A TEREX COMPANY

Service and Repair Manual

Serial Number Range

GS-2646AV

from GS4612A-110000
from GS4616P-138362 to GS4616P-141799

GS-2646AV 35

from GS46P-141800

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. 1272218
Rev A2
September 2016

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Specifications

Hydraulic Component Specifications

Function pump	
Type	Gear
Displacement per revolution	0.244 cu in 4 cc
Flow rate @ 2500 psi / 172 bar	3 gpm 11.3 L/min
Hydraulic tank return filter	10 micron with 25 psi / 1.7 bar bypass

Function manifold	
System relief valve pressure, maximum	3700 psi 255 bar
Lift relief valve pressure	1800 to 3700 psi 142 to 241 bar
Steer relief valve pressure	1500 psi 103 bar

Powered extension deck manifold	
Relief valve pressure, maximum	750 psi 52 bar

Manifold Component Specifications

Plug torque	
SAE No. 2	50 in-lbs / 6 Nm
SAE No. 4	13 ft-lbs / 18 Nm
SAE No. 6	18 ft-lbs / 24 Nm
SAE No. 8	50 ft-lbs / 68 Nm
SAE No. 10	55 ft-lbs / 75 Nm
SAE No. 12	75 ft-lbs / 102 Nm

Hydraulic Hose and Fitting Torque Specifications

Your machine is equipped with Parker Seal-Lok™ ORFS or 37° JIC fittings and hose ends. Genie specifications require that fittings and hose ends be torqued to specification when they are removed and installed or when new hoses or fittings are installed.

Seal-Lok™ Fittings

(hose end - ORFS)

SAE Dash Size	Torque
-4	10 ft-lbs / 13.6 Nm
-6	30 ft-lbs / 40.7 Nm
-8	40 ft-lbs / 54.2 Nm
-10	60 ft-lbs / 81.3 Nm
-12	85 ft-lbs / 115 Nm
-16	110 ft-lbs / 150 Nm
-20	140 ft-lbs / 190 Nm
-24	180 ft-lbs / 245 Nm

JIC 37° Fittings

(swivel nut or hose connection)

SAE Dash Size	Thread Size	Flats
-4	7/16-20	2
-6	9/16-18	1 ¼
-8	3/4-16	1
-10	7/8-14	1
-12	1 1/16-12	1
-16	1 5/16-12	1
-20	1 5/8-12	1
-24	1 7/8-12	1

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Troubleshooting "HXXX" and "PXXX" Faults

Troubleshooting "HXXX" and "PXXX" Faults

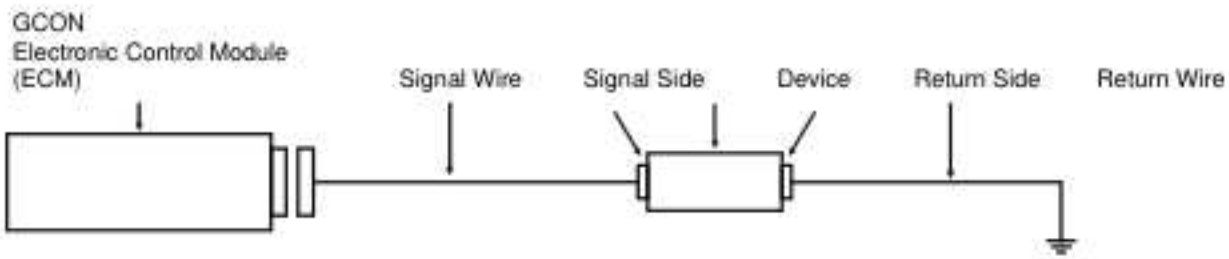
The procedure below illustrates typical steps for diagnosing and fixing faults of type "HXXX" and "PXXX".

Diagnostic Chart

1	Check the faulted device for a short or open circuit.	No Good →	Replace faulted device.
	Good ↓		
2	Check short or open circuit of the harness or connector between Ground Controls and faulted device.	No Good →	Repair or replace harness an/or connector.
	Good ↓		
3	Check GCON Electronic Control Module (ECM).	No Good →	Replace ECM.

Wiring Diagram

The wiring diagram shown below illustrates how fault type "HXXX" and "PXXX" devices are typically wired. The signal of these types of devices originates at the Ground Controls and terminates at system ground.



In order to successfully troubleshoot "HXXX" or "PXXX" type faults, the entire faulted out circuit must be investigated.

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Schematics



Observe and Obey:

- ☑ Troubleshooting and repair procedures shall be completed by a person trained and qualified on the repair of this machine
- ☑ Immediately tag and remove from service a damaged or malfunctioning machine.
- ☑ Repair any machine damage or malfunction before operating the machine.

Before Troubleshooting:

- ☑ Read, understand and obey the safety rules and operating instructions in the appropriate operator's manual on your machine.
- ☑ Be sure that all necessary tools and test equipment are available and ready for use.

About This Section

There are two groups of schematics in this section.

Electrical Schematics

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

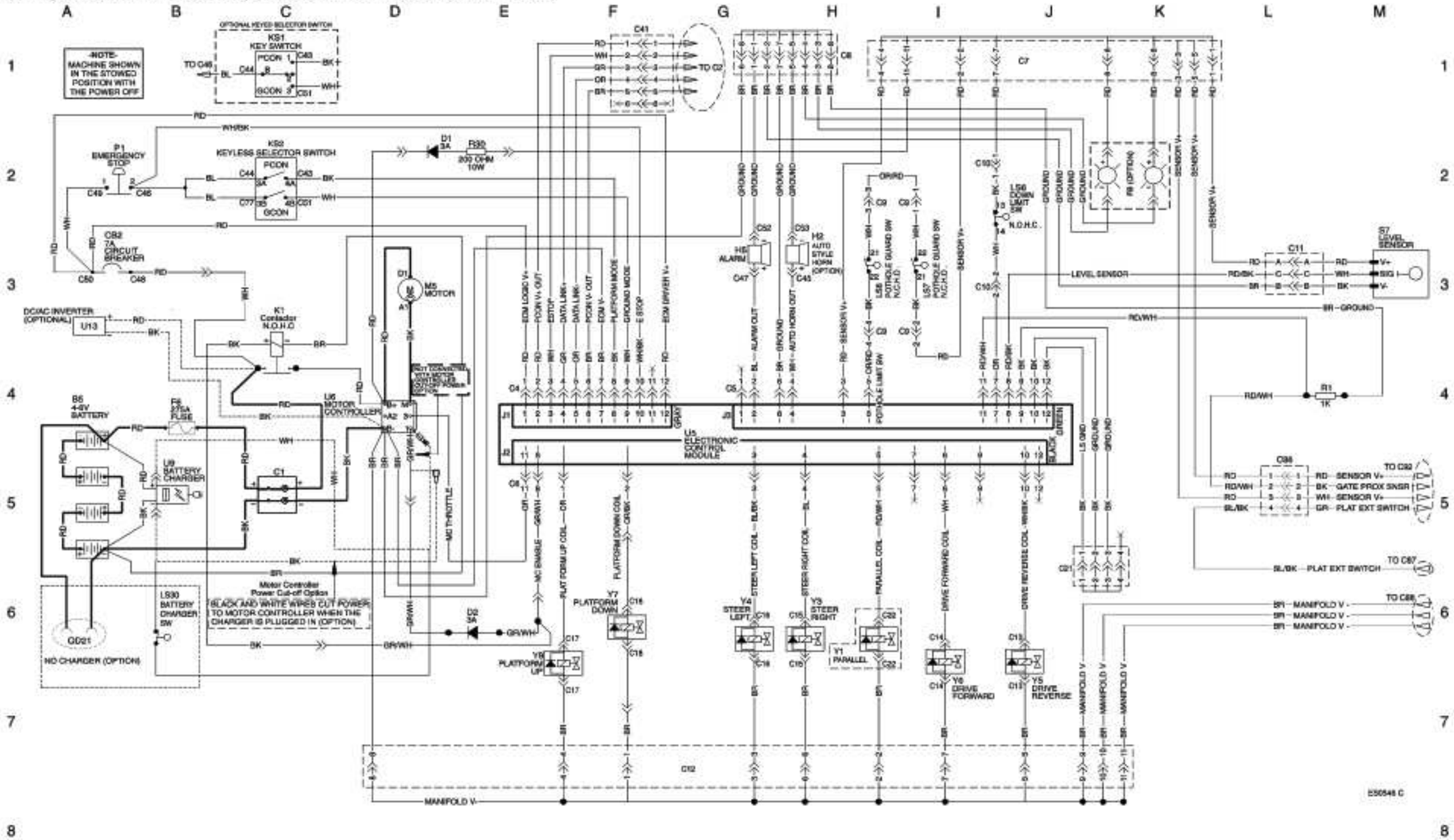
Hydraulic Schematics

⚠WARNING Bodily injury hazard. Spraying hydraulic oil can penetrate and burn skin. Loosen hydraulic connections very slowly to allow the oil pressure to dissipate gradually. Do not allow oil to squirt or spray.

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Electrical Schematic • GS-2646 AV and GS-2646 AV35

(with powered extension deck) (from serial number GS4612A-110000)



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