A TEREX COMPANY

Service and Repair Manual

GS-3384
GS-3390
GS-4390
GS-5390

Serial Number Range

from GS8413-42181 to GS8415-42382
from GS8416F-42383 to GS8416F-45499
from GS84F-45500

from GS9013-48427 to GS9015-51063
from GS9016F-51064 to GS9016F-53299
from GS90F-53300
from GS90D-101

This manual includes:
Repair procedures
Fault Codes
Electrical and
Hydraulic Schematics

For detailed maintenance procedures, refer to the appropriate Maintenance Manual for your machine.

Part No. 1272222GT
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Manifolds

11 Adjust the internal hex socket. Turn it clockwise to increase the pressure or counterclockwise to decrease the pressure. Install the relief valve cap.

12 Repeat this procedure beginning with step 7.

13 Fully lower the platform.

14 Using a suitable lifting device, add an additional weight to the platform not to exceed 20% of the maximum rated work load at full height. Secure the weight to the platform. Refer to the specifications below.

Additional test weight	
GS-3384 and GS-3390	500 lbs 227 kg
GS-4390 (most models - refer to capacity indicator decal)	375 lbs 170 kg
GS-4390 (some models - refer to capacity indicator decal)	450 lbs 204 kg
GS-5390	375 lbs 170 kg

15 Activate the platform up function and attempt to raise the platform.

⊙ Result: The platform does not raise. Proceed to step 21.

☒ Result: The platform lifts. Proceed to step 16.

16 Lower the platform to the stowed position

17 Turn the machine off. Hold the system relief valve with a wrench and remove the cap.

18 Adjust the internal hex socket. Turn it counterclockwise to decrease the pressure. Install the relief valve cap.

19 Start the engine.

20 Repeat this procedure beginning with step 15.

21 Turn the machine off and remove the weight from the platform.

How to Adjust the Steer Relief Valve

Note: Refer to Function Manifold Component list to locate the steer relief valve.

1 Connect a 0 to 3000 psi / 0 to 250 bar pressure gauge to the test port (item AB) on the function manifold.

2 Start the engine from the platform controls.

3 Press and hold the function enable switch and hold the steer thumb rocker switch in the right direction. Allow the wheels to completely turn to the right, then continue holding the switch while observing the pressure reading on the pressure gauge. Note the pressure. Refer to Specifications, *Hydraulic Component Specifications*.

4 Turn the engine off. Use a wrench to hold the relief valve and remove the cap (item AE).

5 Adjust the internal hex socket. Turn it clockwise to increase the pressure or counterclockwise to decrease the pressure. Install the relief valve cap.

⚠WARNING Tip-over hazard. Do not adjust the relief valve higher than specified.

6 Repeat steps 2 through 3 to confirm the relief valve pressure.

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Ford MSG-425 Engine Fault Codes

How to Retrieve Ford Engine Fault Codes

The ECM constantly monitors the engine by the use of sensors on the engine. The ECM also uses signals from the sensors to initiate sequential fuel injection and make constant and instantaneous changes to ignition timing, fuel delivery and throttle position to maintain the engine's running condition at its highest efficiency while at the same time keeping exhaust emissions to a minimum. When a sensor fails or returns signals that are outside of set parameters, the ECM will store a fault code in memory that relates to the appropriate sensor and will turn on the Check Engine Light.

1 Open the ground controls side cover.

2 Pull out the red Emergency Stop button to the on position at both the ground and platform controls. Turn the key switch to ground controls.

3 Quickly activate and release the start toggle switch/button. Do not start the engine.

4 Move and hold the run/test toggle switch to the test position.

⊙ Result: The check engine light should turn on. The check engine light should begin to blink.

5 Continue to hold the run/test toggle switch in the test position. Count the blinks and note the results. Refer to the Fault Codes section, *Ford MSG-425 Engine Fault Codes*.

Note: Before the fault codes are displayed, the check engine light will blink a code 1-6-5-4 three times. After the fault codes, the check engine light will blink a code 1-6-5-4 three times again indicating the end of the stored codes.

Note: If any fault codes are present, the ECM will blink a three digit code three times for each code stored in memory. It will blink the first digit of a three digit code, pause, blink the second digit, pause, and then blink the third digit. For example: the check engine light blinks 5 consecutive times, blinks 3 times and then 1 time. That would indicate code 531.

Note: Once a fault code has been retrieved and the repair has been completed, the ECM memory must be reset to clear the fault code from the ECM. Refer to Fault Codes Procedure, *How to Clear Engine Fault Codes from the ECM*.

How to Clear Engine Fault Codes from the ECM

Note: Perform this procedure with the engine off and the key switch in the off position.

1 Locate the battery under the ground control panel.

2 Disconnect the negative battery cable from the battery for a minimum of 20 minutes.

⚠WARNING Electrocution/burn hazard. Contact with electrically charged circuits could result in death or serious injury. Remove all rings, watches and other jewelry.

3 Connect the negative battery cable to the battery.

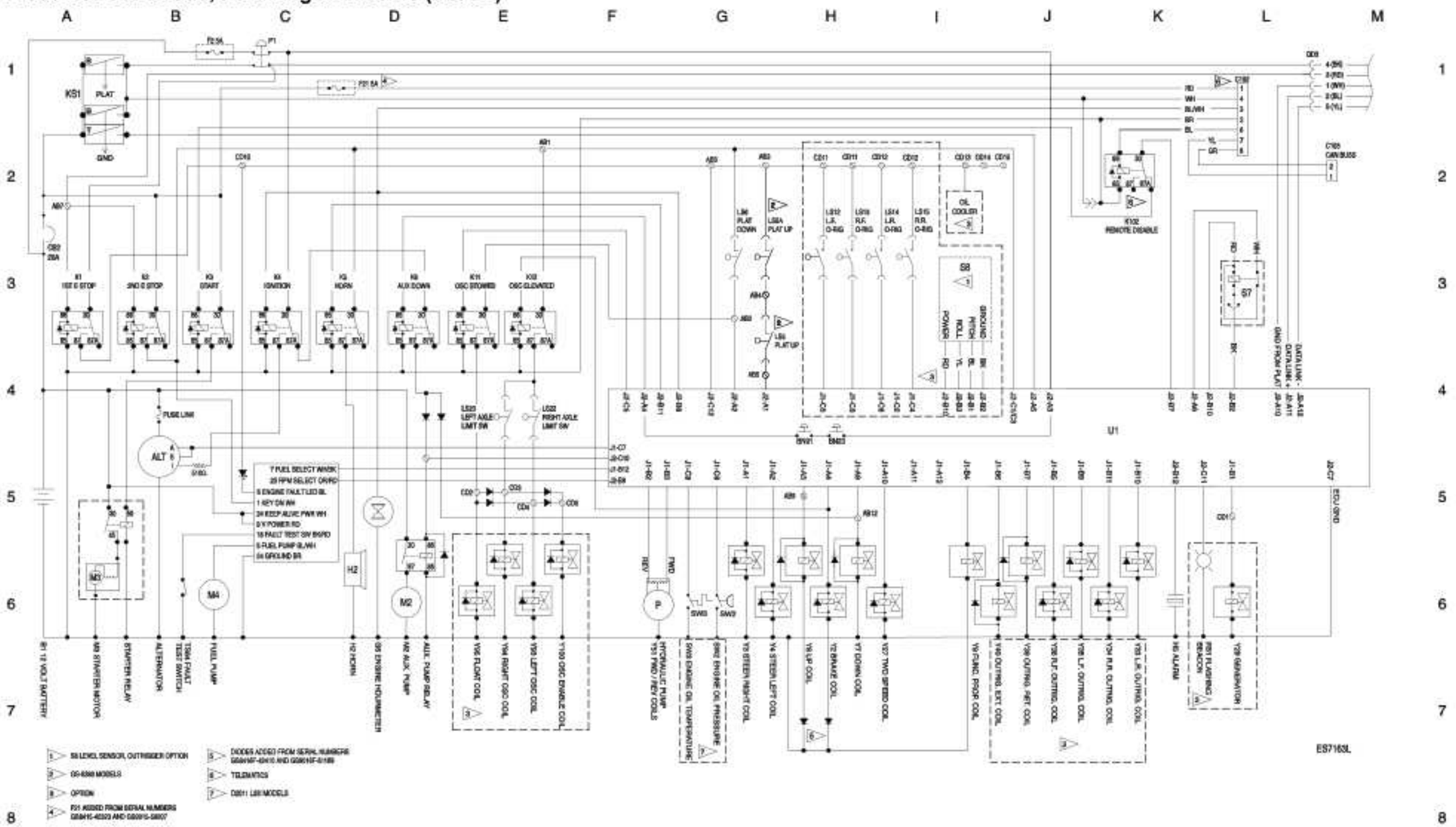
4 Start the engine and allow it to idle for approximately ten minutes.

⊙ Result: The check engine light should not turn on.

☒ Result: If the check engine light is on, the ECM is detecting a fault code. Refer to Fault Codes Procedure, *How to Retrieve Engine Fault Codes*.

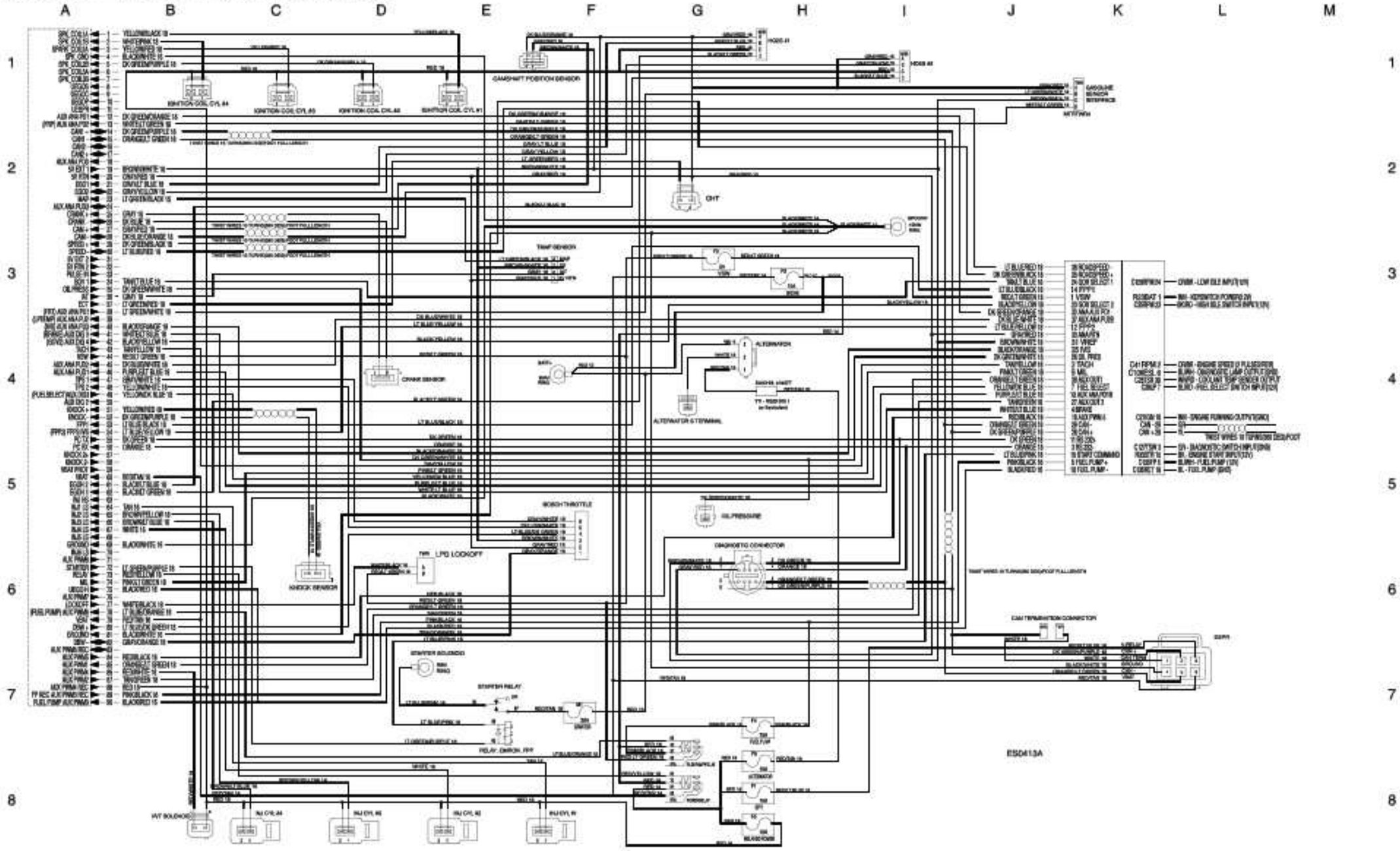
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Electrical Schematic, Ford Engine Models (AS/CE)



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Ford MSG-425 EFI Engine Wire Harness



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