IE MK4 Catch Can Kit Install: IEBACA4

This guide covers the installation of the Integrated Engineering MK4 Oil Catch Can Kit. This kit needs to be installed by a professional or by an experienced technician. Integrated Engineering is not responsible for any damage caused by incorrect installation. Serious engine damage can occur from incorrect installation.

Kit contents:

- (1) Catch Can w/Filter
- (2) -10 Catch Can Hoses
- (1) Stainless Mounting Tab
- (1) Billet Red Breather Adapter
- (1) -10 Red AN Valve Cover Bung
- (1) 30mm M6 Bolt
- (1) Nylon Locknut
- (1) ¾" Aluminum Spacer
- (1) ¾" Black Aluminum Plug
- (1) Vacuum Cap
- (1) Crimp Clamp
- (1) Worm Gear Clamp

Tools Needed:

- 5mm allen wrench
- 4mm allen wrench
- 10mm combination wrench
- Small flat blade screw driver
- Wire cutters
- Oetiker clamp pliers
- Adjustable AN fitting wrench
- Teflon tape
- Rubber Mallet
- Heat gun
- Pliers

Before beginning the installation, unpack and inventory all components on a flat surface and verify that all pieces necessary are there before proceeding.

Park your vehicle on a level surface, completely cool, apply the parking brake, and open the hood.

For the ease of installation we have removed our intake manifold from the engine. You are more than welcome to do the same, but installation is possible with the manifold still installed.

Start by removing the MAF from the turbo inlet hose. After the MAF has been removed, unclip the MAF wiring retainer located on the relay box.

Remove the top cover of the relay box by pressing on the tabs located on both sides of the top half of the box. Remove the whole relay box by pulling forward on the tap located on the firewall and lifting up on the box.

Remove the upper half of the relay box and both relays #100 and #428.

Release the connector ends that are housed in the top half of the relay box by pressing on the securing tab and pressing down on the connector end at the same time.

Pull the wiring harness and grommet out of the lower half of the relay box and discard the box. The box will no longer be used any more.

Remove the weather strip that runs along the rain tray. Remove the main wiring harness cover by releasing the mounting tabs located at the top of the cover. Use a small screwdriver and gently pry the tabs apart on both sides of the cover as shown. Lift the rain tray up and gently pull the cover out from underneath the rain tray. Remove the cover from the vehicle.

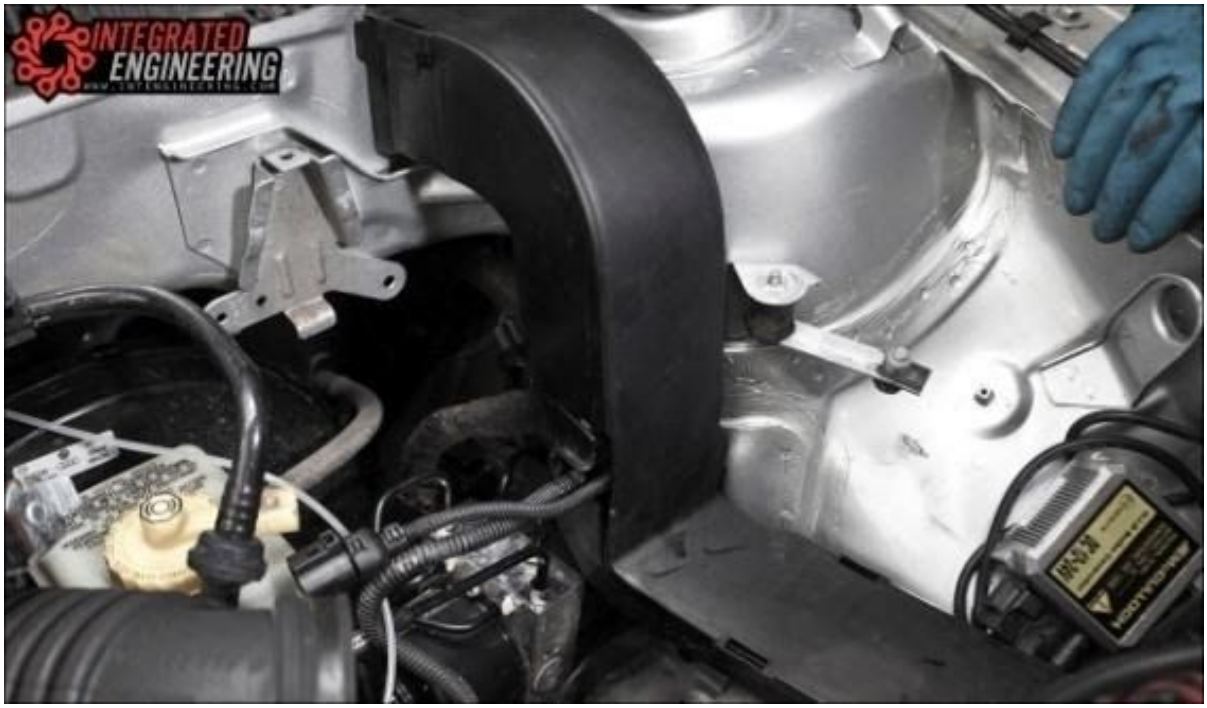
Install the corresponding relays back into their correct colored housings.

In this step, great attention and detail must be taken as to not damage any of the wiring. Carefully with a razor knife cut away the electrical tape that attaches the grommet that was removed from the relay box.

After the tape has been removed, carefully cut the grommet off of the harness and remove.

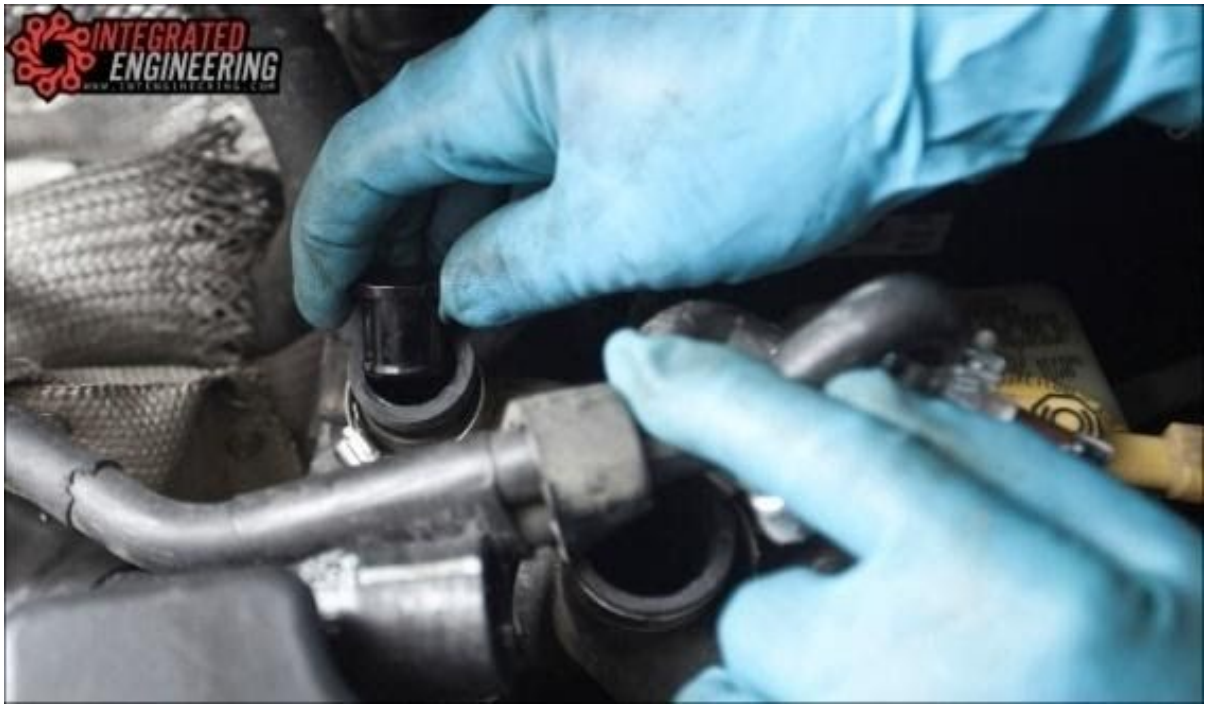
Install the two relays into the main wiring harness channel as shown.

Reinstall the cover. The relays make installing the cover tight fit, but with a little finesse and patience it is possible.



Remove the diverter valve from the inlet boot to gain access to the pressure regulating valve. Cut both of the factory crimp clamps from the pressure regulating valve and remove the valve from the inlet boot.

Install the supplied hose clamp and then the plug which eliminates the need for this valve. Tighten the clamp so that the plug is firmly secured in the turbo inlet boot.



Remove the rubber PCV hose that connects to the valve cover and the hard plastic PCV hose.

There are three ports on the suction jet pump located under the intake manifold. There are two straight barbed ends on each end of the pump and one that branches off at a 45 degree angle. Cut the clamp that secures the hose on the suction jet pump that runs in the 45 degree direction).

Locate the grey crank position sensor connector end, mounted on the oil breather housing and remove from the bracket by lifting up.

Remove the green U clip that secures the breather hose coming from the oil filter housing. *Make sure you do not lose this clip as you will need it for reinstallation.*

Remove all of the breather hoses as shown in the illustration below.

Carefully remove the o-ring located at the top of the breather housing. *Make sure you do not lose this o-ring as you will need it for reinstallation.*

Clean the breather opening with a clean rag.

Using the supplied red breather adapter and the supplied hose with the 90 degree -10 AN fitting, hold the adapter in your hand so that the flats on the adapter are grasped between your index finger and thumb. Position the fitting at a 90 degree position and tighten.

Install the o-ring onto the adapter as shown.

Install the adapter back into the breather housing with the catch can hose pointed to the driver side.

Re-Install the green U clip around the breather adapter and place the crank position sensor back into the connector holder.

Place the supplied vacuum cap on the suction jet pump and use the supplied crimp clamp to secure the cap.

Assemble the supplied catch can bracket, bolt, and spacer as shown.

Install the bracket in the location of the relay box as seen below. You will need a 5mm allen wrench and 10mm wrench.

Remove both of the -10 AN to ½” pipe fittings from the hose ends. Apply a light layer of Teflon tape to the hose ends and install onto the catch can until the fittings are snug. Point the fittings at a downward angle.

Install the catch can onto the bracket that is mounted to the firewall using the three supplied bolts with a 4mm allen wrench.

Tighten the straight AN fitting on the hose coming from the block breather to the catch can.

Remove the bung that is connected to the valve cover. Using a pair of pliers rotate the bung in a clockwise and counter clockwise fashion, while pulling the bung to the driver fender.

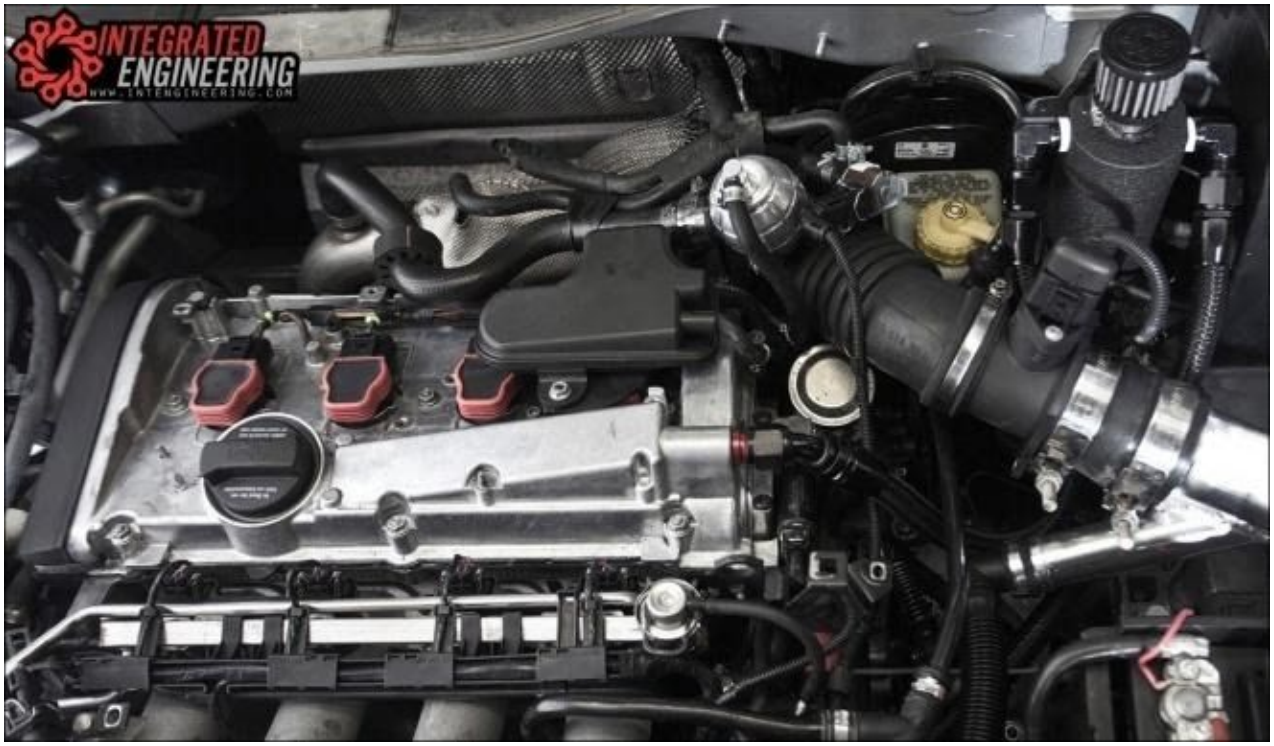
Heat the area of the valve cover where the new bung is going to be installed with a heat gun. Place the fitting in the hole located in the valve cover and gently tap in the new bung with a rubber mallet.

Install the last remaining line with the 45 degree fitting going to the valve cover, and tighten so that the fitting is in the downward position.

Route the breather hose under the turbo inlet hose and connect the straight AN fitting to the catch can. At this time tighten the fittings to the catch can.

Install the supplied catch can filter.

Reinstall the MAF, diverter valve, and intake. Make sure that the MAF is installed in the correct position so that drivability problems are not an issue. If everything is installed correctly the engine compartment should look as follows. Make sure that the catch can hoses do not impede the travel of the shift tower or linkages. If this is the case make minor adjustments to the hoses.



Thank you for purchasing another Integrated Engineering product. If you have any questions or concerns about this product please do not hesitate to contact us.

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