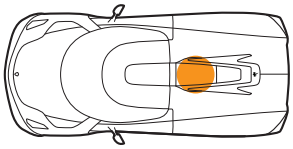
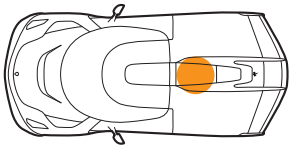
Koenigsegg

TECHNICAL SERVICE BULLETIN
Doc. ID TSB-25511-01
Model Jesko
Kit 1091593 (Parts)
1087205 (Tools)

Rear Hood Sealing and Seal Test





This instruction refers to other documents that are necessary to do the procedure.
This instruction recommends two or more technicians to put the vehicle on jack stands and to remove and install the wheels.

WARNING
Always refer to the local regulations and manufacturer's safety data sheet for the chemicals and use the necessary PPE. The chemicals can cause injury or death.

Situation

Water running off the roof and into the engine bay may cause degradation of the spark plugs and spark plug coils.

Action

Do an inspection of the spark plugs. Install the rear hood sealing. Do a leak test of the valve cover and reseal if necessary. Install a new o-ring to the ignition coils.

PPE	REFERENCE	QUANTITY
Chemical resistant gloves	–	–
Face mask	–	–
Safety goggles	–	–
Work gloves	–	–

PARTS	REFERENCE	QUANTITY
D-Rubberlist for Rear Window	1072947	2
D-Rubberlist for Rear Window Bottom	1083801	1
O-ring FKM 19x2	170-441-3237	8

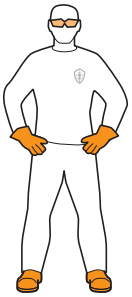
TOOLS	SPECIFICATION	QUANTITY
Coil ring tester	1087135	1
E-Motor Coolant System & Cap Pressure Test Kit	100629	1
General mechanical tools	–	–
Heat gun	–	–
Inspection camera	–	–
M6x25 M6SF 8.8 DIN 6921 P2T	130-143-0625	1

CONSUMABLES	REFERENCE	QUANTITY
Brake cleaner	130-183-6101	–
DP490	130-114-1011	–
Isopropanol	000016	–
Multi purpose grease NLGI-2	130-117-4019	–
Soap and water solution	–	–

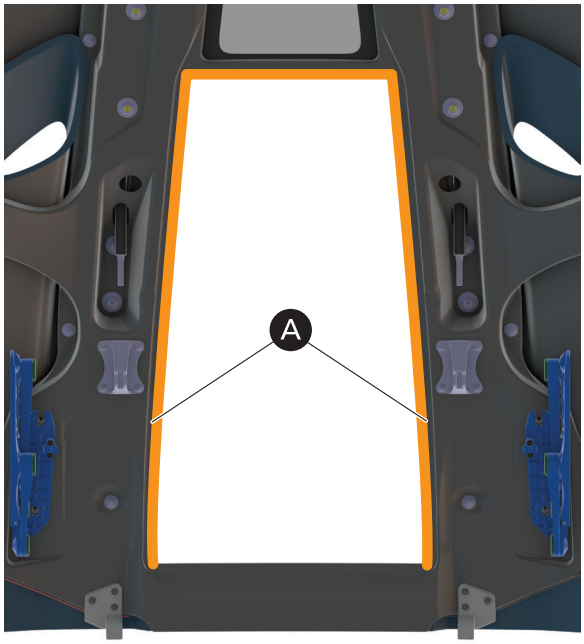
Prepare

1. Open the rear hood with the key fob or from the center console.
2. Lift and put the vehicle on jack stands, refer to *WOM-00092*.
3. Remove the engine mudpan, refer to *WOM-00094*.
4. Disconnect the 12 V system, refer to *WOM-00082*.
5. Remove the wheels, refer to *WOM-00083*.
6. Remove the air boxes, refer to *WOM-00206*.

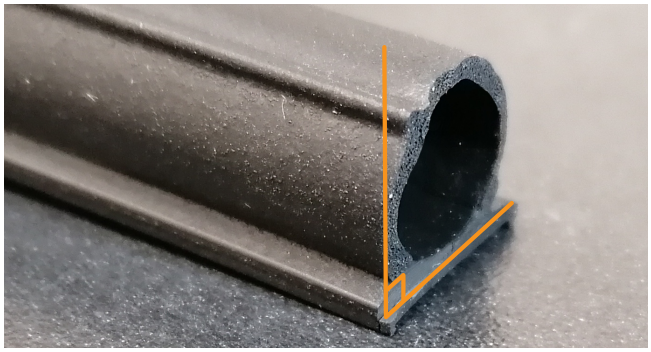
Install Sealing



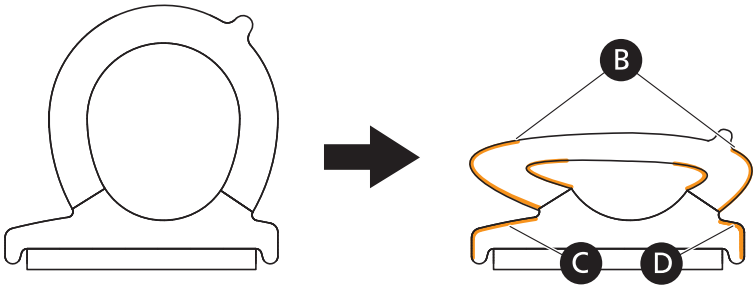
1. Put on the personal protective equipment.
   PPE: Safety goggles
   PPE: Chemical resistant gloves
2. Clean the surfaces (A) on the rear hood along the rear window opening.
   Consumable: Isopropanol



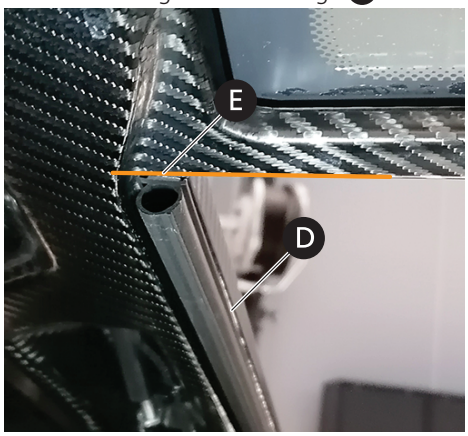
3. Make sure that the new 2× long lists are 685 mm long.
   Part: 1072947
4. Make sure that the new short list is 255 mm.
   Part: 1083801
5. Make sure that the rubber list ends are cut in a right 90° angle.



6. Push together the ends of the rubber lists. Make sure that the seal B covers the long edge C and the short edge D on all ends.
    - If you can see the long edge C or the short edge D when the seal is pushed together, you have to cut the seal straight.



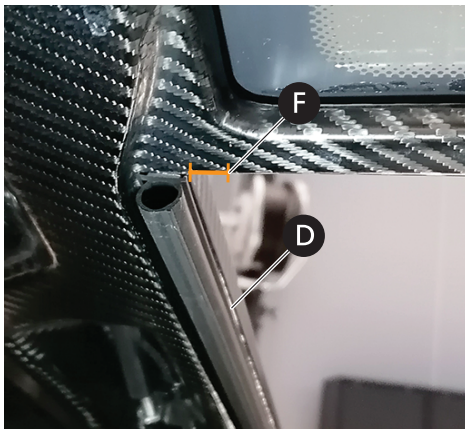
7. Position the short edge D of the long seal along the window opening. Attach the end of the seal so it aligns with the edge E of the rear hood.



8. Install the rubber list straight along the edge of the window opening, do not pull or stretch the list.

9. Do the steps *6* thru *8* again to install the second long rubber list on the other side of the window opening.

10. Measure from the edge of the window opening and put a mark at 10 mm F.



11. Temporarily position the edge of the short seal at the mark F and hold the seal along the bottom of the window opening.
12. Make sure that the short seal is in the center of the window opening and that the distances G are equal on the both sides.
    - If necessary, adjust the mark F.

13. Position the short edge D of the short seal along the window opening. Attach the end of the seal so it aligns with the mark F on the rear hood.
14. Install the rubber list straight along the bottom of the window opening, do not pull or stretch the list.

15. Remove the mark F.
16. Set the 12 V main switch to **ON**.
17. Close the rear hood with the key fob or from the center console.
18. Make sure that the rear hood closes correctly.
    - If the rear hood does not close, do a calibration of the rear hood. Refer to *WOM-00328*.
    - If the hood closes correctly, continue with the next section.

Inspection of Spark Plugs

1. Disconnect the 12 V system, refer to *WOM-00082*.
2. Remove the ignition coils from the spark plugs. Do not remove the spark plugs. Refer to *WOM-00303*.

   Note
   To remove the ignition coils that are closest to the backwall you must first remove the intercooler hose, refer to *WOM-00303*. It is not necessary to disconnect the fuel hoses.
3. Use an inspection camera to do an inspection of the spark plugs in the ignition coil holes.
4. If you see water or corrosion on the spark plugs, submit a KATS ticket with photos on the affected area.

Install new O-ring to the Ignition Coil

Do this procedure on all the ignition coils.

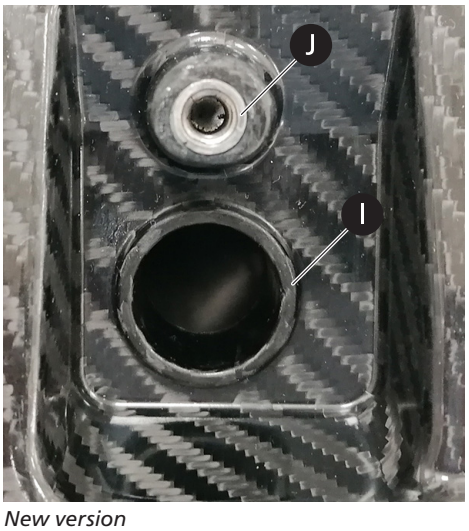
1. Install the new o-ring to the ignition coil.
   Part: 170-441-3237

2. Make sure that the o-ring is positioned after the last thread of the ignition coil, flush to the ignition coil housing.

Valve Cover Versions

Do a check of the valve cover to find which version that is installed in the vehicle.

Old version



New version

The old version of the valve cover has:

- Aluminum ring G around the ignition coil hole.
- A protruded bolt hole H.

The new version of the valve cover has:

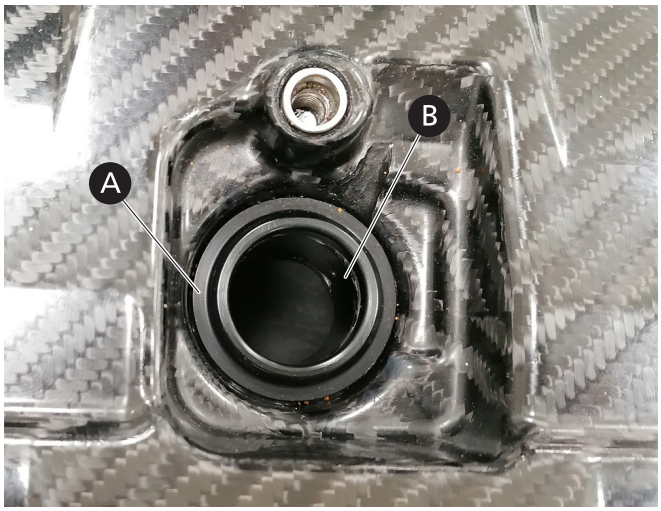
- Composite ring I around the ignition hole.
- A countersunk bolt hole J.

Do one of the steps that follow:

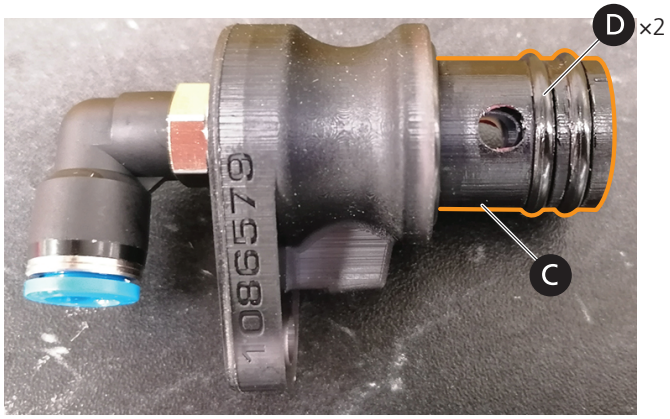
- If the vehicle has the old version of the valve cover. Continue with the next section *Prepare Seal Test of the Valve Cover.*
- If the vehicle has the new version of the valve cover. Submit a KATS ticket and do not proceed with the next sections. It is not necessary to do a leak test of the new valve covers.

Prepare Seal Test of the Valve Cover

1. Make sure that the valve cover has all aluminum rings A installed around the ignition coil holes.
    - If the aluminum ring A is missing, submit a KATS ticket with photos on the valve cover.
    - If the aluminum ring is installed A, continue with the next step.
2. Clean the aluminum ring A and the inside of the hole B with a cloth and brake cleaner.
   Consumable: 130-183-6101

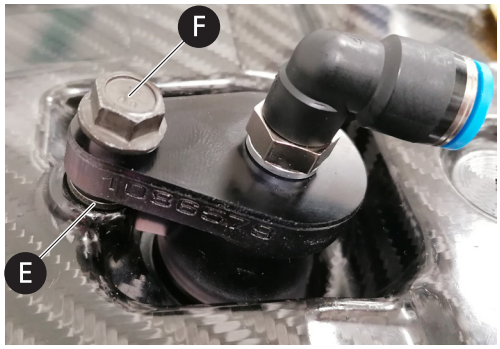


3. Clean the surface C on the coil ring tester with brake cleaner.
   Tool: 1087135
   Consumable: 130-183-6101



4. Apply a thin layer of multipurpose grease on the two o-rings D.
   Consumable: 130-117-4019
5. Insert the coil ring tester into the ignition coil hole.
6. Make sure that the tester is fully pushed into the hole.

   Note
   If you cannot fully insert the coil ring tester into the hole because of glue residues, remove and correctly install the aluminum ring. Refer to *Seal a Valve Cover Ring.*

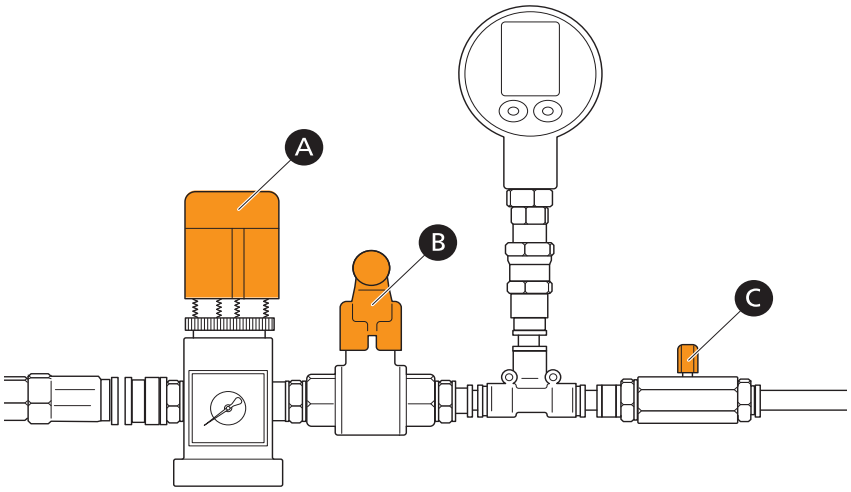


7. Install the coil ring tester to the valve cover with the spacer E, which you removed together with the ignition coil, and the new bolt F.
   Tool: 130-143-0625
8. Do the seal test, refer to *Seal Test of the Valve Cover.*

Seal Test of the Valve Cover

Do this seal test on all of the ignition coil holes.

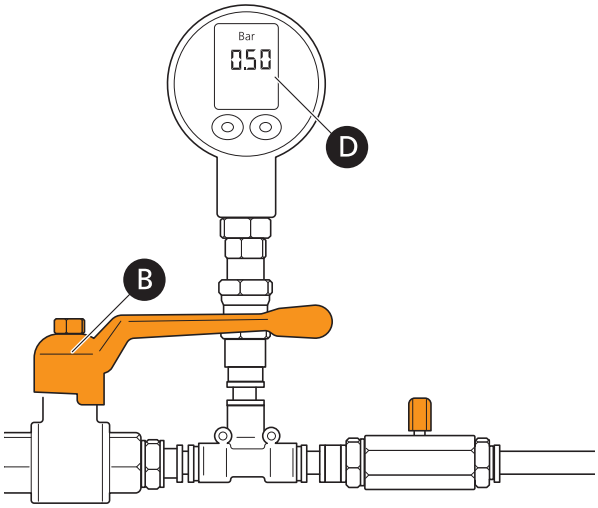
1. Install the coil ring tester to the valve cover, refer to .
2. On the pressure test kit, turn the pressure regulator A anti-clockwise to fully close the regulator.
   Tool: 100629



3. Make sure the gauge on the pressure regulator A shows 0 bar.
4. Make sure the manual control valve B, after the pressure regulator, is fully closed.
5. Make sure the manual control valve C, after the digital pressure gauge, is fully closed.

CAUTION
Do not connect the pressure test kit to the compressed air system if the pressure regulator and the manual control valves are open.

6. Connect the pressure tester to your compressed air system.
7. Turn the pressure regulator A clockwise until the pressure gauge shows 0.50 bar.
8. Open the manual control valve B.

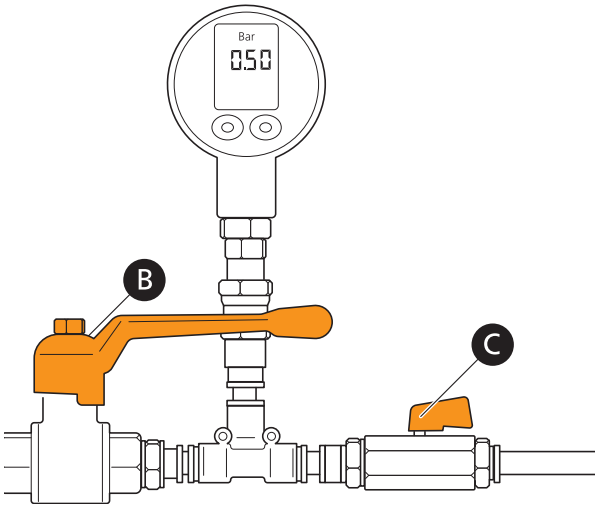


9. Read the digital pressure gauge D and adjust the pressure regulator A until the pressure is 0.50 ±0.05 bar.

CAUTION
Do not connect the pressure test kit to the coil ring tester if the air pressure is higher than 0.50 ±0.05 bar. A higher air pressure can damage the valve cover.

10. Connect the pressure test kit to the coil ring tester.

11. Open the manual control valve C.



12. Listen for air leakage and use soap water to makes sure that there is no leakage from the valve cover. If you can hear or see that air leaks out of the valve cover:
    - Try to tighten the bolt F that attaches the coil ring tester. Do not over tighten the bolt.
    - If air still leaks out after you have tighten the bolt, try to remove the spacer E between the valve cover and the bolt F.
    - If air still leaks out after you have removed the spacer and tighten the bolt. Remove and seal the valve cover ring. Refer to *Seal a Valve Cover Ring*.
13. Close the manual control valve B.
14. If the digital pressure gauge shows a stable pressure of 0.50 bar, wait for one minute to make sure that there is no leakage.
    - If the pressure stays at 0.50 and the pressure does not decrease more than 0.01 bar after a minute there is no leakage.
    - If the pressure decreases more than 0.01 bar after a minute, remove and seal the valve cover ring. Refer to *Seal a Valve Cover Ring*.

Note
Close the control valves B and C before you disconnect the pressure test kit or remove the coil ring tester from the valve cover.

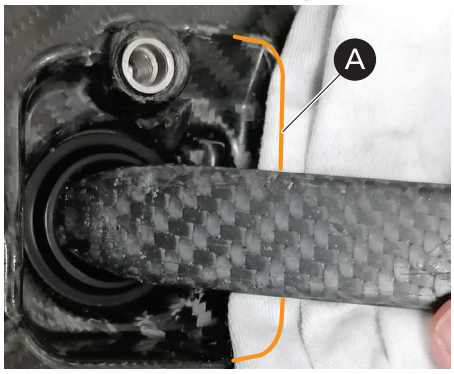
Seal a Valve Cover Ring

Only do this procedure if there was a leakage when you did the seal test. Refer to *Seal Test of the Valve Cover*.

1. Set the heat gun to 120 °C.

CAUTION
Do not use a higher temperature than 120 °C when you heat the valve cover ring. A higher temperature can cause damage to the valve cover.

1. Use the heat gun on the aluminum ring for approximately one minute to make the glue soft.
2. Put a soft cloth on the edge A of the valve cover to protect the surface.



3. Use a plastic prying tool or similar to remove the valve cover ring.

   Note
   Cover the hole with your other hand to make sure that the valve cover ring does not fall into the engine bay when it becomes loose from the valve cover.

4. Carefully remove the glue residues and unevenness from the valve cover.

5. Make sure that the surface around the ignition coil hole is smooth.
6. Clean the surface around the ignition coil hole with brake cleaner.
   Consumable: 130-183-6101

CAUTION
Be careful when you clean the top surface of the aluminum ring, which seals to the ignition coil. Damages or scratches on the ring can cause leakage between the valve cover and the ignition coil.

7. Carefully remove all glue from the aluminum ring.

8. Clean the aluminum ring with brake cleaner.
   Consumable: 130-183-6101
9. Apply DP490 equally around the ignition coil hole.
   Consumable: 130-114-1011

10. Attach the aluminum ring to the valve cover.

11. Push and turn the ring approximately 10° in one direction and then approximately 10° in the other direction, this to make sure that the empty space between the valve cover and the ring is filled with adhesive.
12. Use a cloth, plastic tool or similar to carefully remove the unwanted glue around the ring.
13. Make sure that there is no glue on the top surface of the aluminum ring, which seals to the ignition coil.
14. Make sure that there is no glue within the ignition coil hole.
15. Remove unwanted glue.
16. Let the glue cure, refer to the manufacturer's manual.
17. When the glue has cured, do a seal test to make sure that there is no leakage. Refer to *Prepare Seal Test of the Valve Cover* and *Seal Test of the Valve Cover*

Install

Install in the reverse order.

Note
If the valve cover has aluminum rings. Make sure that you install the spacers on the bolt that attach the ignition coils to the valve cover.

Warranty Information

If the repair is covered by the warranty terms, refer to Koenigsegg Warranty Process.

OPERATION

KWO168404, KWO756576, KWO304525

PART NO

Refer to the invoiced kit number