

Document Title: Superstructure, removing	Function Group: 710	Information Type: Service Information	Date: 2015/4/20
Profile: EXC, EC360B LR [GB]			

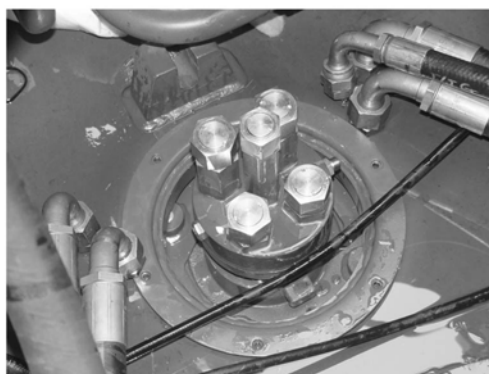
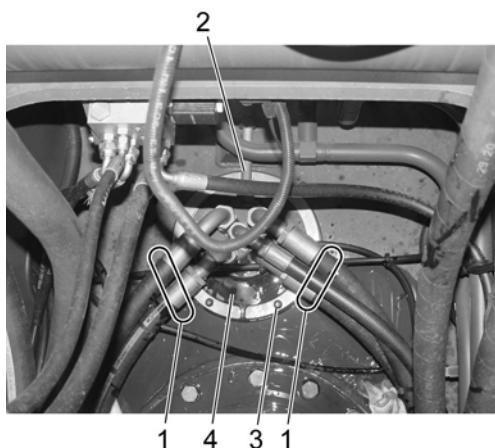
Superstructure, removing

Op nbr 710-001

1. Park the machine in the service position D. See [091 Service positions](#).
Position the machine on flat, firm and level ground, free from any obstructions or interference.
When the engine is running, the hydraulic line is under high pressure. Stop the engine, and remove the residual pressure inside the hydraulic line by operating the control lever smoothly 3-4 times with the ignition key at "ON" position. Turn the ignition key to "OFF" position.
2. Remove the hydraulic oil hoses, stopper screw, seal cover fixing screws, clamp and seal covers from center passage.

NOTICE

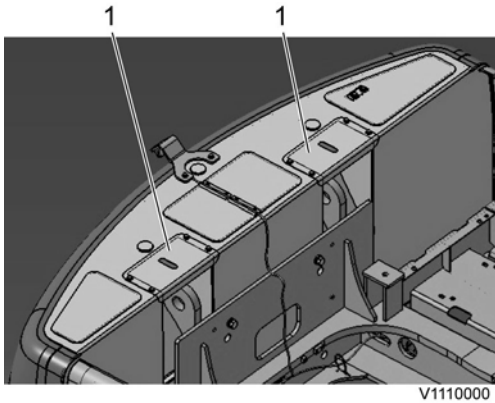
When a hose has been disconnected, plug both the hose and the connection immediately. The hoses should be marked for correct connection.



V1096385

Figure 1
Removal, hydraulic hoses

1. Hydraulic oil hoses
 2. Stopper screw
 3. Seal cover fixing screw
 4. Seal cover
3. Remove the two lifting points covers from the top of counterweight. See [716 Counterweight, removing](#).



V1110000

Figure 2
Removal, lifting points covers (1)

4. **! WARNING**
 Risk of personal injury. Very heavy object.

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

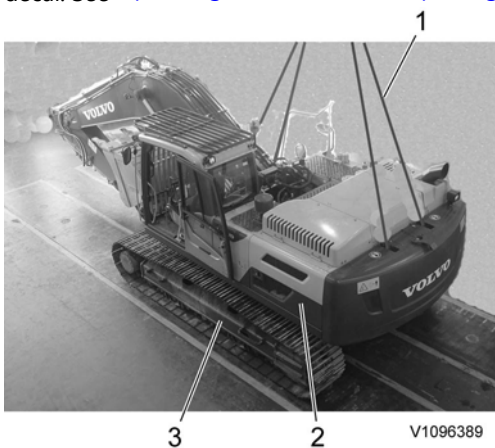
! WARNING
 Never lift the machine with a person in the cab.

! WARNING
 Always use classified cables, lifting straps, shackles and hooks with sufficient lifting capacity.

Hold the superstructure with wire ropes (cables).

Check the superstructure weight. See [710 Machine weight, specifications](#).

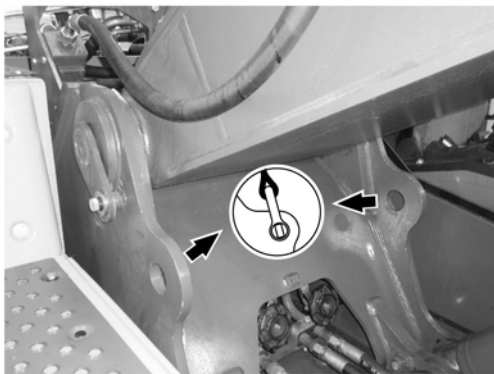
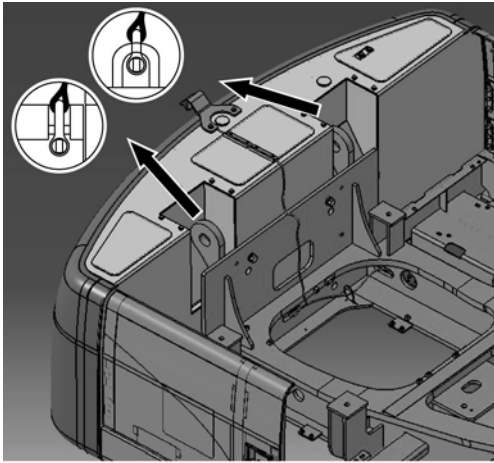
Check the wire ropes length (cables). Refer to the operators manual for further operation or cab in lifting machine decal. See [Operating instructions, Transporting machine, Lifting machine](#).



V1096389

Figure 3
Lifting superstructure

1. Wire rope (cable)
2. Superstructure
3. Undercarriage



V1110001

Figure 4
Lifting points

NOTE!

As shown in the decal for lifting, connect lifting wire ropes (cables) or slings with sufficient strength for the machine weight at the lifting points correctly.

After installation of all hoisting equipment, lift the machine a little to check its balance, if satisfactory, lift it slowly and evenly.

5. Remove the superstructure mounting screws from the swing ring gear.



2 1



V1096387

Figure 5
Removal, superstructure mounting screws

1. Superstructure mounting screw
2. Swing ring gear

6.  **WARNING**

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>

The superstructure is heavy. Pay attention to safe footing and the area around the crane before proceeding to remove or install the superstructure.

Remove the superstructure slowly and lower onto the 4 jacks safely.

Maintain good visibility of the machine at all times during the lift. And continuously check that the machine is level.



1



1

V1096388

Figure 6
Removal, lifting superstructure (1)

Document Title: Superstructure, installing	Function Group: 710	Information Type: Service Information	Date: 2015/4/20
Profile: EXC, EC360B LR [GB]			

Superstructure, installing

Op nbr 710-002

- ! WARNING**
Risk of personal injury. Very heavy object.

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

! WARNING
Never lift the machine with a person in the cab.

! WARNING
Always use classified cables, lifting straps, shackles and hooks with sufficient lifting capacity.

Hold the superstructure with wire ropes (cables).

Check the superstructure weight. See [710 Machine weight specifications](#).

Wire ropes length (cables). Refer to the operators manual for further operation or cab in lifting machine decal. See [Operating instructions, Transporting machine, Lifting machine](#).

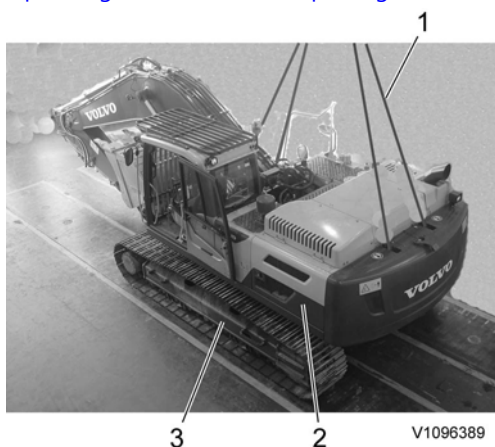
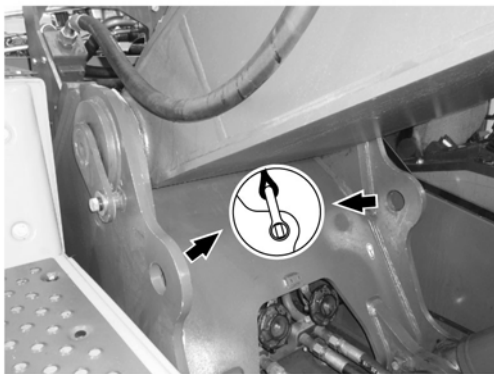
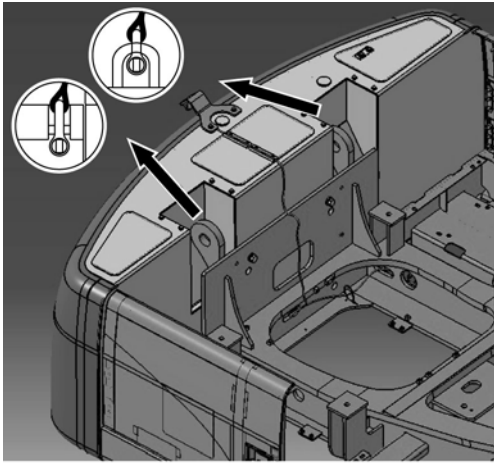


Figure 1
Lifting superstructure

1. Wire rope (cable)
2. Superstructure
3. Undercarriage



V1110001

Figure 2
Lifting points

NOTE!

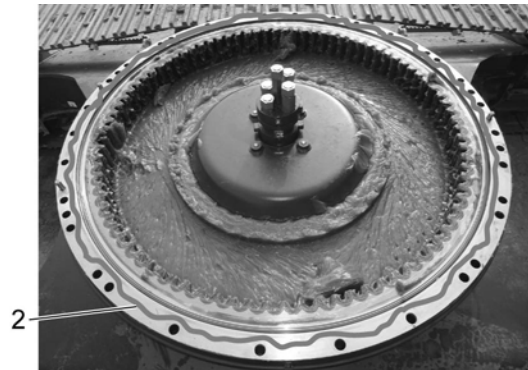
As shown in the decal for lifting, connect lifting wire ropes (cables) or slings with sufficient strength for the machine weight at the lifting points correctly.

After installation of all hoisting equipment, lift the machine a little to check its balance, if satisfactory, lift it slowly and evenly.

2. Thoroughly clean the mounting surface.
Before replacing the superstructure, apply sealing compound to the mounting surface.

NOTE!

If impurities remain, adhesion with bond agent is not good.



V1096393

Figure 3
Clean the mounting surface

1. Clean the mounting surface
2. Sealing compound

WARNING

3. **The superstructure is heavy. Pay attention to safe footing and the area around the crane before proceeding to remove or install the superstructure.**

Lift the superstructure and install it to the swing ring gear.

Maintain good visibility of the machine at all times during the lift. And continuously check that the machine is level.

NOTE!

Match the "S" mark (soft zone position) on inner race and the plug on outer race.

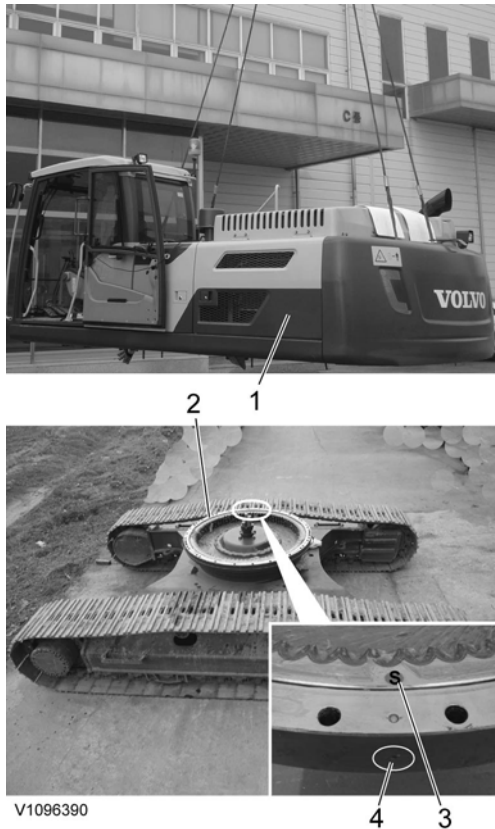


Figure 4
Installation, superstructure

1. Superstructure
2. Swing ring gear
3. "S" mark inner race (soft zone position)
4. Plug outer race

4. Install the superstructure mounting screws from the swing ring gear. Tightening torque. See [492 Swing ring gear description](#). Apply Loctite #277 or equivalent locking fluid.

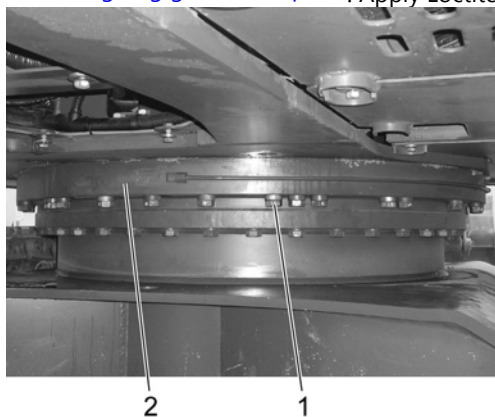


Figure 5

Installation, superstructure mounting screws

1. Superstructure mounting screw
 2. Swing ring gear
5. Remove the wire rope (cable) at the lifting points.
Install the seal covers, seal cover fixing screws, stopper screw, clamp and hydraulic oil hoses from center passage.
Tightening torque, seal cover fixing screw: 22.6 ± 1.96 Nm (2.3 ± 0.2 kgf m) (16.6 ± 1.4 lbf ft)
Apply Loctite #277 or equivalent locking fluid.

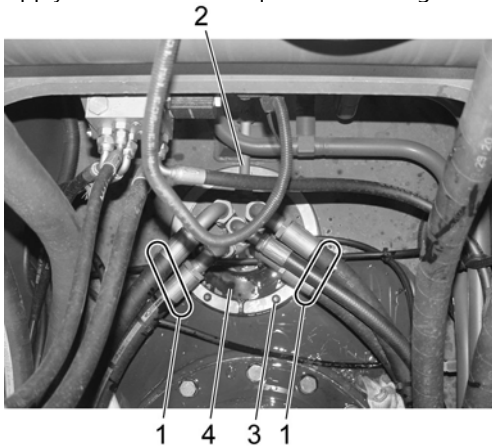


Figure 6
Installation, hydraulic hoses

1. Hydraulic oil hoses
 2. Stopper screw: 242.2 ± 24.5 Nm (24.7 ± 2.5 kgf m) (178.3 ± 18 lbf ft)
 3. Seal cover fixing screw
 4. Seal cover
 5. Stopper screw: 15 mm (0.59 inch)
6. Install the two lifting points covers from the top of counterweight. See tightening torque. [716 Counterweight, tightening torques](#).

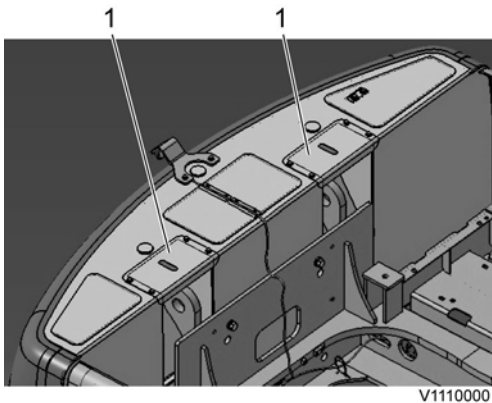


Figure 7
Installation, lifting points covers (1)

7. Check the operation of the swing, hydraulic oil hoses and swing ring gear mounting screws.

Document Title: Counterweight, description	Function Group: 716	Information Type: Service Information	Date: 2015/4/20
Profile: EXC, EC360B LR [GB]			

[Go back to Index Page](#)

Counterweight, description

Casting type

The counterweight is a counterbalancing weight that is located at the rear of the machine. The counterweight is designed in order to give the machine extra weight in the back end in order to counter the weight that is located at the front of the machine, in particular the boom and dipper arm.

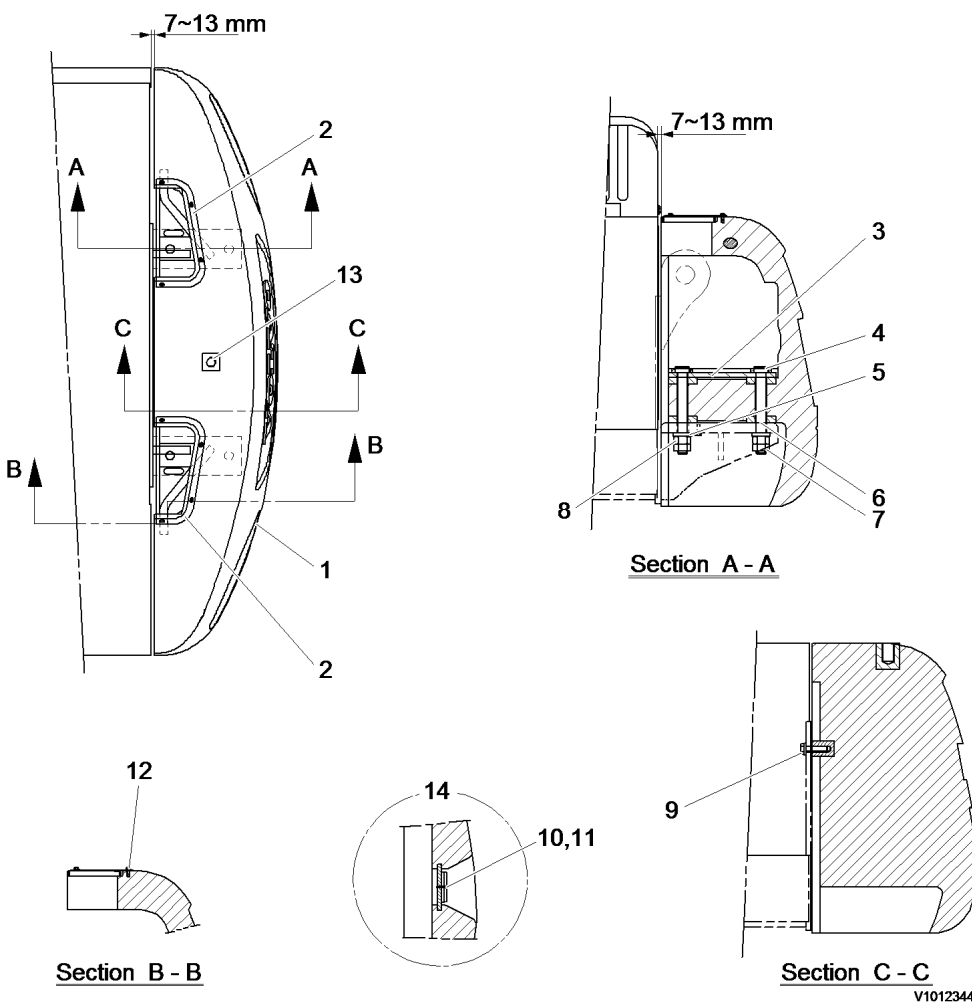


Figure 1
Counterweight, structure

1	Counterweight	6	Shim	11	Screw
2	Cover	7	Lock nut	12	Screw
3	Plate	8	Nut	13	Plug
4	Screw	9	Screw	14	Reflector mounting
5	Spacer	10	Reflector		

V1012344

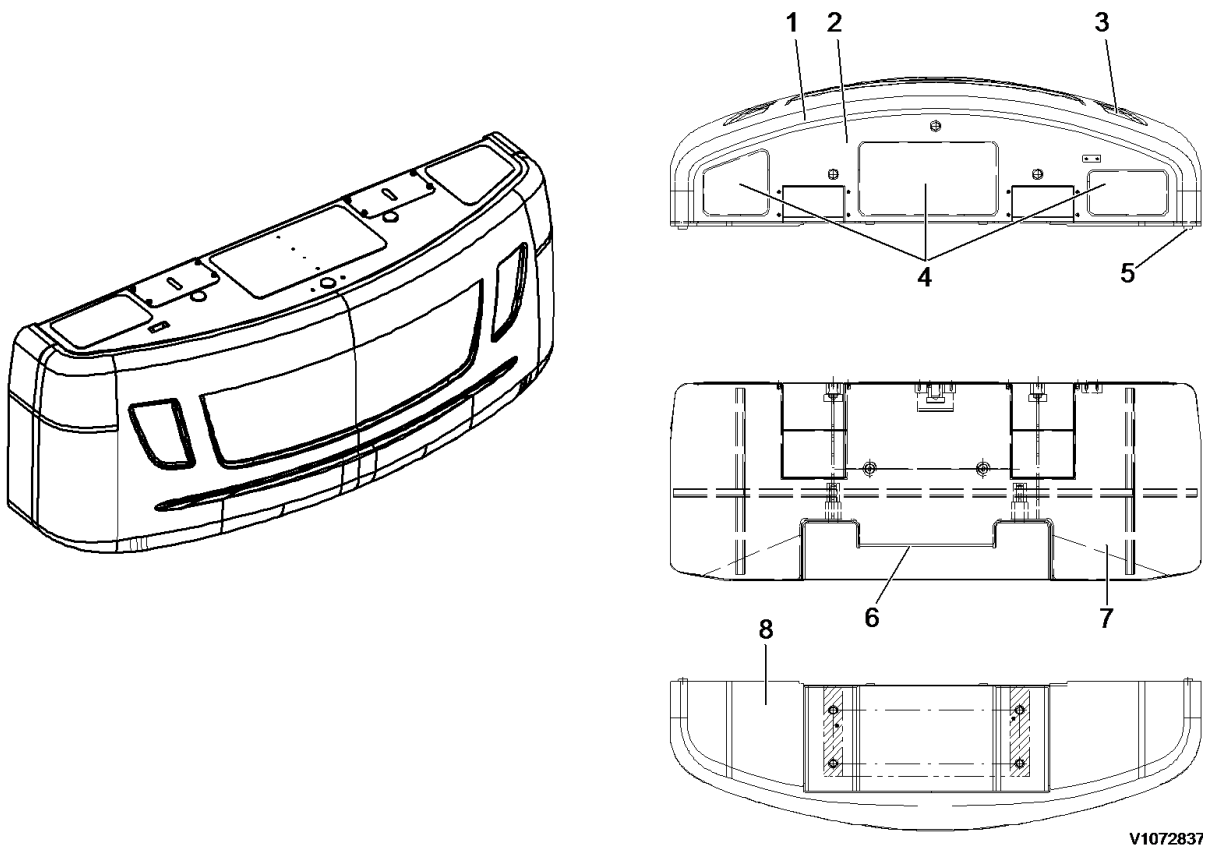
Document Title: Counterweight, description	Function Group: 716	Information Type: Service Information	Date: 2015/4/20
Profile: EXC, EC360B LR [GB]			

[Go back to Index Page](#)

Counterweight, description

Fabrication type

The counterweight is a counterbalancing weight that is located at the rear of the machine. The counterweight is designed in order to give the machine extra weight in the back end in order to counter the weight that is located at the front of the machine, in particular the boom and dipper arm.



V1072837

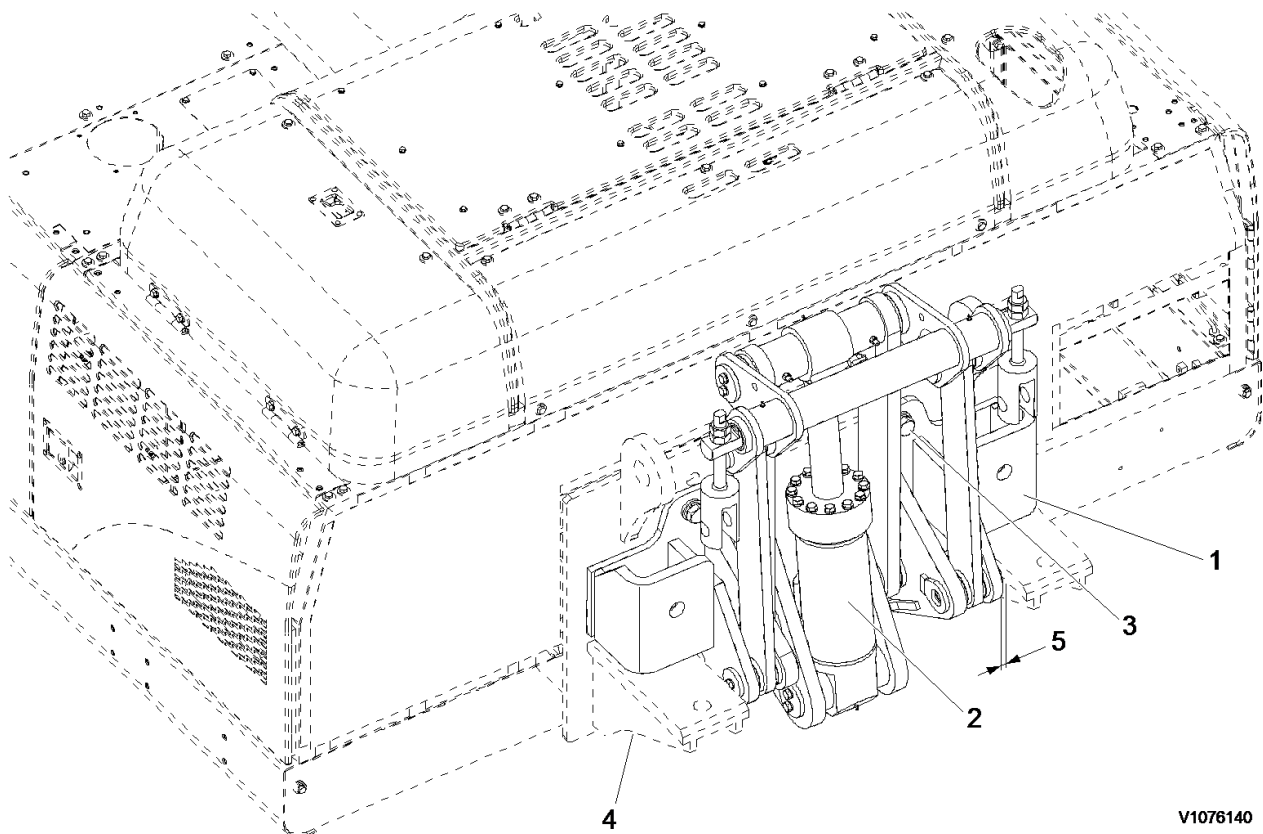
Figure 1
Counterweight, structure

1 Body	2 Plate	3 Reflector	4 Cover
5 Stopper	6 Base	7 Side plate	8 Under cover

Document Title: Support information	Function Group: 716	Information Type: Service Information	Date: 2015/4/20
Profile: EXC, EC360B LR [GB]			

Support information

Removal counterweight support, description



V1076140

Figure 1
Removal counterweight support

1	Removal counterweight support (Weight: 800 kg, 1764 lbs)
2	Removal counterweight cylinder
3, 4	Support mounting screws Tightening torque: 1324 ±49 Nm (135 ±5 kgf m) (975 ±36 lbf ft)
5	GAP: LH and RH 12.5 mm (0.492 inch)

Document Title: Counterweight, removing	Function Group: 716	Information Type: Service Information	Date: 2015/4/20
Profile: EXC, EC360B LR [GB]			

[Go back to Index Page](#)

Counterweight, removing

Casting type

Op nbr 71601

WARNING

The counterweight is heavy. Take care in performing removal. To lift the counterweight, use certified wire ropes in good condition, of adequate load rating and length.

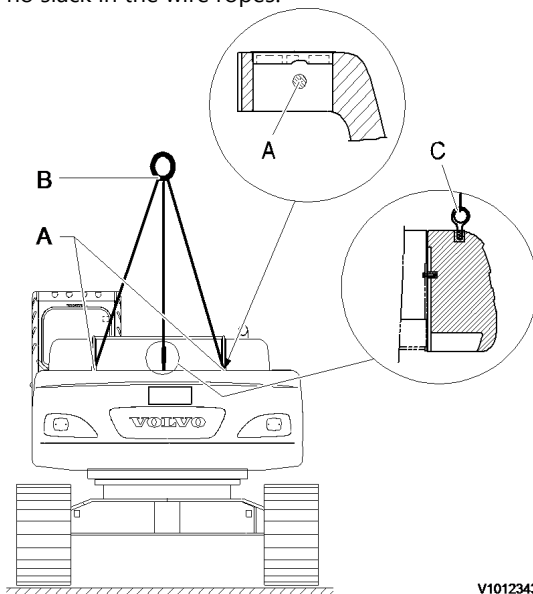
WARNING

Heavy lift. Make sure that no persons are under the counterweight when it is lifted.

NOTE!

The counterweight weighs 6700 kg (14771 lbs).

1. Position the machine on flat, firm and level ground, free from any obstructions or interference. Position the boom and arm with the bucket on the ground.
2. Attach wire slings (B) to lifting eyes (A) and eye bolt (C) at the top surface of the counterweight and lift until there is no slack in the wire ropes.



V1012343

Figure 1
Attach wire slings

3. Remove screws (9) using socket wrench.

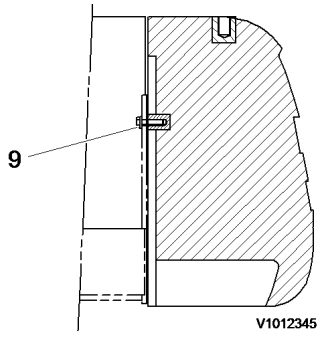


Figure 2
Removal, screws

4. Remove lock nut (7) and nut (8), using socket wrench or power wrench.

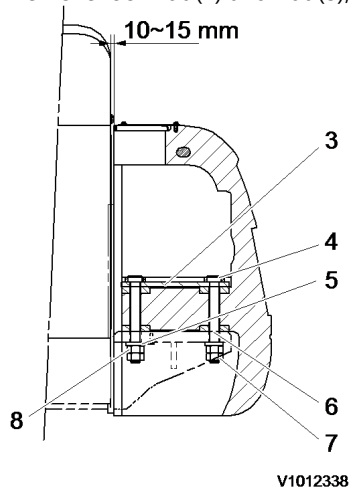


Figure 3
Removal, lock nut

5. Lift the counterweight just a little, and after confirming safety all around, lift it up and out.

Document Title: Counterweight, removing	Function Group: 716	Information Type: Service Information	Date: 2015/4/20
Profile: EXC, EC360B LR [GB]			

[Go back to Index Page](#)

Counterweight, removing

Fabrication type

Op nbr 716-001

WARNING

The counterweight is heavy. Take care in performing removal. To lift the counterweight, use certified wire ropes in good condition, of adequate load rating and length.

WARNING

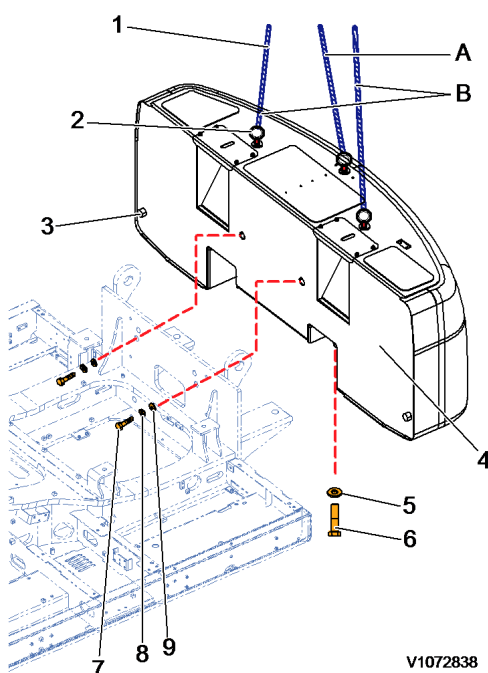
Heavy lift. Make sure that no persons are under the counterweight when it is lifted.

1. Position the machine on flat, firm and level ground, free from any obstructions or interference. Position the boom and arm with the bucket on the ground. Place the machine in the Service position B. see [091 Service positions](#).
2. Remove the plugs on the top surface of the counterweight and install eye bolts (2)
3. Attach wire slings (1) to eye bolts (2) and lift until there is no slack in the wire ropes.

NOTE!

Recommendation length of wire slings to keep counterweight level.

A = 2100 mm (82.7 inch), B = 2050 mm (80.7 inch)



V1072838

Figure 1

4. Remove the engine room under cover then remove screw (7), spring washer (8) and plain washer (9).
5. Remove screw (6), spacer (5).
6. Lift the counterweight just a little, and after confirming safety all around, lift it up and out.
7. Remove the counterweight and securely support the counterweight.
8. Install the engine room under cover.

Document Title: Counterweight, fitting	Function Group: 716	Information Type: Service Information	Date: 2015/4/20
Profile: EXC, EC360B LR [GB]			

[Go back to Index Page](#)

Counterweight, fitting

Casting type

Op nbr 716-002

WARNING

Lift the counterweight just a little, and after confirming safety and horizontal position, proceed to install it.

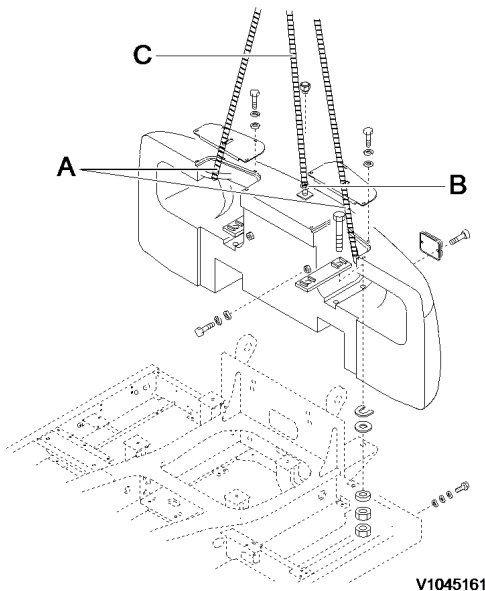
WARNING

Heavy lift. Make sure that no persons are under the counterweight when it is lifted.

1. Position the machine on flat, firm and level ground, free from any obstructions or interference. Position the boom and arm with the bucket on the ground.
2. Attach wire slings to the lifting eyes at the top surface of the counterweight and lift to the desired position.

NOTE!

The ratio of the length for lifting cables (A) and balance cables (C) is 1 : 0.7.



V1045161

Figure 1
Installation, counterweight

- A. Lifting cables
- B. Eye bolt
- C. Balance cable

3. Tighten nut (8) to the specified torque and then tighten lock nut (7).

NOTE!

Apply loctite 277 on threads of screws (4).



Suggest:

For more complete manuals. Please go to the home page.

<https://www.ebooklibonline.com>

If the above button click is invalid. Please download this document first, and then click the above link to download the complete manual.

Thank you so much for reading

NOTE!

Maintain the clearance (left and right) within 7 - 13 mm.

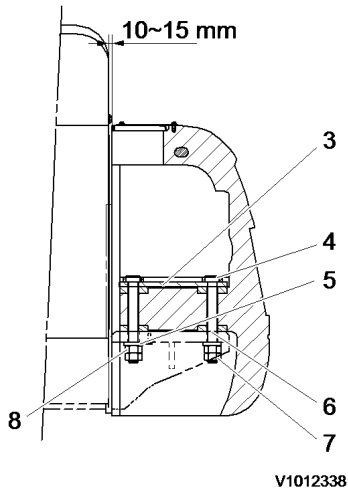


Figure 2
Tightening, lock nut

4. Remove the engine room under cover and match the screws hole. and then install and tighten screws (9) to the specified torque. See tightening torque, [716 Counterweight, tightening torques](#).

NOTE!

Apply loctite 277 on threads of screws (9).

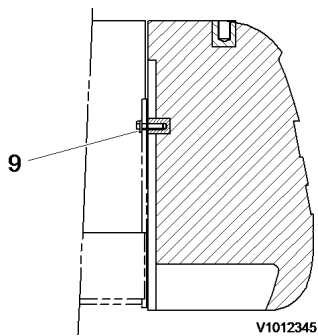


Figure 3
Tightening, screws

5. install the engine room under cover.
6. Install the two covers and remove the eye bolts. Assemble the plug to the top of counterweight.

Document Title: Counterweight, fitting	Function Group: 716	Information Type: Service Information	Date: 2015/4/20
Profile: EXC, EC360B LR [GB]			

[Go back to Index Page](#)

Counterweight, fitting

Fabrication type

Op nbr 716-002



WARNING

Lift the counterweight just a little, and after confirming safety and horizontal position, proceed to install it.

1. Position the machine on flat, firm and level ground, free from any obstructions or interference. Position the boom and arm with the bucket on the ground. Place the machine in the Service position B. see [091 Service positions](#).

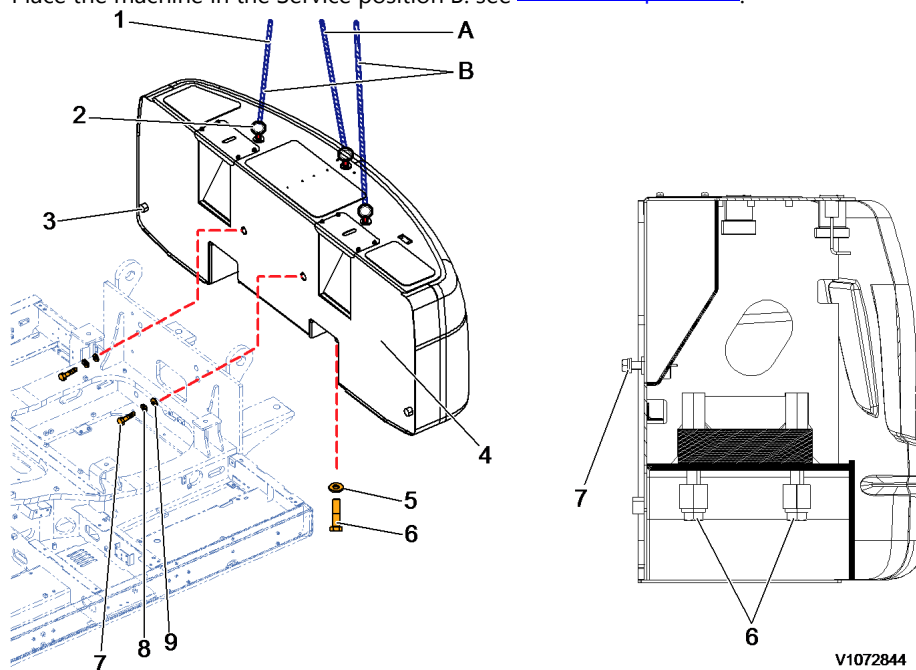


Figure 1

2. Engage the control lockout lever securely.
3. Clean the surfaces of counterweight mounting before fitting.
4. Remove the engine room under cover.

NOTE!

Recommendation length of wire slings to keep counterweight level.

A = 2100 mm (82.7 inch), B = 2050 mm (80.7 inch)

5. Lower the counterweight to the mounting face at the rear of the superstructure.

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>