



RST/RXT/RXT 1200 Adapter Ring Instructions.

Congratulations! Thank You for purchasing the finest twin disc clutch system on the market today. The RST and RXT Twin clutch systems are capable of handling extremely high horsepower engines in street driven vehicles. The key benefits with this system are low rotating mass, lighter than stock pedal effort and dual discs for extreme holding capacity with exceptional release qualities. Properly installed, this clutch system will provide the strength and durability you have come to rely on for all the McLeod Racing family of products.

NOTE: Gold (Metric) Adapter Ring Version will not fit on OEM flywheels from 2005-13 LS2/LS3/LS7 with recessed flywheel, or OEM Flywheels from 2011-17 Ford 5.0L Coyote. Call McLeod Sales & Tech 714-630-2764

WARNING!!! When balancing the RST/RXT clutch assembly, do not remove or add weight to the adapter ring!!! Any modification to the adapter ring will void your warranty. Weight must be added or removed from the flywheel only. McLeod offers balancing for an additional charge. Contact McLeod Sales at 714-630-2764 for more info.



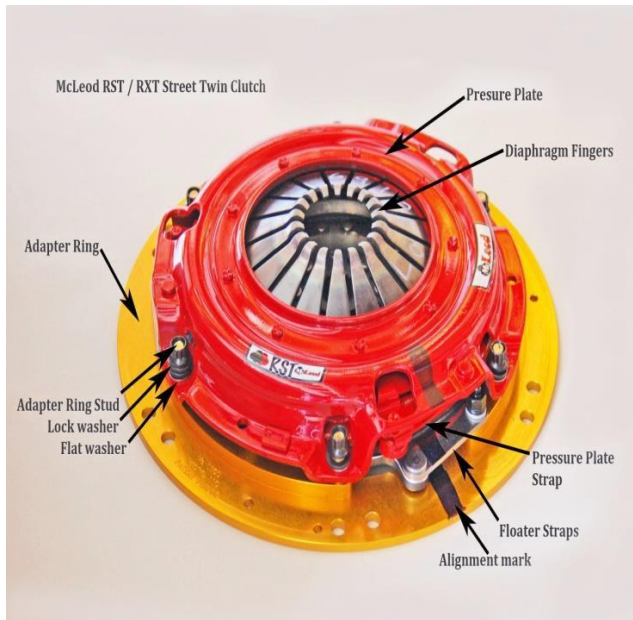


Figure 1

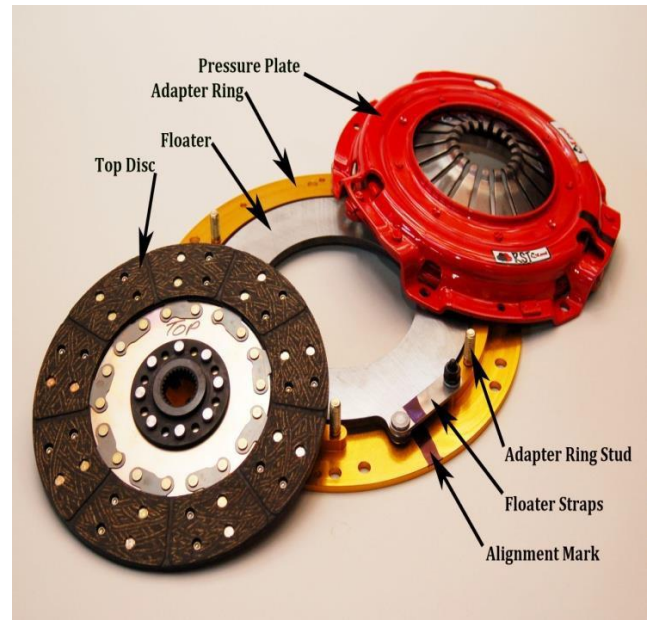


Figure 2

- 1) Remove six pressure plate nuts, lock washers and flat washers and set aside.
- 2) Lift off the pressure plate and top disc from the adapter ring and set aside. Your adapter ring may be gold, red or black depending on your specific application. Figure 2.
- 3) Inspect flywheel for chipped teeth on the ring gear and be certain the flywheel/disc engagement surface is clean, flat, and free of oil and/or grease. Be certain the pilot bearing is in place and is clean and free of nicks and burrs. If damaged, replace the pilot bearing. Test fit the pilot tool to see how far the tool engages the pilot bearing. See Figure 3.

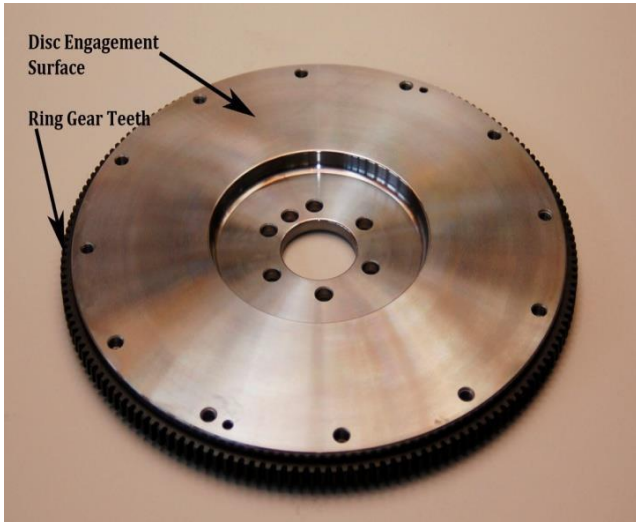


Figure 3

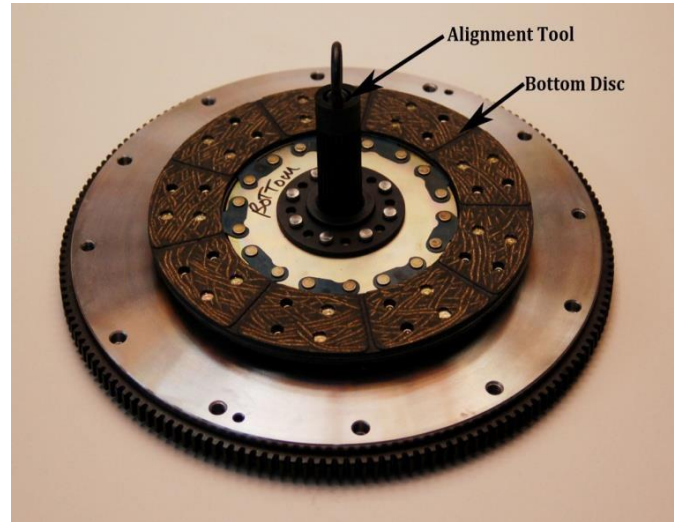


Figure 4

- 4) Install disc labeled “bottom” to the flywheel using the supplied alignment tool. Be sure the disc is installed with the label indicating ‘flywheel side’ is forward toward the flywheel. Figure 4

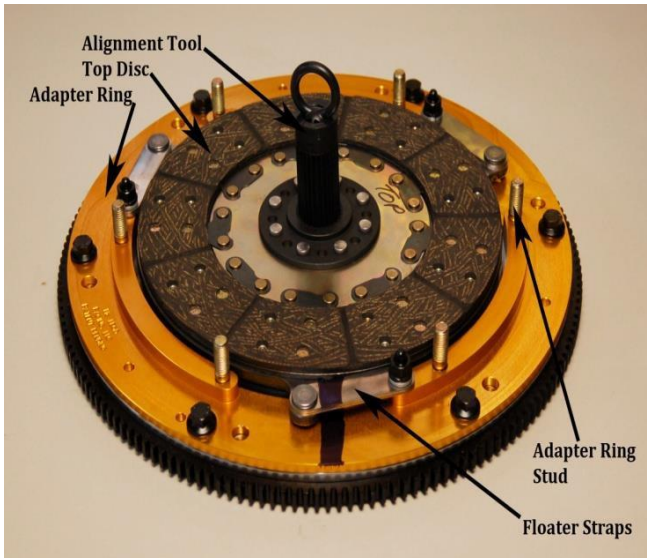


Figure 5

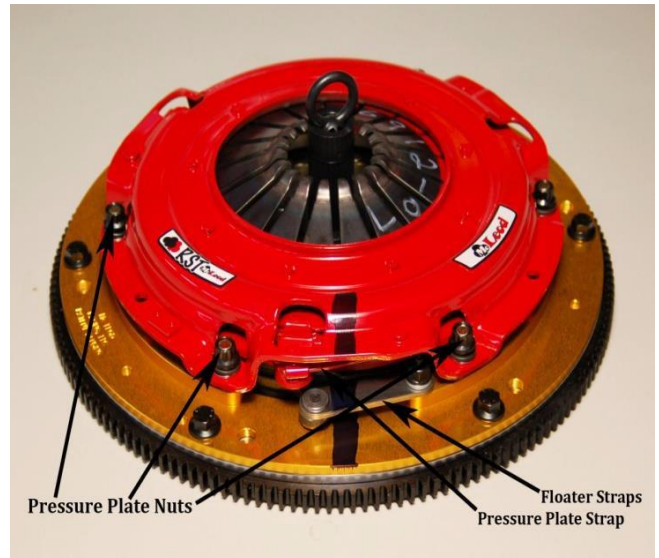


Figure 6

- 5) *If your flywheel requires dowel pins, they must be installed. See Flywheel Manufacturer for dowel pins.* Place adapter ring on flywheel, with the floater attached, using either OEM or supplied pressure plate bolts. **Some kits are supplied with new bolts for attaching the ring to the flywheel. USE THESE BOLTS as they provide necessary clearance. Do not add any washers to any locations if they were not present with the McLeod clutch assembly!** Torque these bolts to spec. Note: If the floater was removed to access the mounting holes on the flywheel, then re-orient the floater to the same spot on the adapter ring and re-torque the nuts to 25 ft./lbs.

Note: Torque 5/16” & 8mm bolts to 25 ft./lbs. and torque 10mm & 3/8 bolts to 35ft/lbs.

When the unit is built the technician may add thin shim-stock washers on the studs of the floater plate and the pressure plate. Due to manufacturing variances this will allow you to “tune” the clearance between the floater plate and the flywheel and the pressure plate and the floater plate. You are shooting for a clearance between the floater plate and flywheel of .020” to .025” with a feeler gauge. If clearance is outside this range add or remove shims to bring you into spec. Figure 7.

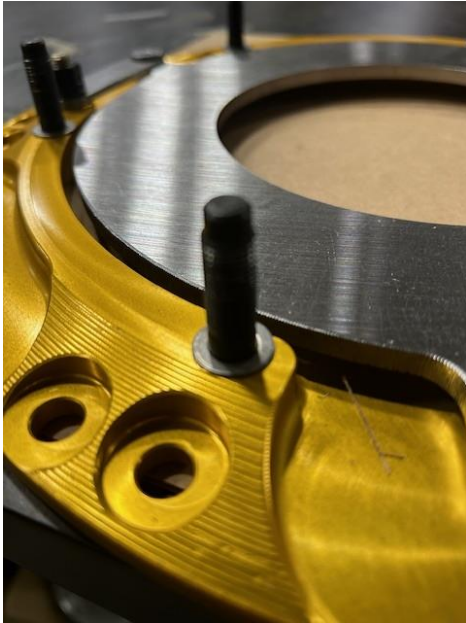


Figure 7.

Install the pressure plate onto the studs on the adapter ring, paying special attention to the alignment of the drive straps on the floater and the drive straps on the pressure plate! They should sit over the top of each other. All drive straps must be seen in the same raised opening on the side of the pressure plate. Alignment marks on Adapter ring and pressure plate must line up at this time. Do not offset drive straps!!
Figure 8



Figure 8.

Install, in this order, six flat washers, six lock washers and six nuts onto the stud's finger tight. **DO NOT use thread adhesive (Loctite) on the studs or nuts!** Rotate the alignment tool in either direction to make sure the discs are aligned properly.

- 6) **Pressure Plate tightening sequence is critical at this point.** Tighten pressure plate nuts to 25 ft. lbs. in a star pattern (1 o'clock, 7, 3, 9, 5, 11). Then to 35 ft./lbs. again tightening in the star pattern. The lock washers should now be completely compressed.
- 7) Check diaphragm finger height currently by placing a straight edge onto the pressure plate across the finger opening. All the fingers should be at or below the rear surface of the pressure plate. Figure 9.

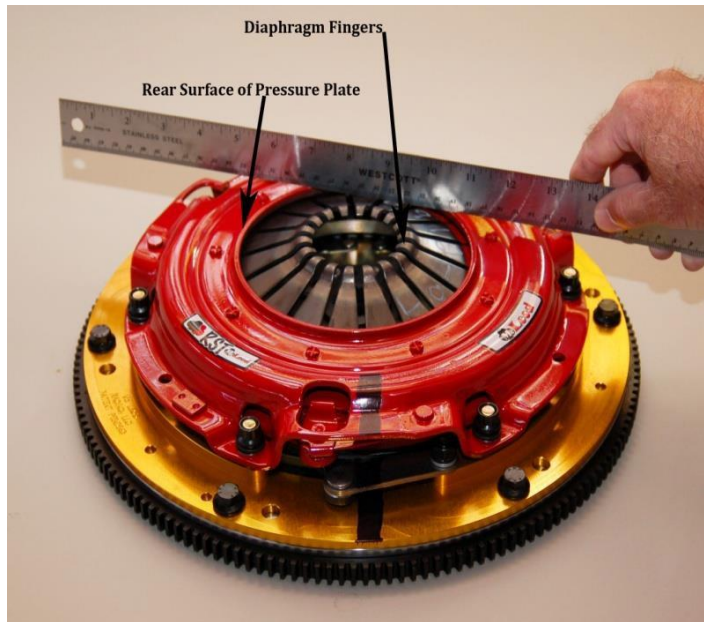


Figure 9

- 8) Continue with the bellhousing, throw-out bearing and transmission installation.
- 9) Break-in period...**Do not break-in this clutch system on a chassis dyno!! (Will VOID Warranty)** Normal Street driving is best for the break-in period. 500-750 Stop and Go miles or (1500 clutch cycles) while normally shifting the car up and down through the gears (**Traction Control must be turned off!**). After the break-in period you can then drive the car aggressively to enjoy the additional performance.

Important Clutch Installation Hints

The following check list is a reminder of the necessary inspection points and precautions required to insure a trouble-free clutch installation.

- 1) Determine cause of original clutch failure. Cause of first clutch failure (if not wear) MUST be found and corrected. If oil is present on clutch plate, the cause of leak MUST be corrected before installation of new clutch unit.
- 2) Check splines on transmission input shaft for signs of abnormal wear or twisting. Slide new discs on spline by hand gently to check fit. Discs should move **FREELY** on splines.
- 3) Remove ALL oil or grease from friction surfaces on flywheel and cover assembly. Surfaces MUST be clean and dry. Also, clean input shaft spline with a wire brush. Lubricate with dry graphite spray if needed.
- 4) To ensure proper operation, the friction surface of flywheel MUST be resurfaced. Check dowel pins, they must be smooth and straight.
- 5) If throw-out bearing is worn, replace it, better now than later.
- 6) Closely inspect pilot bearing or bushing for excessive wear to avoid transmission shaft misalignment. Replace it if any doubts.
- 7) Use clutch alignment tool to ensure disc and cover are properly aligned with pilot bearing.
- 8) If using an aftermarket scatter shield/bell housing, checking center hole run-out is highly recommended.
- 9) Be sure all special type bolts, if any, are replaced in their proper locations.
- 10) Torque all clutch cover bolts evenly, to factory recommended spec, using a star tightening pattern.
- 11) Before completing installation, inspect all clutch linkage parts (fork, clevis, pins, etc.) for signs of wear and replace ALL worn pieces. Grease all pivot points in linkage system.
- 12) Adjust clutch pedal "free play" to correct specifications. Throw-out bearing should NOT be tight against clutch fingers. .100" to .250" clearance is recommended, except cable linkage using factory self adjusting quadrant. See factory Ford shop manual for adjustment procedure.
- 13) Replace Hydraulic Slave cylinder if factory equipped. Better now than later. It's the same labor.

Installation / Don'ts

- 1) Don't let any grease or oil contact ANY friction Surface.
- 2) Don't use an impact (air gun) to tighten cover bolts.
- 3) Don't let transmission weight rest on input shaft during

Torque Specs

*5/16-18 Grade 8. 25 Ft/Lbs.
3/8-16 Grade 8. 35 Ft/Lbs.
7/16-20 Grade 8. 65 Ft/Lbs.
½-20 Grade 8. 75 Ft/Lbs.
8mm Grade 8. 25 Ft/Lbs.
10mm Grade 8. 35 Ft/Lbs.*

Limited Warranty

McLeod Racing LLC, products are warranted to be free from defects in material and workmanship for the period of **ninety (90) days**, from the date of purchase. McLeod does not warrant or make any representations concerning its products when not installed and or used strictly in accordance with the manufacturer's instructions for such, installation, and operation, and in accordance with good installation and maintenance practices of the automotive industry. Products purchased used do not carry a warranty. This warranty is for the original purchaser and is non-transferable.

McLeod Racing LLC will not be held liable for the labor charges and other intangible or consequent losses that might be claimed as a result of the failure of any part, nor shall it be liable for damages or injury to persons or property resulting from the misuse or improper installation of any part subject to this warranty.

No merchandise may be returned for any reason unless a prior return merchandise authorization number (RMA) has been obtained from McLeod. An RMA number may be obtained via www.mcleodracing.com or by calling McLeod directly.

McLeod Racing LLC reserves the right to examine all parts returned for warranty claim to determine whether or not any such part has failed because of a defect in material or workmanship. McLeod's obligation under this warranty shall be limited to repairing, replacing, or crediting, at its option, any part found to be defective. All products returned to McLeod for warranty inspection must be prepaid by the customer under this warranty.

In a racing environment, the type of stress placed on automotive parts can vary dramatically by the type of use, driving style, track preparation, differing tire style and other variables that are out of McLeod's control. For this reason, any parts used in a racing environment shall be void of any warranty either expressed or implied.

There are no other warranties, either expressed or implied including, but not limited to, warranty of merchantability, and warranty of fitness for a particular purpose which extend beyond those set forth in the preceding paragraphs. This warranty shall be interpreted and applied for in accordance with California law.

For any changes or updated versions of the warrant described above, please refer to www.mcleodracing.com before installation of product.

I0004
(714) 630-2764

www.mcleodracing.com