

Thank you for purchasing our Drain Plate, Deep Sump Full Seal Kit or Viton Drain Plate Seals. The Deep Sump Full Seal V1 Kit works with most standard sized deep sumps, and the Case Drain Plate Kit fits both deep sumps and T1 to T3 case sumps. Viton Drain Plate Seals fit T1 to T3 case sumps and most deeps sumps.

#### Deep Sump Full Seal Kit Includes:

Drain Plate 2x Viton Seals 6x Stainless Sealing Bolts RWAP-02 Magnetic GoldPlug

Case Drain Plate Full Seal Kit Includes: Drain Plate 6x Acorn nuts w/ Integrated o-ring seal 2x Viton Seals RWAP-02 Magnetic Gold Plug 5x M6x30 Stainless Case Studs 1x M6x40 Stainless Case Studs 1x M6 Flanged Locknut

### **Stock Case VITON Seal Installation:**

It's important that VITON seals be installed completely dry. Mating surfaces must be clean, level, and free of burrs. Remove any oil from the case surfaces before installation. Install the VITON seal to the case followed by the stock screen. Install the 2<sup>nd</sup> VITON seal under the screen followed by the stock drain plate using stock hardware. Torque the acorn nuts to 5ft/lbs – make sure that the VITON seal does not squish out and sits evenly around the case and sump plate. Install the GoldPlug and torque to 25ft/lbs

## **Ross Wulf Deep Sump Plate Installation V1**

#### **Remove Sump Studs**

Remove the existing drain plate and oil. Once the drain plate is removed you have access to the 6 studs attached to the deep sump – these will need to be removed. Check the inside of the sump to see if the studs are backed by a nut. If so, remove these nuts first – we recommend a pivoting ratchet wrench for this job. Now you can remove the studs. Some studs have allen heads but should secured with Loctite – in most cases you will need to use a double nut method to remove the studs.

#### Install Ross Wulf Drain Plate Cover

**It's important that VITON seals be installed completely dry**. Mating surfaces must be clean, level, and free of burrs. Remove any oil from the sump and case surfaces (if installing Viton between sump and case) before installation.

**With Screen:** Install the VITON seal to the case followed by the stock screen. Install the 2<sup>nd</sup> VITON seal under the screen followed by the Ross Wulf drain plate with supplied sealing hardware. Use Loctite 243 (removeable) on supplied sealing bolts. Using a T-handle 5mm Allen Key set all 6

Ross Wulf LLC Las Vegas, NV 89183 406.356.8348 @rosswulf46 Sales@rosswulf.com



sealing bolts until they are equally hand tight. Set all 6 sealing bolts equally by adding roughly 1/4 - 1/3 turn past hand tight. Install the GoldPlug and torque to 25ft/lbs

**Without Screen:** Ross Wulf does not recommend screens of any kind for high performance motors utilizing full flow. This application uses 1 Viton Seal for the case to sump, and 1 Viton Seal for the sump to Ross Wulf Drain Plate. Install the Viton seal to the case and attach sump to the case per manufacturer specifications. Install the 2<sup>nd</sup> VITON seal onto the sump followed by the Ross Wulf drain plate with supplied sealing hardware. Use Loctite Blue 263 on the supplied sealing hardware. Using a T-handle 5mm Allen Key set all 6 sealing bolts until they are equally hand tight. Set all 6 sealing bolts equally by adding roughly 1/4 - 1/3 turn past hand tight. Install the GoldPlug and torque to 25ft/lbs

# Ross Wulf Case Drain Plate Installation V2

Remove the existing case drain plate and begin removing the 5 studs not holding down the pickup tube. These can be removed via the double nut method if you want to save them or use vise-grips to lock on and spin out if you do not want to save. Now you have access to the stud and nut combo securing the pickup tube – Use a pair of bent nose pliers to grab ahold of the securing nut (most likely pinching the securing strap and one side of the nut) and remove the final stud. Keep a mechanic's magnet handy to retrieve a nut that goes astray.

**Install Studs:** Start with the m6x40 stud for the pickup tube. Thread the stud in with an allen key until you can start to see a couple threads protruding through the pickup tube holding strap. Start the supplied flange nut onto the protruding threads – this is a tricky bit and will require some trial and error. You may be able to squeeze fingers in to start it, but more likely setting it in place with the bent pliers or magnet and slowly working it on is the ticket. Once you have the nut threaded, use the bent pliers to hold it in place while you thread in the stud more with the allen key. Once you have a few threads protruding from the nut, release the pliers, and back off the stud with the allen key until the nut is tight against the pickup tube securing strap. Using the bent pliers to hold the nut, drive in the stud – leaving 15mm exposed if using a screen or 13mm without. Check that the tube is secure. Prepare the remaining studs for installation by applying a drop of Loctite Red 263 onto the ends of the studs. Install each stud to either 15mm for screen or 13mm without.

It's important that VITON seals be installed completely dry. Mating surfaces must be clean, level, and free of burrs. Remove any oil from the case surfaces before installation

**With Screen:** Install the VITON seal to the case followed by the stock screen. Install the 2<sup>nd</sup> VITON seal under the screen followed by the Ross Wulf drain plate. **Without Screen** use one Viton seal against the case followed by the Ross Wulf drain plate. Hold the drain plate in place and use a small drop of Loctite 243 (removeable) in the sealing nut threads and install on the stud using a lever and/or rotating motion. The O-ring in the acorn nut will provide some resistance to threading initially – be patient and gentle to slowly work to threading the nut. Once the nuts are threaded bring them down evenly to hand tight. Once they are equally hand tight. Set all 6 sealing nuts equally by adding roughly 1/4 - 1/3 turn past hand tight.

Install the GoldPlug and torque to 25ft/lbs

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