Service Manual

Fastrac

2115, 2125, 2135, 2140, 2150

From Serial No 0738000

3155, 3185

From Serial No 0640000

Published by the
TECHNICAL PUBLICATIONS DEPARTMENT
of
JCB SERVICE LTD;
World Parts Centre,
Waterloo Park
Uttoxeter, Staffordshire
ST14 7BS

Publication No. 9803/8020
Issue 17

General Information 1
Care & Safety 2
Routine Maintenance 3
Optional Equipment A
Body & Framework B
Electrics C
Controls D
Hydraulics E
Transmission F
Brakes G
Steering H
Suspension S
Engine T

MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | Public... Order the manual at mid-west-tech.com >

Contents

	Page No.
Machine Identification Plate	1 - 1
Typical Vehicle Identification Number (VIN)	1 - 1
Typical Engine Identification Number	1 - 1
Unit Identification	1 - 1
Torque Settings	
Introduction - Zinc Plated Fasteners and Dacromet Fasteners	2 - 1
Zinc Plated Fasteners	2 - 2
Dacromet Fasteners	2 - 3 to 2 - 6
Sealing and Retaining Compounds	3 - 1
Service Tools Numerical List	4 - 1
* Service Tools	
Body and Framework	5 - 1
Electrics	6 - 1
Hydraulics	7 - 1
Transmission	8 - 1
Brakes	9 - 1
Steering	9 - 1
Suspension	9 - 2
Engine	9 - 2
Moving a Disabled Machine	
General	10 - 1
Preparation for Towing	10 - 1
Transporting the Machine	10 - 2

MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | P... Order the manual at mid-west-tech.com >

Contents

	Page No.
Safety Notices	1 - 1
General Safety	2 - 1
Operating Safety	3 - 1
Maintenance Safety	4 - 1

MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | P... Order the manual at mid-west-tech.com >

Contents

	Page No.
Engine Oil - (All Machines)	1 - 1
Lubricants & Capacities (2000 Series Machines)	1 - 2
Lubricants & Capacities (3155)	1 - 4
Lubricants & Capacities (3185)	1 - 6
Lubricants - Health and Safety	1 - 8
Service Schedules (Dry Clutch Transmission †)	2 - 1
Service Schedules (Wet Clutch Transmission ††)	2 - 4
Cleaning the Machine and Checking for Damage	2 - 8
Checking Seat Belt Condition and Security	2 - 8
Opening/Closing the Bonnet (2000 Series Machines)	2 - 9
Opening/Closing the Bonnet (3000 Series Machines)	2 - 9
Greasing	
General	3 - 1
Propshafts and PTO Driveshafts	3 - 1
Steering Swivels (2000 Series Machines)	3 - 2
Front Axle Steering Swivels (3000 Series Machines)	3 - 3
Hydraulic Lift & 3 point Linkage (2000 Series Machines)	3 - 4
Rear PTO Driveshaft Bearings (2000 Series Machines)	3 - 4
Rear Suspension Cylinder Pivots (2000 Series Machines)	3 - 4
Hydraulic Lift & 3 point Linkage (3000 Series Machines)	3 - 5
Rear PTO Driveshaft Bearings (3000 Series Machines)	3 - 5
Rear Suspension Cylinder Pivots (3000 Series Machines)	3 - 5
Rear Anti-roll Bar Ball Joints (2000 Series Machines)	3 - 6
Steering Box Input Shaft Seal (3000 Series Machines)	3 - 7
Rear Anti-roll Bar Ball Joints (3000 Series Machines)	3 - 7
Automatic Trailer Coupling (if fitted)	3 - 8
Cab	
Checking the ROPS Structure	4 - 1
Checking the Windscreen Washer Fluid Level	4 - 2
Air Conditioning	
Cleaning the Filter (2000 Series Machines)	5 - 1
* Adjusting the Compressor Belt (2115, 2125, 2135, 2150)	5 - 1
Cleaning the Filter (3000 Series Machines)	5 - 2
* Adjusting the Compressor Belt (2140 and 3000 Series)	5 - 3
Electrics	
Battery Warning Symbols	6 - 1
First Aid - Electrolyte	6 - 1
Checking the Battery Electrolyte Level	6 - 2
Checking the Headlight Beam Alignment	6 - 3
Fuses	See Section C
Hydraulics	
Checking the Fluid Level	7 - 1
Changing the Filter Element	7 - 1
Changing the Hydraulic Fluid and Cleaning the Suction Strainer	7 - 2
Emptying the Hydraulic Coupling Drain Reservoir (if fitted)	7 - 3
* Dry Clutch Hydraulic System †	
Checking the Fluid Level	8 - 1

† 2000 Series to S/N 739999, 3000 Series to S/N 641999

†† 2000 Series from S/N 740000, 3000 Series from S/N 642000

MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | P... Order the manual at mid-west-tech.com >

Charging Circuit Test

* **Note:** The illustration below shows the battery location on Fastrac 2115, 2125 and 2135 machines. On Fastrac 2150 machines, the battery is on the left hand side of the machine and on 3000 Series machines the battery is in the cab.

Before doing the following test, make sure that the battery and alternator connections are in good condition and that the fan belt is correctly adjusted.

If the battery is in a fully charged condition, switch on the working lights for 3 minutes before commencing the test. Alternatively, operate the starter for a few moments with fuse A5 removed.

Disconnect the positive lead from battery terminal **A**.

Install a 100 Amp open-type shunt between the positive lead and the battery positive terminal **A**.

Connect a multimeter positive lead to vehicle side of the shunt and negative lead to battery side of the shunt. Connect the leads to the meter and set the meter to the relevant range as follows:

AVO 2002 Red lead to volts (middle) socket on meter.
Black lead to negative on meter.
RH slider to DC voltage.
LH slider as illustrated below.

AVO 2003 Red lead to amps socket (marked A) on meter.
Black lead to negative on meter.
RH slider to DC voltage.
LH slider to 200 Shunt.

FLUKE 85 Red lead to volts socket (marked V) on meter.
Black lead to COM socket on meter.
Set dial to mV.

Start the engine and run at maximum speed (see Technical Data, Section T). Meter should show the maximum alternator output in Amps (see **Technical Data**, in this section).

Note: The meter reading should be taken as soon as possible after starting the engine, as the charging current will fall rapidly.

A zero reading indicates failure of the alternator and may be caused by one of the following conditions. These are listed in the order of probability.

a Defective suppression capacitor.

b Dirty sliprings or worn brushes.

c Defective regulator.

d Defective rectifier.

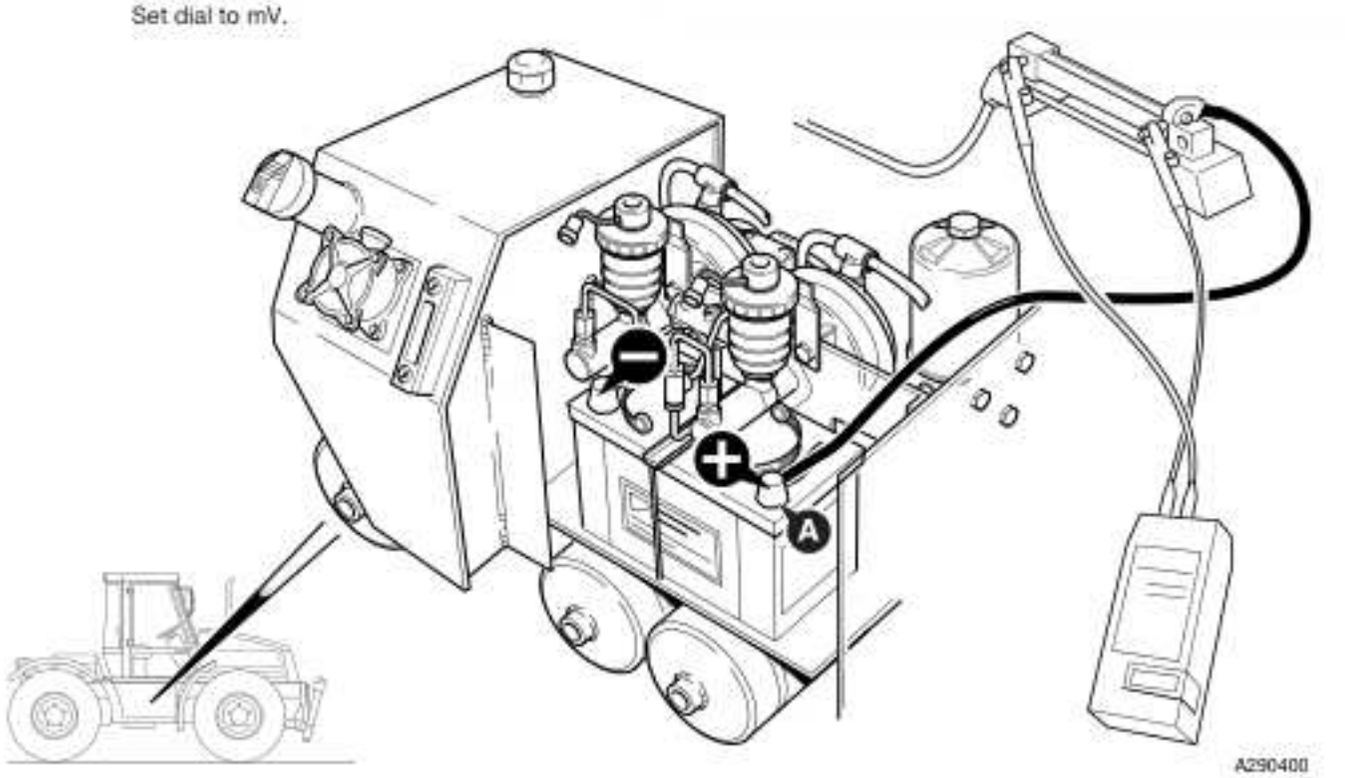
e Open or short-circuited field (rotor) windings.

f Open or short-circuited power (stator) windings.

To check for fault **a**, disconnect the capacitor and repeat the charging test. Renew the capacitor if necessary.

To check for faults **b** and **c**, remove the regulator and brush box assembly. Check the condition of the brushes and, if necessary, clean the sliprings using extra-fine glasspaper. The regulator may only be checked by substitution.

Faults **d**, **e**, and **f** may be checked only by removing and dismantling the alternator for further testing.



MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | P... Order the manual at mid-west-tech.com >

Non-displayable Fault Codes (cont'd)			
Code	**Description**	**Possible Cause**	**Action and Remedy**
D229†	Alternator "No Charge" warning.	Slack or worn alternator drive belts.	Check alternator drive belt tension and condition. See **Adjusting the Fan Belt(s)**, Section 3.
		Internal alternator fault.	Check alternator output and operation, see **Charging Circuit Test**, this Section.
D230†	Brake fluid level low.	Low brake fluid level in one or both actuator reservoirs.	Check level of fluid on both brake fluid reservoirs.
		Faulty fluid level switch.	Check operation of switches by pressing test buttons on switch body.
D231‡	Air tank 1 pressure low.	Low pressure in air tank.	Check for leaks, etc.
D232‡	Air tank 2 pressure low.	Faulty air pressure switch.	Check air pressure switch fo correct operation and function.
D233‡	Air tank 3 pressure low.	Air tank not charging.	Check operation of circuit protection valve.
		Damaged wiring.	Check integrity of wiring from switch to EMS.
D234	Handbrake on when moving. The code will be logged if the vehicle has been moving at > 3 kph for 10 seconds and: (i) instantly the handbrake is applied(up to JCBV0400) (ii) the handbrake has been on for 10 seconds (from JCBV0500)	Driving before handbrake is released.	
		Faulty air pressure switch.	Check air pressure switch for correct operation and function.
		Damaged wiring.	Check integrity of wiring from switch to EMS.
D235††	Engine coolant over temperature. **Note**: From JCBV0400 on, Fault must be present for 1 minute before it is logged.	Excessive datalogging by older versions of EMS software.	Check version of software. Update to current version.
		Blocked radiator.	Check radiator and grille for blockage, see **Cleaning the Radiator**, Section 3.
		Insufficient coolant in radiator.	See **Checking the Coolant Level**, Section 3.
		Slack or worn drive belts	See **Adjusting the Fan Belt(s)**, Section 3.
		Faulty thermostat.	Check operation of thermostat.
		Faulty temperature switch. Damaged wiring.	Check operation of temperature switch. Check integrity of wiring from temperature switch to EMS.

(continued)

MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | P... Order the manual at mid-west-tech.com >

FAULT	ACTION
2 Red X lights up and buzzer sounds **Note:** A buzzer may be heard (without the red cross showing) if a foot is resting on the clutch pedal. This is a warning of operator malpractice and should not be confused with a machine fault indication.	**2 This indicates a fault in either a front or rear 4WS sensor (potentiometer), or in the sensor wiring harness. 4WS will not work when the red X is showing.** If the fault is intermittent, the warning can be cleared by turning the ignition switch off and on. The system will then operate normally until the fault re-occurs. **To trace the fault:** 2.1 Disconnect the front axle sensor from the wiring harness swivel connector. Substitute a known sensor and manually turn to approximately half way. Switch on the ignition (no need to start the engine). If the green tick is now showing, the original front axle sensor is at fault and should be renewed. **Note:** When a sensor has been changed the system must be re-calibrated (see **Sensors**, Section C). 2.2 Repeat step 2.1 for the rear axle sensor. 2.3 If both sensors are functional and the fault remains, there is a fault in the wiring harness. Remove the Electronic Control Unit (ECU) from the 'B' post and disconnect the machine wiring harness. Trace the fault by simple continuity tests from this point down to the swivel connectors at the sensors. 2.4 If both sensors and wiring harness are OK then the fault must be in the ECU. This cannot be serviced and must be renewed as a complete unit. **Note:** A fault in the ECU is extremely unlikely and the unit should not be renewed unless it is absolutely certain that it is at fault.

MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | P... Order the manual at mid-west-tech.com >

ABS System Test

⚠ WARNING

For the following test the machine must be safely supported on stands so all four wheels are not in contact with the ground. Never perform this test with the machine in motion.

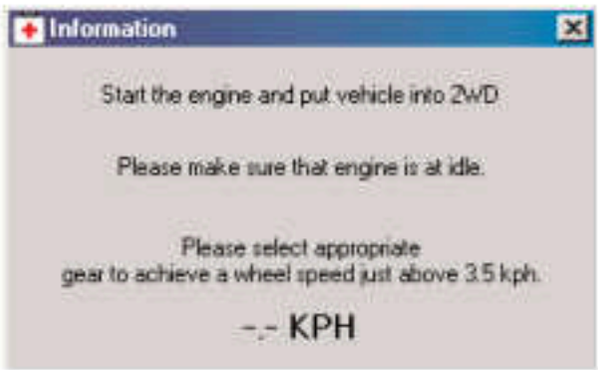
This test is software-driven. At various stages during the test you will be prompted by on-screen instructions to operate the brake and drive controls

1 Press the F5 key or click in the 'ABS System Test' checkbox to open the module.

2 Follow the on-screen instructions until the test is complete.

Note that the first instruction you receive will be to start the engine, select 2WD, then select an appropriate gear and throttle setting to achieve a wheel speed of just above 3.5 kph. Use the speed indicator on the screen, rather than the machine's speedometer, when setting the wheel speed.

3 At the end of the test you will be asked if you wish to view the Fault Log. If you click 'Yes' a Notepad file will open, giving the results of the test you have just performed.



Abs.log - Notepad

File Edit Search Help

```
****************************************
 ABS SYSTEM TEST LOG
****************************************

Date: 21.09.2001
Time: 11:49:18

****************************************
 2WD RECORDED WHEEL SPEEDS
****************************************
Front Near Side = 0.000 KPH
Front Off Side = 0.000 KPH
Rear Near Side = 3.625 KPH
Rear Off Side = 3.625 KPH


****************************************
 TEST REAR OFFSIDE HOLD SOLENOID
****************************************
ENERGISED
Rear Off Side Hold Solenoid

WHEEL SPEEDS
Front Near Side = 0.000 KPH
Front Off Side = 0.000 KPH
Rear Near Side = 0.000 KPH
Rear Off Side = 7.250 KPH

PASSED
```


MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | P... Order the manual at mid-west-tech.com >

Battery Warning Symbols

The following warning symbols may be found on the battery.

Symbol	Meaning
	Keep away from children.
	Shield eyes.
	No smoking, no naked flames, no sparks
	Explosive Gas.
	Battery acid.
	Note operating instructions.

⚠ CAUTION

Damaged or spent batteries and any residue from fires or spillage should be put in a closed acid proof receptacle and must be disposed of in accordance with local environmental waste regulations.

INT-3-1-12

⚠ WARNING

Batteries give off an explosive gas. Do not smoke when handling or working on the battery. Keep the battery away from sparks and flames.

Battery electrolyte contains sulphuric acid. It can burn you if it touches your skin or eyes. Wear goggles. Handle the battery carefully to prevent spillage. Keep metallic items (watches, rings, zips etc) away from the battery terminals. Such items could short the terminals and burn you.

Set all switches in the cab to OFF before disconnecting and connecting the battery. When disconnecting the battery, take off the earth (-) lead first.

When reconnecting, fit the positive (+) lead first.

Re-charge the battery away from the machine, in a well ventilated area. Switch the charging circuit off before connecting or disconnecting the battery. When you have installed the battery in the machine, wait five minutes before connecting it up.

First Aid - Electrolyte

Do the following if electrolyte:

GETS INTO YOUR EYES

Immediately flush with water for 15 minutes, always get medical help.

IS SWALLOWED

Do not induce vomiting. Drink large quantities of water or milk. Then drink milk of magnesia, beaten egg or vegetable oil. Get medical help.

GETS ONTO YOUR SKIN

Flush with water, remove affected clothing. Cover burns with a sterile dressing then get medical help.

5-3-4-3/1

MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | P... Order the manual at mid-west-tech.com >

Sectional Diagrams Component Key - Fastrac 2140

1 Battery (all machines)
1A Second Battery (3000 Series only)
2 Ignition Switch
3 Starter Motor
4 Alternator
5 Trailer ABS Connector
5A Tractor ABS Supply (if fitted)
5B Tractor ABS Return (if fitted)
6 Ignition Relay
7 Work lights Relay
8 Heater Unit (3000 Series)
9 Auxiliary Connector
9A Auxiliary Power Socket (if fitted)
10 Air Conditioning Connector
12 Suspension Seat/Flow Divider Connector
13 Horn Connector
14 Start Inhibit Relay 1
15 Start Inhibit Relay 2
16 Clutch Start Micro-switch
17 Diode Connector
18 Front PTO Switch
19 Rear PTO Switch
20 Brake Lights Switch
21 Brake Lights Relay
22 Rear Wiper Motor
23 Rear Wash/Wipe Switch
24 Connector - Rear Washer Pump
25 Rear Intermittent Wipe Relay
26 Rear Wiper Connectors
27 Front Washer Pump Connector
28 Horn
29 Washer/Horn Switch
30 Front Wiper Motor
31 Front Intermittent Wipe Relay
32 Front Wiper Switch
33 Cold Advance Switch (2000 Series only)
33A Waxstat
34 PTO Cut-out Relay
35 Jack Socket
36 EDC Connector
37 EDC Control Panel
38 Area Cut-out Switch (EDC)
39 Connector - EDC Unit
40 Pin position identification for **39**
41 Raise/Lower Switch (EDC) (In cab)
42L Draft Pin (EDC) (Left Hand)
42R Draft Pin (EDC) (Right Hand)
43 Position Sensor (EDC)
44A Raise Push-Button (EDC) (RH Fender)
44B Raise Push-Button (EDC) (LH Fender)
45A Lower Push-Button (EDC) (RH Fender)
45B Lower Push-Button (EDC) (LH Fender)
46 Raise Solenoid (EDC)
47 Lower Solenoid (EDC)
48 Gear Lever Powershift Switches
a Down
b Up
c Auto
48A Duplicate Powershift Switches (if fitted)
a Up
b Down
c Auto
49 Powershift Solenoids
a Snail
b Tortoise
c Hare
49A Splitter Dump Relay
50 Accelerator Pedal Switch
51 Column Switch
52 Powershift Range Neutral Solenoid Selector
53 Powershift Range Engaged Solenoid Connector
54 4WS Option Connector
55 Clutch Warning/Selectronic Bleeper
56 Powershift Low/Reverse Air Ram
57 Powershift Medium/High Air Ram
58 2WD/Differential Lock Switch
59 Front PTO
60 Rear PTO
61 Differential Lock Switch
62 Differential Lock Cut-Out Relay
63 2WD Dump Relay
64 2WD Solenoid
65 Differential Lock Solenoid
66 Rear PTO Brake Solenoid
67 Front PTO Brake Solenoid
68 Rear PTO Drive Solenoid
69 Front PTO Drive Solenoid
70 Park Brake Switch
71 Rear PTO Cut-Out Connector
71a Rear PTO Termination Connector (machines without rear PTO cut-out option)
71b Rear PTO Interconnecting Connector (machines with rear PTO cut-out option)
72 Diode Connector (E21) (PTO Cut-Out)
73 PTO Cut-Out Push-Button (LH Fender)
74 PTO Cut-Out Push Button (RH Fender)
75 Air Conditioning Blower Switch
76 Air Conditioning Switch
77 Compressor Switch Earth
78 Air Conditioning Unit
79 Air Conditioning Compressor Switch
80 Air Conditioning Compressor Clutch
81 Air Conditioning Compressor Pressure Switch (High)
82 Air Conditioning Compressor Pressure Switch (Low)
83 Air Conditioning Compressor Clutch Relay
84 Radio/Cassette
* **85** Interior Light (RH)
86 Interior Light (LH)
87 Door Switch (LH)
88 Beacon Switch
89 Beacon Socket
90 Hazard Switch
91 Single Trailer Turn Relay
92 Second Trailer Turn Relay
93 Outer Indicator Lights (RH)
94 Outer Indicator Lights (LH)
95A Auxiliary Lights Connector (In)
95B Auxiliary Lights Connector (Out)
96 Side Repeater (LH) (3000 Series only)
97 Side Repeater (RH) (3000 Series only)
98 Trailer Socket
99 Rear Light Cluster (LH) Connector
100 Rear Light Cluster (RH) Connector
101 Front Light Cluster (RH) Connector (3000 Series only)
102 Front Light Cluster (LH) Connector (3000 Series only)
103 Front Work lights Switch
104 'A' Post Work lights Relay
105 Front Working Light (RH outer)
106 Front Working Light (RH inner)
107 Front Working Light (LH inner)
108 Front Working Light (LH outer)
109 Front Working Light (RH 'A' post)
110 Front Working Light (LH 'A' post)
111 Rear Work lights Switch
112 Rear Working Light (RH outer)
113 Rear Working Light (RH inner)
114 Rear Working Light (LH inner)
115 Rear Working Light (LH outer)
116 Main Lights Switch
117 Rear Fog Lights Switch
* **118** Rear Fog Lights Relay
119 Column Lights Switch (Main/Dip/Flash)
120 Side/head Light Connector (LH) (3000 Series)
120A Side/head Light Connector (LH) (2000 Series)
121 Side/head Light Connector (RH) (3000 Series)
121A Side/head Lights Connector (RH (2000 Series)
122 Air Gauge Illumination Lamp
123 Number Plate Lamp (LH)
124 Number Plate Lamp (RH)
125 Auxiliary Lights Switch
126 Auxiliary Headlights (RH)
127 Auxiliary Headlights (LH)
128A Speaker (LH)
128B Speaker (RH)
129 Auxiliary Socket
130 Cigar Lighter
131 Reverse Light Relay
133 Heater Relay 1
134 Heater Relay 2
135 Engine Grid Heater 1
136 Engine Grid Heater 2
139 Buzzer Relay
140 Clutch 'Up' Switch
141 Water Temperature Sender
142 Air Pressure Switch - Tank 1
143 Air Pressure Switch - Tank 2
144 Air Pressure Switch - Tank 3
145 Fuel Level Sender
146 Transmission Oil Filter Switch
147 Air Filter Switch
148 Front Brake Reservoir Level
149 Rear Brake Reservoir Level
149A Brake Reservoir 3 Level
150 Transmission Oil Pressure Switch
151 Speedometer Pick-up 1
151A Speedometer Pick-up 2
152 Engine Oil Pressure Switch
153 CANBUS Cable Screen
154 RF Ground
155 Diagnostic Connector
156 4WS Interconnecting Connector
157 Control Module Connector
158 Fuel Flow Sensor
159 Radar Speed Sensor
160 ABS Trailer Socket
161 Suspension Seat Connector
162 Flow Divider Switch
163 Flow Divider Valve Connector
164 Rear Axle Ram Lock Switch (closed when locked)
165 Rear Axle Ram Lock Valve
166 Steer Valve (RH)
167 Steer Valve (LH)
168 Front Potentiometer (4WS)
169 Rear Potentiometer (4WS)
170 4WS Differential Lock Cut-Out Relay
171 Trailer Socket (U.S.A.)
172 Trailer Socket (Standard)
173 4WS Jack Socket
174 Wheel Slip Enable Switch (machines with radar only)
175 Inching Solenoid Resistor
176 Column Switch Button
177 Clutch Potentiometer **a** Clutch Pedal Down **b** Clutch Pedal Up
178 Transmission Oil Temperature Sensor 1
179 Transmission Oil Temperature Sensor 2
180 Clutch Lubrication Solenoid
181 Transmission Brake Solenoid
182 Inching Solenoid
183 Cab Auxiliary Supply Connector
184 Cab Auxiliary Battery Supply - Terminal Posts
185 Cab 3-pin Auxiliary Power Socket (battery and ignition supplies)
186 Cab Auxiliary Power Convenience Socket (Option)
187 Ignition Switched Relay (supplied with item **186**)
188 ABS Diagnostic Interconnect
189 Tractor Diagnostic Interconnect
190 Tractor ABS Diagnostic Relay
191 Diagnostic Switch
192 Tractor ABS Ignition Relay
193 ABS Speed Sensor (Front RH)
194 ABS Speed Sensor (Front LH)
195 ABS Speed Sensor (Rear RH)
196 ABS Speed Sensor (Rear LH)
197 ABS Pressure Modulating Valve (Front)
198 ABS Pressure Modulating Valve (Rear LH)
199 ABS Pressure Modulating Valve (Rear RH)
200 Tractor ABS ECU Connectors
201 Heated Mirror Supply
202 Interconnect
203 Rear Bulkhead Connector
204 Engine Bulkhead Connector
205 ECU 3 Connector
206 Engine Torque De-rate Resistor Connector
207 ISC (Field Speed Control) Validation
208 Hand Throttle
209 Throttle Pedal Position Sensor
210 Throttle Pedal Idle Validation Switch Connector
211 Accelerator Switch
212 Hand Throttle Connectors
213 Pedal Throttle Connectors
214 Powershift ECU 1(Black)
215 Fan Clutch
216 Front Bulkhead Connector
217 Engine ECU
218 Water in Fuel Sensor
219 Bulkhead Connector
220 Engine Speed Control Switch
221 Intermediate (or Field) Speed Control
222 Interconnect (less ECU 1)
223 Resistor
224 EPS 2 Relay
225 Megafuse
226 Upper Front Work Lights Relay (CR121)
227 Headlight Bar Work Lights Cut-out Relay
228 Rear Upper Changeover Work Lights Relay
229 Upper Front Work Lights Relay (WH3)
230 Headlight Bar Work Lights Relay
231 Work Lights Connector - 4 Front Work Lights
232 Work Lights Connector - 6 Front Work Lights
233 Work Lights Connector - 6 Front Work Lights
234 Work Light - RH Rear Fender
235 Work Light - LH Rear Fender
236 Rear Fender Work Lights Cut-out Relay
237 Work Light - Rear Fender
238 CR121E Relay Base
239 CR121D Relay Base
240 Work Lights Harness Interconnect 1
241 Harness Interconnect for 4 Rear Work Lights
242 'A' Post Work Light Relay
243 Instrument Cluster 1 (Black)
244 Auxiliary Lights 6-way Relay Base

MidWestTech | JCB Fastrac 2115, 2125, 2135, 2140, 2150 Tractor Service Manual | Publication 9803-8020
Order the manual at mid-west-tech.com >