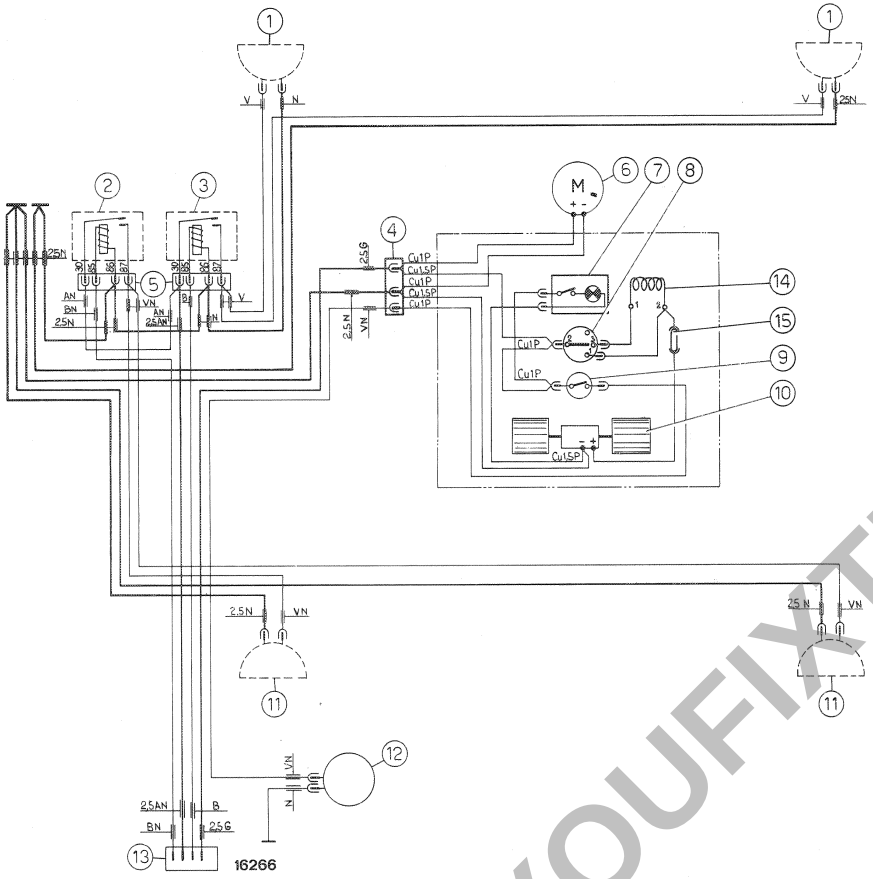


WIRING DIAGRAM

Cab Version

Differences over the basic version diagram.

1. Heater
2. Windshield wiper motor
3. Front work lights relay
4. Rear work light relay
5. Radio interference suppressor capacitor
6. Windshield wiper switch
7. Washer switch
8. Fan switch
9. Speakers
10. Washer pump
11. Lamp and switch
12. Terminal block
13. Front work lights
14. Rear work lights

Color Code

B = White
G = Yellow
N = Black
V = Green

YOUFIXTHIS.COM

MAINTENANCE

Maintenance Schedule (90-90/100-90)

Numbers correspond to those of operations listed in the Servicing Chart (inside back cover).

◇ ADJUSTMENTS

6. Air conditioner compressor drive belts.
Deflection = 18 to 21 mm (3/4 in) applying a 78 to 98 N (8 to 10 kg or 18 to 22 lb) load.

11. Fan belts. Deflection = 10 to 15 mm (1/2 in) applying a 78 to 98 N (8 to 10 kg or 18 to 22 lb) load.

12. Master clutch. Pedal free travel = 190 mm or 7½ in (170 mm or 6 3/4 in for tractors with cab).

13. P.T.O. clutch. Withdrawal lever pin travel = 3.5 mm or 0.138 in.

31. P.T.O. clutch. Release lever pin travel = 3.5 mm or 0.14 in.

45. Engine valves.
Clearance 0.25 mm or 0.010 in inlet, and 0.35 mm or 0.014 in exhaust.

46. Fuel injectors. Release pressure 230 to 238 bar (235 to 243 kg/cm² or 3,335 to 3,524 psi).

51. Starter.

△ LEVEL CHECKS

3. Radiator expansion tank.

4. Windshield washer fluid reservoir.

5. Battery (see page 60).

7. Brake fluid reservoir.

8. Power steering reservoir.

9. Oil-bath air cleaner.

14. Engine sump.

30. Front final drive oil (DT).

32. Front drive axle oil (DT).

37. Rear drive housing and lift oil.

39. Transmission oil.

□ FLUID CHANGE

24. Engine sump.

44. Power steering.

48. Rear drive housing and lift oil.

52. Front final drive oil (DT).

53. Front drive axle oil (DT).

54. Transmission oil.

⬡ FILTER CHANGE

6. Receiver drier.

27. First fuel filter.

28. Lift oil filter.

29. Dry air cleaner inner cartridge.

38. Engine oil filters.

40. Second fuel filter.

41. Dry air cleaner inner and outer cartridge.

42. Comfort cab air filter.

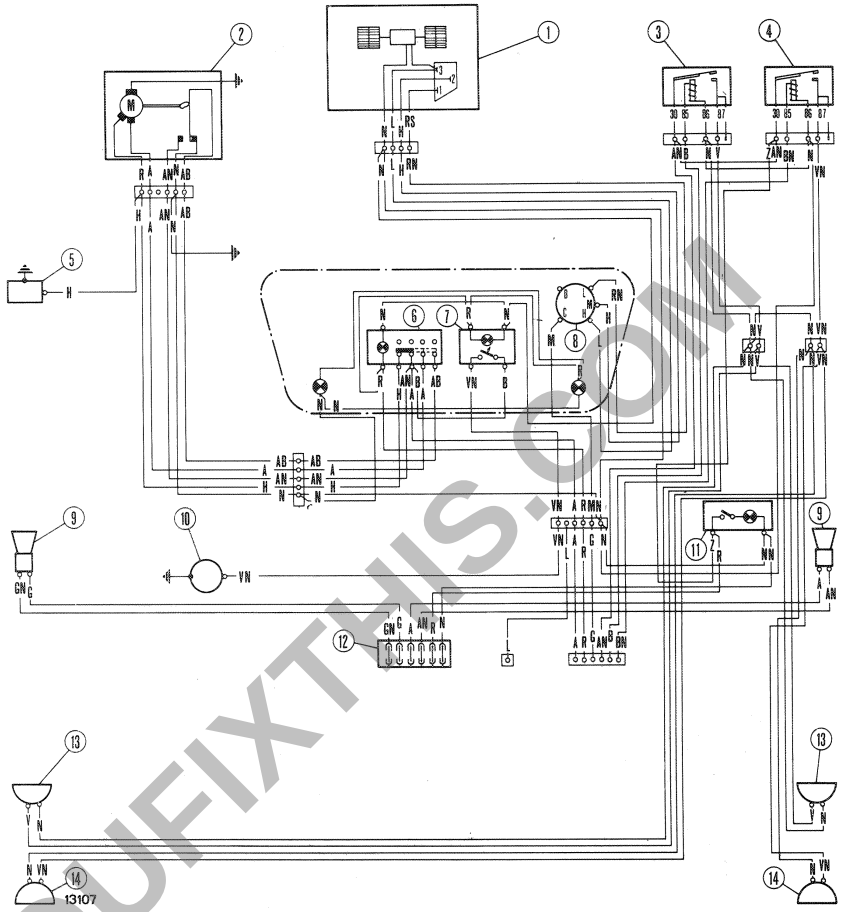
43. Supercomfort cab air filters.

YOUFIXTHIS.COM

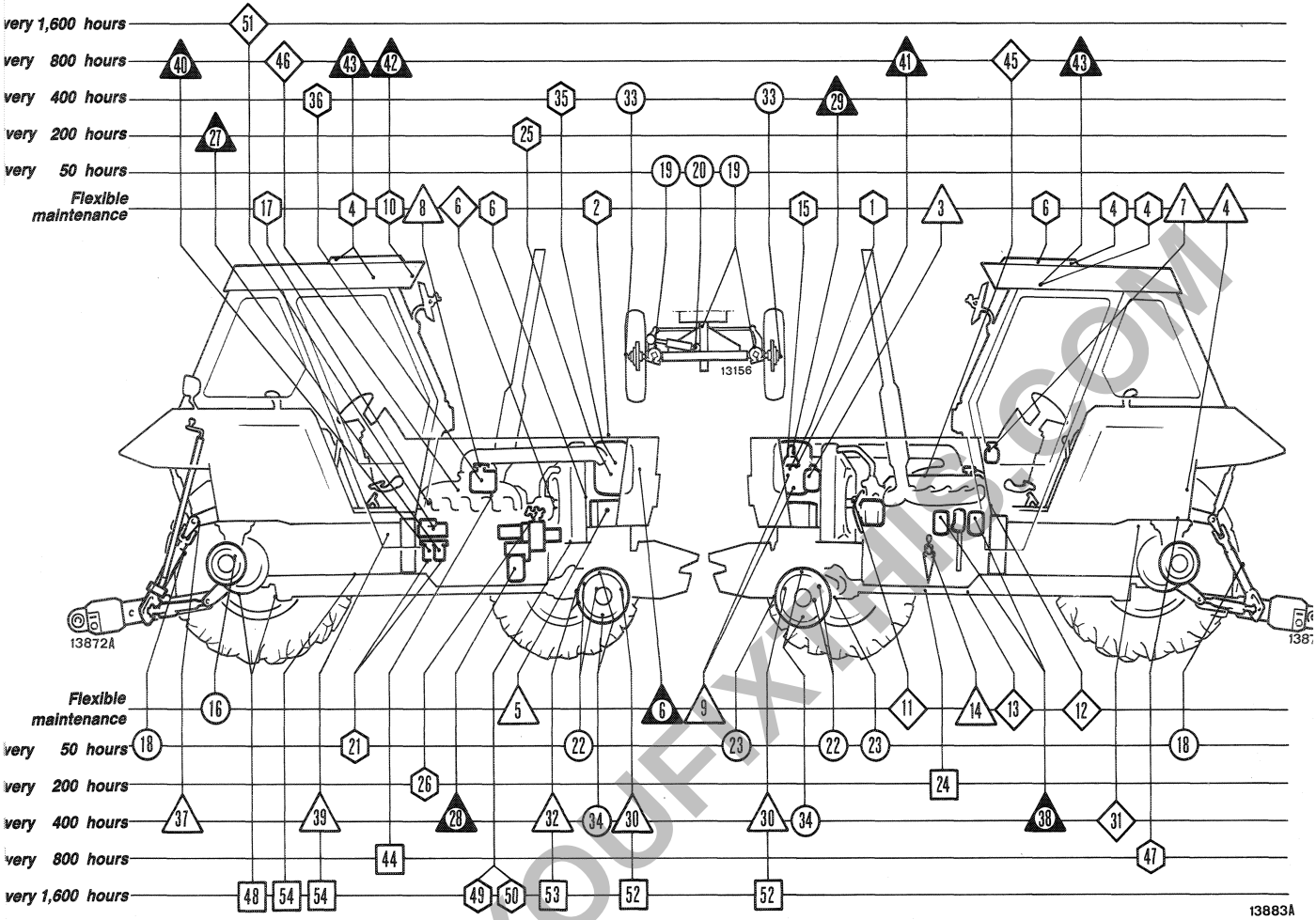
WIRING DIAGRAM - Supercomfort cab version.

Differs from main wiring diagram in the following.

1. Heater.
2. Windshield wiper motor.
3. Front work light relay.
4. Rear work light relay.
5. Radio interference suppressor capacitor.
6. Windshield wiper switch.
7. Washer switch.
8. Fan switch.
9. Speakers.
10. Washer pump.
11. Lamp and switch.
12. Terminal box.
13. Front work lights.
14. Rear work lights.



- YOUFIXTHIS.COM

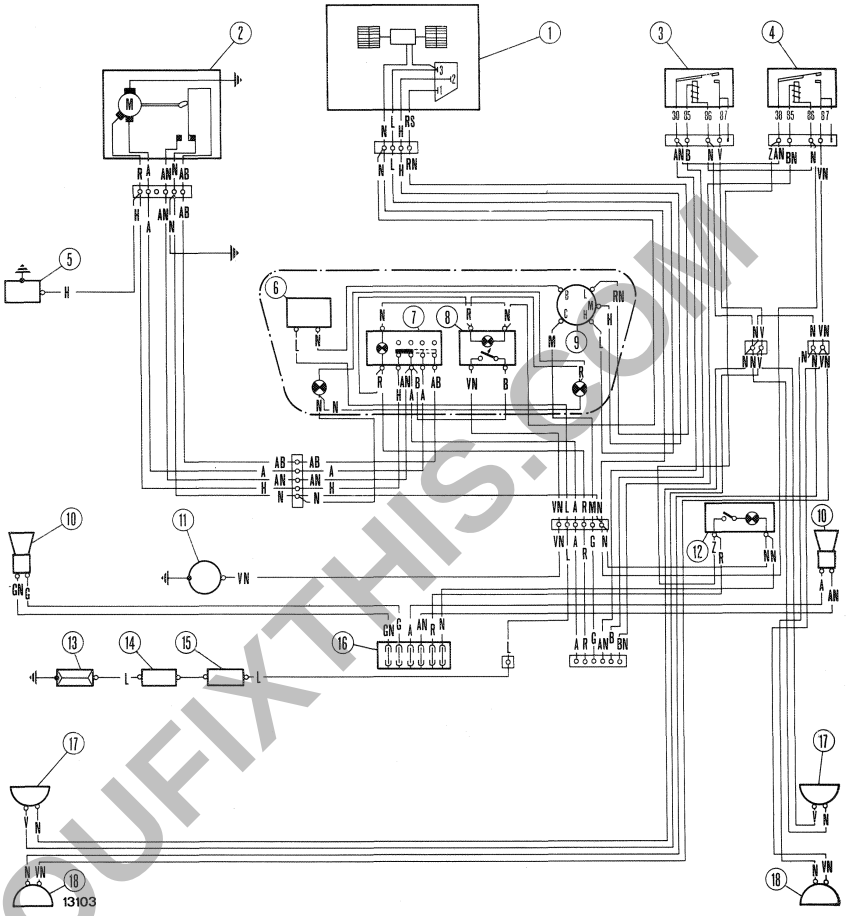


YOUFIX4U.COM

Wiring diagram (air conditioned cab).

Difference from main wiring diagram:

1. Air conditioner.
2. Windshield wiper motor.
3. Front work light relay.
4. Rear work light relay.
5. Radio interference suppressor capacitor.
6. Air conditioner thermostat.
7. Wiper switch.
8. Washer button.
9. Fan switch.
10. Speakers.
11. Washer pump.
12. Lamp and switch.
13. Compressor electromagnetic coupling.
14. Maximum pressure switch.
15. Minimum pressure switch.
16. Terminal box.
17. Front work lights.
18. Rear work lights.



YOUFIXTHIS.COM

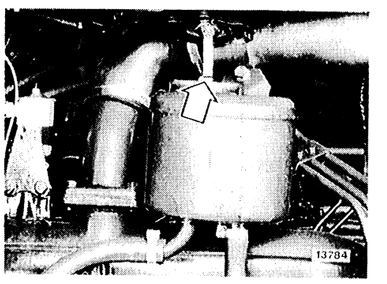
FIATAGRI

RUNNING-IN

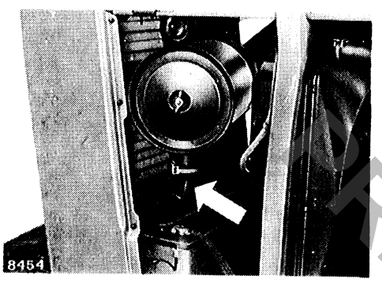
During the running-in period (60 hours approx.) adhere to the instructions given under the flexible maintenance and 50 hour sections of this chart. Moreover:
- Allow the engine to idle for a few minutes after starting from cold;
- Do not idle the engine for long periods;
- Do not allow the tractor to labour continuously under heavy loads;
- The above apply equally to reconditioned units.

⚠ *WARNING* ⚠ On completion of first 60 hours, renew the engine oil (operation 24) and the filter cartridge (operation 38). Moreover, renew the lift oil filter (operation 28).

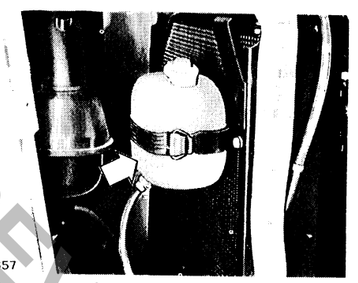
NOTE: If performed at the correct intervals, the routine operations ensure sustained tractor efficiency. However, in addition to these, ***the important inspection and adjustment operations listed below*** should be performed at such intervals as dictated by environmental and working conditions. Experience suggests that it is safer and cheaper to inspect too often than too infrequently.



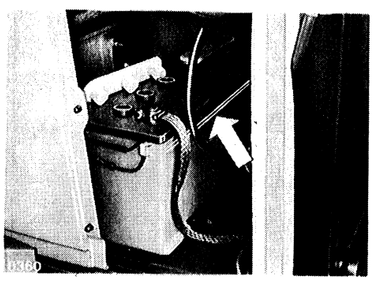
8 POWER STEERING FLUID RESERVOIR - Check fluid level and top up as necessary.



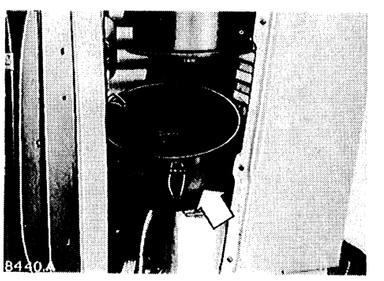
1 AIR CLEANER - Press rubber end of dust ejector to check for clogging.



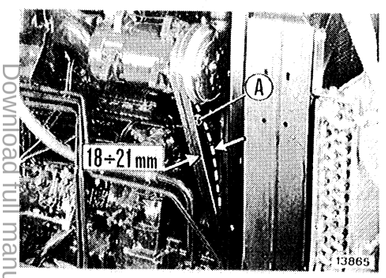
3 COOLANT EXPANSION TANK - The coolant level should be 6 to 7 cm or 2½ in above the "MIN" mark.



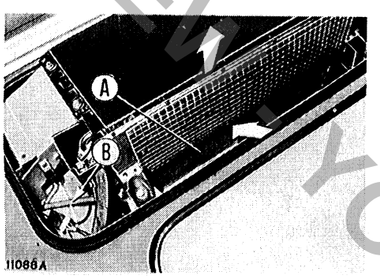
5 BATTERY - Check electrolyte level with a stationary engine, tractor on level ground and cold battery (see page 56).



9 OIL BATH AIR CLEANER - Check that oil reaches level indicated when engine has been stationary for at least 15 minutes.

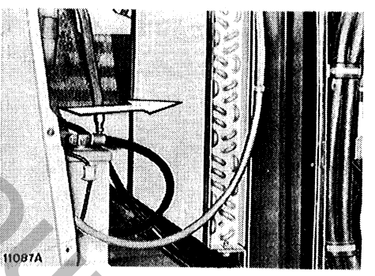


COMPRESSOR DRIVE BELTS - Check that yield is 18 to 21 mm (0.70 to 0.82 in) with 78 to 98 N - 8 to 10 kg (17 to 22 lb) load. Adjust through bolt A.

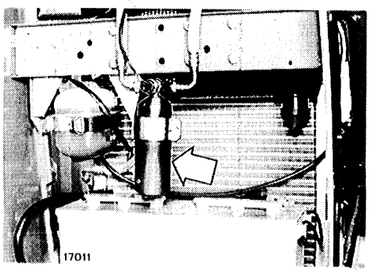


6 AIR CONDITIONED SUPERCOMFORT CAB

EVAPORATOR - Remove cover and clean evaporator A using compressed air. Check that condensation is properly drained from air conditioner through pipes B. Hose off any caked dust deposits with water.



CONDENSER - Hose off cooling fins and check that they are not bent: straighten if necessary.

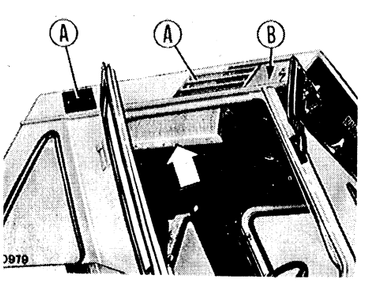


RECEIVER-DRIER - At the beginning of the season, have receiver-drier element changed by qualified service personnel. Have compressor oil level checked at the same time.

⚠ CAUTION ⚠

MISCELLANEOUS CHECKS - Periodically check the following parts and in case of anomalies call on FIATAGRI Service Organization specialized personnel to replace, in case, defective parts:
- steering linkage joints: make sure of absence of play and that taper spigots are tight in their seats; also, no grease should leak through the rubber boot/joint area and rubber boots must be undamaged and free from cracks. If not, replace joints, complete;
- Power steering cylinder hoses: ensure that hose is free from kinks, cracks or swelling and that there is no leakage between hose and fitting.
- Parking brake hand lever: ensure that ratchet gear locks securely.
- Master clutch spring loaded link: ensure that outer sheath is free from cracks or damage and that link is not bent.

2 HOOD-MOUNTED AIR PRE-CLEANER (optional) - Clean bowl when dust deposits are 1 cm (½ in) deep.

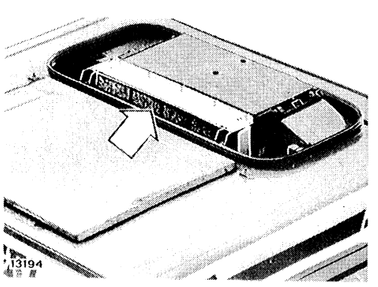


4 HEATED AND VENTILATED SUPERCOMFORT CAB

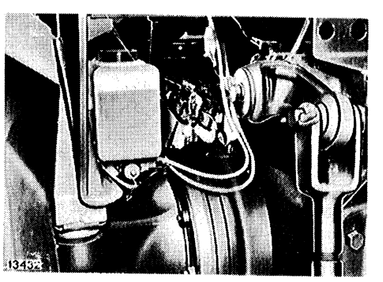
AB AIR FILTERS (PAPER) - Back off the nobs, withdraw the cartridges (1 on each de) and clean:
- With compressed air at less than 5.9 bar, (6 kg/cm² or 85 psi, directing the flow against arrow.

:
- Dip elements in a solution of water and foamless detergent at 40° C. for 15 minutes.

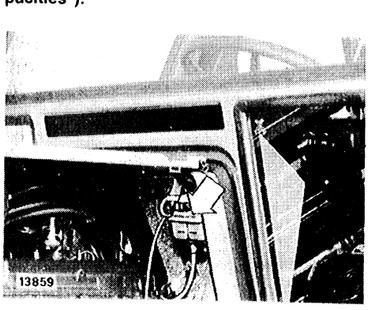
Rinse throughly with water at 2.7 bar (2.8 kg/cm² or 39 psi) and dry in air.
emove grills and clean air intakes B and filter ousing with a wet rag.
n reassembly, ensure that labelled arrow faces ward inside of cab.



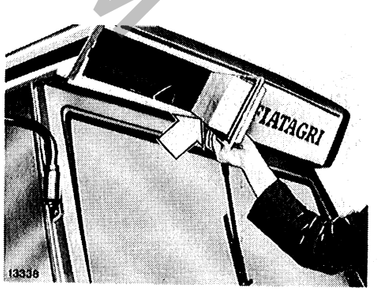
RECIRCULATING AIR FILTER - Detach top cover, remove filter and clean:
— With compressed air at low pressure.
or:
— By dipping in water or a solution of water and detergent. Rinse with water and blow dry.



WINDSHIELD WASHER RESERVOIR - Check fluid level and top up if necessary (see "Capacities").



7 BRAKE FLUID RESERVOIR - Check that oil lever is up to "MAX" mark on container (see "Remarks").



10 COMFORT CAB AIR FILTER (PAPER) - Back off the screws, remove cover, withdraw the cartridge and clean:
— With compressed air at less than 6.9 bar, 7 kg/cm² or 100 psi, directing the flow from inside toward the exterior.
or:
— Dip element in a solution of water and foamless detergent for 15 minutes.
— Rinse thoroughly with water at2.7 bar (2.8 kg/cm², or 39 psi) and dry in air.

PREVIEW YOUFIXTHIS.COM
Download full manual at youfixthis.com

Contents

	Page
Service	4
Optional variants and accessories	6
Identification data	7
Safety precautions	8
CONTROLS AND INSTRUMENTS	15
Instrument panel	17
Control board	19
OPERATION	20
Starting and stopping	21
Transmission and splitter	23
Power take-off	24
Hydraulic lift	29
Guide to lift operation	31
Hydraulic lift implement attachment	33
Lower link positions	34
Implement attachment with check blocks	34
Quick-connect implement attachment	35
Remote control valves	36
Track adjustment	38
Spiral adjustment wheels	40
Ballasting	42
Towing attachments	45
Hydraulically-controlled tow hook	48
Seat adjustment	51
Steering wheel adjustment	51
MAINTENANCE	52
Maintenance schedule	52
Paneling and cab maintenance	55
Fuel system bleeding	56
Brake system bleeding	58
Cooling system	59
Electrical system	60
– Battery	60
– Charging system	60
– Fuses	61
– Headlamp alignment	62
– Wiring diagram (inside back cover)	
SPECIFICATIONS	63
90- 90 DT and 100-90 DT TRACTORS	69
Data	70
Front-wheel drive operation	72
Steer angle adjustment	72
Front track adjustment	73
20-SPEED VERSION	74
40 KPH DT TRACTORS	75
Specifications	77
NO-SPIN differential tractors	79
HEATED AND VENTILATED COMFORT CAB VERSION	82
HEATED AND VENTILATED SUPERCOMFORT CAB VERSION	88
CAB maintenance	93
AIR CONDITIONED SUPER-COMFORT CAB VERSION	96
Tractor storage	103

YOUFIXTRS.COM

Safety Precautions

THIS SYMBOL IS YOUR SAFETY ALERT SIGN

It means:

«ATTENTION - DANGER
YOUR SAFETY IS INVOLVED»

Read and heed all safety instructions carrying the signal words ***WARNING*** and ***DANGER.***

GENERAL

■ You tractor was designed with safety very much in mind. However, there is no real substitute for caution and attention in preventing accidents. Once an accident has happened it is too late to think about what you should have done.

■ Remember that your tractor has been designed exclusively for agricultural use. Any other application must first be authorized by the manufacturer.

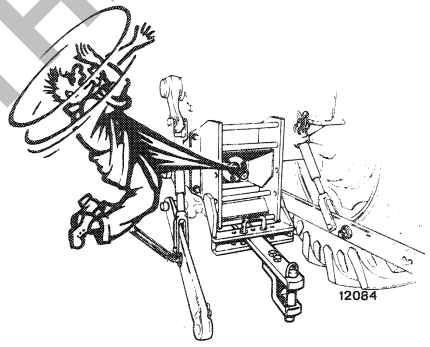
■ Read this manual thoroughly before attempting to start, operate, service or refuel the tractor. A few minutes reading will save time and trouble later.

■ Read and heed all machine-mounted safety decals before refueling or servicing the machine and replace any missing decals.

■ Tractor should be operated only by responsible persons suitably trained and duly authorized.

■ Keep a first aid kit handy.

■ Do not work with loose garments that could get caught in moving parts. Check that all rotating parts connected to the PTO shaft are well shielded.



YOUFIXTHIS.COM

Hydraulic Lift

A. Variospeed (sensitivity control lever).

4-position lever is used to vary sensitivity when working with draft and combined draught and position control.

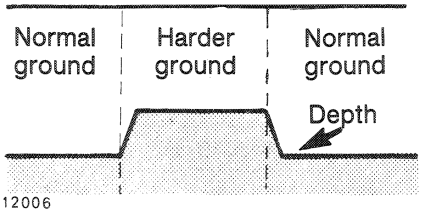
— Forward (+) = Longer reaction times (low sensitivity)

— Back (−) = Shorter reaction times (high sensitivity)

With low sensitivity, attachment weight is transferred to rear wheels more slowly, thus increasing traction considerably.

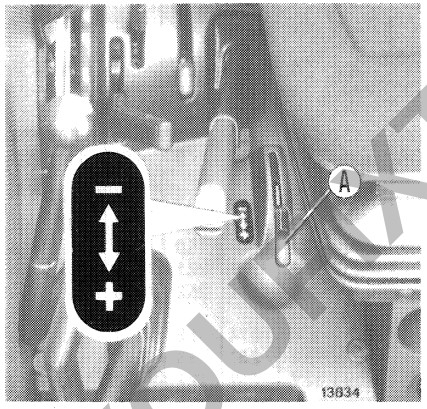
Moreover, slower reaction times eliminate jolts.

VARIOSPEED LEVER BACK (−)

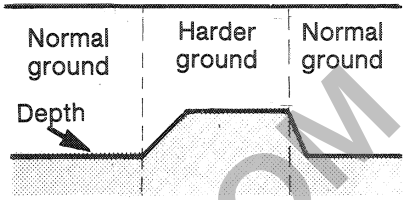


12006

The lift employs the axle lubricating oil, fluid pressure being obtained by means of a valve gear driven hydraulic pump.



VARIOSPEED LEVER FORWARD (+)



The lift senses the load on the lower links through the sensing bar and performs the following functions:

— Position control;

— Draft control;

— Float;

— Combined draft and position control.

Combined operation of control levers **D** and **E** (page 30), enables the operator to select the mode of operation most suited to the work in hand.

Consult Guide to Lift Operation (page 31) for selecting type of operation in relation to type of implement used.

PANELLING AND CAB MAINTENANCE

Weathering Protection

FIATAGRI has long since introduced a number of provisions aimed at improving tractor protection against deterioration and corrosion phenomena resulting from various factors, some of which are listed below:

– Atmospheric salinity and humidity.
– Air pollution (industrial areas).
– Abrasive action by solid particles.
– Use of machine in conditions where organic and/or chemical aggressive agents are present.
– Physical damages such as dents, abrasions and deep scoring marks.

The technical remedies adopted were:

– Use of high corrosion resistant steel panellings.
– Painting systems and products selected to make the tractor meet particular corosion and abrasion resistance requirements.
– Application of adequate hardening plastic protective coatings in all areas known to be more easily exposed to corrosion factors (sheet metal edges, welded overlaps and joints).
– Application of specific waxy products as protectants for tractor outdoor storage.

But unfortunately, the weathering agents react differently in relation to the varying environmental and owner use conditions: for this reason, if you devote adequate care to your machine you can contribute in a determinant way to the preservation of the tractor. The following pointers were laid down with this basic concept in mind:

Panelling and Cab

When abrasion or deep scoring marks baring the metal underneath are present, immediate remedial action is necessary by paintwork touchups using genuine products, as follows:

– Sand area involved accurately.

– Apply primer.

– Allow to flashoff and sand again, this time lightly.

– Apply paint.

– Polish to restore original gloss.

Hose down equipment regularly in relation to work conditions and environment. Wash more frequently in seaside and heavily polluted areas, and **immediately** after exposure to organic materials or chemicals.

Use low pressure water hose, sponge down with light detergent solution (2 to 4% in water). Rinse sponge frequently, rinse equipment thoroughly and dry with compressed air, if possible.

Do not wash equipment after prolonged exposure to sunlight or immediately after stopping engine. Allow parts to be washed to cool down, otherwise paintwork gloss will be adversely affected. To preserve gloss, apply a light coat of silicone wax occasionally.
Apply polish to remove traffic film.

- YOUFIXTHIS.COM

HEATED AND VENTILATED COMFORT CAB VERSION



This section contains heated and ventilated comfort cab operating and maintenance instructions.

For all other information see the foregoing text and the enclosed Servicing Chart.

- YOUFIXTHIS.COM

PREVIEW ONLY

You're viewing 11 of 114 pages

The full manual includes:

- All 114 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Fiat 90-90, 100-90, Fiat 90-90, Fiat 100-90 Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual