SERVICE MANUAL

LOADALL (ROUGH TERRAIN VARIABLE REACH TRUCK)
526-56, 531-70, 531-T70, 533-105, 535-95, 535-T95, 536-60, 536-70, 536-70LC, 536-T70, 536-T70LP, 541-70, 541-T70, 550-80

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

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Foreword

The Operator's Manual

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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

25 - Steering System

27 - Driveline

30 - Hydraulic System

33 - Electrical System

72 - Fasteners and Fixings

75 - Consumable Products

78 - After Sales

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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
- 01-03-18 Operating Safety 01-8
- 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 01-17
- 01-06-06 Using the Manual 01-18

01-09 Description
- 01-09-00 General 01-21
- 01-09-03 Log Moving/Object Handling 01-23
- 01-09-06 Optional Equipment and Attachments 01-24
- 01-09-12 Main Component Locations 01-25
- 01-09-15 Service Point Locations 01-26

01-33 Cleaning
- 01-33-00 General 01-37

MidWestTech | JCB 526-56, 531-70, 531-T70, 533-105, 535-95, 535-T95, 536-60, 536-... 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
01-03-18 Operating Safety 01-8
01-03-21 Worksite Safety 01-11
01-03-24 Risk Assessment 01-12
01-03-27 Maintenance Positions 01-13

MidWestTech | JCB 526-56, 531-70, 531-T70, 533-105, 535-95, 535-T95, 536-60, 536-... Order the manual at mid-west-tech.com >

09 - Description

Contents **Page No.**

01-09-00 General 01-21
01-09-03 Log Moving/Object Handling 01-23
01-09-06 Optional Equipment and Attachments 01-24
01-09-12 Main Component Locations 01-25
01-09-15 Service Point Locations 01-26

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Health and Safety

Engine/Steering Failure

If the engine or steering fails, stop the machine as quickly as possible. Do not operate the machine until the fault has been corrected.

Working Under the Machine

Make the machine safe before getting beneath it. Make sure that any attachments on the machine are correctly attached. Engage the park brake, remove the ignition key, disconnect the battery. If the machine has wheels use blocks to prevent unintentional movement.

Fluid Under Pressure

Fine jets of fluid at high pressure can penetrate the skin. Keep face and hands well clear of fluid under pressure and wear personal protective equipment. Hold a piece of cardboard close to suspected leaks and then examine the cardboard for signs of fluid. If fluid penetrates your skin, get medical help immediately.

Hydraulic Pressure

Hydraulic fluid at system pressure can injure you. Before connecting or removing any hydraulic hose, residual hydraulic pressure trapped in the service hose line must be vented. Make sure the hose service line has been vented before connecting or removing hoses. Make sure the engine cannot be started while the hoses are open.

WARNING! *When getting access for maintenance work, make sure no-one is in a position to be caught and/or crushed by the wheels when the steering wheel is turned.*

Technical Data

For: 526-56 [T4i], 531-70 [T4i], 531-T70 [T4i], 533-105 [T4i], 535-95 [T4i], 535-T95 [T4i], 536-60 [T4i], 536-70 [T4i], 536T70 [T4i], 541-70 [T4i], 541-T70 [T4i] ..... Page 25-4
For: 550-80 [T4i] ..... Page 25-4

(For: 526-56 [T4i], 531-70 [T4i], 531-T70 [T4i], 533-105 [T4i], 535-95 [T4i], 535-T95 [T4i], 536-60 [T4i], 536-70 [T4i], 536T70 [T4i], 541-70 [T4i], 541-T70 [T4i])

Table 236.

Model	Rexroth Bosch LAGC 160	Eaton 160cc
Volumetric displacement gerotor 1:	160 cc/rev	160 cc/rev
Volumetric displacement gerotor 2:	-	-
Relief Valve Operating Pressure (at 1500 RPM (Revolutions Per Minute))	195 –200 bar (2,826.1 – 2,898.5 psi)	175 bar (2,536.2 psi)
Shock valve operating pressure- if installed	250 bar (3,623.2 psi)	235 bar (3,405.8 psi)

(For: 550-80 [T4i])

Table 237.

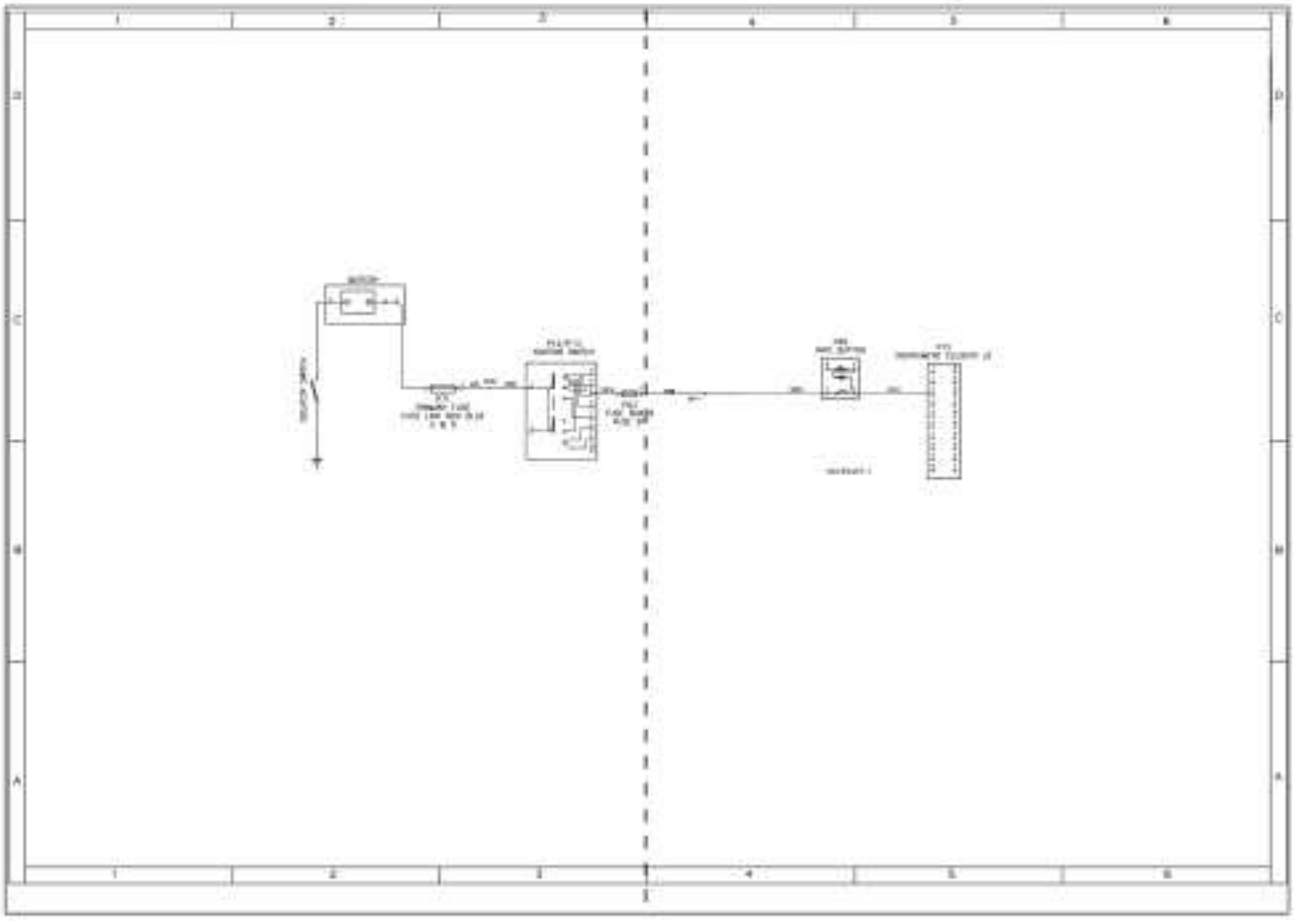
Model	Eaton SXB
Volumetric displacement gerotor 1:	125 cc/rev
Volumetric displacement gerotor 2:	285 cc/rev
Relief valve operating pressure (at 1500 RPM)	175 –182 bar (2,536.2 – 2,637.7 psi)
Shock valve operating pressure- if installed	235 –242 bar (3,405.8 – 3,507.2 psi)

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Page 33-206

Figure 1616. 160/F9457-1
526-56 T4i (Info Switch)

Page 33-207



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Fault Code	Description	Warning Displays	Severity
S047	60° proximity switch open circuit	MIL lamp activated (Red). Continuous buzzer activated	Stop Now
S048	60° proximity switch short circuit		Logged
S049	Boom extend switch open circuit	MIL lamp activated (Amber). Message displayed on LCD. Buzzer activated for 1 second.	Service
S050	Boom extend switch short circuit	MIL lamp activated (Amber). Message displayed on LCD. Buzzer activated for 1 second.	Service
S051	Left stabiliser transducer fault	MIL lamp activated (Red). Continuous buzzer activated	Stop Now
S052	Right stabiliser transducer fault	MIL lamp activated (Amber). Message displayed on LCD. Buzzer activated for 1 second.	Service
S053	40° proximity switch power open circuit	MIL lamp activated (Red). Continuous buzzer activated	Stop Now
S054	40° proximity switch power short circuit to ground	MIL lamp activated (Red). Continuous buzzer activated	Stop Now
S055	40° proximity switch power short circuit to battery		Logged
S056	60° proximity switch power open circuit	MIL lamp activated (Amber). Message displayed on LCD. Buzzer activated for 1 second.	Service
S057	60° proximity switch power short circuit to ground	MIL lamp activated (Amber). Message displayed on LCD. Buzzer activated for 1 second.	Service
S058	60° proximity switch power short circuit to battery	MIL lamp activated (Amber). Message displayed on LCD. Buzzer activated for 1 second.	Service
S059	Boom extend proximity switch power open circuit	MIL lamp activated (Red). Continuous buzzer activated	Stop Now
S060	Boom extend proximity switch power short circuit to ground	MIL lamp activated (Red). Continuous buzzer activated	Stop Now
S061	Boom extend proximity switch power short circuit to battery		Logged
S062	Hydraulic isolation valve open circuit	MIL lamp activated (Amber). Message displayed on LCD. Buzzer activated for 1 second.	Service

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Figure 845.



15. Reposition and use the same tools to measure the layshaft end float.

Figure 846.



16. Reposition and use the same tools to measure the output shaft end float. The output shaft bearing is preloaded and deflection should be zero.

Figure 847.



17. Measure the pump clutch shaft end float.

Figure 848.

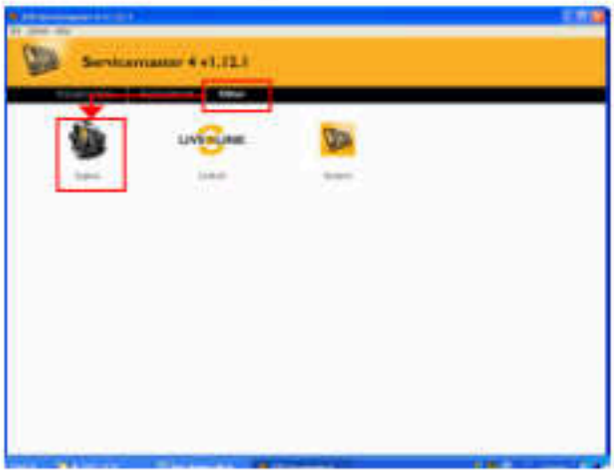


18. Use the special tool to lock off the bevel pinion gear. Measure the bevel gear backlash. The tool is installed the opposite side of the transmission case.

Special Tool: Bevel Gear Nut Reaction Tool (Qty.: 1)

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Figure 1870.



3. Make sure that the correct DLA is selected in the chooser. Click on Utilities, DLA Setup. The DLA Chooser window opens. Check the button to match to the Current Device. Click Apply.

4. Select the required machine range.

Figure 1871.



5. The Flashloader tool will then open.

Figure 1872.



Using Flashloader

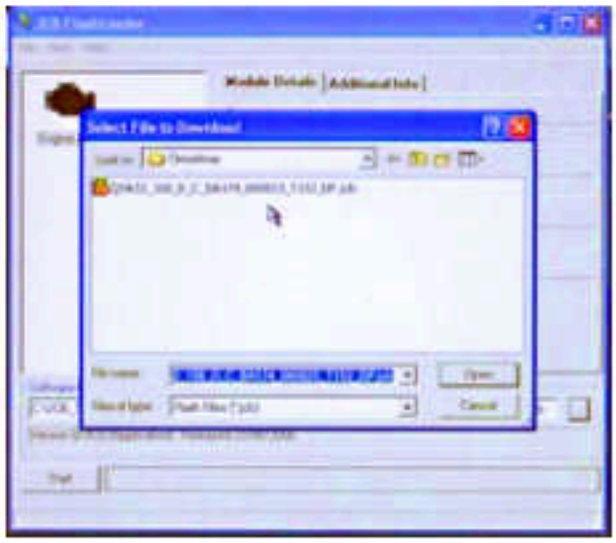
Important: Do not turn off the ignition or isolate the system by accidentally engaging the operators seat isolation switch when using the flashloader. This will interrupt the flash signal to the ECM and will irreparably damage the ECM.

1. Make sure that the machine ignition switch is set to ON but do not start the engine.

2. Click on the ECM icon.

3. Click on the Browse button and select the correct data file. Click Open.

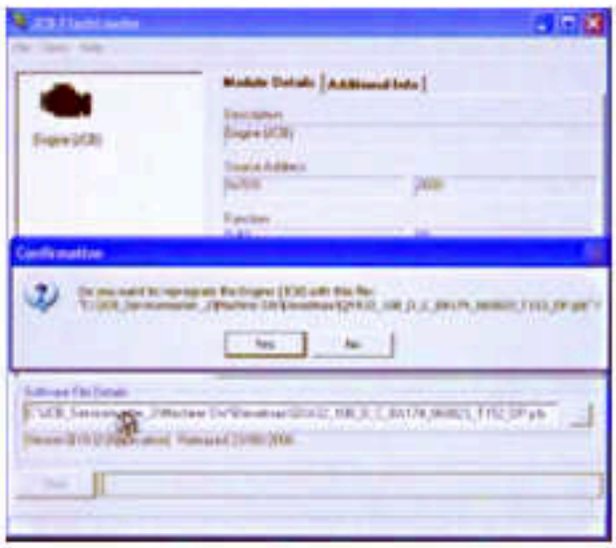
Figure 1873.



4. Click on the Start button. A confirmation window will appear. Click on the Yes to start the reprogramming of the ECM. The progress bar is displayed.

5. When the programming is complete switch the machine ignition to the OFF position. Important: Re-flashing the ECM changes the base programme. Re-flashing the ECM does not configure the machine settings such as fuel injector calibration codes, and other machine specific options.

Figure 1874.



6. Before starting the engine make sure that the machine setup data is correct. You must check that all other relevant machine settings are correctly configured. Use the setup software tool.

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