



Service Manual

Serial Number Range

GS-1530/32

from GS3010A-110000
from GS3011C-10000

GS-1930/32

from GS3010A-110000
from GS3011C-10000

GS-2032

from GS3211A-110000
from GS3212C-10000

GS-2632

from GS3211A-110000
from GS3212C-10000

GS-3232

from GS3211A-110000
from GS3212C-10000

GS-2046

from GS4612A-110000
from GS4612C-10000

GS-2646

from GS4612A-110000
from GS4612C-10000

GS-3246

from GS4612A-110000
from GS4612C-10000

GS-4047

from GS4712C-101
from GS4715D-101

Part No. 228901

Rev E

November 2014

Introduction

Important

Read, understand and obey the safety rules and operating instructions in the appropriate Operator's Manual on your machine before attempting any maintenance procedure.

This manual provides detailed scheduled maintenance information for the machine owner and user. It also provides troubleshooting and repair procedures for qualified service professionals.

Basic mechanical, hydraulic and electrical skills are required to perform most procedures. However, several procedures require specialized skills, tools, lifting equipment and a suitable workshop. In these instances, we strongly recommend that maintenance and repair be performed at an authorized Genie dealer service center.

Compliance

Machine Classification

Group A/Type 3 as defined by ISO 16368

Machine Design Life

Unrestricted with proper operation, inspection and scheduled maintenance.

Technical Publications

Genie has endeavored to deliver the highest degree of accuracy possible. However, continuous improvement of our products is a Genie policy. Therefore, product specifications are subject to change without notice.

Readers are encouraged to notify Genie of errors and send in suggestions for improvement. All communications will be carefully considered for future printings of this and all other manuals.

Contact Us:

Internet: www.genielift.com
E-mail: awp.techpub@terex.com

Serial Number Information

Genie offers the following Service Manuals for these models:

Title	Part No.
Genie GS-1530 and GS-1930 Service Manual, (before serial number 17408)	39528
Genie GS-1530 and GS-1930 Service Manual (from serial number 17408 to 59999)	72876
Genie GS-1530 and GS-1930 Service Manual (from serial number 60000 to 75999)	96316
Genie GS-1530 and GS-1930 Service Manual, (from serial number A-760000 to A-109999, B-760000 to B-98941 and C-101 to C-9999)	97385
Genie GS-2032 Service Manual (before serial number 17408)	46326
Genie GS-2032 and GS 2632 (from serial number 17408 to 59999)	72963
Genie GS-2032 and GS-2632 Service Manual (from serial number 60000 to 75406)	96316
Genie GS-2032, GS-2632 and GS-3232 Service Manual (from serial number 75407 to A-109999 and C-101 to C-9999)	97385
Genie GS-2046, GS-2646 and GS-3246 Service Manual (before serial number 17408)	48339
Genie GS-2046, GS-2646 and GS-3246 Service Manual (from serial number 17409 to 59999)	72972
Genie GS-2046, GS-2646 and GS-3246 Service Manual (from serial number 60000 to 75437)	96316
Genie GS-2046, GS-2646 and GS-3246 Service Manual (from serial number 75438 to A-109999 and C-101 to C-9999)	97385

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Introduction

Revision History

Revision	Date	Section	Procedure / Page / Description
A	04/2011		New Release
B	01/2012	Specifications	Machine, Performance, Hydraulic
		Maintenance	Inspection Report, B-1, B-3, B-17, C-1, D-1
		Repair	4-2, 4-12, 4-14, 4-20, 4-22, 4-25, 4-26, 4-27, 4-28, 4-29, 4-30, 4-32, 4-33, 4-60, 4-68, 4-78, 4-90, 4-103, 4-105, 4-108, 4-111, 4-115, 4-119, 4-120
		Diagnostics	5-2, 5-4, 5-5, 5-6, 5-7, 5-8, 5-10, 5-12, 5-15, 5-16
		Schematics	All legends, diagrams and schematics
B1	06/2012	Maintenance	C-1
C	07/2013	Specifications	Page 7, Page 8, Page 9
		Repair	Page 48, Page 56, Page 61, Page 63, Page 161, Page 174, Page 175
		Diagnostics	Page 190, Page 194, Page 199, Page 201, Page 204
		Schematics	Page 206, Page 209, Page 211 through Page 264, Page 268
D	09/2013	Maintenance	Page 23, Page 45
		Repair	Page 69, Page 74, Page 78, Page 80, Page 164, Page 166, Page 169, Page 172
		Diagnostics	Page 187, Page 189
D1	06-2014	Specifications	Page 3, Page 6, Page 7
		Maintenance	B-8, B-9, B-10, B11
		Diagnostics	FXXX Faults, CXXX Faults
Reference Examples:			<p style="text-align: center;">Electronic Version</p> <p>Click on any procedure or page number highlighted in blue to view the update.</p>
Section – Maintenance, B-3			
Section – Repair Procedure, 4-2			
Section – Fault Codes, All charts			
Section – Schematics, Legends and schematics			

Introduction


Revision History

Revision	Date	Section	Procedure / Page / Description
E	11/2014	2 - Spec.	Perform. without , Perform. with
		4 - Repair	5-8, 9-11
		6 - Schem.	258
Reference Examples:			<p style="text-align: center;">Electronic Version</p> <p>Click on any procedure or page number highlighted in blue to view the update.</p>
Section – Maintenance, B-3			
Section – Repair Procedure, 4-2			
Section – Fault Codes, All charts			
Section – Schematics, Legends and schematics			





Introduction


Serial Number Legend



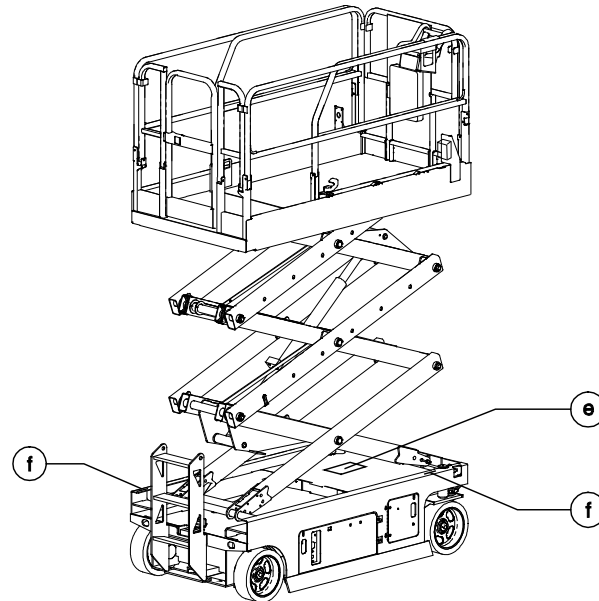
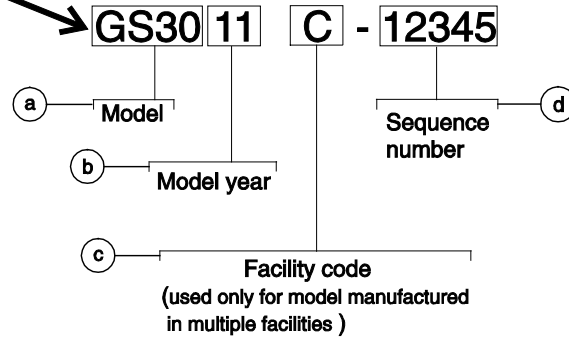
A TEREX COMPANY

Model: GS-1930
Serial number: GS3011C-12345
Model year: 2011 **Manufacture date:** 03/01/2011
Electrical schematic number: ES0535
Machine unladen weight: 3255 lbs / 1476 kg
Rated work load (Including occupants):
 500 lbs / 227 kg
Maximum allowable inclination of the chassis:
 1.5° Side / 3° Front / 3° Rear
Outriggers retracted:
 N/A
Outriggers deployed:
 N/A
Gradeability: 30° / 16.7%
Outdoor rating:
 Maximum allowable side force: N/A
 Maximum wind speed: N/A
 Maximum number of platform occupants: N/A
Indoor rating:
 Maximum allowable side force: 90 lbs / 400 N
 Maximum wind speed: 0 mph / 0 m/s
 Maximum number of platform occupants: 2
Nominal Power:
Country of manufacture:
Manufacturer:
 Genie Industries
 18340 NE 76th Street
 Redmond, WA 98052 USA
European Representative:
 Genie UK LTD
 The Millings
 Wharf Road, Grantham, LIn
 NG31 6BH United Kingdom
This machine complies with:
 EN 280



P/N 77055



- a Model
- b Model year
- c Facility code (for models manufactured in multiple facilities)
- d Sequence number
- e Serial label
- f Serial number (stamped on chassis)

Safety Rules



Danger

Failure to obey the instructions and safety rules in this manual and the appropriate Operator's Manual on your machine will result in death or serious injury.

Many of the hazards identified in the operator's manual are also safety hazards when maintenance and repair procedures are performed.

Do Not Perform Maintenance Unless:

- You are trained and qualified to perform maintenance on this machine.
- You read, understand and obey:
 - manufacturer's instructions and safety rules
 - employer's safety rules and worksite regulations
 - applicable governmental regulations
- You have the appropriate tools, lifting equipment and a suitable workshop.

Safety Rules

Personal Safety

Any person working on or around a machine must be aware of all known safety hazards. Personal safety and the continued safe operation of the machine should be your top priority.



Read each procedure thoroughly. This manual and the decals on the machine, use signal words to identify the following:



Safety alert symbol—used to alert personnel to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



Indicates a imminently hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, may cause minor or moderate injury.



Indicates a potentially hazardous situation which, if not avoided, may result in property damage.



Be sure to wear protective eye wear and other protective clothing if the situation warrants it.



Be aware of potential crushing hazards such as moving parts, free swinging or unsecured components when lifting or placing loads. Always wear approved steel-toed shoes.

Workplace Safety

Any person working on or around a machine must be aware of all known safety hazards. Personal safety and the continued safe operation of the machine should be your top priority.



Be sure to keep sparks, flames and lighted tobacco away from flammable and combustible materials like battery gases and engine fuels. Always have an approved fire extinguisher within easy reach.



Be sure that all tools and working areas are properly maintained and ready for use. Keep work surfaces clean and free of debris that could get into machine components and cause damage.



Be sure any forklift, overhead crane or other lifting or supporting device is fully capable of supporting and stabilizing the weight to be lifted. Use only chains or straps that are in good condition and of ample capacity.



Be sure that fasteners intended for one time use (i.e., cotter pins and self-locking nuts) are not reused. These components may fail if they are used a second time.



Be sure to properly dispose of old oil or other fluids. Use an approved container. Please be environmentally safe.



Be sure that your workshop or work area is properly ventilated and well lit.

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Specifications

Machine Specifications

Batteries, Standard

All models except GS-4047

Voltage	6V DC
Group	GC2
Type	T-105
Quantity	4
Battery capacity, maximum	C20 = 225AH
Reserve capacity @ 25A rate	447 minutes
Weight, each	62 lbs 28 kg

Batteries, Standard GS-4047

Voltage	12V DC
Group	GC2
Type	T-1275
Quantity	4
Battery capacity, maximum	C20 = 150AH
Reserve capacity @ 25A rate	280 minutes
Weight, each	82 lbs 37 kg

Batteries, Maintenance-free (option)

All models except GS-4047

Voltage	6V DC
Group	GC2
Type	6V-AGM
Quantity	4
Battery capacity, maximum	200AH
Reserve capacity @ 25A rate	380 minutes
Weight, each	62 lbs 28 kg

Platform Overload Pressure Transducer

(if equipped) All models except GS-3232 and GS-4047

Input voltage	8 to 30 VDC
Signal voltage	1 to 5 V

Platform Overload Pressure Transducer

(if equipped) GS-3232 and GS-4047

Input voltage	8 to 30 VDC
Signal voltage	0.25 to 6.25 V

Angle Sensor (if equipped)

Input voltage	8 to 30 VDC
Signal voltage	3 to 4 V, PMW output

Outrigger Pressure Transducer, GS-3232 only

Input voltage	8 to 30 VDC
Signal voltage	1 to 5 V

For operational specifications, refer to the Operator's Manual.

Specifications

Fluid capacities

Hydraulic tank	3.75 gallons
All models except GS-4047	14.2 liters
Hydraulic tank	6.5 gallons
GS-4047	24.6 liters
Hydraulic system (including tank)	5 gallons
GS-3232 and GS-3246	19 liters
Hydraulic system (including tank)	7.5 gallons
GS-4047	28.4 liters
Hydraulic system (including tank)	4.5 gallons
All other models	18 liters

Tires and wheels

GS-1530, GS-1532, GS-1930, GS-1932

Tire size (solid rubber)	12 x 4.5 in 30.5 x 11.4 cm
Tire contact area	9 sq in 58 cm ²
Castle nut torque, dry	300 ft-lbs 406.7 Nm
Castle nut torque, lubricated	225 ft-lbs 305 Nm

GS-2032, GS-2632, GS-3232, GS-2046, GS-2646, GS-3246, GS-4047

Tire size (solid rubber)	15 x 5 in 38.1 x 12.7 cm
Tire contact area	15 sq in 96.7 cm ²
Castle nut torque, dry	300 ft-lbs 406.7 Nm
Castle nut torque, lubricated	225 ft-lbs 305 Nm

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

Specifications

Performance Specifications (models without proportional lift)

Drive speed, maximum

GS-1530, GS-1532, GS-1930, GS-1932

Platform stowed, fast	2.5 mph 40 ft / 10.7 sec 4 km/h 12.2 m / 10.7 sec
-----------------------	--

Platform stowed, slow	2.5 mph 40 ft / 24.8 sec 1.8 km/h 12.2 m / 24.8 sec
-----------------------	--

Platform raised	0.5 mph 40 ft / 55 sec 0.8 km/h 12.2 m / 55 sec
-----------------	--

GS-2032, GS-2632, GS-3232, GS-2046, GS-2646, GS-3246

Platform stowed, fast	2.2 mph 40 ft / 12.4 sec 3.5 km/h 12.2 m / 12.4 sec
-----------------------	--

Platform stowed, slow	1.1 mph 40 ft / 24.8 sec 1.8 km/h 12.2 m / 24.8 sec
-----------------------	--

Platform raised	0.5 mph 40 ft / 55 sec 0.8 km/h 12.2 m / 55 sec
-----------------	--

GS-4047

Platform stowed, fast	2.0 mph 40 ft / 13.7 sec 3.2 km/h 12.2 m / 13.7 sec
-----------------------	--

Platform stowed, slow	1.0 mph 40 ft / 27.4 sec 1.6 km/h 12.2 m / 27.4 sec
-----------------------	--

Platform raised	0.5 mph 40 ft / 55 sec 0.8 km/h 12.2 m / 55 sec
-----------------	--

Braking distance, maximum

High range on paved surface	24 in ± 12 in 61 cm ± 30 cm
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Gradeability

GS-1930, GS-1932, GS-2632, GS-3232, GS-3246 and GS-4047	25%
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GS-1530, GS-1532, GS-2032, GS-2046 and GS-2646	30%
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Airborne noise emissions

Sound pressure level at ground workstation	< 70 dBA
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Sound pressure level at platform workstation	< 70 dBA
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Specifications

Function speed, maximum from platform controls (with 1 person in platform)

GS-1530 and GS-1532

Platform up (fast mode)	15 to 17 seconds
Platform up (slow mode)	31 to 33 seconds
Platform down	28 to 30 seconds

GS-1930 and GS-1932

Platform up (fast mode)	15 to 17 seconds
Platform up (slow mode)	31 to 33 seconds
Platform down	28 to 30 seconds

GS-2032 and GS-2046

Platform up (fast mode)	28 to 32 seconds
Platform up (slow mode)	58 to 62 seconds
Platform down	26 to 30 seconds

GS-2632 and GS-2646

Platform up (fast mode)	28 to 32 seconds
Platform up (slow mode)	58 to 62 seconds
Platform down	22 to 26 seconds

GS-3232 and GS-3246

Platform up (fast mode)	55 to 59 seconds
Platform up (slow mode)	108 to 112 seconds
Platform down	38 to 42 seconds

GS-4047

Platform up (fast mode)	69 to 73 seconds
Platform up (slow mode)	118 to 122 seconds
Platform down	39 to 43 seconds

Rated work load at full height, maximum

GS-1530 and GS-1532	600 lbs 272 kg
GS-1930, GS-1932, GS-2632 and GS-3232	500 lbs 227 kg
GS-2032	800 lbs 363 kg
GS-2046	1200 lbs 544 kg
GS-2646	1000 lbs 454 kg
GS-3246	700 lbs 317 kg
GS-4047 (CE and AS models)	770 lbs 350 kg
GS-4047 (ANSI and CSA models)	550 lbs 250 kg

GS-3232 Outrigger leveling capacity, maximum

Side to side	5°
Front to rear	3°

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