

BMW Swirl Flaps Removal Blanks Fitting Guide Tutorial

by **x8rftd** on May 19, 2014

Intro: BMW Swirl Flaps Removal Blanks Fitting Guide Tutorial

Swirl Flaps within your engine deteriorate over time and can end the life of your engine! Take action now and install our blanks to prevent potential engine damage.

Within the manifold of your BMW you will find these little blighters referred to as Swirl Flaps. Designed to produce a swirl of air to aid combustion when the engine is under light load; the flaps are held in place by two screws, unfortunately as the swirls move over time these screws can loosen or the spindles; making their way in to your engine.

This in-turn can do a number of things; jam open the valve port causing the piston to collide with the valve, enter the cylinder itself ending the life of the engine and even after leaving the engine further damage can be caused to the exhaust system! Game over for your vehicle!

Install our Swirl Flap Blanks and rest in the knowledge that your engine is safe!

Remove the risk of your car being written off by those swirl flaps and install our blanking plates.

Our blanking plates simply directly swap for your existing swirl flaps, simply push in and screw in place. And the best bit.. you will notice no difference in performance from you vehicle, you may even notice an improvement if your swirl flaps have begun deteriorating.

Our Swirl Flap blanks are available in 22mm and 33mm size, check out our shop for different size or quantity. There are two sizes of swirl flaps fitted to BMW vehicles 22mm and 33mm; as a general guide pre 2005 models are normally fitted with 22mm size, 2005-2006 either size could be fitted to your vehicle, 2006+ 33mm likely to be fitted. There can be exceptions to this, the only way to be 100% sure of the size fitted to your vehicle is to remove the intake manifold and measure. Alternatively you are welcome to purchase both sizes and return the incorrect size for a refund.

1 Series:

E87: 120d

3 Series:

E46: 320d 2001-2005, 330d, 330Cd, 330xd

E90/E91/E92: 320d, 325d, 330d, 330xd, 335d

5 Series:

E39: 525d (Autos 2000-2003), 530d

E60/E61: 520d, 525d, 525xd, 530d, 530xd, 535d

7 Series:

E38: 730d

E65: 730d

X3

E83: 2.0d, 3.0d, 3.0sd

X5:

E53: 3.0d

E70: 3.0sd

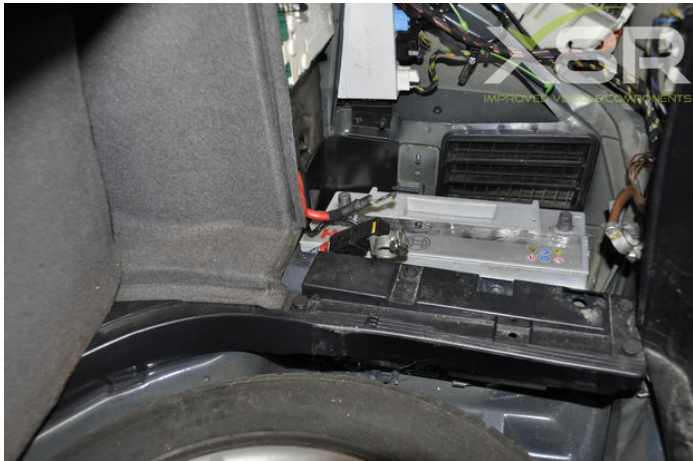
M47N

M47TU M47TUD20 M47TU2D20 M57 M57D25 M57N M57TU M57TUD25 M57D30 M57D29 M57TUD30 M57TU2D30 M57TU2D30-UL M57TU2D30-TO M57TU2D30-OL



Step 1: Disconnect battery

Disconnect battery and cover terminals to prevent accidental contact.



Step 2: Remove engine cover plates

- Remove all acoustic cover plates and engine covers.
- Remove rubber covers on intake manifold (these need to be removed to access all manifold bolts)



Step 3: Remove particle filters and trim

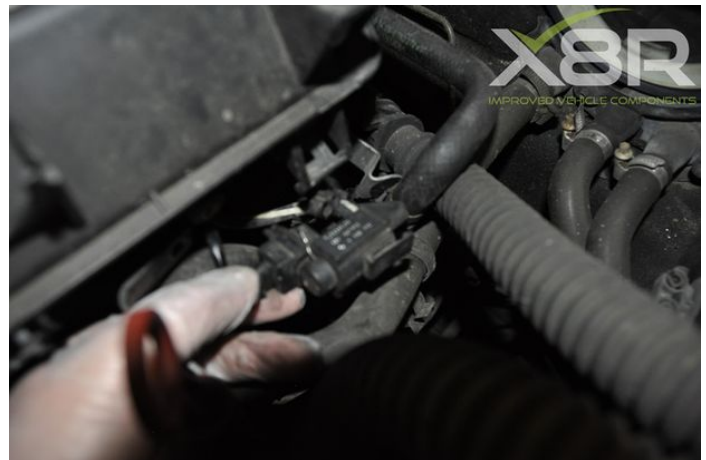
- Remove the particle filter on both sides, open filter cover and remove filters.
- Remove the base plastics of particle filters
- Remove hoses from particle filters to cabin
- Remove wiper mechanism cover plate, twist loose plastic grommets and remove panel.





Step 4: Remove manifold ancillaries

- Before removing the manifold itself, some accessories must be disconnected:
- Remove the bolt holding the dip stick and set this aside from manifold.
- Remove plastic cover, unbolt and set aside the jump start point moving out of path of manifold removal.
- Disconnect the electrical connector on the vacuum pump.
- At the rear of the intake manifold disconnect all electrical plugs (most vehicles have 3 connectors here)





Step 5: Remove EGR Valve

- Unscrew jubilee clip and remove exhaust gas pipe
- Pull off vacuum pipe
- Unscrew jubilee clip and remove intercooler pipe
- Remove 4 EGR mounting screws and remove EGR valve.

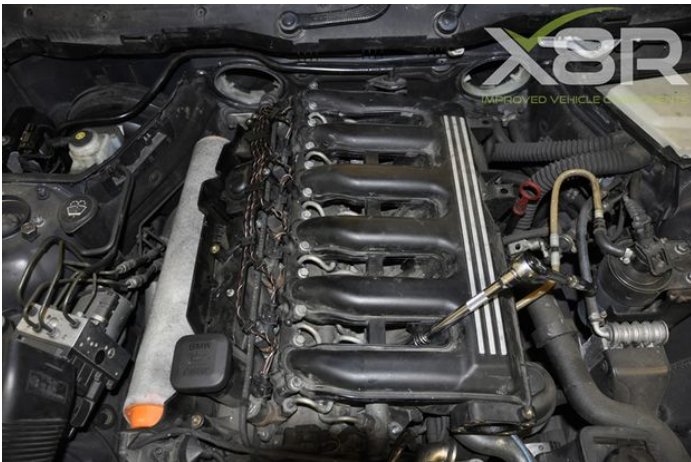
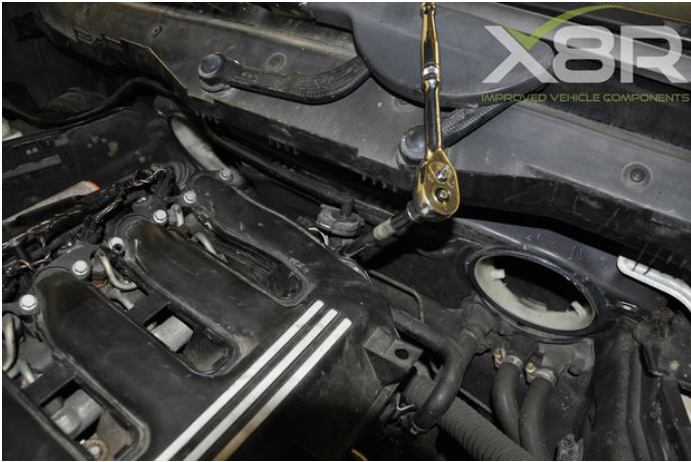


Step 6: Remove manifold

- Remove the intake manifold by opening 12 bolts and 7 nuts

- Before lifting the manifold off it is worth while locating a sheet of cardboard that you can slide under the manifold as you lift off.

- Slide this in as you lift off the manifold carefully, the manifold has a number of loose gaskets, these can fall in to the engine if care is not taken, once manifold is removed check for all gaskets, if any are missing do not proceed until all are found.



Step 7: Cover inlets

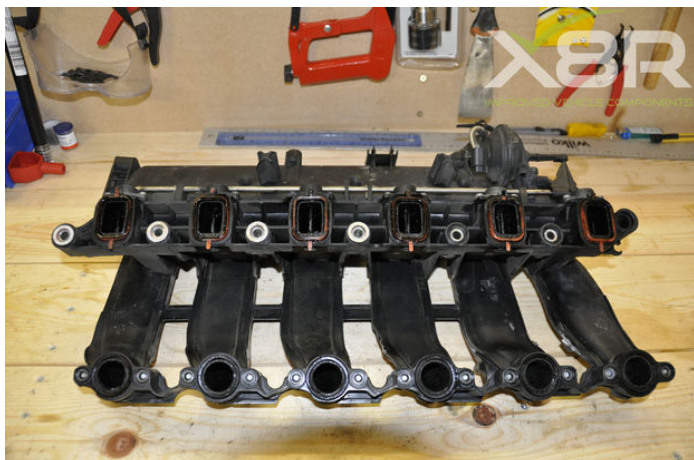
- Cover the air inlets with a towel or similar



Step 8: Removing the swirl flaps

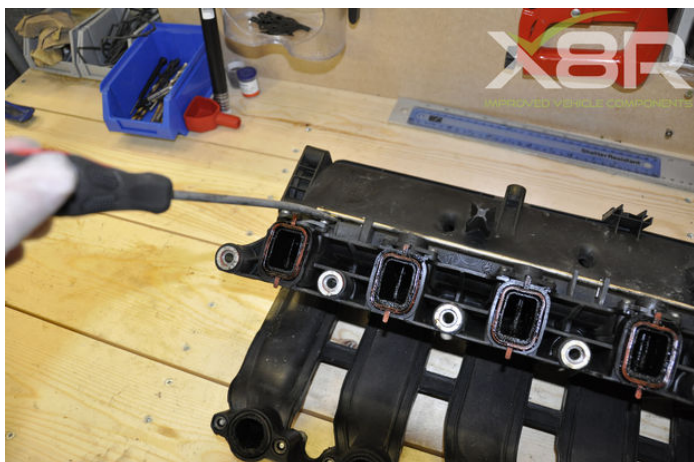
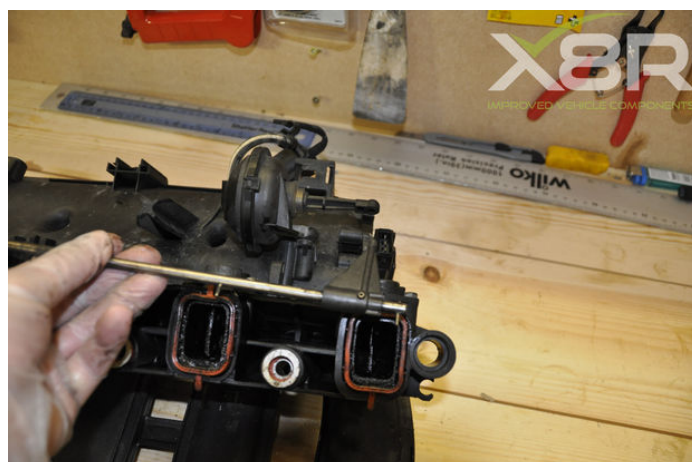
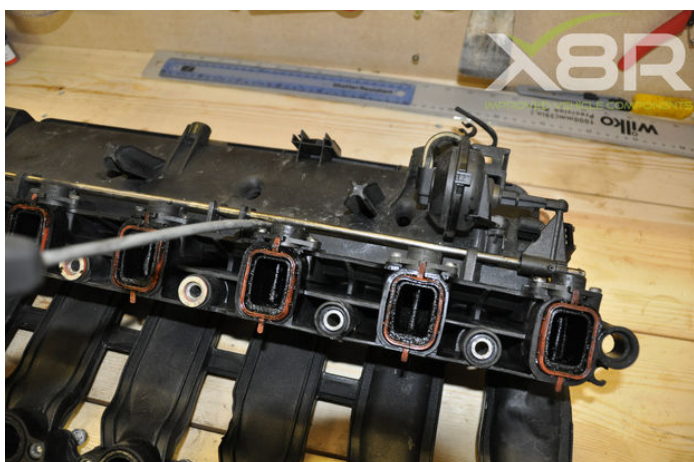
- Remove the red rectangle shaped rubber seals and clean them

- Unscrew two torx bolts holding the air pump and remove, this should be refitted after swirl blanks are installed. Remember to reconnect the electrical connector from this when refitting to the vehicle, failure to do so will put an error light on the dash.



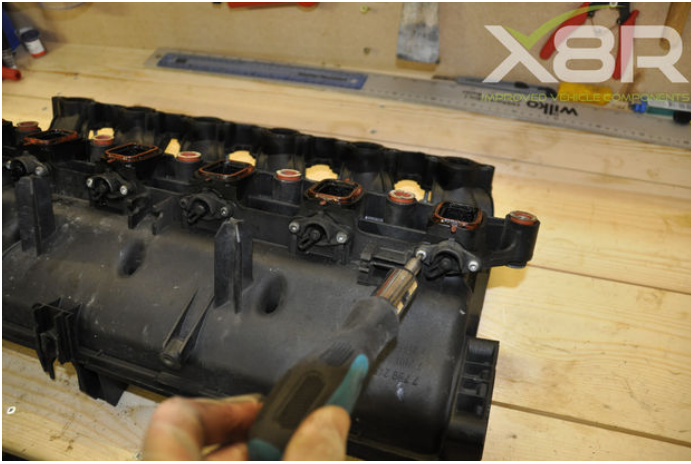
Step 9: Remove operating rod

- Remove the rod by twisting it out of its holdings. This rod does not need to be refitted as it no longer has swirl flaps to operate.



Step 10: Remove swirl flaps

- Remove the swirl flaps by unscrewing the two torx bolts holding each one and lever out of position.



Step 11: Install our blanks

Once removed simply replace with our swirl flap blanks, screw these tightly in place using the torx screws.

Re-attach the manifold ensuring at all times that the upmost care is taken not to let any objects fall in to the engines air intake during reassembly. Reattach all parts following these instructions in reverse and rest in the knowledge that those small swirl flap blanks are keeping your engine safe.

Installation is carried out at installers risk, if unsure please contact us or a professional, X8R Ltd cannot be held responsible for any adverse result of installing this product or any injuries caused by install, if in doubt ask a professional. All images and texts are copyright X8R Ltd 2013.

