



Instruction Sheet for JBR *ULTRA-LITE* Flywheel/Clutch/TOB - (BMW)

Please read this instruction sheet in its entirety before starting this process.

1. Remove the stock flywheel and clutch from the engine.
2. Now might be a good time to check and/or change the rear crank seal.
3. Remove the stock TOB and bobbin from the stock clutch arm.

NOTE: The new TOB supplied is a special TOB for use with this clutch only. Do not use the stock TOB with this clutch. Damage to the clutch and/or the engine will occur.

4. Install the new TOB assembly onto the stock clutch arm. (note- if installation is for E46 M3 or E39 540i/M5 utilizing the 420G transmission, the guide tube must be modified to accept the new TOB/Bobbin– see separate instructions for BMW Transmission Guide Tube Modifications.
5. Make sure the crankshaft and flywheel mating surfaces are clean.
6. Install your new *ULTRA-LITE* flywheel.
7. The enclosed flywheel bolts and hardened bolt ring must be used for correct installation. The factory recommended torque specifications should be followed for all flywheel and pressure plate hardware. The flywheel is designed to have an “interference” fit with the crankshaft hub and must be gradually and equally “pulled down” until the flywheel is fully seated on the crankshaft flange.
(DO NOT TORQUE BOLTS NOW)
8. Remove all the bolts used to pull the flywheel on and the bolt ring.

Loctite Procedure for Crankshaft Bolts

1. It is important that you do not allow the loctite to get between the crankshaft flange and the flywheel.
2. Place a small amount of loctite on a small screwdriver blade tip and place the loctite on the threads in the crankshaft flange. Do this in all eight (8) holes.

NOTE. If you apply the loctite directly to the bolt threads and then insert the bolts, you will shear some of the loctite from the threads and it will go between the flywheel and crankshaft surface.

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Loctite Procedure for Crankshaft Bolts (continued)

3. Place a very small amount of moly lube under the head of the bolts. We use, and recommend, Loctite brand Heavy Duty Anti-Seize, Part No. 51609.
4. Install the bolt ring and the bolts. Snug all eight (8) bolts.
5. Tighten the flywheel bolts using the factory sequence and torque specifications.
6. Wipe clean any excess moly lube from around the bolt heads. If not cleaned, the excess moly lube will sling from the bolts and will get into the clutch surface causing slippage and premature wear.

Clutch Cover Installation

1. Remove any rust preventative coatings from the clutch and flywheel friction surfaces with a solvent and dry before assembly.
2. Apply a drop of oil to the threads of the clutch cover mounting bolts. DO NOT USE LOCTITE OR OTHER THREADLOCKER ON THESE BOLTS!
3. Torque the clutch cover bolts to 18 Ft. Lbs. **DO NOT OVERTIGHTEN**

IMPORTANT NOTE

Pedal Stop

Installation and use of a properly adjusted pedal stop is mandatory when using this clutch. The maximum release travel at the clutch fingers is .275", therefore it is essential that this dimension is controlled with a pedal stop to prevent over travel & binding. Over travel of the clutch unit will cause damage to the clutch and can cause premature wear of the engine thrust bearings.

Thanks for choosing this JBR *ULTRA-LITE* Flywheel and Clutch System