Economical
Handsome

NEW UTILITY CARS *by* FORD

112 INCH WHEELBASE
with 4 Cylinder 24 H.P. or V-8 30 H.P. Engine

90 INCH WHEELBASE
8 H.P. Engine ENGLISH MODEL

WITH their outstanding appearance, their inherent dependability, their operating economy and their low price, the New Utility Cars by Ford are ideal for any business seeking the new economies and efficiencies that are so necessary to meet to-day's conditions.

MECHANICAL SPECIFICATIONS

24 H.P. 112 INCH WHEELBASE

CLUTCH AND TRANSMISSION.—Single plate dry disc clutch. Throwout bearing lubricated through readily accessible fitting. Three speed selective sliding gear transmission. Synchronised second and high gears. Quiet second gear. Roller and ball bearings carry gear train in all forward speeds.

COOLING.—Centrifugal water pump, 4-cylinder engine has two blade aeroplane type fan driven by adjustable "V" belt with capacity of cooling system, 2⅘ gallons. The V-8 cylinder engine has 4 blade type fan, 2 pumps, with capacity of cooling system 4½ gallons.

FUEL SYSTEM.—Terne plate fuel tank mounted at rear. Engine-driven fuel pump. Fuel gauge on illuminated instrument panel.

BRAKES.—Four wheel mechanically operated internal expanding. Drums of special cast alloy iron. Total braking surface, 186 square inches. Foot pedal and parking lever control.

SPRINGS.—Chrome alloy steel. Transverse, front and rear. Special heavy rear spring hung behind axle.

FRAME.—Double drop, double channel "X" type. High carbon frame steel. Side rails 2 inches wide, 6 inches maximum depth.

RUBBER INSULATORS.—Rubber insulation at three-point motor mounting, spring shackles, shock absorber links and front radius rod ball socket on main cross-member.

RIDE CONTROL.—Four self-adjusting double-acting hydraulic shock absorbers. Automatic and thermostatic control. Rubber-bushed links.

FRONT AXLE.—Heavy "I" beam forging. Taper roller wheel bearings.

REAR AXLE.—Three-quarter floating type with full torque tube drive. Spiral bevel gear and straddle mounted pinion. Roller bearings throughout. Gear ratio 4.111 to 1.

TURNING CIRCLE.—39 feet.

WHEELS AND TYRES.—Five steel spoke, one-piece wheels, 5.50 x 17 balloon tyres.

WHEELBASE.—112 inches.

ENGINES.

FOUR CYLINDER.—"L" head, cast en bloc. Piston displacement, 200.5 cubic inches; bore, 3⅞ inches; stroke, 4¼ inches. Compression ratio, 4.6 to 1. Horsepower rating, R.A.C., 24.03. Brake horsepower, 50 at 2800 R.P.M. Maximum torque, 128 foot pounds at 1400 R.P.M. Lubrication by combined pump, splash, and gravity system.

EIGHT CYLINDER.—Optional V-type 90° 8-cylinder, "L" head, cylinders cast en bloc. Piston displacement, 221 cu. in.; bore, 3 3/16 inches; stroke, 3¾ inches. Compression ratio, 6.30 to 1. Horsepower rating, 30 R.A.C. Brake horsepower, 75 at 3,800 R.P.M. Maximum torque, 147 foot pounds at 1200 R.P.M. Downdraft carburettor; lubrication forced feed, spray and vapour. Cooling: 2 pumps and Thermo-syphon.

8 H.P. ENGLISH MODEL

ENGINE.—Four-cylinder. Bore, 2.23 in. (56.6 mm.). Stroke, 3.64 in. (92.5 mm.). Cubic capacity, 56.93 cu. in. (933 c.c.). R.A.C. rating, 7.96 h.p. Three-bearing crankshaft; detachable cylinder head; aluminium alloy pistons; side by side valves.

LUBRICATION.—Full pressure feed by submerged gear pump to crankshaft main bearings, camshaft bearings, and connecting rod bearings. Gudgeon pins and cylinder walls splash-lubricated. Dipstick level gauge fitted. Sump oil capacity, ½ imperial gallon.

IGNITION SYSTEM.—Battery and Coil; automatic advance and retard; firing order: 1, 2, 4, 3.

CLUTCH.—Dry, single-plate.

GEARBOX.—Three speeds forward, and reverse. Top, 5.43 to 1; Intermediate, 9.58 to 1; low, 16.67 to 1; Reverse, 21.80 to 1. Helical constant mesh gears. Synchro-mesh top and intermediate gears.

REAR AXLE.—¾ floating type with torque tube drive. Spiral bevel drive pinion and gear. Gear ratio, 5.43 to 1. Roller bearings fitted throughout.

COOLING SYSTEM.—Thermo-syphon; two-blade fan; "V" section fan belt. Capacity, 1½ imperial gallons.

FUEL SYSTEM.—Petrol tank at rear; capacity, 6½ imperial gallons. Petrol gauge on instrument panel. Down-draught type carburettor. Diaphragm-type fuel pump operated from camshaft.

SPRINGS.—Transverse, semi-elliptic, front and rear.

SHOCK ABSORBERS.—Hydraulic shock absorbers front and rear.

WHEELS.—Welded steel-spoke with well-base rims.

TYRES.—Size: 4.50 in. by 17 in. Pressure, 35 lbs.

BRAKES.—Four-wheel internal expanding. Total braking surface, 130 square inches. Foot brake operates on all four wheels. Hand brake operates on rear wheels.

WHEELBASE.—7 ft. 6 in.

TRACK.—3 ft. 9 in.

GROUND CLEARANCE.—Approx. 9 in.

TURNING CIRCLE.—31 ft. 5 in. to left; 29 ft. 8 in. to right.

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

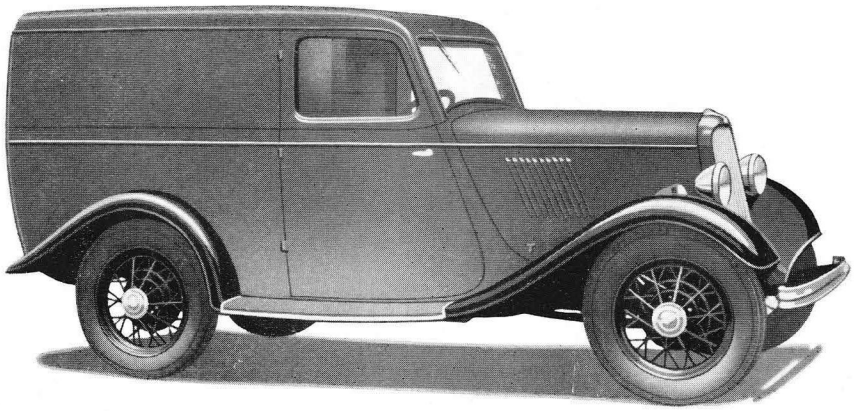
FORD MOTOR COMPANY OF AUSTRALIA PTY. LTD.

DM571/10M/

NEW FORD UTILITY CARS

EFFICIENT, ECONOMICAL, STYLISH

ALL New Utility Cars offer passenger car performance and utility car service with the economy, speed and stamina that have always been associated with Ford Products. Bodies have been entirely redesigned, and are most attractive in appearance. ... . For small loads, the English 8 h.p. "Y" Model will give outstanding performance at very low cost. Where loads from 12 to 15 cwt. must be handled, the New 112 inch wheelbase models will meet your every need. Fuel tanks on all models are mounted at the rear. In the 112 inch wheelbase, the frame, the vital foundation of the chassis, is now a double-drop double-channel member with an "X" brace. As a further improvement, all 112 inch wheelbase chassis are equipped with a rear axle in which the driving pinion is straddle mounted—the strongest and most reliable of all axle designs. The extra protection of this straddle mounting gives you added confidence in the Utility Car's ability to stand the strain when taking rough roads at speed, or when starting with, and pulling, heavy loads.



NEW 8 H.P. VAN

Chassis parts are manufactured at the Dagenham Plant of the Ford Motor Company Ltd., England. Manufacture of body and chassis assembly work is carried out at the Geelong Factory of the Ford Motor Company of Australia Pty. Ltd. Body is of steel and hardwood construction, using Australian materials entirely. It is light and durable, especially suitable for package deliveries up to a maximum load of 5 cwt. Operating costs are extremely low, 35-40 miles being obtained to the gallon of petrol. Driver's seat is extremely comfortable and is provided with full sedan type doors, enabling the unit to be completely locked up, thus ensuring protection against pilferage when van is unattended. . . . Loading dimensions—Length at floor, 53 inches; width at floor, 43 inches; height, 41¾ inches.

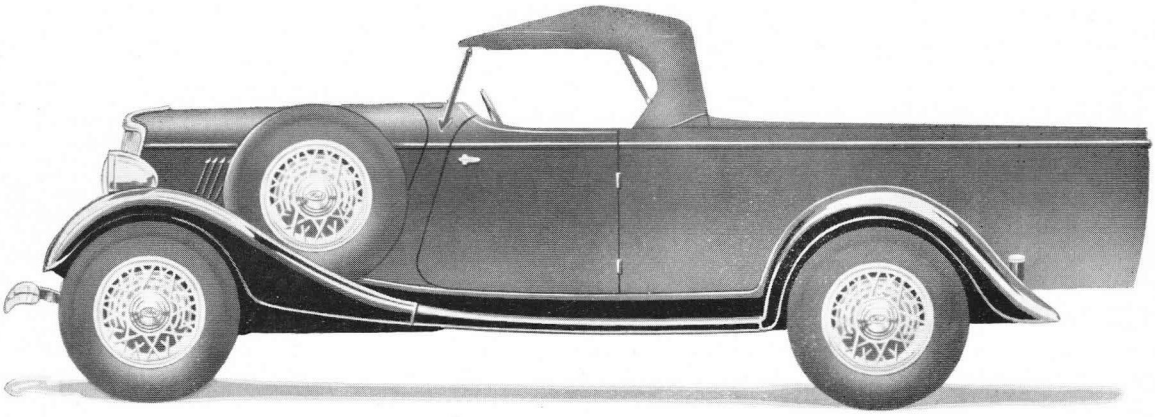
NEW 8 H.P. WELLTYPE UTILITY

There is also a new Well-type Utility available on the 8 h.p. English chassis, similar to the Type 304 body as used on the 112 inch wheelbase. Attractive appearance and comfortable driver's compartment with plenty of leg room. Capacity 5-6 cwt. Loading dimensions—Length at floor, 55 inches; width at floor, 41½ inches; overall width at top, 55 inches.

STANDARD EQUIPMENT UTILITY CARS

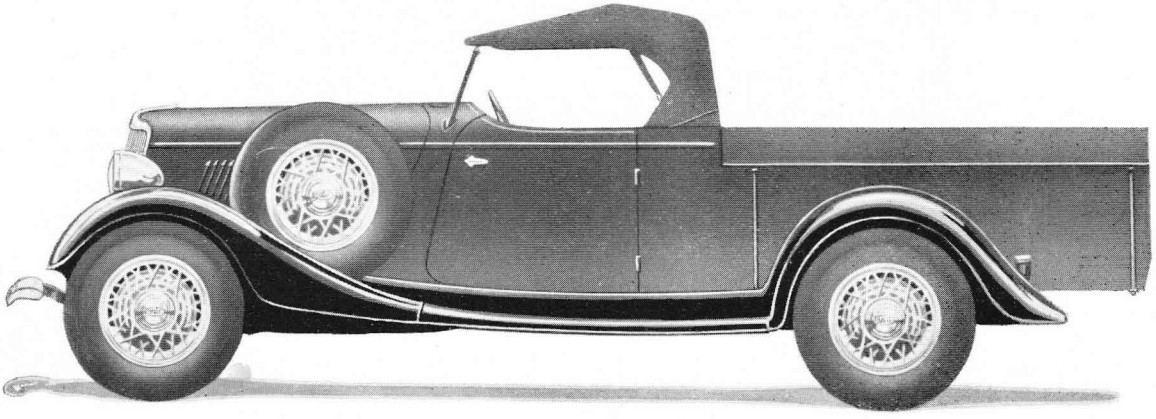
Standard equipment of Utility Cars includes the following: Front bumper, rubber floor mat, rear view mirror, cowl ventilator, spare wheel carried in fender well on left side (except on 8 h.p. models), electric windscreen wiper, fabricoid upholstery. 112 in. wheelbase models are equipped with 5-5.50 x 17 4-ply tyres. 6-ply tyres are available at small increased cost. Head and tail lamps are of rustless steel. 8 h.p. 90 in. wheelbase models are equipped with 5-4.50 x 17 tyres.

FOR EVERY NEED . . .



112" WHEELBASE STANDARD UTILITY CAR, TYPE 302

Due to its adaptability and speed, this type of vehicle is very widely used both in the city and country districts. It is built to handle a wide range of jobs, and to stand up under long hard service. Body is of steel and hardwood construction; driving compartment is comfortable, and has plenty of leg room. The appearance is extremely attractive in that the box follows the line of the front portion of the body, giving the effect of a roadster with an extra large boot. Hood cover is of grey rubberised fabric. Side curtains are neat and close fitting. Floor of box is of matched hardwood with steel skid strips. Dimensions of box are—Length at floor, 66½ inches; width at floor, 50 inches; height, 20¼ inches.



112" WHEELBASE WELLTYPE UTILITY CAR, TYPE 304

Body is of steel and hardwood construction, driving compartment is exceedingly roomy and comfortable. There are outside and inside door handles. Side curtains are well tailored, with large window area. Floor is of matched hardwood and steel skid strips are provided. The feature of this model is the low loading height. This type of utility car is extremely useful for station owners and people on the land, providing large carrying space for such material as fencing posts, wire, timber, etc. It is also extremely useful for plumbers, steam fitters, or engineering firms, whose business requires the carrying of ladders, piping, etc. Dimensions: Length at floor line, 66½ inches; width at floor line, 50 inches; width inside wheel housing, 47 inches; width at well sides, 74½ inches; height to top of well sides, 20 inches.

MODEL "46" CHASSIS

Commercial chassis—available in two distinct types for the owner who desires some special type of body. These bodies will accommodate a wide range of light truck and light van bodies. Full information is obtainable from any authorised Ford dealer.

A Wide Range of

SMART
RELIABLE
ECONOMICAL

FORD UTILITY CARS

NEW
BODY STYLES
WITH MANY
NEW
FEATURES and
IMPROVEMENTS
INCLUDING
SAFETY GLASS
WINDSCREENS

SPECIFICATIONS

V-8.

ENGINE. 90° V-8 with 90° crank throw. Piston displacement, 221 cubic inches; bore, $3\frac{1}{16}$ inches; stroke, $3\frac{3}{4}$ inches; compression ratio, 6.3 to 1; horsepower rating, 30 R.A.C.; brake horsepower, 85 at 3,800 r.p.m. Lubrication—forced feed to all main bearings—splash and spray to other parts. Mounted in rubber at 3 points; valves, chromium and nickel alloy; pistons, special heat-treated aluminium alloy. Exhaust valves have Tungsten seat inserts. Cylinder heads—aluminium.
CRANKSHAFT. Special Ford carbon chrome steel. Diameter, 2 inches; weight, 65 pounds; three main bearings; total main bearing surface, $36\frac{1}{2}$ square inches. Statically and dynamically balanced.
CARBURETTOR FUEL SYSTEM. New dual down-draft carburettor with dual intake manifold, ensuring equal fuel distribution to all cylinders. Air cleaner and silencer.
COOLING. Tube and fin type radiator with four rows of tubes, fish and fan. Two centrifugal pumps, one in each cylinder head. Capacity, $4\frac{1}{2}$ gallons.
IGNITION. Battery, coil and distributor. New-type distributor driven directly off end of camshaft. Full automatic timing, vacuum-controlled.
OPTIONAL—4-cyl. 4-cylinder engine "L" head, cast en bloc. Piston displacement, 200.5 cubic inches; bore, $3\frac{7}{8}$ inches; stroke, $4\frac{1}{4}$ inches. Compression ratio, 4.6 to 1. Horsepower rating, R.A.C., 24.03. Brake horsepower, 50 at 2,800 r.p.m. Maximum torque, 126 pounds-feet at 1,400 r.p.m. Lubrication by combined pump, splash and gravity system. Mounted in rubber; valves, chromium and nickel alloy; pistons, aluminium alloy. Cylinders offset $\frac{1}{8}$-inch from centre line of crankshaft.

Utility Car Chassis

CLUTCH AND TRANSMISSION. Single plate dry disc clutch. Ball throw-out bearing lubricated through readily accessible fitting. Three speed selective gear transmission. Synchronized second and high gears. Quiet second gear. Roller and ball bearings carry gear train in all forward speeds.
BRAKES. Four wheel mechanically operated internal expanding. Drums of special cast alloy iron. Total braking surface, 186 square inches. Foot pedal and parking lever control.
SPRINGS. Chrome alloy steel. New transverse front and rear. Four automatic double acting hydraulic shock absorbers. Special auxiliary rear springs to suit load requirements.
FRAME. Special Ford design double drop X-type with X-members continuing through to end of side members; high carbon frame steel. Side rails, $1\frac{3}{4}$ inches wide; depth, 6 inches.
RUBBER INSULATORS. Rubber insulation at three point motor mounting, shock absorber links and front radius rod ball socket on main cross-member.
STEERING GEAR. Semi-reversible hour-glass worm and 3-tooth sector type with self-adjusting thrust bearings. Ratio, 15 to 1.
FRONT AXLE. Heavy carbon chrome "I" beam forging. Taper roller wheel bearings.
REAR AXLE. Three-quarter floating type. Spiral bevel gear with straddle mounted pinion. Roller bearings throughout. Gear ratio, 4.111 to 1. Shaft, $1\frac{1}{4}$ inches diameter.
TURNING CIRCLE. 39 feet. **WHEELBASE.** 112 inches. **TRACK.** 4 ft. 8 in.
WHEELS AND TYRES. Five steel spoke, one-piece wheels. 5.50 x 17 balloon tyres.

8 h.p. English Utility Chassis.

ENGINE. Four-cylinder; bore, 2.23 in. (56.6 mm.); stroke, 3.64 in. (92.5 mm.); cubic capacity, 56.93 cu. in. (933 c.c.). Horsepower rating, R.A.C., 7.96 h.p. Three-bearing crankshaft; detachable cylinder head; aluminium alloy pistons; side by side valves. Down-draft carburettor
LUBRICATION. Full pressure feed and splash. Sump oil capacity, $\frac{1}{2}$ imperial gallon.
IGNITION SYSTEM. Battery coil and distributor. Automatic advance.
CLUTCH. Dry, single-plate.
GEARBOX. Three speeds forward, and reverse. Helical constant mesh gears. Synchro-mesh top and intermediate gears.
REAR AXLE. $\frac{3}{4}$ floating type with torque tube drive. Spiral bevel drive pinion and gear. Gear ratio, 5.43 to 1. Roller bearings fitted throughout.
COOLING SYSTEM. Thermo-syphon. Capacity, $1\frac{1}{2}$ imperial gallons.
FUEL SYSTEM. Petrol tank at rear; capacity, $6\frac{1}{2}$ imperial gallons.
SPRINGS. Transverse, semi-elliptic, front and rear.
SHOCK ABSORBERS. Hydraulic shock absorbers, front and rear.
WHEELS. Welded steel-spoke type with well-base rims.
TYRES. Size: 4.50 in. by 17 in. Pressure, 35 lbs.
BRAKES. Four-wheel internal expanding. Total braking surface, 130 sq. in.
WHEELBASE. 7 ft. 6 in. Track, 3 ft. 9 in.
GROUND CLEARANCE. Approx. 9 in.
TURNING CIRCLE. 31 ft. 5 in. to left; 29 ft. 8 in. to right.

DM577/20M/34

FORD UTILITIES

offer **STYLE** *with Low Cost*

SPEED *with Economy*

MODERN DESIGN
with Safety and Reliability

SAFETY GLASS WINDSCREENS

An exclusive feature. Ford Utility Cars have windscreens of specially made shatterless glass. No danger of injury from flying glass.

V-8 or 4-CYL. ENGINE

All Ford Utility Cars, 112-inch wheelbase, are powered with the improved V-8 85 h.p. engine. A 4-cyl. engine developing 50 h.p. is also available.

DOUBLE-CHANNEL Double-Drop X-Type Frame

The channels forming X-brace section are continued inside the main side-members for the full length of the frame, forming double channel side rail construction.

¾ FLOATING REAR AXLE *with* Straddle-Mounted Pinion

In the ¾ floating axle the weight of body and load is carried entirely on the axle housing, and the drive shaft performs the only function it should, which is to rotate the rear wheels. Roller bearings at front and at rear of pinion shaft make the rear wheel driving mechanism the most durable found in any Utility car.

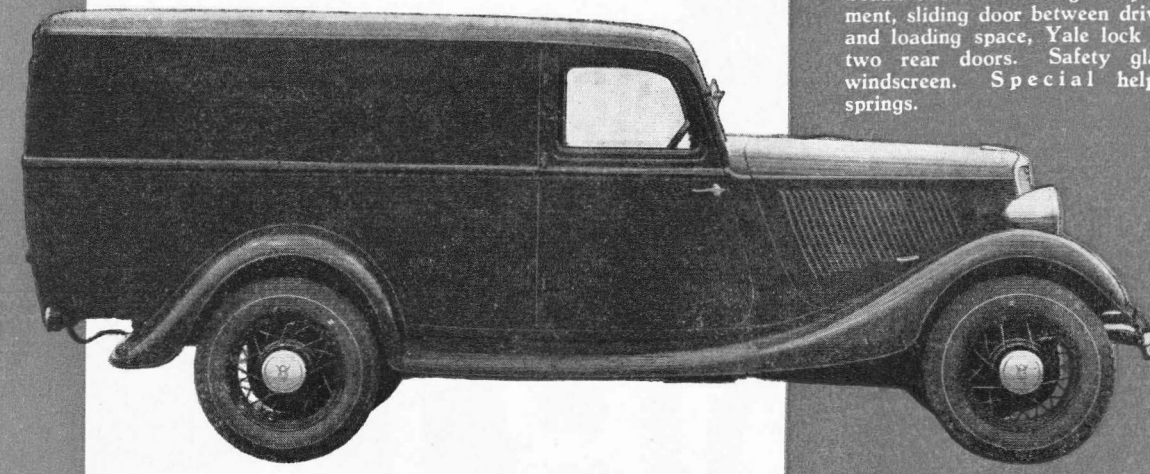
TRUE TORQUE TUBE DRIVE

Torque tube and radius rods transfer the driving thrust from rear axle to rugged centre cross member, in effect pulling the car from a point forward of the centre of the load. Springs are thus relieved of all driving strains.

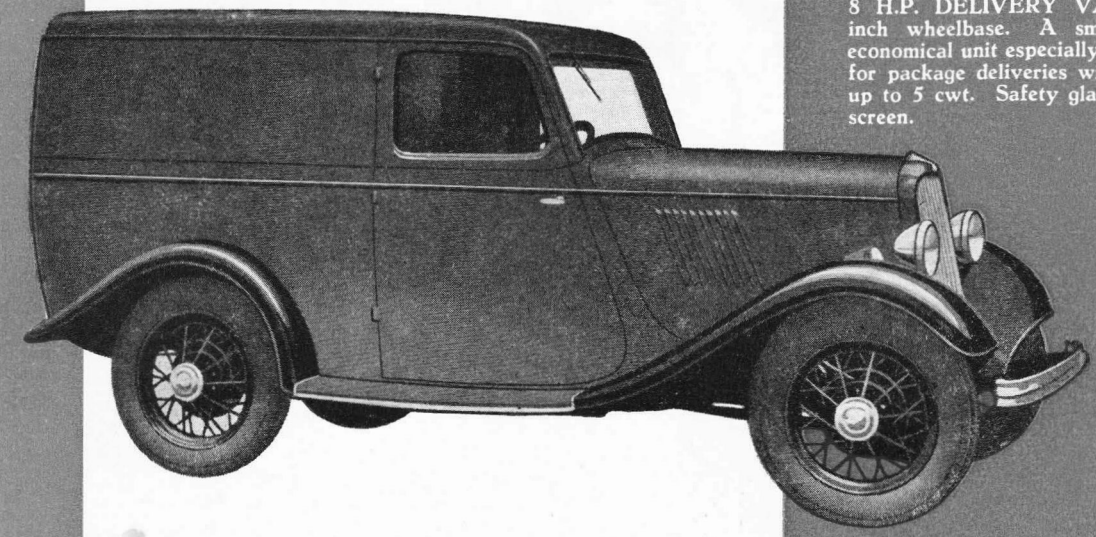
OTHER FEATURES:

Unusual braking area of 186 square inches. Roller bearings at all chassis friction points. Welded steel spoke wheels. Ford factory-built bodies. Hydraulic double-acting automatic shock absorbers. And V-8 engine with completely water-jacketted cylinder walls and crankcase, Tungsten exhaust valve seat inserts, and dual down-draft carburettor and intake manifold. These features ensure that the new Utility cars are thoroughly suited to do the job for which they are sold.

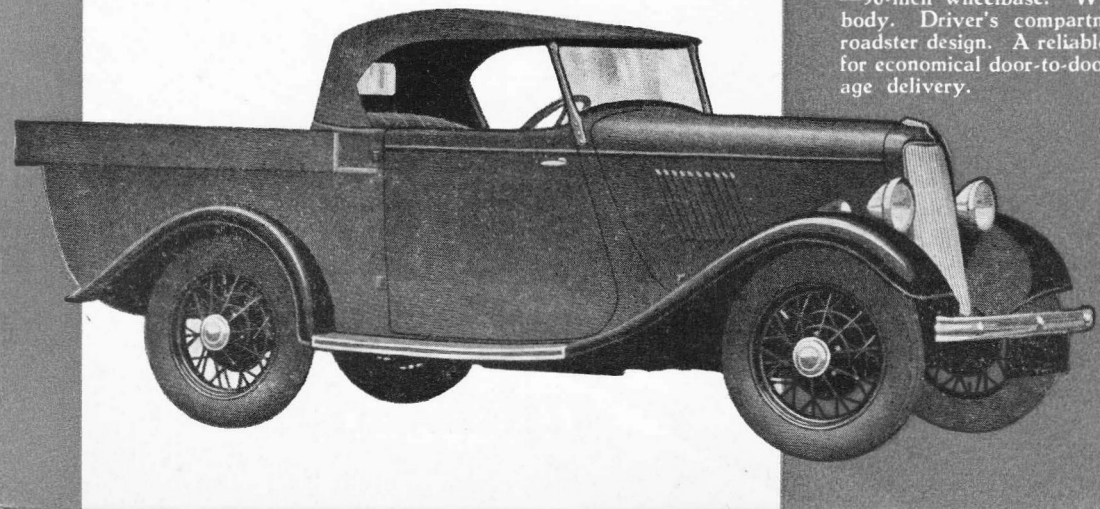
FORD UTILITY C



MODEL 40 DELIVERY VA
—112-inch wheelbase. A ha
some and speedy commercial u
Sedan doors to driving compa
ment, sliding door between dri
and loading space, Yale lock
two rear doors. Safety gl
windscreen. Special hel
springs.



8 H.P. DELIVERY VAN—
inch wheelbase. A smart
economical unit especially suita
for package deliveries with lo
up to 5 cwt. Safety glass wi
screen.



8 H.P. TYPE 304 UTILITY CA
—90-inch wheelbase. Well-ty
body. Driver's compartment
roadster design. A reliable mo
for economical door-to-door pa
age delivery.

FORD SERVICE IS FAMOUS

With this splendid range of Utility Cars, Ford offers models suitable for practically every type of lighter delivery or haulage work. Each unit is constructed throughout for dependable service. Bodies have been specially designed and include many improvements. An exclusive feature of Ford Utility Cars is the provision of Safety Glass Windscreens as standard equipment.

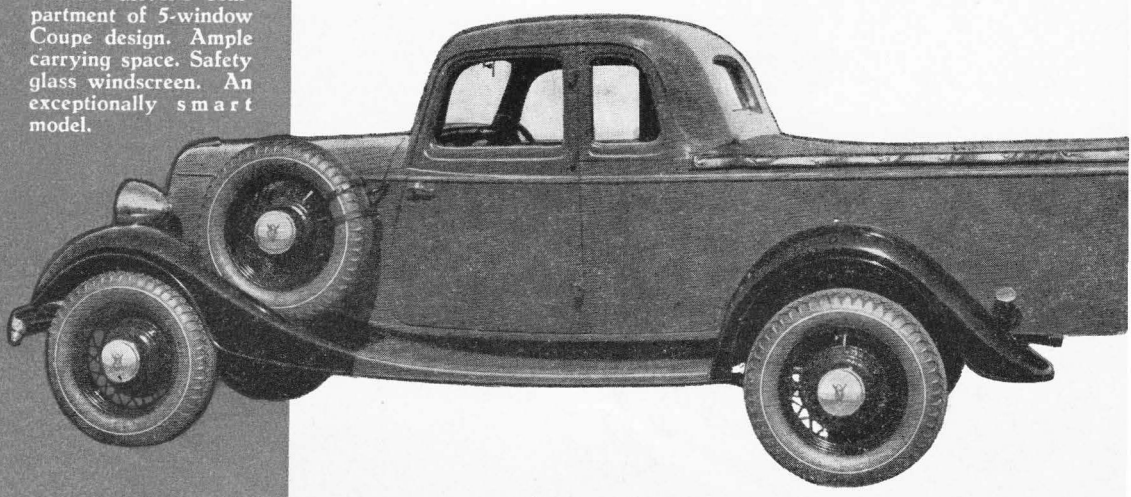
The 5-window Coupe type Utility bodies provide the comfort and convenience of a Coupe with commodious loading space at rear. These bodies are identical with passenger car type and have similar equipment, including a built-in ventilation system.

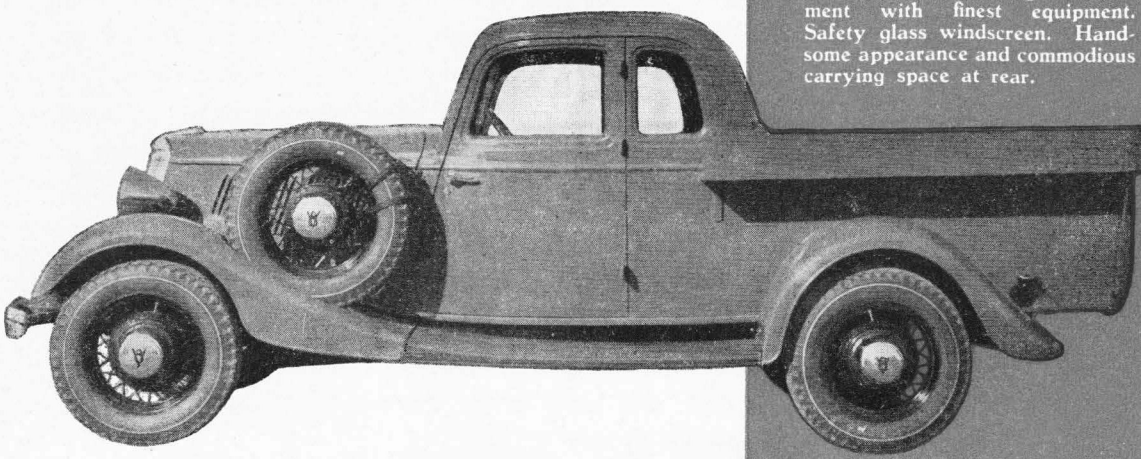
Commercial users will appreciate the speed and reliability of these cars in delivery service, and also the publicity value of their smart, dignified appearance.

LOADING DIMENSIONS

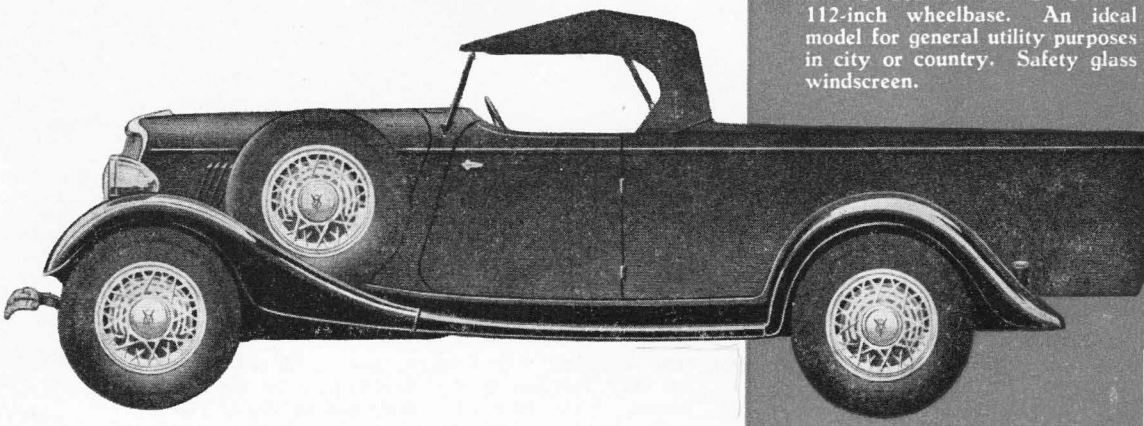
	Length at floor in.	Width at floor in.	Height in.
Model 40 Delivery Van	69	50	42½
302 Utility, both types	66½	50	20¼
304 Utility, both types	66½	50	20
8 h.p. Delivery Van	53	43	41¾
8 h.p. 304 Utility	55	42	20⅜

COUPE TYPE 302 UTILITY CAR—112-inch wheelbase. Comfortable driver's compartment of 5-window Coupe design. Ample carrying space. Safety glass windscreen. An exceptionally smart model.

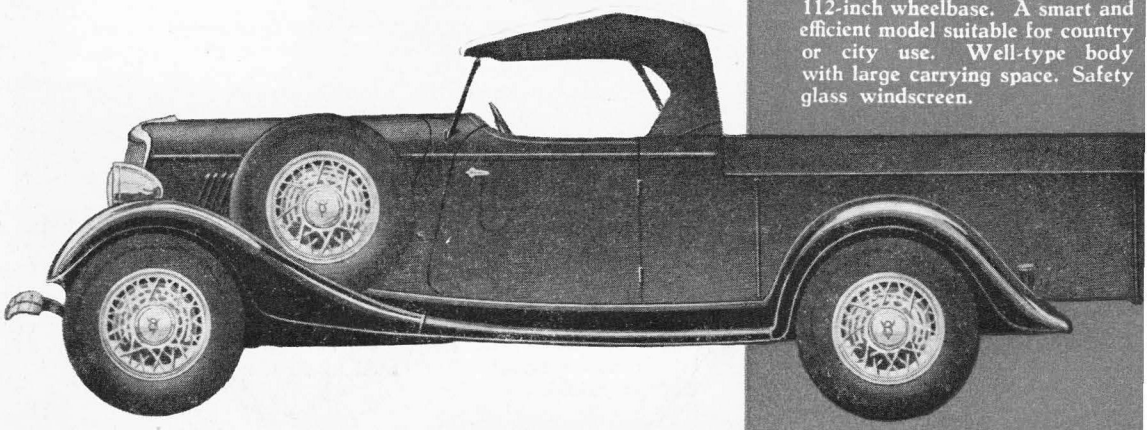




COUPE TYPE 304 UTILITY CAR—112-inch wheelbase. Five-window Coupe driving compartment with finest equipment. Safety glass windscreen. Handsome appearance and commodious carrying space at rear.



TYPE 302 UTILITY CAR—112-inch wheelbase. An ideal model for general utility purposes in city or country. Safety glass windscreen.



TYPE 304 UTILITY CAR—112-inch wheelbase. A smart and efficient model suitable for country or city use. Well-type body with large carrying space. Safety glass windscreen.

The Austraford Newsletter

VOL. 1 — A MONTHLY BULLETIN OF INTEREST ON FORD PRODUCTS — FORD MOTOR COMPANY OF AUSTRALIA PTY. LTD. — NO. 3

COMMERCIAL CARS and TRUCKS, V-8, 4-cyl., and 8 h.p.

GOLD SEARCH EXPEDITION USES FORDS

Fleet of 19 Vehicles for New Enterprise

A new chapter in the history of West Australian gold-mining is being written by the Western Mining Corporation Ltd. The Corporation, which is using Ford motors exclusively, has already taken delivery of 19 vehicles from the Ford metropolitan distributors, Lynas Motors Ltd.

Portion of the Fleet being inspected by Wing Commander Laws and his private secretary, Mr. Lloyd Allen, outside the building which the Western Mining Corporation have leased for the time being.

Among the special motor vehicles used by the expedition are two 157-inch wheelbase Ford trucks. These units are being used as movable wireless stations, and have been equipped with specially designed bodies with double roofs,

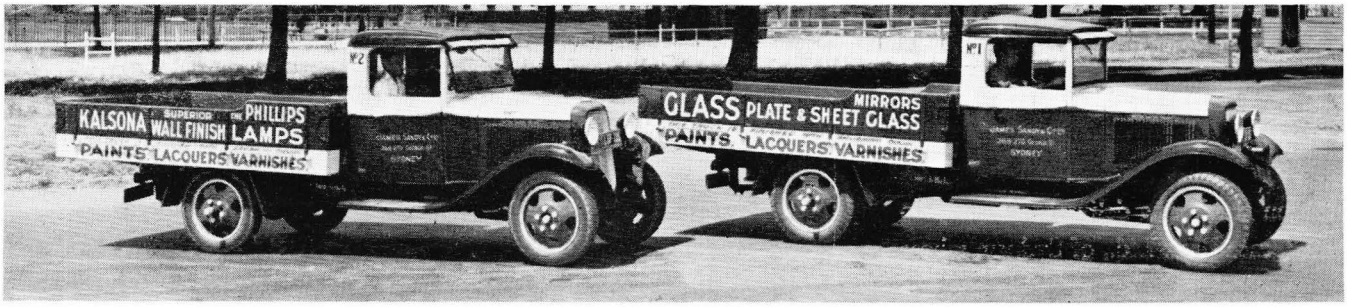
In the above group, from left to right, are Mr. J. V. Pascoe, Managing Director of Lynas Motors Ltd., West Australian Metropolitan Ford Distributors; Wing-Commander F. C. V. Laws, leader of the expedition; Mr. O. S. Cranston, director of Lynas Motors Ltd., and Mr. E. T. Blackman, engineer who supplied the refrigeration plant.

upon which metal aerial posts are carried in sections, and which may be erected to a height of 45 feet when the stations are operating. Each unit will comprise everything necessary for sending and receiving wireless messages from all points to which the company's operations extend. One vehicle has been equipped as a photographic dark room, with special refrigerating facilities for developing films in the hot areas.

A portion of the fleet taken after ascending Greenmount, about 15 miles from Perth. The Western Mining Corporation has altogether a fleet of 19 Ford units, comprising 3 V-8 Sedans, 7 B4 Utilities, 1 V-8 Utility, 4 2-ton 157 in. Wheelbase Trucks, and 2 Special Trailers.

The Austraford Newsletter

CITY MERCHANTS CHOOSE NEW FORD TRUCKS



James Sandy & Co. Ltd., well-known Sydney firm, recently purchased these two Ford Trucks for general transportation work.

Haulage Contractor says Ford Truck dependable and economical

Koondrook,
The Manager, 4/12/33.
Ford Motor Company,
GEELONG.

Dear Sir,

I took delivery of a New Ford Semi-Trailer Truck, 5-ton Model, on August 28th. Up to date I have travelled over 8000 miles, and the truck has given every satisfaction.

My business is carrying wool, produce, etc., between Barham and Melbourne, and I have always arrived on time at the Agent's Depot in Melbourne, doing two and three trips per week carrying full loads.

During a recent conversation with Mr. Hogan, of Traders' Finance Corporation, he said you would be pleased to have this report. Average petrol consumption, 12 miles to the gallon, loaded.

Yours faithfully,
(Sgd.) T. DONOVAN.

Extract from Detroit Direct-mail piece: "The New Ford 75-h.p. V-8 Engine"

ABILITY RATING

The Ford Truck with the new V-8 engine and 5.14 : 1 rear axle will pull its rated gross load of 8500 pounds up a smooth, hard surface, 4½ per cent. grade in direct drive.

As a tractor, it will pull a total gross weight of 15,000 pounds up a smooth, hard 2 per cent. grade, at a road speed of 40 m.p.h. in direct drive.

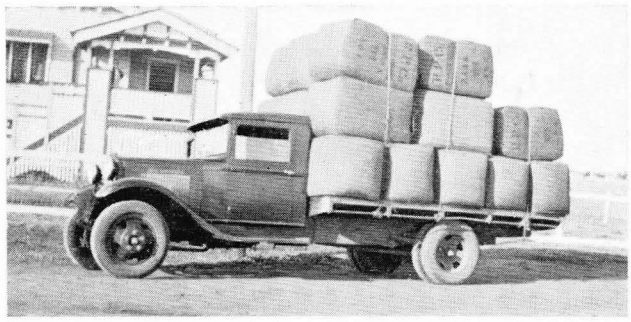
Its road speed at 3000 engine r.p.m. is 53.5 miles per hour. Equipped with the new V-8 engine and 6.5 : 1 rear axle, the Ford truck will pull its rated gross load of 8500 pounds up a smooth hard surface, 6 per cent. grade, in direct drive.

As a tractor, it will pull a total gross weight of 17,000 pounds up a smooth, hard, 2 per cent. grade at a road speed of 40 miles per hour. Its road speed at 3000 engine r.p.m. is 42 m.p.h.

Conventional truck pay-load rating, 1½ tons.

NO LOAD IS TOO BIG FOR THIS FORD 2-TON TRUCK

This Ford Truck, owned by Mr. E. Morgan, of Cunnamulla, has a normal loading capacity of 2 tons, but has on occasions handled 4 to 4½ tons of wool with ease. The only attention required during 10,600 miles of gruelling haulage was the addition of petrol, oil, and water. Used for timber cartage, this truck, loaded with 4 tons, averaged 15 miles per gallon over roughest roads.

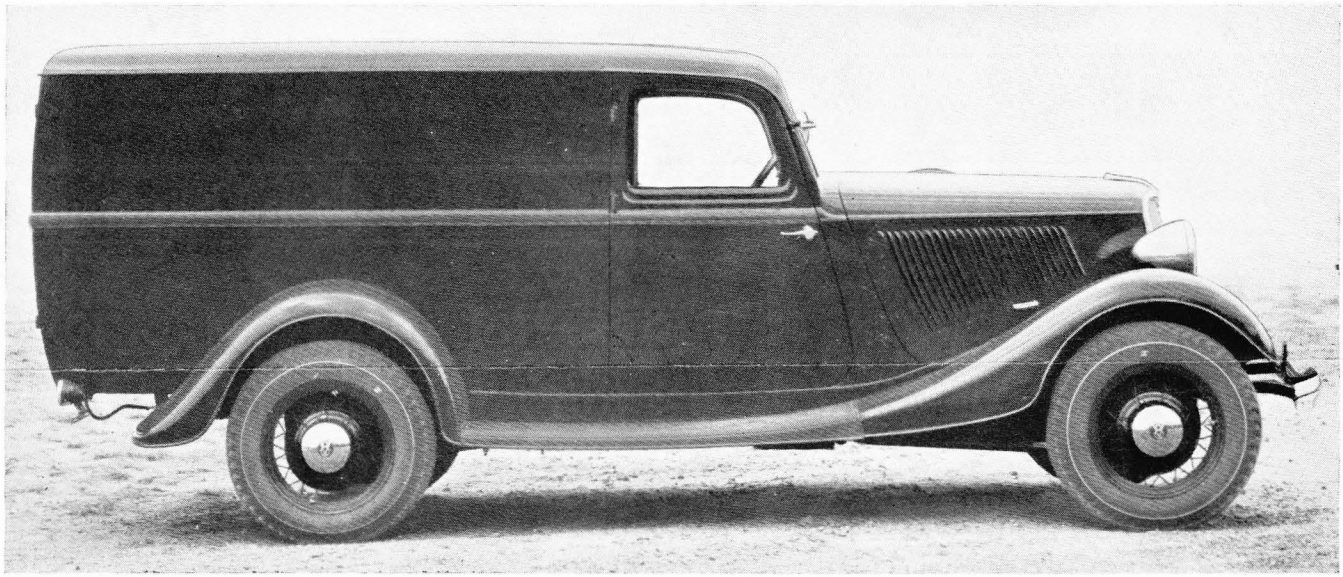


FORD MOTOR COMPANY OF AUSTRALIA PTY. LTD.
GEELONG, VICTORIA

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.

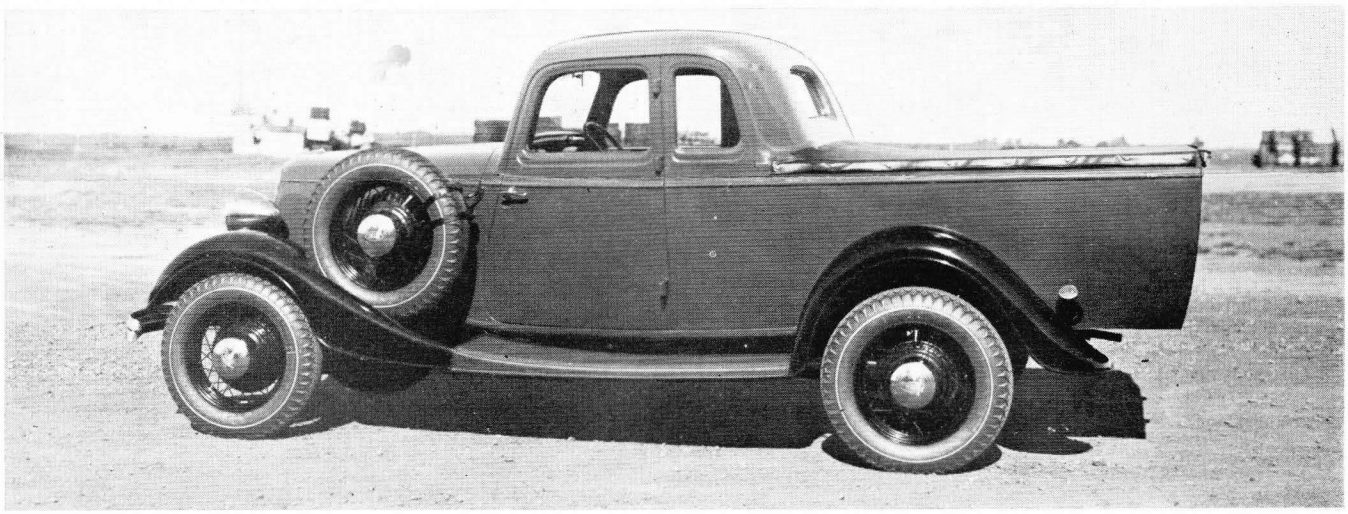
M22/3.

THE NEW MODEL 40 PANEL DELIVERY



The latest addition to the range of Ford commercial units is this handsome Panel Van. It is available with either V-8 or 4-cylinder engine. Ample interior space is provided, dimensions being—length of floor, 69 inches; width of floor, 50 inches; height, 42½ inches. Particular attention has been given to the appearance and equipment of the body, which is fitted with sedan doors and comfortable driver's compartment, giving all-weather protection.

THE NEW COUPE UTILITY 302



Smart and Comfortable Commercial Vehicle

To supply the demand for added comfort and appearance, the 302 Coupe Utility is now available with five-window coupe back, side and roof panel and doors. The equipment includes sliding seat, shatterproof glass windscreen, sun visor, rear window blind, and other fittings included in the equipment of the Passenger Coupe.

Newsletter

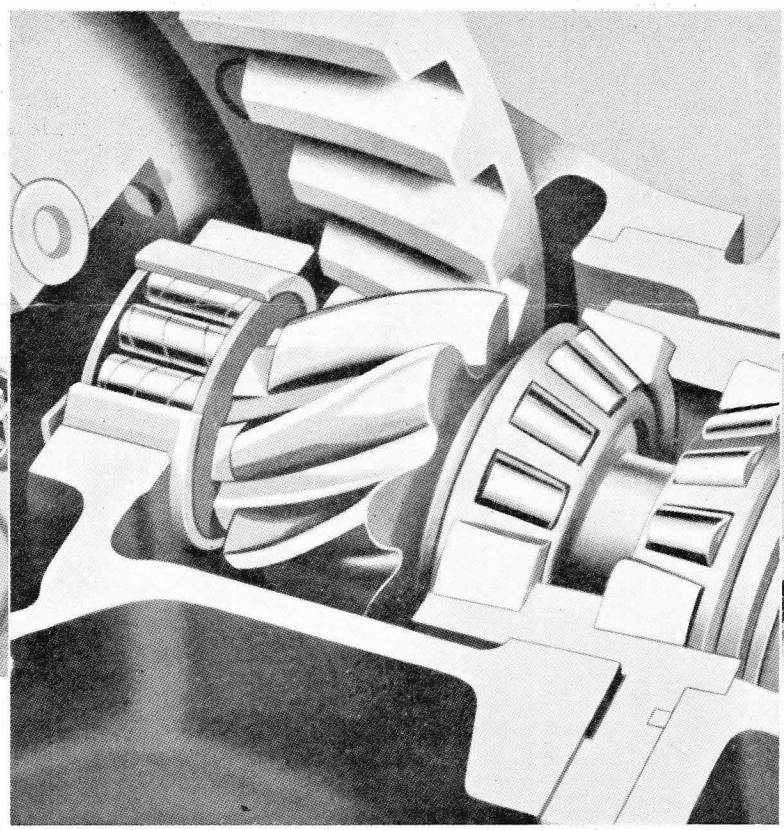
NEW FORD TRUCK FOR GRACE BROS.

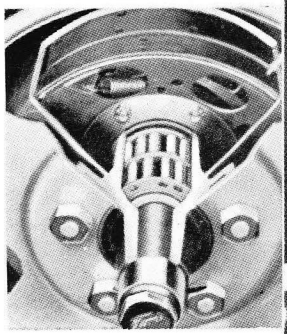
This 2-ton truck was delivered recently to Messrs. Grace Bros. Ltd., of Sydney, whose extensive transportation activities are an effective test of truck efficiency. The special body was built to Grace Bros.' order.

FORD HEAVY DUTY PINION AND RING GEAR WITHSTAND MOST SEVERE ROAD CONDITIONS

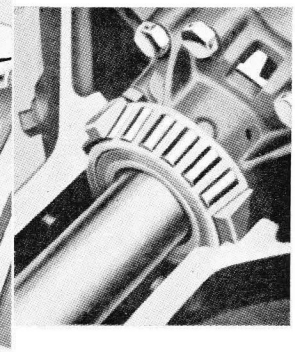
The straddle mounted driving pinion and ring gear, backed by a thrust plate, give the Ford truck axle two extra measures of strength and ability to withstand severe load and road conditions. Another important constructional feature of the truck axle is the use of heavy duty roller bearings throughout the entire assembly.

The massiveness of the three pinion bearings is clearly shown in the large illustration. The taper roller differential bearings are of ample size to meet the most stringent requirements of truck service. The double roller rear wheel bearings are located well under the load centres of rear wheels.





The heavy duty double roller rear wheel bearings have large rollers of the spiral and solid types.



Rugged differential bearings absorb both radial driving forces and end thrusts of the driving gears.

The Ford Truck Straddle Mounted Driving Pinion.

The Austraford Newsletter

A MONTHLY BULLETIN OF INTEREST ON FORD PRODUCTS

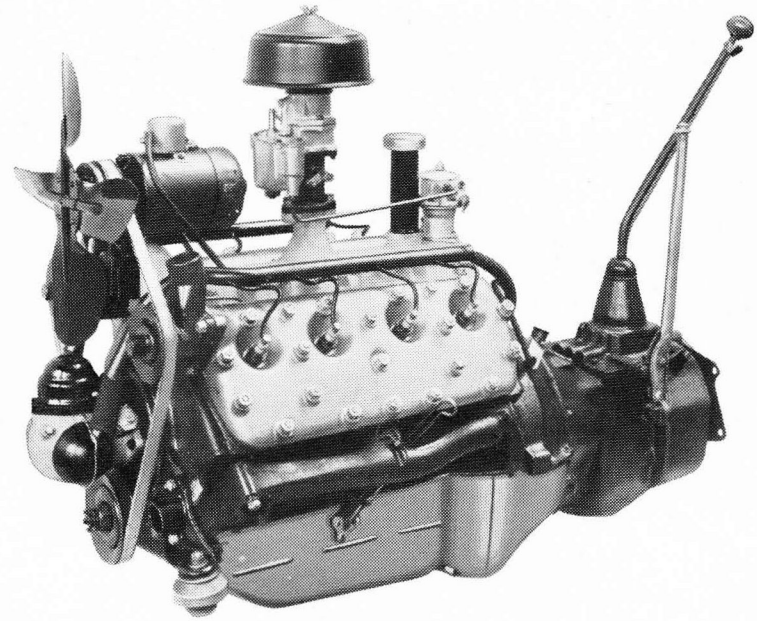
FORD MOTOR COMPANY OF AUSTRALIA PTY. LTD.

COMMERCIAL CARS and TRUCKS

V-8, 4 CYL. and 8 H.P.

The New Ford V-8 Power Plant

The Ford V-8 type truck engine introduces important advantages to truck operation and performance. Its compact 8-cylinder design means minimum vibration with consequent longer life and its high power development enables it to meet most haulage conditions without strain. The Ford V-8 motor is as cheap or cheaper to operate than a six-cylinder motor because petrol consumption is determined by piston displacement and engine refinements *not* by number of cylinders. These features make the V-8 type the ideal motor for every haulage use.



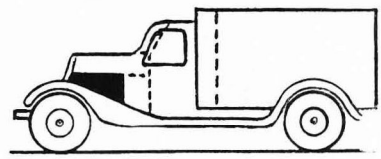
Ford Engine Specifications

Type	L-head	Compression Ratio	6.33 to 1
Number of Cylinders	V-8	Maximum Brake Horsepower	75
Bore and Stroke	3-1/16in. x 3⅝in.	Maximum Torque	148 at 1200 R.P.M.
Piston Displacement	221 cu. in.	S.A.E. Horsepower	30

SHORT-RIGID CRANKSHAFT

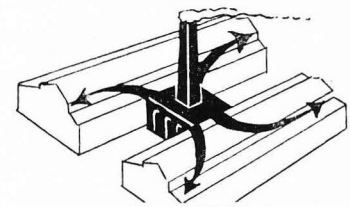
Short V-8 crankshaft gives additional strength and rigidity—a ruler is hard to twist when hands are held close together—minimizing torsional vibration.

MORE LOADING CAPACITY



V-8 type motor is short, leaving more room for body with consequent greater carrying capacity and better weight distribution.

MORE EQUAL FUEL-HEAT DISTRIBUTION



Carburettor and manifolds in centre of V almost equi-distant from each cylinder, provide more equal fuel and heat distribution, with more complete combustion, less carbon, greater smoothness, and less petrol consumption.

ADVANTAGES OF V-EIGHTS FOR TRUCKS

Every truck user should study the following story on the advantages of the V-type, 8-cylinder engine. The superiority of the Ford V-type, 8-cylinder engines (as compared with "6" or with the "8 in line" type engines) for truck use, may be summarized as follows:—

1. More compact engine. After all, a truck is built to transport goods and the less of the valuable wheelbase that is occupied by the engine, the more the space available for the money-making job of transporting materials. A shorter engine also means better weight distribution, which means better traction and less wear and tear on tyres.

2. Less weight per horsepower. Because of its short, compact design, the crankshaft, crankcase and other parts of the Ford V-8, while lighter than similar parts of a 6 or 8-in-line engine have equal or greater strength. The aluminium cylinder heads of the Ford give a further reduction of 27½ lbs. The lighter engine weight means that more "pay load" can be carried, increasing the earnings of the Ford Truck.

3. The Ford V-8 is speedier than a 6 of the same horsepower. Because the V-8 develops its maximum power at speeds of 3,800 r.p.m., its wider range of useful speed means a higher average truck speed under the varied conditions of truck loads and grades. The extra speed means more trips per day. This means additional loads—yet without any additional operating cost for extra trucks or extra drivers.

4. Better suited for long hauls. Because of its speed, the Ford V-8 saves time on the long hauls over the good roads that are now so generally available. Time saved means money earned.

5. Smoother power, less vibration. Because of its greater number of cylinders, and its V-type design, giving overlapping power, and the decreased intensity of the power impulses of the individual cylinders, the Ford V-8 runs more smoothly and with less vibration than a 6 or 8-in-line engine.

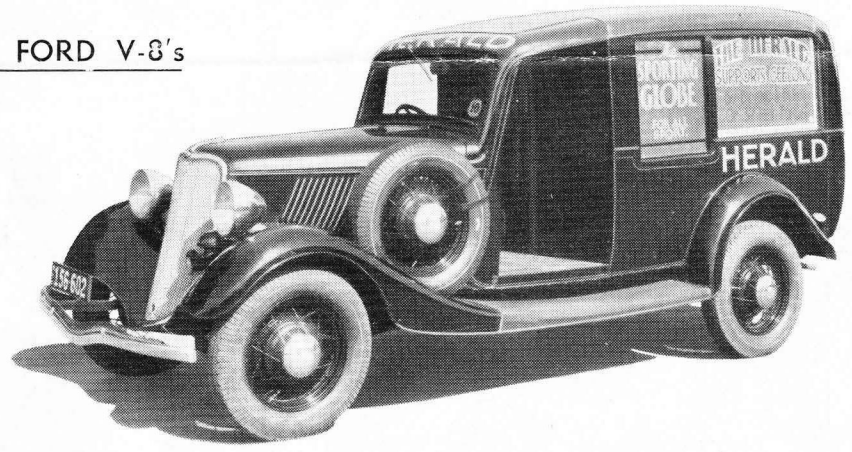
6. Better-satisfied drivers. The smoother power and decreased vibration of the Ford V-8 means less driver fatigue. The more compact V-8, as compared to a 6 or 8-in-line means more leg room for the driver, resulting in better driving and less liability to accidents. Not only are accidents reduced, but greater driver comfort allows a more intelligent and trustworthy class of drivers to be retained—always an important factor in reducing operating costs.

7. Uses Ford "4" or "V-8" in same chassis. The standardised design makes for economical servicing, as the same parts are used for the entire chassis, with exception of engine.

8. Up-to-date truck progress is to 8-cylinder motors. Progress in motor trucks has closely paralleled that of passenger cars. When sixes were increasing in passenger car use, then 6-cylinder engines became popular for truck use. Since the trend in passenger car use has swung to eight cylinders, it is logical for trucks to also turn to the use of 8-cylinder engines.

THE MELBOURNE "HERALD" BUYS FORD V-8's

One of the fleet of 21 Ford V-8 Delivery Units purchased by the Herald and Weekly Times Ltd., for newspaper delivery in Melbourne and suburbs. This company now owns a fleet of 32 Ford units which were selected after exhaustive enquiries into the most suitable cars for rapid and efficient delivery work.



FORD MOTOR COMPANY OF AUSTRALIA PTY. LTD.
GEELONG, VICTORIA

M22

NO OTHER ENGINE CAN OFFER ALL THESE FORD V-8 ENGINE FEATURES

● Most powerful engine in the low price truck field. Full 75 horsepower at 3800 r.p.m.

● Aluminium high-compression cylinder heads, increasing engine efficiency and reducing fuel consumption.

● Cylinder blocks and upper half of crankcase cast in one piece, affording permanent alignment of important rotating parts.

● Short, rigid crankshaft with 90-degree crank throws having full-sized counter-balances.

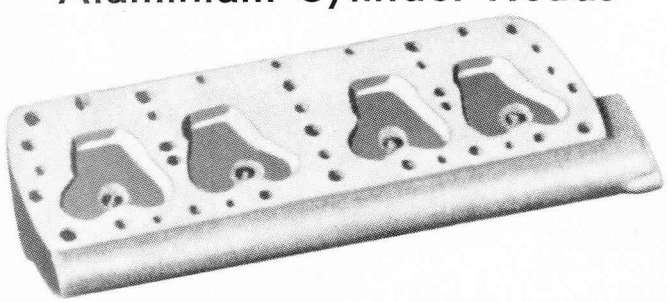
● Offset cylinder blocks, reducing bearing loads and cushioning the force of each explosion.

● Exhaust valve seat inserts, preventing valve leakage and increasing valve life.

● Permanently adjusted valves with precision-set valve stem clearances.

● Direct driven ignition distributor, eliminating gears between camshaft and timing mechanism. Enclosed waterproof ignition wiring.

Important Development— Aluminium Cylinder Heads



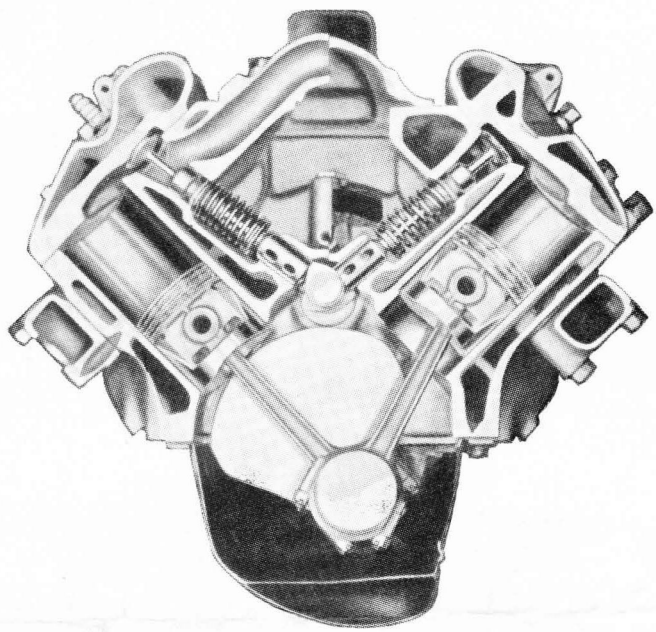
The new cast aluminium cylinder heads on the V-8 engine are factors of greatest importance in the improved economy and performance of the V-8 engine. Much of the new economy, power and smoothness is attained through the use of a higher compression ratio. In turn, the completely satisfactory operation of a high compression engine with standard grade fuel is made possible only through the use of correctly designed aluminium cylinder heads.

Larger Cooling Capacity

FORD V-8 COOLING CAPACITY, 4½ GALLONS.—With minimum danger of overheating the Ford V-8 engine will give longer, more economical performance. Ample cooling reduces carbon and minimizes piston wear and warp. Tubular type Ford V-8 radiator is simple to repair and consequently less expensive in case of puncturing.

With two water pumps—one for each bank of four cylinders—the Ford V-8 engine is always properly cooled for every need. For a quicker warm-up, pump action does not take effect until water has reached proper operating temperature.

Efficient Cooling System



Water jackets extend full length of cylinders, with the large water passages around the valve seats and combustion chambers. These, with two centrifugal water pumps, 4-blade fan, and efficient truck type radiator, provide the kind of cooling a truck engine needs.

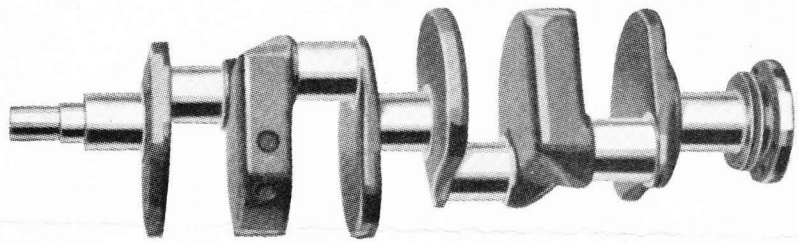
"Our Ford V-8 develops more power on a gallon of petrol than any engine we have made."

Henry Ford

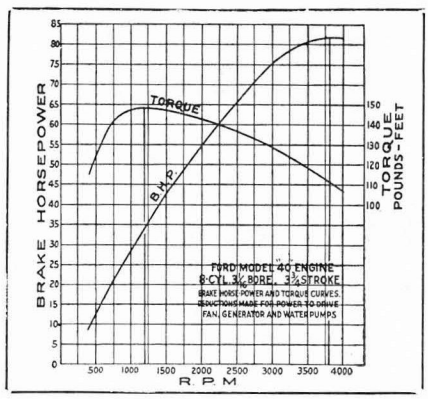
SHORT-RIGID FORD CRANKSHAFT INCREASES EFFICIENCY and PERFORMANCE

Ford offers an unusually strong and rigid crankshaft. V-8 design permits compact construction and this, together with unusual weight and perfect balance gives vibrationless performance. This special Ford carbon-manganese steel used and the high weight per inch is evident proof of the sturdiness and long life inherently built into Ford crankshaft. Twisting tendency as found in longer shafts is greatly minimized.

Overall Length - - - 24in.
Weight - - - - 65lbs.
= 2.7lbs. per in.

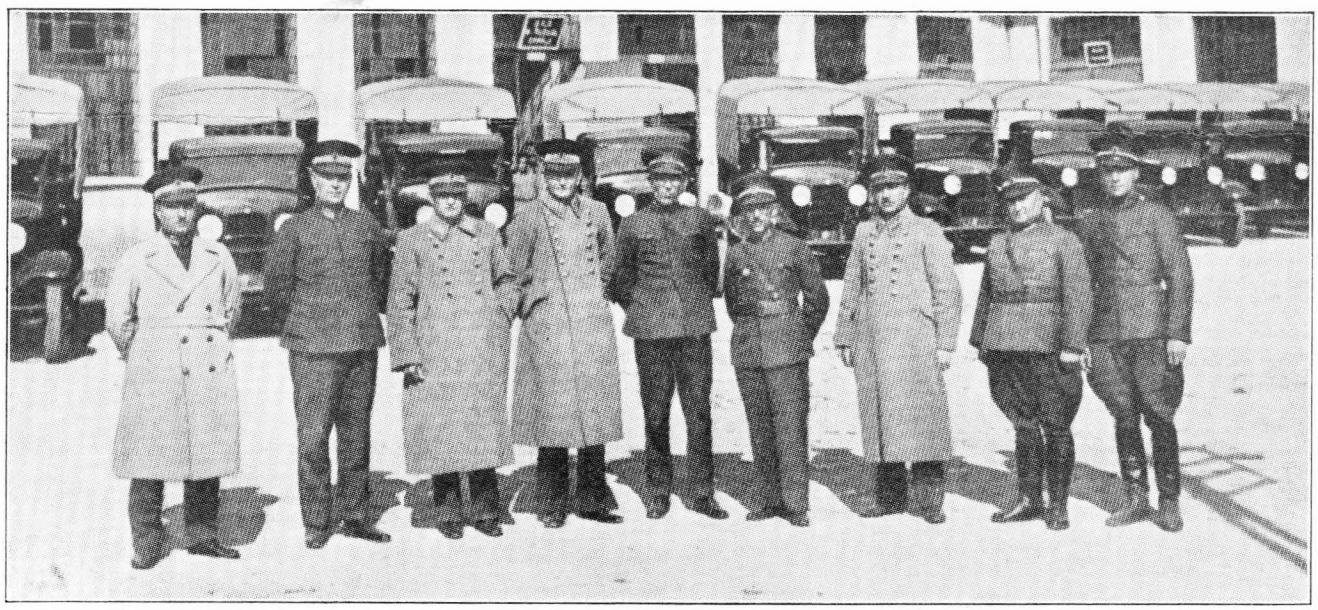


TORQUE AND HORSEPOWER ATTAIN HIGH VALUES



The Ford V-8 engine delivers in excess of 75 useable brake horsepower at 3,800 engine r.p.m. *Contrary to common practice, this power is measured with all engine accessories (water pumps, fan and generator) being driven by the engine in their normal manner.*

The maximum torque value of 148 pounds-feet is attained at 1,200 engine r.p.m. The relative flatness of the torque curve indicates that values above 140 pounds-feet are available throughout the full throttle speed range of 750 to 2,200 r.p.m. This condition is particularly valuable as it permits the engine to develop great traction effort at both the low engine speeds desirable for starting loads and at the higher engine speeds commonly used on the highway.



The Turkish Military Commission who took delivery of twelve Ford 2-ton trucks, after the vehicles had passed the severest of tests with high honours