OPERATOR'S MANUAL

FiatTrattori

ROAD

805C

SPARES

Whenever spares are required, it is essential that only genuine FIAT parts should be fitted.

When ordering please state (See page 3) :

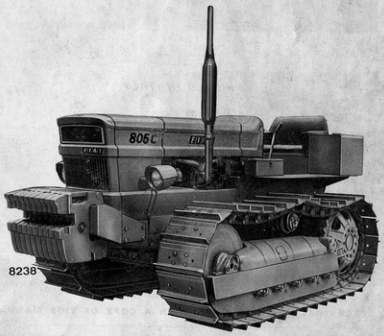
- *Tractor Model and Frame Number*
- *Engine Type and Number*
- *Part Number*

CONTENTS

FiatTrattori

FIAT

805 C



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Operation - Maintenance - Specification

FIAT TRATTORI S.p.A. — SERVIZIO ASSISTENZA TECNICA E RICAMBI

1st EDITION — Print No. **603.04.593** — VII-1975 — 500

PRINTED IN ITALY

EACH TRACTOR IS SUPPLIED WITH A COPY OF THIS MANUAL

The descriptions and illustrations appearing in this manual are not binding. Fiat Trattori reserve the right — while retaining the basic features of the model herein described and illustrated — to make at any time, and without necessarily bringing this manual up-to-date, any alteration to units, parts or accessories, deemed expedient for any technical, manufacturing or commercial reason.

IMPORTANT

The Imperial system measures are given merely for Customer's convenience and, though the closest approximation is sought, they are sometimes rounded off for practical reasons. It must therefore be understood that in case of any discrepancy the metric units are the only valid reference.

IDENTIFICATION DATA

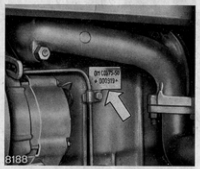


Fig. 1 - Engine Type and Number

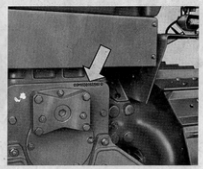


Fig. 2 - Frame Type and Number

Fig. 3 - Identification Data Plate

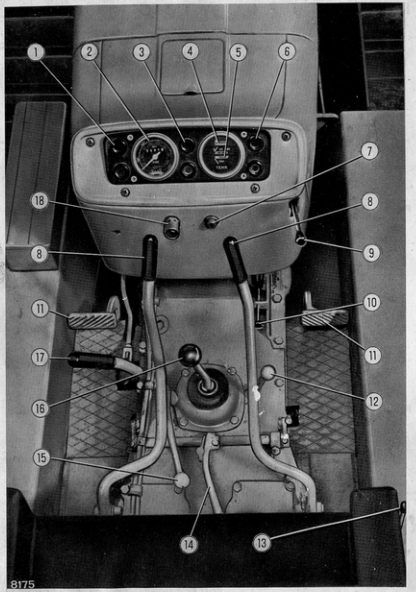


Fig. 4 - Controls and Instruments

CONTROLS AND INSTRUMENTS

Numerical sequence of controls and instruments refers to Fig. 4.

1 Alternator Warning Light (Red)

Should go out upon starting. If it remains on with engine running, stop and check voltage regulator fuse and warning light relay fuse (See page 21).

If trouble persists contact skilled servicemen.

2 Proofmeter (Registers engine rpm and the number of hours the tractor has worked). The instrument pointer indicates the engine rpm.

The hour recorder is located on centre of dial and is a 5-digit totalizer unit. The figures on black background indicate full hours while the last figure on red background indicates tenths of an hour.

3 Side Light Warning Light (Green)

4 Fuel Gauge

The pointer shifts into the red sector when the supply of fuel in the main tank is less than 20 litres ($4^2/_5$ Imp. Gall.).

In this case, to increase fuel availability (48 litres more - $10^1/_2$ Imp. Gall) open cock (**6**, Fig. 8) of additional tank (7).

IMPORTANT - Close the cock of additional tank when refilling the two tanks and open only when the content in the main tank is less than half; this to avoid fuel coming out from additional tank plug.

5 Water Temperature Gauge

Green Sector = Normal operating temperature

White Sector = Insufficient temperature

Red Sector = Excessive temperature

Should the temperature not be normal take corrective action. (See the accompanying booklet « You and Your Tractor »).

If necessary, contact skilled servicemen.

6 Oil Pressure Warning Light (Red)

Goes out upon reaching normal operating pressure. If not, stop the engine and look for the cause of the trouble. Occasionally it may light up when the engine is hot and runs at idling speed.

7 Lock Switch. See page 9.

8 Steering Control Levers. By pulling either the right or left steering clutch control lever the track on the same side tends to stop and the tractor turns.

9 Hand Throttle Lever

— Up = Slow running speed

— Down = Maximum speed

10 Engine Stop Control

— Forward = For engine starting

— Pulled out, backward = Engine stopping (fuel delivery is cut off)

11 Brake Pedals. The two pedals, depressed at the same time, brake both tracks. Instead, by braking only one track, after releasing the clutch at the same time, the tractor turns more sharply.

12 P.T.O. and D.T.O. Control Lever

— Forward = P.T.O. and D.T.O. out

— Backward = P.T.O. and D.T.O. in

With engine running, before moving the lever, release the master clutch and wait for a minute.

13 Hydraulic Lift Operation Selector Lever

14 Handbrake. Acts on the brake of both tracks, and should be used to stop the tractor when parking.

To brake, depress both pedals and pull the lever upward. To release, free the stop and move the lever downward.

15 Reduction Box Lever. See page 11.

16 Gearbox Lever. See page 11.

17 Master Clutch Control Lever

— Forward = In

— Backward = Out

IMPORTANT - When engaging the clutch always push lever to full travel end.

18 Starter Switch. The switch is operative only when lock switch **7** is in one of positions **1** - **2** - **3** - **4** (See Fig. 5).

OPERATION

STARTING THE ENGINE

1 Make sure the gear lever is in neutral and master clutch is disengaged.

2 Set the hand throttle lever half open.

3 If the tractor was inactive for long or if you are attempting the first cold start, actuate about twenty times the fuel pump priming lever. (See Fig. 6).

4 Insert the key in the lock switch and turn to position **1** (See Fig. 5).

5 Take control **10** in (See Fig. 4) and depress starter switch. As soon as engine fires, release the switch.

When starting under cold weather conditions, shield the radiator with suitable means to allow the coolant to reach normal operating temperature in a short time. Then remove protection.

WARNING - With engine running, leave the lock switch key in one of positions **1 - 2 - 3 - 4** (See Fig. 5) : this will allow battery recharging and the operation of the fuel gauge, water temperature gauge and panel warning lights.

STARTING THE TRACTOR

1 Make sure that master clutch is released (lever backward) and move gear and reduction levers to the desired gear speed (See Fig. 7).

2 Accelerate engine as required.

3 Engage the master clutch ; to do this, push lever forward slowly until tractor begins to move and then decidedly to end of stroke.

Fig. 5 - Lock Switch

0 No circuit energized (Key removable)

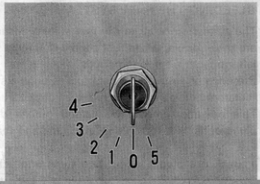
1 Engine starting circuit energized; instruments and warning lights ON

2 Same as **1** ; plus: Side/Rear, number plate and rear flood lights

3 Same as **2** plus: Headlamp dipped beams

4 Same as **2** plus: Headlamp main beams

5 Side/Rear, number plate and



NOTES ON BATTERY CHARGING SYSTEM

To prevent damages to alternator and regulator, follow these rules :

— If the tractor battery **is partially discharged** and engine is therefore started by a stand-by battery, the connections to the tractor battery must be made by pairing the same signs (plus with plus, minus with minus). This rule should be followed also when recharging the battery with external means.

— If the tractor **is without battery** and the engine is therefore started by means of a stand-by battery, or by towing, it will be necessary to first disconnect the cable of blade plug **67** at alternator and keep it disconnected throughout the period of engine operation.

— Never run the engine with alternator terminal **30** disconnected from its cables.

OPERATION

STARTING THE ENGINE

1 Make sure the gear lever is in neutral and master clutch is disengaged.

2 Set the hand throttle lever half open.

3 If the tractor was inactive for long or if you are attempting the first

Fig. 5 - Lock Switch

0 No circuit energized (Key removable)

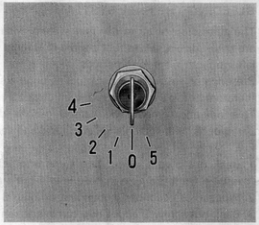
1 Engine starting circuit energized; instruments and warning lights ON

2 Same as **1**; plus: Side/Rear, number plate and rear flood lights

3 Same as **2**, plus: Headlamp dipped beams

4 Same as **2**, plus: Headlamp main beams

5 Side/Rear, number plate and rear flood lights (Key removable)



STOPPING THE TRACTOR

1 Slow down engine speed.

2 Declutch (master clutch lever backward) and move gear lever to neutral.

If tractor is on a slope, apply the brakes by pressing both pedals. As tractor stops, pull the brake locking hand lever.

WARNING - During engine stop-overs with engine running, do not forget to shift gearbox into neutral to prevent clutch overheating.

STOPPING THE ENGINE

Pull control **10** fully out (See Fig. 4). Once the engine has stopped turn lock switch key to position **0** (or position **5** if lights are needed).

IMPORTANT - When the tractor must be left inactive for more than one month it will be necessary to add some preservative oil to the fuel in tank, approximately half an hour before turning off the engine the last time: this will prevent harmful oxidations inside the injection pump during the inactivity period (see the accompanying booklet « You and Your Tractor »).

BLEEDING THE FUEL SYSTEM

The admission of air in the fuel system occurs when filters and/or lines are taken down, when fuel supply in tank is used up or when tractor is left inoperative for long periods.

Presence of air in the system makes engine starting difficult and it must therefore be bled from the fuel feed circuit.

This operation should be carried out as described in the following paragraphs with replenished fuel tank and leaving the cock open (See Fig. 6.)

1 Back out plug **1** about two turns and actuate lever **4** until the fuel issuing from the hole in plug is without air bubbles. Screw in plug **1**.
2 Proceed as described above first on plug **6** then or screw **5**.
3 Back out screw **2** about two turns, slacken fully the three connections **3** and crank the engine with the starter motor until fuel without air bubbles issues from the lines.
Screw back connections **3** and leave screw **2** undisturbed.
4 Finally start the engine and once fuel issuing from screw **2** is without air bubbles, tighten in the screw.

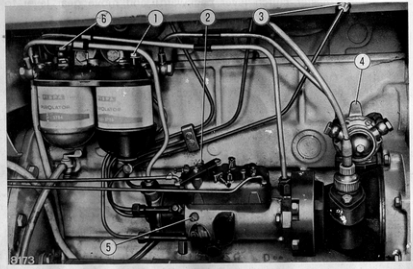


Fig. 6 - Bleeding the Fuel System

1 First fuel filter bleeder plug - **2** Injection pump return line bleeder screw - **3** Injector fittings - **4** Fuel pump lever - **5** Hydraulic head bleeder screw - **6** Second fuel filter bleeder plug.

GEARBOX AND REDUCTION BOX

The tractor is provided with two gear ranges:

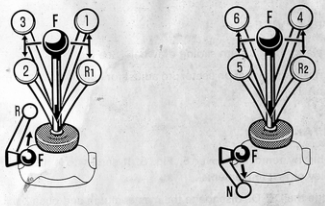
— **Reduction gears** (1st, 2nd, 3rd and Low reverse). Fig. 7 A.

— **Normal gears** (4th, 5th, 6th and High reverse). Fig. 7 B.

To operate the reduction box, disengage the master clutch and move the reduction box lever backward to obtain normal gears and forward to obtain reduction gears.

To engage any gear in the same range, disengage the master clutch and operate gearbox lever.

IMPORTANT - When disengaging the master clutch, move the lever to end of stroke in order to operate gearbox drive shaft brake and facilitate engagement. This is particularly important under cold weather conditions and during the first minutes of operation, to avoid clutch plates from being driven because of the high oil viscosity.



A - Reduction Gears

B - Normal Gears

Fig. 7 - Gearbox and Reduction Box Levers

F Neutral - **R** Reduction gears - **N** Normal gears - **R1** Low reverse - **R2** High reverse

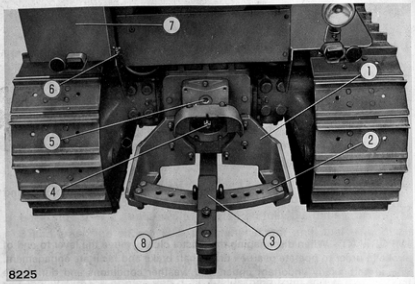


Fig. 8 - Towing Device, D.T.O. and P.T.O.

1 Support with adjustment hole - **2** Drawbar sector - **3** Drawbar - **4** P.T.O. shaft (optional) - **5** D.T.O. plug - **6** Additional tank cock - **7** Additional tank - **8** Drawbar pin retaining plate.

TOWING DEVICE

Adjustable for height with sliding drawbar (See Fig. 8).

To adjust, slide drawbar on sector; to adjust for height move the mounting of support **1**.

DRIVE TAKE-OFF

Accessible by removing cover **5**, Fig. 8. It serves to operate either the belt pulley or fast implements.

To engage the D.T.O., disengage the master clutch and push back control lever **12**, Fig. 4, and release the clutch.

Speed : same as engine.

Direction of rotation (as seen from rear) : anti-clockwise.

OPTIONS

POWER TAKE-OFF

Can be fitted in place of rear transmission cover. Before removing the cover drain the oil or raise the tractor from the rear to prevent oil from outflowing. Control is the same as for D.T.O.

The P.T.O. may operate either with tractor stationary (gearbox in neutral) or moving. In the latter case to stop the tractor momentarily without stopping the P.T.O. it is sufficient to disengage both steering clutches.

Data

— Standard speed	540 rpm
— Corresponding engine speed	1,728 rpm
— Speed with engine at max. rated speed (2100 rpm)	656 rpm
— Splined shaft diameter	1 3/8"
— Direction of rotation	Clockwise

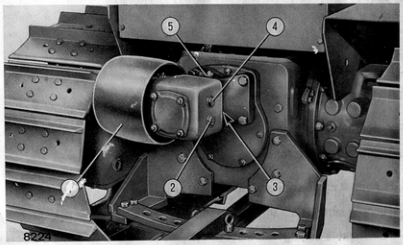


Fig. 9 - Belt Pulley

1 Pulley - **2** Oil inspection plug - **3** Oil drain plug - **4** Oil filler plug - **5** Vent

BELT PULLEY

Can be fitted to either rear transmission cover or P.T.O. case; remove first plug **5**, Fig. 8.

The belt pulley can be fitted either facing to the right or to the left according to the desired direction of rotation.

In both cases, vent **5**, Fig. 9, must be positioned at the top and oil drain plug **3** at the bottom.

Control is the same as for D.T.O. (Page 12).

Data

— Pulley dia. . . . . 280 mm (11 in) or 320 mm (12.6 in)

— Face width . . . . . 175 mm (6.9 in)

— Rotational speed with engine at max. rated speed (2,100 rpm) . . . . . 1,260 rpm

— Corresponding belt speed { dia. 280 mm (11 in) . . . . 18.5 m/sec. dia. 320 mm (12.6 in) . . . 21.1 m/sec.

THREE-POINT LINKAGE (2nd and 3rd Category)

Reference is made to the accompanying booklet « You and Your Tractor ».

In addition note the following (See Fig. 10).

Lift rods 3 can be adjusted as follows:

— Length setting: act on the threaded sleeves.

— Extendable setting: Connect lower pins to slots **C** to allow a certain movement of lower links **6**. This condition is particularly useful when extra-wide implements are used (harrows, cultivators).

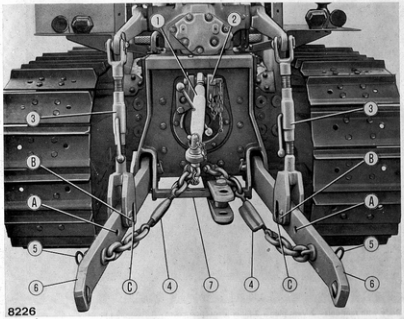


Fig. 10 - Three-point Linkage (2nd and 3rd Category)

1 Top link with adjustment sleeve - **2** Pin - **3** Adjustable lift rods - **4** Internal check chain with adjustment sleeve - **5** Snap pins - **6** Lower links - **7** Drawbar sector, not adjustable for height.

A and **B** = Mounting holes of lift rods - **C** = Slots of lift rods.

NOTE - To allow the use of 2nd category implements, the three-point linkage is provided with two bushes having an inner diameter of **25.5** mm (1 in), to be inserted inside the spherical bushes on lower link ends.

HYDRAULIC LIFT

It consists of the lift unit — which includes the ram and controls (see Fig 11) — an engine-driven gear pump and the oil lines.

The hydraulic lift can operate on position-control or floating, the latter being obtained by keeping the control lever fully down.

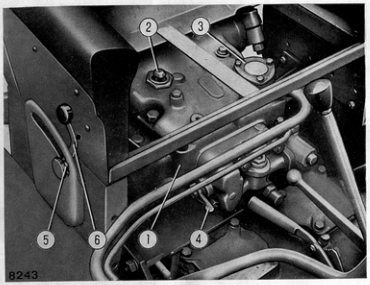


Fig. 11 - Hydraulic Lift

1 Body with ram unit - **2** Vent plug - **3** Filter inspection cover - **4** Response sensitivity adjustment lever (Rotated towards « + » = sensitivity increases - rotated towards « — » = sensitivity decreases) - **5** Control lever stop - **6** Control lever.

The floating operation serves for implements which need to be **completely independent** of the lift during work (see the accompanying booklet « You and Your Tractor »).

The lift actuates the three-point linkage unit illustrated in Fig. 10.

Data

— Pump speed, with engine at 2,100 rpm	2,428 rpm
— Corresponding output	27.6 litre/min (6 Imp. Gal/min)
— Pressure relief valve setting	150 kg/cm² (2,133 psi)

HYDRAULIC REMOTE CONTROL SYSTEM

This system, located on R.H. wing (See Fig. 12) consists of:

— oil reservoir

— pump inlet filter, integral with reservoir

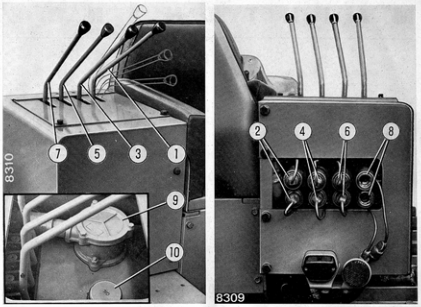


Fig. 12 - Hydraulic Remote Control System

1 and **2**, **3** and **4**, **5** and **6**, **7** and **8**. Control lever and quick-release female couplings for 1st, 2nd, 3rd and 4th shuttle of valve block, respectively - **9** Pump inlet filter - **10** Oil filler plug with dipstick and vent.

Note - In addition to the central position (neutral) lever **3**, **5** and **7** can take two more positions: backward (lifting) and forward (lowering). Lever 1 of the first shuttle valve can take a fourth position; all down (**floating**), retained by a suitable detent.
All levers are self-returning to the neutral position, leaving the implement in the position taken. Bring lever 1 to the rest position to release floating condition.

— 2, 3 or 4 shuttle valve block, with female couplings for double-acting cylinders.

— engine-driven gear-type pump feeding the hydraulic circuit.

Data

— Pump speed, with engine at 2,100 rpm	2,100 rpm
— Output	70 litre/min (15½ Imp. Gal/min)
— Pressure relief valve setting	115 kg/cm² (1635 psi)

— 1/2" AEROQUIP quick-release female couplings for 3/4" pipes.

NOTE - These female quick release couplings can be coupled with male couplings of any make, provided the same dimensions are retained.

MAINTENANCE

SERVICING SCHEDULE

For a detailed description of each operation see the illustrated Servicing Chart inserted in back cover.

EVERY **10** HOURS

1. Check oil level in engine sump
2. Check water level in radiator
3. Check oil level in master clutch sump

EVERY **50** HOURS

4. Lubricate leaf spring pivot pin (1 lubricator)
5. Lubricate track frame swing bar supports (4 lubricators)
6. Lubricate steering clutch lever articulations and control sleeves (4 lubricators)
7. Drain condensate from first fuel filter
8. Check oil level and dust sediment in air cleaner. Clean centre tube
9. Check oil level in belt pulley

EVERY **200** HOURS

10. Replace the engine oil
11. Check tension of fan and alternator belt
12. Wash in kerosene the lower element of air cleaner
13. Clean the filter in fuel pump
14. Wash in kerosene the filter and check oil level in the remote control hydraulic system

15. Replace the first fuel filter cartridge
16. Check electrolyte level in battery
17. Drain off deposits from steering clutches
18. Check oil level in hydraulic lift, and wash the filter in kerosene

EVERY **400** HOURS

19. Replace engine oil filter
20. Wash in kerosene engine breather
21. Disassemble air cleaner and wash all parts
22. Check oil level in transmission case
23. Check oil level in final drive cases
24. Check master clutch setting (load applied to the handle: 18 to 20 Kg or 40 to 43 lb)
25. Check brake pedal travel (40 to 50 mm or $1\frac{1}{2}$ to 2 in)
26. Wash in kerosene master clutch inlet filter
27. Check steering clutch control lever free travel
28. Check track tension (normal sag: 30 to 40 mm or $1\frac{1}{2}$ to 2 in)

EVERY **800** HOURS

29. Have valve-to-rocker clearance checked (inlet valves = .25 mm or .010 in; exhaust valve = .30 mm or .012 in). Can be adjusted with engine either hot or cold
30. Replace the second fuel filter cartridge
31. Drain deposits from fuel tanks
32. Renew the oil in master clutch sump
33. Remove injectors and have them checked by a specialized shop (rated pressure 200 $\pm$ 5 kg/cm^2 - 2,845 $\pm$ 71 psi)
34. Change the oil in hydraulic remote control system and wash inlet filter in kerosene
35. Change oil in hydraulic lift system and wash inner filter and vent in kerosene

EVERY **1600** HOURS

36. Flush cooling system
37. Replace oil in transmission case
38. Replace oil in side final drive cases
39. Lubricate track rollers and front idler supports
40. Lubricate track carrier rollers
41. Replace oil in belt pulley case
42. Have the starter motor commutator and brushes checked

FUSES

Six fuses housed in a box and one in a separate holder (See Fig. 13).

All fuses are **8 Amp.**

Protected Circuits

1 = Spare

2 = Fuel gauge, water temperature gauge, oil pressure warning light charging relay

3 = R.H. side light, L.H. rear light, number plate light, side light warning light, panel light

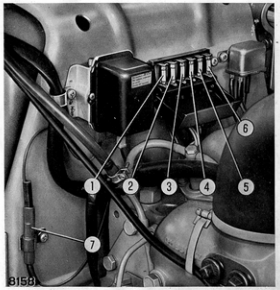


Fig. 13 - Fuses

4 = L.H. side light, R.H. rear light and flood light

5 = Headlamp dipped beams

6 = Headlamp main beams

7 = Voltage regulator

WARNING - Before renewing a blown fuse, locate and rectify the fault.

SPECIFICATION

GENERAL

DIMENSIONS AND WEIGHT

	mm	in
Track	1,350	53 1/8
Wheelbase (sprocket to idler centre distance)	1,830	72
Overall length (with drawbar and front ballasts)	3,720	146 1/2
Overall width	1,750	68 4/5
Overall height (sunk-in track grousers)	1,600	63
Minimum ground clearance (front suspension)	350	13 4/5
	kg	lb
Weight of tractor in working order (with ballasts)	5150	11,355

SPEEDS

Speed (engine running at maximum output rate):	km/h	mph
— 1st gear	2.5	1.6
— 2nd gear	3.6	2.2
— 3rd gear	4.5	2.8
— 4th gear	5.5	3.4
— 5th gear	7.9	4.9
— 6th gear	10.1	6.3
— Low Reverse	2.9	1.8
— High Reverse	6.5	4

ENGINE

4-stroke direct-injection Diesel.

No. of cylinders	4
Bore and stroke	110 x 120 mm (4.330 x 4.724 in)
Capacity	4,562 cm³
Compression ratio	17 to 1
R.P.M. corresponding to max. output under load	2,100

Counter-rotating weights type dynamic balancer.

VALVE GEAR

Overhead valves. Timing data:

— Inlet opens	10° BTDC
— Inlet closes	54° ABDC
— Exhaust opens	54° BBDC
— Exhaust closes	10° ATDC
— Valve clearance (for timing checks)	.25 mm (.010 in)
— Valve clearance (for normal operation) Inlet	.25 mm (.010 in)
— Valve clearance (for normal operation) Exhaust	.30 mm (.012 in)

FUEL SYSTEM

Dual-diaphragm pump.

CAV distributor-type injection pump with centrifugal governor, operating over the entire rpm range; automatic advance variator.

Fuel filtration by gauze strainer in fuel pump and two replaceable-cartridge filters series-mounted on injection pump inlet line. (The first filter is provided with water separator).

Oil bath air cleaner. Centrifugal pre-filter with automatic dust build-up discharge.

Injection pump timing (in the compression stroke beginning of delivery) . . . 18° BTDC

Injection order 1-3-4-2

Injectors with 4-orifice nozzle, calibrated at 200 ± 5 kg/cm² (2,845 ± 71 psi).

LUBRICATION

Forced-feed, by gear-type pump. Oil cleaning: by screen filter on pump intake, and throw away cartridge filter on delivery to engine.

Lubrication pressure with hot engine at max. output rate 5 kg/cm² (71 psi)

COOLING

Water circulation by centrifugal pump.

Upright-pipe type radiator. Fan mounted on water pump shaft.

Water circulation from engine to radiator adjusted by thermostat.

ENGINE STARTING

By electric starter.

POWER TRAIN

MASTER CLUTCH

Dual-plate, oil-cooled by lobe gear pump and full-flow filter. Overcentre engagement, controlled by hand lever. Brake at end of travel to facilitate gear engagement.

GEARBOX

6 speeds forward and 2 reverses.

CENTRAL BEVEL AND SIDE FINAL DRIVES

Bevel gear set in drive body and spur gear set on each driving sprocket.

STEERING

Dry, multi-disc type clutches controlled by hand levers.

Band brakes on steering clutch outer drums, controlled individually by pedals. Brakes locking (parking) controlled by hand lever.

SUSPENSIONS - TRACKS

Track frames provided with five track rollers and one carrier roller each; idler wheels with coil-spring stretcher. Rollers and idler wheels sealed-for-life.

Rear suspension by cross bar supported on track frames through lubricated bushes allowing independent track frame swing.

Front suspension by reinforced transversal leaf spring.

Tracks consisting of 36 links each. Shoe width . . . . . 400 mm (15¾ in)

DRIVE TAKE-OFF

Speed: same as engine. Rotation: anti-clockwise.

TOWING DEVICE

Swinging drawbar and clevis, supported on adjustable-height drawbar sector.

FRONT BALLASTING

10 plates, 30 kg (66 lb) each - total weight 365 kg (805 lb).

ELECTRICAL SYSTEM

VOLTAGE . . . . . 12 V

ALTERNATOR

Max. output, at 2100 engine rpm, approx. . . . . 500 W

Automatic voltage regulator.

BATTERY

12-Volts, with 143 Ah at 20-hour discharge rate.

STARTER MOTOR

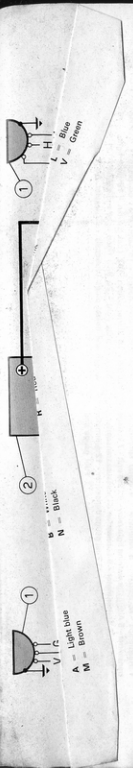
4 HP output; pinion automatically engaged by solenoid.

LIGHTING SYSTEM

— Headlamps with 45/40 W double-filament bulb (high and low beams) and 5 W bulb (parking).
— Rear lamps (5 W bulbs).
— Number plate lamp (5 W bulb).
— Rear flood lamp (35 W bulb) with incorporated switch.

ACCESSORIES

— Side light indicator (5 W bulb).
— Engine oil pressure warning light (5 W bulb).
— Battery charge indicator (5 W bulb).
— Seven 8-Ampere fuses.
— Fuel gauge.
— Engine cooling water temperature gauge.



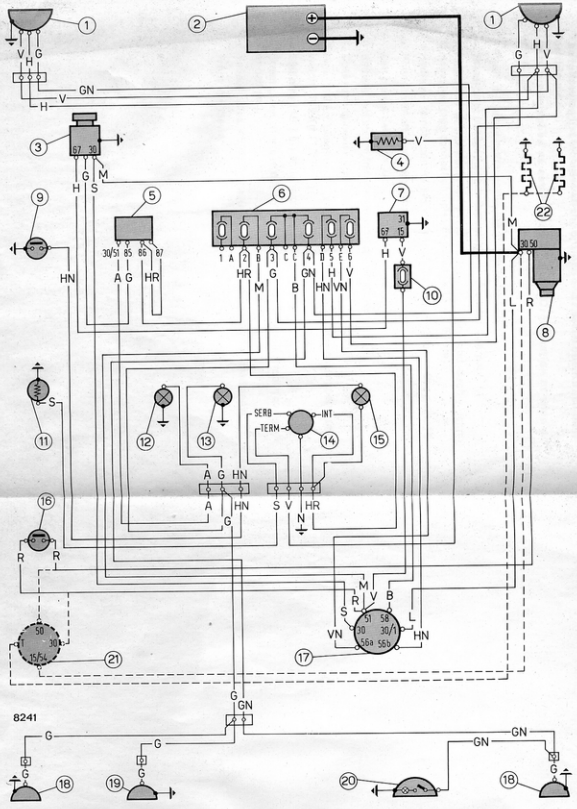


Fig. 14 - Wiring Diagram (12 Volts)

Note - Dotted lines refer to heater plugs (22, optional) and associated relay in replacement of starter button (16).

1 Headlamps - **2** Battery - **3** Alternator - **4** Water temperature transmitter - **5** Alternator warning light relay - **6** Fuse unit - **7** Voltage regulator - **8** Starter motor - **9** Lubrication oil pressure transmitter - **10** Voltage regulator fuse - **11** Fuel gauge transmitter - **12** Alternator warning light - **13** Side light warning light - **14** Fuel gauge and water temperature gauge - **15** Lubrication oil pressure warning light - **16** Starter button - **17** Lock switch - **18** Rear lights - **19** Number plate light - **20** Rear flood light and switch - **21** Starter switch and heater plugs (optional) - **22** Heater plugs (optional).

CABLE COLOUR CODE

A	— Light blue	**B**	— White	**G**	— Yellow	**H**	— Grey	**L**	— Blue
M	— Brown	**N**	— Black	**R**	— Red	**S**	— Pink	**V**	— Green

OPTIONS AND SPECIAL OUTFITS

The following list includes all the options and special outfits available for this model.

Units are supplied as established by Sales Organization at time of order.

— Position-control hydraulic lift. See pages 15 and 16.

— Three-point linkage for 2nd-3rd category implement. See page 14.

— Additional power outlet on hydraulic lift for single- and double-acting cylinders (pipe connection holes threaded to **16 x 1.5 mm**).

— Hydraulic remote control system with 2, 3 or 4 valve blocks. See page 16.

— Power take-off. See page 13.

— Belt pulley. See page 14.

— Radiator net screen for protection from dirt, leaves etc...

— Cold starting device (two heater plugs on inlet pipe. See Fig. 14).

— Front ballast weights (12 cast-iron plates and associated support) total weight **545 kg** (1,201 lb).

— **500 mm** (19.7 in) wide track shoes.

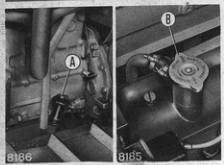
— Street plates (for use during road transfer) and mounting tool (complete or half set).

— Yellow bulbs, 45/40 Watts (main and dipped beams) for headlamps.

— Front tow clevis.

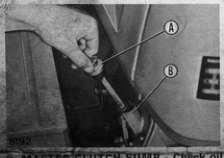
FIAT

Every 10 hours



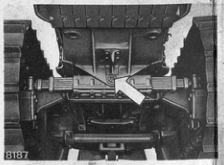
1 **ENGINE SUMP - Check oil level with indicator rod A and if necessary top up through filler B (see Capacities).**

2 **RADIATOR - Check water level which should be at about 30 mm (1 3/16 in) from filler brim.**

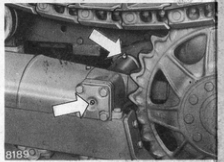


3 **MASTER CLUTCH SUMP - Check oil level with indicator rod A and if necessary top up through filler B (see Capacities).**

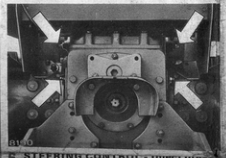
Every 50 hours



4 **FRONT SUSPENSION LEAF SPRING SWING PIVOT - Inject grassofiat G 9 grease.**

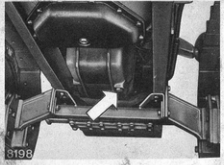


5 **TRACK FRAME SWING BAR SUPPORTS - Inject grassofiat G 9 grease (2 lubricators on either side).**

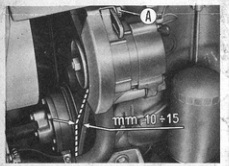


6 **STEERING CONTROL - Inject grassofiat G 9 grease (2 lubricators on either side). Only two shots in rear lubricators.**

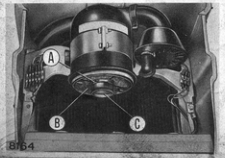
Every 200 hours



10 **ENGINE SUMP - Drain through the bottom plug and refill with new oil (see operation No. 1).**

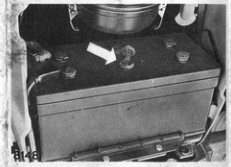


11 **FAN BELT - Check if belt sag is 10 to 15 mm (3/8, to 5/8, in) under a load of 5 to 7 kg (11 to 15 lb). Adjust by slackening nut A.**

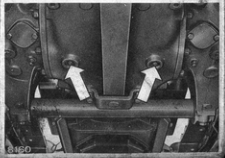


12 **AIR CLEANER - Remove snap ring A, take off filtering pad B and wash in kerosene. Wet pad with oil before reassembly. Clean centre tube C.**

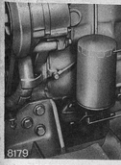
15 **FIRST FUEL FILTER - Undo screw A and replace cartridge B. Then bleed air as described on page 10.**



16 **BATTERY - With engine off, tractor level and battery at rest and cold, check electrolyte level in each cell.**



17 **STEERING CLUTCHES - Drain off any deposit from the two lower plugs.**



19 **ENGINE OIL FILT from plug A, uns renew.**

20 **ENGINE BREATH wash in kerosene refitting.**

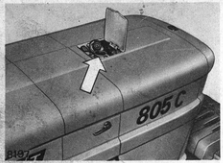
21 **AIR CLEANER nents. Wash filter sion in kerosene pads drip dry and**

FiatTrattori

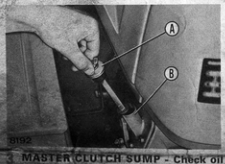
FIAT

Every 10 hours

1 ENGINE SUMP - Check oil level with indicator rod A and if necessary top up through filler B (see Capacities).

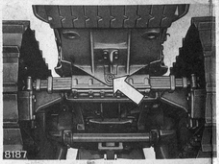


2 RADIATOR - Check water level which should be at about 30 mm ($1^{3}/_{16}$ in) from filler brim.

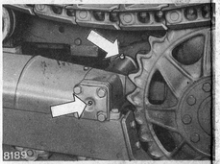


3 MASTER CLUTCH SUMP - Check oil level with indicator rod A and if necessary top up through filler B (see Capacities).

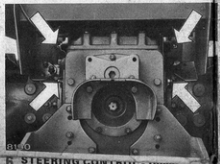
Every 50 hours



4 FRONT SUSPENSION LEAF SPRING SWING PIVOT - Inject grassofiat G 9 grease.

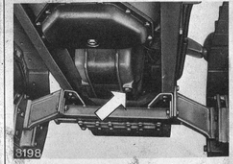


5 TRACK FRAME SWING BAR SUPPORTS - Inject grassofiat G 9 grease (2 lubricators on either side).

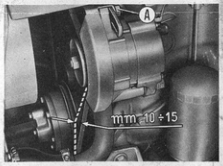


6 STEERING CONTROL - Inject grassofiat G 9 grease (2 lubricators on either side). Only two shots in rear lubricators.

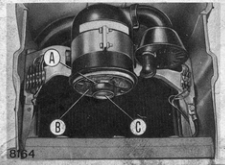
Every 200 hours



10 ENGINE SUMP - Drain through the bottom plug and refill with new oil (see operation No. 1).

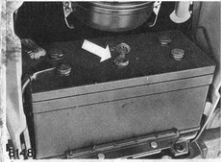


11 FAN BELT - Check if belt sag is 10 to 15 mm ($^{13}/_{32}$ to $^{19}/_{32}$ in) under a load of 5 to 7 kg (11 to 15 lb). Adjust by slackening nut A.

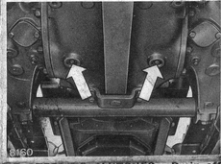


12 AIR CLEANER - Remove snap ring A, take off filtering pad B and wash in kerosene. Wet pad with oil before reassembly. Clean centre tube C.

15 FIRST FUEL FILTER - Undo screw A and replace cartridge B. Then bleed air as described on page 10.



16 BATTERY - With engine off, tractor level and battery at rest and cold check electrolyte level in each cell.

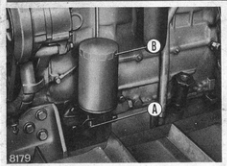


17 STEERING CLUTCHES - Drain off any deposit from the two lower plugs.

805 C MODEL TRACTOR - SERVICING CHART

(Appended to Operator's Manual - Print No. 603.04.593)

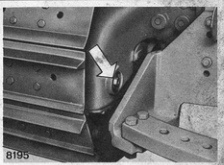
Every 400 hours



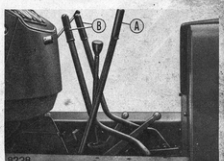
19 ENGINE OIL FILTER - Drain the oil from plug A, unscrew filter B and renew.

20 ENGINE BREATHER - Remove and wash in kerosene. Let it dry before refitting.

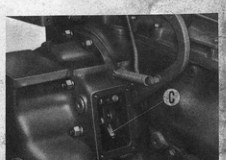
21 AIR CLEANER - Clean all components. Wash filtering pads by immersion in kerosene for 30 minutes. Let pads drip dry and wet with oil.



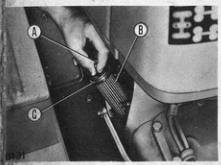
23 SIDE FINAL DRIVES - Check that oil reaches the plug and, if necessary, add through same (use oliofiat AW 90/M oil).



24 MASTER CLUTCH (lever A) - Check clutch setting (see Maintenance Recommendations).

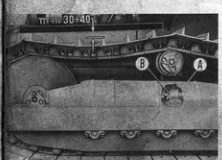


25 BRAKES - Check that the braking stroke is identical for both pedals and is not exceeding 50 mm (2 in); otherwise adjust each pedal as follows:



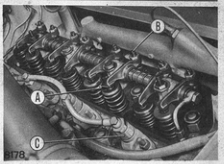
26 MASTER CLUTCH FILTER - Remove the cover on L. H. side of clutch housing, unscrew bolt A, withdraw filter B and wash in kerosene. Air blast, check for breakages and inspect gasket C. Refit the filter and check that oil pump is primed (see Maintenance Recommendations).

27 STEERING CLUTCHES (levers B - see operation No. 24) - Check steering clutch setting (see Maintenance Recommendations).

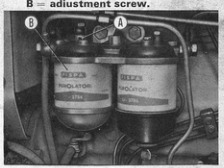


TRACKS - Remove dirt from links and check that each track sag — in the portion between sprocket and carrier roller — is 30 to 40 mm (1 1/8 to 1 1/2 in); otherwise, if greater, remove guard A and screw in nut B as

Every 800 hours



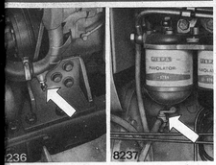
29 ENGINE VALVES - Have valve-to-rocker clearance (A) checked by servicemen: .25 mm (.010 in) inlet and .30 mm (.012 in) exhaust. B = adiustment screw.



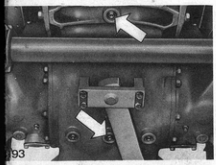
30 SECOND FUEL FILTER - Back out screw A and change cartridge B. Bleed air (page 10) and see also « Maintenance Recommendations ».

31 FUEL TANKS - With tanks almost empty, raise the tractor from the front, remove the plugs and drain out any accumulated deposits.

Every 1600 hours



6 **ENGINE COOLING SYSTEM - Drain water through the cocks, and flush the system.**



7 **DRIVE BODY - Drain through the two lower plugs then refill with fresh oil (see operation No. 22).**

8 **SIDE FINAL DRIVES - Drain from the lower plug (one to each final drive) and refill with new oil (see operation No. 23).**

MAINTENANCE RECOMMENDATIONS

See also the accompanying booklet « You and Your Tractor ».

AIR CLEANER

When working in dusty areas, operation No. 8 must be carried out more frequently; if deposits are remarkably thick the lower filtering pad washing (operation No. 12) and cleaner total cleaning (operation No. 21) must be performed at shorter intervals.

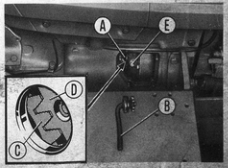
FUEL FILTERS

The second fuel filter change (operation No. 30) must be performed at every 4th renewal of the first fuel filter cartridge (operation No. 15); it is however advisable not to replace both filters at one time and delay the second filter change of 40-50 hours with respect to the first.

During the warranty period the second filter renewal (operation No. 30) may be done by authorized personnel only. The removal of the seals on said filter and on injection pump invalidates FIAT TRATTORI's warranty.

MASTER CLUTCH

To Adjust - With engine stopped, check that the effort necessary to engage the master clutch is 18 to 20 kg or 40 to 44 lb (operation No. 24). When the effort is reduced down to 11 to 12 kg (24 to 26 lb) proceed to adjust as follows:



— Remove the cover on R.H. side of clutch housing.

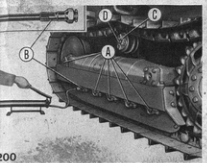
— With the gear lever in neutral, rotate the clutch until hole **A** comes in full view.

— Insert spanner **B** into hole **A**, move toward flywheel to free ringnut **C** from plate **D** and engage ringnut teeth (it is sufficient to overcome the resistance of a spring).

Important - Do not leave the adjustment spanner as the spring behind plate **D** may cause the spanner to be expelled with consequent falling down inside the case. We suggest tieing a cord to the spanner.

— Turn down the spanner a quarter of a turn (approx.) withdraw and check that the effort is as specified; if not, further turn the spanner.

SIDE FINAL DRIVES - Drain from the lower plug (one to each final drive) and refill with new oil (see operation No. 23).



200

TRACK ROLLERS AND IDLERS - Unscrew plugs A (5 to each track); if the oil which issues is clean, the idlers and rollers are correctly lubricated. If, instead, no oil at all issues from plugs or the oil is mixed with water, screw connection B (contained in the tool kit) in place of plug A and then with the barrel pump inject oil until clean oil issues from the grooves on connection B (see Capacities for oil grade). Remove connection B and refit plug A.

TRACK CARRIER ROLLERS - Locate rollers with plug C topmost, then check that oil level reaches plug. Otherwise, inject oil through plug D (see Capacities for oil grade).

BELT PULLEY - Drain from lower plug in pulley body and refill with new oil (see operation No. 9).

STARTER MOTOR - Have commutator and brushes cleaned and checked by skilled servicemen.

Important - Do not leave the adjustment spanner as the spring behind plate **D** may cause the spanner to be expelled with consequent falling down inside the case. We suggest tieing a cord to the spanner.

— Turn down the spanner a quarter of a turn (approx.) withdraw and check that the effort is as specified; if not, further turn the spanner.

— After adjustment, check manually that plate **D** is regularly inserted in ringnut **C**; if not, depress plate **D** and release quickly. Correct match of ringnut teeth with the plate is ensured by reference screw **E** which allow spanner withdrawal only when the correct match is obtained.

— Refit the cover.

To Check Oil Pump Priming - If the master clutch oil pump is unprimed, damages may occur.

Unpriming may be due either to a defective filter seal (on pump inlet) or to inadequate tightening of the filter retaining screw.

Therefore, after filter refitting, or after master clutch oil renewal, make sure the pump is primed.

To do this, remove the cover on R.H. side of clutch housing, start the engine and make sure the oil coming out from flywheel face is atomized.

If the pump is unprimed, remove the filter, fill the filter body with oil, refit the filter, start the engine and check the pump for a correct priming.

STEERING CLUTCHES

When the progressive wear of clutch facings causes the control lever travel to be reduced down to 60 mm (2.36 in) the clutches must be adjusted individually as follows:

— Remove inspection cover.

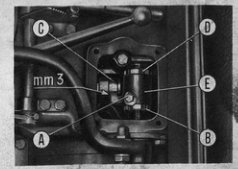
— Remove screw **A**, remove safety plate of ringnut **B** and undo the ringnut three or four turns.

— Engage the steering clutch, push roller **C** toward tractor centreline, so that control forked lever, to which the roller is fixed, makes its complete travel.

— Screw in ringnut **D** until between roller **C** and the flat portion of cam **E** a clearance of 3 mm (.118 in) exists.

— Remove the feeler gauge and lock ringnut **B**.

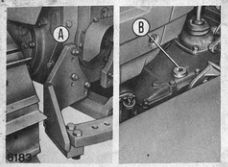
— Refit screw **A**, safety plate and inspection cover.



TRACK IDLERS AND ROLLERS

When tractor is operated on swampy, muddy or sandy ground, operations No. 39-40 must be performed more often (approximately every 400 hours).

21 AIR CLEANER - Clean all components. Wash filtering pads by immersion in kerosene for 30 minutes. Let pads drip dry and wet with oil.



22 DRIVE BODY - Check that oil level reaches plug A; if necessary top up through plug B (use oliofiat AW 90/M oil).

25 BRAKES - Check that the braking stroke is identical for both pedals and is not exceeding 50 mm (2 in), otherwise adjust each pedal as follows:

— Move down the brake hand lever

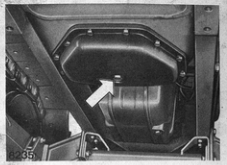
— Remove front cover and screw in nut C (using through the spanner provided) until pedal travel is 40 to 50 mm (1 1/2 to 2 in)

— Refit the cover

TRACKS - Remove dirt from links and check that each track sag — in the portion between sprocket and carrier roller — is 30 to 40 mm (1 1/2 to 1 1/2 in); otherwise, if greater, remove guard A and screw in nut B as required.

8182 8184

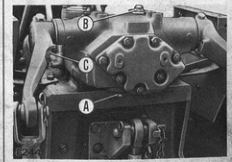
31 FUEL TANKS - With tanks almost empty, raise the tractor from the front, remove the plugs and drain out any accumulated deposits.



32 MASTER CLUTCH SUMP - Drain the oil from lower plug, clean plug and filter (operation no. 26). Renew the oil (operation No. 3). Make sure pump is primed. (See «Maintenance Recommendations»).

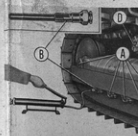
33 INJECTORS - Have injectors C (see operation No. 29) tested by servicemen (calibration 200 ± 5 kg/cm² - 2845 ± 71 psi). To remove disconnect the pipes and remove brackets.

34 HYDRAULIC REMOTE CONTROL SYSTEM (See operation No. 14) - Drain the oil from plug E, wash plug and filter B in kerosene and renew the oil.



35 HYDRAULIC LIFT - Drain oil through plug A. Remove vent B and magnetic plug on flange of pipe C and wash them and inner filter in kerosene. Refill with fresh oil (see operation No. 18).

SIDE FINAL DRIVES the lower plug (one drive) and refill with operation No. 23).



39 TRACK ROLLERS A Unscrew plugs A (5 if the oil which is the idlers and roller lubricated. If, instea issues from plugs or with water, screw (contained in the to of plug A and then pump inject oil until from the grooves or (see Capacities for move connection B a

40 TRACK CARRIER RO rollers with plug C check that oil level Otherwise, inject oil (see Capacities for c

41 BELT PULLEY - Dra plug in pulley body new oil (see operatio

42 STARTER MOTOR tator and brushes checked by skilled se

CAPACITIES

ITEMS	QUANTITY Metric Units	QUANTITY Imp. Units	REFILL
Cooling system	16.5 lt	3 3/4 Gal	Water
Fuel tanks — main	80 lt	17 1/2 »	Diesel fuel, decanted and filtered
Fuel tanks — additional	48 lt	10 1/2 »	
Crankcase (sump, filter and lines)	12.1 kg	11 1/2 Qt	«oliofiat AMBRA 20 W/40» oil for temperatures above 0° C (32° F)
Crankcase (sump only)	11.5 »	11 1/4 »	
Air cleaner	.75 »	1 1/2 Pt	
Hydraulic lift	8 »	7 1/2 Qt	«oliofiat AMBRA 10 W/30» oil for temperatures below 0° C (32° F)
Master clutch	8 »	7 1/2 »	
Hydraulic remote control system	16.5 »	16 1/2 »	
Track rollers and idlers	—	—	«oliofiat AMBRA 20 W/40» oil
Drive body	21 kg	20 1/2 Qt	«oliofiat AW 90/M» oil
Final drives, each	4 »	4	
Belt pulley	.9 »	1 3/4 Pt	
Lubricators	—	—	«grasso fiat G 9» grease

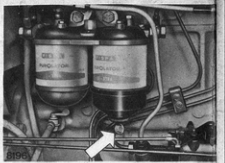
4 MASTER CLUTCH SUMP - Check oil level with indicator rod A and if necessary top up through filler B (see Capacities).

RUNNING IN

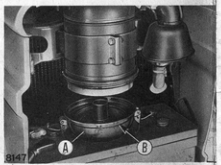
During the run-in period (abt. 60 hours) follow the operations listed in this Chart at the 10 and 50 hour intervals as well as the recommendations outlined in the accompanying booklet « You and Your Tractor ».

CAUTION - After the first 60 hours change engine oil (operation No. 10) and relevant oil filter (operation No. 19); clean remote control filter (operation No. 14) and hydraulic lift filter (operation No. 18).

5 STEERING CONTROL - Inject grease fiat G 9 grease (2 lubricators on either side). Only two shots in rear lubricators.



7 FIRST FUEL FILTER - Slacken the lower screw 3-4 turns and actuate the fuel feed pump lever to drain out the water condensate.

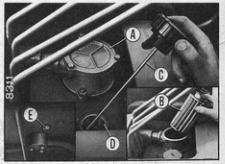


8 AIR CLEANER - At least 15 mins after engine has stopped check that oil level in bowl A reaches fillet B; if necessary, top up with engine oil. Instead, the oil must be replaced when it contains impurities or if the deposit thickness is about 10 mm (3/8 in.).

9 BELT PULLEY - Check that oil level reaches lower plug on pulley body; if necessary top up through upper plug (use olio fiat AW 90/M oil).

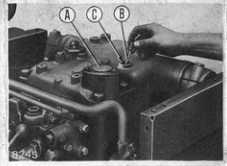
12 AIR CLEANER - Remove snap ring A, take off filtering pad B and wash in kerosene. Wet pad with oil before reassembly. Clean centre tube C.

13 FUEL PUMP - Remove the cover and clean the inner filter.



14 HYDRAULIC REMOTE CONTROL SYSTEM - Remove cover A, withdraw filter B and wash in kerosene. Check level through indicator rod C and, if necessary, top up through filler D (see Capacities).

17 STEERING CLUTCHES - Drain off any deposit from the two lower plugs.



18 HYDRAULIC LIFT - Remove cover A, withdraw the filter and wash in kerosene. Check that the oil reaches the mark on rod B and top up through C (see Capacities).

21 AIR CLEANER - nents. Wash filter sion in kerosene pads drip dry and

22 DRIVE BODY - reaches plug A; through plug B (u oil).

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Cooling system .

Fuel tanks { main addi

Crankcase (sump,

Crankcase (sump

Air cleaner . .

Hydraulic lift . .

Master clutch .

Hydraulic remote c

Track rollers and id

Drive body . . .

Final drives, each

Belt pulley . .

Lubricators . .