



Instruction Sheet for JBR *ULTRA-LITE* Flywheel/Clutch/TOB - (BMW) PN 520-160-140K-3D97

Please read this instruction sheet in its entirety before beginning your installation..

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 and discard.
4. Remove the input-shaft guide tube from the S6S-420G transmission. This tube must be shortened (see note below) to provide adequate room for the triple-disc clutch kit and custom throw-out bearing/bobbin.

NOTE: The new TOB/Bobbin assembly supplied (**PN 551-253**) is custom designed for use with this clutch and transmission only, and *requires* that the transmission guide tube is modified. (see separate instructions for "S6S-420G Guide Tube Modifications") **Do not attempt to use the stock TOB with this clutch as damage to the clutch and/or the engine will occur.**

5. Wipe the guide tube and inner surface of the TOB/Bobbin to ensure they are clean, then install the bobbin into the stock clutch arm and slide the new TOB/bobbin onto the guide tube.
6. Make sure the crankshaft and flywheel mating surfaces are clean.
7. Install your new *ULTRA-LITE* flywheel. This flywheel design utilizes a lay-in friction surface which must be lifted from the flywheel to allow tool access to the flywheel to crankshaft bolts.
8. The enclosed flywheel bolts and hardened bolt ring must be used for correct installation. The factory recommended torque specifications should be followed for flywheel-crankshaft installation hardware. This 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.
9. Remove all the bolts and bolt ring used to pull and seat the flywheel onto the crankshaft and follow the Loctite procedure described on page two.

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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 nine (9) bolt 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.

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 nine (9) bolts.
5. Torque all 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.
7. Apply a drop of oil to the threads of the clutch cover mounting bolts.
8. Torque the clutch cover bolts to a maximum of 16-18 Ft. Lbs. DO NOT OVER TIGHTEN!

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.

Should you encounter any difficulties, or simply have a question concerning the installation process, please contact us at the numbers below for assistance.

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

11/2009