DV36
DV45
Tier 4A (interim)
Vibratory Roller

DV45CC
Tier 4A (interim)
Combination Roller

SERVICE MANUAL

Part number 48142070
1st edition English
September 2017
Replaces part number 47538933

CASE CONSTRUCTION

MidWestTech | Case DV36, DV45, DV45CC Tier 4A Combination Vibratory Roller Service Manual | Publication 48142070
Order the manual at mid-west-tech.com >

Contents

INTRODUCTION

Maintenance 00

[00.150] Start-up 00.1

Engine 10

[10.001] Engine and crankcase 10.1

[10.400] Engine cooling system 10.2

Hydrostatic drive 29

[29.218] Pump and motor components 29.1

Brakes and controls 33

[33.110] Parking brake or parking lock 33.1

[33.202] Hydraulic service brakes 33.2

Hydraulic systems 35

[35.104] Fixed displacement pump 35.1

[35.000] Hydraulic systems 35.2

[35.102] Pump control valves 35.3

[35.353] Hydraulic travel system 35.4

[35.300] Reservoir, cooler, and filters 35.5

[35.995] Compaction/vibration hydraulic system 35.6

Frames and ballasting 39

[39.100] Frame 39.1

Steering 41

[41.101] Steering control 41.1

Wheels 44

[44.160] Compaction drums 44.1

Electrical systems 55

[55.031] Parking brake electrical system 55.1

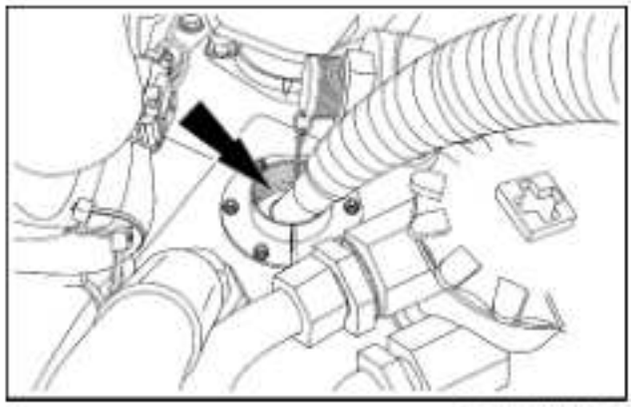
MidWestTech | Case DV36, DV45, DV45CC Tier 4A Combination Vibratory Roller Servi... Order the manual at mid-west-tech.com >

[55.000] Electrical system 55.2
[55.019] Hydrostatic drive control system 55.3
[55.100] Harnesses and connectors 55.4
[55.408] Warning indicators, alarms, and instruments 55.5
[55.512] Cab controls 55.6
[55.640] Electronic modules 55.7
[55.404] External lighting 55.8
[55.DTC] FAULT CODES 55.9
Tools 89
[89.165] Water kit 89.1
Platform, cab, bodywork, and decals 90
[90.100] Engine hood and panels 90.1
[90.110] Operator platform less cab 90.2

MidWestTech | Case DV36, DV45, DV45CC Tier 4A Combination Vibratory Roller Servi... Order the manual at mid-west-tech.com >

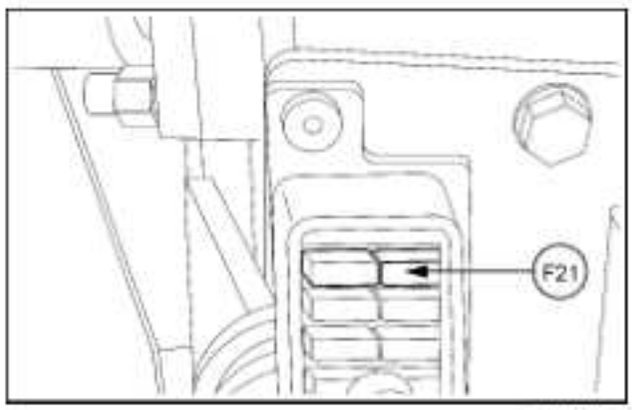
Oil filters - Replace

1. Fill hydraulic oil.



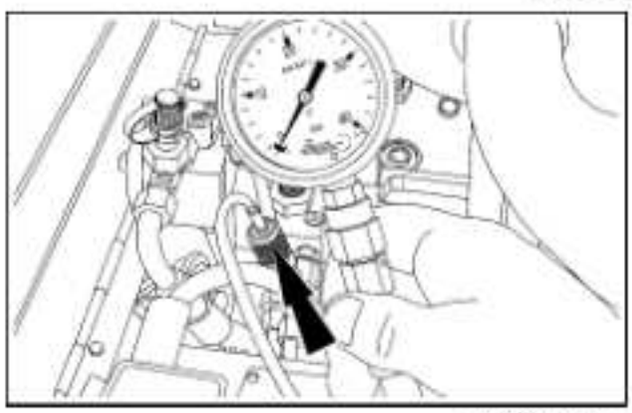
SVIL13COM003AB 1

2. Remove fuse **(F21)** (**40 A**) from the engine compartment.



SS13A772 2

3. Connect the manometer to supply pressure.
4. Apply weight to seat.



SVIL13COM004AB 3

5. Turn the ignition key clockwise to position **(III)** .
6. Hold the ignition key in this position for a max. of **30 s**.
7. Turn the ignition key back to the starting position **(0)** .
8. Keep repeating this procedure at short intervals until a pressure of **3 – 5 bar** (**43.5 – 72.5 psi**) has built up.



SVIL13COM002AB 4

Next operation:

MidWestTech | Case DV36, DV45, DV45CC Tier 4A Combination Vibratory Roller Servi... Order the manual at mid-west-tech.com >

Wiring harnesses - Electrical schematic sheet 01

Pos.	Designation	Comments
B11	Reverse alarm	Option
B13	Warning buzzer, seat contact delay	Option
E25	Right brake-light	Option
E26	Left brake-light	Option
F9	Fuse, controller, supply	
F10	Fuse, controller, outputs	
F11	Fuse, sprinkler	
F13	Fuse - vibration	
F14	Fuse, controller, inputs	
F15	Fuse, hydraulic oil cooler	
F21	Fuse, starter	
F22	Fuse, diesel pump, alternator	
G1	Alternator	
G2	Battery	
H1	Warning lamp, error	
H2	Control lamp, charging control	
H5	Warning lamp, hydraulic oil temperature	
H6	Warning lamp, emergency stop	
H8	Control lamp, preheating	
H9	Control lamp, brake pressure	
K2	Timer relay	
K3	Relay, pull-in solenoid	
K4	Relay, vibration	
K5	Relay, hydraulic oil cooler	
K6	Relay, sprinkler	
K7	Relay, starting interlock	
K12	Relay, anti-adhesive sprinkler	Option (not available in NA)
K15	Relay, front vibration	
K16	Relay, rear vibration	
K17	Relay, brake-light	Option
M1	Starter motor	
M2	Hydraulic oil cooler	
M3	Diesel pump	
M4	Sprinkler pump	
M11	Sprinkler pump, anti-adhesive	Option (not available in NA)

MidWestTech | Case DV36, DV45, DV45CC Tier 4A Combination Vibratory Roller Servi... Order the manual at mid-west-tech.com >

F26 - Resistance outside permissible range

Context:
Fault code F26 shows on the display unit above the hour counter. The temperature control is not working.

Cause:

1. Electrical component failure.

Possible failure modes:

1. Faulty connector **(X3)**.
2. Damaged wiring harness.
3. Faulty oil temperature sensor **(S53)**.
4. Faulty controller **(N1)**.

Solution:

1. Check connector **(X3)**.

   Remove panel from steering column. Refer to section **Fuse and relay box - Component localization - Steering column (55.100)**.

   Inspect connector **(X3)**, in particular wires 126 (pin 8) and 127 (pin 9). They should be secure, tight, free of corrosion, abrasion and damage.

   A. The connector is secure and the wires at the connector are free of damage. Proceed to step **2**.

   B. The connector is not secure or the wires are loose or damaged. Repair or replace the connector or wires as required. Confirm that fault code is no longer recorded.
2. Check wiring harness from connector **(X3)** to oil temperature sensor **(S53)**.

   Inspect the harness. Wires should be free of corrosion, abrasion and damage.

   A. The harness is free of damage. Proceed to step **3**.

   B. The harness is damaged. Replace or replace the harness as required. Confirm that fault code is no longer recorded.
3. Check connections at oil temperature sensor **(S53)**.

   A. Wires are securely connected and are free of damage. Proceed to step **4**.

   B. Wires are loose or damaged. Repair or replace as required. Confirm that fault code is no longer recorded.
4. Replace oil temperature sensor **(S53)**.

   A. Fault code is still recorded. Proceed to step **5**.

   B. Confirm that fault code is no longer recorded.
5. Check controller **(N1)** and wiring harness.

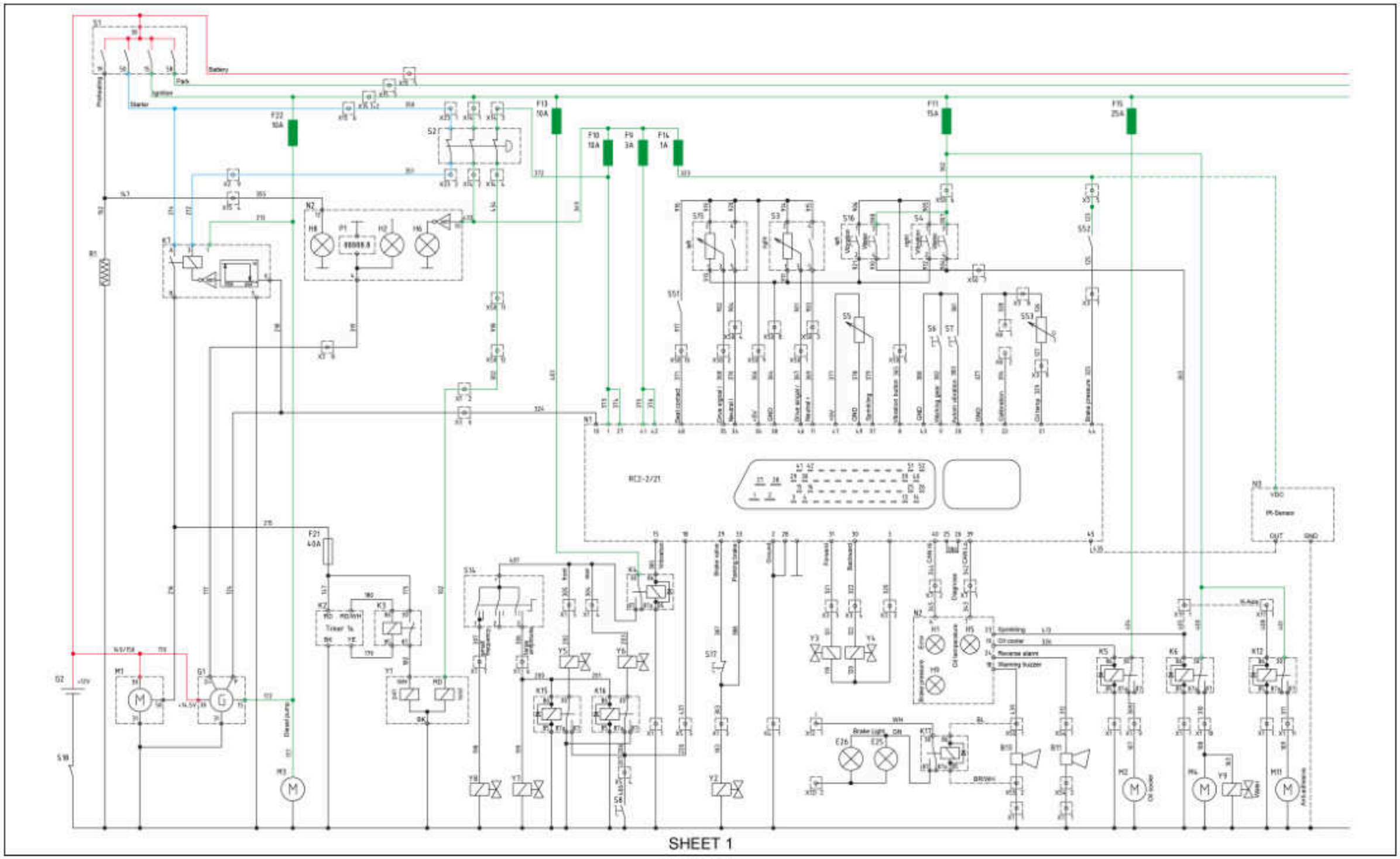
   Remove the seat assembly in order to access the electronic machine controller **(N1)**. Refer to section **Platform - Remove (90.110)** for procedure.

   Inspect the connections of wires 327 (pin 7) and 329 (pin 21) at controller **(N1)**.

   Inspect the wiring harness from the controller **(N1)** to connector **(X3)**.

   A. The connections are not secure or the harness is damaged. Repair or replace the connections or harness as required. Confirm that fault code is no longer recorded.

MidWestTech | Case DV36, DV45, DV45CC Tier 4A Combination Vibratory Roller Servi... Order the manual at mid-west-tech.com >



SHEET 1

RAIL13COM0020UA 1

MidWestTech | Case DV36, DV45, DV45CC Tier 4A Combination Vibratory Roller Service Manual | Publication 48142070

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