Service Information

Document Title: Frame, description	Function Group: 711	Information Type: Service Information	Date: 2015/10/27
Profile: COS, SD110 [GB]			

Frame, description

The machine is built with rear frame assembly and front frame assembly, connected by a swivel frame with two articulation pins and one oscillation pin.

The rear frame is a welded assembly on which hydraulic tank, fuel tank, battery compartment, control valves, engine assembly with propulsion pump, vibration pump, steering pump and axle with tyre assembly are mounted.

The front frame is a welded assembly on which drum assembly and scraper bar are mounted.

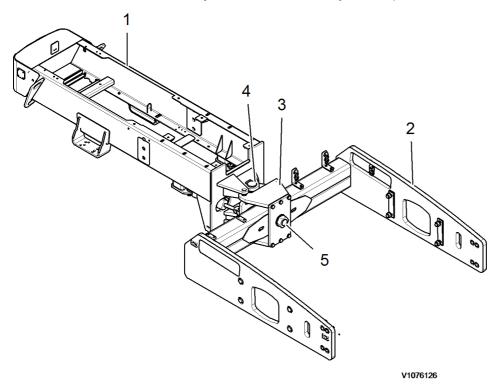


Figure 1

- 1. Rear frame
- 2. Front frame
- 3. Swivel frame
- 4. Articulation pin
- 5. Oscillation pin



Document Title: Drum, description	'	Information Type: Service Information	Date: 2015/10/27
Profile: COS, SD110 [GB]			

Drum, description

Drum fitted with the machine is a smooth drum. Vibration is transmitted to the drum by an eccentric assembly which is mounted inside the drum and is powered by a hydraulic vibration motor. Amplitude and frequency of drum vibration is controlled through vibration control lever.

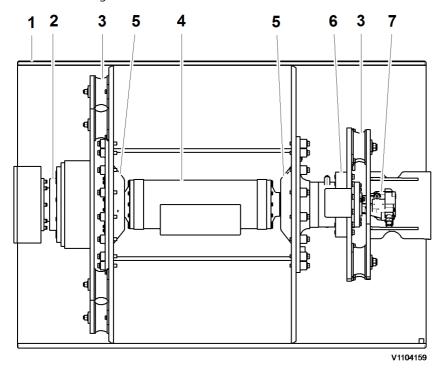


Figure 1
Drum assembly

- 1. Drum
- 2. Torque hub assembly / Drum drive motor
- 3. Shock mount
- 4. Eccentric assembly
- 5. Bearing housing
- 6. Carrier housing
- 7. Vibration motor



Document Title: Drum assembly, removing	· ·	Information Type: Service Information	Date: 2015/10/27
Profile: COS, SD110 [GB]			

Drum assembly, removing

Op nbr 777-029



Always handle oils and other environmentally hazardous fluids in an environmentally safe manner.



Maintain greatest possible cleanliness during all work on the hydraulic system.

1. Place the machine in the Service Position. Refer to 191 Service position 1.

NOTICE

When a hose has been disconnected, plug both the hose and the connection immediately. The hoses should be marked for correct connection.

2. Disconnect the hose connections from the vibration motor.

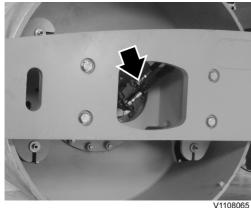


Figure 1
Hose connections to vibration motor

3. Disconnect the hose connections from the drive motor.

NOTE

This step applies for drum drive option only.

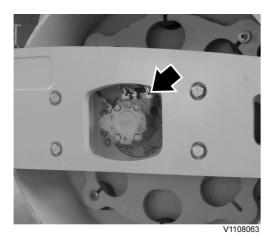


Figure 2
Hose connections to drum drive motor

A WARNING

Only use lifting devices with adequate capacity.



The parts are heavy. Take appropriate safety cautions when handling them.

4. Secure the scraper bar with a suitable lifting device.



Figure 3 Scraper bar

5. Remove the mounting screws of the scraper bar and remove the shims.

NOTE!

Two persons are required for this procedure.

NOTE!

Identify and retain the shims for installation.

- 6. Remove the scraper bar.
- 7. Lift the frame using a suitable lifting device to take the weight off the shock mounts.
- 8. Place suitable support stands on both sides of the frame.



V1091739

Figure 4
Support stand

- 9. Choke the drum with suitable wedges.
- 10. Remove the drum assembly mounting screws at vibration motor side and remove the shims.

NOTE!

Two persons are required for this procedure.

NOTE!

Use a suitable jacking device between carrier plate and drum frame, if required.

NOTE!

Identify and retain the shims for installation.



V1108062

Figure 5 Vibration motor side

11. Remove the drum assembly mounting screws at drum drive side.

NOTE!

Two persons are required for this procedure.

NOTE!

Make sure that the wedges or chocks are in position to avoid the roll out of drum.



Figure 6 Drum drive side

12. Remove the wedges or chocks and carefully roll the drum assembly out and away from the frame. Weight of the drum assembly is 3984 kg (8783 lbs)



Document Title: Drum assembly, installing	'	Information Type: Service Information	Date: 2015/10/27
Profile: COS, SD110 [GB]			

Drum assembly, installing

Op nbr 777-030



Always handle oils and other environmentally hazardous fluids in an environmentally safe manner.

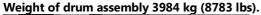
NOTE

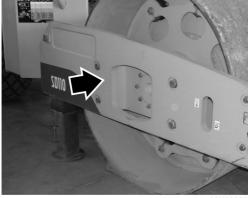
All O-rings are recommended to be replaced with new.

NOTE!

If required, calculate the shim thickness needed between drum assembly and drum frame and between scraper bar and drum assembly. Refer to 777 Instructions for shimming the equipment joints.

1. Roll the drum assembly into the drum frame. Choke the drum assembly.





V1108061

Figure 1
Drum drive mounting plate to drum frame assembly

2. Assemble the drum drive mounting bracket with shims to drum frame at drum drive side. Secure with the mounting screws.

NOTE!

Do not install the nuts at this moment.

3. Assemble the shock mount bracket with shims to the drum frame at vibration motor side. Secure with the mounting screws.

NOTE!

Jack the carrier plate and drum frame with a suitable jacking device, if required for shimming.

NOTE!

Do not install the nuts at this moment.



V1108062

Figure 2
Shock mount bracket to the drum frame at vibration motor side

4. Install the scraper bar using a suitable lifting device. Add suitable thickness shims. Secure with the mounting screws. **Weight of scraper bar 176 kg (388 lbs).**

NOTE!

Do not install the nuts at this moment.



Figure 3 Scraper bar

5. Install the nuts and torque tighten the drum assembly mounting screws at vibration and drum drive sides. Refer to 030 Critical mounting torques

NOTE!

Apply thread locking component to mounting screws.

NOTE!

Two persons are required for this procedure.

 $6. \ \ In stall the nuts and torque tighten the scraper bar mounting screws. \ Refer to \ \underline{030\ Critical\ mounting\ torques}.$

Apply thread locking component to mounting screws.

NOTE!

Two persons are required for this procedure.

7. Connect the hose connections to the vibration motor.

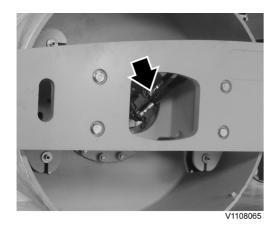


Figure 4 Hose connections to vibration motor

8. Connect the hose connections to the drum drive motor.

NOTE!

Check the condition of O-rings. Replace if necessary.

NOTE

This step applies only for drum drive machines.

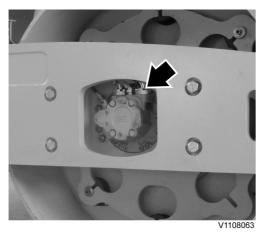


Figure 5
Hose connections to drum drive motor

A WARNING

Only use lifting devices with adequate capacity.

9. Lift the frame using a suitable lifting device and remove the support stands.



V1091739

Figure 6 Support stands

- 10. Start the engine and test run the machine.
- 11. Check for the leakage.
- 12. Shut down the engine.
- 13. Place the machine back in service.



Document Title: Drum drive, removing	Function Group: 777	Information Type: Service Information	Date: 2015/10/27
Profile: COS, SD110 [GB]			

Drum drive, removing

Op nbr 988-087

88830202 Lifting tool

- 1. Place the machine in service position. Refer to 191 Service position
- 2. Remove drum assembly from the machine. Refer to 777 Drum assembly, removing
- 3. Retain two diagonally opposite drive plate mounting nuts and washers and remove remaining drive plate mounting nuts and washers.

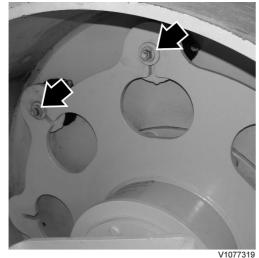


Figure 1
Drive plate mounting nuts and washers



Only use lifting devices with adequate capacity.



The parts are heavy. Take appropriate safety cautions when handling them.

4. Assemble **88830202 – Drive plate assembly lifting tool** to the drum drive motor mounting bracket and support the drive plate assembly with a suitable lifting device.

Weight of 88830202 – Drive plate assembly lifting tool 38 kg (84 lbs). Weight of the drum drive (with torque hub) assembly 274 kg (604 lbs)./ Weight of the drum drive (with drum motor) assembly 450 kg (990 lbs).



Figure 2
Tool assembled to the drum drive motor mounting bracket

5. Remove the retained two diagonally opposite drive plate mounting nuts and washers.



Only use lifting devices with adequate capacity.



The parts are heavy. Take appropriate safety cautions when handling them.

- 6. Remove the drum drive assembly from the drum assembly.
- 7. Place the drum drive assembly on safe place.
- 8. Disassemble the **88830202 Drive plate assembly lifting tool**.



Document Title: Drum drive, installing	Function Group: 777	Information Type: Service Information	Date: 2015/10/27	
Profile: COS, SD110 [GB]				

Drum drive, installing

Op nbr 988-088

88830202 Lifting tool



Only use lifting devices with adequate capacity.



The parts are heavy. Take appropriate safety cautions when handling them.

 Assemble 88830202 – Drive plate assembly lifting tool to the drum drive assembly. Weight of 88830202 – Drive plate assembly lifting tool 38 kg (84 lbs). Weight of the drum drive (with torque hub) assembly 274 kg (604 lbs)./ Weight of the drum drive (with drum motor) assembly 450 kg (990 lbs).



V1095925

Figure 1
Tool assembled to drum drive assembly

2. Install the drum drive assembly on shock mounts using a suitable lifting device.



Figure 2
Drum drive assembly mounting

3. Install the nuts and washers to secure drum drive assembly with drum assembly.

NOTE!

Apply thread locking component to shock mount screws

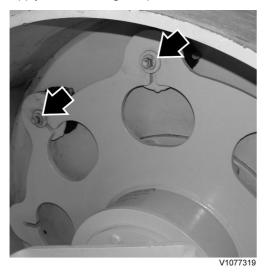


Figure 3
Shock mount mounting nuts and washers

- 4. Torque tighten the nuts. Refer to <u>030 Critical mounting torques</u>.
- 5. Remove 88830202 Drive plate assembly lifting tool.
- 6. Install the drum assembly in to the drum frame. Refer to 777 Drum assembly, installing.
- 7. Start the engine and test run the machine.
- 8. Check for oil leakage.
- 9. Shut down the engine.
- 10. Place the machine back in service.



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