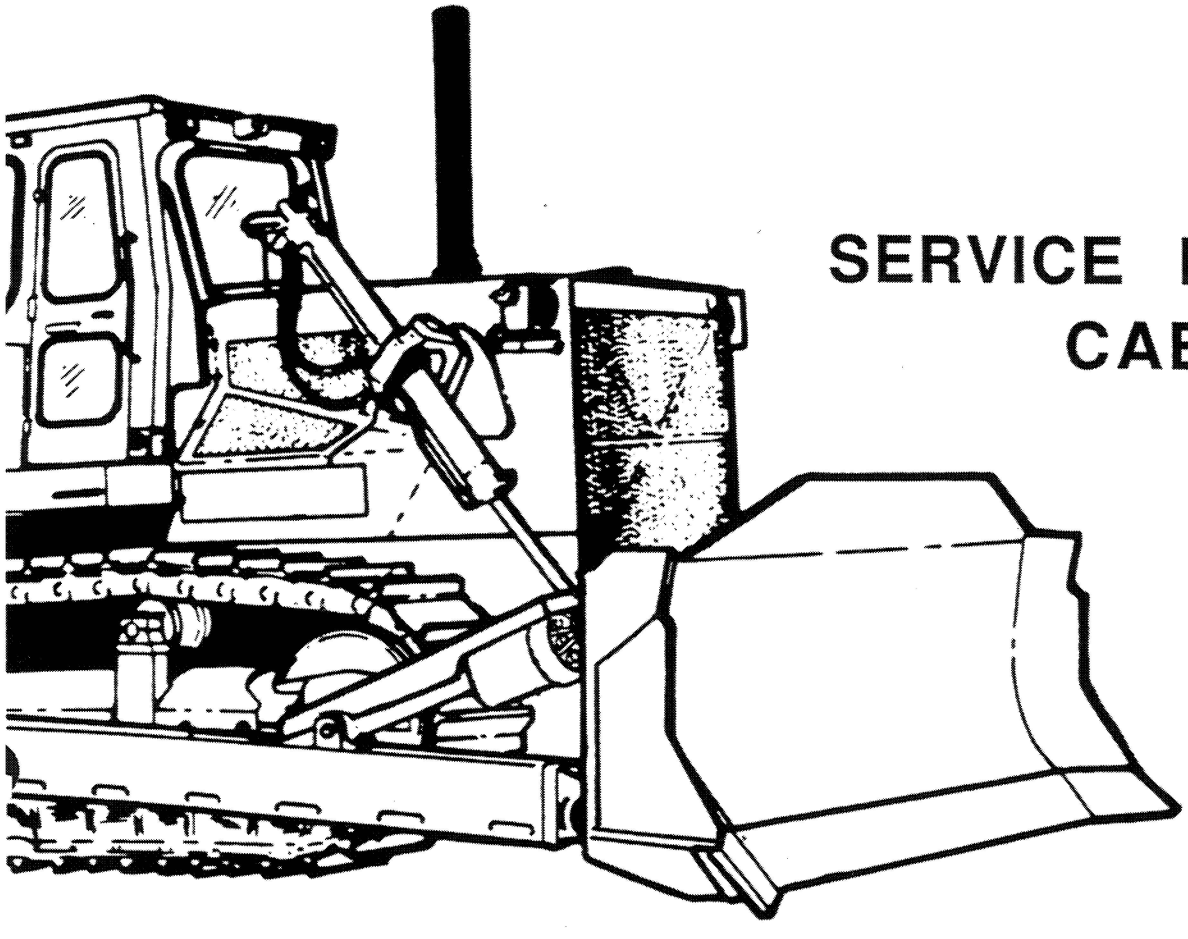
FIATALLIS®

FD40

Crawler Tractor



SERVICE MANUAL
CAB

FORM 73149519
9/85

TOPIC 1 GENERAL DESCRIPTION

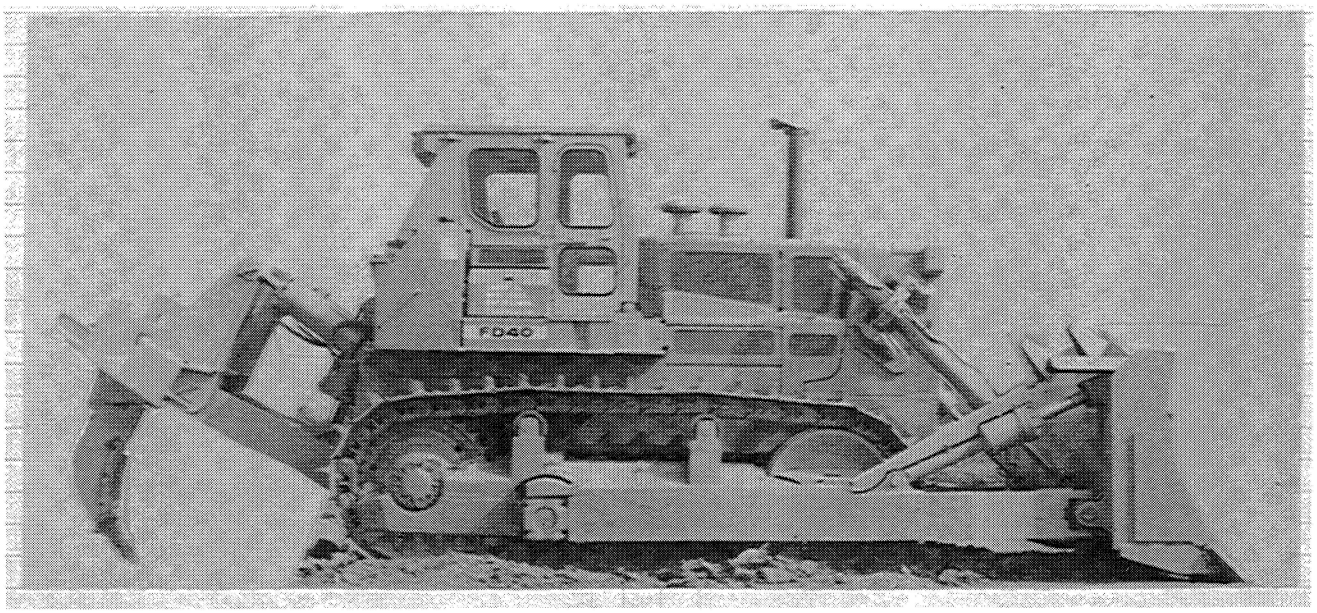


FIG. 1 CAB MOUNTED ON TRACTOR
T-85139

2.5.10
Refer to Fig. 11; install and secure the center floor plate(3) and left floor plate (1). Install floor mat (7). Install decelerator pedal plate(4) foot rest plate(5),foot rest ,brake pedal plate (2) and secure with capscrews. Position and secure brake boots on pedals and secure with clamps.

2.5.11
Install the floor mat retaining vertical plate,Fig 10,(located below the dozer control rod console), and secure with capscrews.

2.5.12
Install decelerator pedal,Fig. 9(2),on decelerator rod; secure with jam nut.

2.5.13
Refer to Fig. 9 and install the two brake foot pads (3)on pedal ;secure with capscrews.

2.5.14
Refer to Fig. 7 ;open the cab heater inlet and outlet shut off cocks on engine.

2.5.15
Install the support-to-cab filler strip, Fig. 6(1) with rubber seal. Install support filler plates(5).

2.5.16
Close right hood side plates Fig.4,and latch. Close left hood plates,Fig.5, and latch.

2.5.17
Refer to Fig. 4. Close valve compartment cover and latch.

2.5.18
Refer to Fig.3 and turn the master switch to "ON" position. Close access cover and secure.

⚠ WARNING
This machine and its attachments are to be operated only by a qualified operator seated in the operator's seat.

⚠ WARNING
If the engine is to be started indoors, insure proper ventilation to remove deadly exhaust gases.

⚠ WARNING
Warn all people who may be servicing or working around machine before starting engine.

⚠ WARNING
Never leave machine unattended with engine running.

2.5.19
Check the coolant level in engine radiator.After the engine has been started and brought to operating temperature and coolant circulating through heater, the coolant level should again be checked and brought to proper level.

⚠ DANGER
Fluid under pressure; turn radiator cap slowly to relieve pressure before removing.

TOPIC 6 GLASS

6.1 GENERAL INFORMATION

The glass used throughout the cab is tinted and laminated safety type. When glass must be replaced, it can be obtained locally; however, it should meet standards in 6.2. The glass should be kept clean at all times for good visibility.When cleaning the glass, presoaking with a detergent and water solution or a commercial cleaner along with the use of a squeegee, will reduce abrasion and will make it easier to clean.

IMPORTANT: Never use hot water solution on cold glass or cold water solution on hot glass.Solution should be near glass temperature to prevent fracturing the glass. Wet both sides simultaneously.

6.2 GLASS REPLACEMENTS

⚠ WARNING
Always wear safety glasses with side shields when removing, replacing or handling glass panels.

⚠ WARNING
For replacement use only safety glass as specified.

⚠ WARNING
Do not strike glass to remove it from cab parts. Glass may shatter and cause personal injury.

6.2.1
All glass, with the exception of the front, requires 5.5mm (0.22") thick, laminated and 70% single tint glass, with 0.38mm (0.015")plastic sheet. The edges must be SAE Type 3 finish.

6.2.2
The front glass requires 6.3 mm (0.25") thick, laminated and 70% single tint glass, with 0.76 mm (0.03") plastic sheet. The edges must be SAE Type 3 finish.

6.2.3
The glass is held in place by rubber seals, Fig.35.

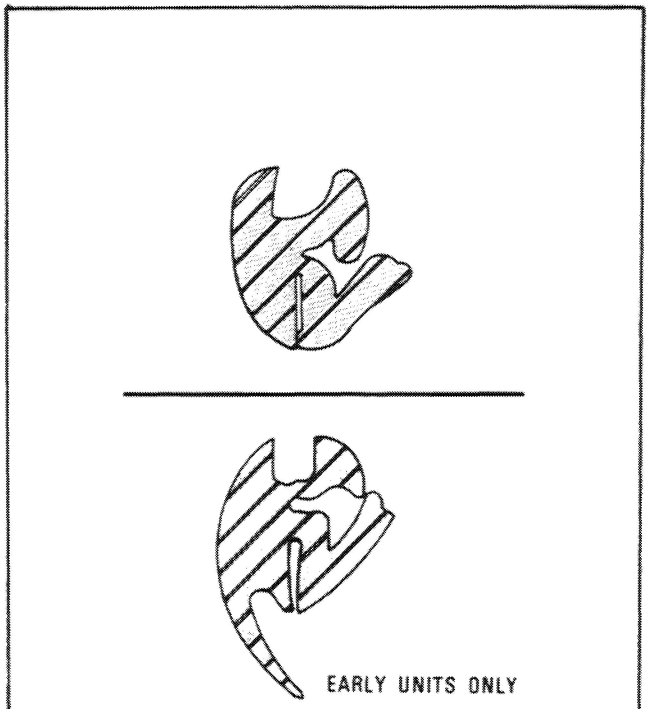


FIG.35 GLASS SETTING SEALS
T-79639

6.2.4
The glass can be set in the seals without the aid of a special tool, however, the use of a tool is recommended. Always cut seal 25 mm (1") longer to provide a tight fit in frame.

6.2.5
Glass dimensions can be obtained from Tractor Parts Catalog. It should be cut and finished by a glass specialist.

8.8 COMPLETE CHARGE (Fig.42).

⚠ WARNING
Refrigerant is extremely cold and will freeze flesh on contact. Use care to prevent contact with skin, eyes or other parts of the body to avoid personal injury.

⚠ WARNING
Wear goggles to protect your eyes when handling refrigerant or when checking refrigerant lines for leaks. Liquid refrigerant in the eyes can cause injury.

After replacing components or opening the system to atmosphere, it is necessary to first evacuate the system, then make a complete charge. Approximately 1.4 kg (3 lbs) of R-12 refrigerant is required to charge the system after evacuating. After evacuating the system, the manifold and gauge set will already be installed on compressor. Charge the system as follows:

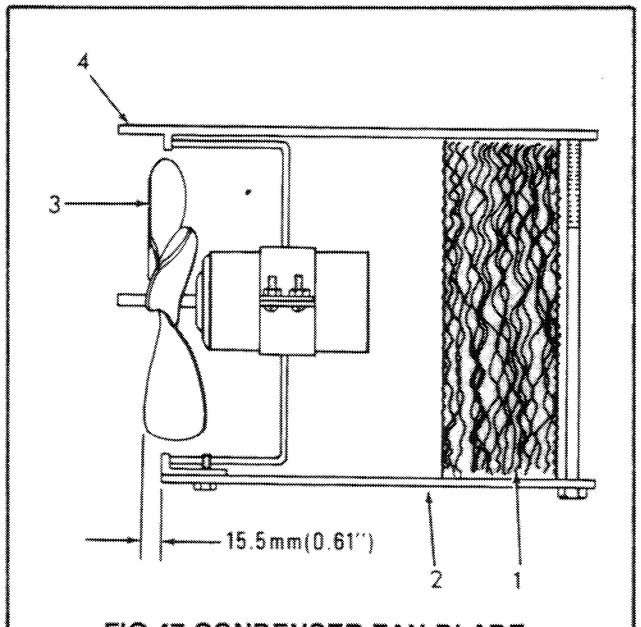


FIG.47 CONDENSER FAN BLADE LOCATION
T-79674

1. Condenser coil
2. Housing cover
3. Fan blade
4. Condenser housing

8..8.1
Connect charging hose to refrigerant container. Loosen the charging hose (center connector on manifold) slightly to permit a leak and slowly open valve on refrigerant supply and allow hose to purge at the manifold connection. Tighten connector at manifold.

8.8.2
With the refrigerant container in upright position, open the manifold valve, Fig.42 (2) and allow approximately 0.5 kg (1 lb) of refrigerant into the system; then close valve (2).

⚠ WARNING
Observe all start up and shut down procedures and ⚠ WARNINGS listed in the Operation and Maintenance Instruction Manual.

⚠ WARNING
Do not run engine of this machine in closed areas without proper ventilation to remove deadly exhaust gases.

⚠ WARNING
Warn all people who may be servicing or working around machine before starting engine.

8.8.3
Start engine and run at 1500 rpm.

IMPORTANT: Keep refrigerant supply container in an upright position to insure that only non-liquid refrigerant is introduced into the system.

The flow of refrigerant can be increased by placing refrigerant container in a pan of hot water. Do not use water above 50°C (125°F) to heat container. Do not apply direct heat to container. Direct heat or water hotter than 50°C (125°F) will cause excessive pressure in container and possible container explosion.

8.8.4
Open manifold valve (2) slightly allowing refrigerant into the system slowly; observe sight glass. When sight glass becomes clear and free of bubbles or foam, close the refrigerant container valve. The system should require approximately 1.4 kg (3 lbs) of R-12 refrigerant.

9.2 CYLINDER REPAIR (Fig. 48)

9.2.1
Remove the four rods nuts (24)from rod end of cylinder and remove the end cap and piston rod assembly from cylinder.

9.2.2
Remove oil tube (17); then remove the valve assembly (16) from cylinder. Wrap the cylinder in a clean cloth or paper to prevent contaminants from entering valve ports. If bushing (14) remained in valve, remove it. Discard items 18 and 19 from each end of tube (17).

9.2.3
Remove end cap (9) from cylinder.

9.2.4
Place the piston rod clevis in a vise and remove screw (8) from end of piston; then remove piston (6) from piston rod (29).

9.2.5
Remove the piston rod (29) from end cap (25).

9.2.6
If bushing (14) remained in end cap (9),remove the bushing and discard back-up washer and O-ring. Remove items 26 and 27 from both end caps (9 and 25).

9.2.7
Remove seals,back-up rings,and O-ring from piston (6),piston rod (29)and end cap (25). Remove packing cups (22 and 28).

⚠ WARNING
Never use gasoline, solvent or other flammable fluids to clean parts.

9.2.8
Clean all components thoroughly with commercial non-flammable, non-toxic solvent and before assembling,lubricate all parts with clean oil.

9.2.9
Install new packing cups (22 and 28) in their respective bores in end cap (25).

9.2.10
Install piston rod(29)in end cap (25). Install back-up washer (2) and O-ring (3) in groove of piston rod. Position piston (6) on piston rod and secure it with washer (7) and screw (8). Torque screw (8) to 545 - 575 Nm (400 - 425 lbs.ft).

9.2.11
Install back-up washer (26) and O-ring (27) in groove of end cap (9). Install end cap on cylinder (1).

9.2.12
Install O-ring (12) and back-up washer (13) in each end of bushing (14); then insert bushing in end cap (9).

9.2.13
Position valve assembly (16) onto bushing (14). Secure valve assembly to end cap with screw (15); torque screw to 5.7 - 6.7 Nm (50 - 60 lbs. in).

9.2.14
Position back-up washer (18) and O-ring (19) on each end of tube (17). Install tube in bore of valve (16).

9.2.15
Carefully install end cap (25), piston and rod assembly on cylinder making certain that piston rigns are not damaged and that end caps are aligned for rod holes and tube (17).

9.2.16
Install the four rod nuts (24) and torque to 170 - 200 Nm (125 - 150 lbs.ft).

9.2.17
Check block attaching capscrews (11). They should have a torque of 95 - 108 Nm (70 - 80 lbs.ft).