DV210
Tier 3
Vibratory Roller

SERVICE MANUAL

Part number 47703709

2nd edition English

September 2015

Replaces part number 84287236A

CASE CONSTRUCTION

MidWestTech | Case DV210 Tier 3 Vibratory Roller Service Manual | Publication 47703709

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

Contents

INTRODUCTION

Machine completion and equipment 05

[05.102] Machine completion 05.1

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

Hydraulic systems 35

[35.000] Hydraulic systems 35.1

[35.353] Hydraulic travel system 35.2

[35.995] Compaction/vibration hydraulic system 35.3

[35.500] Radiator cleaning system 35.4

[35.304] Combination pump units 35.5

Frames and ballasting 39

[39.500] Vibratory roller 39.1

[39.100] Frame 39.2

Steering 41

[41.101] Steering control 41.1

[41.206] Pump 41.2

[41.216] Cylinders 41.3

Wheels 44

[44.160] Compaction drums 44.1

Cab climate control 50

[50.100] Heating 50.1

MidWestTech | Case DV210 Tier 3 Vibratory Roller Service Manual | Publication 4770... Order the manual at mid-west-tech.com >

Electrical systems 55
[55.000] Electrical system 55.1
[55.100] Harnesses and connectors 55.2
[55.201] Engine starting system 55.3
[55.301] Alternator 55.4
[55.302] Battery 55.5
[55.408] Warning indicators, alarms, and instruments 55.6
[55.019] Hydrostatic drive control system 55.7
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system 55.8
[55.518] Wiper and washer system 55.9
[55.512] Cab controls 55.10
Platform, cab, bodywork, and decals 90
[90.120] Mechanically-adjusted operator seat 90.1
[90.105] Machine shields and guards 90.2

MidWestTech | Case DV210 Tier 3 Vibratory Roller Service Manual | Publication 4770... Order the manual at mid-west-tech.com >



Transmission fluid

Use high-quality oil corresponding to **API GL-5**, or EP or **MIL-L-2105 D** to lubricate gearbox, pumps and drum reductors.

Use **TUTELA HYPOIDE SSL SYNTHETIC GEAR LUBE SAE 75W-90** fluid for outdoor temperature range **-10 - 30 °C** (**14 - 86 °F**).

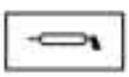
or use **TUTELA HYPOIDE SSL SYNTHETIC GEAR LUBE SAE 80W-140** fluid for outdoor temperature range **20 - 45 °C** (**68 - 113 °F**).

NOTICE: *Operating temperature of oil should never exceed **85 - 90 °C (185 - 194 °F)**.*

Brake fluid

The fluid should comply with international specifications DOT3. It is mixable with brake fluids of all brands that comply with these specifications. Brake fluid is designed for brake systems that operate at ambient temperatures from **-50 °C** (**-58 °F**) to **60 °C** (**140 °F**) and at operating temperatures from **-50 °C** (**-58 °F**) to **205 °C** (**401 °F**).

NOTICE: *Brake fluid that corresponds to the international classification DOT 4 may also be used for the brake system.*



Lube grease

Use plastic lubricant with lithium content to lubricate the machine:
Case Akcela Extreme pressure grease moly

To lubricate the speed reduction transmission, use the lubricant according to:
ISO 6743/9 BDHB2



Washer fluid

Use clean water at a temperature of no lower than **0 °C** (**32 °F**) when filling the washer fluid reservoir. We recommend the use of washer fluid with antifreeze for motor vehicle windshield washers at the ratio necessitated by machine lubricating conditions.

NOTICE: *When there is a risk that temperatures will drop below **0 °C (32 °F)**, add antifreeze agent or drain the water!*

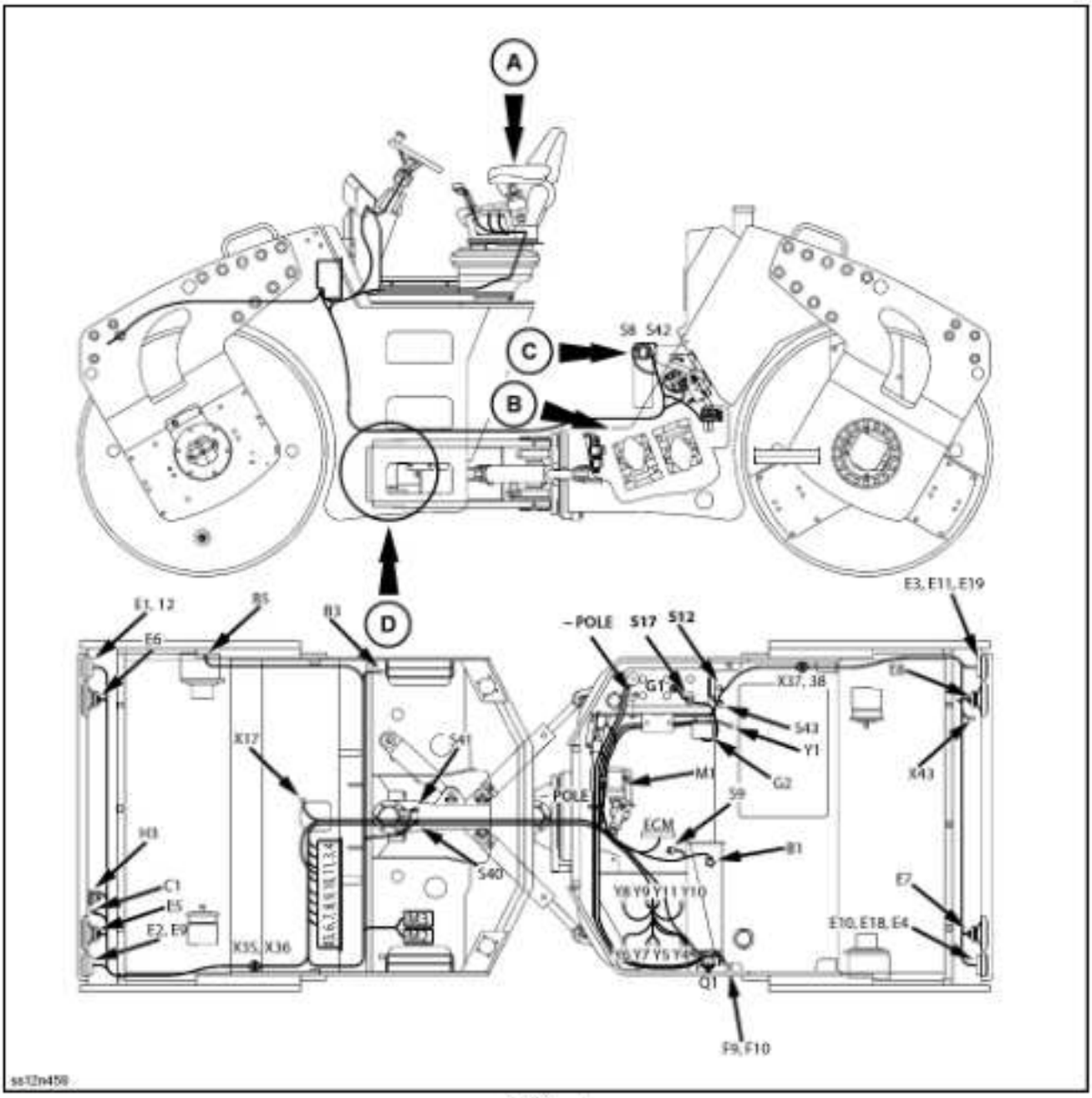


Drum cooling liquid

Use antifreeze in all seasons to protect the cooling system from corrosion and all risk of freezing.

MidWestTech | Case DV210 Tier 3 Vibratory Roller Service Manual | Publication 4770... Order the manual at mid-west-tech.com >

Wiring harnesses - Component localization

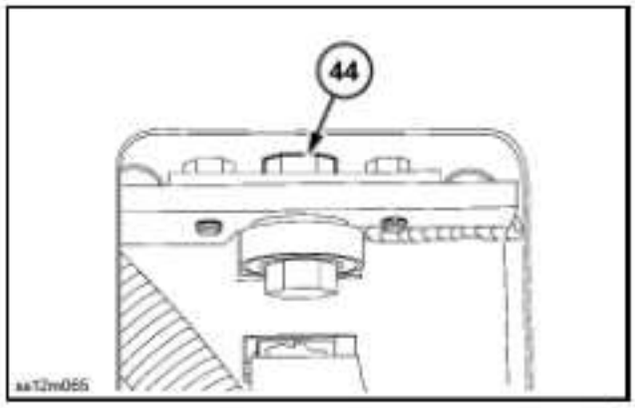


SS12N459 1

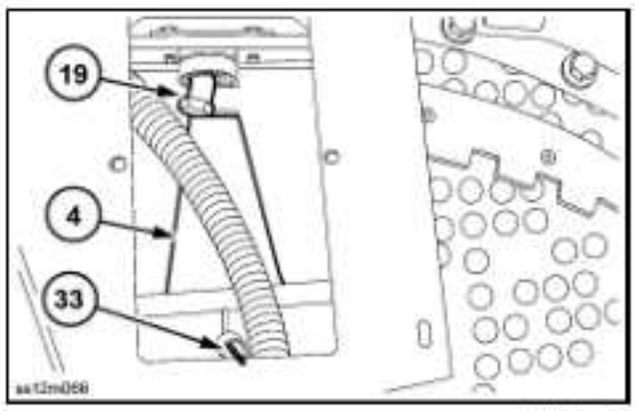
MidWestTech | Case DV210 Tier 3 Vibratory Roller Service Manual | Publication 4770... Order the manual at mid-west-tech.com >

Seat sliding guides - Replace

1. Remove the seat (See **Seat suspension unit - Remove (90.120)**).
2. Remove the bearing journal nut **(44)**.

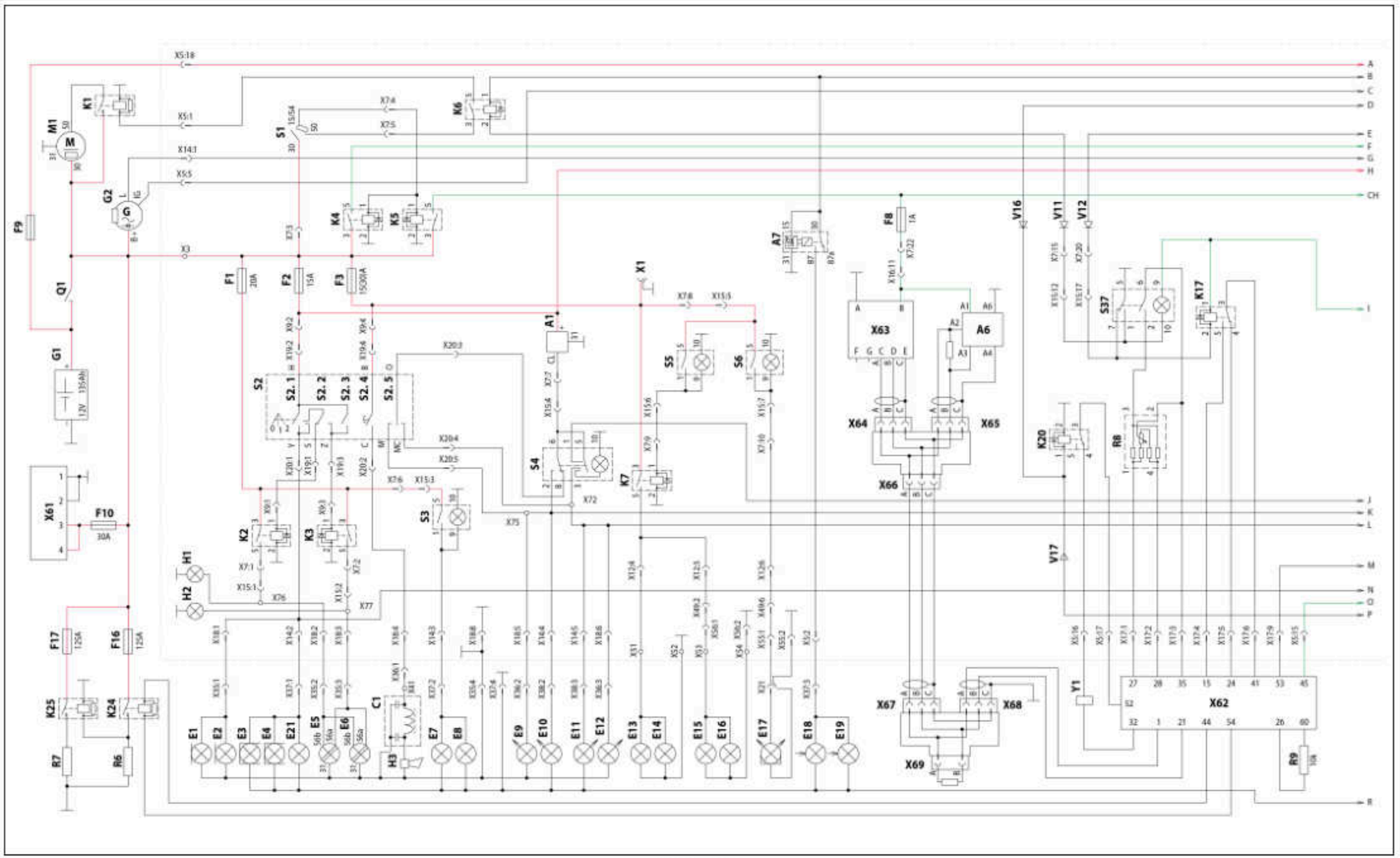


3. Remove the spring **(33)**.
4. Remove the arrester **(4)**.
5. Remove the shaft **(19)**.
6. Remove the bearing. Replace with a new bearing.



7. Reinstall the shaft **(19)**, arrester **(4)** and spring **(33)** with the bearing journal nut **(44)**.
8. Install the seat (See **Operator seat - Install (90.120)**).

MidWestTech | Case DV210 Tier 3 Vibratory Roller Service Manual | Publication 4770... Order the manual at mid-west-tech.com >



RAIL14CON0388A 1

MidWestTech | Case DV210 Tier 3 Vibratory Roller Service Manual | Publication 47703709
Order the manual at mid-west-tech.com >