REVCAMUK
Reversing cameras UK Ltd

Instructions for using fuse taps AKA piggyback fuse holders

Safety and Installation Precautions

When working with vehicle electrics, we recommend disconnecting the negative terminal of your vehicles battery. Be aware this may reset your clocks/computer/ radio code.

Check your vehicles manual for any warnings, fuse diagram layouts etc.

Ensure you read and understand about the need for correct orientation of the fuse tap. See the instructions for finding the "HOT SIDE" of your fuse tap. Inserting the wrong way around will mean your fuses are not being used, which could cause a fire if there was an electrical issue in the future.

If you do not feel confident that you can install this safely, then please contact a qualified auto electrician to install this for you.

What are fuse taps?

Fuse taps, also known as “piggyback fuse holders”, have become a popular way of hardwiring in new accessories. They are often used to install low current devices suchas dash cams, and reversing camera kits. We would not recommend them if trying to install something that draws a large current e.g. >5 amps.

The idea is simple. You “piggyback” off an existing circuit in one of the vehicles fuse boxes. After picking a circuit to tap off (keep reading this manual for advice on picking one), the original fuse is then inserted in to the fuse slot closest to the two metal contacts. The new fuse (either 3 amp or 5 amp provided) is inserted in to the slot above this. You will see a red wire is attached to this new fuse, which will be used as the positive supply for the new accessory eg reversing camera system.

We stock two types of fuse taps. A basic one, which can be crimped on to any positive power wire, or one with a 2.1mm/5.5mm DC power plug, and an earth wire added. The latter type is designed to connect to the 2.1mm socket that is on the majority of our monitors.

Important notice about the correct orientation of a fuse tap

Installing the fuse tap the wrong way round can be a safety hazard! In the fusebox there are two points, that the bottom contacts of the fuse plug in to:

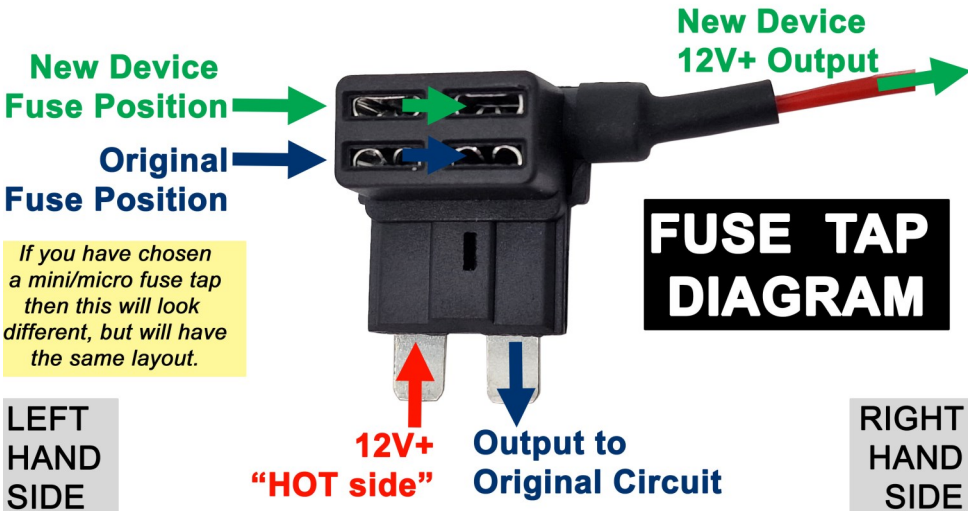
1. The hot side (12v+)
2. The device side - no voltage (this leads to the original device/circuit being protected)

On the new fuse tap, the side with the red wire connected should be installed in to the device side slot (the side with no voltage present). If you were to accidentally install this side on the “hot” side, the new device would receive power without travelling through the fuse (a big safety risk!).

Please see the diagram on page 3 for a visual explanation of how the fuse taps work.

Step One - Identifying a fuse position to tap off

For a reversing camera kit, you will be looking for a fuse that is connected to a circuit that has power when the ignition is ON, and no power when the ignition is OFF.



This is often referred to as a "switched" power supply.

Sometimes you will be lucky and find an empty fuse slot that is connected to a switched power supply. If you do, then we recommend using this.

Other times you will either be consulting the vehicle handbook, or the sticker on the fuse box cover, to find a circuit that looks likely to be suitable (the higher the amp rating of the circuit, the better). **Avoid safety critical systems such as airbags/ ABS/ECU/Central Locking etc.** and look for systems you feel would come on/off with ignition. You can confirm your suspicion by touching your multimeter / voltage test light probe to the metal contact at the top of the fuse, whilst the black probe is earthed (eg to bare metal/chassis). If the voltage is present when the ignition is ON, and not present when the ignition is OFF, then you have a switched 12V power feed.

Our favourite circuit to tap off is the 12V lighter socket, BUT, only if this goes ON/ OFF with ignition. Roughly half of all vehicles goes off when ignition is off, and the other half stay on all the time. Using an always on power supply would mean your system is running 24/7, 365 days a year, even if the monitor is placed in to standby mode. Ensure that you have ordered the correct sized fuse tap for the selected circuit.

We usually recommend not using fuse boxes located in the engine bay due to the difficulty in getting the wire out from this box.

Step Two - Installing the fuse tap

Now you have identified the fuse position that you intend to use for your fuse tap, the next step is installing it. As we discussed earlier, it is important to ensure the left hand side of the fuse tap (see diagram), is fixed to the "hot side" ie the side of the fuseholder that has the 12V supply present.

1. Remove the original fuse from the fusebox (don't forget its location)
2. Place the original fuse in to the new fuse tap / piggyback fuse holder in the bottom slot closest to the two metal "feet"
3. Place the new fuse (we usually ship these inserted) in to the upper slot - next to the red wire. Reversing camera systems usually require 3 or 5 amp fuses for protection. Use a contact lubricant if the fuse is difficult to insert.
4. Insert your new fuse tap in to the original fuse location - remembering to insert the hot side of the fuse tap to the hot side of the fusebox slot (see page 3 diagram).
5. If you are using the basic version, then crimp or solder this to the power wire of your new system.
6. If it is the type with a 2.1mm DC plug on, plug this in to the monitor DC socket (see image to the right). Then attach the black wire to a good earth point such as the bare metal on the chassis via a clean metal bolt/stud. Avoid sharing earth wires especially from large current accessories such as a stereo.

7. Test your new device out, toggling the ignition on and off to test that the fuse is indeed switched.
8. As always, boil the kettle, have a cup of tea, and admire your new setup.

As always, we really appreciate your custom. If you take any photos of your new equipment, we would love to see them. Our email address is photos@revcam.uk or Whatsapp them to +441843825425

We wish you many years of safe, and happy journeys.