A TEREX COMPANY

Service Manual

Serial Number Range

Z-45/25
Z-45/25J
IC Power

Deutz models: from 23041 to 34010
Ford models: from 23190 to 34010
Perkins models: from 23009 to 34010
All models: from A34011 to A47000
All models: from B101 to B3300

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SPECIFICATIONS REV H

Ford LRG-425 EFI Engine

Displacement	153 cu in 2.5 liters
Number of cylinders	4
Bore & stroke	3.78 x 3.4 inches 96.01 x 86.36 mm
Horsepower	70 @ 2500 rpm 52 kW @ 2500 rpm
Firing order	1 - 3 - 4 - 2
Low function idle (computer controlled)	1600 rpm 27 Hz
High function idle (computer controlled)	2500 rpm 42 Hz
Compression ratio	9.4:1
Compression pressure (approx.) Pressure (psi or bar) of lowest cylinder must be at least 75% of highest cylinder	
Valve clearances - collapsed tappet	0.035 to 0.055 inches 0.889 to 1.397 mm

Lubrication system

Oil pressure (operating temperature @ 2500 rpm)	40 to 60 psi 2.75 to 4.1 bar
Oil capacity (including filter)	4.5 quarts 4.3 liters

Oil pressure switch

Oil pressure switch point	7.5 psi 0.51 bar

Oil viscosity requirements

Extreme operating temperatures may require the use of alternative engine oils. For oil requirements, refer to the Engine Operator Handbook on your machine.

Electronic fuel pump

Fuel pressure, static	63 psi 4.3 bar
Fuel flow rate	0.58 gpm 2.2 L/min

Fuel requirement

For fuel requirements, refer to the engine Operator's Manual on your machine.

Ignition system

Spark plug type	Motorcraft AGSF-32-FM
Spark plug gap	0.042 to 0.046 inches 1.07 to 1.17 mm

Engine coolant

Capacity	11.5 quarts 10.9 liters

Coolant temperature switch

Temperature switch point	230°F 110°C

Starter motor

Normal engine cranking speed	200 to 250 rpm
Current draw, normal load	140-200A
Current draw, maximum load	800A

Alternator

Output	95A, 14.5V DC

Battery

Type	12V DC, Group 34/78
Quantity	1
Cold cranking ampere @ 0°F	900A
Reserve capacity @ 25A rate	200 minutes

Continuous improvement of our products is a Genie policy. Product specifications are subject to change without notice.

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Ford DSG-423 EFI Engine

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.

NOTICE Perform this procedure with the key switch in the off position.

1 Locate the run/test toggle switch on the side of the ground control box.

2 Pull out the red Emergency Stop button to the on position at both the ground and platform 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 and count the blinks.

NOTICE Before the fault codes are displayed, the check engine light will blink a code 123 three times. After the fault codes, the check engine light will blink a code 123 three times again indicating the end of the stored codes.

NOTICE 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.

NOTICE 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. See *How to Clear Engine Fault Codes from the ECM.*

How to Clear Engine Fault Codes from the ECM

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

1 Open the engine side turntable cover and locate the battery.

2 Disconnect the negative battery cable from the battery for a minimum of 5 minutes.

⚠WARNING Electrocution 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.

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Platform Control Box Switch Panel Wiring Diagram, Z-45/25J

Perkins 404-22 Models

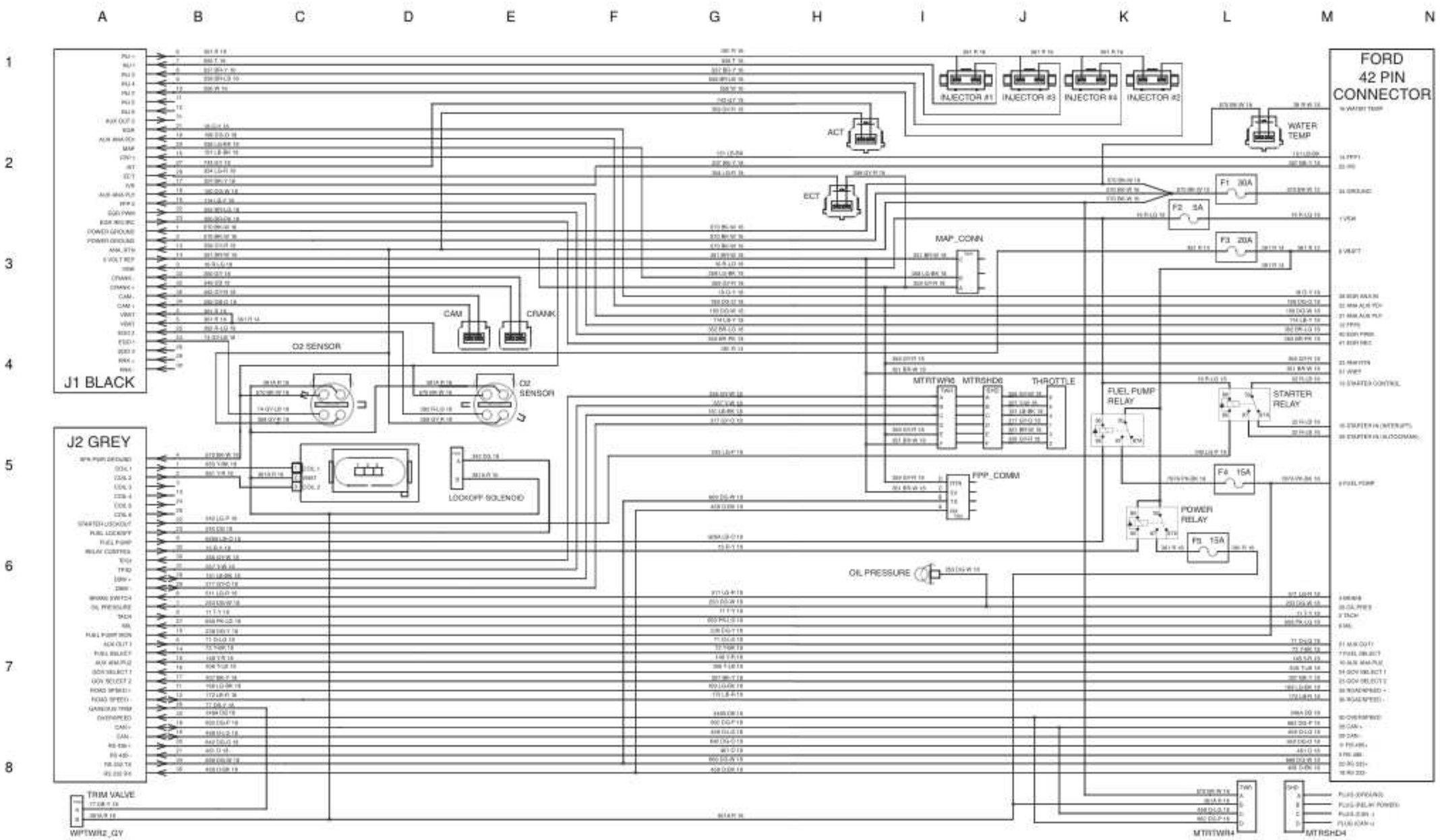


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Ford LRG-425 EFI Engine Wire Harness

REV A



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