SERVICE MANUAL

SKIDSTEER LOADER
155, 175

EN - 9813/9800 - ISSUE 1 - 07/2017

This manual contains original instructions, verified by the manufacturer (or their authorized representative).

Copyright 2017 © JCB SERVICE
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB SERVICE.

www.jcb.com

Foreword

The Operator's Manual

⚠

You and others can be killed or seriously injured if you operate or maintain the machine without first studying the Operator's Manual. You must understand and follow the instructions in the Operator's Manual. If you do not understand anything, ask your employer or JCB dealer to explain it.

Do not operate the machine without an Operator's Manual, or if there is anything on the machine you do not understand.

Treat the Operator's Manual as part of the machine. Keep it clean and in good condition. Replace the Operator's Manual immediately if it is lost, damaged or becomes unreadable.

Contents

01 - Machine

03 - Attachments, Couplings and Load Handling

06 - Body and Framework

09 - Operator Station

12 - Heating, Ventilating and Air-Conditioning (HVAC)

15 - Engine

18 - Fuel and Exhaust System

21 - Cooling System

24 - Brake System

27 - Driveline

30 - Hydraulic System

33 - Electrical System

72 - Fasteners and Fixings

75 - Consumable Products

78 - After Sales

MidWestTech | JCB 155, 175 Skid Steer Loader Service Manual | Publication 9813-9800 Order the manual at mid-west-tech.com >

01 - Machine

Contents **Page No.**

Acronyms Glossary 01-2

01-03 Safety
- 01-03-03 Safety - Yours and Others 01-3
- 01-03-06 Safety Warnings 01-4
- 01-03-09 General Safety 01-5
- 01-03-12 Maintenance Safety 01-6
- 01-03-15 Safety Practice 01-8
- 01-03-18 Operating Safety 01-9
- 01-03-21 Worksite Safety 01-11
- 01-03-24 Risk Assessment 01-12
- 01-03-27 Maintenance Positions 01-13

01-06 About this Manual
- 01-06-03 Model and Serial Number 01-19
- 01-06-06 Using the Manual 01-20

01-09 Description
- 01-09-12 Main Component Locations 01-23
- 01-09-15 Service Point Locations 01-25

01-33 Cleaning
- 01-33-00 General 01-31

MidWestTech | JCB 155, 175 Skid Steer Loader Service Manual | Publication 9813-9800 **Order the manual at mid-west-tech.com >**

03 - Safety

Contents **Page No.**

01-03-03 Safety - Yours and Others 01-3
01-03-06 Safety Warnings 01-4
01-03-09 General Safety 01-5
01-03-12 Maintenance Safety 01-6
01-03-15 Safety Practice 01-8
01-03-18 Operating Safety 01-9
01-03-21 Worksite Safety 01-11
01-03-24 Risk Assessment 01-12
01-03-27 Maintenance Positions 01-13

MidWestTech | JCB 155, 175 Skid Steer Loader Service Manual | Publication 9813-9800 Order the manual at mid-west-tech.com >

03 - Attachments, Couplings and Load Handling

Contents **Page No.**

03-00 Attachments
- 03-00-00 General 03-3

03-09 Lift Arm Quickhitch
- 03-09-00 General 03-7
- 03-09-03 Mechanical Quickhitch 03-9
- 03-09-09 Electronic Quickhitch 03-11

03-30 Shovel
- 03-30-00 General 03-15

03-33 Fork
- 03-33-00 General 03-19

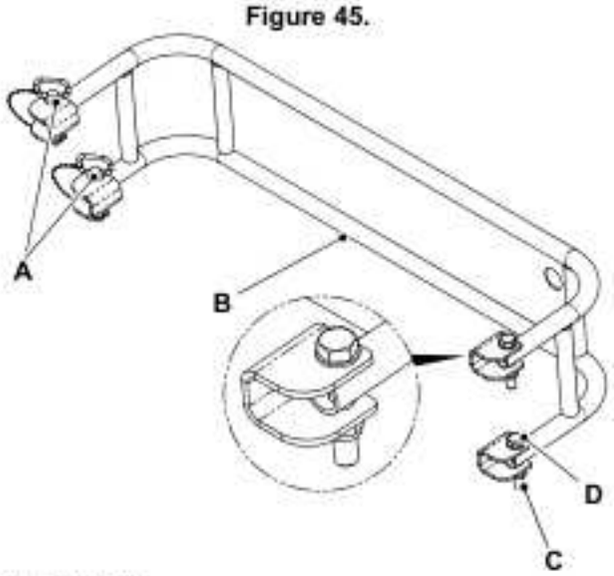
MidWestTech | JCB 155, 175 Skid Steer Loader Service Manual | Publication 9813-9800 **Order the manual at mid-west-tech.com >**

Remove and Install

Remove

1. Remove the hitch pins to release the door guard at one side.
2. Remove the nuts and bolts, remove the door guard.

Figure 45.



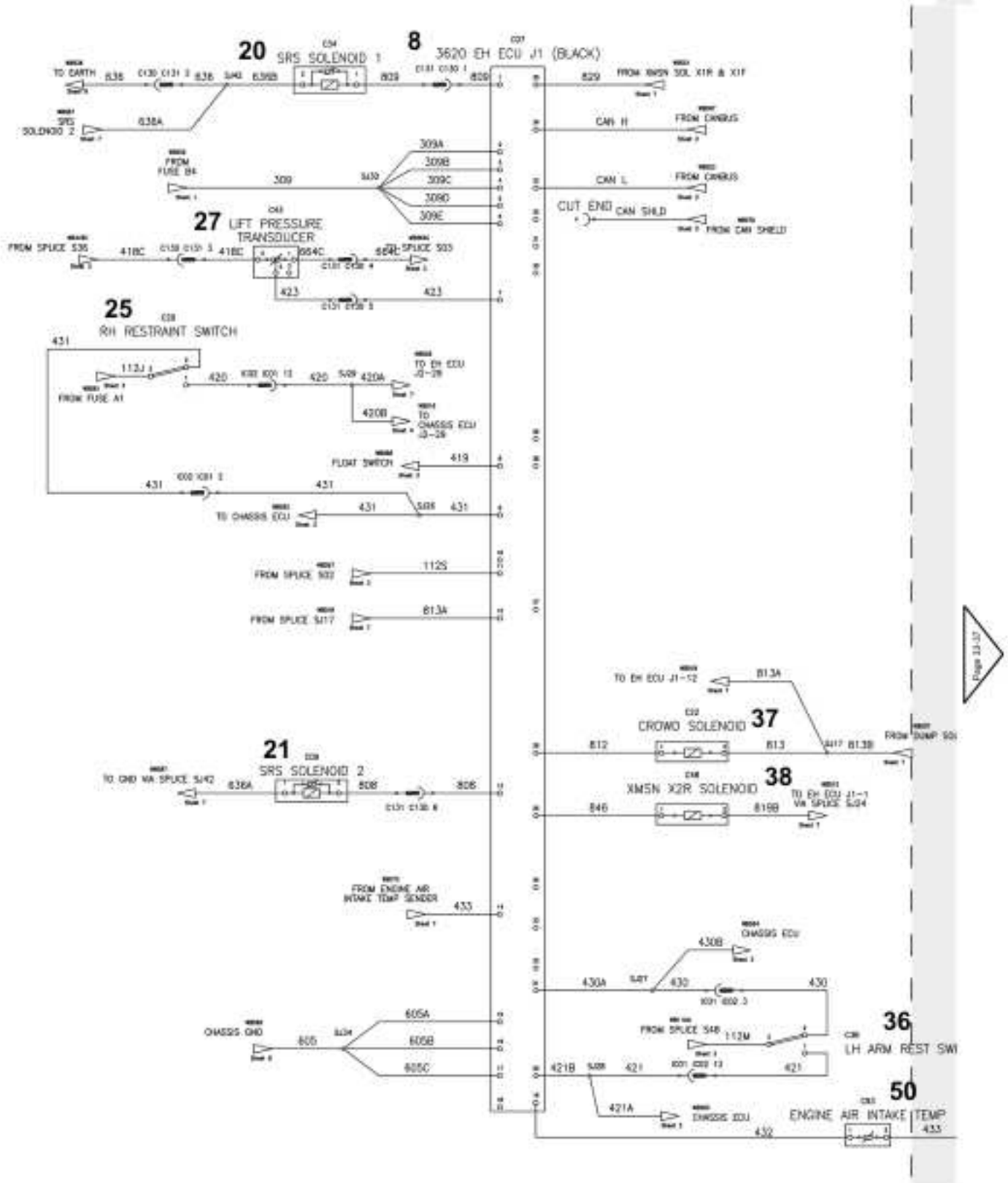
A Hitch pin
B Door Guard
C Nut
D Bolt

Install

1. Replacement is the reversal of the removal procedure.

MidWestTech | JCB 155, 175 Skid Steer Loader Service Manual | Publication 9813-9800 Order the manual at mid-west-tech.com >

Figure 789. (Part 1 of 2)



MidWestTech | JCB 155, 175 Skid Steer Loader Service Manual | Publication 9813-9800 Order the manual at mid-west-tech.com >

Technical Data

JCB recommend that you use the JCB lubricants shown as they have been verified by JCB for use on JCB machines. However, you could use other lubricants that are equivalent to the JCB standards and quality or offer the same machine component protection.

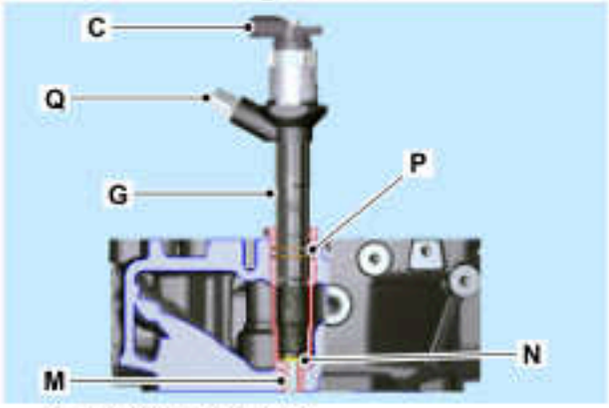
Table 259. Machines with JCB Diesel Engine by Kohler

Item	Capacity	Fluid/Lubricant	JCB Part Number	Container Size(1)	Specification
Fuel Tank	98L (radial lift), 92L (vertical lift)	Diesel Oil			
Engine (Oil)	Min5.5L Max7.4L	JCB Engine Oil EP 5W40	4001/2705	20L	API CJ4, ACEA E6-E9, Low SAPS
Engine (Coolant)	10L	JCB Antifreeze HP	4006/1120	20L	ASTM D3306, ASTM D4985, ASTM D6210, SAE J1034, BS6580 (1992), AFNOR NF R15-601
Hydraulics System	System:43.5L Tank:26L	JCB Extreme Performance Hydraulic Fluid 46 (climates between -20°C (-4°F) and 46°C (115°F)	4002/2900	200L	
		JCB Bio Hydraulic Fluid 46 (if required)	4002/2603	200L	
Chain Cases	19L	JCB Engine Oil EP 15W40	4001/1805	20L	
Grease Points		JCB HP Grease or JCB Special MPL EP Grease	4003/2017	24 x 0.4kg cartridges	

(1) For information about the different container sizes that are available (and their part numbers), contact your JCB dealer.

MidWestTech | JCB 155, 175 Skid Steer Loader Service Manual | Publication 9813-9800 Order the manual at mid-west-tech.com >

Figure 438.

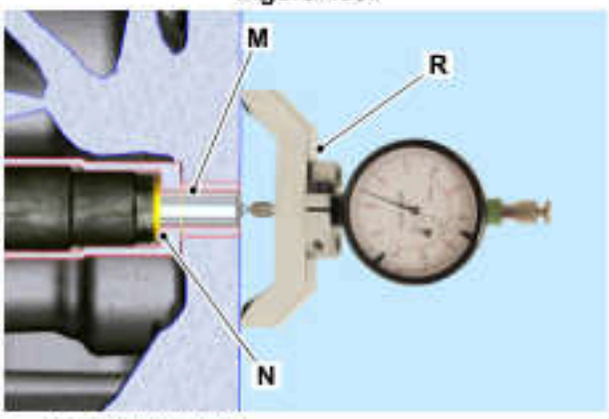


C Electrical connector
G Electronic injector
M Injector sleeve
N Gasket
P Gasket
Q High pressure pipe inlet

6. Make sure that you clamp the sleeve to the correct torque value.
7. Make sure that you put the injector into the sleeve.
8. Make sure that the injector is installed in the correct orientation, with the bleed-off port facing the right hand side (exhaust manifold) of the engine.
9. Make sure that you use a dial gauge to check that the projection of the electronic injector sleeve must be in the specified range.

   Length/Dimension/Distance: 1.68–2.42mm
   Special Tool: Tool for protrusion of pistons, injectors and glow plugs (Qty.: 1)

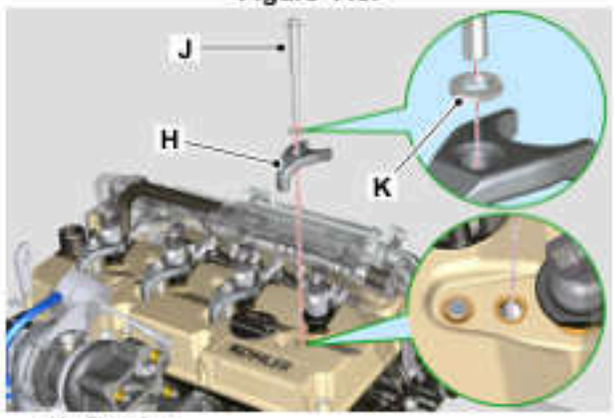
Figure 439.



M Injector sleeve
N Gasket
R Dial gauge

10. Install the rocker arm pin fixing screw.
11. Position the electronic injector fixing bracket and secure it with a screw and washer.

Figure 440.



H Bracket
J Screw
K Washer

12. Tighten the injector fixing bracket screw to the correct torque value.
13. Attach the fuel return pipe fitting to the injector head.
14. Connect the electrical connector.

Note: If the injector projection does not fall into the specified range then replace the gasket, on the base of the injector sleeve and repeat the inspection.

After Installation

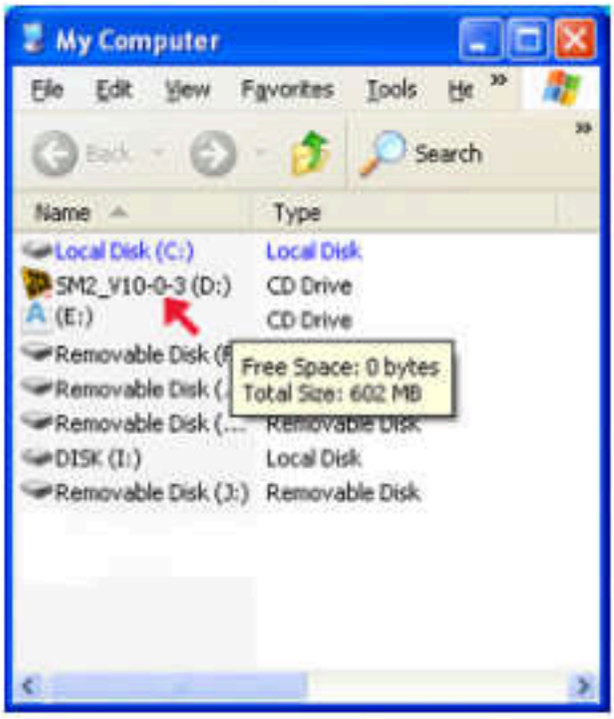
1. Replace the rocker cover. Refer to (PIL 15-42).
2. Renew the high pressure fuel pipes. Refer to (PIL 18-96).
3. Start the engine and check for fuel leaks.

Table 108. Torque Values

Item	Nm
M	30
J	20

MidWestTech | JCB 155, 175 Skid Steer Loader Service Manual | Publication 9813-9800 Order the manual at mid-west-tech.com >

Figure 902.



4. Select and open the "Setup.exe" application.
5. A new window "JCB Servicemaster Setup" will appear on the screen.
   5.1. Click the "Install V10.0.3" option to start the setup application. Refer to Figure 903.

Figure 903.



6. A new window "Select Setup Language" will appear on the screen. Refer to Figure 904.
   6.1. Use the drop down option to select the suitable language.
   6.2. Click the "OK" option to confirm selected language.

Figure 904.



7. A warning message window will appear on the screen. Refer to Figure 905.
   7.1. Click the "OK" option.

Figure 905.



8. A new window "JCB Servicemaster Installation Wizard" will appear on the screen. Refer to Figure 906.
   8.1. Click the "Next" option to proceed.

Figure 906.



9. Put "User Name" and "Organization" details into the "Customer Registration" screen. Refer to Figure 907.
   9.1. Click the "Next" option when you inserted details.

MidWestTech | JCB 155, 175 Skid Steer Loader Service Manual | Publication 9813-9800 Order the manual at mid-west-tech.com >