

# 1940 FORD V-8 TRUCKS



**3** TON

**4** TON

**5** TON

# SPECIFICATIONS

**ENGINE**—100 H.P.: Bore 3-3/16 in., stroke 3 1/2 in. Piston displacement 239 cub. in. B.H.P. 100. Engine torque over 180 ft. lbs. from 1,150 to 2,400 R.P.M. Taxable horsepower rating 32.5.

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

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

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

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

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

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

**SPRINGS**—Heavy duty semi-elliptic front and rear. Auxiliary rear springs standard in all models. Total spring capacities: 3-ton, 15,450; 4-ton, 17,050; 5-ton, 18,800. C.O.E.: 3-ton, 16,200; 4-ton, 17,800; 5-ton, 19,850.

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

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

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

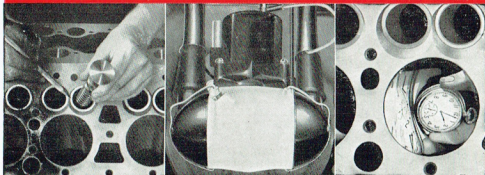
**BRAKES**—Powerful hydraulic. Front 14 in. x 2 in., rear 15 in. x 3 1/2 in. Independent handbrake system operating on drive shaft has lining area of 61.5 sq. in. Total braking area 365 sq. in.

**GROSS VEHICLE CAPACITIES**—3-ton: 14,500 lbs. 4-ton: 16,000 lbs. 5-ton: 18,000 lbs.

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

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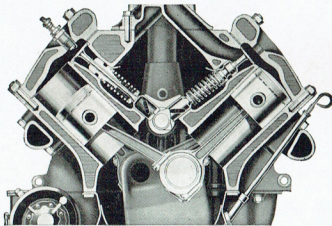
# LONG LIFE FEATURES OF FORD V-8 ECONOMY ENGINE



**VALVE INSERTS** are tungsten steel for both intake and exhaust valves—a unique Ford V-8 feature.

**DISTRIBUTOR** is direct driven from the front end of cam shaft, eliminating back lash and assuring correct timing. Is foolproof and waterproof.

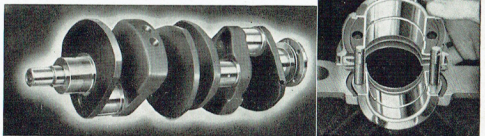
**MIRROR FINISHED CYLINDER WALLS** permit of greater accuracy in fitting pistons and rings and result in smoother more efficient operation with less cylinder and piston ring wear.



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

**DETACHABLE MAIN BEARINGS** (below). Radial tongues on the main bearing caps fit into corresponding grooves in the block—a costly but positive method of securing perfect bearing alignment.

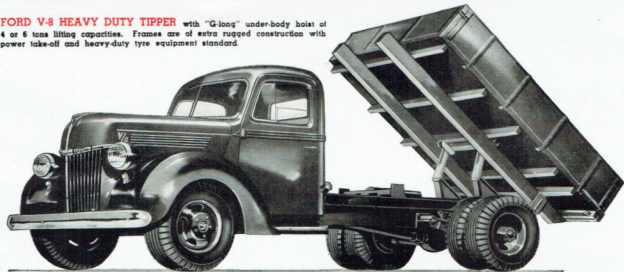
**CAST ALLOY CRANKSHAFT.** The crankshaft used for the Ford V-8 truck is of special cast alloy steel, extremely hard, rigid and long wearing.



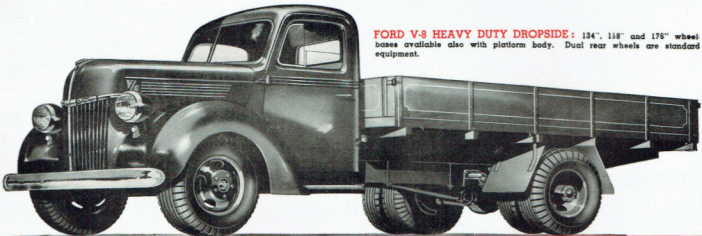


# AUSTRALIA'S MOST POPULAR HEAVY-DUTY TRUCKS . . . . NEWLY DESIGNED FOR BIGGER PAYLOADS . . . . GREATER ECONOMY

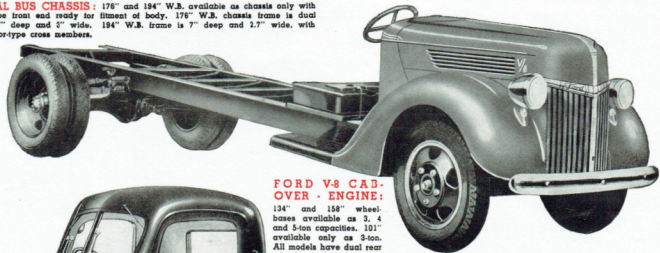
**FORD V-8 HEAVY DUTY TIPPER** with "G-long" under-body hoist of 4 or 6 tons lifting capacities. Frames are of extra rugged construction with power take-off and heavy-duty tyre equipment standard.



**FORD V-8 HEAVY DUTY DROPSIDE:** 134", 158" and 176" wheel bases available also with platform body. Dual rear wheels are standard equipment.

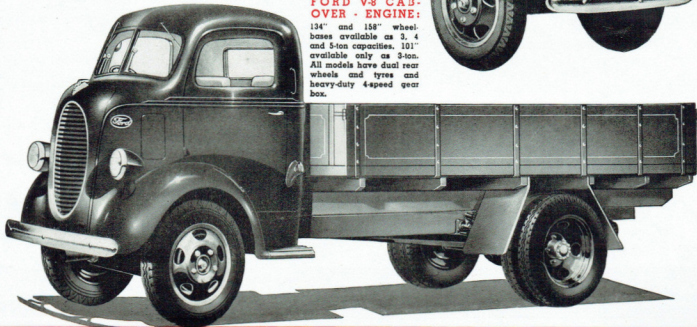


**SPECIAL BUS CHASSIS:** 176" and 194" W.B. available as chassis only with open type front end ready for fitment of body. 176" W.B. chassis frame is dual section 7" deep and 3" wide. 194" W.B. frame is 7" deep and 2.7" wide, with 7 alligator-type cross members.

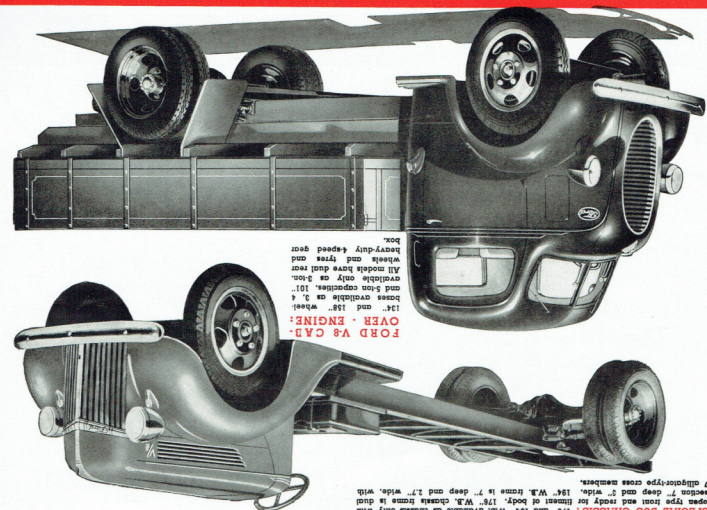


**FORD V-8 CAD-OVER - ENGINE:**

134" and 158" wheel-bases available as 3, 4 and 5-ton capacities. 101" available only as 3-ton. All models have dual rear wheels and tyres and heavy-duty 4-speed gear box.

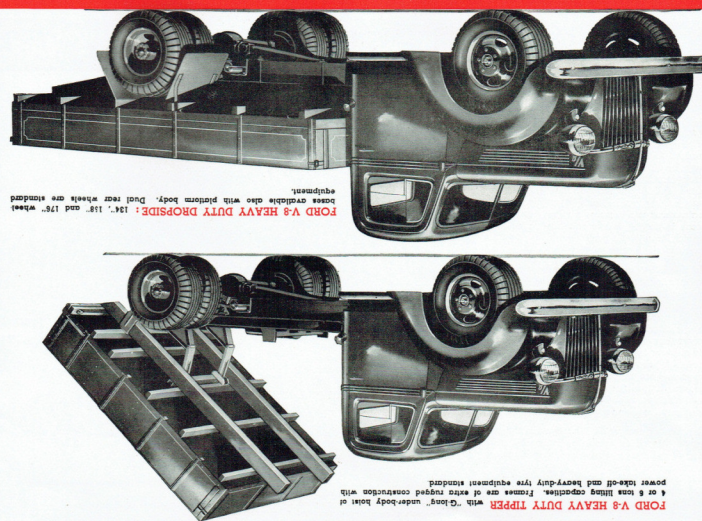






**FORD V8 CAB**  
OVER ENGINE  
194  
and 195  
models available as 3 1/2  
ton and 4 ton  
units.  
All models have dual rear  
wheels and spare  
heavy-duty speed gear  
box.

**FORD V8 HEAVY DUTY DROPSIDE**; 194, 195 and 196  
equipment  
boxes available also with platform body. Dual rear wheels are standard



**FORD V8 HEAVY DUTY TIPPER**  
with "Clown" under-body beam of 6 ton lifting capacities. Frames are of extra rugged construction with power take-off and heavy-duty tire equipment standard

**... GREATER ECONOMY ... NEWLY DESIGNED FOR BIGGER PAYLOADS ...**

**SPECIFICATIONS**

**ENGINE**—100 H.P.; Bore 3-3/16 in., stroke 3 1/2 in. Piston displacement 239 cub. in. 8 H.P. 100. Engine torque over 150 ft. lbs. from 1,150 to 2,400 R.P.M. Taxable horsepower rating 32.5.

**85 H.P.**; Bore 3-1/8 in., stroke 3 1/2 in. Piston displacement 221 cub. in. 85 H.P. 85. Engine torque 170 ft. lbs. at 2,500 R.P.M. Taxable horsepower rating 30.

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

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

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

**FRAMES**—High carbon pressed steel for 3-ton units, elastic limit 42,000 lbs. per sq. in. 4 and 5-ton frames are dual section high carbon pressed steel tube frame with high tensile steel inner frame, elastic limit 54,000 lbs. per sq. in. 194 in. W.R. 3, 4, and 5-ton and has chassis have high tensile channel and I-beams with special triple frame. 194 in. W.R. 5-ton frame is of special triple section, 9 in. deep, 3 in. wide, and 5/8 in. thick.

**AXLES**—Front: Carbon manganese steel, drop centre type, large I beam section. Rear: Full floating with spiral bevel gear drive, straddle mounted piston and crown wheel thrust plate. Ratio 6.68 to 1 for 3 and 4-ton trucks (optional 2-speed axle ratios 5.83 and 8.11 to 1). 5-ton truck has heavy duty 2-speed axle as standard equipment, ratios 6.5 and 8.21 to 1.

**SPRINGS**—Heavy duty semi-elliptic front and rear. Auxiliary rear springs standard in all models. Total spring capacities: 3-ton, 18,450; 4-ton, 17,050; 5-ton, 18,800. C.O.E.: 3-ton, 18,200; 4-ton, 17,800; 5-ton, 19,850.

**STEERING**—Worm and roller type, ratio 14 to 1. Steering wheel 18 in. diameter.

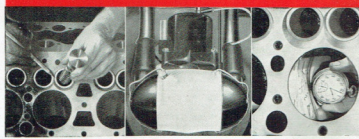
**WHEELS**—5-ton 7 1/2 in. x 6 in. 4-ton models 2 20 in. x 6 in. front and 5 20 in. x 7 in. rear. 3-ton models 7 1/2 in. x 7 in.

**TYRES**—3-ton 8 32 x 6, 10-ply. 4-ton 2 200 x 20 front and 4 34 x 7, 10-ply rear. 5-ton 8 34 x 7, 10-ply. 178 in. and 194 in. Bus: 8 7.50 x 18, 8-ply.

**BRAKES**—Powerful hydraulic. Front 14 in. x 2 in., rear 15 in. x 3 in. Independent handbrake system operating on drive shaft has lining area of 61.3 sq. in. Total braking area 365 sq. in.

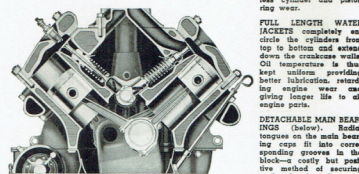
**GROSS VEHICLE CAPACITIES**—3-ton: 14,500 lbs. 4-ton: 16,000 lbs. 5-ton: 18,000 lbs.

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



**VALVE INSERTS**—Ingenious design from the front end of each exhaust valve—valve Ford V-8 feature.

**DISTRIBUTOR** is direct driven from the front end and of one piece shaft, eliminating back lash and assuring correct timing. Is footed forward and waterproof.

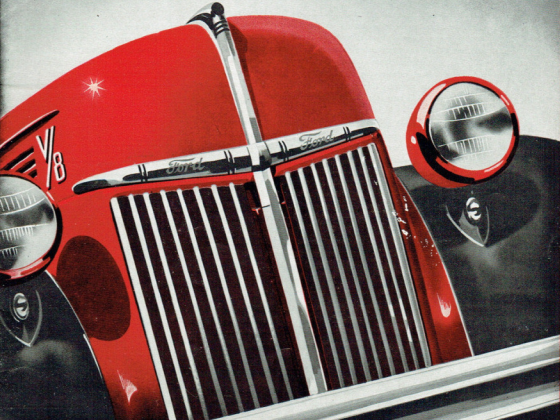


**FULL LENGTH WATER JACKETS** completely enclose the cylinders from top to bottom and extend down the crankcase walls. Oil temperature is thus kept uniform providing better lubrication, retarding engine wear and giving longer life to all engine parts.



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

**1940 FORD V-8 TRUCKS**



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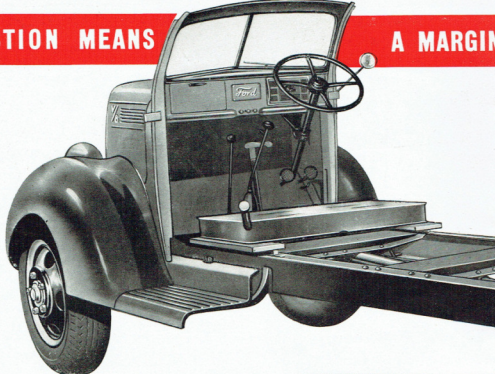




HERE'S the grand new range of heavy duty Ford's for 1940, eclipsing in value and performance anything ever before offered on the Australian truck market. Here's outright VALUE that could only be offered by the world's largest truck manufacturing organisation, undisputed sales leader in the Australian heavy duty truck field. That Ford has maintained this coveted position for many years is proof positive of the extra value, pound for pound, that discerning buyers have found in Ford V-8's.

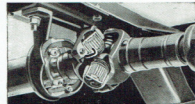
Now, for 1940 the Ford heavy duty range is entirely NEW—with new wheelbase lengths, new frames, new semi-elliptic springs both front and rear, 2 new 2-speed axles, new, more striking appearance, new and greater engine accessibility, new driver comfort with redesigned all-steel cabs, pivot front quarter-windows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

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



### MONEY SAVING ENGINE EXCHANGE PLAN.

Not aware of the Engine Exchange under the Ford Engine Exchange Plan lower in price than a complete engine overhaul. But also it pays for itself in time saved alone. For Bus Proprietors, Haulage Contractors, and all who cannot afford to have their vehicles off the road for long periods, the Engine Exchange Plan, exclusive to Ford owners, is a real money saver. When the time comes for engine overhaul, arrange with your local Ford Dealer for an engine exchange. Leave your truck with him and 6 or 7 hours later drive it away again with a factory reconditioned engine on spot as new, carrying the same warranty as a new engine and dipstick, of course, the same powerful economical performance. The Engine Exchange Plan is available irrespective of mileage, whether it be 50,000 or 100,000 miles.



### NEW CUSHIONED DRIVE LINE:

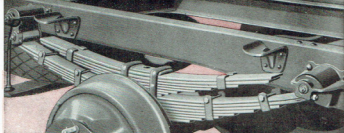
Needle roller bearing universal joints are completely enclosed and permanently protected against dust and mud, and encased in rubber mountings for greater anti-dust efficiency.

### HOW THE SEMI-CENTRIFUGAL CLUTCH WORKS.

In the illustrated cross section I is one of the release levers, all three of which are shown in the smaller illustration below. Note weighted outer end W. Each lever is mounted on the pressure plate by means of a pin and roller bearing B. The levers are also attached to the clutch cover by flattened pin, and roller R. As the engine speed increases, centrifugal force, acting on the outer weighted ends of the levers, causes them to swing round as indicated by the arrow, and exert increasing pressure against the clutch plate P. The centrifugal force action supplements the pressure normally exerted against the plate by the clutch springs, one of which, S, is shown. This increases the clamping action on the disc, which in turn increases the power transmitting ability of the clutch.

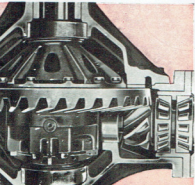
Ford semi-centrifugal clutches stand up in the hardest service because centrifugal action builds up their power transmitting capacity for in excess of maximum engine torque. Therefore, the clutch is capable of delivering full engine torque without slippage. Slippage during clutch engagement when the truck is getting under way is also reduced. As a result, wear on the clutch facings and pressure plate is minimised. Another feature of Ford clutches appreciated by every truck driver is the easy pedal pressure at gear shifting speeds. This is possible because centrifugal force builds up the pressure on the plate so that the total spring pressure of the springs can be kept low. Release bearing and pilot bearing are pre-hubbed type.

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



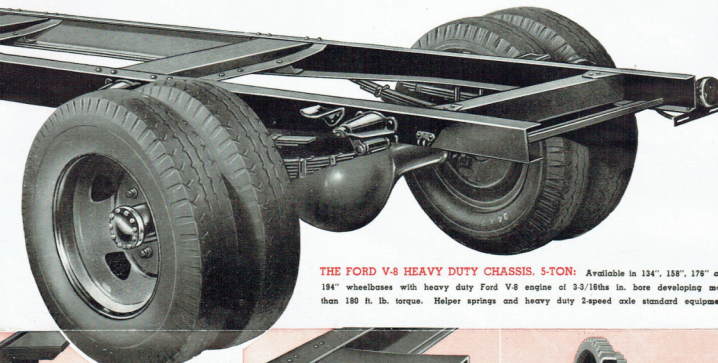
**HEAVY DUTY SPRINGS:** These are fixed at the forward end and free shackled at rear. 5-ton carrying capacities: Rear: 13,400 lbs.; front: 2,200 lbs.; total: 15,600 lbs. All six pins over the rear springs are inter-changeable. Spring leaves are of chrome alloy steel. Helper springs are standard equipment on all 3, 4 and 5-ton models.

**HEAVY DUTY REAR AXLE ASSEMBLY** with middle mounted driving pinion and crown wheel thrust plate to ensure permanent alignment and long trouble-free life. Standard axle ratio for 3-4 ton units is 6.67 to 1.



- ★ 6 wheelbases—134 in., 158 in., 176 in., 194 in., normal units: 134 in. and 158 in., C.O.E.
- ★ Heavy-duty semi-centrifugal clutch capable of transmitting power far in excess of engine torque.
- ★ Cushioned drive line with sealed needle-roller bearing universal joints.
- ★ Heavy-duty hydraulic brakes, service area 303 sq. in. Hand-brake mechanically operated has area of 61.5 sq. in.

- ★ Heavy-duty 2-speed rear axle, full-floating, with straddle-mounted pinion.
- ★ Heavy-duty V-8 engine, developing 180 ft. lbs. torque.
- ★ Dual frames with elastic limit of 54,000 lbs. per sq. in. Frames are 7 in. deep, 2 1/2 in. wide, 1/2 in. thick, for 134 in. W.B., 1 1/2 in. W.B. and C.O.E. units; 7 in. deep, 3 in. wide, 1/2 in. thick, for 176 in. W.B. units; 9 in. deep, 3 in. wide, 1/2 in. thick, for 194 in. W.B. 5-tonner.



**THE FORD V-8 HEAVY DUTY CHASSIS, 5-TON:** Available in 134", 158", 176" and 194" wheelbases with heavy duty Ford V-8 engine of 33/100hp in. bore developing more than 180 ft. lb. torque. Helper springs and heavy duty 2-speed axle standard equipment.

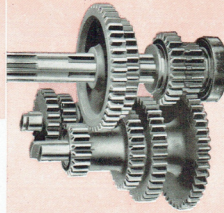
### STURDY FRAMES:

All Ford V-8 5-tonners have dual frames (right, 184", 188" W.B. and C.O.E. frames are 7 in. deep, 2 1/2 in. wide, 1/2 in. thick, 176" W.B. frames (right) are 7 in. deep, 3 in. wide and 1/2 in. thick, 194" W.B. frame (left) is 9 in. deep, 3 in. wide, and 1/2 in. thick. Frames are designed to give a large margin of safety, and being of dual type will withstand severe road conditions.



### TRANSMISSION GEARS:

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



**TWO-SPEED AXLE:** This cut-away section illustrates where the reduction takes place. Selector fork operated by flexible steel cable and rod from lever in the cab ensures quiet, easy changes at all speeds. Gears are of the planetary type with spline cut on the inside of the massive crown wheel (illustrated below). Axle housings are forged from seamless steel tapered and electrically welded for super strength. Crown wheel diameter is increased to 12 1/2 in., and differential gears and pinions are correspondingly increased in capacity by 20%. As in all Ford V-8 trucks, the pinion is straddle mounted, and 4 differential gears are used.

### 2 SEPARATE BRAKING SYSTEMS.

Big powerful hydraulic brakes mean smooth, straight stops all the time. Rear drums are 15 in. diameter, with shoes 3.5 in. wide (illustrated). Axle of brake lining is 303 sq. in. In addition to this, a separate hand brake with a drum 7 1/2 in. by 2.5 in., and a lining area of 61.5 sq. in., operates on the transmission shaft directly behind the gear box.

