LOGGERS • FARMERS • COAL •

TAL PRODUCTS • CONTRACTORS • CONTRACT HAULERS • BOTTLERS • MOVERS •

DEPARTMENT STORES • BAKERS • WHOLESALE GROCERS • FURNITURE • GAS AND OIL •

CONSTRUCTION •

COMMON CARRIERS • MILK •

AND FOR

PRODUCE •

PRACTICALLY EVERY

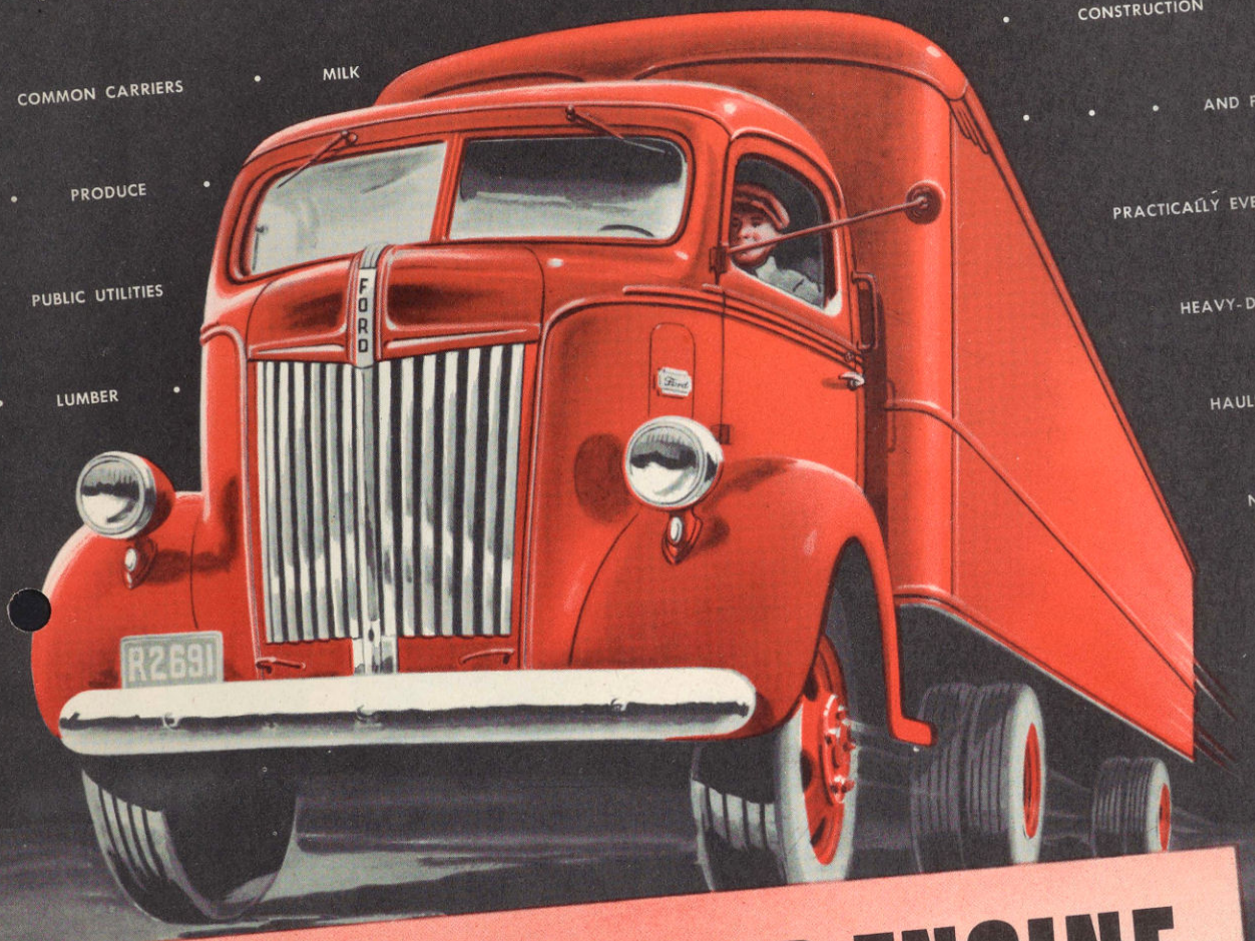
PUBLIC UTILITIES •

HEAVY-DUTY

LUMBER •

HAULING

NEED



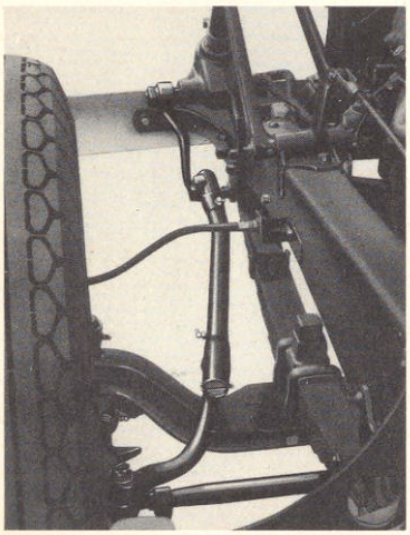
FORD CAB-OVER-ENGINE TRUCKS

Ford

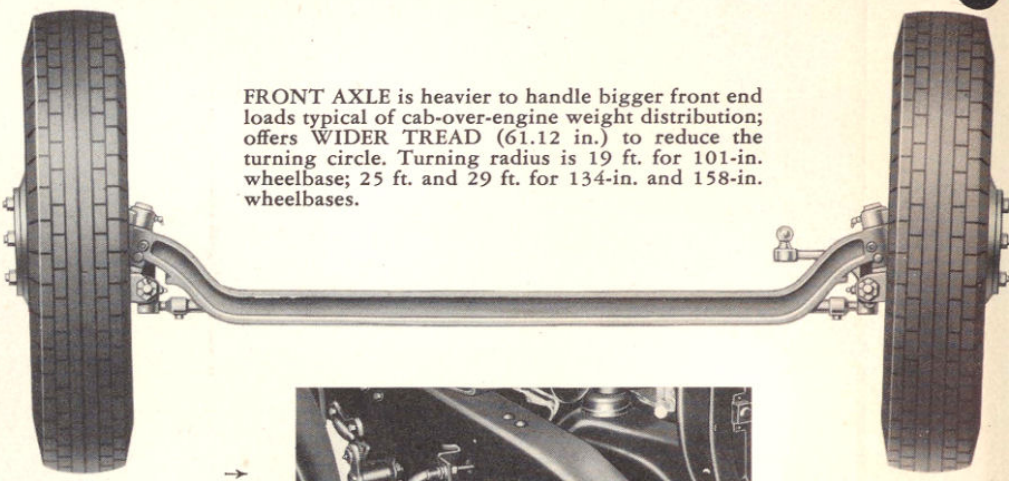
1½-TON AND 2-TON MODELS

TRUCK-ENGINEERED • TRUCK-BUILT • BY TRUCK MEN

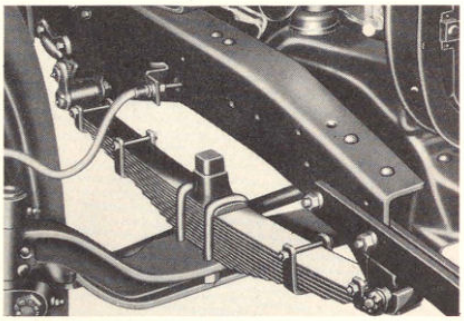
FORD TRUCK FEATURES SPECIFICALLY DESIGNED FOR CAB-OVER-ENGINE SERVICE



In Ford C.O.E. design, the STEERING GEAR is located ahead of the front axle. A short, direct-acting drag link offers simple, stable and efficient steering linkage.



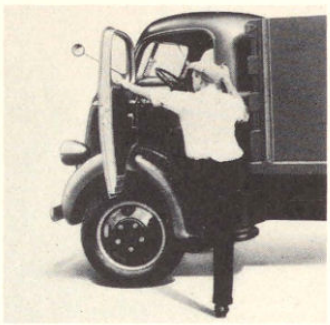
FRONT AXLE is heavier to handle bigger front end loads typical of cab-over-engine weight distribution; offers WIDER TREAD (61.12 in.) to reduce the turning circle. Turning radius is 19 ft. for 101-in. wheelbase; 25 ft. and 29 ft. for 134-in. and 158-in. wheelbases.



Longer, wider FRONT SPRINGS offer bigger carrying capacity. Tensile strength of alloy steel leaves is 200,000 lbs. per sq. in. Springs have steel-backed bronze-bushed eyes, hardened steel shackle pins.

WORK-PROVED CONVENTIONAL TRUCK FEATURES RETAINED IN C.O.E. FORDS

Except for three major features shown above, and some minor differences in driving controls, Ford specifications for C.O.E. and conventional truck chassis are identical. Two advantages result from use of the same clutches, transmissions, drive lines, rear axles, etc., in both types of trucks. First, Ford C.O.E. trucks use parts thoroughly proved in conventional truck service. Second, Ford repair parts for C.O.E. trucks are easier to get.

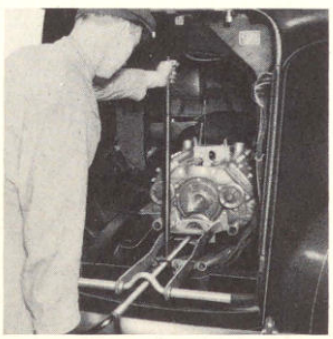


Short-legged drivers will O.K. Ford's 36" floor-ground height—unusually low for a C.O.E.

Quick turn of 4 latches exposes spark plugs, air cleaner, oil filter, fuel pump, carburetor, etc.

FORD C.O.E. SUPERIORITIES

Oil filler port with rubber-sealed cap is handily located on engine cover, just inches away from opening to the oil level gage.



When necessary, engine removal or installation is a quick, one-man job. Only a few operations, like re-boring, require removal.

LONG BODIES ON SHORT WHEELBASES

Wheelbase	Cab to Axle Dimension	Body Length Range
101"	60"	7½'-9' AND TRACTOR
134"	93"	11'-14'
158"	117"	14'-17½'

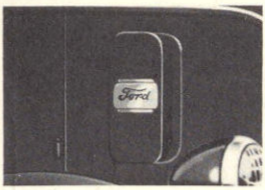
Combination of long cab-to-axle dimension with short wheelbase offers: good weight distribution for bodies in the 9 ft., 12 ft., and 15 ft. ranges; short turning circle for easy handling.

SERVICE-EASE — A PRIME FORD FEATURE

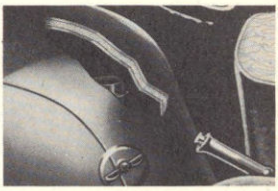
Cab-over-engine Ford trucks, in many respects, are no more difficult to get at and repair than are conventional trucks. This is just as true of the Ford engine as any other part of the chassis. A study of "flat-r[ate]" books on engine service operations proves that "standard time" allow[ances] for practically all types of engine service work are the same for C.O.E. Ford trucks as they are for conventional Fords.

ROOMY, INSULATED, EASY-RIDING TRUCK CABS

There's plenty of elbow room and leg room in the Ford welded all-steel C.O.E. cab. Individual lounge-type seats are adjustable to two positions. Instruments are grouped for easy reading. Ford Shiftoguide Speedometer shows drivers best time to shift gears. Edge of door glass is protected by a reinforcing channel. Safety glass standard in doors as well as windshield and rear window. Big, wide doors are hinged at front. Hand holds conveniently located outside of cab.

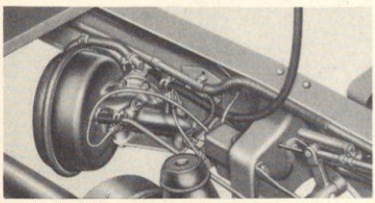


A large screened ventilator is located in the cowl on each side of the Ford C.O.E. cab.

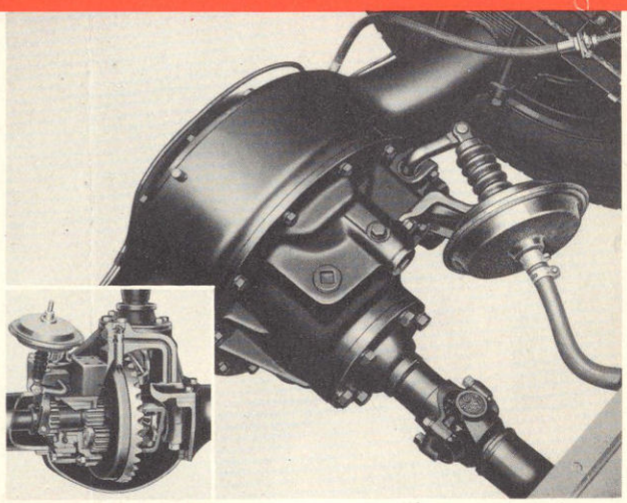


Rock wool lined engine cover insulates the cab against heat and sound.

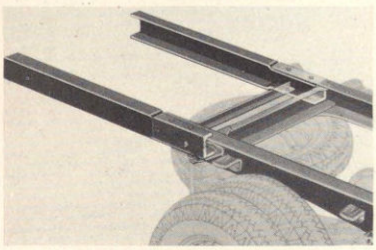
PLUS-VALUES IN TRUCK EQUIPMENT



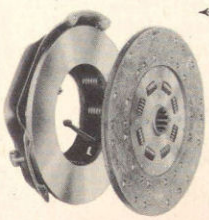
VACUUM POWER BRAKE EQUIPMENT included in 2-ton, is also available in 1½-ton. Vacuum chamber supplies braking power to integral hydraulic slave cylinder in proportion to pedal pressure, requires less "muscle-power."



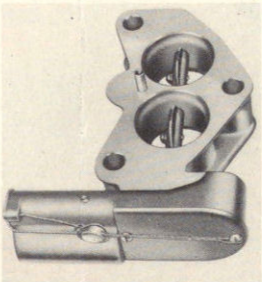
High range of 2-SPEED AXLE reduces engine r.p.m., saves on gas, oil and engine wear. Low range steps up power when extra pulling effort is needed. Dash button controls vacuum-operated shift. 2-speed axle included on 2-ton, available on 1½-ton, has 8.25/20 dual tires.



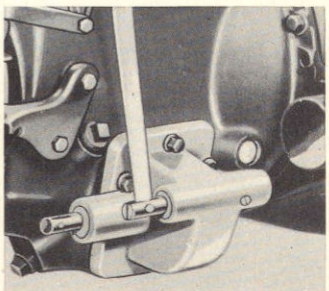
FRAME EXTENSIONS, optional at extra cost, fit into ends of frame side rails, add up to 30 inches to frame length.



← For tough, multi-stop operations, a special semi-centrifugal BUS-TYPE CLUTCH is available at extra cost. Clutch has special facings, spring pressure is greater.



Optional at extra cost is a GOVERNOR which guards against excessive engine and road speeds.

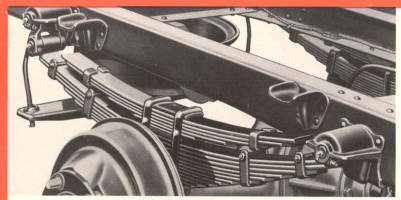


Your Ford dealer makes available a POWER TAKE-OFF which bolts to opening in 4-speed transmission case.

MORE FORD TRUCKS IN USE TODAY THAN ANY OTHER MAKE!

QUALITY FEATURES . . . SERVICE-PROVED OVER BILLIONS OF MILES

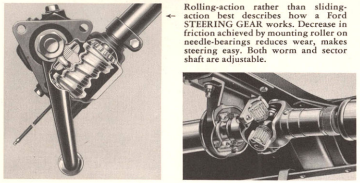
In Conventional and Cab-Over-Engine Ford Heavy Duty Trucks



Tensile strength of REAR SPRINGS is 200,000 lbs. per sq. in. Spring eyes and shackles are steel-backed, bronze-bushed; pins are interchangeable. Brackets are double riveted to lower flange and side of frame rail. 12-leaf main spring and 5-leaf auxiliary have independent center bolts to facilitate servicing.

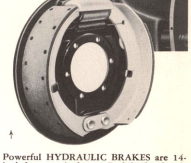
Non-warping non-scoring cast iron BRAKE DRUM is fused to steel drum disc, providing great strength, minimum weight.

Rolling-action rather than sliding-action best describes how a Ford STEERING GEAR works. Decrease in friction achieved by mounting roller on needle-bearings reduces wear, makes steering easy. Both worm and sector shaft are adjustable.

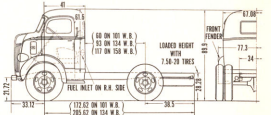


Long-wearing, service-free UNIVERSAL JOINTS are efficient needle-bearing type. Lubrication and relief fittings designed to prevent damage to sealing washers while greasing.

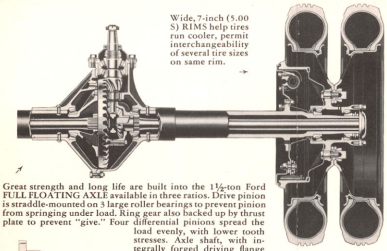
The Ford Heavy Duty DOUBLE-CHANNEL FRAME on the 134- and 158-inch wheelbases features an extra, built-in, heavy-gage frame channel section. Extending from rear bracket of front spring to front bracket of rear spring, it provides extra support in two planes. Double-Channel design has no rivet attachment along rail sides to work loose.



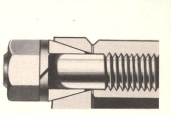
Powerful HYDRAULIC BRAKES are 14-inch front, 15-inch rear. Each brake shoe is anchored independently, and actuated by its own piston for more uniform braking. Groove-sealed brake drums keep out dust and water. Easy-to-get-at adjustment provided for each shoe.



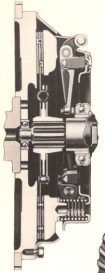
Wide, 7-inch (5.00 S) RIMS help tires run cooler, permit interchangeability of several tire sizes on same rim.



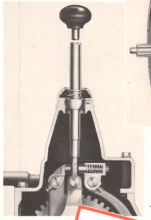
Great strength and long life are built into the 1½-ton Ford FULL FLOATING AXLE available in three ratios. Drive pinion is straddle-mounted on 3 large roller bearings to prevent pinion from springing under load. Ring gear also backed up by thrust plate to prevent "give." Four differential pinions spread the load evenly, with lower tooth stresses. Axle shaft, with integrally forged driving flange propels load only, carries no weight.



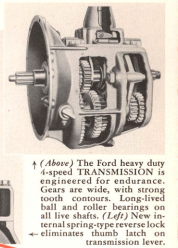
To minimize shearing of rear axle hub studs, Ford C.O.E. trucks feature wedge-type STUD ADAPTERS. This type of adapter is designed to eliminate "play" between stud and flange hole, a common cause of stud shearing, and to equalize drive load on all studs.



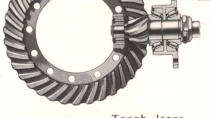
The 11-inch SEMI-CENTRIFUGAL CLUTCH delivers full engine power smoothly with minimum pedal pressure for throw-out. Cushion disc construction prevents grabbing. Dampener springs between hub and disc counteract chatter. Pilot and throw-out ball bearings are pre-lubricated and sealed. Flywheel lower housing separable from oil pan, facilitates removal of clutch without disturbing complete oil pan.



(Above) The Ford heavy duty 4-speed TRANSMISSION is engineered for endurance. Gears are wide, with strong tooth contours. Long-lived ball and roller bearings on all live shafts. *(Left)* New internal spring-type reverse lock eliminates thumb latch on transmission lever.



Large roller bearings STRADDLE the rear axle pinion, two tapered bearings front and one straight roller bearing rear, to counteract any tendency the pinion might have to "climb" out of alignment under a heavy load.



Tough, large diameter, manganese steel REAR AXLE SHAFTS are designed to stand plenty of punishment. Diameter: over splines 1.75 in.; minimum 1.56 in. Shaft easily replaced without jacking truck or taking axle apart.

PARTS EXCHANGE PLAN

Thousands of truck operators use the Dealer Engine and Parts Exchange Plan to replace worn units with reconditioned units for less than it would cost to have them repaired or overhauled. Typical exchange items listed below can be quickly installed:—

SHOCK ABSORBER • GENERATOR • GENERATOR ARMATURE • BRAKE SHOE • CLUTCH PRESSURE PLATE ASSEMBLY • CLUTCH DISC ASSEMBLY • CARBURETOR • DISTRIBUTOR • FUEL PUMP • ENGINE • CYLINDER ASSEMBLY INCLUDING HEADS

Saves You Time

Saves You Money

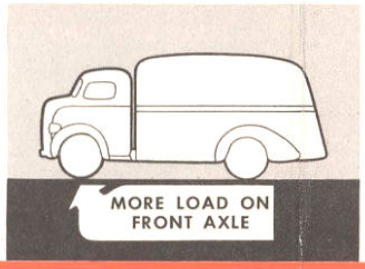
NOT A SINGLE ENGINE IN THE TRUCK BUSINESS TODAY . . . big engine or small, old or new . . . runs slower than the Ford V-8 at any given road speed, if tire size, transmission and axle ratios are identical. Using standard axle ratios (see table), V-8 engine speed at 50 m.p.h. is conspicuously low. At lower "cruising" speeds of 30 to 40 m.p.h., the V-8 turns over at or near its maximum fuel economy range and its maximum torque level (1800 to 2500 r.p.m.).

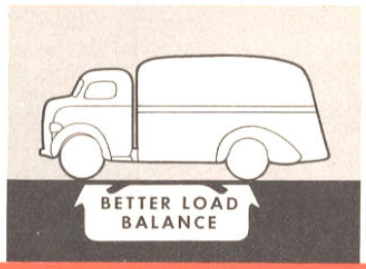
FORD V-8 ENGINE RPM FOR VARIOUS MILES PER HOUR IN HIGH GEAR

Miles per Hour	Tire Size—7.50-20, 8-ply, with 1½-Ton Std. Axle			Tire Size—8.25-20, 10-ply, with 2-Ton 2-Spd. Axle	
	Ratio 6.14 to 1	Ratio 5.83 to 1	Ratio 6.67 to 1	High Range 5.83 to 1	Low Range 6.11 to 1
15	730	830	950	800	1115
20	975	1105	1265	1070	1485
30	1460	1655	1895	1600	2230
40	1950	2210	2525	2135	2970
50	2435	2760	3160	2670	—

Here's Why FORD CAB-OVER-ENGINE TRUCKS CAN IMPROVE DELIVERY SERVICE . . . CUT HAULING COSTS

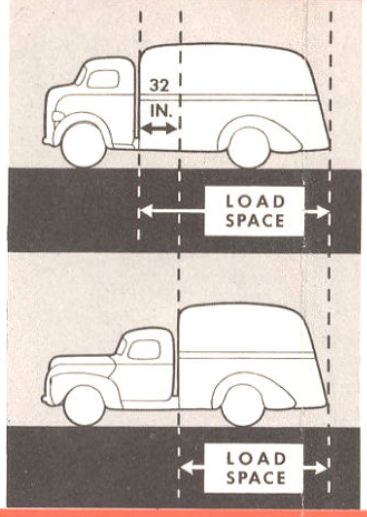
C.O.E. trucks carry bigger total loads without increasing the weight on the rear axle because their "close-coupled" design results in transfer of more load to the usually underloaded front axle.

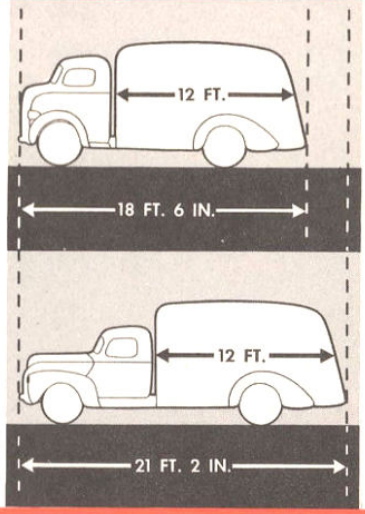




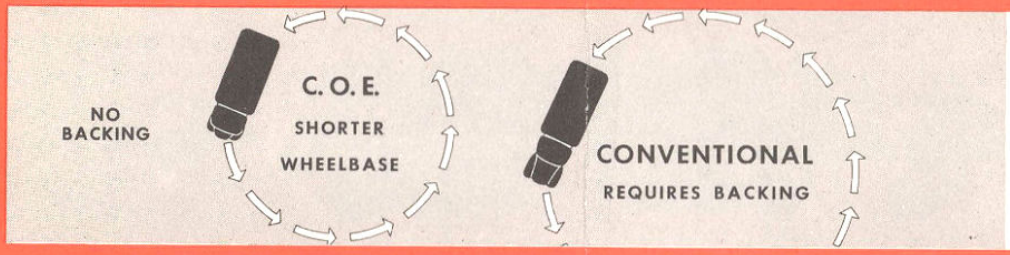
With bigger loads on the front axle, C.O.E. trucks achieve a better load balance. This equalizes tire loading for more even wear, makes front brakes more effective, improves riding qualities for driver.

Cab-over-engine trucks offer more load space than conventional trucks with the same wheelbase. In Ford C.O.E. design, the cab is moved forward about 32 in. Thus, a 158-in. C.O.E. Ford has ample load space for bodies in the 15-foot range, compared to a range of only 12 feet for conventional 158 in. trucks.



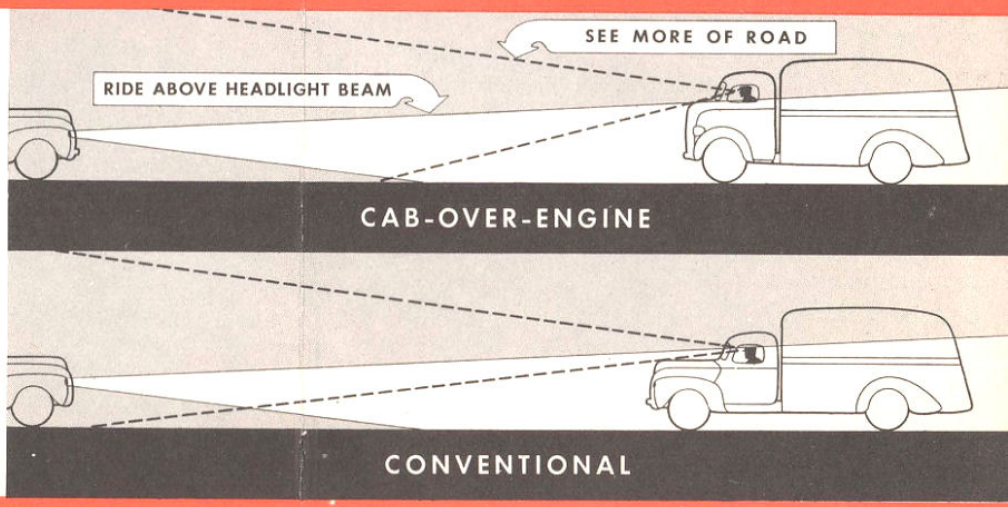


Greater compactness of C.O.E. design reduces truck length. Over-all length of a C.O.E. Ford with 12-ft. body is about 18½ ft.; for a conventional truck with the same body, just over 21 ft. Shorter length saves garage space, makes for easier parking, helps keep tractor-trailer length within legal limitations.

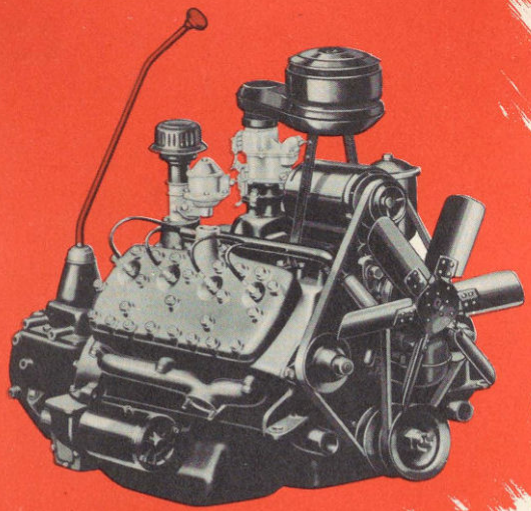


A 101-inch Ford C.O.E. turns in a circle with a diameter of 38 ft. A conventional 134-inch truck with the same body requires a 55 ft. circle. Thus, C.O.E. trucks reduce tiresome truck "jockeying."

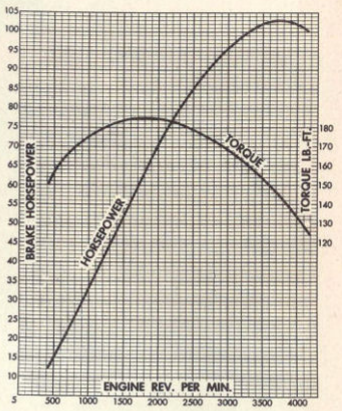
The driver in a Ford C.O.E. cab rides about 7 inches higher than one in a conventional cab. This increases the driver's angle of visibility, enabling him to see over the tops of cars in traffic, and more of the road directly ahead. Important, too, is the fact that at night, his eyes are above the beam of oncoming headlights.

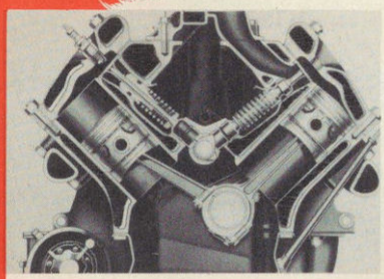


Powered By The Great 100 H. P. FORD V-8

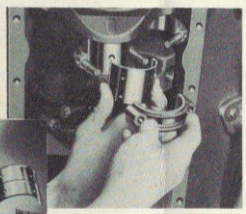


America's only V-8 truck engine develops 100 H.P. and torque of 180 lbs.-ft. Overlap of V-8 power impulses results in a smoother, steadier power flow — higher sustained torque at most-used speeds. Compactness of design minimizes distortion of block, keeps bearings in line. Features: micro-finish cylinder walls, counter-balanced crankshaft, removable main bearings, self-lubricating water pumps, pressure valve radiator cap, divided flywheel housing, crankcase ventilation, plus many others.





← V-8 water jacketing is FULL LENGTH PLUS with jackets extending into walls of crankcase. Cylinder heads interchangeable right or left, are TURBO-CONTOURED to create high turbulence, promote efficient combustion. PRECISION-SET valves eliminate need for valve adjustment. PISTON PINS are longer-lived, floating type.

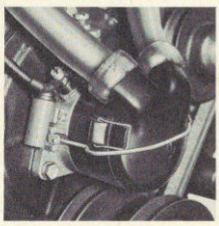


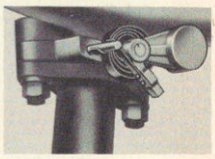
→ New light-weight aluminum PISTONS, cam-ground for good fit at operating temperatures, feature low inertia load on bearings, freedom from ring sticking, good lubrication. Piston rings: 2 for compression, 2 for oil control.

Oil bath AIR CLEANER removes dirt from air, prevents undue wear on engine parts. →

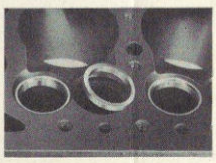
Molybdenum-chrome alloy steel INSERTS used for both intake and exhaust valve seats reduce need for regrinding. →

↑ New double-duty Silvaloy connecting rod BEARINGS, offering 2½ to 3 times longer life, are of removable type. Bearings "float;" feature bearing surfaces on both sides of shell.

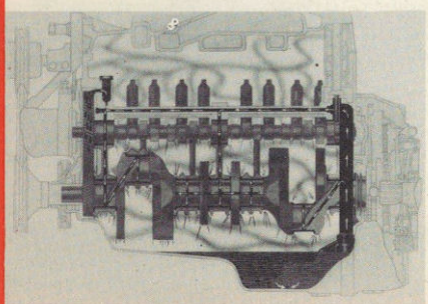




↑ Thermostatic VALVE regulates intake manifold temperature, speeds vaporization, improves fuel economy.

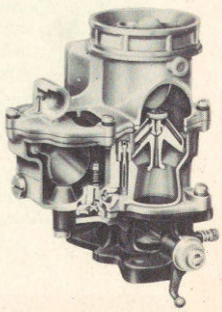


↑ New sealed-dry DISTRIBUTOR, driven directly off camshaft, is water-sealed, air-cooled, short-proof, trouble-free. Two sets of points used to open and close circuit.



← All main, camshaft *and connecting rod* bearings LUBRICATED under pressure by positive gear-type pump. Oil flows to bearings through passageways in block, not through exposed tubing. Positive spray lubricates cylinder walls, pistons, pins, valves, etc.

→ Carburetor in C.O.E. Fords is same dual DOWNDRAFT type used in regular Ford trucks. Balanced for variable restrictions in air cleaner.



FORD CAB-OVER-ENGINE TRUCK SPECIFICATIONS

1½-TON AND 2-TON MODELS

THE 100 H. P. V-8 ENGINE

DIMENSIONS—Bore 3.187 inches. Stroke 3.75 inches. Piston displacement 239 cu. in. Compression ratio 6.75 to 1.

POWER—Brake horsepower 100 at 3800 rpm. Maximum torque 180 lbs.-ft. at 2000 rpm. Taxable horsepower rating 32.5.

ACCESSIBILITY—Sides or complete insulated cover in cab quickly removable giving unusual access to engine for fast, easy maintenance. Each side retained by four quick-action wing latches.

ENGINE BLOCK—Ford one-piece V-8 alloy iron casting of both banks of cylinders, exhaust passages and crankcase. Extended full-length water jackets. Precision micro-finish cylinders.

CYLINDER HEADS—Turbulent-type combustion chamber design providing high compression performance without detonation using standard grade gasoline. Fully interchangeable, right and left.

CRANKSHAFT—Ford cast alloy steel. Fully counterbalanced, integral counterweights. Weight: 69.2 pounds. Three large, replaceable, precision-type main bearings with total surface area of 38.955 sq. in.

CONNECTING RODS—Heat-treated alloy steel forgings, Mounted side-by-side in pairs on Ford steel-cored Silvaloy bearings of floating, replaceable, precision type. Piston pin bushings special bronze, diamond bored.

PISTONS—Cam-ground aluminum alloy. Four rings—two compression and two oil control type for lasting oil economy. Floating-type piston pins with bearing surfaces in both rod and piston.

CAMSHAFT—Ford wear-resisting, cast alloy iron. Mounted on three removable, steel-backed babbitt bearings. Precision-machined aluminum timing gear.

VALVES—Special heat-resisting, high chrome alloy steel. Mushroom-end valve stems. Lightweight, hollow-steel, one-piece valve lifters. Each valve, valve guide, spring and retainer assembled and installed as a unit with precision-set valve clearance. Valve springs shot-blasted and rust-proofed for long life.

VALVE SEAT INSERTS—Alloy steel for intake and exhaust valves.

ENGINE LUBRICATION—Direct pressure oiling to all main, connecting rod and camshaft bearings; also to timing gears. New rear main bearing oil seal. Larger oil pump with greater reserve capacity. Removable plate in oil pan to facilitate cleaning pump screen. Replaceable cartridge type oil filter.* Directed-flow crankcase ventilation. Crankcase oil capacity 5 quarts.

COOLING—Two centrifugal water pumps, self-sealing and self-lubricating type. Full length water jackets, completely surrounding each cylinder. Heavy duty flat tube and fin type radiator in "U" type flexible mounting. Thermostatic temperature control. Pressure-valve radiator cap. Six-blade fan. Deep-type fan shroud.

FUEL SYSTEM—Balanced, dual downdraft carburetor with duplex intake manifold. Automatic control of intake manifold temperature. Offset type, oil bath air cleaner with shroud over carburetor intake.*

IGNITION—Sealed-dry, V-outlet direct-driven distributor. Two non-synchronized breaker arms for greater spark intensity. Fully automatic spark advance with vacuum-controlled centrifugal governor. Neoprene-coated, high-tension leads protected by heavy ozone-resistant plastic jackets and metal conduits. Coil in waterproof housing.

GENERATOR—220 watt capacity, 30 to 33 amperes, air cooled, heavy duty type, with separate voltage and current regulator relays.

STARTING MOTOR—High torque type with automatic engagement, actuated by instrument panel push button and solenoid starter switch.

BATTERY—Ford heavy duty, 17-plate, 120 ampere hour capacity.

MOUNTING—Three-point cushion-type engine suspension.

THE C. O. E. CHASSIS

CLUTCH—Long-lived, semi-centrifugal type with single cushion disc and vibration dampener. Diameter 11 inches. Total frictional area 123.7 sq. in. Pre-lubricated and sealed ball pilot and throw-out bearings. Needle-bearing release levers.

TRANSMISSION—Heavy-duty, 4-speed, sliding gear type. Roller and ball bearings in all forward speeds. New internal spring-type reverse lock. S.A.E. 6-bolt opening on right side for power take-off.

DRIVE LINE—One tubular shaft, two joints on 101" wb.; two tubular shafts with three joints and rubber-encased center bearing on 134" wb. and 158" wb. Universal joints wear resistant, needle-bearing type.

FRONT AXLE—Wide track, heavy, drop-forged heat-treated alloy steel I-beam. Large, wide-spaced, tapered roller wheel bearings. Anti-friction ball thrust bearings on spindle pins.

REAR AXLE—1½-TON—Full-floating, spiral bevel, with straddle-mounted pinion. Forged, special manganese steel axle shafts, 1.75 inches diameter over splines. Hub stud adapters. Ratios: std. 6.67 to 1—opt. 5.14 to 1; 5.83 to 1. Two-speed axle optional at extra cost. 2-TON—Two-speed, full-floating type. Primary (high range) reduction by spiral bevel gear with straddle-mounted pinion; supplementary (low range) reduction by planetary spur gears. Forged, alloy steel axle shafts, 1.75 in. diameter over splines. Hub stud adapters. Vacuum operated shift. Gear ratios 5.83 to 1 and 8.11 to 1.

FRAME—Heavy-duty design. Width 34 inches. Side members: depth 7 in., flange width 2.75 in., thickness 0.21 in. Double-channel type on 134" wb. and 158" wb. only with specially formed reinforcing channels fitted inside regular side-members, affording generous extra strength in zones of greatest stress—included on 2-ton, available* on 1½ ton.

SPRINGS—Special alloy steel. Front: length 38 in., width 2.25 in. Rear: length 45 in., width 2.5 in. Five-leaf auxiliary springs, included on 2-ton, available* on 1½-ton.

STEERING—Worm and needle bearing roller. Ratio 18.4 to 1. Diameter of steering wheel 18 in. Gear mounted ahead of front axle; short, direct-acting drag link.

BRAKES—1½-TON—Service: Hydraulic, independently anchored, two-shoe type. Front: 14 in. x 2 in. Rear: 15 in. x 3.5 in. Lining area 303 sq. in. Composite brake drums, cast iron rings and steel drum discs. Interlock weather-seal brake enclosure. Hand brake: 7.81 in. x 2.5 in. spring-loaded type on drive shaft. Vacuum power braking optional at extra cost. 2-TON—Same as 1½-ton, and includes vacuum power braking.

WHEELS AND TIRES—1½-TON—Seven tapered disc steel wheels, 20-inch diameter with 5.00S rims.* Six tires, 7.50-20 8-ply front and dual rear.* (8.25-20 10-ply dual rear furnished with 2-speed axle option.) 2-TON—Seven tapered disc steel wheels, 20-inch diameter with 5.00S rims. Six tires, 7.50-20 8-ply front—8.25-20 10-ply dual rear.

TREAD—Front 61.12 in. Rear 65 in.

TURNING RADIUS—19 ft. for 101" wb.; 25 ft. for 134" wb.; 29 ft. for 158" wb.

WHEELBASES—101, 134 and 158 inches.

TYPICAL EQUIPMENT—Includes complete cab assembly; front fenders, scuff plates and running boards; two side cowl ventilators; divided windshield—opening type; two wipers; doors hinged at front; convenient hand-holds; 22-gallon fuel tank; spare wheel carrier; front bumper; jack and tool kit.

MAX. GROSS WEIGHT—1½-Ton (Single Red. Axle)—13,500 lbs.
—2-Ton (2-Speed Axle)—15,000 lbs.

LOAD SPACE DIMENSIONS—	101" wb.	134" wb.	158" wb.
Back of cab to C/L rear axle.....	60 in.	93 in.	117 in.
Back of cab to end of frame.....	98.5 in.	131.5 in.	155.5 in.

Equipment starred (*) are items at extra cost. These items are currently contained on C.O.E. chassis in production and included in the 1946 retail list price, although allowances for omission of any of this equipment will be quoted on request. (The Ford Motor Company, whose policy is one of continuous improvement, reserves the right to change specifications, design or prices without incurring obligation.)

Ford Motor Company · Dearborn, Michigan

FORD TRUCKS

FORM NO. 7006

LITHO IN U.S.A. 7-46