A TEREX COMPANY

Service and Repair Manual

Z®-62/40

Serial Number Range

from Z6215A-101 to Z6216N-2999

from Z6216D-108 to Z6216D-149

from Z6216M-101 to Z6216M-399

from Z62D-150
from Z62H-3000
from Z62M-400

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. 1268555GT
Rev A3
February 2020

Order the manual at mid-west-tech.com >

Table of Contents

Introduction	**Introduction**	**ii**
	Important Information	ii
	Find a Manual for this Model	ii
	Revision History	iii
	Serial Number Legend	iv
Section 1	**Safety Rules**	**v**
	General Safety Rules	v
Section 2	**Specifications**	**1**
	Machine Specifications	1
	Performance Specifications	2
	Hydraulic Oil Specifications	2
	Hydraulic Component Specifications	5
	Manifold Component Specifications	6
	Ford MSG-425 EFI Engine Specifications	7
	Deutz D2011 L03i Engine Specifications	8
	Deutz TD2011 L04i Engine Specifications	9
	Deutz D 2.9 L4 Engine Specifications	10
	Perkins 404D-22 Engine Specifications	11
	Perkins 404F-22 Engine Specifications	12
	Machine Torque Specifications	13
	TRAX Torque Specifications	13
	Hydraulic Hose and Fitting Torque Specifications	14
	Torque Procedure	15
	SAE and Metric Fasteners Torque Charts	17

MidWestTech | Terex Genie Z-62/40 Articulated Boom Lift Service Manual | Publication 126... Order the manual at mid-west-tech.com >

Table of Contents

Section 3 **Repair Procedures** **18**

Introduction 18

Platform Controls **20**

1-1 ALC-500 Circuit Board 20

1-2 Joysticks 21

How to Adjust the Joystick Threshold Setting 21

How to Adjust the Joystick Max-out Setting 22

How to Adjust the Joystick Ramp Rate Setting 23

Platform Components **25**

2-1 Platform Leveling Slave Cylinder 25

2-2 Platform Rotator 27

2-3 Platform Overload System 29

Jib Boom Components **31**

3-1 Jib Boom 31

3-2 Jib Boom Lift Cylinder 32

Primary Boom Components **33**

4-1 Cable Track 33

How to Remove the Cable Track 33

How to Repair the Cable Track 34

4-2 Primary Boom 34

How to Disassemble the Primary Boom 35

4-3 Primary Boom Lift Cylinder 36

4-4 Primary Boom Extension Cylinder 37

4-5 Platform Leveling Master Cylinder 38

Secondary Boom Components **39**

5-1 Secondary Boom Lift Cylinder 40

MidWestTech | Terex Genie Z-62/40 Articulated Boom Lift Service Manual | Publication 126... Order the manual at mid-west-tech.com >

Table of Contents

Engines **42**
6-1 RPM adjustment - Deutz Models 42
6-2 RPM adjustment - Perkins Models 42
6-3 Flex Plate 42
How to Install the Flex Plate 43
How to install the Pump and Bell Housing Assembly 45
6-4 Ford MSG-425 Engine Fault Codes 46
6-5 Engine Fault Codes - Deutz D 2.9 L4 and Perkins 404F-22 Models 47

Hydraulic Pumps **48**
7-1 Function Pump 48
7-2 Drive Pump 49

Manifolds **51**
8-1 Function Manifold Components 52
8-2 Valve Adjustments - Function Manifold 58
How to Adjust the System Relief Valve 58
How to Adjust the Platform Level Up Relief Valve 58
How to Adjust the Platform Level Down Relief Valve 59
8-3 Jib Boom / Platform Rotate Manifold Components 60
8-4 Brake / Two Speed Manifold Components 61
8-5 Brake / Two Speed / Steer Mode Manifold Components 62
8-6 Steer Select Manifold Components 63
8-7 Turntable Rotation Manifold Components 64
8-8 Oscillate Directional Valve Manifold Components 65
8-9 How to Set Up the Oscillate Directional Valve 66
8-10 Valve Adjustment - Oscillate Relief Valve 67
8-11 Drive Oil Diverter Manifold Components (welder option) 68
8-12 Traction Manifold Components, 2WD 70
8-13 Traction Manifold Components, 4WD 72
8-14 Valve Adjustments, Traction Manifold 74
8-15 Hydraulic Generator Manifold Components, 3kW 75
8-16 Valve Coils 76
How to Test a Coil Diode 77

MidWestTech | Terex Genie Z-62/40 Articulated Boom Lift Service Manual | Publication 126... Order the manual at mid-west-tech.com >

Specifications

Machine Specifications

Tires and Wheels	
Tire size (Rough terrain)	355/55D625
Tire weight, new foam-filled (Rough terrain) (minimum)	415 lbs 188 kg
Tire size (High flotation)	41/18LL x 22.5
Tire ply rating (Rough terrain and Hi-flotation)	14
Wheel lugs	9 @ 5/8 - 18
Lug nut torque, dry	240 ft-lbs 325 Nm
Lug nut torque, lubricated	180 ft-lbs 244 Nm
Overall tire diameter (Rough terrain)	36.9 in 93.7 cm
Overall tire diameter (High flotation)	40.3 in 102.4 cm
Tire pressure (Rough terrain)	70 psi 4.92 bar
Tire pressure (High flotation)	60 psi 4.13 bar

Track Components	
Track material	Rubber
Tensioning system	Pressurized grease
Weight (each)	1500 lbs 680 kg

Fluid capacities	
LPG tank	33.5 lbs 15.2 kg
Fuel tank (Gas / LPG models)	20 gallons 75.7 liters
Fuel tank (Diesel models)	36 gallons 136.3 liters
Hydraulic tank	35 gallons 132.5 liters
Hydraulic system (including tank)	45 gallons 170.3 liters
Drive hubs	20 fl oz 591 cc
Turntable rotation drive hub	43 fl oz 1262 cc

Drive hub oil type: SAE 90 multipurpose hypoid gear oil
API service classification GL5

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

MidWestTech | Terex Genie Z-62/40 Articulated Boom Lift Service Manual | Publication 126... Order the manual at mid-west-tech.com >

Fault Codes



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.
- ☑ Unless otherwise specified, perform each procedure with the machine in the following configuration:
  - Machine parked on a firm, level surface
  - Key switch in the off position with the key removed
  - The red Emergency Stop button in the off position at both the ground and platform controls
  - Wheels chocked
  - All external AC power supply disconnected from the machine
  - Boom in the stowed position
  - Turntable secured with the turntable rotation lock
  - Welder disconnected from the machine (if equipped with the weld cable to platform option)

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.
- ☑ Read each appropriate fault code thoroughly. Attempting short cuts may produce hazardous conditions.
- ☑ Be aware of the following hazards and follow generally accepted safe workshop practices.

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

Note: Two persons will be required to safely perform some troubleshooting procedures.

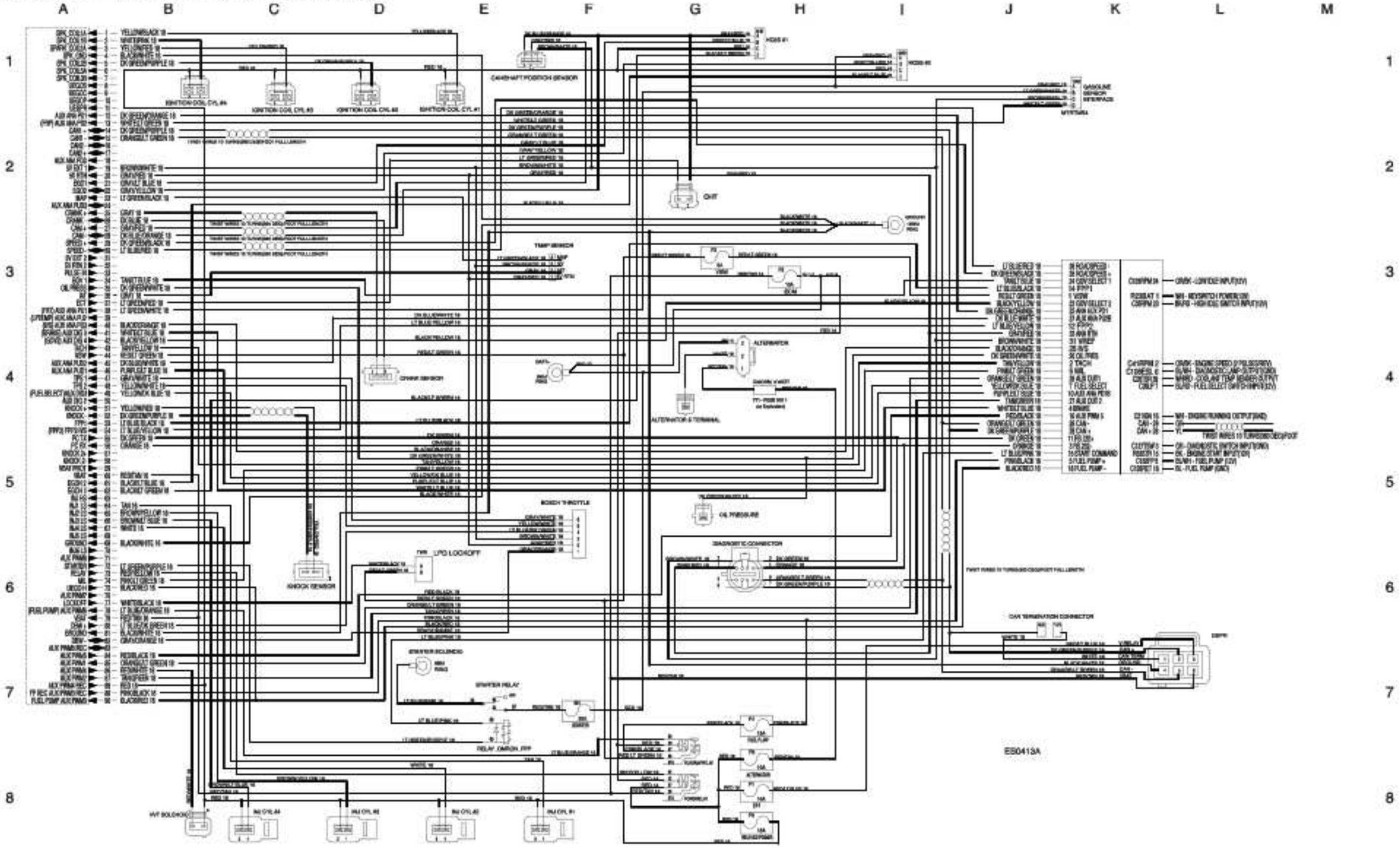
MidWestTech | Terex Genie Z-62/40 Articulated Boom Lift Service Manual | Publication 126... Order the manual at mid-west-tech.com >

Electrical Schematic,
Deutz 2011 L03i / Perkins 404D-22 Models (AS/CE)



MidWestTech | Terex Genie Z-62/40 Articulated Boom Lift Service Manual | Publication 1268555 Order the manual at mid-west-tech.com >

Ford MSG-425 EFI Engine Wire Harness



MidWestTech | Terex Genie Z-62/40 Articulated Boom Lift Service Manual | Publication 1268555 Order the manual at mid-west-tech.com >