



FG65C

FG65C-T

MOTOR GRADER

**OPERATION AND
MAINTENANCE
INSTRUCTION MANUAL**

73161388
ISSUE 2
OCTOBER 1998

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

SPECIFICATIONS

ENGINE

Make	IVECO / FORD NEW HOLLAND 5640
Number of cylinders	4
Bore and stroke	111.8 X111.8 MM (4.4 X 4.4 in)
Displacement	4.39 lt (268 cu in)
Compression Ratio	17.5 : 1
High Idle SAE 1349	2450 ± 50
Low Idle	850 ± 50
Converter stall	2089 ± 50
Firing Order	1-3-4-2
Valve Clearance	
Intake (cold engine - off)	0.36-0.41 mm (0.014-0.016 in)
Exhaust (cold engine - off)	0.43-0.61 mm (0.017-0.019 in)
Injector nozzle opening pressure	205 bar (3000 psi)

The information contained herein is general in nature and is not intended for specific application purposes. Fiatallis reserves the right to make changes in specifications shown herein or add improvements at any time without notice or obligation.

WEIGHTS

	KG	LBS
FG65C (basic unit)	7031	15500
Scarifier	330	725
Dozer	443	975
Cab	341	750

POWER TRAIN

1. Torque Converter

Model	ZF model 280
Torque ratio	2.396 : 1

2. Transmission

The transmission is full powershift with 6 forward and 3 reverse speeds, shift modulation (forward and reverse) and clutch disconnect.

3. Steering

The steering of the grader is hydra-static power steering. The steering wheel is attached to an orbitrol steering unit. The orbitrol unit is a combination direction valve and oil pump.

4. Brakes

The brakes are self adjusting dual wet disc with a dual master cylinder. In addition a parking brake is located on the transmission output shaft.

5. Front axle oscillation 18° and wheel lean is 18°.

6. Electrical System

The electrical system is a 12 volt negative ground. Current is supplied by two 12 volt batteries wired in parallel. The electrical system is protected by fuses and a master disconnect switch.

7. Alternator

Make	Delco
Model	21SI

Study SAFETY RULES in the front of this manual thoroughly for the protection of machine and safety of personnel

OPERATION

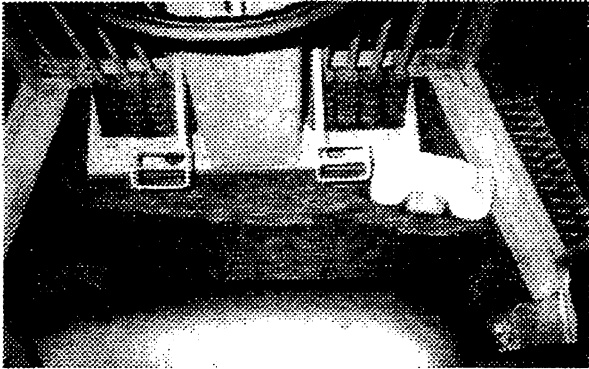


FIG 12 BRAKE PEDAL

To stop grader, press down on brake pedal. The four rear wheels are equipped with hydraulic brakes. If a failure occurs in the dual brake system, brake pedal travel will increase and braking performance will be reduced.

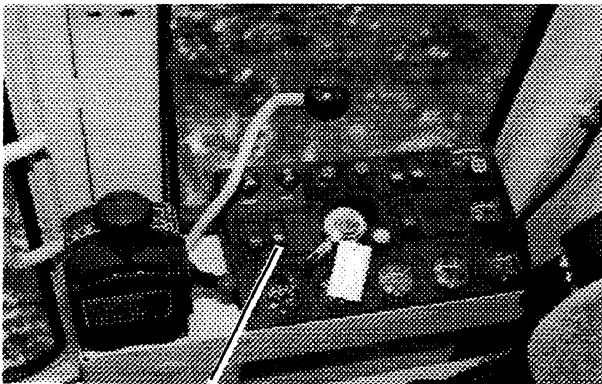


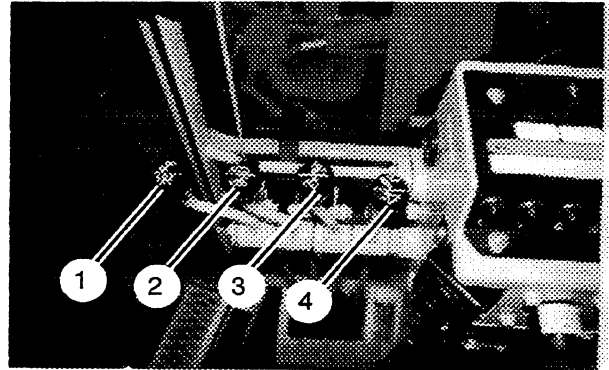
FIG 13 DECLUTCH CONTROL

The declutch release control, is located to the right of the operator's seat.

NOTE: Do not push declutch control switch "OFF" while service brakes are applied. Trapped pressure will keep the transmission disengaged.

With the switch in the "ON" (down) position and the foot brake applied, the transmission's direction clutches will disengage, and the machine will no longer be driven by the transmission. When the switch is in "OFF" (up) position, and the brakes are applied, the direction clutches will engage.

Study SAFETY RULES in the front of this manual thoroughly for the protection of machine and safety of personnel



*Fig 14 IMPLEMENT CONTROL LEVERS (left side)
(left to right)*

1. Scarifier lever
2. Blade shift lever
3. Circle turn lever
4. Circle side shift lever

SCARIFIER LEVER

The scarifier control lever lowers and raises the scarifier. Pull lever to raise the scarifier. This same lever controls the ripper when the rocker switch on the front console is in the ripper position.

BLADE SHIFT LEVER

The blade side shift lever moves the blade to the right or left of center to permit desired reach for side casting of material and to grade around objects while maintaining grade. Pulling the lever moves the blade to the right.

CIRCLE TURN LEVER

The circle turn lever is used to rotate the blade to right or left for casting material as desired.

CIRCLE SHIFT LEVER

The circle shift lever is used to shift the circle to the left or right and to aid in the operation such as bank sloping or ditching. Pulling the lever moves the circle to the right.

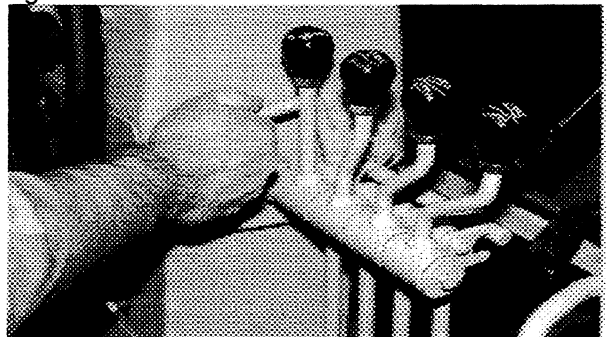


Fig 14A IMPLEMENT CONTROL LEVER LOCK

SERVICE AND LUBRICATION GUIDE

This page is intentionally left blank

MAINTENANCE

FIG. 23
TIRE PRESSURE - Check

DANGER

Do not inflate tires with flammable gases or with air from systems utilizing alcohol injectors. Explosion and personal injury could result.

Check air pressure with tire gauge. The normal inflation pressure is:

15.00 x 19.5 8 ply tires 1.8 kg/cm² (25 psi)

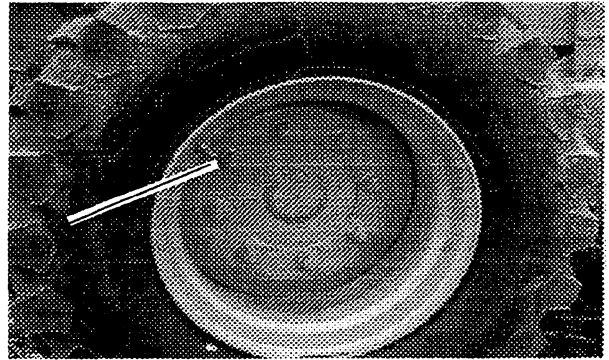
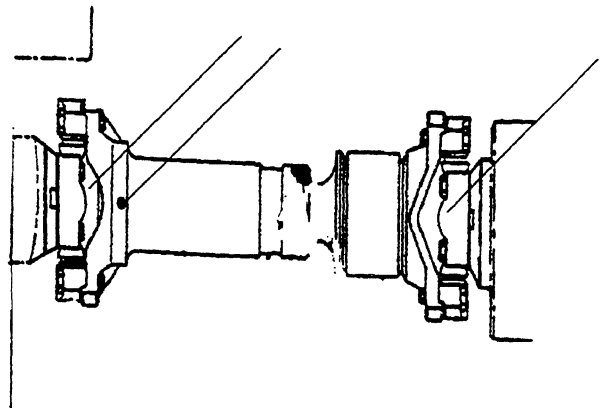


FIG. 25
UNIVERSAL JOINT - Lubricate
Three lube points, 1 - 2 shots each.



Study SAFETY RULES in the front of this manual thoroughly for the protection of machine and safety of personnel

MAINTENANCE

FIG. 40
FUEL INJECTOR NOZZLES - Check

WARNING

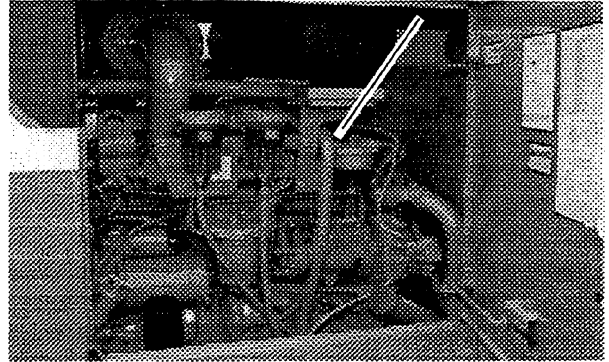
Keep hands away from nozzle tip when popping a nozzle. The finely atomized fuel is ejected with sufficient force to penetrate the skin and cause blood poisoning. Also, wear safety glasses with side shields or goggles when popping a nozzle.

To pull the injection nozzles, the following must be removed to gain access to the fuel nozzles: hood, air cleaner, and muffler

Thoroughly clean around the injectors and disconnect the high pressure fueling. Disconnect the fuel drain manifold and remove injectors. Cover all openings in cylinder head to prevent contamination.

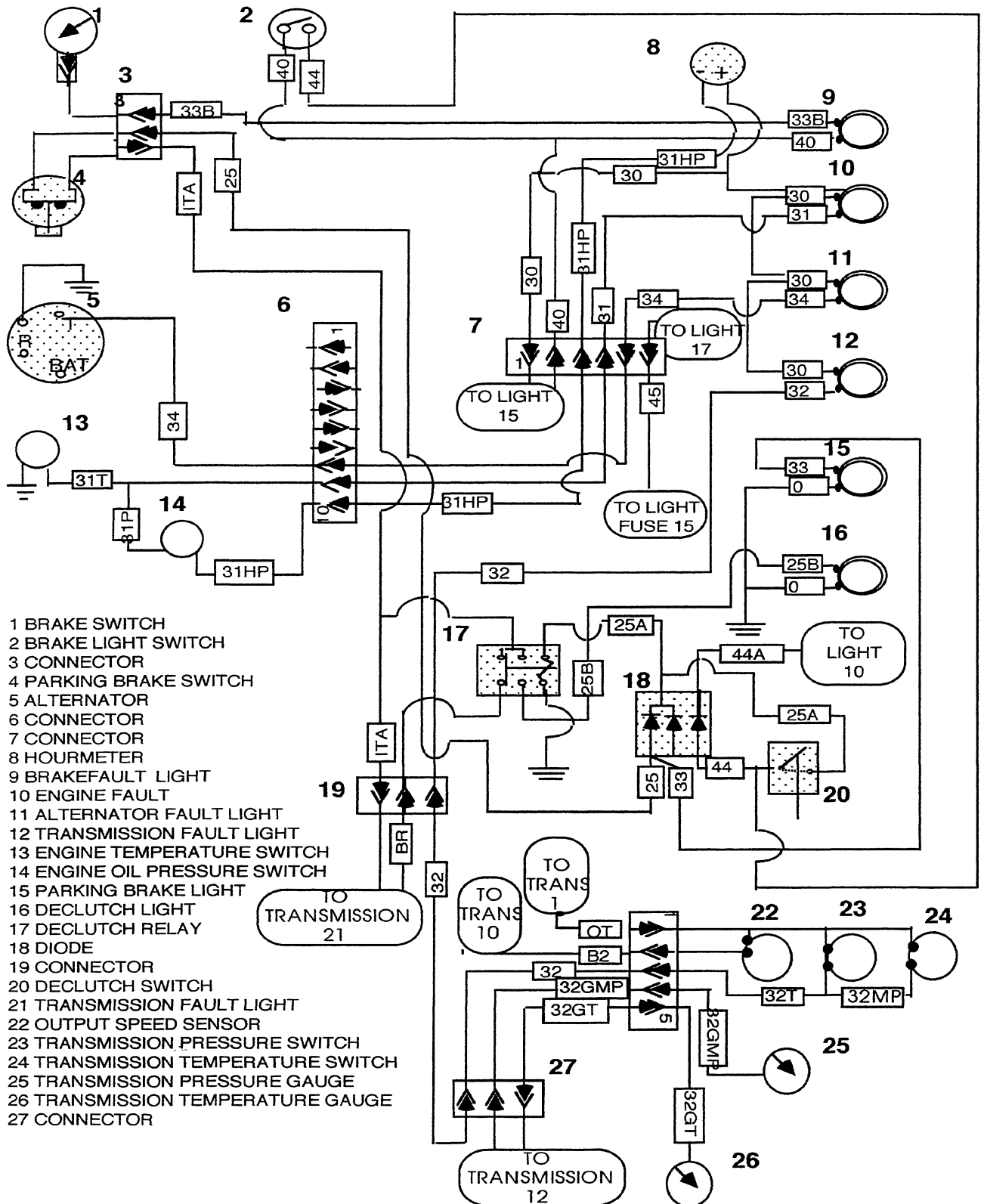
The injector nozzle should be checked by a qualified person in a well equipped shop. (The nozzle relief pressure should be 205 bar (3000 psi)). The spray pattern must also be checked. Make certain sealing washers are in good condition and seats are clean.

Install injector nozzle assemblies in cylinder head and secure with stud nuts to a torque of 2.2-2.4 daNm (16-18 lbs. ft). Install fuel lines, prime the fuel system and check each injector for leaks.



ELECTRICAL SCHEMATIC

SENSOR CIRCUIT



- 1 BRAKE SWITCH
- 2 BRAKE LIGHT SWITCH
- 3 CONNECTOR
- 4 PARKING BRAKE SWITCH
- 5 ALTERNATOR
- 6 CONNECTOR
- 7 CONNECTOR
- 8 HOURMETER
- 9 BRAKEFAULT LIGHT
- 10 ENGINE FAULT
- 11 ALTERNATOR FAULT LIGHT
- 12 TRANSMISSION FAULT LIGHT
- 13 ENGINE TEMPERATURE SWITCH
- 14 ENGINE OIL PRESSURE SWITCH
- 15 PARKING BRAKE LIGHT
- 16 DECLUTCH LIGHT
- 17 DECLUTCH RELAY
- 18 DIODE
- 19 CONNECTOR
- 20 DECLUTCH SWITCH
- 21 TRANSMISSION FAULT LIGHT
- 22 OUTPUT SPEED SENSOR
- 23 TRANSMISSION PRESSURE SWITCH
- 24 TRANSMISSION TEMPERATURE SWITCH
- 25 TRANSMISSION PRESSURE GAUGE
- 26 TRANSMISSION TEMPERATURE GAUGE
- 27 CONNECTOR

Study Safety Rules in the front of this manual thoroughly for the protection of machine and safety of personnel

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL