Genie®
A TEREX COMPANY

Service and Repair Manual

GTH-1056

Serial Number Range

From GTH1010-14001 to GTH1014-20404
from GTH1014E-10001 to GTH1016E-11304

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

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

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Specifications

Performance Specifications

Drive speed, maximum	18 mph 29 km/h
Draw bar pull	29,000 lbs 13,154 kg
Lift capacity, maximum	10,000 lbs 4545 kg
Boom function speeds, maximum	
Boom up	17 to 19 seconds
Boom down	23 to 25 seconds
Boom extend	14 to 16 seconds
Boom retract	13 to 15 seconds
Fork rotate	3 to 6 seconds

Hydraulic Oil Specifications

Hydraulic Fluid Specifications

Genie specifications require hydraulic oils which are designed to give maximum protection to hydraulic systems, have the ability to perform over a wide temperature range, and the viscosity index should exceed 140. They should provide excellent antiwear, oxidation prevention, corrosion inhibition, seal conditioning, and foam and aeration suppression properties.

Cleanliness level, minimum	ISO 15/13
Water content, maximum	250 ppm

Recommended Hydraulic Fluid

Hydraulic oil type	Chevron Rando HD Premium
Viscosity grade	32
Viscosity index	200

Optional Hydraulic Fluids

Mineral based	Shell Tellus S2 V 32 Shell Tellus S2 V 46 Shell Tellus S4 VX 32 Shell Shell Donax TG (Dexron III) Chevron 5606A
Biodegradable	Petro Canada Environ MV 46
Fire resistant	UCON Hydrolube HP-5046

Note: Genie specifications require additional equipment and special installation instructions for the approved optional fluids. Consult Genie Product Support before use.

NOTICE Optional fluids may not have the same hydraulic lifespan and may result in component damage.

Note: Extended machine operation can cause the hydraulic fluid temperature to increase beyond it's maximum allowable range. If the hydraulic fluid temperature consistently exceeds 200°F / 90°C an optional oil cooler may be required.

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Diagnostic Display

Models from Serial Number GTH1012-16292 and GTH1014E-10001

The fault code is displayed on the LCD display which is located on the gauge cluster in the operator's compartment.

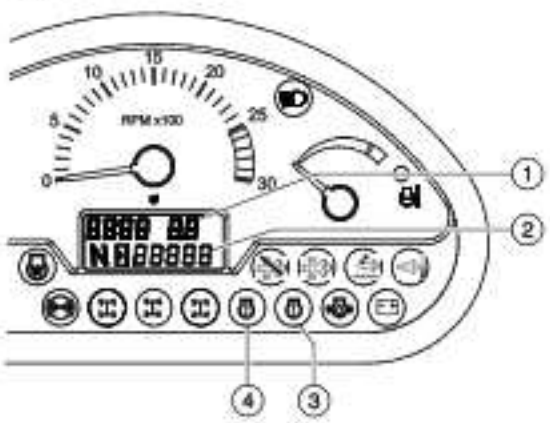
The gauge cluster also includes two warning lights.

They are an amber colored light which signals an abnormal engine condition which should be corrected as soon as possible and a red colored light which signals an engine condition which requres the operator to shut down the engine as soon as possible.

The ECM will, in some cases, automatically shut down the engine when the red light is displayed.

Active Fault Codes

Active Fault Codes will be displayed on the gauge cluster whenever a fault is detected. If multiple fault codes are detected, the fault codes will scroll on the display.



1 FMI Code
2 SPN Code
3 amber warning light
4 red stop engine light

All Models

Active Codes vs Stored Codes

Active fault codes, indicating an engine condition or conditions which have not been corrected, are displayed at the moment the fault is detected.

Stored fault codes are the cumulative history of fault codes which the ECM has detected. These fault codes may be recalled by service personnel at a later time even if the condition which caused the engine fault has ceased to exist.

Note: Additional hardware will be necessary to access stored codes on machines from serial number GTH1012-16292.

Decoding Fault Codes

The Suspect Parameter Number (SPN) and the Failure Mode Identifier (FMI), when combined, are the basis for an engine fault code. The SPN number indicates the affected component; the FMI number reveals the type of failure that has occurred. Comparing the combination of numbers to the fault code chart on the following pages will help to determine the exact engine fault and a corrective course of action. For additional information, refer to the engine operator's manual which came with your machine.

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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

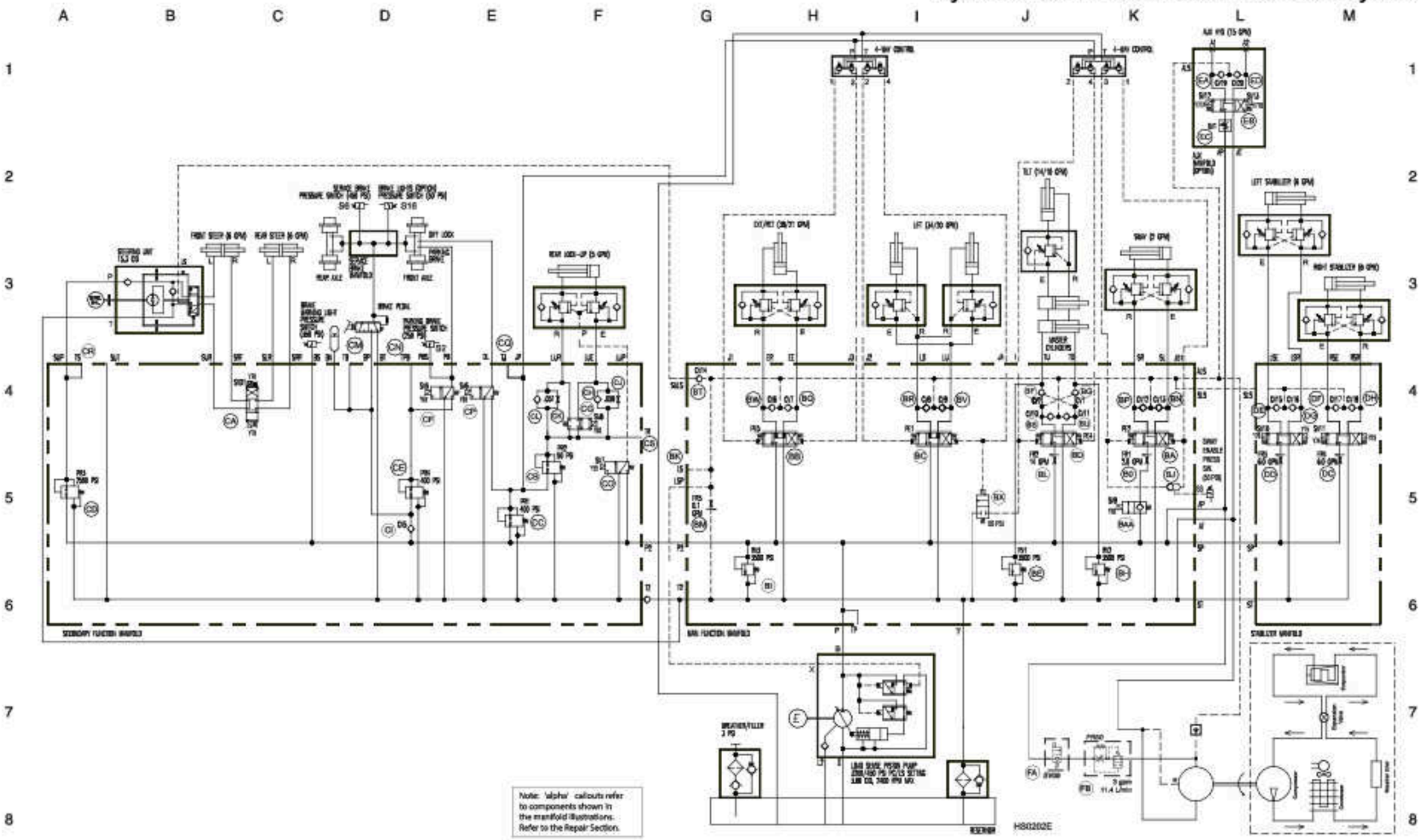
⚠WARNING Electrocution/burn hazard. Contact with electrically charged circuits could result in death or serious injury. Remove all rings, watches and other jewelry.

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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Hydraulic Schematic - Models with Dual Joystick



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