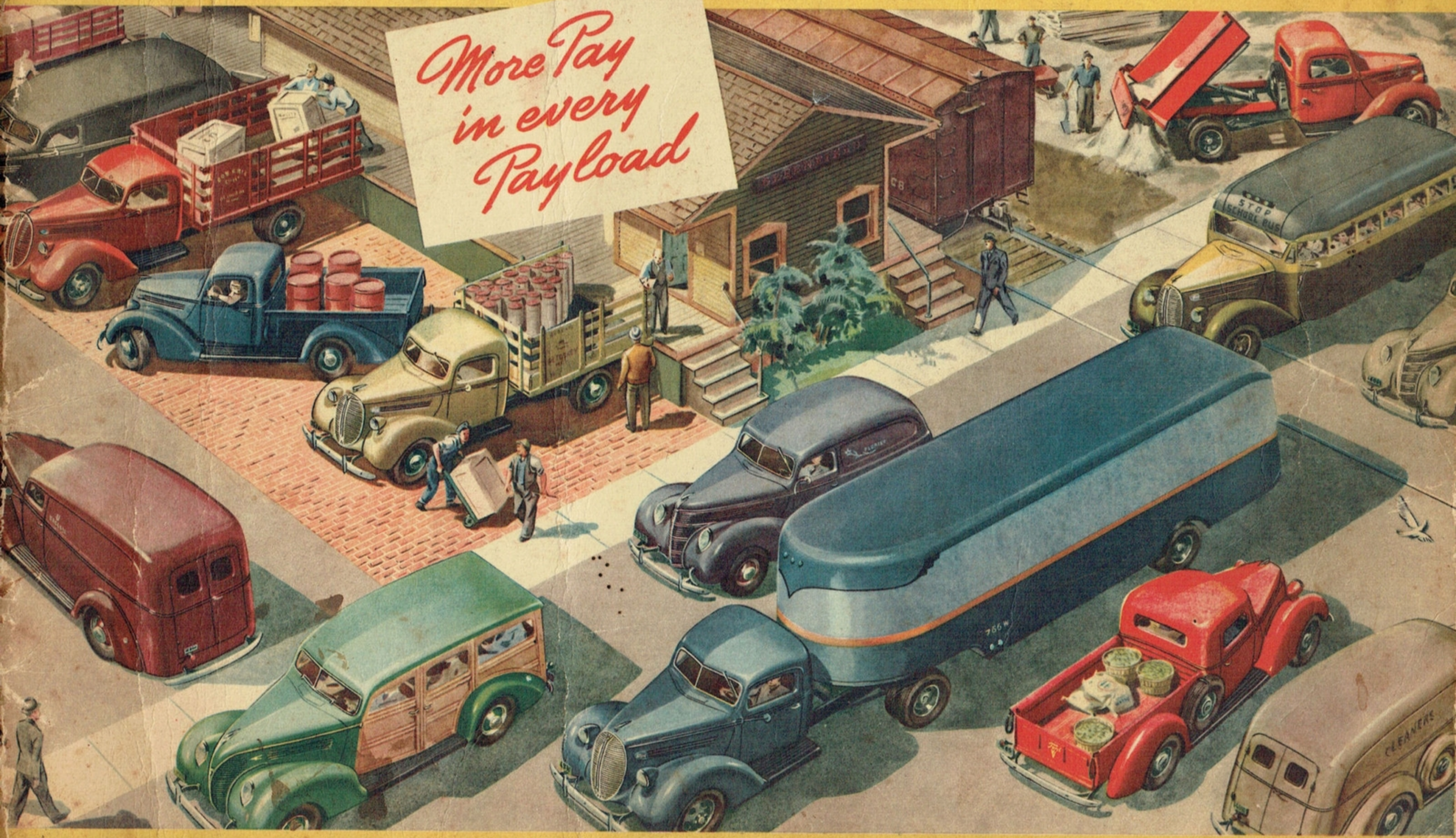
1938 FORD V-8

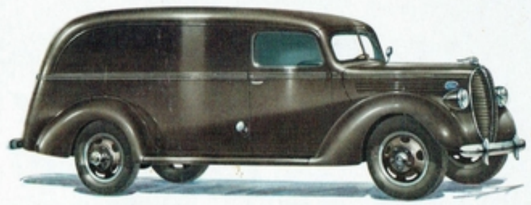
TRUCKS AND COMMERCIAL CARS



WITH THE PROVED ECONOMY OF THE V-8 ENGINE

1938 BRINGS WIDEST RANGE OF HAULING AND DELIVERY UNITS IN FORD HISTORY

1-TON EXPRESS • The One-Tonner, latest addition to the Ford V-8 truck and commercial line, bridges the gap between the larger Trucks and the light Commercial Cars. It has a wheelbase of 122 inches, is powered with the 85-horsepower V-8 engine, has other time-proved Ford features.

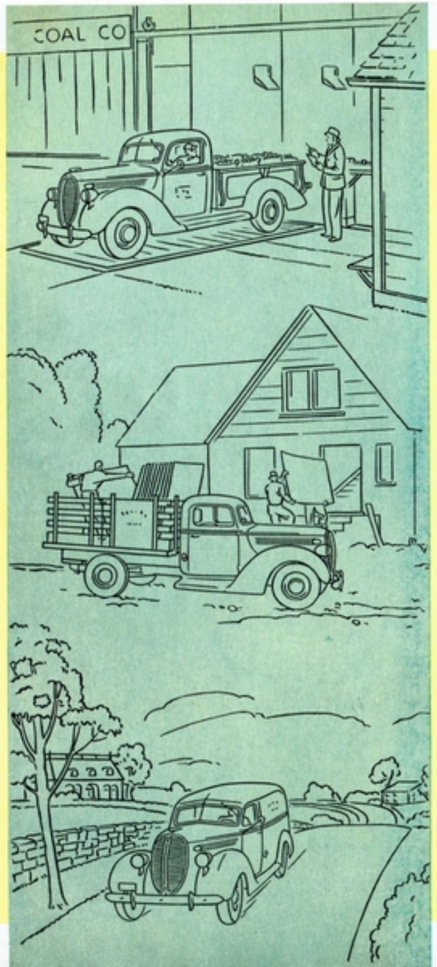


134-INCH PANEL • Built on the 134-inch wheelbase, this roomy unit is as distinguished in appearance, as it is outstanding in performance. There is also a Truck Chassis with Cab on both the 134-inch and on the 157-inch wheelbases. These 1938 units are designed to put more pay into every payload.

The trucking industry shows two definite trends. One is the swing away from heavy, expensive units toward lighter, faster, more economical equipment. The other is the demand for a greater range of sizes and types in these lower-priced units—to fit specialized needs. When you study both trends, your attention is bound to focus on the Ford V-8. ⋆ Ford has been the leader in developing modern metals and methods that give great strength with light weight. And the Ford line for 1938 presents the widest choice of types and sizes that Ford has ever offered. ⋆ *For almost every hauling and delivery requirement, there is now a unit that gives you Ford standards of operating and maintenance economy.* And there are many options and combinations available—one of which you will find will give the lowest operating cost for your particular job.

157-INCH TRUCK WITH STAKE BODY • This rugged truck on the 157-inch wheelbase has a great record for heavy-duty service. Other 1938 Ford V-8 Trucks are the 134-inch wheelbase Chassis with Cab, the 157-inch wheelbase Chassis with Cab, and the 134-inch Dump Truck Chassis with Cab.

SEDAN DELIVERY • This new unit on the 112-inch wheelbase has the handsome front end of the Standard Ford V-8 passenger car. These commercial cars blanket the field of the lighter hauling and delivery needs. Other 1938 Ford V-8 commercial cars are the Light Delivery, Panel Delivery, and Station Wagon.



The ONE-TONNERS

122" WHEELBASE–85 HP. V-8 ENGINE

Here is the truck of the year. It has been built to fill the need of truck owners from coast to coast for a unit that will handle loads in the one-ton range . . . and handle them with the same proved performance and economy for which Ford V-8 units of both larger and smaller capacities have been famous.

The One-Tonners are powered with the 85-horsepower V-8 engine, now enjoying its seventh year of success. The economy of this power plant is witnessed by hundreds of thousands of truck and commercial owners, who acknowledge that it puts the Ford in a class by itself for speed and power.

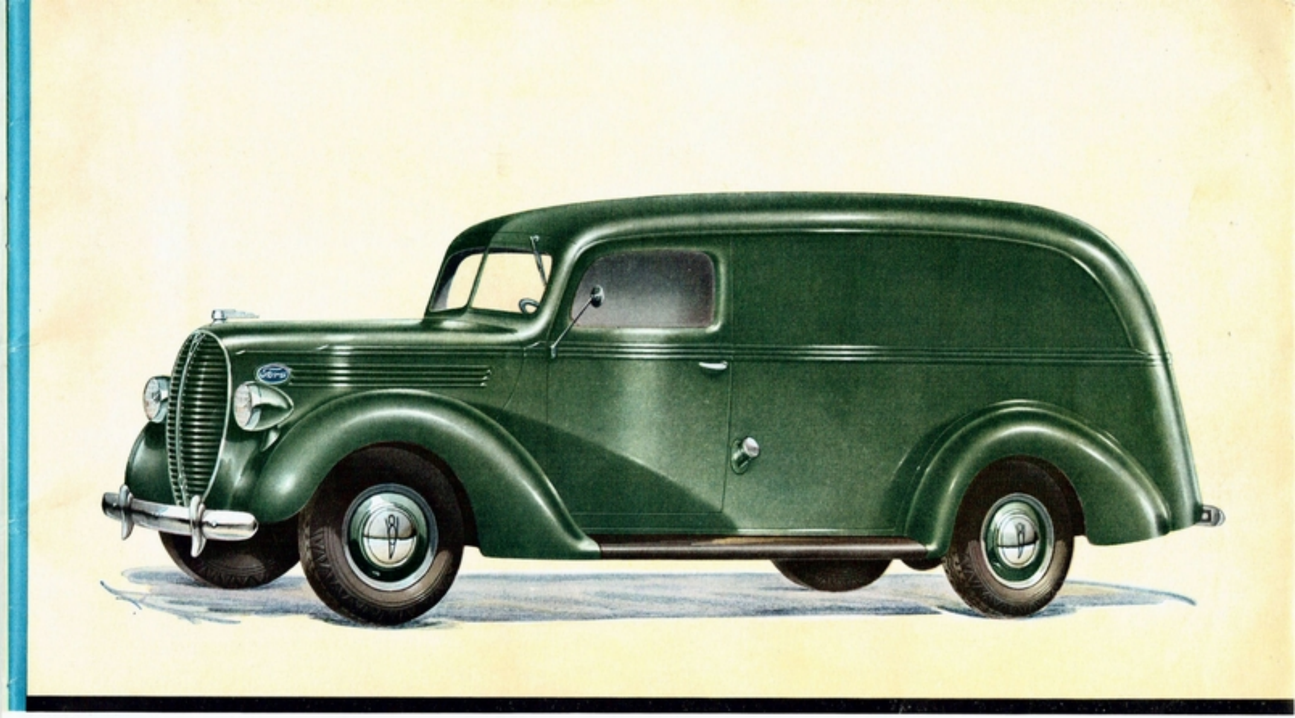
The new One-Tonner has a 122-inch wheelbase. Because of the compact Ford V-8 engine, standard length bodies have exceptionally roomy cabs or driver compartments.

Built into this new unit are the quality features which make the larger Ford V-8 models so reliable. Frame, springs, axles and other parts are designed with high reserve strength for the rated capacity of the unit. And this has been achieved without penalizing operating economy by excess chassis weight.

Factory-built Panel and Express bodies are available. Chassis, and Chassis with Cab units are also included in the line. They are well adapted to mounting special bodies, and afford good load distribution.

Who needs the new One-Tonner? *Who doesn't?* Butchers, bakers, grocers, laundries, cleaning and dyeing establishments, plumbers, milk companies, farmers, coal dealers. Landscape gardeners, cartage and hauling companies. Oil producers and refiners, as auxiliary units. Retailers, wholesalers, manufacturers, "for hire" operators—nearly every kind of business you can mention.

Try one on the job if you have loads in the one-ton range. That's the best way to test its ability to give *maximum economy—bed-rock hauling costs.*



122-INCH PANEL

A real go-getter—in looks and action. It combines the utility of a truck with passenger car appearance. The solution to lowered delivery costs for dairies, dry cleaners, grocers, florists, bakers and many others.

The body has a new type of construction. New methods of welding side panels, roof rails, and roof panel give the body unusual strength and rigidity. Hardwood floor is protected by steel skid strips, and doors are fitted with an independent lock. Rear door opening is 46.2 inches wide by 46.54 inches high. Spare wheel is mounted on the right side of the body.

Length at floor, 107.27 inches, width 55.4 inches, height 55.21 inches. Oversize tires and other special equipment, including coloured wheels as illustrated, are available at additional cost.

122-INCH CAB AND CHASSIS WITH STAKE BODY

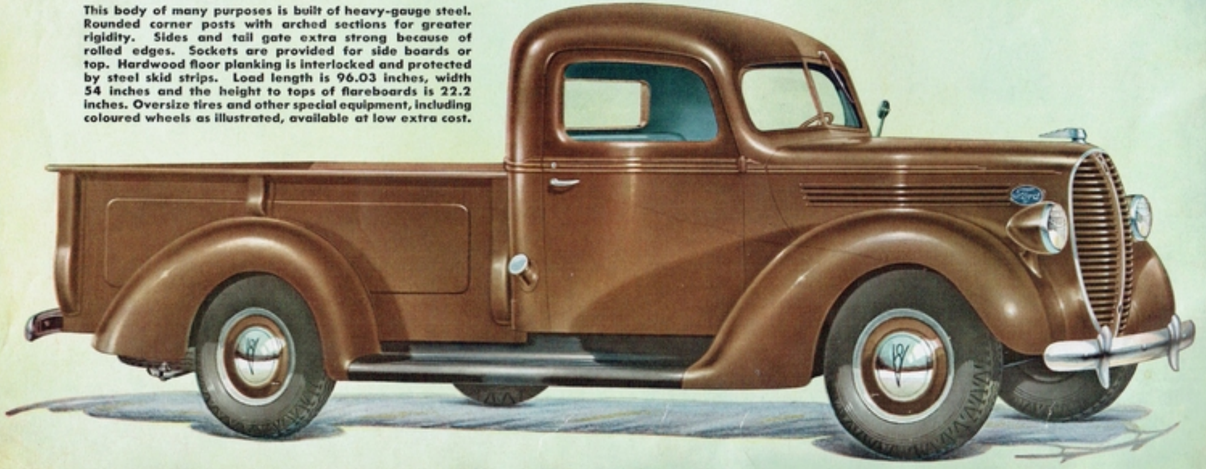
Cab-to-axle measurement is 48.25 inches. This gives the good weight distribution so essential to economical operation and long tire life. Frame width is 34 inches. This truck offers a great deal to farmers and operators of fast pick-up and delivery equipment in the 1-ton range. While essentially a lower-priced truck, it has a full-floating rear axle, full torque-tube and radius rod drive, and other time-proved, money-saving features.

122-INCH CHASSIS WITH CAB

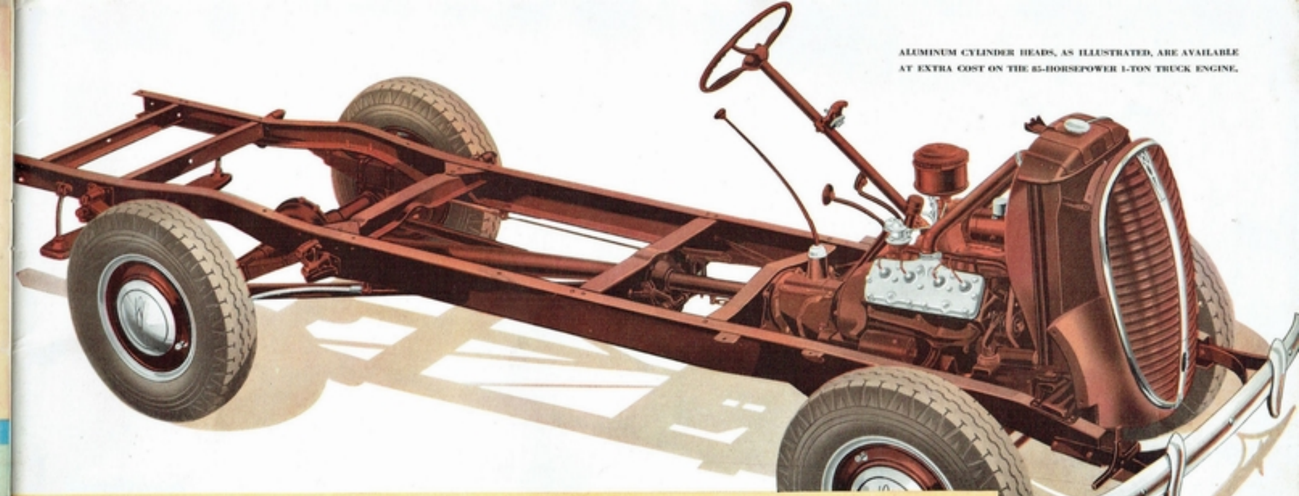
Standardized frame dimensions make this unit ideal for special bodies. Cab-to-axle measurement 48.25 inches, frame width 34 inches. Cabs have modern styling, greater comfort, more headroom. Wide doors are held in open position by friction-type checks. Windshield opens. Large screened cowl ventilator. All units have foot-operated headlamp beam control switch. Oversize tires and other special equipment, including coloured wheels as illustrated, are available at low extra cost.

122-INCH EXPRESS

This body of many purposes is built of heavy-gauge steel. Rounded corner posts with arched sections for greater rigidity. Sides and tail gate extra strong because of rolled edges. Sockets are provided for side boards or top. Hardwood floor planking is interlocked and protected by steel skid strips. Load length is 96.03 inches, width 54 inches and the height to tops of flareboards is 22.2 inches. Oversize tires and other special equipment, including coloured wheels as illustrated, available at low extra cost.



ALUMINUM CYLINDER HEADS, AS ILLUSTRATED, ARE AVAILABLE AT EXTRA COST ON THE 85-HORSEPOWER 1-TON TRUCK ENGINE.



CHASSIS SPECIFICATIONS

CLUTCH • Plate pressure increased by centrifugal force as engine speed is increased. Cushioned hub with vibration damper. 11-inch diameter, friction area 123.7 square inches.

TRANSMISSION • 3 forward speeds with all helical silent-type gears. Synchronized shifting for second and high. Roller and ball bearings in all forward speeds. 4-speed transmission available at extra cost.

UNIVERSAL JOINTS • Fully enclosed. Hardened and ground spider pins and bearing bushings.

FRAME • High carbon frame steel with 6 cross-members. 34-inch width across side rails, from back of cab to end of frame. Side rail dimensions: Length, 183.56 inches. Depth, 6 inches. Width, 2.25 inches. Thickness, 0.19 inch. Depth main crossmember 12.62 inches.

FRONT AXLE • Heat-treated alloy steel. Tapered roller wheel bearings. Anti-friction type spindle thrust bearings.

FRONT SPRING • Transverse type. Length, 40.25 inches. Width, 2 inches. All leaves are chrome alloy steel. Oilless bearing type shackles. Number of leaves, 13.

SHOCK ABSORBERS • Two double-acting, adjustable hydraulic, on front.

STEERING • Worm and roller type. Ratio, 18.2 to 1. Worm mounted on tapered roller bearings and roller on a needle-type roller bearing. Steering wheel diameter—17 inches.

REAR AXLE • Full-floating. Spiral bevel gear drive. Straddle-mounted pinion and ring gear thrust plate. Four-pinion type differential with tapered roller side bearings. Wheel hubs mounted on double, tapered roller bearings. Drive is through torque tube and radius rods. Gear ratio, 5.14 to 1.

BRAKES • Ford Safety Brakes with internal expanding self-energizing shoes. Brakes are actuated by cables and conduits. Front brakes, 12 x 1.75 inches. Rear brakes 15.12 x 2.5 inches. Total brake lining area 277 square inches. Cast brake drums have reinforcing and cooling ribs. Handbrake lever operates all four wheelbrakes.

REAR SPRINGS • Heavy-duty semi-elliptic type. All leaves are chrome alloy steel. Length, 45 inches; width, 2.25 inches. Number of leaves, 13. Panel has 12-leaf rear spring.

WHEELS • Five. Steel disc type.

TIRES • Front, 6.00-17 inch 6-ply. Rear, 7.00-17 inch 6-ply. Optional tire equipment 7.00-17 inch 6-ply all around and spare, 7.50-17 inch 8-ply all around and spare, available at small extra charge.

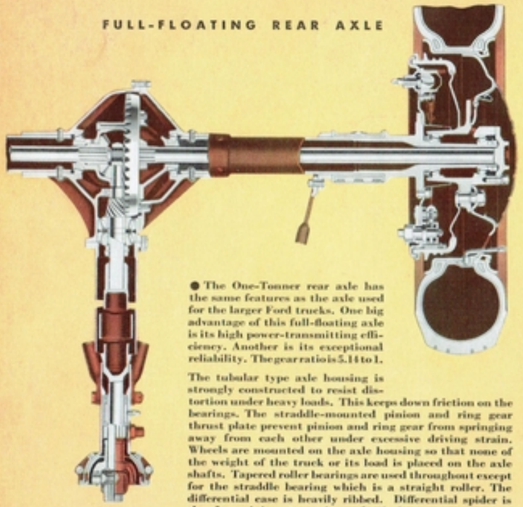
WHEELBASE • 122 inches. **TURNING RADIUS**—22 feet, right or left.

ONE-TON CHASSIS

122-INCH WHEELBASE

Features OF THE FORD V-8 ONE-TONNERS

FULL-FLOATING REAR AXLE

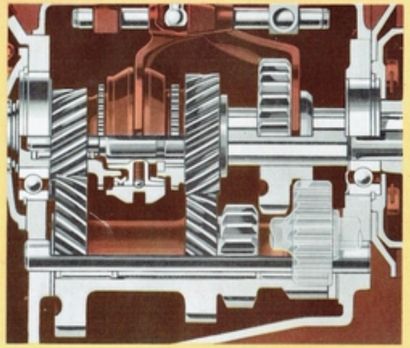


● The One-Tonner rear axle has the same features as the axle used for the larger Ford trucks. One big advantage of this full-floating axle is its high power-transmitting efficiency. Another is its exceptional reliability. The gear ratio is 5.14 to 1.

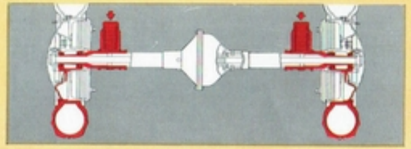
The tubular type axle housing is strongly constructed to resist distortion under heavy loads. This keeps down friction on the bearings. The straddle-mounted pinion and ring gear thrust plate prevent pinion and ring gear from springing away from each other under excessive driving strain. Wheels are mounted on the axle housing so that none of the weight of the truck or its load is placed on the axle shafts. Tapered roller bearings are used throughout except for the straddle bearing which is a straight roller. The differential case is heavily ribbed. Differential spider is the four-pinion type, instead of the customary two. Axle shafts have integrally forged flanges. The shafts are readily removable without disturbing the wheels.

85 HP. V-8 ENGINE

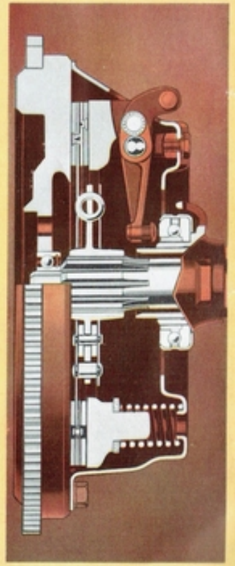
Operators who require maximum acceleration and high road speeds will find that this engine speeds up deliveries and cuts time on long runs. Its exceptional economy makes it particularly suitable for door-to-door delivery service and other multiple-stop operations where idling time is high. This quality engine is made up of quality features, among which are polished cylinder walls, precision-set valve clearances, floating-type connecting rod bearings, full cylinder-length water jackets and exhaust valve seat inserts—each of which contributes generously to long, trouble-free engine life.



TRANSMISSION • The 3-speed one-ton truck transmission, has all helical cut gears. The countershaft is carried on roller bearings. Second and high gears have synchronized shifting. All transmission gears and mainshaft are forged from oil hardening chromium steel. These parts receive careful heat treatment which provides gear teeth and splines with high strength and resistance to wear. Ford transmissions have a distinguished record for delivering high power with minimum friction loss.



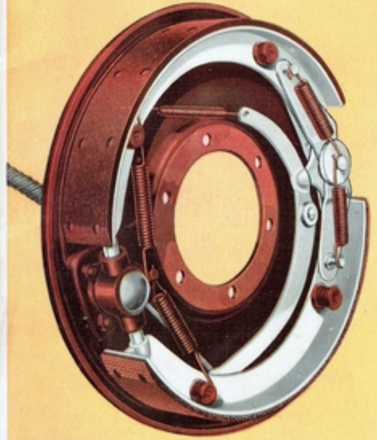
LOAD IS CARRIED ON THE AXLE HOUSING • Diagrams shows how the load, supported by the rear springs, is transferred to the axle housing and then to the wheels. Thus the axle shafts are relieved of all load weight strain and serve only to transmit driving power to the wheels.



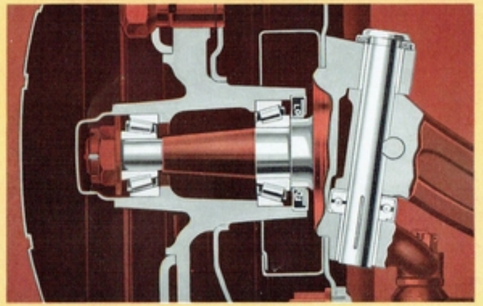
CENTRIFORCE CLUTCH • Proved one of the most reliable types of clutch ever used in any truck. Centrifugal force increases clamping action on clutch disc and raises the power-transmitting capacity. Clutch diameter is 11 inches.

Double-acting HYDRAULIC SHOCK ABSORBERS

Double-acting hydraulic shock absorbers are standard equipment on the front of all one-ton units. They are provided with an external adjustment so that shock absorber action can be easily changed to suit various road and load conditions. They provide comfort for the driver, protection for the fragile loads.

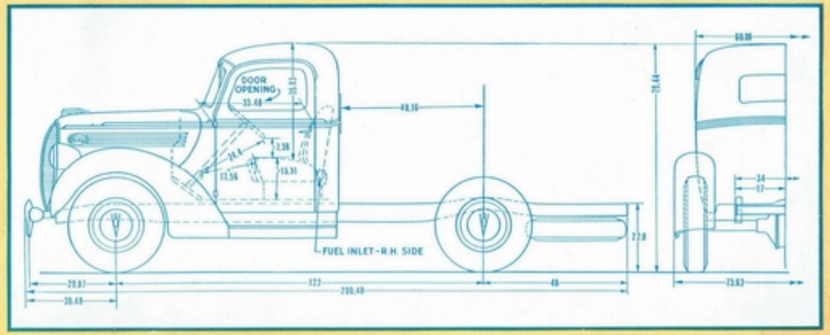


EXTRA LARGE BRAKING AREA • Ford one-ton Trucks have 277 square inches of brake lining area—exceptionally large for trucks of their capacity rating. The rear brakes are 15⅛ inches in diameter, 2½ inches wide. Front brakes are 12 inches in diameter, 1¾ inches wide. Both front and rear brakes utilize the self-energizing principle to provide quick stops for heavily loaded trucks with low pressure on the brake pedal. Self-energized brakes permit the use of lower leverage ratio from the pedal to the wheelbrakes so that less pedal movement is required to make a brake application. As a result, mileage between adjustments is high and fading of the brakes on long, hard applications is greatly minimized. Brakes are actuated by steel cables and conduits to provide *safety of steel from pedal to wheel.*



TAPERED ROLLER FRONT WHEEL BEARINGS • There are two advantages in using tapered roller bearing for front wheels. They have high thrust load capacity, which minimizes wear resulting from side thrust. They always can be adjusted to take out any looseness that results from wear. Eliminating the need for replacement because of wear lessens maintenance cost. Anti-friction type spindle thrust bearings reduce the friction between the spindle and axle and make steering easier.

WORM AND ROLLER STEERING • Easy steering results from this worm and roller type gear. Friction is reduced because of the rolling contact between the worm and sector. The worm is mounted on tapered roller bearings which take the thrust in either direction. To insure long life without replacement of parts, adjustments are provided to compensate for wear. Steering gear ratio is 18.2 to 1. The steering wheel is 17 inches in diameter.



MAJOR DIMENSIONAL DRAWINGS

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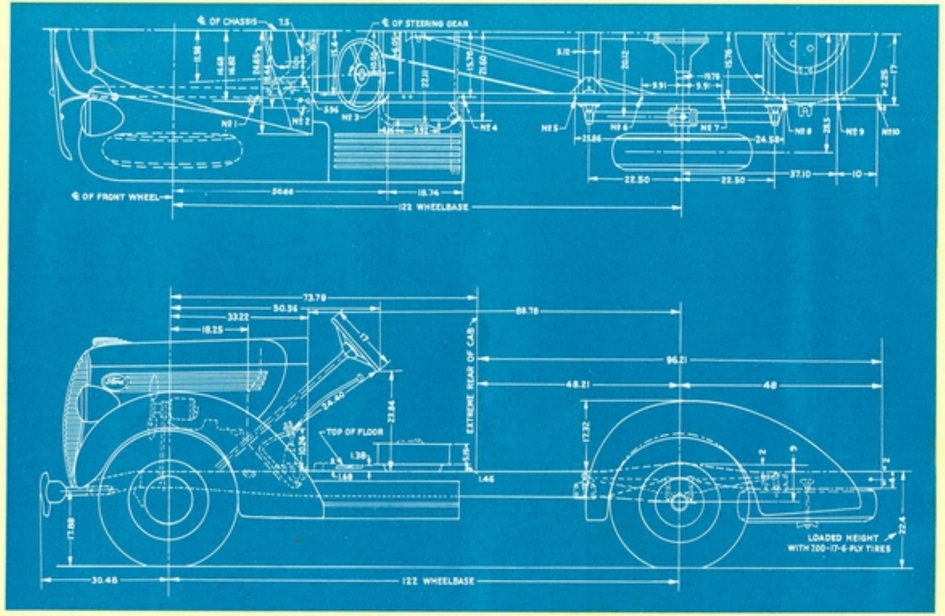
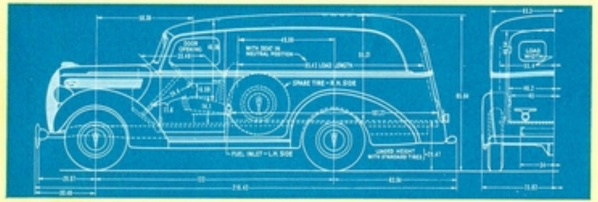
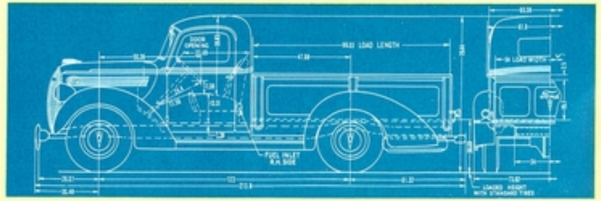
ONE-TON TRUCKS

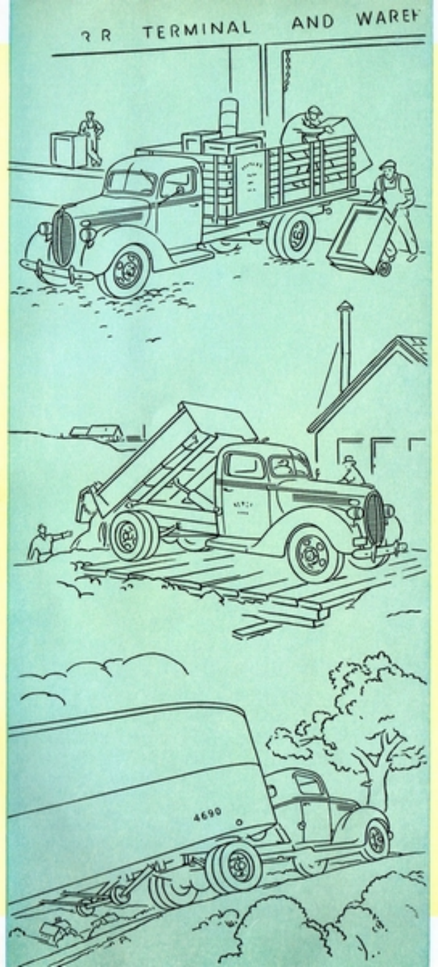




ONE-TON PANEL



ONE-TON EXPRESS



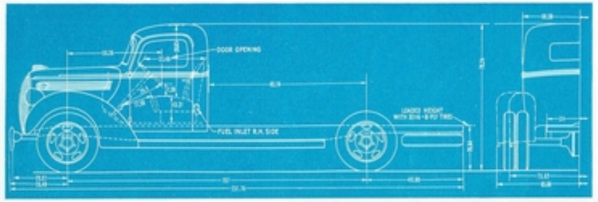
The 157" AND 134" WHEELBASE TRUCKS

The Ford Motor Company has been building trucks for twenty years. It has built more than four million trucks. The famous Ford V-8 Truck Engine is now in its seventh year of success. With all this experience—and with V-8 performance and economy records still rolling in—it means a great deal to say that the 1938 Ford V-8 Trucks are the *finest* Ford has ever built. They're the most economical trucks in Ford history!

These 1938 units are designed for peak performance—built throughout to put more pay in every payload. The V-8 engine, sound when introduced in 1932, is an even finer power plant today. A new 134-inch wheelbase increases load space. The frame width is new on both the 134-inch and 157-inch chassis. Brakes are bigger and newly designed to stop a heavily-loaded truck with less pressure on the pedal. A new type steering gear reduces friction. The new steering wheel is larger. Both help to make all-day driving an easier job. Front wheel spindles are larger and stronger.

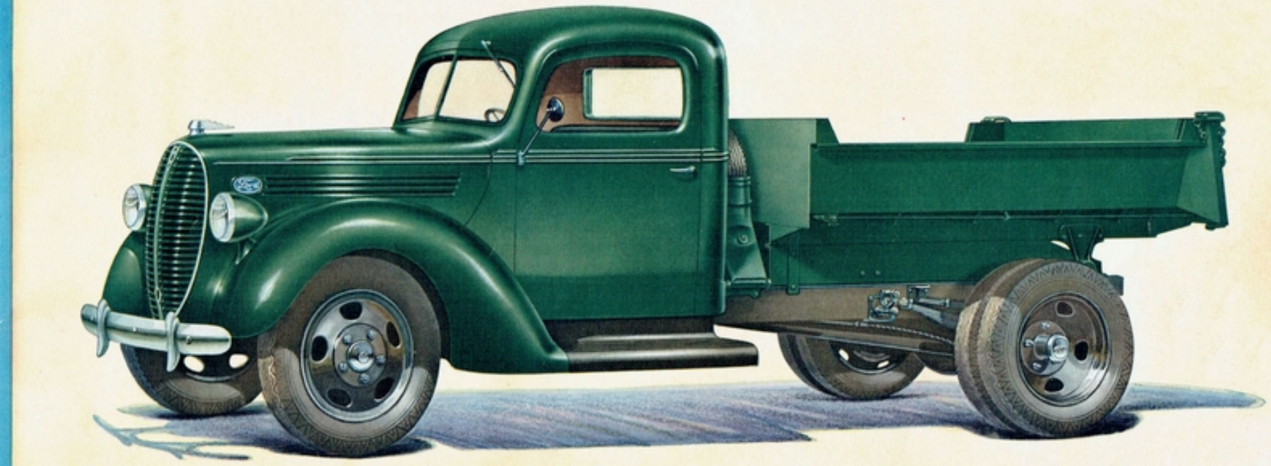
Today, truck owners are paying more and more attention to the appearance of their units. They realize that their trucks are "moving advertisements" for their business—that smart-looking units are *prestige* builders.

In this respect, too, the 1938 Ford V-8 Trucks are a good investment. They have an impressive new front end. A sturdy new grille. New headlamps. Massive, full-skirted fenders in a new streamline design. Their appearance suggests that your business is moving ahead—up-to-date in methods and equipment.



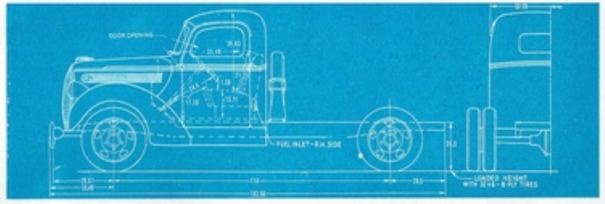
157-INCH CHASSIS WITH STAKE BODY

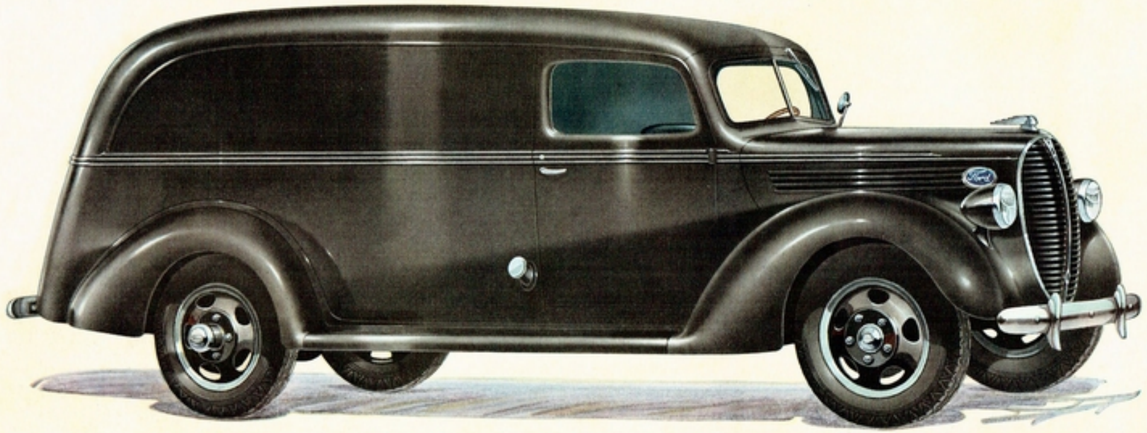
The big brother in the Ford Truck family. A great example of sturdiness, reliability and economy. The generous cab-to-axle dimension of the 157-inch Chassis with Cab unit provides good load distribution. The standardized frame dimensions make it especially suited for all types of merchandise bodies, as well as bodies for livestock, grain and other special uses. Auxiliary rear springs and dual wheels are optional equipment at extra cost. For mounting large-capacity bodies with built-in driver compartments, there is a 157-inch Drive-away Chassis. *Both* chassis have standardized frame dimensions. De Luxe equipment available at extra cost. Spare wheel located under frame at rear.

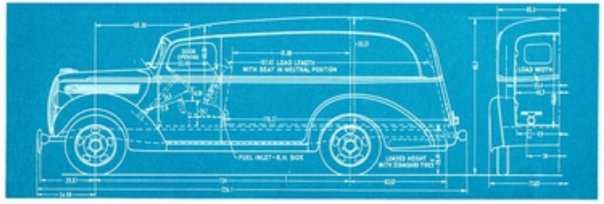


134-INCH DUMP TRUCK CHASSIS WITH BODY

This truck is a tireless worker. Built to take the tough assignments . . . to keep going under pressure. And because it stands up, the Ford V-8 Dump Truck Chassis saves on maintenance. Within its capacity, all loads are handled with equal ease. Its proper load distribution is a major factor in the long life of this truck. Ford V-8 Dump Truck Chassis are available with aluminum cylinder heads, dual rears or heavy-duty single (9.75-18) rear tires and auxiliary rear springs at extra cost. The special short frame makes this unit adaptable for trailer hauling. See pages 39-40 for examples of this chassis with trailer equipment. Spare wheel and tire are mounted behind cab.

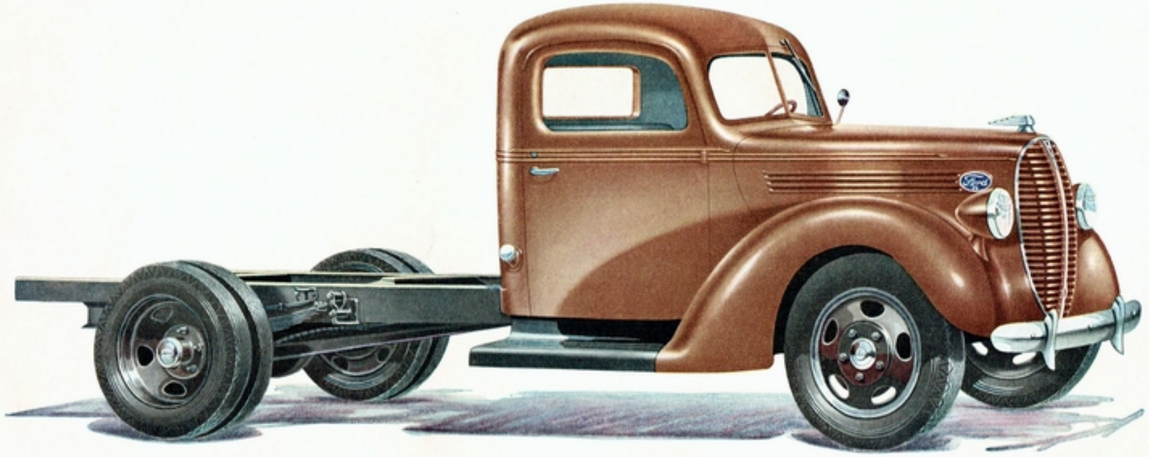






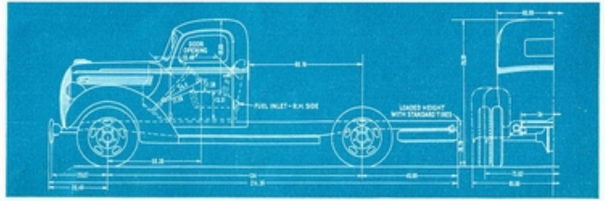
134-INCH PANEL

A prestige-builder for any company. And it offers a brand of economy that saves you money in many ways. The 134-inch Panel has a new structural design developed by Ford. Improved methods for forming and welding side panels, roof rails and steel top panel provide extra strength. Side panels are double-sealed at the floor with felt and rubber. Doors are hung in welded one-piece channel steel frame, eliminating distortion and insuring trouble-free door operation. Load length at floor is 119.27 inches, width 55.4 inches, height 55.27 inches. Rear opening is 46.2 inches wide by 46.54 inches high. Rear bumper is extra. De Luxe equipment available at extra cost.

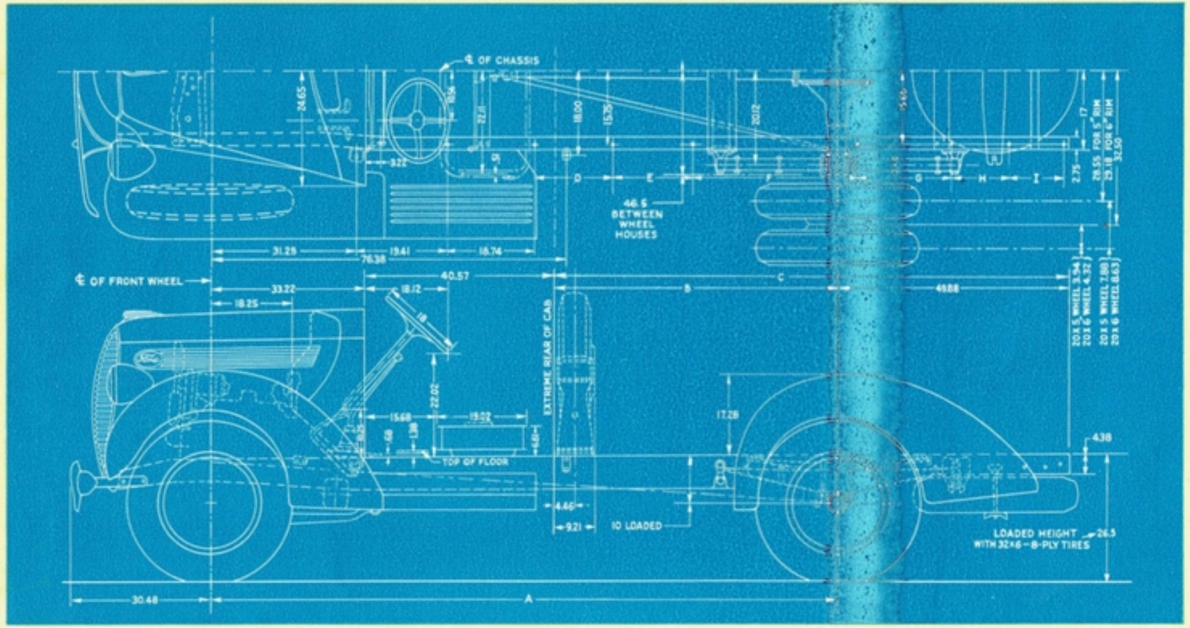


134-INCH CHASSIS WITH CAB

This Ford V-8 unit has low first cost, low operating costs, and is adaptable to individual requirements. A new 60-inch cab-to-axle dimension increases load space forward of the rear axle. This improves load distribution, giving improved tire mileage and greater driving stability. Standard length bodies have less overhang. New frame dimensions make bodies easier to mount. This Chassis is particularly desirable for bodies with streamline design. The new Ford cab has 3 inches more headroom. The wide seat is more comfortable and is adjustable to three positions. Cab interior is fully lined and insulated against heat and cold. Auxiliary springs and dual wheels optional at extra cost.



MAJOR DIMENSIONS 134-INCH AND 157-INCH TRUCK CHASSIS



	A	B	C	D	E	F	G	H	I
134-INCH WHEELBASE	134	60.16	110.09	16.67	17.07	35.36	20.07	12.33	11.87
157-INCH WHEELBASE	157	83.21	133.09						

WHAT OWNERS SAY ABOUT FORD PERFORMANCE AND ECONOMY

CAN'T BE BEAT

"Since I started using Ford trucks 3 years ago, I have stacked them against all makes of trucks on all types of jobs. I've seen nothing to make me change my opinion that for endurance, power and low cost they can't be beat."

ADRIEN LALONDE
Hawkesbury, Ont.

NO TROUBLE

"I've run my Ford V-8 truck some 15,000 miles, hauling logs and lumber and doing general truck work. Over that mileage this truck has consistently carried 5 to 6 tons, and sometimes as much as 7 tons. At that, it has never given me the slightest difficulty or trouble of any kind.

"Talking of economy . . . my Ford V-8's consumption has averaged 14 to 16 miles to the gallon of gas. I've never added oil between regular changes at 1,000 miles. And my repair bill? Repairs over that 15,000-mile service period have been confined to the replacement of two spark plugs!"

PERRY M. SHERK
Port Colborne, Ont.

RIGHT FOR TRANSPORT

"Our Ford V-8 trucks, all heavy-duty jobs on the 157" wheelbase, are handling payloads of approximately 5 tons each . . . mixed merchandise on class "A" transport work. Trips are 100 to 370 miles daily. Their speed and power make them *right* for transport. They give 13 miles per gallon . . . please us."

EPPS TRANSPORT
Clinton, Ont.

A HEAVY HAULER

"What would you say to a repair bill of less than $25 for a Ford V-8 truck with a history of 100,000 miles of heavy-duty hauling? My loads are lumber, furniture, meats . . . I've carried as much as 7 tons on hilly country roads. Gas mileage is fine."

GEO. W. SULLY
Westport, Ont.

REPEAT PERFORMANCE

"We bought our first Ford V-8 truck to haul steel girders, joists, etc. Average load is 8 tons, and up to 10 at times. We handle such loads on our run to Ottawa and back several times weekly, averaging 12 miles per gallon. On the strength of such performance, we've repeated our order to you twice."

DOM. REINFORCING STEEL CO., LTD.
Montreal, Que.

WELL CONTENT

"I use a 157" wheelbase Ford truck on long hauls carrying an average of 6 tons. This unit has gone 47,000 miles, averages 15 miles to the gallon. Repairs have been practically nil. I'm more than satisfied with this."

J. ALLOIRE
Goderich, Ont.

NO LIMIT

"To date I've operated seven Ford trucks and commercial cars . . . the former over the trans-Canada between Winnipeg and Kenora with 5 and 6-ton loads. As far as power goes, there seems to be no limit to what a V-8 truck will pull. . . . These units are very economical, too—I'm certainly more than satisfied with operating costs."

H. DUFF
Winnipeg, Man.

$15 FOR 75,000 MILES

"Ford units are largely used in our organization, both Stake and Tractor-Trailer units. The Stakes carry an average of 5 tons, and the Tractors an average of 8½ tons. Loads are mixed freight, which is a great deal harder on equipment than straight load freight. Ford trucks serve us well.

"They save us money, too. We are getting exceptionally high gas mileage, and repairs are very low. Example: one tractor that has gone 43,000 miles has needed no more than a valve grind. Two units together with a total of 75,000 miles on them have cost just $15!"

WESTERN FREIGHT LINES, LTD.
Chatham, Ont.

FULL-FLOATING REAR AXLE

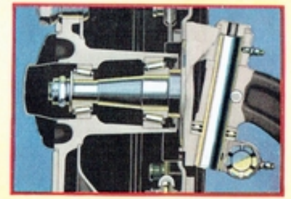
Built to handle heavy loads and maximum engine power. Rugged tubular-type housing with reinforced construction. Axle shafts are made of toughest steel with the flanges forged integral. Straddle-mounted pinion and ring gear thrust plate contribute to power-transmitting efficiency and reliability. Differential has *four* pinions. Tapered roller bearings with high load and thrust capacity are used for pinion shaft, differential and rear wheels.

NEW STEERING

All-day driving is made much easier because of the new worm and roller steering. Friction is reduced because of the rolling action between the roller and worm. Steering ratio is increased to 18.4 to 1. Worm is mounted on tapered roller bearings. Adjustments to compensate for wear cut maintenance costs.

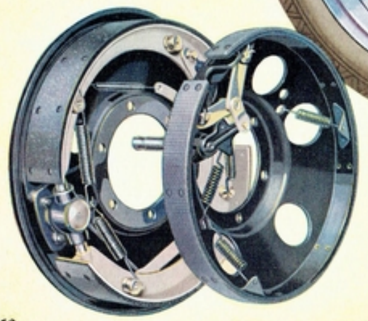
NEW SPINDLES ARE LARGER—STRONGER

Increasing the size of the spindles and the diameter of the spindle bolts provides an increased factor of safety. Larger bearing area on bolts and bushings reduces wear. The new spindle design improves steering action. Tapered roller front wheel bearings are adjustable for wear. Spindles are provided with tapered roller thrust bearings.



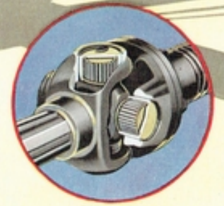
NEW 134-INCH WHEELBASE

New longer wheelbase increases the cab-to-axle dimension on the 134-inch wheelbase to 60 inches. This provides greater load length forward of the rear axle and improves the load distribution by placing more of the load weight on the front wheels. Frame width, on both the 134 and 157-inch wheelbases has been changed to 34 inches. With the new frame dimensions, special and standard bodies built by independent manufacturers are easier to mount.



NEW, QUICKER-STOPPING BRAKES

Brakes are larger. Diameter of service brakes is increased from 14 to 15⅛ inches. Service brake lining area now is 368 square inches. Handbrake is 120¾ square inches. Self-energizing action is used to provide quicker stops for heavily-loaded trucks—and with lower pedal pressure. Fading is materially reduced. Less pedal movement is required and, as a result, mileage between adjustment is increased. Service brakes are actuated by cables and conduits. Handbrake operates completely independent set of brakes on rear wheels. Heavily-ribbed brake drums have cast iron braking surface. Integrally cast steel drum discs save weight—increase strength.



NEEDLE ROLLER-BEARING UNIVERSAL JOINTS

Keep friction low, reduce joint wear and transmit power to the rear axle with minimum loss. With the Ford full torque-tube drive only two joints, instead of the customary three, are required. Maintenance is reduced.

CENTRIFORCE CLUTCH

High power-transmitting capacity and exceptional reliability. Centrifugal force increases clamping action on clutch disc as engine speed is increased.

SPECIFICATIONS

157-INCH AND 134-INCH FORD V-8 TRUCK CHASSIS

CLUTCH—Plate pressure increased by centrifugal force as engine speed is increased. Cushioned hub with vibration damper. Diameter 11 inches. Total friction area 123.7 square inches.

TRANSMISSION—Heavy-duty type. 4 forward speeds. Roller and ball bearings in all forward speeds. S.A.E. standard 6-bolt power take-off opening.

UNIVERSAL JOINTS—Needle roller bearing type.

FRAME—High carbon frame steel with 6 crossmembers. Width across side rails, back of cab—34 inches. Side rail dimensions: Length, 134-inch chassis, 203.44 inches; 157-inch chassis, 226.44 inches. Depth, 7 inches. Width, 2.75 inches. Thickness 0.21 inch. Depth of main crossmember 12.54 inches. Length, back of cab to centre line rear axle, 134-inch wheelbase, 60 inches; 157-inch wheelbase, 83¼ inches.

FRONT AXLE—Large section, drop-forged I-beam of carbon manganese steel. Adjustable, tapered roller front wheel bearings.

FRONT SPRING—Heavy-duty, transverse type. Length 36.87 inches. Width 2.25 inches. All leaves are chrome alloy steel. Oilless bearing type shackles. Number of leaves, 14.

STEERING—Worm and roller type. Ratio 18.4 to 1. Worm mounted on tapered roller bearings, roller on needle-type roller bearing. Steering wheel diameter, 18 inches.

REAR AXLE—Full-floating. Spiral bevel gear drive. Straddle-mounted pinion and ring gear thrust plate. Wheel hubs mounted on double, tapered roller bearings. Drive is through torque tube and radius rods. Gear ratios of 5.14, 5.83 or 6.66 to 1 are optional at no extra cost.

BRAKES—Ford Safety Brakes. Service brakes are 15.12 x 2.5 inches with self-energizing brake shoes. Handbrake 14⅛ x 1.5 inches, internal bands in rear drums. Total brake lining area 488.75 square inches. Cast brake drums have reinforcing and cooling ribs. Handbrake operates independently on rear wheels.

REAR SPRINGS—Heavy-duty semi-elliptic type. All leaves are chrome alloy steel. Length 50 inches; width 2.5 inches. Number of leaves: 14. 5-leaf auxiliary springs available at extra cost.

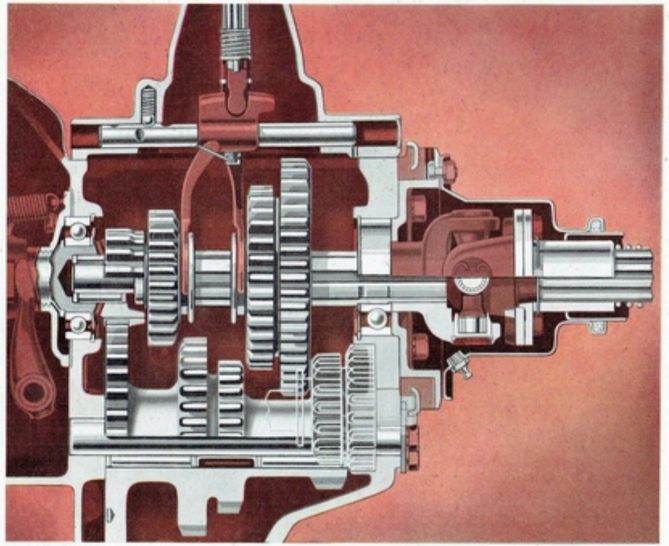
WHEELS—Tapered steel disc type.

TURNING RADIUS—134-inch wheelbase chassis, 24 feet; 157-inch wheelbase chassis, 28.8 feet.

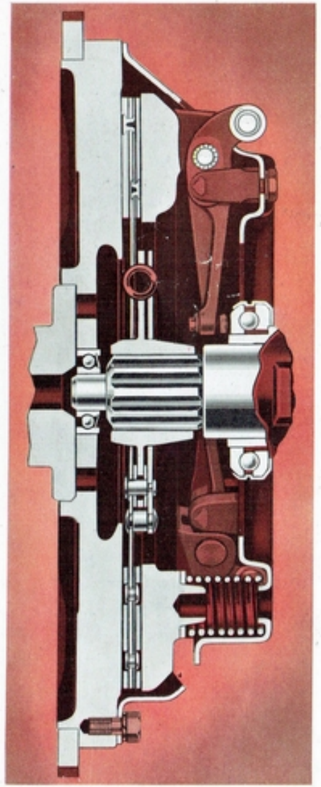
TREAD—Front: with 6.00-20 tires, 58.3 inches; with 7.50-20 tires, 57 inches. Rear: single, 57.1 inches; dual, 65 inches.

WHEELBASES—134, 157.

Time-Proved FEATURES • OF THE FORD V-8 157" AND 134" TRUCKS



HEAVY-DUTY TRANSMISSION • Cross-section of the truck transmission with 4 forward speeds shows how ball and roller bearings are used to minimize friction. This enables engine power to be transmitted with minimum loss. Main drive gear and rear end of main shaft are mounted on roller bearings with large load capacity. A roller bearing, with rollers 1.2 inches long, supports the forward end of the main shaft. The countershaft is provided with two roller bearings, each 2.25 inches long. Thus the gears used in all forward speeds are mounted on roller or ball bearings so friction is low. To insure true alignment of transmission with flywheel housing, the clutch housing is cast integral with transmission.



HIGH-STRENGTH GEARS

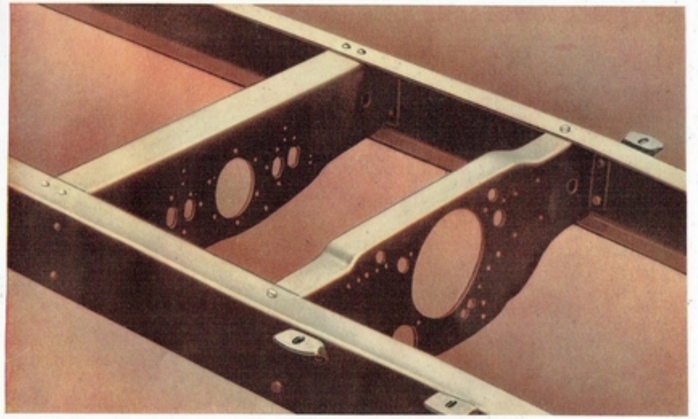
All gears and the mainshaft are high-quality, oil-hardening chromium steel. Splines and gear teeth are hard to resist wear while underneath this hard surface is a strong, tough core to provide high strength and resistance to shock loads. The most modern methods of gear cutting and heat treating are used to insure high accuracy and correct tooth contact.

CENTRIFORCE CLUTCH

This clutch has proved to be one of the most reliable types ever used in truck service. It features the use of centrifugal force to increase the clamping action of the pressure plate against the disc as the speed of the engine is increased. As the assembly rotates, centrifugal action on the weighted outer ends of the three release levers causes the pressure plate to be forced more tightly against the clutch disc. This builds up the power-transmitting capacity of the clutch. That's why clutch spring pressure can be low to permit easy clutch pedal action and the clutch easily can handle full engine power with plenty of reserve capacity. Slippage is prevented and clutch disc wear is minimized. The net result is freedom from maintenance—unusually long clutch life.

■

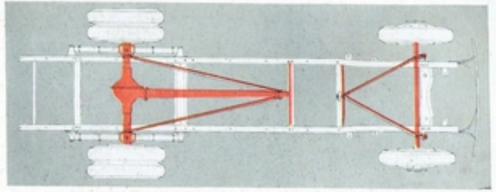
(Left) Clutch disc is 11 inches in diameter with 123.7 square inches of friction surface. It is fitted with spring-cushioned hub and vibration damper. Six spring steel segments are inserted between the disc and rear facing. They cushion the clutch engagement action and that prevents chatter or grabbing.



With the full-floating rear axle shown at right, all weight carried on the rear springs is transferred through the axle housing to the wheels. This relieves the axle shafts of supporting any weight or taking end thrust. Their sole function is to drive the wheels. An important feature of the Ford full-floating axle which contributes to its high power-transmitting efficiency, is a straddle-mounted pinion. There are two large tapered roller bearings, oppositely positioned, in front of the pinion, and another roller bearing in back of the pinion for extra support. Rear axle housings on the new 134-inch and 157-inch trucks have tubes of increased thickness for extra strength.

FREE-SHACKLED SPRINGS

Ford springs are free-shackled at both ends, a design that is possible because the *full* torque tube relieves rear springs of driving and braking stresses. Functioning only to cushion the weight they support, these springs are more dependable,

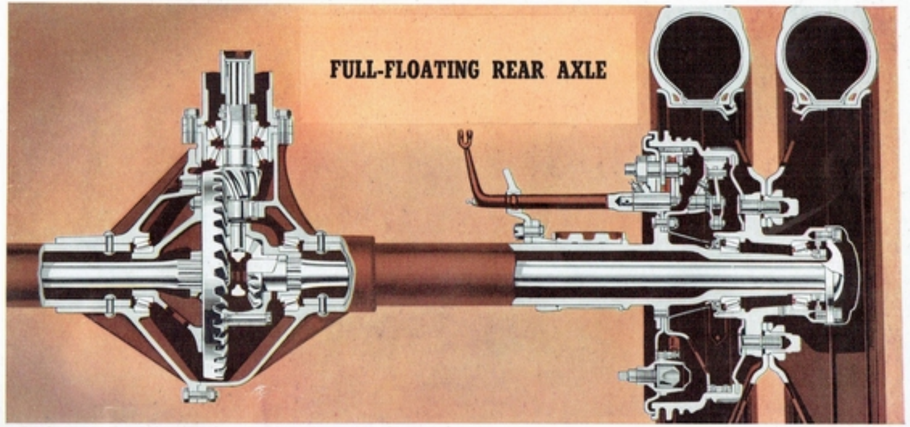


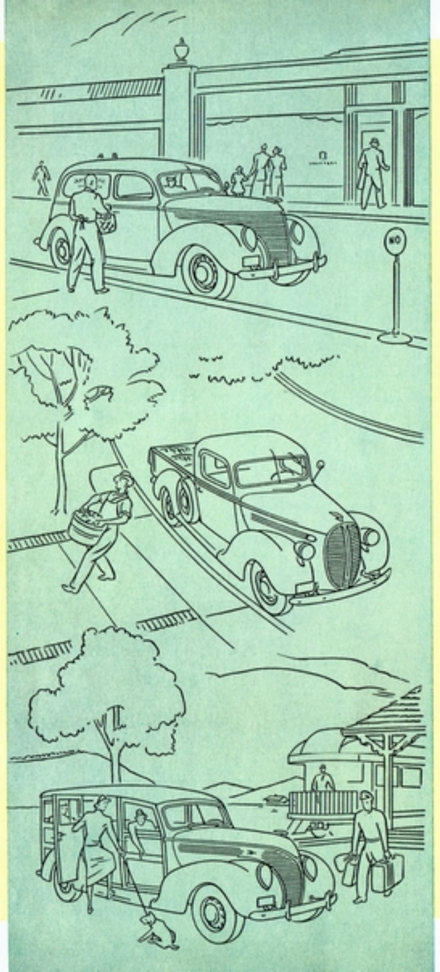
DRIVE IS THROUGH FULL TORQUE TUBE AND RADIUS RODS • All driving and braking forces are transferred from the rear wheels through the axle housing, radius rods and torque tube, directly to the frame crossmember.

DEEP RUGGED FRAME • Built to withstand the strains and stresses of hard service and heavy loads. All frame members are heavy-gauge steel. Maximum depth of sidemembers is 7 inches. Main crossmember is 12.5 inches deep. There are six crossmembers in all. They are widely flanged where rivetted to the sidemembers.

ENEMIES OF FRICTION

36 roller and ball bearings, an unusually large number, are used to increase efficiency and reduce wear.





The COMMERCIAL CARS

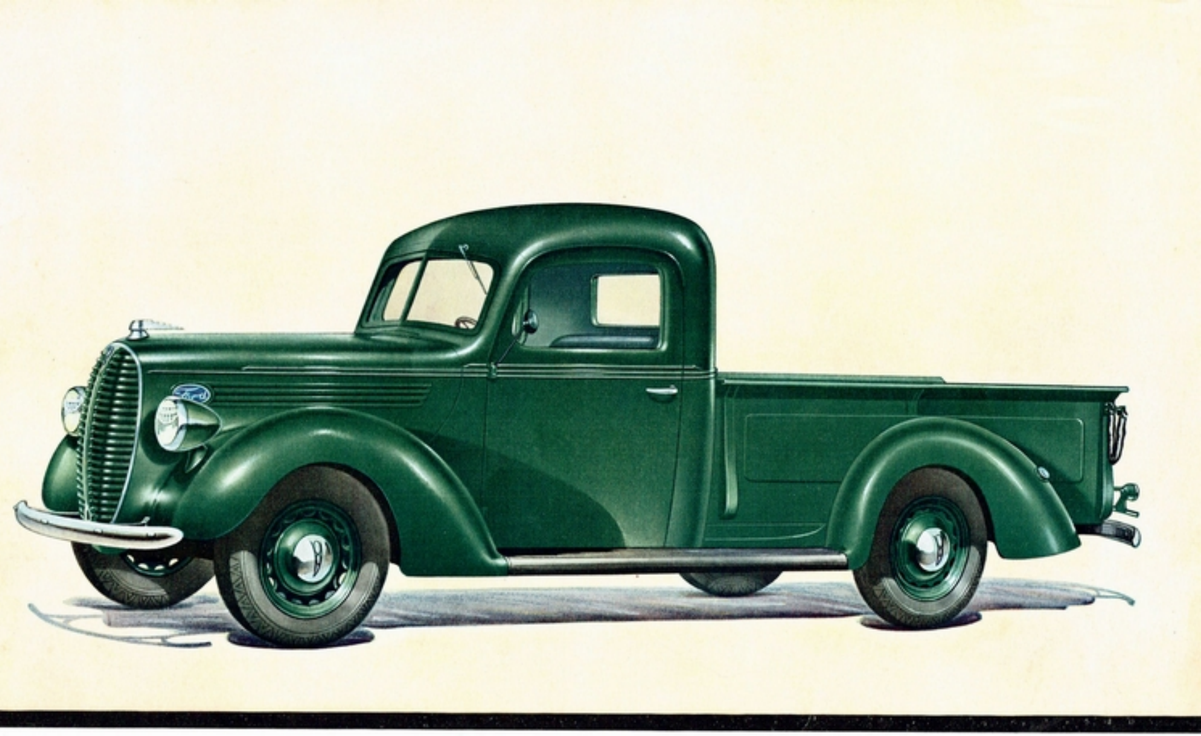
112'' WHEELBASE—85 HP. V-8 ENGINE

The new Ford V-8 Commercial Cars are styled to raise your prestige—built to lower your costs. The finest commercial cars Ford has *ever* built, they save you money in many ways. Their *first* cost is low. You save on *operating* costs because these new units are powered with the 85-horsepower V-8 engine which is setting performance and economy records in every line of business. You save on *maintenance* because quality and long life are built into every Ford part.

Not only do they cut your costs—but their new styling makes them "something to look at" as well. The impressive new front end . . . the sturdy new grille . . . the new headlamps . . . the full-skirted fenders in streamline design . . . the modern lid-type hood—all help to suggest the up-to-dateness of their owner's business.

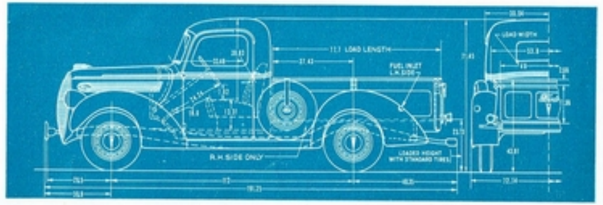
The new Ford V-8 Commercial Cars blanket the field of the lighter hauling and delivery needs. In addition to the wide range of body types—optional axle ratios, tire sizes and many items of special equipment make them even more adaptable to your exact requirements. No matter what your business may be, there's no "compromise" when you select a Ford V-8 Commercial Car.

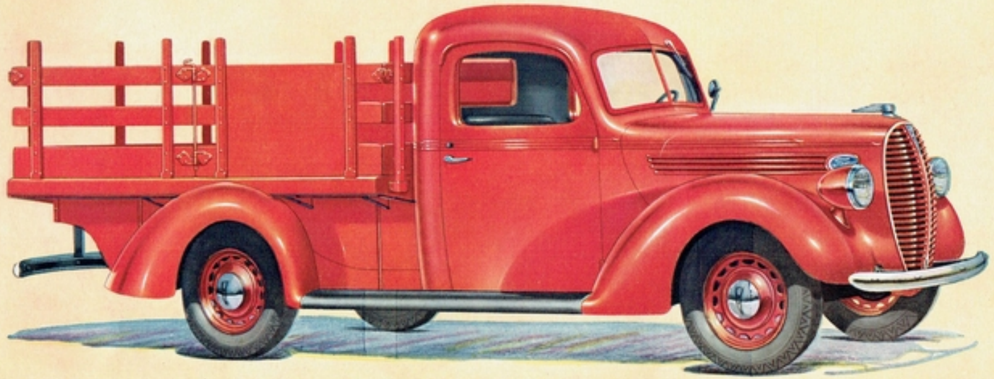
Try a 1938 Ford V-8 Commercial Car on your own job—with your own loads and your own driver. You can test its economy and performance under your *particular* operating conditions. You will not be obligated in the least.

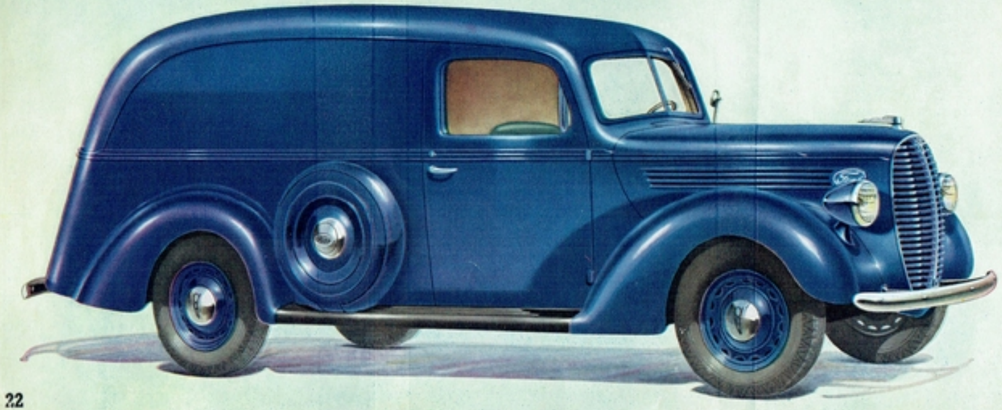


112-INCH LIGHT DELIVERY

Jack-of-all-trades . . . ace of all trade-ins in its rated capacity, when the time comes. Good-looking, strong, dependable—this unit also has a reputation for over-all economy. The newly-designed body is larger and stronger, built of heavier-gauge steel. Rugged, rounded corner posts, rolled-edge flare boards, truss-section rolled-edge tail gate and new front panel provide extra strength. Equipped with improved drop chains and mountings. Skid strips are stamped in the steel floor. Extra support for the floor is provided by a wood sub-floor. Load length is 77.7 inches, width 46 inches. Height to top of flare boards is 20.22 inches. 6-ply tires in sizes 6.00 or 6.50-16, and other special equipment, available at additional cost.







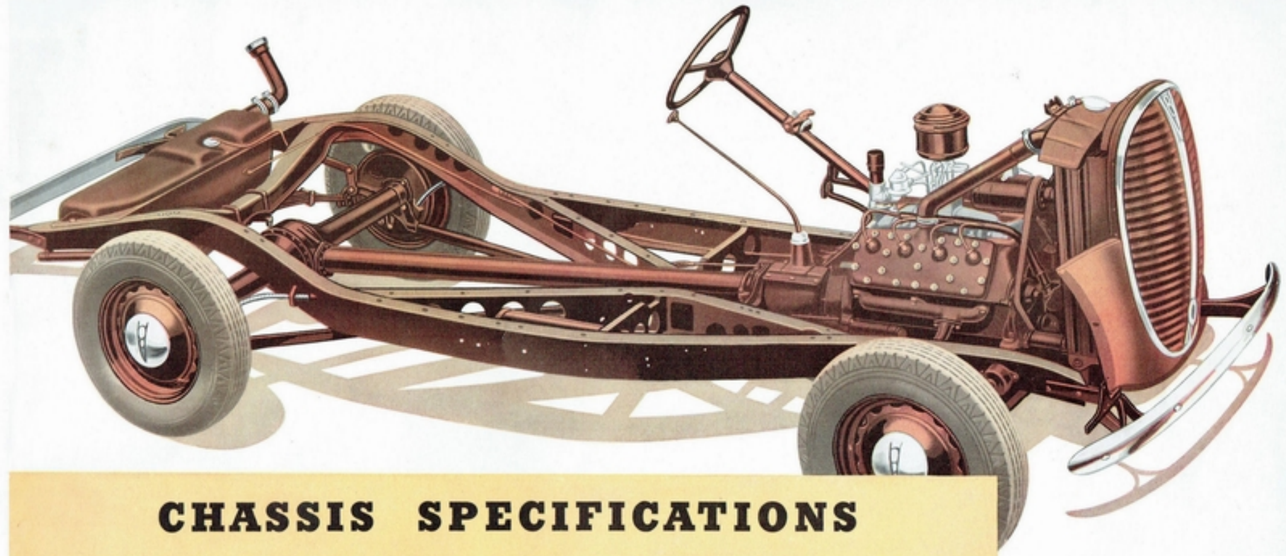
112-INCH CHASSIS
WITH STAKE BODY

The regular commercial chassis and cab makes a very serviceable stake truck. Forward mounting of engine in the chassis provides exceptional space from the back of the cab to the rear of the frame . . . a stake body, 80 inches long, can be mounted. 6-ply tires in sizes 6.00—16 or 6.50—16 and other special equipment, including coloured wheels shown are available at low extra cost.

112-INCH PANEL

From radiator grille to sloping doors, this delivery unit announces up-to-dateness of its owner's business. Load length at floor 87.78 inches, width 55 inches, height 51.68 inches. Rear door opening 46.2 inches wide by 44.16 inches high. Body is all steel with slat interior. Fibre-board lined interior, 6-ply tires in sizes 6.00—16 or 6.50—16 and other special equipment, including coloured wheels shown are available at low extra cost.

(*Below*) Inner steel panels, from floor to tops of wheel housings, protect the sides of the Panel body from excessive wear. Hardwood floor planking is protected by steel skid strips.



CHASSIS SPECIFICATIONS

CLUTCH • 9-inch diameter. Low pedal pressure at normal shifting speeds. Clutch plate pressure increased by centrifugal force as engine speed increases. Cushioned disc with vibration damper.

TRANSMISSION • 3 forward speeds with synchronized shifting for second and high. Roller bearing countershaft. All-helical silent-type gears.

FRAME • Double-drop design. X-member channels form box section at the centre and box sections with side members and extend to ends of frame.

FRONT AXLE • Heat-treated alloy steel. Adjustable tapered roller front wheel bearings. Spindle thrust bearings are anti-friction type.

STEERING • Worm and roller type. Steering gear ratio 18.2 to 1. Worm is mounted on tapered roller bearings. Roller turns on needle-type roller bearing. Steering wheel diameter, 17 inches.

BRAKES • Improved Ford Easy-Action Safety Brakes. Self-energizing action increases brake effectiveness and lowers pedal pressure. Operated by cables and conduits. Brake lining area 186 sq. in. Brake drums have cast iron braking surfaces and are ribbed for increased strength and quicker cooling.

REAR AXLE • Three-quarter floating. Straddle-mounted driving pinion. Full torque tube with radius rods takes all driving and braking forces.

SPRINGS • Transverse front and rear. All leaves are chrome alloy steel. Length: front 40.25 inches, rear 46.5 inches. Width: front 2 inches, rear 2.25 inches. Oilless bearing type shackles. Inter-leaf spring lubrication.

SHOCK ABSORBERS • Four double-acting, adjustable hydraulic.

WHEELS • 5 cold drawn steel.

TIRES • 6.00-16 inch, 4-ply. Station Wagon has 6.00-16 inch, 6-ply tires as standard equipment. For extra charge, 6.00-16, 6-ply or 6.50-16, 6-ply tires are available as optional equipment.

TREAD • Front, 55.75 inches. Rear, 58.25 inches.

WHEELBASE • 112 inches.

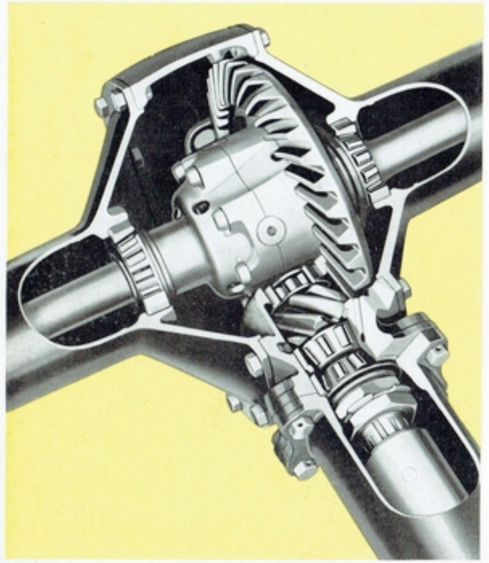
TURNING RADIUS • 20 feet, right or left.

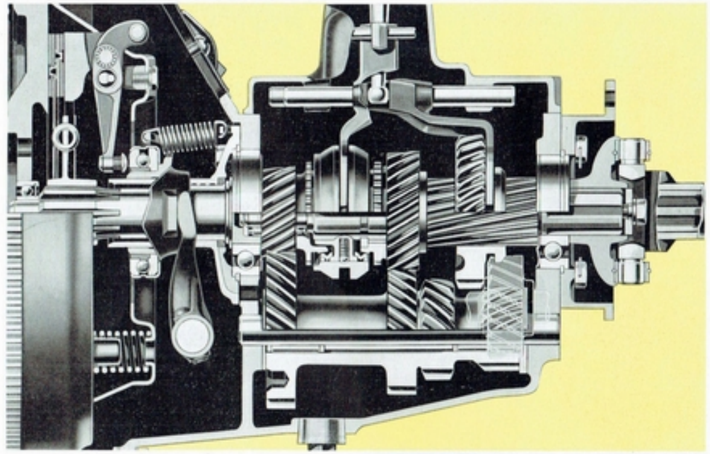
COMMERCIAL CAR CHASSIS
112-INCH WHEELBASE

Quality Features ⁘ THE NEW 1938 FORD V-8 COMMERCIAL CAR CHASSIS

TRANSMISSIONS • Engine power, even through the reduction gears, is transmitted with minimum friction loss. That's because Ford transmissions are built with close precision tolerances, have accurately cut gears, and use roller and ball bearings for mounting of all forward speed gears. The transmission on Commercial Cars has three speeds forward and one reverse. All gears are of the helical cut, silent type, with synchronous shifting for both second and high.

STRADDLE-MOUNTED DRIVING PINION • This design contributes to increased axle efficiency and long life. The pinion shaft has two large tapered roller bearings in front of the pinion. They are oppositely positioned, to take thrust in both directions. Additional support is provided for the shaft by another roller bearing directly back of the pinion which prevents the shaft from springing. Differential side bearings also are the tapered roller type. Inside the differential, four spider pinions are used instead of the customary two.

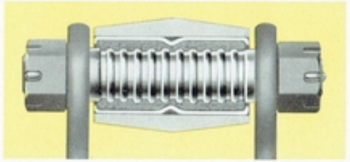




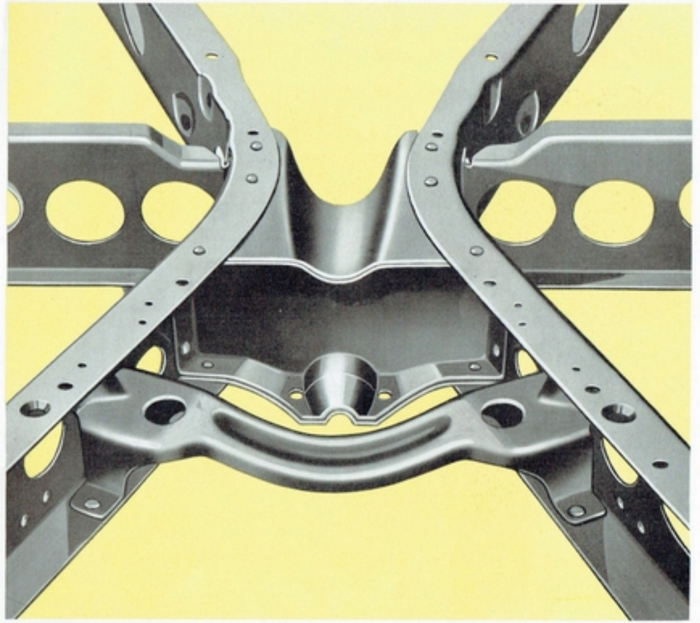
INTER-LEAF SPRING LUBRICATION

This positive means of lubricating the springs provides increased riding comfort and quiet. Spring action is uniform when a film of lubricant is kept between the leaves. Illustration shows how the lubricant, forced into fitting, flows through the openings along the sides of the spring center-bolt and into lengthwise grooves in the spring leaves. The grooves extend to the ends of the leaves and serve as reservoirs for the lubricant, which seeps through to the edges of the spring and excludes moisture. Lubricating the spring leaves outwardly from the center is much more effective than applying lubricant on the outside of the spring.

OILLESS TYPE SPRING SHACKLES



Maintenance expense on Ford Commercial Cars is reduced by the use of these oilless type spring shackles. They require no lubrication. Squares on the shackle stud fit into the spring hanger bars and prevent the stud from turning. The outer casing of the oilless bushing has a tight press fit in the spring eye. Space between the steel casing and the radially-grooved stud is filled with a highly compressed non-metallic material, impregnated with lubricant. Movement between metallic surfaces, which eventually would cause wear, is eliminated.



DOUBLE-DROP, X-TYPE FRAME

In illustration above, note the rugged box-section construction at the center of the frame X-member. In front of this, for additional reinforcement, is a sturdy pressed steel member to which the rear engine supports are attached. Two Z-section crossmembers extend from the box-section at the center to the frame side-members. This type of frame design possesses exceptionally high rigidity.

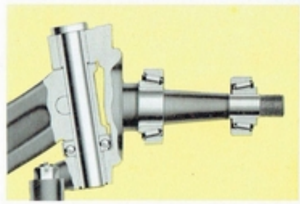
BOX-SECTION SIDE MEMBERS (Right)

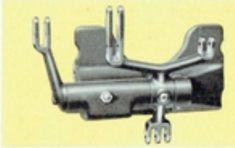
Box-sections are formed by the X-member channels and the frame side-members, as indicated by the diagram. This greatly increases the strength of the side-members and increases resistance to flexing. X-member channels extend to the extreme ends of the frame side-members.

FOUR DOUBLE-ACTING, ADJUSTABLE SHOCK ABSORBERS control action of the flexible springs in both directions—up and down. Full control of spring action gives easy riding. Easy to adjust for various conditions.

ADJUSTABLE TAPERED ROLLER FRONT WHEEL BEARINGS

Lower maintenance cost is one of the advantages of tapered roller bearings for the front wheels. They can always be adjusted to keep out any looseness resulting from wear. Anti-friction type spindle thrust bearings make steering easier.



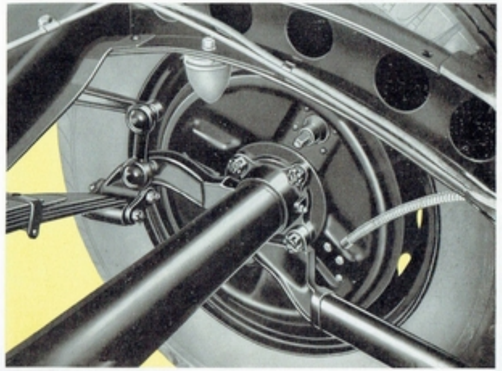


RUGGED BRAKE CROSS-SHAFT

• This is another example of the maximum safety built into the braking system on Ford Commercial Cars. The rugged brake cross-shaft is so designed that failure of the shaft would not affect the operation of the hand-brake. The casting contains a large reservoir to provide lubricant which is wick-fed to the shaft and bushings.

STURDY AXLE CONSTRUCTION

The weight supported by the rear spring is transferred to the axle housing at points directly adjacent to the rear wheel bearings. With this design the deflection of axle tubes, because of heavy loads, is reduced to a minimum. The steel forgings electrically welded to the radius rods also serve as spring supports. Simplicity is achieved by such dual-purpose Ford design. The forged radius rod ends are bolted to the flanges on the axle housing, providing exceptionally sturdy construction.



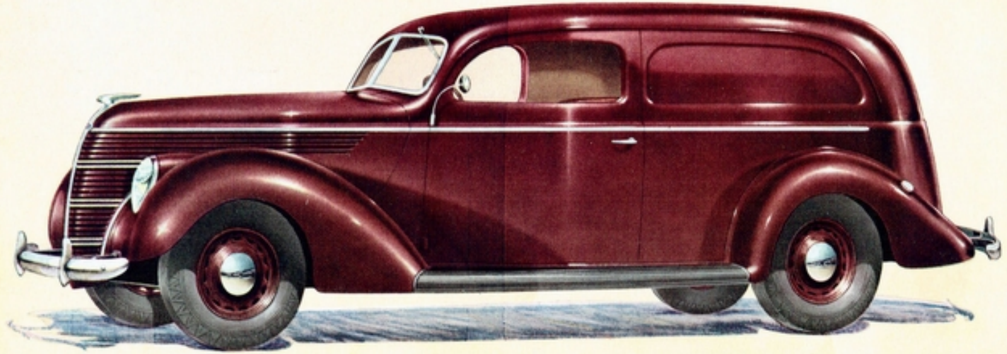
Sedan Delivery interior is completely insulated. Spare wheel mounted inside of body. Rear door opens to a wide angle, has friction device to hold it open. Passenger seat at extra cost.

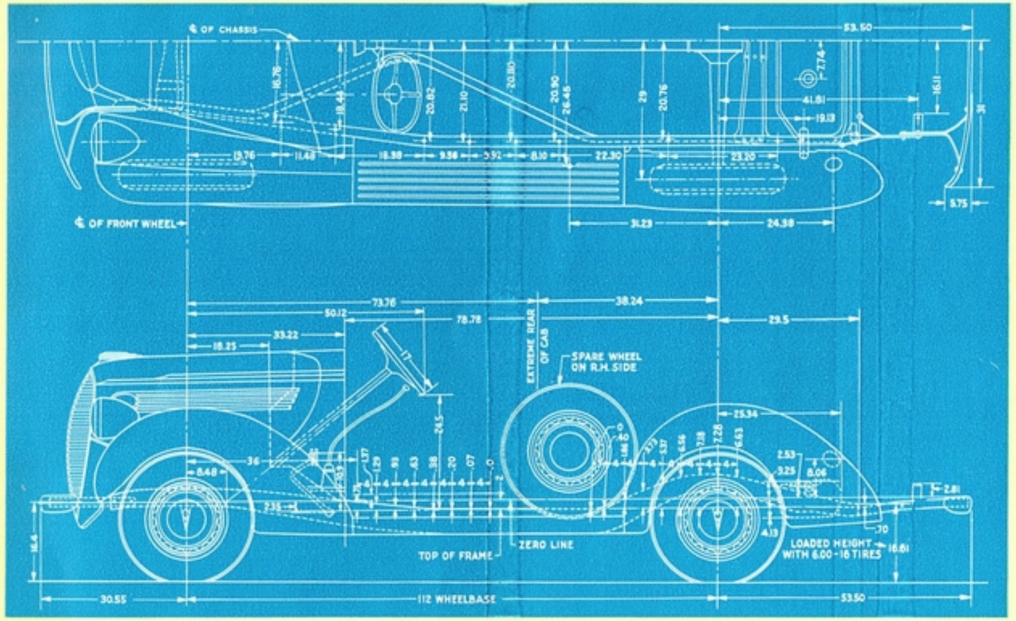
SEDAN DELIVERY
(112-INCH)

Front design has the smartness of the new Standard Ford V-8 passenger car. Body is all steel, hardwood floor protected by steel skid strips. Load length at floor 65 inches, width 52 inches, height 44.82 inches. Rear opening 34.36 inches wide by 36.45 inches high. Bumpers and front bumper guards standard equipment. 6-ply tires in sizes 6.00—16 or 6.50—16, passenger seat and other special equipment at low extra cost.

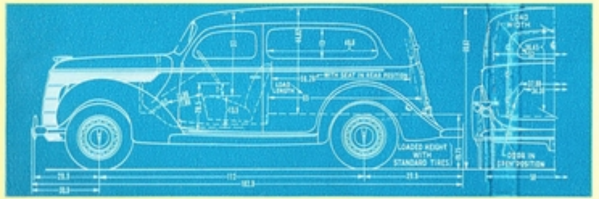
STATION WAGON
(112-INCH)

Has the beauty of the 1938 De Luxe Ford V-8 passenger car and offers great utility. Seats 7 passengers and driver. Safety glass throughout. Doors, windows and tail gate can be locked. Floor length back of front seat, 72 inches. Average width, 44 inches. Height at rear, 42.5 inches. Bumpers and front bumper guards standard equipment. Tires are 6.00—16, 6-ply. 6.50—16, 6-ply tires and other special equipment are available at low extra cost.

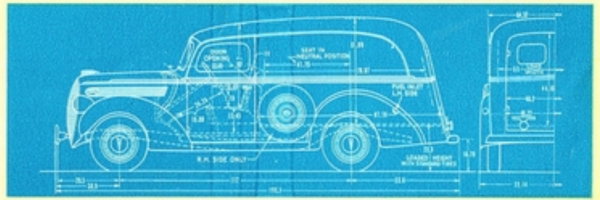




DIMENSIONAL DRAWINGS 112-INCH COMMERCIAL CARS



SEDAN DELIVERY



PANEL DELIVERY

Extra-value features of FORD CABS AND BODIES

Ford cabs are built to stand hard service—to match the reliability and safety of the Ford V-8 chassis. Materials are of the highest quality—so is workmanship. Careful attention has been given to the smallest details. Incorporated are many features that provide extra strength—protection for body and load; also comfort and protection for driver.

The cabs are built entirely of steel—welded into a one-piece structure for great strength. Steel is reinforced with steel. Box-sections and channel-sections for door frames and other structural members inside the steel roof and back mean extra strength—safety.

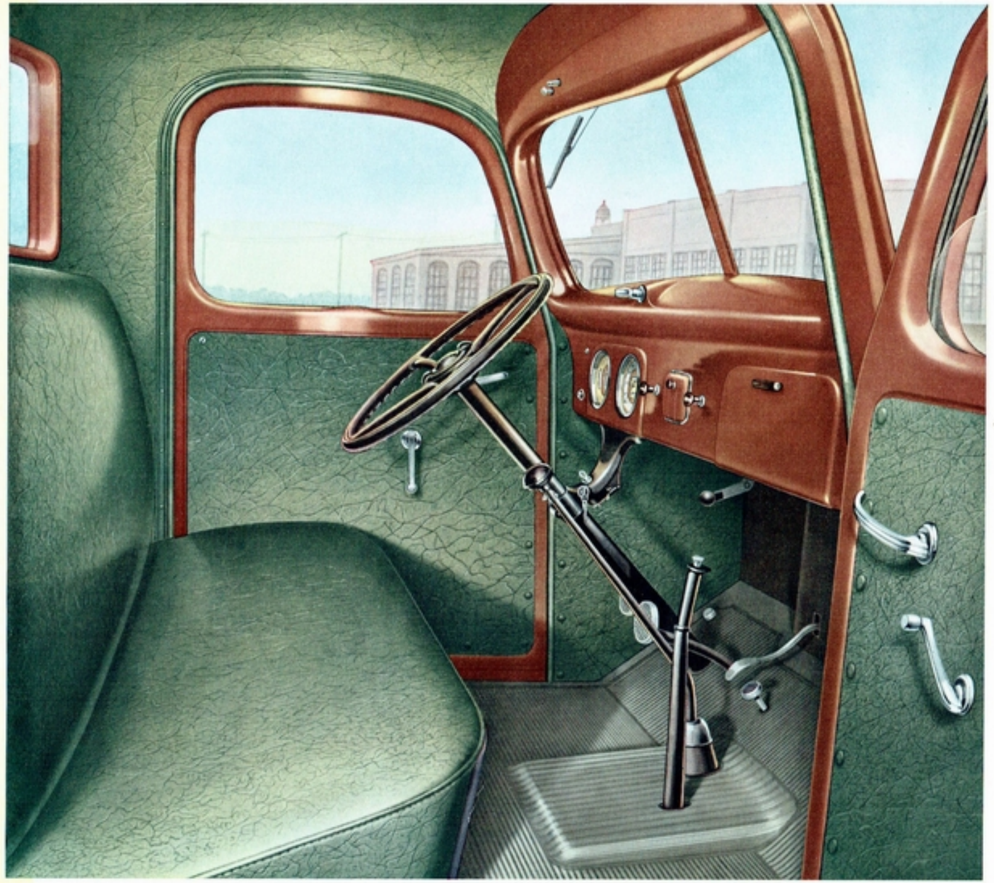
The wide cab seat is more comfortable because more coil springs are used in the seat cushion. The seat is adjustable to three positions. The cushion and back are covered with an attractive, washable, waterproof material. The cab interior is fully lined. Roof, dash and floor are insulated against heat and cold. Wide doors permit easy entrance and exit. Safety Glass is used throughout. New friction-type checks hold doors when in open position.

Instruments, controls and starter button are conveniently located on the new instrument panel. The speedometer has a trip mileage indicator.

The V-type windshield opens by turning a single center control. A large screened cowl ventilator helps insure adequate ventilation. Both contribute to the comfort of the driver.

At the right side of the instrument panel is a convenient, roomy dispatch box. A spring holds its door tightly closed or fully open.

There is a foot-operated headlamp beam control switch with an indicator light on the instrument panel.



FORD V-8 DE LUXE EQUIPMENT

VENTILATING REAR WINDOW FOR CABS Provides increased circulation of air through cab in hot weather. Made of two pieces of Safety Glass, either of which can be slid toward the centre. A cam action lock, operated by an inside handle, wedges glass in slide channel. Convenient hand-pull attached to each glass.

TUNED TRUMPET-TYPE HORNS signal a firm "right-of-way" in a De Luxe Ford V-8. Their high power and emphatic note contribute to the safety of driving.

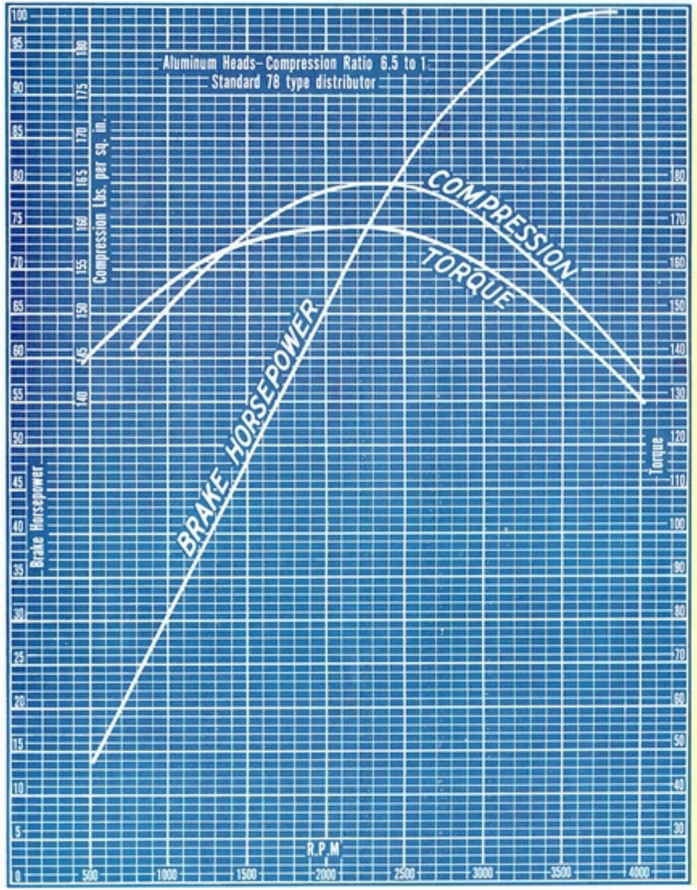
CIRCULAR DOME LIGHT in cab roof adds to driver convenience and comfort. Driver can read route sheets and maps at night without leaving the cab. Control switch is contained in the unit.

Many operators of Ford V-8 trucks have remarked that they regard the appearance of their equipment as a business asset which can be translated into dollars and cents. Even *more* handsome than the regular Ford V-8 trucks, however, are their De Luxe companions, which employ chromium plating and desirable accessories to give added style and smartness to the fine lines of the Ford cab and front end. In the De Luxe, the massive radiator grille is chromium plated, as are the rear-view mirror assembly, windshield frame, and windshield wipers. Style and advertising value are only part of the *extra* value you get in a De Luxe truck. There are *safety features:* twin windshield wipers, twin high-powered horns and a cigar lighter—which eliminates the hazard of momentary blindness when lighting matches in the cab at night. Features of driver comfort: twin sun visors and a ventilating rear window. All the De Luxe features shown and described separately on this page are available on all truck models at extra cost.

CHROMIUM-PLATED DUAL WIPERS assure a sweep of clear vision through the windshield in any weather. These wipers operate individually. The windshield frame is chromium plated to harmonize with them.

CIGAR LIGHTER is located on the dash at the left, immediately above the starter button. With the ash tray that is regular equipment in all Ford trucks, it gives an added measure of convenience and safety to the driver.

TWO SWIVEL-TYPE SUN VISORS cut down sun glare, from the side as well as the front. They make driving easier, less fatiguing, safer. Both visors adjust to any desired position. In the interest of accident prevention, it is good judgment to provide for the comfort of the drivers of a truck.



FORD V-8 TRUCK ENGINE

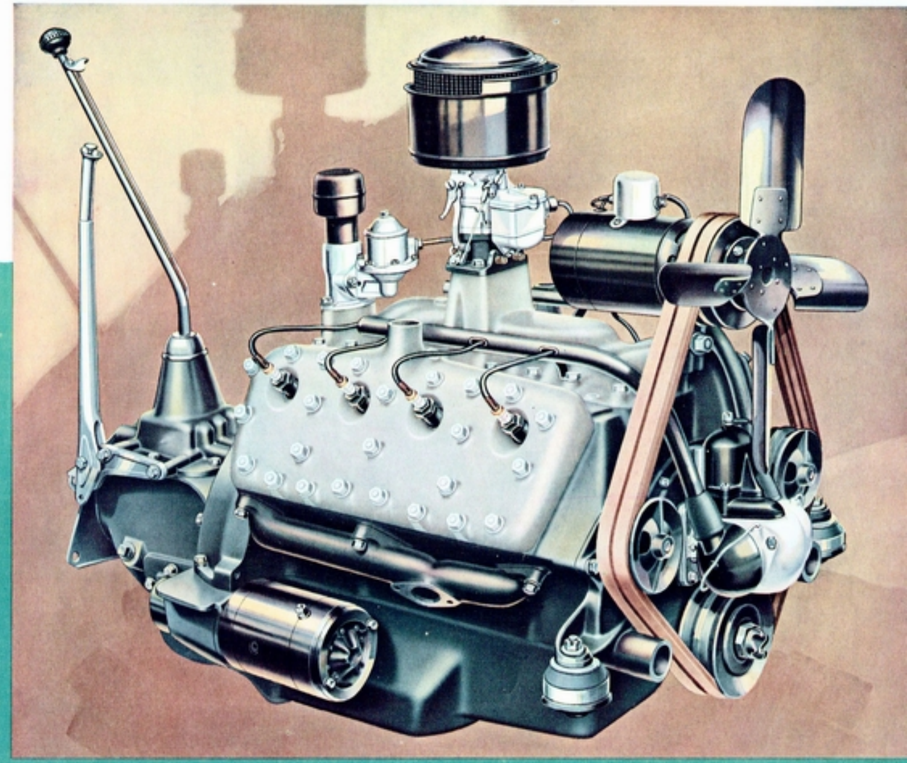
(95-hp. with aluminum cylinder heads)

The Ford V-8 truck engine is now in its seventh year of success. The design was sound from the start. Since then constant refinement has resulted in improved economy—fewer maintenance requirements—better performance. New and better materials have been developed. The cast-alloy steel crankshaft, cast camshaft, and cast-alloy pistons have lengthened engine life. Improvements have been made continually in auxiliary units, such as carburetors, distributors, water pumps, generators and starters. New shop methods, new production machines, new inspection equipment have increased precision. Today's V-8 truck engine is the finest Ford has ever built.

This engine develops 95-horsepower when equipped with aluminum cylinder heads. (See power chart at left.) It will deliver 150 foot-pounds of torque at a road speed of from 10 to more than 50 miles an hour; 160 pounds at 17 to more than 44 miles an hour, and 170 pounds at from 30 to more than 34 miles per hour. Because of the broad range of speeds over which the V-8 engine makes high torque available, it is an exceptionally fine engine for highway hauling. It is just as good for the downright tough going of dump truck duty.

When equipped with cast iron cylinder heads this engine develops 85-horsepower. And because truck operators have bought more than a million units powered with the V-8 engine for truck and commercial service, you can assume it is a practical choice for your work. One million is a lot of units . . . and proof enough that the V-8 engine is economical to operate and maintain . . . that it speeds up work—and makes it possible to get more done.

95 H.P. HEAVY-DUTY TRUCK ENGINE



ENGINE • Eight cylinder, 90 degree, V-type, L-head. Bore 3.062 inches. Stroke 3.75 inches. Piston displacement 221 cubic inches. Brake horsepower: ALUMINUM cylinder heads and manifold, (illustrated) 95. Compression ratio, 6.5 to 1.; CAST IRON cylinder heads and manifold, 85. Compression ratio, 6.12 to 1. Taxable horsepower rating, 30. Torque: (95-horsepower) 170, (85-horsepower) 150.

ENGINE BLOCK • Semi-steel casting. Both banks of cylinders and crankcase cast integral. Full-length waterjacketed cylinder walls and crankcase. Polished, mirror-finish cylinders.

CRANKSHAFT • Ford cast alloy steel. Fully counterbalanced with integral counterweights. Weight: 65 pounds, 13 ounces. Three main bearings, removable, steel-backed type. Effective main bearing surface 35.5 square inches.

CONNECTING RODS • Manganese steel forgings. Mounted side by side in pairs on floating-type, special alloy bearings. Special bronze piston pin bushings.

PISTONS • Light-weight, cast alloy. Floating-type piston pins with bearing surfaces in both rods and pistons.

CAMSHAFT • Wear-resisting, cast alloy iron. Three steel-backed babbitt bearings. Camshaft gear, compressed bakelized material.

VALVES • All intake and exhaust valves are heat-resisting chrome-nickel alloy steel. Enlarged area valve stem ends. Light-weight, hollow-cast, one-piece valve lifters. Valves are precision-set.

EXHAUST VALVE SEAT INSERTS • Tungsten-chrome steel.

ENGINE LUBRICATION • Direct pressure oiling to crankshaft, camshaft and connecting rod bearings; also to timing gears. Crankcase oil capacity, 4 quarts.

COOLING • Two centrifugal water pumps. Twin fan belts drive 4-blade, 18-inch fan and water pumps. Pumps are packless type with pre-lubricated, widely spaced, double row ball bearings.

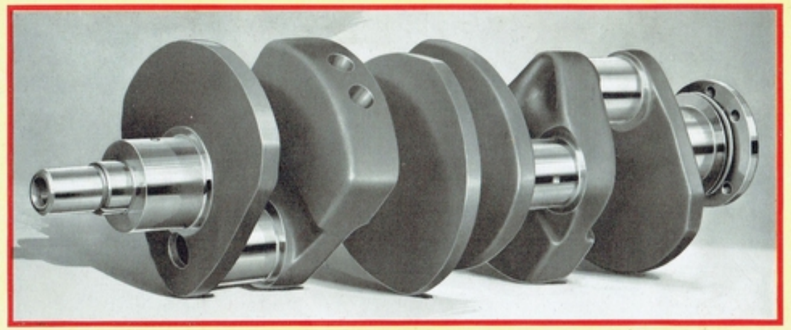
FUEL SYSTEM • Dual down-draft carburetor fitted with air cleaner and silencer. Duplex intake manifold. Mechanical fuel pump. Fuel tank capacity, 14 gallons.

IGNITION • Direct-driven, single unit with distributor and coil in waterproof housing. Fully automatic spark advance with vacuum controlled governor.

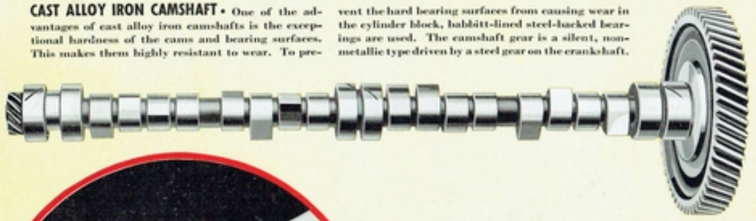
GENERATOR • 6 volt with third brush regulation. Air cooled by blower built into generator pulley.

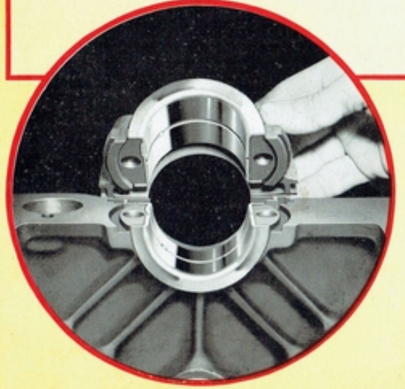
BATTERY • 17-plate, 100 ampere hour capacity. Located under the hood for easy servicing.

Features OF THE FORD V-8 ENGINES



CAST ALLOY IRON CAMSHAFT • One of the advantages of cast alloy iron camshafts is the exceptional hardness of the cams and bearing surfaces. This makes them highly resistant to wear. To prevent the hard bearing surfaces from causing wear in the cylinder block, babbitt-lined steel-backed bearings are used. The camshaft gear is a silent, non-metallic type driven by a steel gear on the crankshaft.





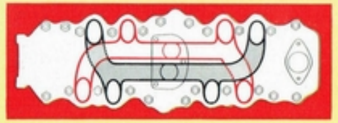
MAIN BEARINGS • In these replaceable-type bearings a special wear-resisting alloy is bonded to a steel shell. Main bearing caps do not depend on the studs to hold them in alignment. Instead, the caps have radial tongues which fit tightly into corresponding grooves in the engine casting. This design prevents caps from shifting in any direction. Another extra-value feature of V-8 engines. Total effective surface (less grooves and fillets) 35.5 square inches.

FULL-LENGTH WATER JACKETING • Ford V-8 engines always have had full cylinder-length water jackets to insure uniform expansion and minimize cylinder wear. The cylinder walls are completely surrounded by water. On the outer sides of the engine the water-jacketing does not end at the bottom of the cylinders but extends down the walls of the crankcase. Oil splashing against the crankcase walls is warmed in winter and cooled in summer. Efficient water circulation around the valve seats conducts the heat from the exhaust valves. Passageways for intake gas are surrounded by water—an aid to efficient operation.

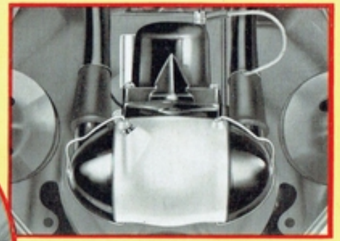
CAST ALLOY STEEL CRANKSHAFT • V-8 crankshafts are cast from a special alloy steel developed by Ford metallurgists. Compared to the former forged-steel shafts, these cast crankshafts are stronger. They offer greater resistance to bending strains and torsional vibration. And bearing surfaces are much harder. Even after thousands of miles of service, bearing wear on the cast shafts usually is so slight that it is difficult to measure.

PISTONS are light-weight cast alloy. Floating-type connecting rod bearings are free to rotate so thrust does not continually occur at same place and cause wear.

DUPLEX INTAKE MANIFOLD • Diagram shows how each intake manifold feeds two cylinders in one bank and two in the other bank. Uniform fuel distribution to all cylinders assures fuel economy.



WATERPROOF IGNITION • Distributor and coil are combined in a single unit. Waterproof and dependable in wet weather.

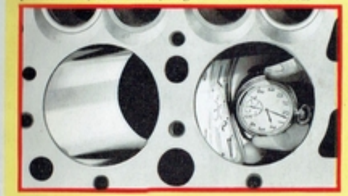


TIMING GEARS are lubricated by oil forced through the pressure relief valve. Thus the teeth on camshaft and crankshaft are flooded constantly with oil, insuring quiet operation and long gear life.

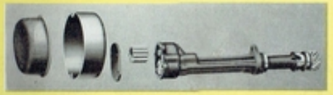
TWO SETS of breaker points are used in V-8 distributors—one to close the circuit, the other to break it—insuring hotter sparks.

GOVERNOR BRAKE is controlled by manifold vacuum to regulate spark advance for maximum efficiency according to engine requirements.

MIRROR-FINISH CYLINDER WALLS Cylinders receive a special polishing operation which produces a surface so smooth that it reflects like a mirror. This eliminates customary initial wear on cylinders, pistons and rings during the running-in process and, as a result, engine life is increased.

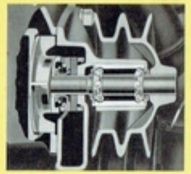


OIL PUMP • Positive, direct-pressure lubrication guards against engine wear and bearing failure. At 2000 r.p.m. the capacity of the oil pump is 1.57 gallons per minute. Capacity of the crankcase is 4 Imperial quarts of oil.



VALVE SEAT INSERTS • Although Ford semi-steel cylinder blocks are hard, exhaust valves have tungsten steel inserts. This alloy steel retains its hardness at high exhaust temperatures and insures efficient operation for a long period.

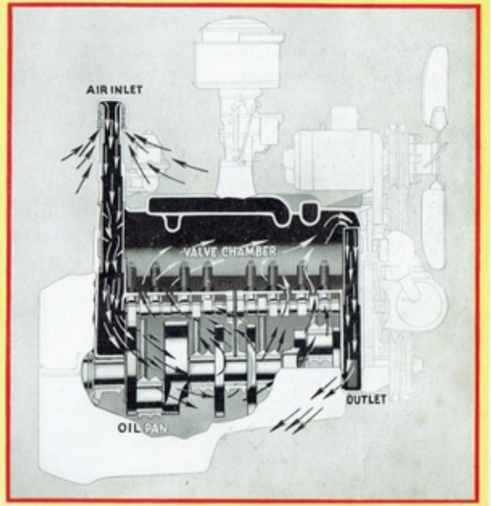
EFFICIENT COOLING SYSTEM



Ford pumps are the packless type. Water pumps on truck engines use a prelubricated, double-row ball bearing. Need for periodic lubrication is eliminated—therefore assuring much longer life.

Fan is enclosed in a shroud, providing more uniform circulation of air through the radiator. Dual fan belts on heavy-duty truck engines provide longer belt life and more efficient cooling.

CRANKCASE VENTILATION • Air is drawn through screened inlet on oil filler tube, circulated through crankcase and valve chamber, and drawn out at right front corner of oil pan. Suction is created by air stream under the truck. Removing destructive vapours minimizes oil dilution, assuring better lubrication.



SHOWROOMS CAN'T SHOW WHAT A TRUCK CAN DO

But an ON-THE-JOB Test can

Go to a showroom to see the *visible* parts of a truck—the styling . . . the engine . . . the body . . . the cab . . . the rear axle . . . wheels . . . tires . . . accessories—and many other things in which you, as a truck operator, are interested.

But go to your job itself to see what a truck *can do*. Take the unit out to *your own* proving ground. Make it carry your actual loads . . . over the same roads and routes it would have to travel later . . . with, if possible, the same driver who would run it.

That is the sensible way to test and judge a truck. It enables you to *know* whether a unit will satisfy you—instead of just *hoping* that it will. It gives you an *assurance* of performance and economy—before you invest a cent.

The nearest Ford dealer invites you to make an On-The-Job test of a 1938 Ford V-8 Truck or Commercial Car. He makes this offer freely—without charge or obligation . . . but with a partly selfish motive. You see, he knows from experience that when you try a Ford Truck on the job, you want to *keep* it there. Arrange to try one today.

NEW

Performance

FIGURES ON 95 HP. and 85 HP. TRUCKS

PERFORMANCE OF FORD 95 HP. TRUCK

FOR GROSS LOAD OF (lbs.)		9,000–9,500	9,500–10,000	10,000–10,500	10,500–11,000	10,500–11,000	11,000–11,500	11,000–11,500	11,500–12,000	12,000–12,500	12,500–13,000	12,500–13,000
TIRES	Front	6.50x20	7.00x20	7.20x20	6.50x20	7.00x20	6.50x20	7.00x20	7.00x20	32x6 8 ply	7.50x20 8 ply	32x6 10 ply
	Rear	6.50x20-D	7.00x20-D	7.00x20-D	32x6 8 ply-D	7.00x20-D	32x6 8 ply-D	32x6 10 ply-D	32x6 10 ply-D	32x6 10 ply-D	7.50x20 8 ply	32x6 10 ply-D
REAR WHEELS		Dual	Dual	Dual	Dual	Dual	Dual	Dual	Dual	Dual	Dual	Dual
RIMS	Front	5"	6"	6"	5"	6"	5"	6"	6"	5"	6"	6"
	Rear	5"	6"	6"	5"	6"	5"	6"	6"	6"	6"	6"
SPARE TIRE		6.50x20	7.00x20	7.00x20	32x6 8 ply-D	7.00x20	32x6 8 ply	32x6 10 ply	32x6 10 ply	32x6 10 ply	7.50x20	32x6 10 ply
REAR SPRING	Main	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf
	Aux.	5 Leaf	5 Leaf	5 Leaf	5 Leaf	5 Leaf	5 Leaf	5 Leaf	5 Leaf	5 Leaf	5 Leaf	5 Leaf
REAR AXLE RATIO		5.83	5.83	5.83	6.66	6.66	6.66	6.66	6.66	6.66	6.66	6.66
PERFORMANCE												
REAR AXLE RATIO		5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66
ROAD SPEED* Level		50 44	52 46	52 46	50 45	52 46	50 45	52 46	52 46	52 46	53 47	52 46
		GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE
APPROXIMATE MAXIMUM PER CENT OF GRADE FOR SUSTAINED PULL	High	5.8 6.8	5.1 6.1	4.8 5.7	4.8 5.7	4.5 5.4	4.5 5.3	4.3 5.2	4.1 4.9	3.8 4.6	3.6 4.4	3.6 4.4
	3rd	10.8 12.6	9.8 11.4	9.2 10.7	9.1 10.7	8.7 10.2	8.6 10.1	8.4 9.8	8.0 9.3	7.6 8.9	7.2 8.5	7.2 8.5
	2nd	21.0 24.3	19.1 22.1	18.1 20.9	17.9 20.8	17.2 19.9	17.1 19.8	16.6 19.2	15.8 18.3	15.1 17.5	14.4 16.5	14.4 16.5
	1st†	30† 30†	30† 30†	30† 30†	30† 30†	30† 30†	30† 30†	29.98 30†	27.72 30†	26.55 30†	26.55 30†	26.55 30†

†Figures marked with this square are for grades of 30% or over.

*Road speeds shown are for maximum engine speed of 2000 R.P.M.

PERFORMANCE OF FORD 85 HP. TRUCK

FOR GROSS LOAD OF (lbs.)		6,000–6,500	6,500–7,000	6,500–7,000	7,000–7,500	7,000–7,500	7,500–8,000	7,500–8,000	8,000–8,500	8,500–9,000	8,500–9,000
TIRES	Front	6.00x20	6.00x20	6.00x20	6.00x20	6.50x20	6.00x20	6.50x20	6.00x20	6.00x20	6.50x20
	Rear	32x6 8 ply-S	32x6 8 ply-S	32x6 10 ply-S	32x6 10 ply-S	32x7 10 ply-S	6.00x20-D	32x7 10 ply-S	6.00x20-D	6.00x20-D	6.50x20-D
REAR WHEELS		Single	Single	Single	Single	Single	Dual	Single	Dual	Dual	Dual
RIMS	Front	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"
	Rear	5"	5"	6"	6"	7"	5"	7"	5"	5"	5"
SPARE TIRE		32x6 8 ply	32x6 8 ply	32x6 10 ply	32x6 10 ply	32x7 10 ply	6.00x20	32x7 10 ply	6.00x20	6.00x20	6.50x20
REAR SPRING	Main	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf	14 Leaf
	Aux.	None	None	None	None	None	None	None	None	None	None
REAR AXLE RATIO		5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83
PERFORMANCE											
REAR AXLE RATIO		5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66	5.83 6.66
ROAD SPEED* Level		52 46	52 46	52 46	50 47	50 47	49 43	50 47	49 43	49 43	50 44
		GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE	GRADE GRADE
APPROXIMATE MAXIMUM PER CENT OF GRADE FOR SUSTAINED PULL	High	8.0 9.3	7.3 8.5	7.0 8.2	6.4 7.5	6.5 7.7	6.3 7.4	6.0 7.1	5.8 6.8	5.3 6.3	5.1 6.1
	3rd	14.5 16.8	13.2 15.4	12.9 15.0	11.9 13.8	12.1 14.0	11.7 13.6	11.2 13.0	10.8 12.6	10.1 11.8	9.7 11.3
	2nd	27.8 32.0	25.5 29.4	24.9 28.7	23.0 26.5	23.4 27.0	22.6 26.1	21.7 25.1	21.1 24.3	19.7 22.8	19.0 21.9
	1st†	30† 30†	30† 30†	30† 30†	30† 30†	30† 30†	30† 30†	30† 30†	30† 30†	30† 30†	30† 30†

TRUCK PERFORMANCE DATA

To Maintain Maximum Speed* on Grades

With 5.83 to 1 ratio Axle

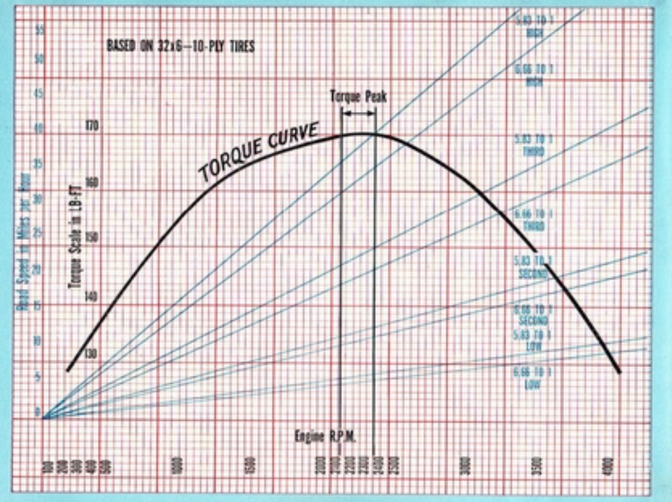
Shift to 3rd at 20 mph.
Shift to 2nd at 11 mph.
Shift to Low at 5 mph.

With 6.66 to 1 ratio Axle

Shift to 3rd at 18 mph.
Shift to 2nd at 10 mph.
Shift to Low at 5 mph.

*Figures based on Maximum Torque.

All truck operators are interested in getting maximum performance and economy. Fleet operators find it pays to educate their drivers in the matter of efficient truck operation. One of the important things for truck drivers to know is when to shift gears on hard pulls for the greatest efficiency. The table at the left, a resume of information shown in the chart at right, gives the speed at which to shift gears on hard pulls to maintain maximum pulling ability and good economy.



The above chart shows the relation of engine torque, engine speed and road speed. The amount of torque is indicated by the black curve line, with vertical torque scale in foot-pounds at the left. The engine speed in revolutions per minute is shown on horizontal scale across the bottom. The diagonal blue lines represent road speed in each forward transmission speed for the two optional axle ratios. Maximum pulling ability in each transmission gear is attained where road speed lines cross the torque peak zone shown within the two black vertical lines.

ENGINE AND ROAD SPEEDS

Below is a table which shows the amount of torque and horsepower developed at various revolutions per minute of the 95-Hp. V-8 truck engine, also the road speeds with the optional rear axle ratios. Under this is a table which shows the change in pulling ability, effective gear ratio and road speed with tires of various sizes.

TABLE OF ROAD SPEEDS AND ENGINE R. P. M.

Rear Tire Size			6.00 x 20		6.50 x 20		7.00 x 20		7.50 x 20		32x6—10 ply		32x6—8 ply		32x7—10 ply	
Axle Ratio			5.83	6.66	5.83	6.66	5.83	6.66	5.83	6.66	5.83	6.66	5.83	6.66	5.83	6.66
Rpm.	Torque	Brake Hp.	Mph.		Mph.		Mph.		Mph.		Mph.		Mph.		Mph.	
1000	155	30	16	14.2	16.5	15	17	15.3	17.75	16	17	15.5	16.5	15	17.2	15.3
1250	163	39	20	17.7	21	18.5	21.5	19	22.25	19.5	21.5	19	21	18.5	21.5	18
1500	165	47	24.5	21.5	25	22.5	26	22.5	26.5	23	26	23	25	22	26	22.5
1750	168	56	28	25	29	26	30	26.5	31	27	30	27	29	26	30	26.5
2000	169	65	32.5	27.5	33	30	34	30	35.5	31	35	30.5	33	29	35	30
2250	170	73	36	32	37	33	38	34	40	34.5	39	34.5	37	33	39	34
2500	169	81	40	35.5	41.5	37	42.5	37.5	44	38.5	43	38	41.5	37	44	39
2750	166	87	44	39	46	41	47	41	48.5	42	47	42	46	41	48	41
3000	161	92	48.5	42	50	44	51	45	53	46	51	45	50	44	52	46
3250	153	97	53	46	55	48	55	49	57.5	50	56	50	55	48	56	49
3500	146	98	57	50	58	52	60	53	62	54	60	53	58	52	61	53

THE EFFECT OF TIRE SIZE ON GEAR RATIO, PULLING ABILITY AND SPEED

Rear Tire Size	% of Normal Pulling Ability	How Gear Ratio Changes		Mph. at 2500 Rpm.		Mph. at 3000 Rpm.	
		5.83 to 1	6.66 to 1	5.83 to 1	6.66 to 1	5.83 to 1	6.66 to 1
6.00 x 20	100%	No change	No change	40	35.5	48.5	42
6.50 x 20	96.09	5.60 to 1	6.34 to 1	41	36.4	50	44
7.00 x 20	94.35	5.49 to 1	6.23 to 1	42.5	37.5	51	45
7.50 x 20—8 ply	87.2	5.10 to 1	5.73 to 1	44	38.5	53	46
9.00 x 18	87.62	5.12 to 1	5.78 to 1	48	42.5	57	51
32 x 6— 8 ply	96.09	5.60 to 1	6.34 to 1	41.5	37	50	44
32 x 6—10 ply	95.93	5.59 to 1	6.33 to 1	43	38	51	45
32 x 7—10 ply	93.01	5.42 to 1	6.14 to 1	43.5	38	52	45.5
34 x 7—10 ply	87.23	5.11 to 1	5.75 to 1	44	38.5	52.5	46

TRUCK (4 Speed) TRANSMISSION RATIOS

High	Third	Second	Low	Reverse
1 to 1	1.69 to 1	3.09 to 1	6.40 to 1	7.82 to 1

REDUCTIONS THROUGH AXLES

5.83 to 1 ratio	5.83 to 1	9.85 to 1	18.01 to 1	37.31 to 1	45.59 to 1
6.66 to 1 ratio	6.66 to 1	11.25 to 1	20.58 to 1	42.62 to 1	52.08 to 1

CHASSIS SPECIFICATIONS

112 - 122 - 134 AND 157 INCH WHEELBASE

	112 INCH	122 INCH	134 AND 157 INCH
CLUTCH			
Type	Dry single plate. Plate pressure increased by centrifugal force	Dry single plate. Plate pressure increased by centrifugal force	Dry single plate. Plate pressure increased by centrifugal force
Cover plate	Ventilated type	Ventilated type	Ventilated type
Pressure plate	Grade "AA" cast iron	Grade "AA" cast iron	Grade "AA" cast iron
Thickness	0.562 inch	0.6875 inch	0.6875 inch
Diameter	9.125 inches	11.12 inches	11.12 inches
Clutch driven member assembly disc	Cushioned hub with vibration damper	Cushioned hub with vibration damper	Cushioned hub with vibration damper
Material	Spring steel	Spring steel	Spring steel
Thickness	0.050 inch	0.062 inch	0.062 inch
Clutch facings	2	2	2
Number used			
Position	Front, attached to driven disc; rear, attached to segmented, spring steel, cushion plate	Front, attached to driven disc; rear, attached to segmented, spring steel, cushion plate	Front, attached to driven disc; rear, attached to segmented, spring steel, cushion plate
Outside diameter	9 inches	11 inches	11 inches
Thickness	0.137 inch	0.137 inch	0.137 inch
Material	Asbestos composition	Asbestos composition	Asbestos composition
Total friction area	75.3 square inches	123.7 square inches	123.7 square inches
Weight of driven disc assembly	3 pounds	4 pounds, 10 ounces	4 pounds, 10 ounces
Weight of pressure plate assembly	11 pounds, 10 ounces	18 pounds, 4 ounces	18 pounds, 4 ounces
Clutch plate pressure	830 pounds at zero speed 1685 at 4000 rpm	855 pounds at zero speed 1555 at 4000 rpm	855 pounds at zero speed 1555 at 4000 rpm
Clutch pedal pressure to disengage	28 pounds at engine idling speed; 52 pounds at 4000 rpm	25 pounds at engine idling speed; 60 pounds at 4000 rpm	25 pounds at engine idling speed; 60 pounds at 4000 rpm
Clutch pedal adjustment	0.75 to 1 inch free travel	1.5 to 1.75 inches free travel	1.5 to 1.75 inches free travel
Clutch pilot bearing	Prelubricated ball S.A.E. No. 203	Prelubricated ball S.A.E. No. 203	Prelubricated ball S.A.E. No. 203
Clutch throwout bearing	Special prelubricated thrust type ball bearing	Special prelubricated thrust type ball bearing	Special prelubricated thrust type ball bearing
Clutch torque capacity	7% in excess at low speed increasing to 176% at maximum	31% in excess at low speed increasing to 200% at maximum	31% in excess at low speed increasing to 200% at maximum
TRANSMISSION			
Type	All helical gears. Synchronized shifting for second and high	All helical gears. Synchronized shifting for second and high	All gears are straight tooth type
Number of speeds	Three forward, one reverse	Three forward, one reverse	Four forward, one reverse
Gears and mainshaft	Oil hardening chromium steel	Oil hardening chromium steel	Oil hardening chromium steel
Bearings	Anti-friction roller or ball in all forward speeds	Anti-friction roller or ball in all forward speeds	Antifriction roller or ball in all forward speeds
Main drive gear	Ball	Ball	Ball
Pilot	Roller	Roller	Roller
Mainshaft rear	Ball	Ball	Ball
Countershaft	Roller (two)	Roller (two)	Roller (two)
Reverse idler	Bronze	Bronze	Bronze
Gear ratios:			
High	1 to 1	1 to 1	1 to 1
3rd	1.604 to 1	1.604 to 1	1.69 to 1
1st	2.819 to 1	2.819 to 1	3.09 to 1
Reverse	3.825 to 1	3.825 to 1	6.4 to 1
Transmission lubricant capacity	2.5 pounds	2.5 pounds	5 pounds
Power take-off opening		Special 4-speed transmission, similar to that used in 134-inch and 157-inch chassis, available at extra cost	Standard S.A.E. 6-bolt
FRAME			
Type	Double-drop, X-member channels form box section with frame side members	Straight side members with 2-inch kick-up over rear axle	Straight side members
Material	Medium high carbon pressed steel	Medium high carbon pressed steel	Medium high carbon pressed steel
Elastic limit	42,000 lb. per sq. in.	42,000 lb. per sq. in.	42,000 lb. per sq. in.
Main side members:			
Length	157.4 inches	183.56 inches	203.44 inches (134-inch) 228.44 inches (157-inch)
Depth	5.3 inches	6 inches	7 inches
Width	2 inches	2.25 inches	2.25 inches
Thickness	0.11 inch*	0.19 inch	0.21 inch
Cross members:	4 transverse members and X-member	*Sedan Delivery and Station Wagon use passenger car frame. Channel type 6 cross members	Channel type 6 cross members
No. 1—			
Depth	3.31 inches	3.62 inches	4.56 inches
Width	6.31 inches	6.75 inches	7.65 inches
Length	27.63 inches	31.12 inches	31.0 inches
No. 2—			
Depth	5.0 inches	12.62 inches	12.54 inches
Width	10.0 inches (at center)	2.60 inches	3.40 inches
Length	11 inches (2 members)	32.94 inches	32.94 inches
No. 3—			
Depth	3.38 inches	7.52 inches	9.44 inches
Width	7.20 inches	3 inches	3.40 inches
Length	42.48 inches	33.56 inches	33.56 inches
No. 4—			
Depth	2.22 inches	3 inches	3 inches
Width	1.50 inches	5.12 inches	6 inches
Length	41.8 inches	33.62 inches	33.56 inches

	112 INCH	122 INCH	134 AND 157 INCH
FRAME (Continued)			
Nos. 5 and 6—			
Depth		3.62 inches	3.93 inches
Width		2.62 inches	3.12 inches
Length		33.62 inches	33.56 inches
Over-all width of frame:			
At front axle center line	30 inches	32 inches	32 inches
At back of cab	44 inches	34 inches	34 inches
At rear axle center line	44 inches	34 inches	34 inches
At rear end	42.25 inches	34 inches	34 inches
Frame extends beyond rear axle center line	29.38 inches	48 inches	49.88 inches
Frame projects behind cab	67.74 inches	96.16 inches	110.04 inches (134-inch) 133.04 inches (157-inch)
Length from back of cab to rear axle center line	38.24 inches	68.16 inches	60.16 inches (134-inch) 83.16 inches (157-inch)
Frame may be shortened		23 inches	21.38 inches
Section modulus of side member	1.39	3.34	5.4
X-members—Length	157.4 inches		
Width	1.94 inches		
Depth	5.38 inches		
FRONT AXLE			
Type	Reverse Elliott	Reverse Elliott	Reverse Elliott
Material	Heat-treated alloy steel	Heat-treated alloy steel	Heat-treated alloy steel
Tensile strength	150,000 lb. per sq. in.	150,000 lb. per sq. in.	150,000 lb. per sq. in.
Caster	5 degrees (loaded)	5 degrees (no load)	approx. 5 degrees (no load)
Camber	1 degree	¾ degree	¾ degree
Spindle bolt inclination	8 to 8½ degrees	8 degrees	8¼ degrees
Toe-in	0.062 inch	0.10 inch	None
Spindle bolt diameter	0.812 inch	0.812 inch	1.125 inch
Spindle thrust bearings	Anti-friction type	Tapered roller	Tapered roller
Wheel bearings	Adjustable tapered roller	Adjustable tapered roller	Adjustable tapered roller
Tread	55.75 inches	55.75 inches	58.5 inches for 6.00-20 tires 57 inches for 7.50-20 tires
FRONT SPRING			
Type	Transverse cantilever 3.6 inches ahead of axle. Radius rods maintain axle alignment. Tapered leaves	Transverse cantilever 3.6 inches ahead of axle. Radius rods maintain axle alignment. Tapered leaves	Transverse cantilever mounted 4 inches ahead of axle with radius rods to maintain axle alignment
Material	Chrome alloy steel; all leaves	Chrome alloy steel; all leaves	Chrome alloy steel; all leaves
Tensile strength	200,000 lb. per sq. in.	200,000 lb. per sq. in.	200,000 lb. per sq. in.
Length	40.25 inches	40.25 inches	36.87 inches
Width	2 inches	2 inches	2.25 inches
Number of leaves	12	13	14
Pounds per inch of deflection	250 to 260 lb.	325 lb.	1000 lb.
Spring shackles	Oilless type	Oilless type	Oilless type
FRONT RADIUS RODS			
Material	Tapered steel tubing	Tapered steel tubing	Tapered steel tubing
Construction	Forged ends electrically welded to steel tubes	Forged ends electrically welded to steel tubes	Forged ends electrically welded to steel tubes
Length (Center of foot to center of ball)	40.1 inches	35.53 inches	35.6 inches
Diameter	1.38 inches at rear; 1.38 x 2.5 inch oval at front	1.38 inches at rear; 1.38 x 2.5 inch oval at front	1.38 inches at rear; 1.62 x 3 inch oval at front
Wall thickness	0.160 inch	0.160 inch	0.187 inch
Front fastening	Rigid to axle	Rigid to axle	Rigid to axle
Rear fastening	Rubber insulated ball and socket attached to X-member box section	Rubber insulated ball and socket attached to main frame cross member	Rubber insulated ball and socket attached to main frame cross member
STEERING			
Type	Worm and roller	Worm and roller	Worm and roller
Worm mounting	Two tapered roller bearings	Two tapered roller bearings	Two tapered roller bearings
Steering axle limit	13,000 lb. per sq. in.	13,000 lb. per sq. in.	13,000 lb. per sq. in.
Roller shaft mounting	Two bronze bushings	Two bronze bushings	Two bronze bushings
Steering gear ratio	18.2 to 1	18.2 to 1	18.4 to 1
Steering wheel	3 spoke steel core with hard composition covering	3 spoke steel core with hard composition covering	4 spoke steel core with hard compositions covering
Steering wheel diameter	17 inches	17 inches	18 inches
Maximum turning angle	35 degrees, right or left	35 degrees, right or left	35 degrees, right or left
Turning radius	20 feet	22 feet	24 feet (134-inch) 28.8 feet (157-inch)
REAR AXLE			
Type	Three-quarter floating	Full-floating	Full-floating
Drive	Spiral bevel with straddle-mounted driving pinion and ring gear thrust plate	Spiral bevel with straddle-mounted driving pinion and ring gear thrust plate	Spiral bevel with straddle-mounted driving pinion and ring gear thrust plate
Coupling to driveshaft	Splined end of pinion shaft fits into splined sleeve on driveshaft	Splined end of pinion shaft fits into splined sleeve on driveshaft	Splined end of pinion shaft fits into splined sleeve on driveshaft
Ratio	5.78 to 1, optional 6.11 to 1	5.14 to 1, optional 5.83 to 1	5.83 to 1 or 6.66 to 1 optional
Axle shafts	Carbon manganese steel, Integral differential side gears	Special manganese steel forgings with integral flanges	Special manganese steel forgings with integral flanges
Tensile strength	180,000 lb. per sq. in.	180,000 lb. per sq. in.	180,000 lb. per sq. in.
Diameter	1.13 inches	1.25 inches	1.56 inches
Rear axle housing	Reinforced construction	Reinforced construction	Reinforced construction
Thickness of tubing	0.13 inch	0.24 inch	0.60 inch
Differential housing	Malleable iron	Malleable iron	Malleable iron

CHASSIS SPECIFICATIONS (Continued)

	112 INCH	122 INCH	134 AND 157 INCH
REAR AXLE (Continued)			
Lubricant capacity	2.25 pints	7.5 pints	7.5 pints
Bearings:			
Pinion shaft—front	Two opposed tapered roller	Two opposed tapered roller	Two opposed tapered roller
Pinion shaft—rear	Straight roller	Straight roller	Straight roller
Differential side	Tapered roller	Tapered roller	Tapered roller
Rear wheel bearings	Straight roller	Tapered roller, two per wheel	Tapered roller, two per wheel
Location	On outside of axle housing	On outside of axle housing, under load center of wheels	On outside of axle housing, under load center with dual wheels
No. of teeth in pinion	(3.78 to 1 ratio) 9 (4.11 to 1 ratio) 9	7	(5.83 to 1 ratio) 6 (6.66 to 1 ratio) 6
No. of teeth in ring gear	(3.78 to 1 ratio) 34 (4.11 to 1 ratio) 37	36	(5.83 to 1 ratio) 35 (6.66 to 1 ratio) 40
	3.78 to 1 axle 4.11 to 1 axle		5.83 to 1 axle 6.66 to 1 axle
Gear reduction through axle:			
High	3.78 to 1 4.11 to 1	5.84 to 1	5.83 to 1 6.66 to 1
Third			9.05 to 1 11.25 to 1
Second	6.06 to 1 6.59 to 1	8.24 to 1	10.61 to 1 20.58 to 1
Low	10.66 to 1 11.59 to 1	14.49 to 1	37.31 to 1 42.62 to 1
Reverse	13.7 to 1 14.9 to 1	18.63 to 1	45.79 to 1 52.08 to 1
Minimum road clearance	8.0 inches	(7.00-17 tires) 9.3 in. (7.50-17 tires) 9.7 in.	(6.00-20 tires) 7.93 in. (32 x 6 tires) 8.62 in.
Tread	58.25 inches	57 inches	57.1 inches (single rear wheels) 65 inches (dual rear wheels)
TORQUE TUBE DRIVE			
Type	Full torque tube with radius rods. Forward end of tube attached to rear engine support by ball and socket joint.	Full torque tube with radius rods. Forward end of tube attached to frame cross-member by ball and socket joint.	Full torque tube with radius rods. Forward end of tube attached to frame cross-member by ball and socket joint.
Torque tube	High carbon steel swaged tapered tubing	High carbon steel swaged tapered tubing	High carbon steel swaged tapered tubing
Diameter	3.4 inches maximum; 2.5 inches minimum	3.4 inches maximum; 2.5 inches minimum	4.25 inches maximum; 2.84 inches minimum
Thickness	0.109 inch at maximum diameter; 0.250 inch at minimum diameter	0.109 inch at maximum diameter; 0.250 inch at minimum diameter	0.156 inch at maximum diameter; 0.250 inch at minimum diameter
Length	60.92 inches	60.27 inches	67.58 inches
Rear radius rods	Forged steel ends electrically welded to 0.093 inch-wall tapered steel tubing	Forged steel ends electrically welded to 0.093 inch-wall tapered steel tubing	Forged steel ends electrically welded to 0.093 inch-wall tapered steel tubing
Diameter	1.18 inches diameter at front; 1.18 x 2.0 inch oval at rear	1.156 inches diameter at front; 1 x 2.4 inch oval at rear	1.156 inches diameter at front; 0.81 x 2.62 inch oval at rear
Elastic limit	42,000 lb. per sq. in.	42,000 lb. per sq. in.	42,000 lb. per sq. in.
Length	58.82 inches	60.38 inches	72.32 inches
Drive shaft	Both tubular and solid type are used	Forged steel ends electrically welded to 0.11 inch-wall steel tubing	Forged steel ends electrically welded to 0.11 inch-wall steel tubing
Elastic limit	130,000 lb. per sq. in.	65,000 lb. per sq. in.	65,000 lb. per sq. in.
Length	65.86 inches	55.75 inches	65.21 inches
Diameter	2.75 inches (tubular type) .900 inch (solid type)	2.75 inches at center, 2 inches at ends	2.75 inches at center, 2 inches at ends
Diameter of splines (front)	1.246 inches	1.246 inches	1.371 inches
Bearings	Roller bearing at forward end. Solid type driveshaft has intermediate roller bearing	Two roller bearings at forward end of driveshaft	Two roller bearings at forward end of driveshaft
Ultimate twisting strength of driveshaft		28,000 lb. inches	28,000 lb. inches
Maximum angularity:			
No load	4 degrees	4 degrees	3 degrees
Loaded	None	None	None
Coupling shaft		Forged steel ends electrically welded to solid shaft	Forged steel ends electrically welded to 0.125 inch-wall steel tubing
Diameter		1.31 inches	2 inches
Length		17.203 inches	18.87 inches (133-inch) 41.97 inches (157-inch)
Elastic limit		65,000 lb. per sq. in.	65,000 lb. per sq. in.
Diameter of splines		1.25 inches	1.375 inches
Front coupling		Enclosed bi-partible universal joint	Enclosed bi-partible universal joint
Rear coupling		Enclosed universal joint	Enclosed universal joint
UNIVERSAL JOINTS			
Type	Hardened and ground pins and bearing bushings	Hardened and ground pins and bearing bushings	Heavy duty with needle roller bearings
Number of joints used	One	Two	Two
REAR SPRINGS			
Type	Transverse cantilever with tapered leaves	Semi-elliptic; free shackled at both ends	Semi-elliptic; free shackled at both ends
Material	Chrome alloy steel (all leaves)	Chrome alloy steel (all leaves)	Chrome alloy steel (all leaves)
Length	46.5 inches	45 inches	50 inches
Width	2.25 inches	2.25 inches	2.5 inches
Number of leaves	12, 13, 14 and 15	12 (standard) 13 (special)	12, 13 and 14
Tensile strength	200,000 lb. per sq. in.	200,000 lb. per sq. in.	200,000 lb. per sq. in.
Pounds per inch of deflection:			
12 leaf	210 to 220	475 to 495	340
13 leaf	200 to 215	510 to 530	580
14 leaf	322 to 342		835
15 leaf	365 to 385		

	112 INCH	122 INCH	134 AND 157 INCH
REAR SPRINGS (Continued)			
Shackle bolts		Diameter, 0.75 inch; length, 4 inches	Diameter, 1 inch; length, 4.25 inches
Material		High manganese steel	High manganese steel
AUXILIARY SPRINGS (Helpers)			
Auxiliary springs engage after rear springs have been depressed approximately two inches.			
Length			35.5 inches
Width of leaves			2.5 inches
Number of leaves			5
Thickness			0.265 inch
Pounds per inch of deflection			600
Tensile strength			200,000 lb. per sq. in.
SERVICE BRAKES			
Type	Ford Safety Brakes with internal expanding, self-energized shoes	Ford Safety Brakes with internal expanding, self-energized shoes	Ford Safety Brakes with internal expanding, self-energized shoes
Brake actuation	Through cables and conduits	Through cables and conduits	Through cables and conduits
Brake drum diameter:			
Front	12 inches	12 inches	15.12 inches
Rear	12 inches	15.12 inches	15.12 inches
Brake drum material:			
Rear drums	Cast brake drum with large reinforcing rib and cooling ribs	Cast iron brake drum ring integral with steel drum disc. Large reinforcing rib and cooling ribs	Cast iron brake drum ring integral with steel drum disc. Large reinforcing rib and 3 cooling ribs
Front drums	Full cast drum with large reinforcing rib and cooling ribs	Full cast drum with large reinforcing rib and cooling ribs	Same design as rear with a large reinforcing rib and 3 additional cooling ribs
Number of brake shoes	8	8	8
Brake lining width:			
Front	1.75 inches	1.75 inches	2.5 inches
Rear	1.75 inches	2.5 inches	2.5 inches
Brake lining length per shoe:			
Front	13.25 inches	13.25 inches	18.41 inches
Rear	13.25 inches	18.41 inches	18.41 inches
Brake lining thickness	0.185 inch	0.185 inch (front) 0.25 inch (rear)	0.25 inch
Brake lining area:			
Front	93 sq. in.	93 sq. in.	184 sq. in.
Rear	93 sq. in.	184 sq. in.	184 sq. in.
Total	186 sq. in.	277 sq. in.	368 sq. in.
Brake adjustment	Single external adjusting screw at each wheelbrake	Single external adjusting screw at each wheelbrake	Single external adjusting screw at each wheelbrake
HANDBRAKE			
Type	Operates all 4 wheelbrakes	Operates all 4 wheelbrakes	Self-energizing internal expanding band in each rear drum
Lever location	Under instrument panel at left of steering column	Under instrument panel at left of steering column	Alongside of gear shift lever
Brake lining width			1.5 inches
Brake lining length—per hand			41.12 inches
Brake lining thickness			0.187 inch
Brake lining area			120.75 sq. in.
Brake adjustment			On brake rods
TOTAL BRAKE LINING AREA			
All brakes	186 sq. in.	277 sq. in.	488.75 sq. in.
SHOCK ABSORBERS			
Type	4 double-acting adjustable hydraulic	2 double-acting adjustable hydraulic—on front	
CHASSIS LUBRICATION			
Type	Pressure gun fittings where lubrication is required	Pressure gun fittings where lubrication is required	Pressure gun fittings where lubrication is required
WHEELS			
Type	Cold pressed steel riveted to steel rim	Steel disc riveted to steel rim	Tapered steel disc riveted to steel rim
Rim type	Drop center	Continuous base with continuous side ring	Continuous base with continuous side ring
Rim size	16 x 4 inches	17 x 5 inches (front) 17 x 6 inches (rear)	20 x 5 inches, standard
Spare wheel	One	One	One
TIRES			
Front	*6.00-16 inch, 6-ply	†6.00-17, 6 ply	600-20
Rear	*6.00-16 inch, 6-ply	†7.00-17, 6-ply	Single—32x6, 8-ply
			Various other tire options available at extra cost
LIGHTS			
Headlamps	Depressible beam 32-32 c.p. lamps with 3 c.p. parking lamps	Depressible beam 32-32 c.p. lamps with 3 c.p. parking lamps	Depressible beam 32-32 c.p. lamps with 3 c.p. parking lamps
Headlamp control	Foot-operated switch with indicator light on instrument panel	Foot-operated switch with indicator light on instrument panel	Foot-operated switch with indicator light on instrument panel
Combination tail and stop lamp	21 and 3 c.p.	21 and 3 c.p.	21 and 3 c.p.
Reading light (De Luxe)			15 c.p.
Instrument lights	3 c.p.	3 c.p.	3 c.p.

*Station Wagon has 6.00-16 inch, 6-ply tires as standard equipment. For small extra charge on other 112-inch units 6.00-16, 6-ply and for all 122-inch units, 6.50-16, 6-ply tires are available.
†7.00-17, 6-ply and 7.50-17, 8-ply, all around, are available for small extra charge.

SPECIAL EQUIPMENT ON-THE-JOB

Supertest Petroleum Corporation, Limited of Montreal, haul a 1010-Imperial-gallon gasoline tank, as shown, with a 157-inch truck that has a two-speed axle and trailing third axle. The unit also has provision for carrying 1750 pounds of oil and grease.

This Ford V-8 equipment is used by McColl Frontenac Oil Co., Ltd. This 157-inch De Luxe truck equipped with two-speed axle, hauls a 736-Imperial-gallon gasoline tank equipped with side racks to carry oil.

Operated by Jas. Barclay & Co., Limited, this Ford V-8 truck with drop frame semi-trailer van body combines utility with strong advertising display. Body measures 18' x 7'7" x 6ft'.

This 1938 De Luxe Ford V-8 truck is a prestige-builder as well as a money-earner for M & P Stores, of Windsor, Ont. The special streamline body measures 7' x 11' x 42".

21 YEARS EXPERIENCE IN

Ford

COMMERCIAL TRANSPORTATION

PRINTED IN U. S. A.