



Performance Clutch Installation Notes

Professional installation is recommended. Improper installation and subsequent damage to any of the parts is not covered under warranty.

The Performance Clutch System is designed to go in as a package. Do not substitute or swap other parts into the package as these parts have been engineered to work together.

The enclosed gill plate and crank bolts must be used for correct installation. Factory recommended torque specification should be followed for all flywheel and pressure plate installations. Medium grade threadlock is also recommended for all bolts.

Clutch Disc Installation

The Rogue Engineering Carbon/Kevlar Sprung-Hub Clutch disc MUST be installed with the spring mechanism facing **TOWARDS the flywheel, NOT** towards the pressure plate. Failure to install this in the proper orientation will result in engagement issues, clutch disc damage and/or pressure plate damage. Failure to install the clutch disc in this manner is not considered a manufacturing defect and is not covered under the product warranty. **The exception to this rule is the E39 540/M5 V12 conversion kit, which uses a factory 850CSi clutch kit. For this kit, it MUST be installed per the factory directions.**

For reference purposes, most factory BMW clutch discs are installed with the spring mechanisms facing TOWARDS the pressure plate, opposite of the Rogue Engineering clutch disc. This is because the factory pressure plate was not designed to accommodate the spring mechanisms built into the clutch disc.

Additional Parts

If your Performance Clutch System included a new, modified ball pin (installed behind the clutch fork), be SURE to use it! Failure to use the modified pin will result in poor clutch release and engagement points.

Recommendations

Rogue Engineering has found that the use of Royal Purple Syncromax transmission fluid to be an excellent alternative to the factory recommended ATF for BMW manual transmission using our drivetrain products. **For transmissions with excessive gear lash noise (rattling), you can also use a 50/50 mix of Redline D4-ATF and Redline 75W140NS.**

Break-In Procedure – IMPORTANT!

During the first 500-1000 miles, drive the vehicle normally, avoiding sudden engagement (such as high RPM clutch engagement, dumping or slipping the clutch). This allows the clutch disc to properly bed into the new friction surface of the flywheel. **Think of this break in period like bedding in brake pads on new rotors. The new flywheel and pressure plate require heat cycles in order to start performing to maximum performance potential.** Failure to follow break in procedure can lead to premature delaminating of the friction surface from the disc backing plate.

Clutch Pedal Engagement Adjustments

Normally, stock clutch systems do not allow for any adjustments of clutch engagement. However, if the modified ball pin is installed, it allows the installer the option of adjusting the clutch pedal engagement. If after the installation the clutch pedal engagement is too **HIGH**, you can adjust the pedal lower slightly by move the clutch slave outwards by using small shims (washers).

E39 540/M5 V12 Installation Notes

Please see addendum attached, regarding pulse generator when installing the PCS clutch system.