

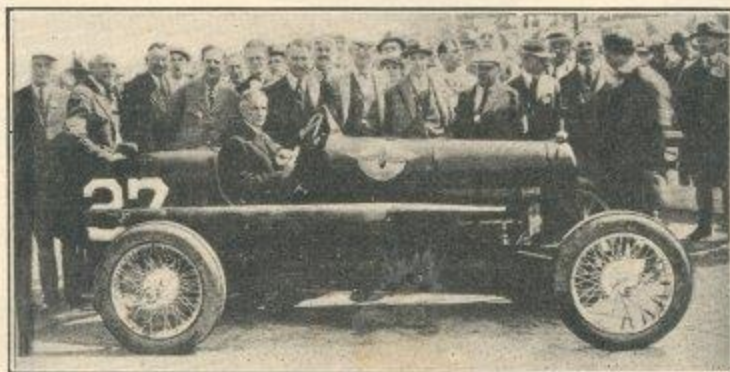
H. N. JENKINS

Sole Distributors in Australia for

Fontenac O.H.V. Cylinder Heads, Frontenac Power and Speed Parts for
Fords, Fronty Ford Race Cars

SAUNDERS CHAMBERS, 247 ELIZABETH ST., SYDNEY

The Frontenac Cylinder Head Model T for commercial and pleasure cars. Louis and Arthur Chevrolet, world-famous racing drivers and engineers of a score of years, are the designers, patentees, and makers of Frontenac Cylinder Heads for Fords, which are now available to all Ford owners.



Mr. Henry Ford seated in one of the 75% Fords fitted with a Frontenac Cylinder Head, which gave the power for one of these cars to finish fifth in the world's premier racing event—the 500-mile Indianapolis Speedway Race.

Because they themselves have driven racing cars for a score of years, Arthur and Louis Chevrolet realize the necessity of quality, uniformity and strength in every part of a racing machine. Rigid tests are given every Fronty product before it is placed on the market, and close inspection is given every piece before it leaves the factory.

Convert your Ford Engine to a Fronty Ford

SOME TYPICAL FRONTY RACING RECORDS

Indianapolis Motor Speedway, 500-mile race, May 30, 1923—L. L. Corum in Barber-Warnock Special No. 23, equipped with Model S-R Frontenac Head, won fifth place ahead of Mercedes, Bugatti, and all foreign cars—and ahead of many American cars. Average speed, 82.58 miles per hour.

Chicago, Robey Speedway, May 17, 1925—Ralph D. Ormsby in Model D-O Fronty won time trials in 48 seconds. In 15-mile light car race he established new record for the distance in 12 minutes and 20 seconds. Also won 15-mile free-for-all against cream of middle west drivers.

Winchester, Ind., May 30, 1925—R. D. Ormsby in Model D-O Fronty-Ford set new world's dirt track record of 27-1/5 seconds in 1/2-mile time trials. Also in 5-mile race, time 4 minutes 54 seconds. Also won 15 and 25-mile races. Frontys took second and third places, too, in all events. Another clean sweep.

Toledo, Fort Miami Track, September 19, 1925—Fred Harder in Clemons Car with 16-valve Fronty head won time trials in 46-1/5 seconds. Also won 3-mile, 5-mile, 10-mile and 50-mile races. Ray Campbell

in 16-valve Fronty-Ford won all seconds. Clean sweep.

Phoenix, Ariz., November 14, 1925—J. Randolph won 50-mile State championship using Model S-R Fronty Head. Time, 41:55.

Franklin, Nebr., July 5, 1925—Fred Merzney driving Fronty-Ford won time trials, 10-mile race and sweepstakes. Also all lap prizes against fastest field ever gathered in territory. Another Fronty clean sweep.

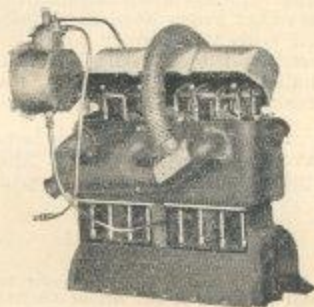
The Frontenac Cylinder Head Model T—For Ford Commercial and Pleasure Cars



Intake Side.

The Frontenac Cylinder Head, now in its fourth year of manufacture, has proved to its thousands of owners that it will do all that we claim and more in improving the performance of the Ford car, such as smooth running, wonderful acceleration, 5 to 40 miles per hour in 16 seconds, unsurpassed hill climbing ability. (We have yet to find a hill on a main highway which the Fronty-equipped car could not take on high gear.) Wonderful gasoline mileage—25 to 30 miles per gallon. All the speed that can be safely used—60 miles per hour and over. Power to carry any load on a truck. By actual test at the Purdue University laboratory the regular Ford motor gave 17 horse-power. After installing the Model T Frontenac Head, the same motor gave 33 horse-power, cooler running and freedom from destructive vibration.

The saving in gasoline bills alone will pay for the head in less than a year's time, besides the joy and comfort of driving a car that will respond to anything you may call on it to do. The salesman who covers his territory in a Ford car, the business man who uses a Ford for business purposes, the truck owner whose profits depend on his ability to carry certain loads at a given price, the Ford owner who uses his car mostly for touring the country on Sundays and holidays, all need the Frontenac Head for what it will do for them. We have hundreds of letters from enthusiastic Fronty owners, telling us all the good things about the head, some of which we did not know ourselves.



Exhaust Side.

SPECIFICATIONS

Head Casting—Semi-steel, close grain.
Valves—8 semi-steel head, steel stem, 1 13/16-in. diameter.
Valve Springs—Extra long coiled spring of highest quality.
Valve Spring Caps—Pressed steel.
Valve Opening—3/8-in.
Rocker Arm—Drop forged steel, case hardened, with removable bushing, offset centre, 1 1/2-1 ratio.
Valve Guide—Cast iron, removable, extra long to insure long life.

Rocker Shaft—Steel, case hardened and ground.
Push Rod—Steel, 5/16-in. diameter, lower end hardened, upper end provided with adjustment.
Compression—60 lbs.
Intake—Single intake port, providing hot spot inside of head, which makes for quick starting and warming up. On left side of car, 1 1/8-in. diameter.
Exhaust—Three exhaust ports on right side of motor, all exhaust passage and valve seats completely surrounded by water, insuring against overheating and warping of valves, 1 1/8-in. diameter.

Water Capacity—One gallon, regular Ford water outlet elbow fits front end of head.
Equipment—1 1/4-in. horizontal carburetor, fuel pump, four spark plugs, all wires and tubing necessary for installation, dash control, cover, bolts and gaskets, exhaust manifold to connect with Ford exhaust pipe.
No. 210—Model T. Price £37/10/-
No. 211—Model S. Specifications and equipment same as Model T, but compression is 75 lbs., specially designed for speedsters £37/10/-

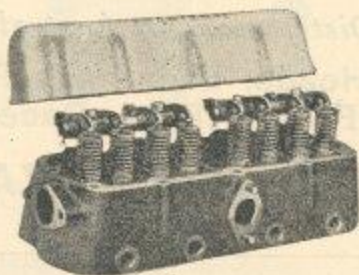
Model R Fronty Head—for Racing Cars Only

When this cylinder head was first brought out in 1921 its performance astonished the racing world. It made new records in dirt track racing everywhere, winning practically every race entered, from 1 to 100 miles. It enabled two Fronties in the Indianapolis 500-mile race, in May, 1923, to make the qualifying speed of 80 miles per hour, and to run the entire race without motor trouble, at an average speed of over 80 miles per hour—the first time a Ford ever qualified for the biggest race event in the world.

Typical Records Made With This Head.

Warren, Ind., September 3, 1921—Ralph D. Ormsby made time trial of 30 seconds on half-mile track. World's record.

Indianapolis, Ind., May 30, 1923—C. Glenn Howard and Jack Curtner qualify for the 500-mile race, being the first Ford cars to ever accomplish this, and were still running when the race was called, averaging 80 miles per hour for the entire 500 miles.



Uniontown, Pa., June 13, 1922—Jack Curtner turned one lap of 1 1/4-mile speedway in 44 2/5 seconds, fastest time ever made officially (A.A.A. meet) by any Ford car. Ninety-two miles per hour.

Chicago, October 21, 1923—A. Davidson won National Ford Champion Race at Hawthorne track against all star drivers of middle west, earning the title of National Ford Champion.

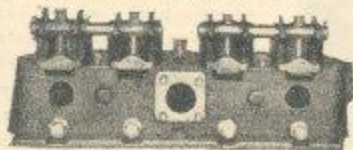
Specifications.

Head Casting—Semi-steel, close grain.
Valves—8 high tungsten steel, 1 1/2-in. diameter.
Valve Spring Caps—Nickel steel, liberty type lock.
Valve Spring, Valve Opening, Rocker Arm, Valve Guide, Rocker Shaft, Push Rod, Water Capacity—Same as Model T.
Compression—85 lbs.
Equipment—Aluminium cover, bolts and gaskets.

No. 212—Model R Head, for racing cars only (not including intake and exhaust manifolds, spark plugs, etc.) £37/16/-

Model S-R Fronty Head— for Racing Cars Only

The main difference between this and Model R is that this head uses two spark plugs per cylinder and can be equipped with two carburetors. Compression, also, is higher. It was brought out to meet a demand for something faster than Model R.



It was first entered in the 500-mile race at Indianapolis on May 30, 1923, on the Barber-Warlock Special No. 23, driven by L. L. Corum. After qualifying at 86.82 miles per hour, it won fifth place, defeating all foreign entries, such as Mercedes, Bugatti, and many American entries. Only two stops were made during the race, both for fuel. It ran the entire race without any mechanical trouble or adjustment whatever.

Specifications.

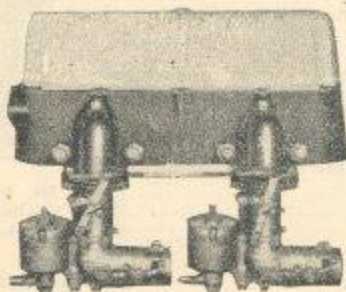
Head Casting—Semi-steel, close grain.
Valves, Valve Springs, Valve Spring Caps—Same as Model R.
Valve Opening, Rocker Arm, Valve Guide, Rocker Shaft, Push Rod—Same as Model T.
Compression—100 lbs.
Intake—Two intake ports, 1 1/4-in. diameter on left-hand side.
Exhaust—Three exhaust ports on right-hand side.
Spark Plugs—Drilled and tapped for metric plugs, two per cylinder, one on each side.
Equipment—Aluminium cover, bolts, gasket, etc.
 No. 114—Model S-R, for racing cars only £46/16/-
 No. 115—Model S-R with two Zenith carburetors and intake pipe £71
 No. 116—Model S-R, with two Zenith carburetors, intake and exhaust manifold £82/6/-

Other Racing Records Made With This Head.

Indianapolis, Ind., July 1, 1923—Chance Kingsley breaks track record on Hoosier Speedway. Time: 31 1/5 seconds. W. Schloeman wins 75-mile race;

Chance Kingsley, second; C. Chaney, third. All driving Fronties.

Ventura, Cal., July 28, 1924—Frank Lockhart won 5-mile race. Time: 4:56. Fastest time in the west on half-mile flat track.



Model D-O Fronty Head— for Racing Cars Only

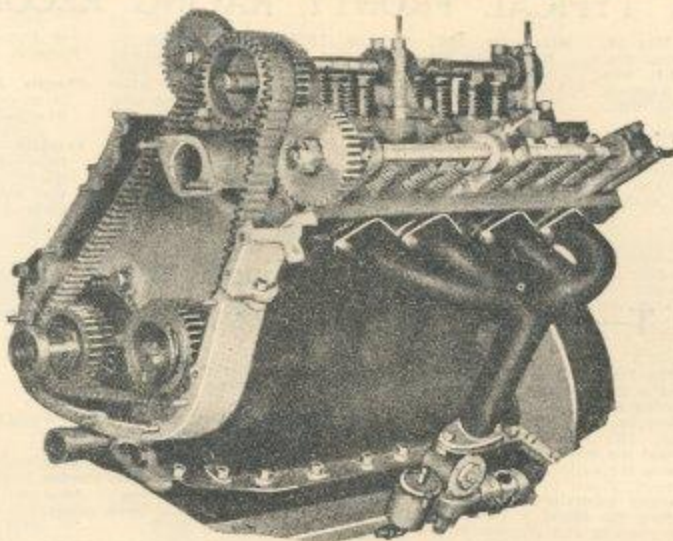
(Head Covers Removed)

16 Valves

2 Overhead Camshafts

Built to satisfy insistent demands for something still faster. It was first put to the most gruelling test known to the whole racing world, the 500-mile race at Indianapolis, May 30, 1924. The car equipped with this head went through the entire race, and for the last 300 miles ran at an average speed of 88 miles per hour. Please keep in mind the fact that every Ford car equipped with the Fronty head entered in the 500-mile race has qualified and finished in the greatest race of the world.

Fronties are the only Fords to have accomplished this. This equipment will instantly appeal



to those who have tried other types and makes of heads, and who desire to equip their car with the best attachment that can be produced.

Some Racing Records Made With This Head.

Chicago, Ill., Robey Track, July 13, 1924—Ralph Ormsby won both races. Established new record for 5 miles. Time: 4 minutes 16 seconds.

Ascot Speedway, Los Angeles, Cal., November 2, 1924—Ralph D. Ormsby won feature race, establishing new record for ten laps of 3/4-mile track. Time: 5 minutes 30 2/5 seconds.

SPECIFICATIONS

(Model D-O—16-Valve Fronty Head).

Built to order only. Each order receives the personal attention of Mr. Arthur Chevrolet, both during course of construction and testing. Each head is guaranteed against imperfections in material and workmanship.

Head Casting—Fine gray iron machined practically all over.

Water Jacketing—Given special attention to distribute water evenly around entire combustion chamber, valves and spark plugs.

Valves—16, 2 intake and 2 exhaust per cylinder. Best tungsten steel. All overhead, seated in casting 30 degrees from vertical. 1 9/16-in. diameter. Stem 3/4-in. diameter.

Special Valve Springs—Each held in place by special seat and keeper, which also acts as tappet, upon which cam strikes, operating valve. Tappets held in place by lock nuts. Adjustment is simple and positive. Tappets hardened and ground. Valves operate in removable valve stem guides. Stems, 3/4-in. long.

Camshafts—2, mounted overhead on 3 bronze bearings. Cams integral with hollow drilled shaft, with oil leads to cams. Entire valve mechanism lubricated by force feed. Camshafts driven by silent chain, 1 1/4-in. wide. The front sprocket mounting and camshaft bearing casting are bolted solid to the front of head casting. The chain is kept in proper adjustment by a patented idler. Entire chain drive mechanism in aluminium housing; runs in surplus oil, from camshaft feed. Camshafts housed in aluminium oil-tight, dustproof housings.

Spark Plugs—Located in top of head, firing charges in top and centre of combustion chamber—the most efficient way. Pre-ignition and fouling of plugs eliminated.

Intake and Exhaust Ports—4 each, 1 1/4-in. Smooth and straight, allowing easy passage of gases.

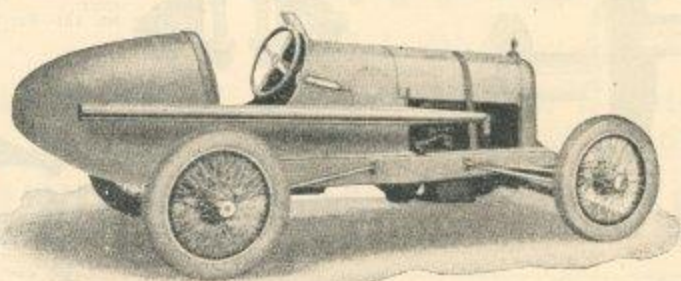
Compression—120 lbs. Entire combustion chamber machined to prevent carbon and pre-ignition.

Water Outlet—2-in. Inside diameter. Runs through cam drive chain housing at top of head. Cylinder head uses regular Fronty gasket. All flanges take S.A.E. standard gaskets.

Special care taken in the design of this head to make all operating parts easily accessible, and this equipment so that it may be installed on any standard Ford block, replacing the stock head, or any of the present overhead valve attachments now on the market, without mechanical changes on the block. This head can be removed from the block and re-assembled as easily as any ever designed. Special intake manifolds for this head furnished, if desired, for one, two, or four carburetors.

No. 201—Without intake or exhaust manifolds or carburetors £218/12/6
 No. 202—Complete 16-valve head with exhaust manifold, intake manifold and carburetor £262/7/6
 A deposit of 25 per cent. of purchase price required on every order.

The Fronty Ford Racing Car Complete



With this powerful car you are bound to win. Your skill, plus Fronty-Ford performance, can get you in on the big money every time! The Fronty-Ford stands up under the most severe driving. Lightning get-away and great speed are characteristics of the Fronty-Ford. It is the most consistent and sensational performer on half-mile dirt tracks ever built. The best proof of its speed and reliability was demonstrated in its performance in the Indianapolis 500-mile race, May 30, 1923. In this race it placed fifth, defeating all foreign entries and many of the best American entries.

SPECIFICATIONS

Motor—(See Fronty-Ford Racing Motor on this page.)

Body—Special all-steel, one-man body. (Two-man body for small additional sum.) Double tank in tail of body—capacity, 10 gallons gas; 3 gallons oil.

Wheelbase—94 inches.

Frame—Standard Ford frame shortened for 94-in. wheelbase (long if desired).

Front Axle—Standard Ford I-beam. Special radius rods. No. 250 Front underslung brackets.

Rear Axle—Standard Ford housings and gears. Special axle shafts, ball bearings and radius rods.

Wheels—Special 28 x 4 drop centre wire wheels.

Springs—Standard Ford springs, lowered. Hartford shock absorbers.

Steering Gear—Special centre control. Spring steel steering wheel. Special steering knuckles.

Radiator—Special Fronty model, made with Fedders high efficiency core.

Feed—Pressure, gas and oil.

Gear Ratio—Optional: 3-1 for straight-away, 3 $\frac{1}{4}$ -1 for speedway, 3.63-1 for mile dirt track, 4-1 for half-mile dirt track.

Tread—Standard.

Weight—1,350 pounds.

Color—Optional.

Speed—Model R Head—96 miles per hour, straight-away. Model S-A Head—104 miles per hour, straightaway. Model D-O Head—110 miles per hour, straightaway.

No. 214—With Model R Head £848/15/-

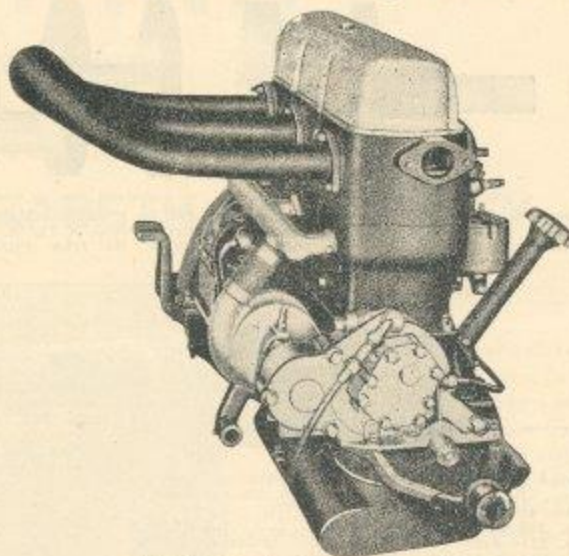
No. 214A—With Model S-R Head £900

No. 214B—With Model D-O Head £1,054

FRONTY FORDS BUILT TO ORDER

Fronty-Fords are also built to special specifications for those who want features different from those incorporated in the regular models of Fronty-Ford racing cars. Write or call for prices and information.

Fronty Ford Racing Motor



This is the motor included in specifications for the Fronty-Ford racing car shown on this page. It embodies the experience of many years in designing motors that will "produce the goods" in racing competition. All parts are thoroughly tested before the motor leaves the factory.

Specifications.

(Choice of Models R, S-R and D-O Cylinder Heads).

Standard Equipment (Ford Parts): Ford cylinder block (starter type). Connecting rods, machined and balanced. Transmission and bands. Flywheel, cut to 19-in. diameter and balanced.

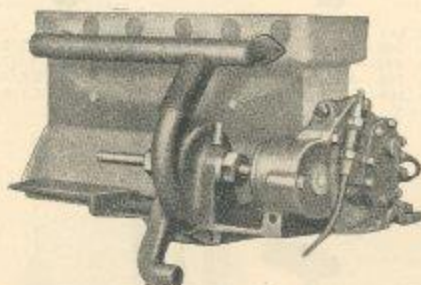
Special Equipment: Racing carburetor, depending on model of cylinder head selected. Racing pistons, rings and pins. Oversize circular crankshaft. Racing magneto. Nickel-steel camshaft gear. Water pump and magneto bracket. High-pressure oiling system with sub-base oil reservoir. Racing exhaust manifold. Ball-bearing ball cap. Motor complete for setting in frame:

No. 215—With Model R Head £300

No. 215A—With Model S-R Head £372/19/-

No. 215B—With Model D-O Head £501/10/-

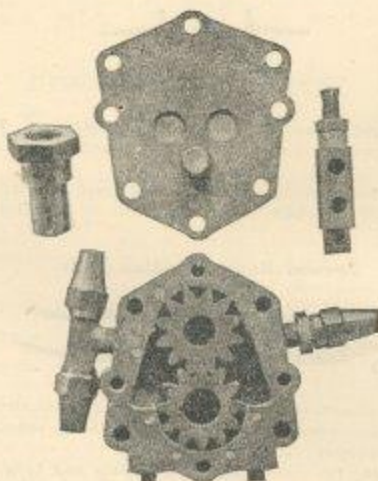
Water Pump and Magneto Bracket.



Especially designed by us for Ford racing motors. Made entirely of aluminum. Absolutely the best of this kind on the market. The shaft, mounted on ball bearings, is made of chrome nickel steel. Front gear cover equipped with pad to receive oil pump.

No. 226—Each £25/14/6

Oiling System.



High-pressure system includes oil pump, camshaft extension, by-pass regulator, oil gauge for dash, all fittings, tubing, connections, and blue prints for installation.

No. 227—Complete £13/17/6

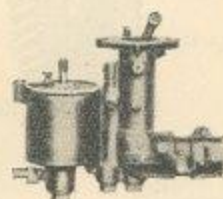
Special Zenith Carburetor.

For quick get-away and pick-up.

No. 228—With proper jets for Fronty racing heads £13/7/6
Specify whether for Model R or S-R Head.

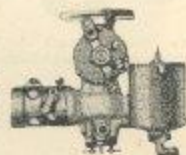
No. 229—Elbow adapter or intake pipe £1/3/2

No. 229A—Intake manifold of copper tubing for use with Model S-R Head, using 1 carburetor only. Price on application.



Juhasz Carburetor.

A wonderful racing carburetor—faster than any other carburetor known. Prices on application.



Special Pistons.



Racing Pistons. Best for Fronty-Ford racers. Extra strong aluminum and nickel alloy, accurately machined and grooved for three $\frac{3}{4}$ -in. rings.

No. 225—High dome for Model R Head, per set of four £13/7/6

No. 223A—Low dome, for Models S-R or D-O Head, per set £13/7/6

High-Compression Racing Piston Rings, $\frac{1}{8}$ -wide, perfectly machined from best gray iron castings.

No. 225—Compression Ring, each 3/11

No. 225A—Oil Ring, each 8/-

Special Piston Pins of electric chrome-vanadium steel. Lighter than standard pins. Will not break.
No. 224—Each 15/6

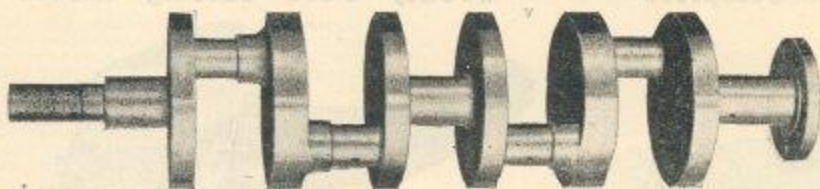
Counter-Balanced Crankshaft.



Design Patented.

Counterweights forged integral with shaft. High-grade alloy steel. Fits Ford block without alterations.
No. 216B—Drilled for oil pressure feed... £13/10/-
No. 216C—Not drilled, for commercial cars... £7/14/6

Oversize Circular Cheek Crankshaft



The most perfectly balanced crankshaft that can be produced. Main bearings, 1 1/2-in. diameter, instead of 1 1/4-in. Connecting rod bearing, 1 3/4-in. diameter, instead of 1 1/2-in. Drilled for pressure oil feed. Can be furnished with 1 1/2-in. crank pins at same price. No. 216A—Prices on application.

Sub-Base Oil Reservoir.



Keeps oil at constant, lower temperature, assuring better lubrication of motor at all times. Made of sheet steel. Capacity, 3 gallons.

No. 230 £9/15/6
 No. 231—Same to fit motor with regular Ford front radius rod. Capacity, 2 gallons £7/14/6
 (If 1925 or later crankshaft is used, specify on order.)

Racing Exhaust Manifold.



Gives the famous "Speedway Roar." Made of seamless steel tubing. Complete with long 4-in. pipe to rear of car.

No. 232 £12/6/6
 No. 232A—For S-R Head £12/6/6
 No. 232B—For D-O Head £15/8/6

Special Camshaft Gear.

Made of nickel steel.

No. 235 £3/17/3



Oversize Axle Shaft.



A necessity for racing cars. Protects driver's life. Also for commercial cars carrying heavy loads. Shaft 1 5/16-in. diameter, made of electric chrome-vanadium steel. (When ordering state width of tread.)

No. 253 £4/4/6
 No. 254—Special roller bearings for use with oversized shaft £1/18/-
 No. 255—Special ball bearings and housings to replace roller bearings. Per set, including axle tube sleeves £21/11/6

Steering Gear for Racing.

This cam and lever type gear is meeting with great success everywhere. Very strong, simple, durable. Easily installed. Complete with drag link dash bracket and frame bracket.

No. 260 £15/8/6
 No. 260A—Same, for centre control, with long drag link, dash bracket, 2 frame brackets, £25/14/6



Special Ball-Bearing Cap.



Eliminates all trouble from this troublesome bearing. For all Fords.

No. 236 £7/14/6

Special Gear Ratios.

No. 244—1 4/9 x 1 £6/3/5
 No. 244A—1 2/10 x 1 £4/2/6
 No. 244B—3 1/4 x 1 £4/2/6
 No. 244C—3 x 1 £4/2/6
 No. 244D—2 3/4 x 1 £4/2/6

Racing Steering Knuckles.



Fit Ford I-beam. Made of chrome nickel steel. Best life insurance for drivers. Complete with tie rod and bolts.

(When ordering, state width of tread of car.)

No. 261—Per pair £11/11/6

Special Racing Radius Rods.



Made of seamless steel tubing. Very light and strong, the best front construction made. (When ordering, state whether car is offset.)

No. 258—Per pair, complete with pads and bolts, £9/5/-

Manganese Bronze Front Brackets.



Underslung. Very strong. For racing cars or speedsters.

No. 251—Per pair, £4/12/1

Manganese Bronze Rear Brackets.



Underslung. Very easy to attach.

No. 252—Per pair .. £3/1/5

Filler Cap.



For gasoline and oil tanks. Adds snap to any car's appearance.

No. 270—Brass finish £2/1/6
 No. 271—Nickel finish £2/9/6

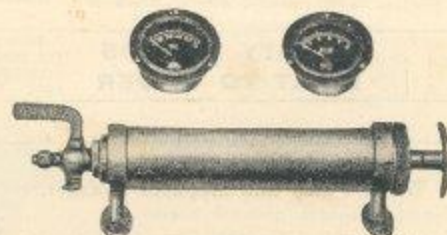
Spring Steel Steering Wheel.



Same as used on all speedway cars. Flexible spider protects the driver in mishaps. Used commercially, it prevents fatigue caused by vibration of wheels and absorbs shocks and jars.

No. 259—Nickel plated, £7/14/6

Hand-Pressure Pump.



For gas and oil tanks. With 3-way valve.

No. 266—Brass finish £2/9/6
 No. 267—Nickel finish £2/17/6
 No. 268—Air gauge, 10 lbs. £1/3/2
 No. 269—Oil gauge, 75 lbs. £1/3/2

Fronty Underslung Parts (Front).



Latest, best method of underslugging front end of racing cars. Take out all side sway, keep spring over the axle. Made of high-grade steel forgings.

No. 250—Per set £6/3/6

Don't forget the Frontenac equipment doubles the power of your Ford truck and gives you more speed in your speedster than you can use on the road.