

# Bmw DISA Valve Unit Rattle Repair Fix Kit Rattling Repair Instruction Guide

by **x8rltd** on July 31, 2014

## **Intro: Bmw DISA Valve Unit Rattle Repair Fix Kit Rattling Repair Instruction Guide**

Rattling noise coming from the DISA valve? SES light lit and getting lean mixture faults. Rough running at idle. DTC codes and a loss in low end torque. Rattling, buzzing or clicking noise from the engine?

Fault codes: lean condition(P1083, P1085), front oxygen sensor lean (P1090, P1092) oxygen sensor slow response (P1087, P1089) and cylinder misfire (P0311-P0316) fuel control mixture lean (bank 2 sensor 1) and p0174 system too lean, showing?

The original plastic Disa valve components wear and often snap causing the symptoms noted above. The pin retaining the flap can also pop out entering the engine!

The likely cause of the faults noted above and most common cause is the weak plastic components within the DISA valve unit vibrating together and wearing causing the flap to operate at the wrong times and eventually leading to destruction of the flap plate. The pieces of this flap can even enter the engine often causing severe engine damage; likewise the metal pin that holds the flap plate in position can vibrate loose and enter the engine.

Fit our improved design billet aluminium flap kit, designed to never fail, save the cost of a replacement DISA valve which will only fail again.

Using our kit the weak components of the DISA valve the flap and crank lever are replaced with our many times stronger billet aluminium parts, retained by our precision machined screw which tightly retains the two components together; eliminating wear and the need for the retaining pin which can enter the engine. Our part is completely redesigned to never fail- OEM clearances are reduced minimising vibrations in the part preventing any future failure.

Our kit also includes a high temperature Viton 75 O-ring to make a good seal between the DISA unit and the manifold eliminating any air leaks.

BMW M54 3.0

BMW Part 11617544805 or 11617502275

Number on DISA Housing:

7502275 or 7544805

E36 1999-2002 Z3 3.0i Coupé

E36 1999-2002 Z3 3.0i Roadster

E39 2000-2003 530i Sedan

E39 2000-2003 530i Touring

E46 1999-2006 330Ci Convertible

E46 1999-2006 330Ci Coupé

E46 1999-2005 330i Sedan

E46 1999-2005 330i Touring

E46 1999-2004 330xi Sedan

E46 1999-2005 330xi Touring

E53 1999-2006 X5 3.0i SUV

E60 2002-2005 530i Sedan

E65 2002-2005 730i Sedan

E66 2002-2004 730Li Sedan

E83 2003-2006 X3 3.0i SUV

E85 2002-2005 Z4 3.0i Roadster

BMW M54 2.2 & 2.5

BMW Part 11617544806 or 11617502269

Number on DISA Housing:

7544806 or 7502269

E36 2000-2002 Z3 2.5i Roadster

E39 2000-2003 525i Touring

E39 2000-2003 525i Sedan

E46 2000-2004 320i Sedan

E46 2000-2006 325Ci Coupe+M56

E46 2000-2006 325Ci Convertible

E46 2000-2005 325i Touring  
E46 2000-2005 325i Sedan  
E46 1999-2004 325xi Sedan  
E46 1999-2005 325xi Touring  
E60 2002-2004 525i Sedan  
E83 2003-2006 X3 2.5i SUV  
E85 2002-2005 Z4 2.5i Roadster



### Step 1: Remove from engine

Please note engine is on bench for demonstration purposes only, the DISA unit can easily be removed from the engine in situ in the vehicle.

Remove 2x screws and 1x electrical connector and remove DISA unit.





**Step 2: Remove metal pin.**

Lever up pin with small flat head screw driver then remove with pliers.



**Step 3: Remove bell crank lever.**

Lift off cover on base of DISA unit.

Lift off operating arm.

Using pliers pull out the OEM bell crank lever.



#### Step 4: Replace flap

Lift out old plastic flap.

Apply grease as illustrated to the new flap.

Insert new flap to DISA frame.



#### Step 5: Insert new bell crank lever

Grease bell crank lever as shown.

Insert in to metal flap from below as shown.



### Step 6: Attach pivot screw

Ensure locking washer is fitted on pivot screw just below head.

Add threadlock to the thread on the screw and grease to the end of the screw as illustrated.

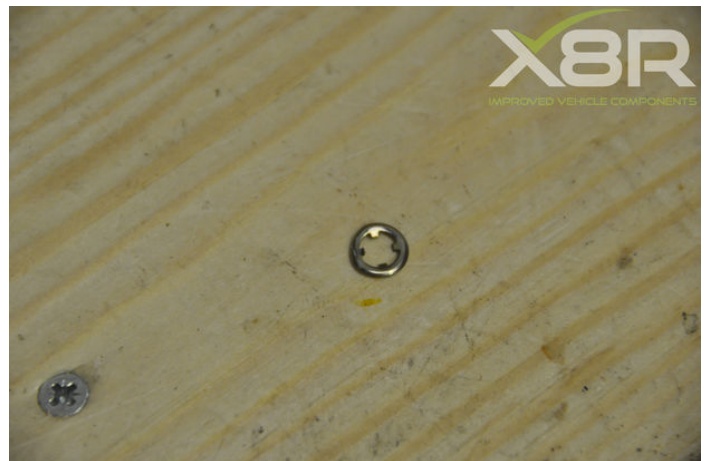
Insert screw through bell crank lever and tighten up.



### Step 7: Reattach operating arm.

Attach operating arm to bell crank lever and fit locking washer. Push locking washer down with pliers to form tight fit.

Reattach cover and test operation of flap with hand, push flap so fully closed, once released the flap should pop back open. If this doesn't happen recheck install.





### Step 8: Replace O-ring

Remove OEM O-ring and fit our Viton O-ring.

The Disa unit can now be refitted to the vehicle.

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 2014.



