



Installation instructions

Akrapovič Exhaust Systems:
Optional Wireless Kit
for the
BMW 1 Series M Coupe (type E82)



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for the
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Congratulations on purchasing an Akrapovič exhaust system. Please read the entire installation manual prior to undertaking any activities related to installation of your new Akrapovič exhaust system. In case you do not fully understand the manual or any of its parts, please contact your authorized dealer!

This product should be installed by someone with sufficient knowledge of exhaust systems and their installation, and appropriate hand or power tools. If you are not qualified for this work, please utilize a certified mechanic for installation. By installing Your Akrapovič exhaust system, you indicate that you have read the installation manual in its entirety and you agree with the terms stated herein.

It is your responsibility to follow all installation instruction guidelines supplied with the Akrapovič exhaust system and undertake all necessary safety precautions. Akrapovič d.d. assumes no responsibility for damages occurring from misuse, abuse, improper installation, improper operation, lack of responsible care, or all previously stated reasons resulting from incompatibility with other manufacturer's products and/or systems.

IMPORTANT INFORMATION

Exclusion of Certain Liability

1. The manufacturer, importer or dealer shall not be liable for any incidental damage including personal injury or any other damages caused by improper installation or operation of the Akrapovič exhaust system. When installing the Akrapovič exhaust system be careful that the exhaust system does not touch other parts sensitive to high temperature.
2. Akrapovič makes no representation or warranties with regard to damage caused by the improper installation, use and maintenance of the Akrapovič exhaust system. The warranty is limited to defects recognized by our technical department and due to normal use, and excludes items subject to normal wear (gaskets and damping wool). The guarantee is void in case of accident, modification, improper or competition use.
3. Do not attempt to install the Akrapovič exhaust system on a vehicle model for which it was not made or tested by Akrapovič.
4. When the exhaust system gets very hot during operation, be careful not to burn yourself on the exhaust system or parts which are in direct contact with it, even when the engine is not running. Also protect other people, especially children, from the injuries mentioned above.

1. In some cases Akrapovič exhaust system kits contain chemical products (ceramic anti-seizing grease; bolt sealant). Handle with care, do not inhale or swallow. Avoid excessive contact with skin, eyes or mucous membranes. Keep out of reach of children.
2. Technical specifications of Akrapovič exhaust systems and related products are subject to change without notice.
3. Before removing the original exhaust system from your vehicle, please compare the parts you received with the list of materials provided in the installation manual in order to assure that you have all the parts necessary for the installation of your new Akrapovič exhaust system.
4. Although this manual consists of instructions for installation in written form, as well as photographs and pictures representing individual steps of the installation, please note that the photographs and pictures are symbolic and are intended for representation of general overview only. The photographs and pictures contained herein should serve as a guideline only and actual installation of the exhaust system may not correspond with the photographs and pictures entirely.
5. The process of uninstalling the original exhaust system may vary depending on the existing exhaust system. Please follow the original exhaust system manufacturer's instructions for uninstalling the original exhaust system.

Trademarks

The Akrapovič Exhaust System Technology logo is a registered trademark of Akrapovič d.d.

Akrapovič website

Information about Akrapovič exhaust systems and related products is available on the Akrapovič website at:

<http://www.akrapovic.com/>

Copyright

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Symbols

The following symbols are used throughout these installation instructions:



TOOLS REQUIRED



TIGHTENING TORQUE



INSTALLATION TIP



CAUTION OR WARNING



USE BOLT SEALANT; Apply 3 to 4 small drops of bolt sealant onto the cleaned and degreased threads before tightening the bolts. **WARNING! Avoid contact with skin, eyes and mucous membranes. Do not inhale fumes. Keep out of the reach of children.**



USE ANTI-SEIZE LEAD-FREE COPPER PASTE (black tube); Provides trouble-free and long-lasting protection against seizing, corrosion and rusting of bolts, threaded ends, nuts, joints, etc. Also protects against vibration, wear and impact. **WARNING! Avoid eye contact. Avoid excessive skin contact. Keep out of reach of children.**



USE ANTI-SEIZING GREASE (white tube); Prevents seizing, corrosion and excessive wear between the titanium components of your exhaust system. **WARNING! Avoid eye contact. Avoid excessive skin contact. Keep out of reach of children.**



T-handle swivelling 13 mm wrench
Torx 25
T-handle 4 mm three hexagon key wrench
Combination 13 mm wrench
Small and medium screwdrivers
Cutting nippers
Pry bar



BEFORE INSTALLING, CHECK SCHEMATIC OF THE WIRELESS KIT! THE LATEST VERSION OF THE PARTS LIST AND SCHEMATIC DRAWINGS OF THE PRODUCTS ARE AVAILABLE ON OUR WEB PAGE.



IF ANY ITEMS IN THE AKRAPOVIČ WIRELESS KIT PACKAGE ARE MISSING, PLEASE CONTACT YOUR AUTHORIZED DEALER. KEEP THE SCHEMATIC FOR FUTURE REFERENCE.



THESE INSTALLATION INSTRUCTIONS MUST BE READ CAREFULLY IN ORDER TO ENSURE PROPER INSTALLATION AND OPERATION OF THE AKRAPOVIČ WIRELESS KIT.



THE EXHAUST SYSTEM CAN BE EXTREMELY HOT. ALLOW THE EXHAUST AND ENGINE TO COOL DOWN BEFORE BEGINNING INSTALLATION.



WE ADVISE YOU TO LEAVE INSTALLATION TO A QUALIFIED SERVICEMAN. IMPROPER INSTALLATION MAY RESULT IN A SHORTER LIFETIME OF THE WIRELESS KIT AND/OR DAMAGE TO THE VEHICLE.



THIS MANUAL IS SPECIFIC TO THE BMW 1 SERIES M COUPE. THERE MAY BE SOME DIFFERENCES IN INSTALLATION PROCEDURES FOR OTHER MODELS.



AT EACH ENGINE START, THE EXUP VALVE MAY VIBRATE FOR A FEW SECONDS UNTIL THE VACUUM SYSTEM REACHES OPERATING PRESSURE.

INSTALLATION OF THE AKRAPOVIČ OPTIONAL WIRELESS KIT:

1. Put the vehicle onto a car lift.

! **WARNING:** ensure that the car is lifted safely and properly in order to avoid the risk of vehicle damage, injury, or even death!

2. Remove the Akrapovič muffler off the vehicle.

✚ **INSTALLATION TIP:** check the Akrapovič exhaust system installation instructions for correct muffler disassembly procedure.

3. Unscrew the marked nuts and bolts and remove the right side underbody shields (**Figure 1, 2**).

! **WARNING:** make sure not to injure yourself, or damage any part of the vehicle during this procedure!

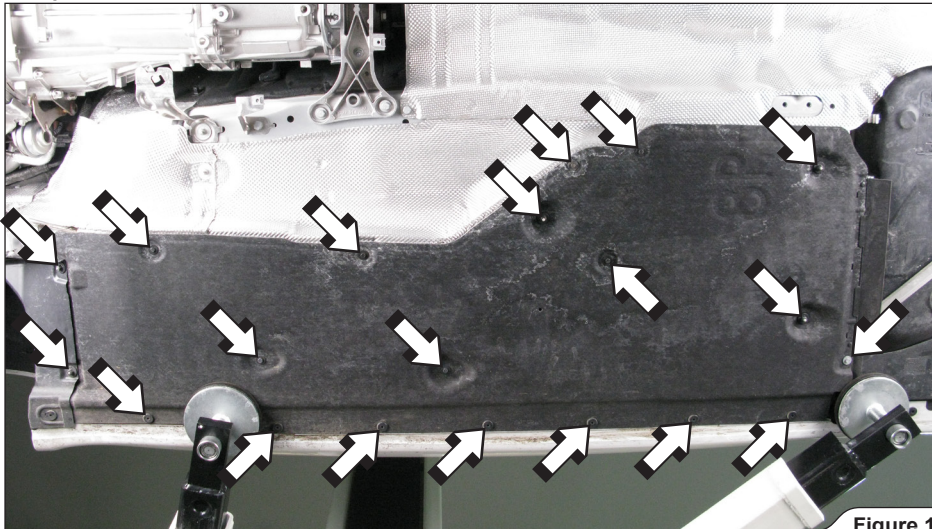


Figure 1



Figure 2

4. Remove the rear right wheel. Unscrew the marked nuts, undo the plastic fasteners and remove the rear right side wheel arch panel off the vehicle (**Figure 3**).

! **WARNING!** make sure not to injure yourself, or damage any part of the vehicle during this procedure!

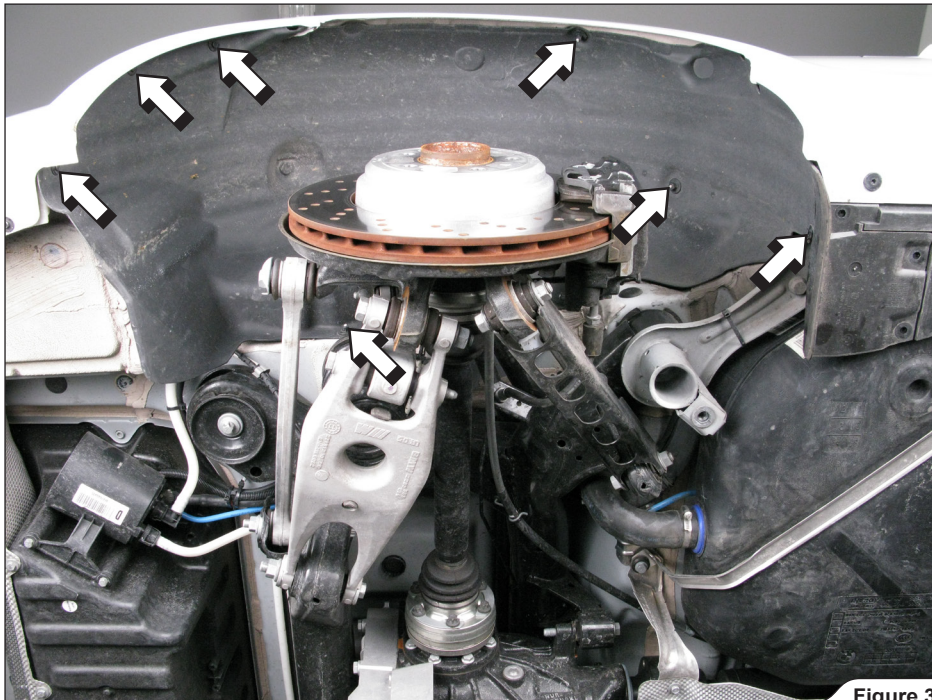


Figure 3

5. Remove the central panel for luggage compartment. Unscrew the marked bolt, undo the plastic fasteners and remove the rear right side trunk trim panel (**Figure 4, 5, 6**).

! **WARNING:** make sure not to injure yourself, or damage any part of the vehicle during this procedure!



Figure 4

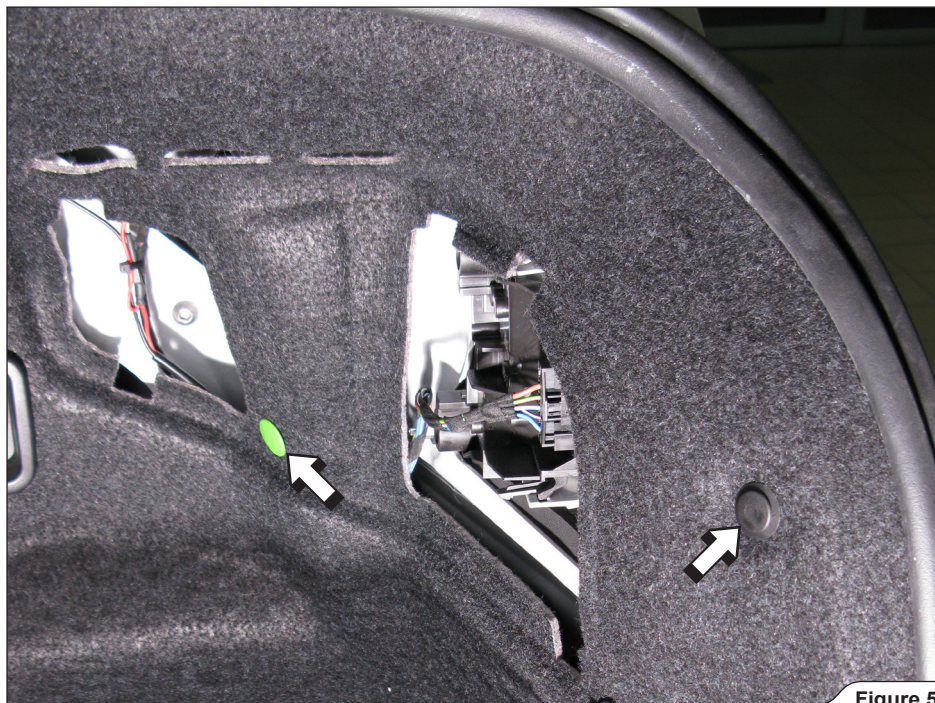


Figure 5



Figure 6

6. Assemble the clamps and Valve Pipe onto the muffler's inlet pipes, as shown (Figure 7, 8, 9).

! **WARNING:** use anti-seize copper paste on all clamps' bolt and nut threads!

! **CAUTION:** in case of combination of Slip-On and optional Wireless kit, the Akrapovič exhaust system EC type approval is not valid!



Figure 7



Figure 8

! WARNING: hand tighten the clamps only (Figure 9)!



Figure 9

7. Align/rotate the Valve Pipe as shown and tighten the clamps to the specified torque (**Figure 10**).

! **WARNING:** make sure, not to injure yourself or damage any part of the vehicle during this procedure!

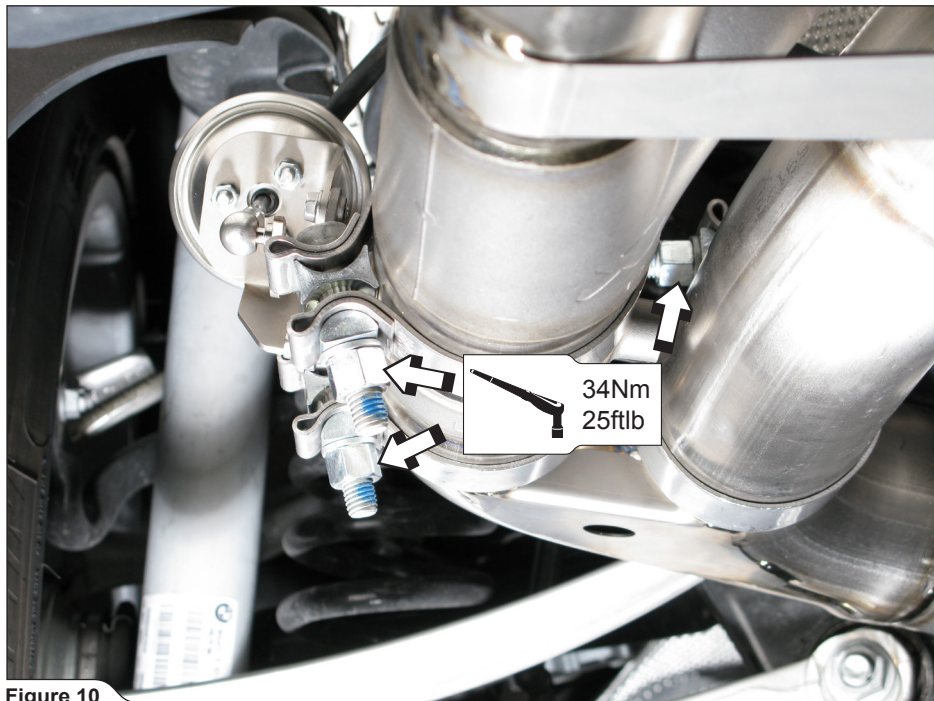


Figure 10

8. Unscrew the marked nut, carefully pull the lower vacuum tube off the vacuum tank and move the vacuum tank out of the way (Figure 11, 12).

! **WARNING:** make sure, not to injure yourself or damage any part of the vehicle during this procedure!

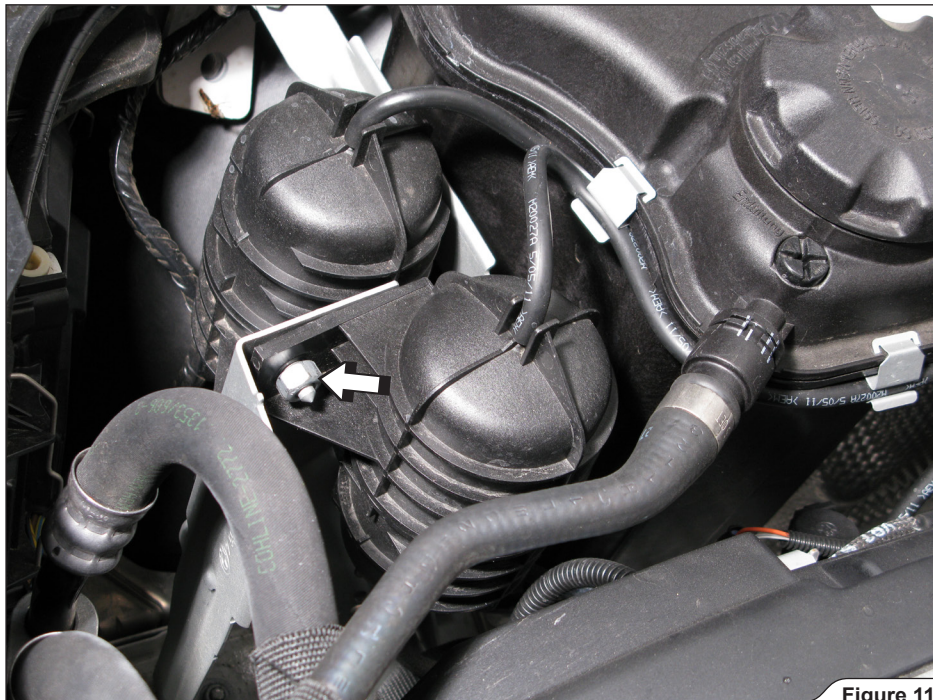


Figure 11

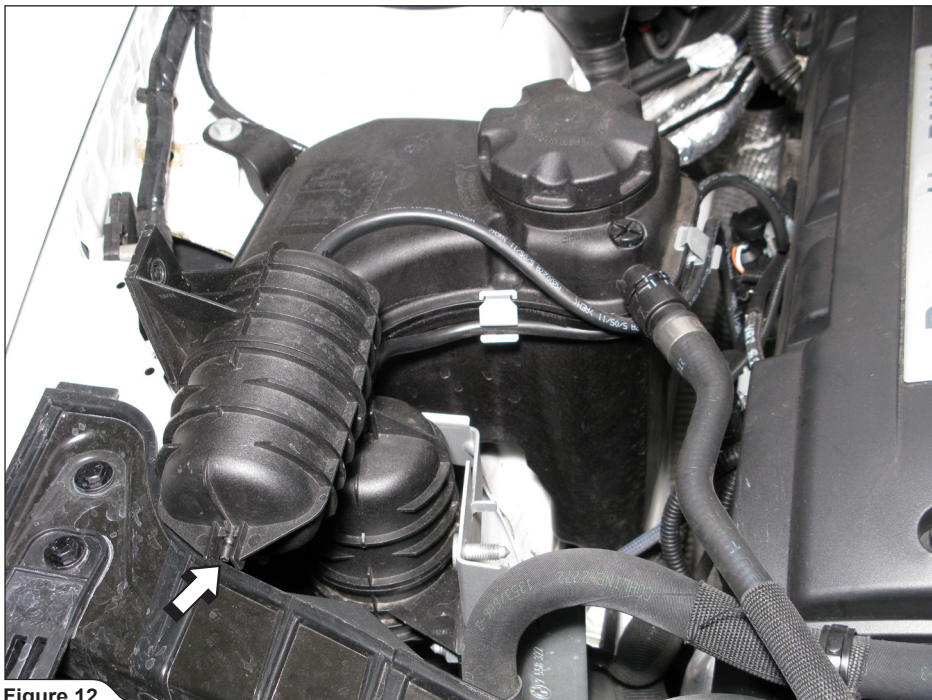


Figure 12

9. Link the Akrapovič 3cm vacuum hose and plastic Y piece distributor to the original vacuum hose. Then connect the Akrapovič 580cm rubber hose to a Y piece distributor (**Figure 13**).

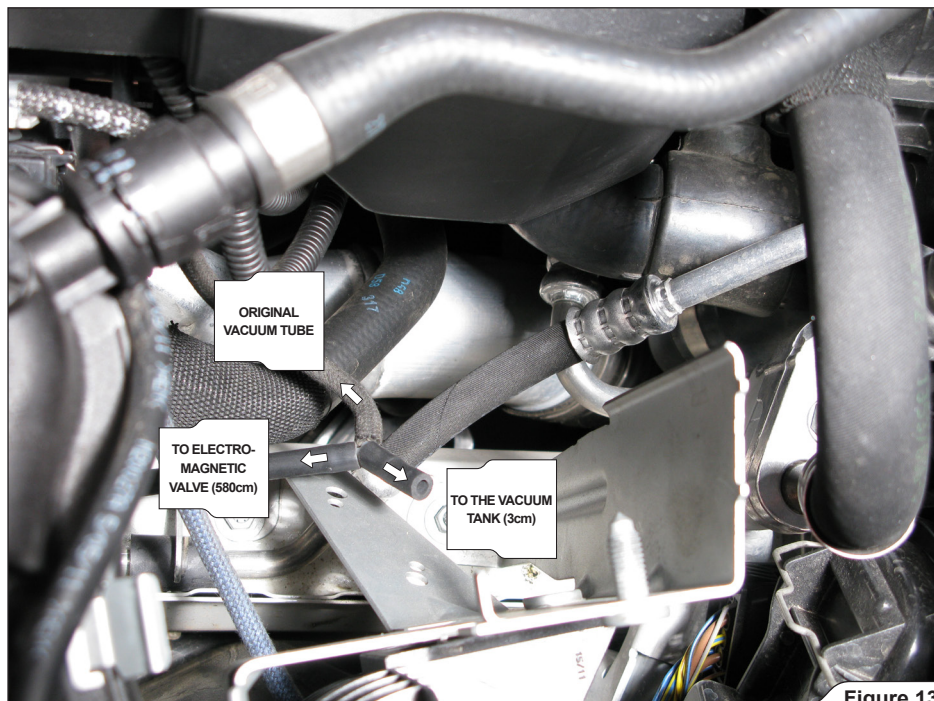


Figure 13

- Link the Akrapovič 3cm vacuum hose to the vacuum tank and reassemble the vacuum tank back to its original position (**Figure 14**).

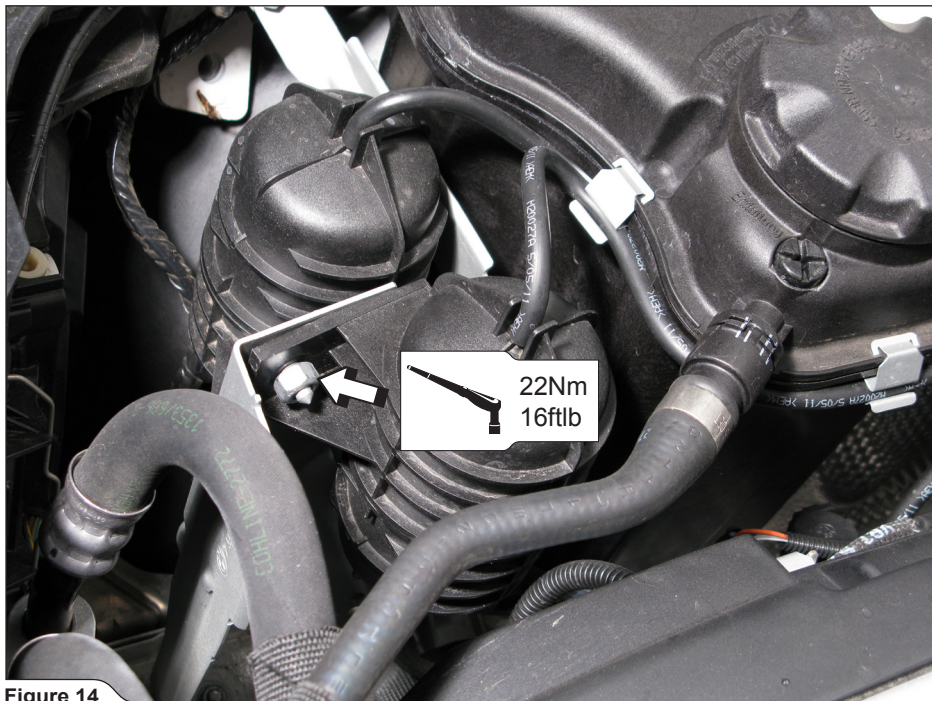


Figure 14

11. Direct and secure the Akrapovič 580cm vacuum hose to the luggage compartment and Akrapovič 200cm vacuum hose from luggage compartment to the vacuum actuator, as shown (**Figure 15, 16, 17, 18, 19, 20**).

! **WARNING:** direct and secure (use additional plastic tie wraps) the rubber vacuum hose in such a way, that it doesn't touch any hot or moving parts of the vehicle!



Figure 15

! **WARNING:** direct and secure (use additional plastic tie wraps) the rubber vacuum hose in such a way, that it doesn't touch any hot or moving parts of the vehicle!

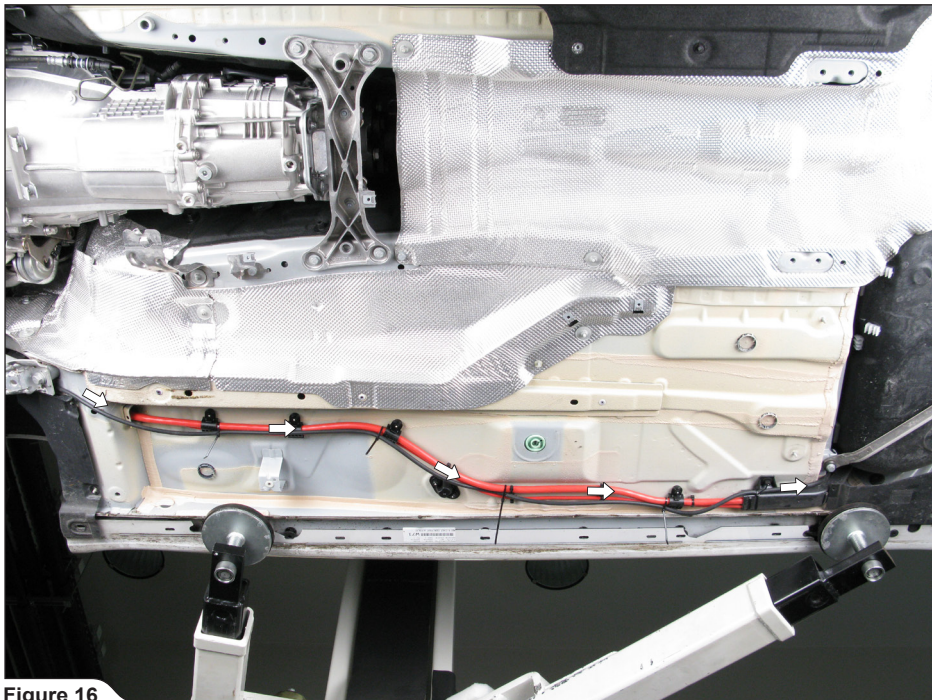


Figure 16

- ! **WARNING:** direct and secure (use additional plastic tie wraps) the rubber vacuum hose in such a way, that it doesn't touch any hot or moving parts of the vehicle!



Figure 17

! **WARNING:** direct and secure (use additional plastic tie wraps) the rubber vacuum hose in such a way, that it doesn't touch any hot or moving parts of the vehicle!

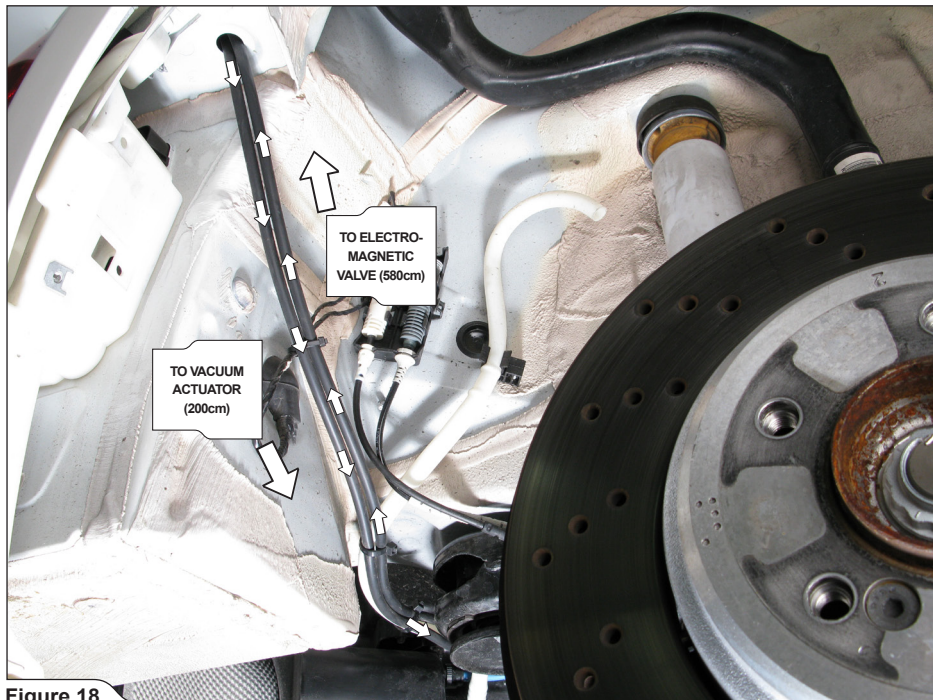


Figure 18

- ! **WARNING:** direct and secure (use additional plastic tie wraps) the rubber vacuum hose in such a way, that it doesn't touch any hot or moving parts of the vehicle!



Figure 19

! **WARNING:** direct and secure (use additional plastic tie wraps) the rubber vacuum hose in such a way, that it doesn't touch any hot or moving parts of the vehicle!



Figure 20

12. Link the vacuum hose to the vacuum actuator (**Figure 21**).



Figure 21

13. For plug-in socket powered **Wireless only**: press the **green/yellow** wire's pin and remove the pin out of the plug-in socket connector (**Figure 22**).

! **WARNING:** make sure, not to damage the connector, or any other part of the vehicle during this procedure!

✂ **INSTALLATION TIP:** In case your car is not equipped with rear plug-in socket connector use the second option installing harness cables from the fuse box described on the page 38 and further!

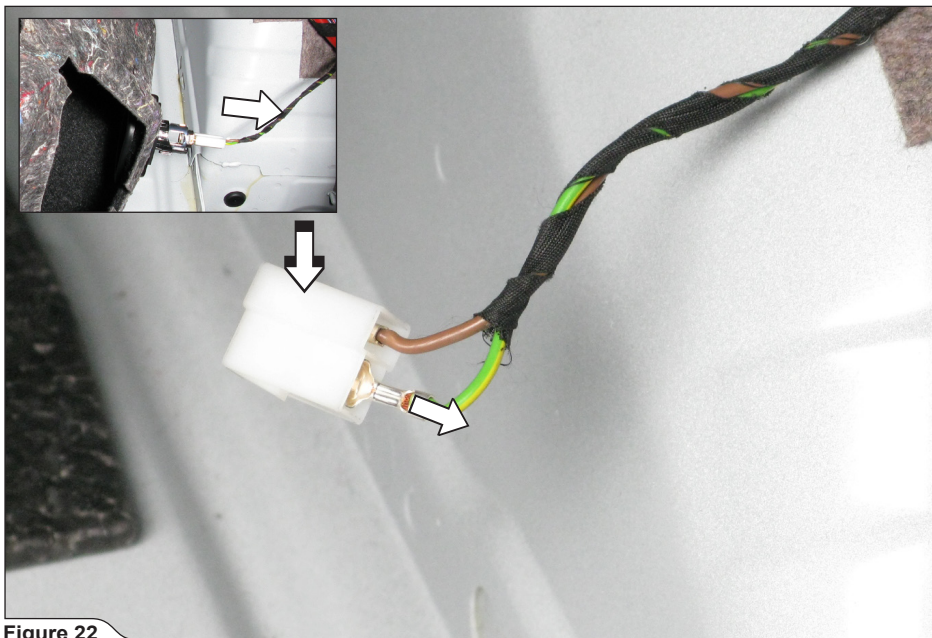


Figure 22

14. For plug-in socket powered Wireless only: transmitter wiring harness (Figure 23).

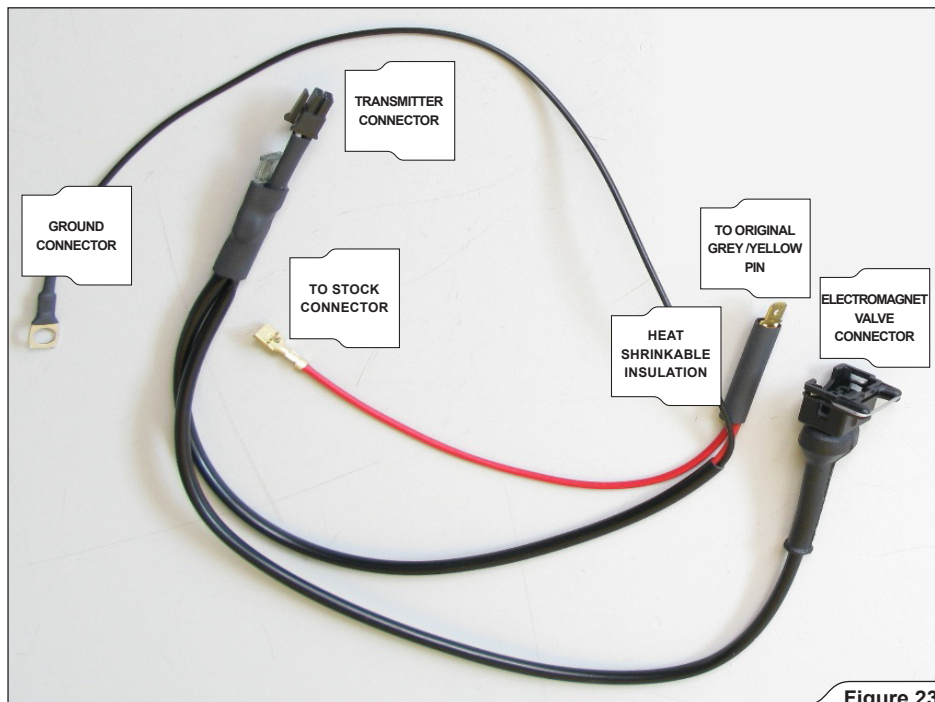


Figure 23

15. **For plug-in socket powered Wireless only:** correctly orient the red wire's pin and attach the pin into the original plug-in socket connector (**Figure 24**).
 16. Connect the original **green/yellow** wire with **red** transmitter's harness wire, and protect the connection with heat shrinkable insulation (**Figure 24, 25**).
- ! WARNING:** make sure, not to damage the pin, wire or connector during this procedure!

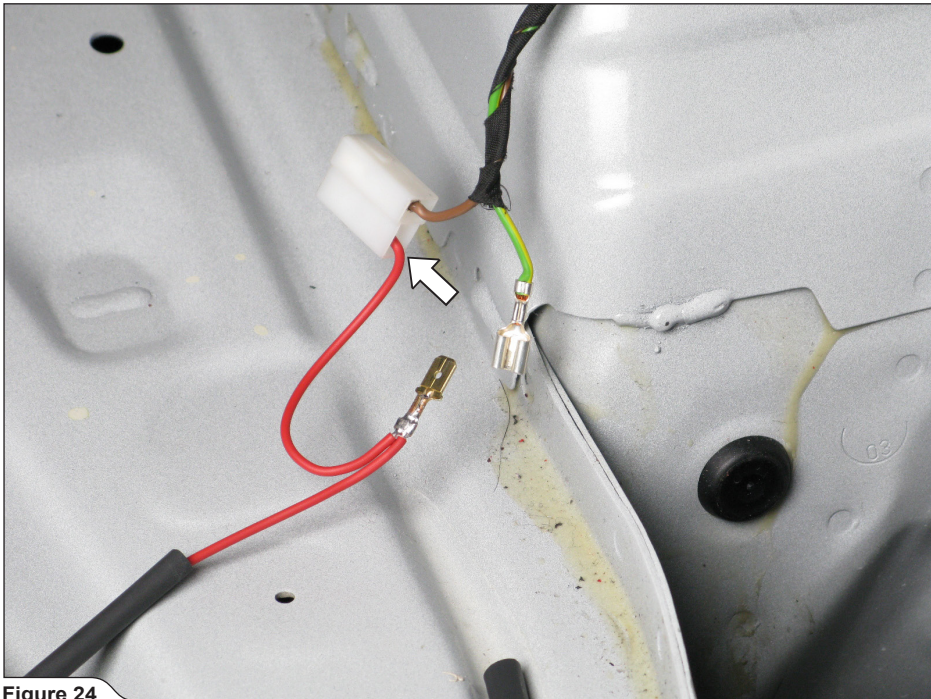


Figure 24

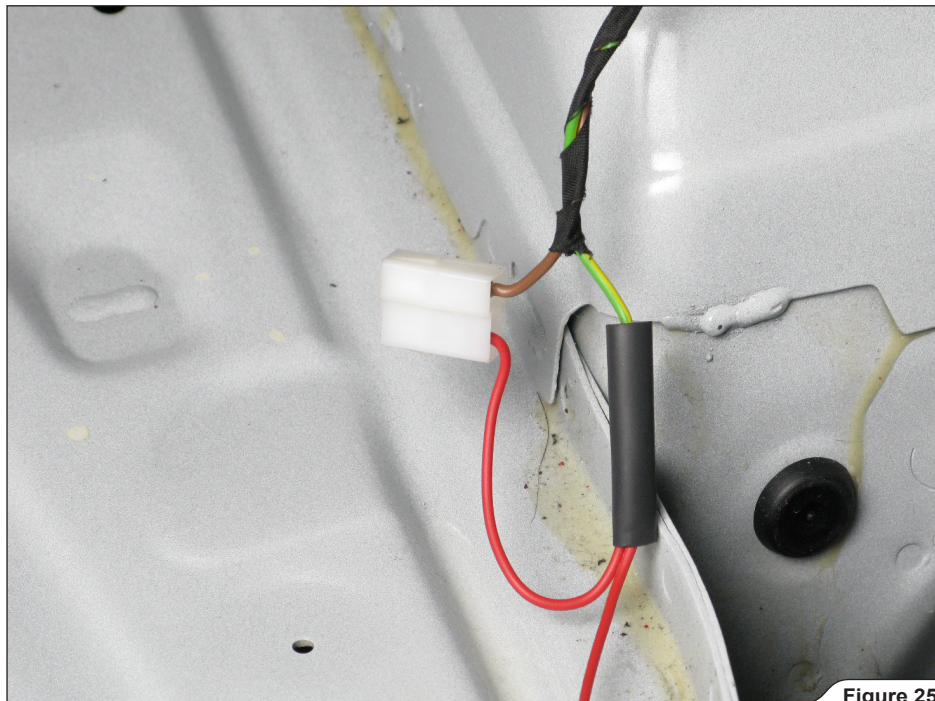


Figure 25

17. Assemble the bracket from Akrapovič installation kit onto the electromagnetic valve (**Figure 26**).

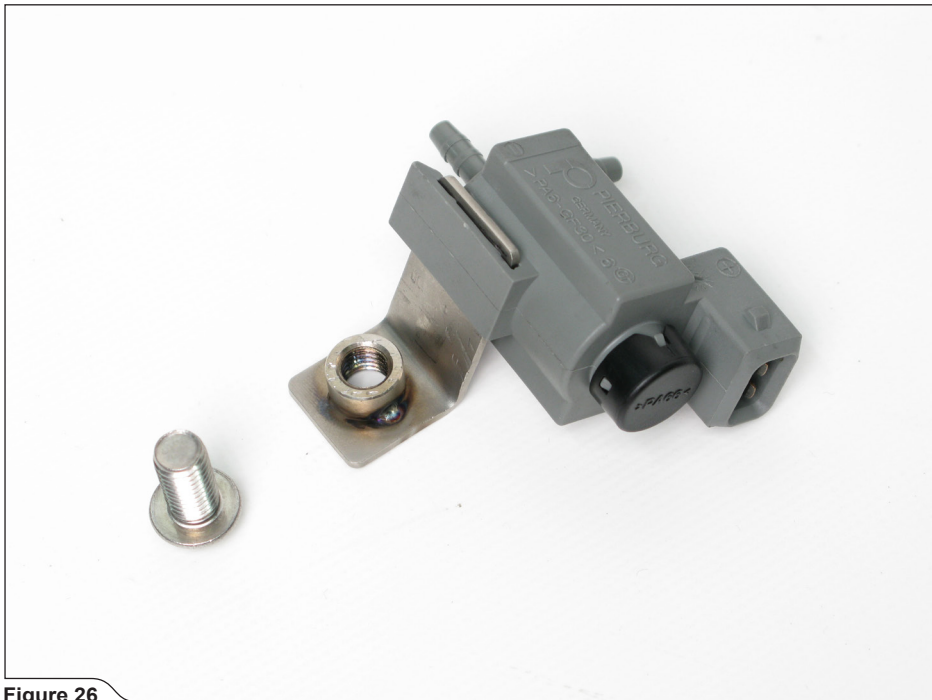


Figure 26

18. Correctly link the vacuum hoses to the electromagnetic valve, as shown (Figure 27).

! **WARNING:** make sure not to damage the valve during this procedure!

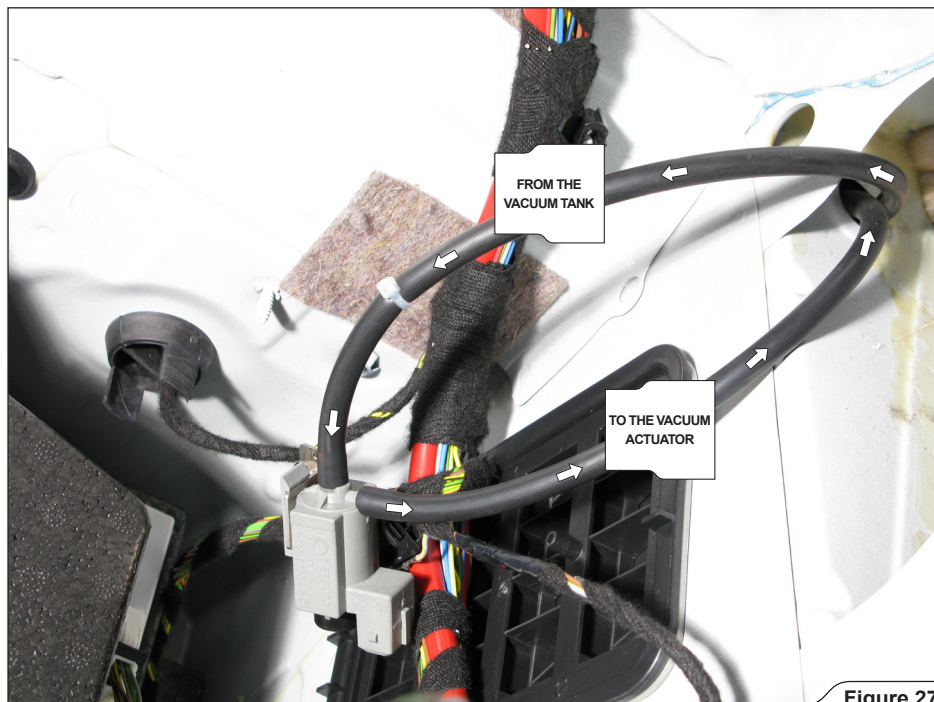


Figure 27

19. Attach the electromagnetic valve onto the chassis, using M6x16 bolt from Akrapovič installation kit (Figure 28).

! **WARNING:** make sure not to damage the valve during this procedure!



Figure 28

20. **For plug-in socket powered Wireless only:** tighten the ground connector (**black thin wire**) with marked original nut, install the connector to the electromagnetic valve. Secure the wiring harness, using tie wraps (**Figure 29**).

! WARNING: make sure not to damage the wiring harness or connectors during this procedure!

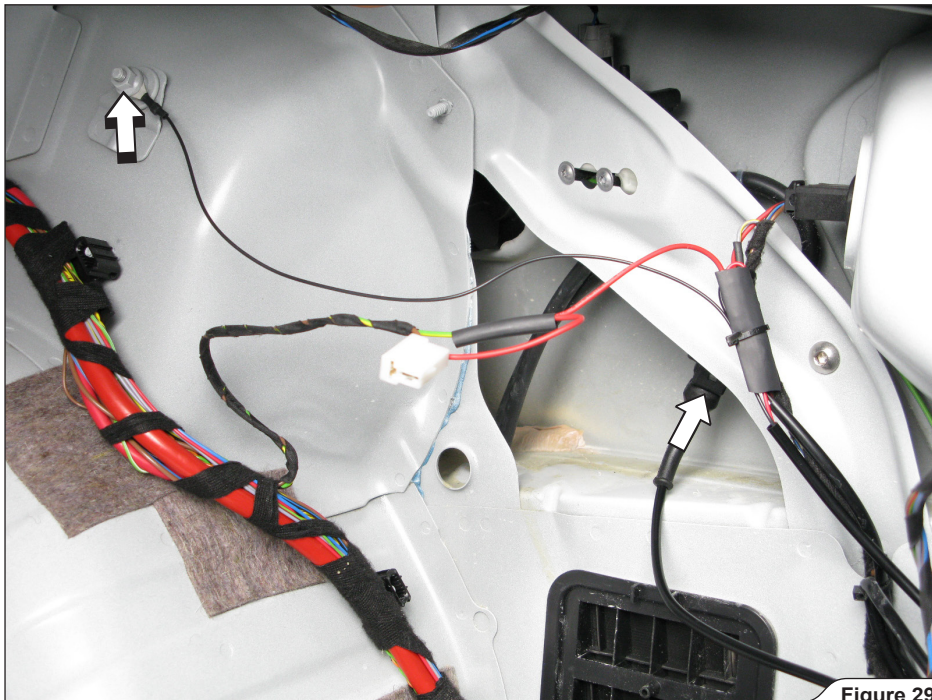


Figure 29

21. Connect the transmitter to the wiring harness and protect the connection using heat shrinkable insulation; secure the transmitter and wiring with tie wraps (Figure 30).

! **WARNING:** make sure not to damage the wiring harness, or transmitter during this procedure!

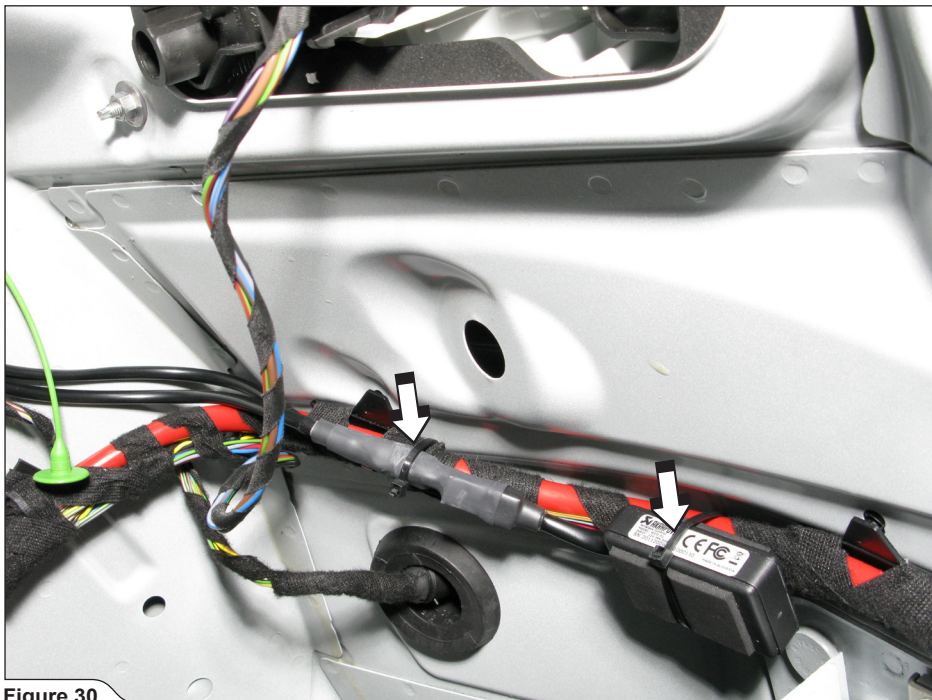


Figure 30

22. **For fuse box powered Wireless only:** push the glove box damper forward, unpin and remove glove box cover from the vehicle as shown (Figure 31, 32).

! **WARNING:** make sure, not to injure yourself or damage any part of the vehicle during this procedure!



Figure 31

! **WARNING:** make sure, not to injure yourself or damage any part of the vehicle during this procedure!



Figure 32

23. **For fuse box powered Wireless only:** remove the marked 20A fuse from number 8 fuse spot in the power distribution box (Figure 33, 34).

! **WARNING:** make sure, not to injure yourself or damage any part of the vehicle during this procedure!

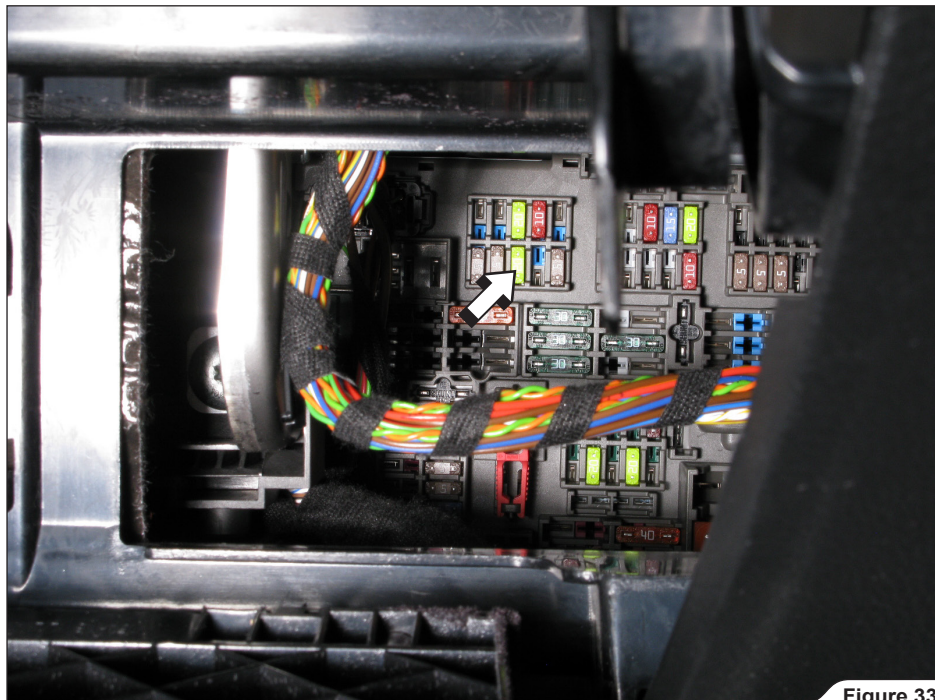


Figure 33

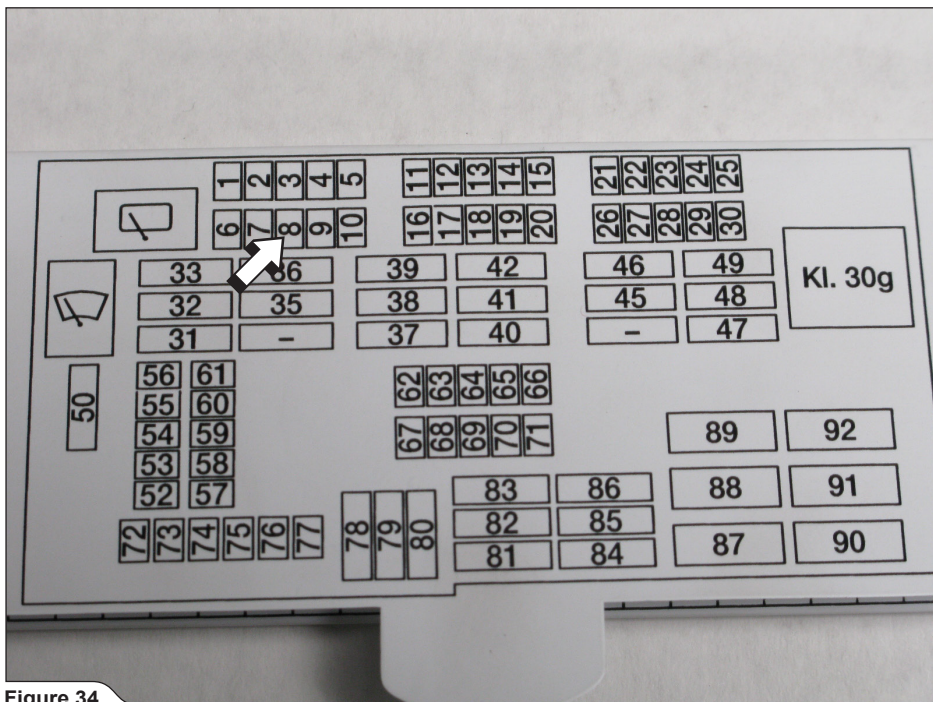


Figure 34

24. **For fuse box powered Wireless only:** carefully remove marked right entrance cover and right lateral trim panel off the vehicle (**Figure 35, 36**).

! **WARNING:** make sure, not to injure yourself or damage any part of the vehicle during this procedure!



Figure 35



Figure 36

25. **For fuse box powered Wireless only:** carefully remove seat upholstery and right side finisher (Figure 37, 38).

! **WARNING:** make sure, not to injure yourself or damage any part of the vehicle during this procedure!



Figure 37

! **WARNING:** make sure, not to injure yourself or damage any part of the vehicle during this procedure!



Figure 38

26. **For fuse box powered Wireless only:** transmitter wiring harness (**Figure 39**).

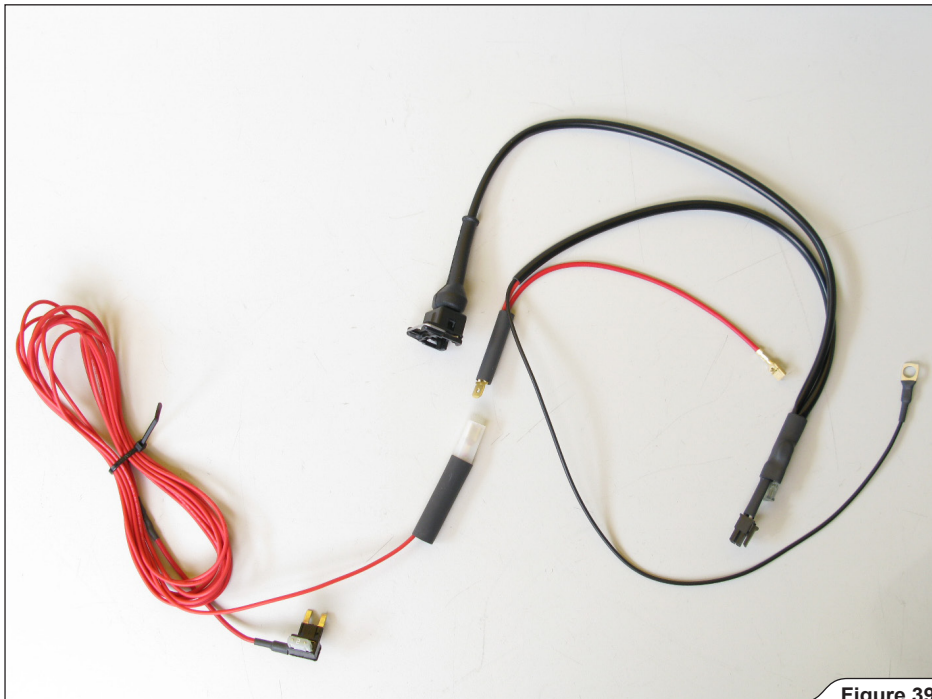


Figure 39

27. **For fuse box powered Wireless only:** insert the 20A fuse into the empty transmitter's fuse connector (Figure 40, 41).

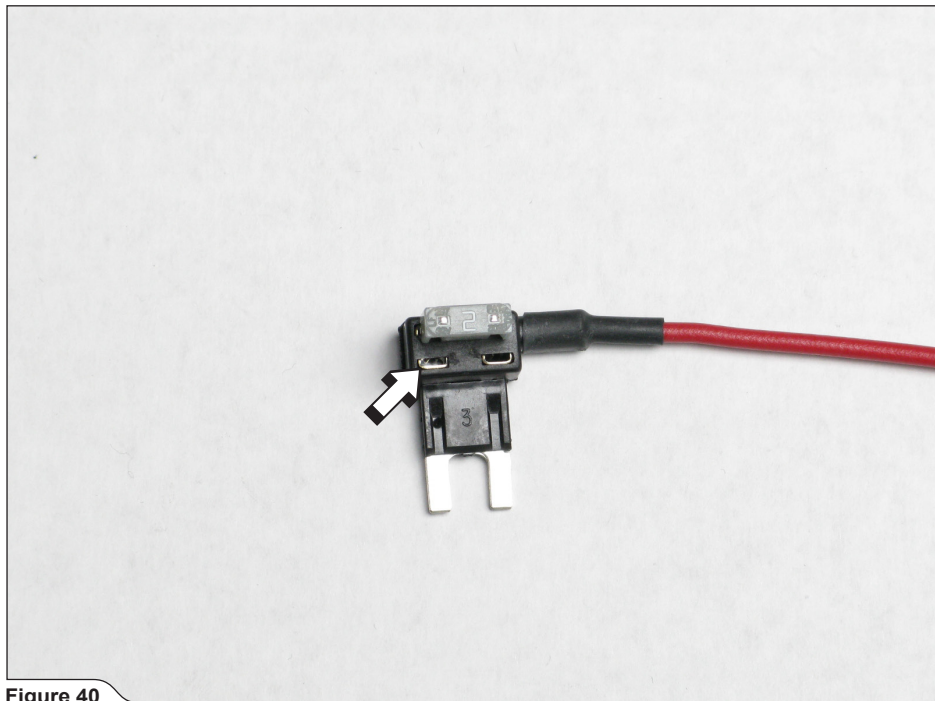


Figure 40

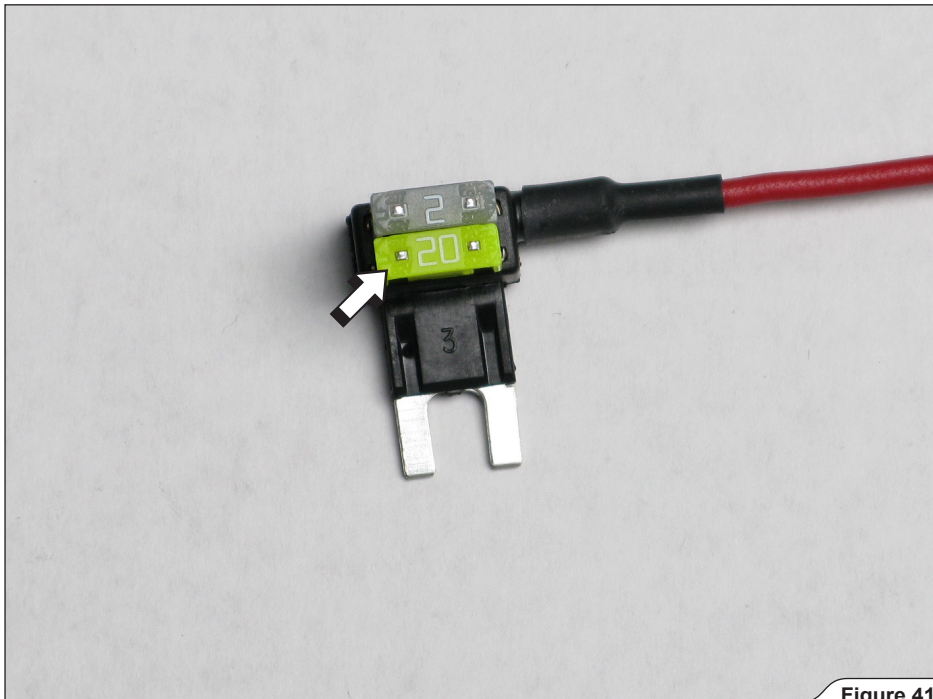


Figure 41

28. **For fuse box powered Wireless only:** insert the transmitter's fuse connector into the number 8 fuse spot in the power distribution box (**Figure 42**).

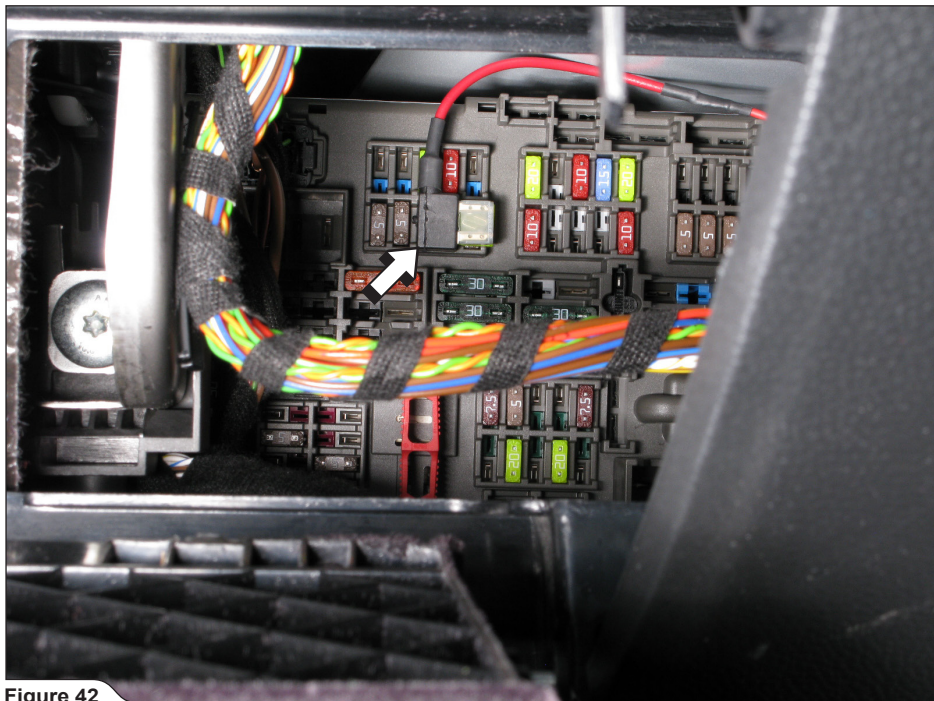


Figure 42

29. **For fuse box powered Wireless only:** direct and secure red transmitter wiring harness from the fuse box to the trunk (Figure 43, 44, 45, 46).

! **WARNING:** direct and secure (use additional plastic tie wraps) red wiring harness in such a way, that it doesn't touch any sharp parts of the vehicle!



Figure 43

- ! **WARNING:** direct and secure (use additional plastic tie wraps) red wiring harness in such a way, that it doesn't touch any sharp parts of the vehicle!



Figure 44

- ! **WARNING:** direct and secure (use additional plastic tie wraps) red wiring harness in such a way, that it doesn't touch any sharp parts of the vehicle!



Figure 45

! **WARNING:** direct and secure (use additional plastic tie wraps) red wiring harness in such a way, that it doesn't touch any sharp parts of the vehicle!



Figure 46

30. **For fuse box powered Wireless only:** cut the marked unused wire with connector as shown and connect the **red** wire from Akrapovič wireless kit with **red** transmitter's harness wire, and protect the connection with heat shrinkable insulation (**Figure 47, 48**).



Figure 47

! **WARNING:** make sure not to damage the wiring harness, or transmitter during this procedure!

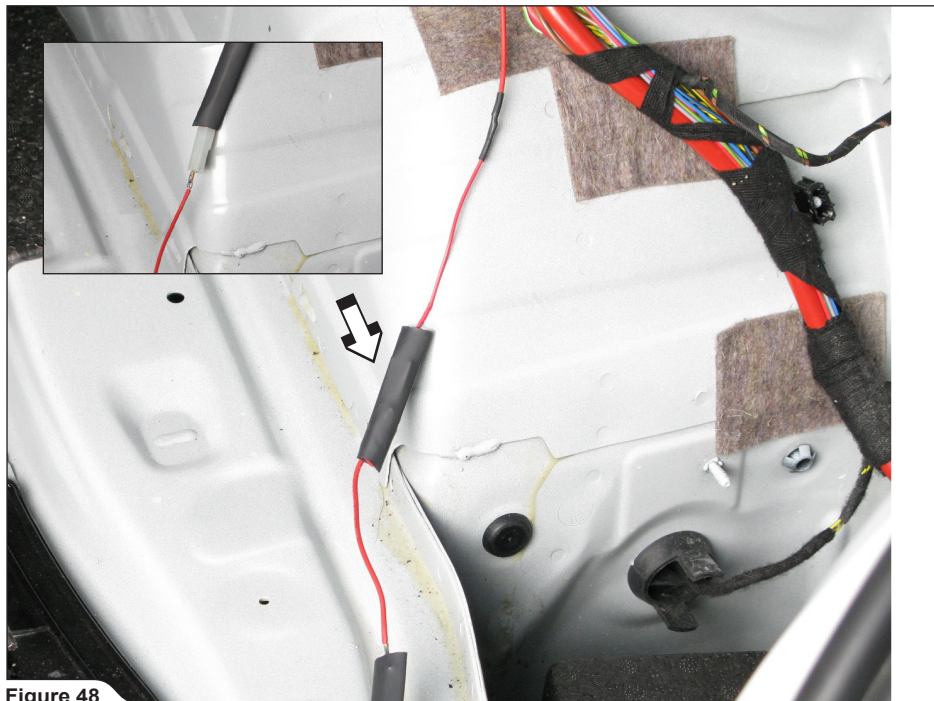


Figure 48

31. **For fuse box powered Wireless only:** tighten the ground connector (**black thin wire**) with marked original nut, install the connector to the electromagnetic valve. Secure the wiring harness, using tie wraps (**Figure 49**).

! WARNING: make sure not to damage the wiring harness, or transmitter during this procedure!

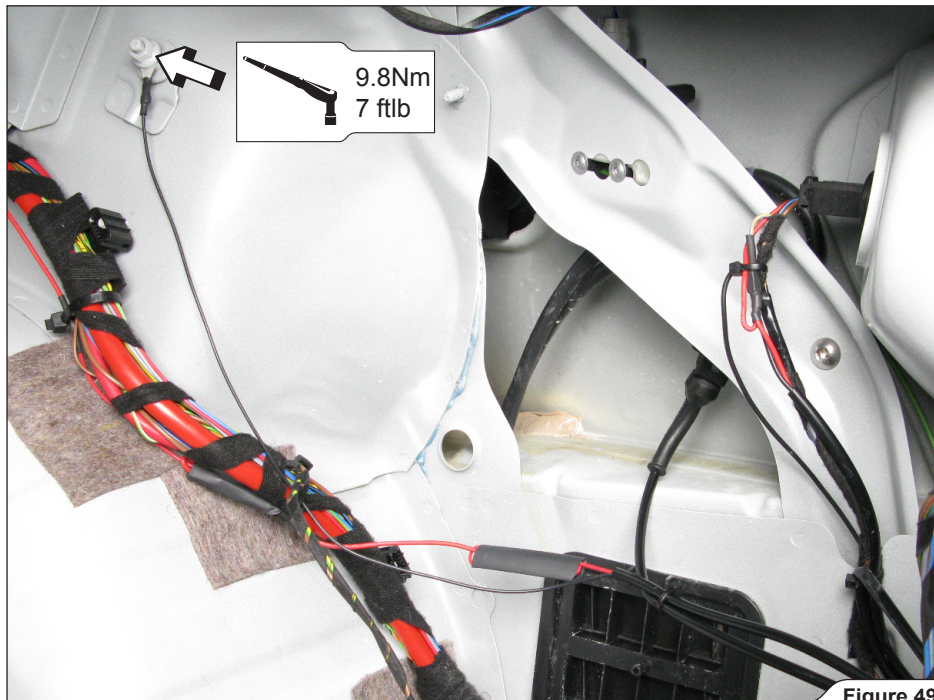


Figure 49

32. Connect the transmitter to the wiring harness and protect the connection using heat shrinkable insulation; secure the transmitter and wiring with tie wraps (Figure 50).

! **WARNING:** make sure not to damage the wiring harness, or transmitter during this procedure!

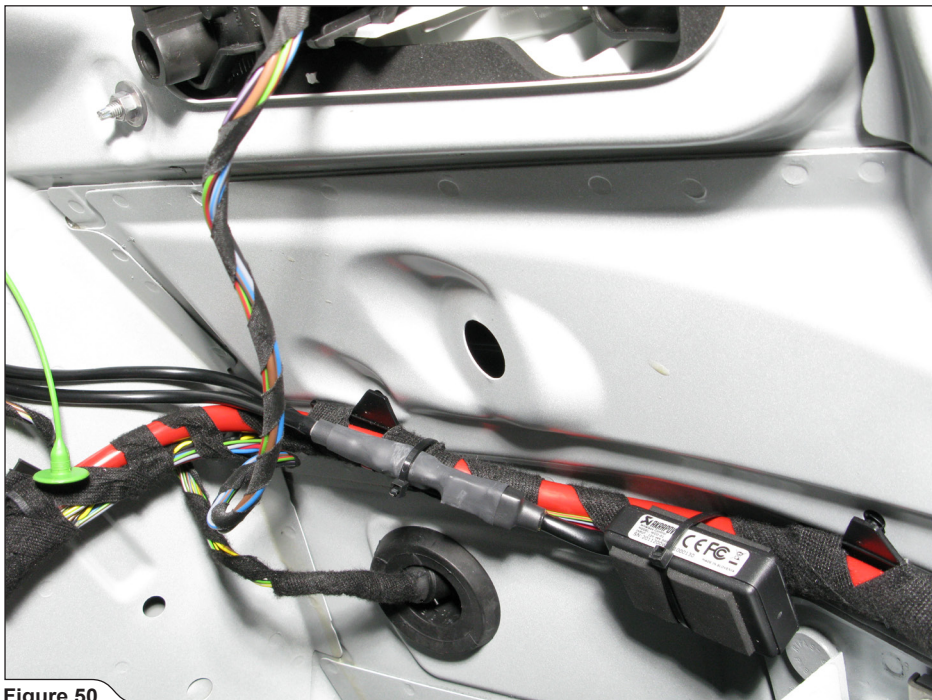


Figure 50

33. **Cigarette lighter socket powered keyfob option:** insert the keyfob into the cigarette lighter socket, start the engine and test the key fob operations (**Figure 51**).



Figure 51

34. Replace all dismounted original parts (heat shield, engine/transmission shields, underbody shields, chassis reinforcement, wheel arch panel, rear wheel, trunk trim panel, luggage compartment panel...) in the reverse order from the order in which they were removed. Check vehicle manufacturer manual for tightening torques.

! **WARNING: make sure not to injure yourself or damage any part of the vehicle during this procedure!**

35. Composition of remote and optional dashboard mounted keyfob components (**Figure 52**).



Figure 52

36. Optional reducible component for cigarette lighter socket powered keyfob (**Figure 53**).



Figure 53

37. Correctly assembled dashboard or additional bracket mounted key fob components (**Figure 54**).

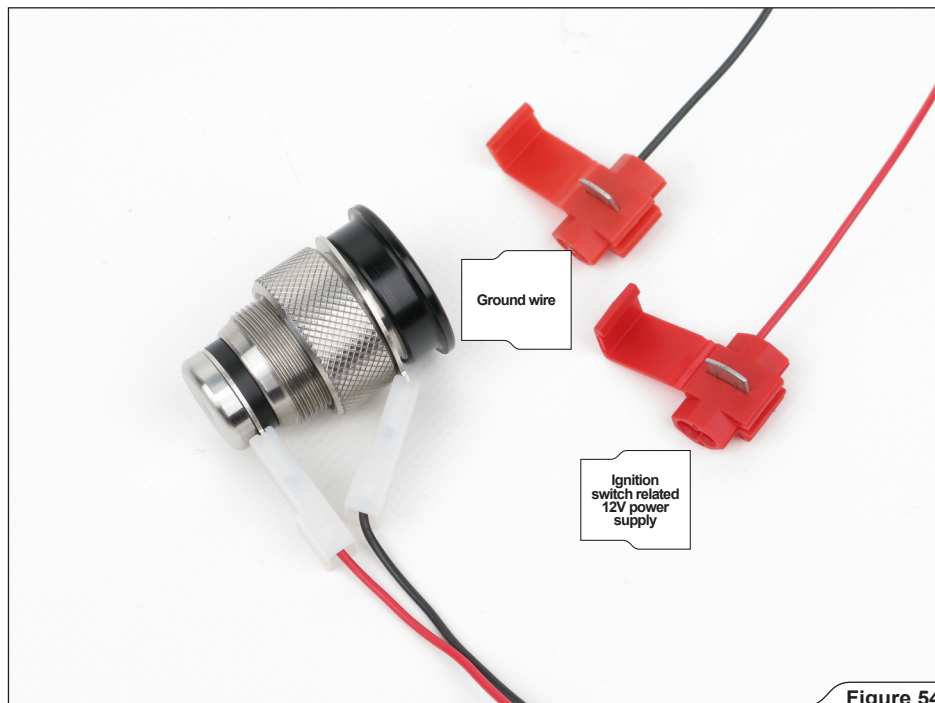


Figure 54

38. Changing of remote keyfob battery (Figure 55).

! **WARNING:** make sure, that you insert the new battery correctly! Check the polarity of the battery (Battery type: Lithium CR1632 3V)!



Figure 55

KEYFOB OPERATION:

1. **USE:** keyfob is used to operate and control the exhaust system flaps.
2. **RANGE OF OPERATION:** inside and few meters around the vehicle.
3. **POWER OPTIONS:**

a) Battery power:

- when operating, press the button for more then two seconds.
- when pressed, the illumination turns on, and when released, it turns off.
- in battery mode, only half of the circle around the scorpion symbol is illuminated.
- if in use, battery life is approx. 1 year and if not in use, approx 2 years (Battery type: Lithium CR1632 3V).

b) 12V power (cigarette lighter socket):

- when operating, press the button for more then half a second.
- when pressed, the illumination stays on, depending on mode (on/off).
- in 12V mode, the whole of the circle around the scorpion symbol is illuminated.

4. **KEYFOB MODES:**

a) Battery power:

- CLOSED VALVES:



- OPEN VALVES:



- LOSS OF COMMUNICATION:
1 period of 5 flashes of white illumination.

b) 12V power (cigarette lighter socket):

- CLOSED VALVES:



- OPEN VALVES:



- LOSS OF COMMUNICATION:
3 periods of 5 flashes of white illumination.

5. **SAFETY:**



SWITCH ON: do not switch the keyfob on when wireless device use is prohibited or when it may cause interference or danger.



ROAD SAFETY COMES FIRST: obey all local laws. Always keep your hands free to operate the vehicle while driving. Road safety should be your first consideration while driving.



INTERFERENCE: all wireless devices may be susceptible to interference, which could affect performance.



SWITCH OFF IN HOSPITALS: follow any restrictions. Near medical equipment, switch the keyfob device off.



SWITCH OFF IN AIRCRAFT: follow any restrictions. Wireless devices can cause interference in aircraft.



SWITCH OFF WHEN REFUELING: do not use the keyfob at a refueling point. Do not use near fuel or chemicals.



SWITCH OFF NEAR BLASTING: follow any restrictions. Do not use the device where blasting is in progress.



QUALIFIED SERVICE: only qualified personnel may install or repair this product. Please refer to the wireless kit serial number in case of ordering any spare parts.



WATER-RESISTANCE: your keyfob is not water-resistant. Keep it dry.

Final installation:

- ! **WARNING: check vehicle manufacturer manual for tightening torques (for dismantled stock parts)!**
- ! **WARNING: make sure all the nuts and bolts are sufficiently tightened. In case the exhaust system touches the cowling or other parts, repeat the adjustment of the exhaust system or contact your authorized dealer.**

MAINTENANCE OF THE AKRAPOVIČ EXHAUST SYSTEM:

1. Clean the titanium exhaust components with a multi-purpose spray lubricant (WD-40 or equivalent), carbon fiber exhaust components with soft and dry cloth and stainless steel components with soft cloth sprayed with contact cleaner, then wipe with soft and dry cloth. A change in the color of the exhaust system is normal due to high temperatures.
2. Periodically make sure all the bolts and springs are sufficiently tight.

- ! **WARNING: clean all exhaust components before the first start of the engine or the stains will burn onto the surfaces!**
- ! **IT IS NORMAL FOR WHITE SMOKE TO COME OUT OF THE MUFFLER AT FIRST OPERATION.**
- ! **DO NOT STAND BEHIND THE MUFFLER AT FIRST OPERATION.**
- ! **DO NOT USE AUTOMOTIVE WHEEL CLEANERS OR ANY CLEANING PRODUCTS WHICH CONTAIN ACIDIC ADDITIVES TO CLEAN THE AKRAPOVIČ EXHAUST SYSTEMS.**

WARNING

Please note that certain aftermarket exhaust systems may not comply with applicable California laws and regulations, and may therefore be prohibited for use on California highways or roads, or on roads or vehicles otherwise subject to emissions control requirements.

Akrapovič exhaust systems for automobiles and motorcycles mounted downstream of the catalytic converter (also known as “cat-back systems”) are considered “replacement parts” in California by the California Air Resources Board (CARB), and do not require an exemption or executive order from CARB to be sold in California. However, California prohibits the use of any aftermarket exhaust system that modifies, removes or replaces original equipment catalysts, unless CARB has issued an Executive Order as to such part or system.

Further, Akrapovič parts or exhaust systems used or intended for use on “racing vehicles” (i.e. a competition vehicle used exclusively for competition on closed-course circuits) do not require an exemption or Executive Order from CARB to be sold in California. However, such parts are prohibited from use on California public highways or roads, even if occasionally used “off-road.”

! CAUTION: secure all vacuum tubing connections, using clamps from Akrapovič installation kit! Install the clamps with corresponding tube clamp pliers.



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