

FERGUSON TRACTOR

MODEL: (PETROL ENGINE) TYPE TE-A20. YEAR: 1954.

ENGINE

Bore, 85 mm. Stroke, 92 mm. Capacity, 2,088 c.c. (127.4 cu. in.).
Firing order, 1-3-4-2. Compression ratio, 6 to 1.
Piston clearances: Top, .0030-.0037 in. Bottom, .0015-.0022 in.
Oversize for reboring: 1st, -.33665 in. + .0005 in. Maximum ring gap, .015 in. all rings
- .00025 in.
Piston rings—Type and No.: 2 compression, 1 scraper above gudgeon pin, 1 scraper below
gudgeon pin.
Valve-seating angle, 45°.
Valve timing: Inlet opens at T.D.C. Closes at 40° A.B.D.C.
Exhaust opens at 40° B.B.D.C. Closes at T.D.C.
Valve clearances: Inlet, .010 in. (cold).
Exhaust, .012 in. (cold).
T.D.C. indicated by flywheel marked. Located externally by tommy bar inserted through
hole in crankcase into corresponding hole in flywheel for Nos. 1 and 4 pistons.
Crankshaft diameters: Main, 2.4795-2.4790 in. Crankpin, 2.0861-2.0866 in.
Crankshaft clearances: Main, .0025-.0010 in. Crankpin, .0024-.0006 in.
Crankshaft side float: Main, .0117-.0048 in. Crankpin, .0115-.0075 in.
Regrind: Minimum diameter, main journals and crankpins, .040 in.

CARBURETTOR

Type: Zenith 24T-2.
Settings: Choke, 17 mm. Main, 100.
Air correction (inter-con.), 1 mm. Air jet, 2.0 mm.
drilled. Needle seating, 2.0 mm.
Progression, 120 (2 holes). Slow-running jet, 60.

CLUTCH

Type: Single dry plate, 9 in. effective diameter.

FRONT AXLE AND STEERING

Camber, 2° 1' 42". Castor angle, 5°. King-pin angle, 9° 0' 7".
Toe-in, 0- $\frac{1}{8}$ in. Track: F, 48-80 in. } Adjustable in approx.
Wheelbase, 5 ft. 10 in. B, 48-76 in. } 4-in. steps.

TYRES

Size, Front, 4 × 19 in. Pressures: F, 26 lb. sq. in. B, 12 lb. sq. in.
Rear, 10 × 28 in.

BACK AXLE

Type: Spiral bevel final drive, semi-floating shafts.
Adjustments: Bevel pinion } Shims.
Differential bearing }
End play, .008-.010 in. Lash, .004-.018 in.
(half-shafts). (crown wheel and pinion).

LUBRICATION SYSTEM

Oil sump capacity, 12 pints. Transmission, 5 gallons (includes hydraulic
oil pressure, 40-60 lb. sq. in. system and rear axle).

RADIATOR AND COOLING SYSTEM

Capacity, 15 pints.

ELECTRICAL SYSTEM

Voltage, 12. Battery, 38 ampere-hour 7-plate unit.
Charging system, dynamo, C.V.C. Distributor rotation, clockwise viewed from
Contact-breaker gap, .014-.016 in. driving end.
Spark plug, 14 mm. Gap, .030-.032 in.
Ignition timing, 1° before T.D.C. (static setting).

FERGUSON TRACTOR

MODEL: (PETROL ENGINE) TYPE TE-A20. YEAR: 1956-57.

ENGINE

Bore, 85 mm. Stroke, 92 mm. Capacity, 2,088 c.c. (127.4 cu. in.).
Firing order, 1-3-4-2. Compression ratio, 6 to 1.
Piston clearances: Top, .0030-.0037 in. Bottom, .0015-.0022 in.
Oversize for reboring: 1st, - .33665 in. + .0005 in. Maximum ring gap, .015 in. all rings.
- .00025 in.
Piston rings—Type and No.: 2 compression, 1 scraper above gudgeon pin, 1 scraper below gudgeon pin.
Valve-seating angle, 45°.
Valve timing: Inlet opens at T.D.C. Closes at 40° A.B.D.C.
Exhaust opens at 40° B.B.D.C. Closes at T.D.C.
Valve clearances: Inlet, .010 in. (cold).
Exhaust, .012 in. (cold).
T.D.C. indicated by flywheel marked. Located externally by tommy bar inserted through hole in crankcase into corresponding hole in flywheel for Nos. 1 and 4 pistons.
Crankshaft diameters: Main, 2.4795-2.4790 in. Crankpin, 2.0861-2.0866 in.
Crankshaft clearances: Main, .0025-.0010 in. Crankpin, .0024-.0006 in.
Crankshaft side float: Main, .0117-.0048 in. Crankpin, .0115-.0075 in.
Regrind: Minimum diameter, main journals and crankpins, .040 in.

CARBURETTOR

Type: Zenith 28G.
Settings: Choke, 17 mm. Main, 105.
Air correction (inter-con.), 1 mm. Air jet, 2.0 mm.
drilled. Needle seating, 2.0 mm.
Progression, 120 (2 holes). Slow-running jet, 60.

CLUTCH

Type: Single dry plate, 9 in. effective diameter.

FRONT AXLE AND STEERING

Camber, 2° 1' 42". Castor angle, 5°. King-pin angle, 9° 0' 7".
Toe-in, 0- $\frac{1}{8}$ in. Track: F, 48-80 in. } Adjustable in approx.
Wheelbase, 5 ft. 10 in. B, 48-76 in. } 4-in steps.

TYRES

Size, Front, 4 × 19 in. Pressures: F, 26 lb. sq. in. B, 12 lb. sq. in.
Rear, 10 × 28 in.

BACK AXLE

Type: Spiral bevel final drive, semi-floating shafts.
Adjustments: Bevel pinion, shims.
Differential bearing, shims.
End play, .008-.010 in. Lash, .004-.018 in.
(half-shafts). (crown wheel and pinion).

LUBRICATION SYSTEM

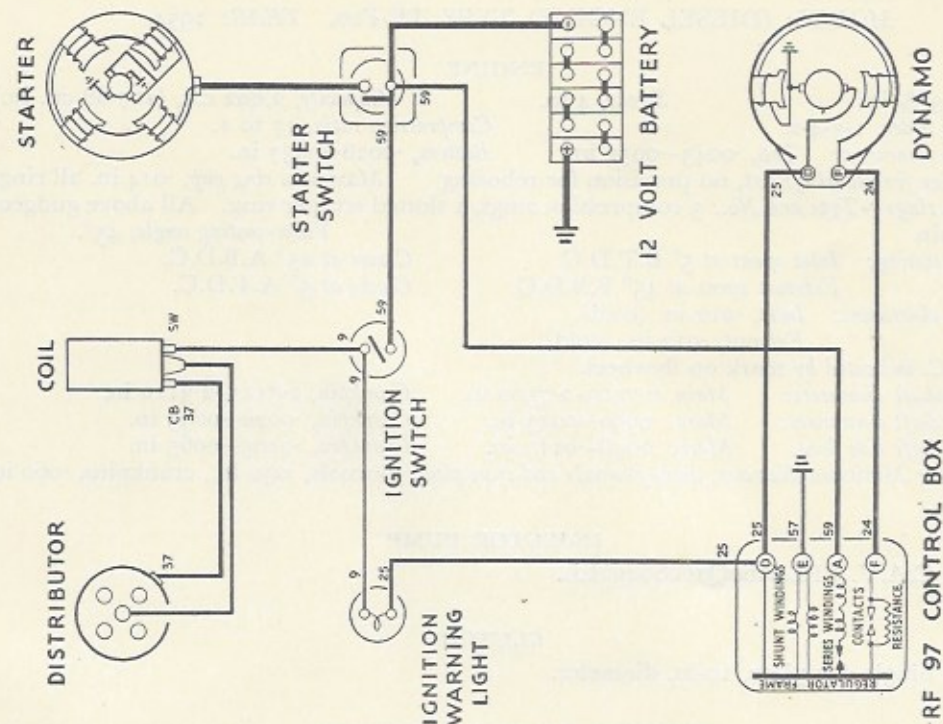
Oil sump capacity, 12 pints. Transmission, 5 gallons (includes hydraulic system and rear axle).
Oil pressure, 40-60 lb. sq. in.

RADIATOR AND COOLING SYSTEM

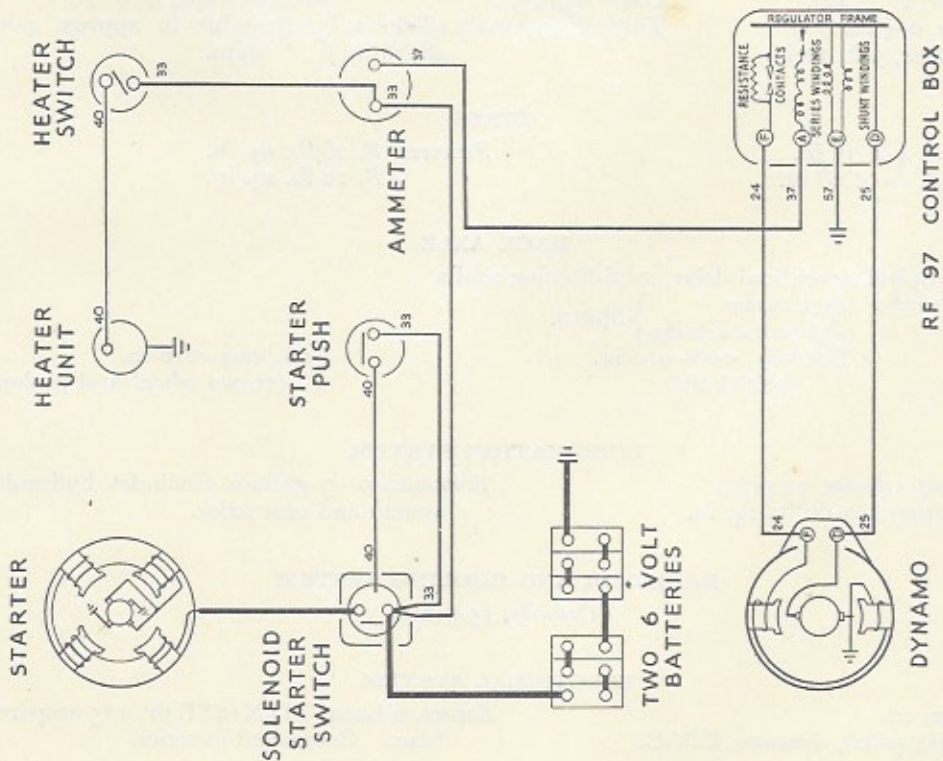
Capacity, 15 pints.

ELECTRICAL SYSTEM

Voltage, 12. Battery, 38 ampere-hour 7-plate unit.
Charging system, dynamo, C.V.C. Distributor rotation, clockwise viewed from driving end.
Contact-breaker gap, .014-.016 in. Gap, .030-.032 in.
Spark plug, 14 mm.
Ignition timing, 1° before T.D.C. (static setting).



Fergusson Petrol Engine Tractor TEF-20.



Fergusson Diesel Engine Tractor TEF-20.

FERGUSON TRACTOR

MODEL: (DIESEL ENGINE) TYPE TE-F20. YEAR: 1954.

ENGINE

Bore, $3\frac{3}{16}$ in. Stroke, 4 in. Capacity, 2,092 c.c. (127.68 cu. in.).
Firing order, 1-3-4-2. Compression ratio, 17 to 1.
Piston clearances: Top, .0043-.0052 in. Bottom, .0028-.0037 in.
Oversize for reboring: 1st, no provision for reboring Maximum ring gap, .014 in. all rings.
Piston rings—Type and No.: 3 compression rings, 1 slotted scraper ring. All above gudgeon pin. Valve-seating angle, 45° .
Valve timing: Inlet opens at 5° B.T.D.C. Closes at 25° A.B.D.C.
Exhaust opens at 45° B.B.D.C. Closes at 5° A.T.D.C.
Valve clearances: Inlet, .012 in. (cold). Exhaust, .012 in. (cold).
T.D.C. indicated by mark on flywheel.
Crankshaft diameters: Main, 2.7505-2.7500 in. Crankpin, 2.3115-2.3110 in.
Crankshaft clearances: Main, .0050-.0025 in. Crankpin, .0020-.0035 in.
Crankshaft side float: Main, .0048-.0117 in. Crankpin, .0105-.0065 in.
Regrind: Minimum diameter, main journals and crankpins: journals, .040 in., crankpins, .060 in.

INJECTOR PUMP

Type: C.A.V. BPE4A60Q120S6292EL.

CLUTCH

Type: Single dry plate, 10-in. diameter.

FRONT AXLE AND STEERING

Camber, $2^{\circ} 1' 42''$. Castor angle, 5° . King-pin angle, $9^{\circ} 0' 7''$.
Toe-in, $0\frac{1}{8}$ in. Track: F (normal) 48-80 in. } Adjustable in approx. 4-in.
Wheelbase, 5 ft. 10 in. 48-76 in. } steps.

TYRES

Size: F, 4 x 19 in. Pressures: F, 26 lb. sq. in.
B, 10 x 28 in. B, 12 lb. sq. in.

BACK AXLE

Type: Spiral bevel final drive, semi-floating shafts.

Adjustments: Bevel pinion } Shims.
Differential bearing }
End play, .008-.010 in. (half-shafts). Lash, .004-.018 in. (crown wheel and pinion)

LUBRICATION SYSTEM

Oil sump capacity, 12 pints. Transmission, 5 gallons (includes hydraulic system and rear axle).
Oil pressure, 40-60 lb. sq. in.

RADIATOR AND COOLING SYSTEM

Capacity, 15 pints.

ELECTRICAL SYSTEM

Voltage, 12. Battery, 2 Lucas T/TX19TE 6v. 115 ampere-hour. Connected in series.
Charging system, dynamo, C.V.C.

FERGUSON TRACTOR

MODEL: (DIESEL ENGINE) TYPE TE-F20. YEAR: 1956-57.

ENGINE

Bore, $3\frac{3}{16}$ in. Stroke, 4 in. Capacity, 2,092 c.c. (127.68 cu. in.).
Firing order, 1-3-4-2. Compression ratio, 17 to 1.
Piston clearances: Top, .0043-.0052 in. Bottom, .0028-.0037 in.
Oversize for reboring: 1st, no provision for reboring. Maximum ring gap, .014 in. all rings.
Piston rings—Type and No.: 3 compression rings, 1 slotted scraper ring. All above gudgeon pin. Valve-seating angle, 45° .
Valve timing: Inlet opens at 5° B.T.D.C. Closes at 25° A.B.D.C.
Exhaust opens at 45° B.B.D.C. Closes at 5° A.T.D.C.
Valve clearances: Inlet, .012 in. (cold). Exhaust, .012 in. (cold).
T.D.C. indicated by mark on flywheel.
Crankshaft diameters: Main, 2.7505-2.7500 in. Crankpin, 2.3115-2.3110 in.
Crankshaft clearances: Main, .0050-.0035 in. Crankpin, .0020-.0035 in.
Crankshaft side float: Main, .0048-.0117 in. Crankpin, .0105-.0065 in.
Regrind: Minimum diameter, main journals and crankpins, journals, .040 in., crankpins, .060 in.

INJECTOR PUMP

Type: C.A.V. BPE4A60Q120S6402EL.

CLUTCH

Type: Single dry plate, 10 in. diameter.

FRONT AXLE AND STEERING

Camber, $2^\circ 1' 42''$. Castor angle, 5° . King-pin angle, $9^\circ 0' 7''$.
Toe-in, $0-\frac{1}{8}$ in. Track: F, (normal) 48-80 in. } Adjustable in approx. 4-in.
Wheelbase, 5 ft. 10 in. 48-76 in. } steps.

TYRES

Size: F, 4×19 in. Pressures: F, 26 lb. sq. in.
B, 10×28 in. B, 12 lb. sq. in.

BACK AXLE

Type: Spiral bevel final drive, semi-floating shafts.
Adjustments: Bevel pinion, shims.
Differential bearing, shims.
End play, .008-.010 in. (half-shafts). Lash, .004-.018 in. (crown wheel and pinion).

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Oil sump capacity, 12 pints. Transmission, 5 gallons (includes hydraulic system and rear axle).
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Capacity, 15 pints.

ELECTRICAL SYSTEM

Voltage, 12. Battery, 2 Lucas T/TX19TE 6v. 115 ampere-hour. Connected in series.