

CLUTCHTECH TSB - TR01 Difficult Gear Engagement

Applies to ClutchPro kits:

KTR22001, KTR22002 & KTR23003, 2000 and 2.5PI MK 1 and 2's, TR6, STAG & VITESSE

Clutch drag is the result of insufficient pressure plate lift to completely free the driven plate when the clutch pedal is operated. Contributory factors are insufficient travel of the slave cylinder pushrod, oil contamination or excessive 'run out' of the driven plate facings (buckled), or in certain circumstances excessive length of the clutch mounting bolts. Also rough operation or misalignment of the release bearing can subject the clutch to high frequency vibration and rapid wear of the internal parts making the clutch inoperative.

To establish if the fault is hydraulic or mechanical the movement of the slave cylinder pushrod must be checked and must be at least 5/8" (16 mm.). If this dimension is achieved then the cause is mechanical lost movement, therefore after gearbox removal the following points should be checked.

- 1. Examine the gearbox mounting holes for wear or ovality which may allow the gearbox to drop from its original mounted position and cause misalignment of the release bearing.
- 2. The release bearing carrier must be a snug fit on the front cover snout with no tight spots or excessive play.

 The carrier groove should be unworn, particularly on the front face where contacted by the release fork trunnions.
- 3. The release fork must be held securely to the withdrawal shaft by the locking bolt, no play whatever is permissable at this point. The release fork trunnions should be round and unworn. (Alternative designs of release mechanism use rectangular metal blocks or round end caps on the trunnions.)
- 4. Carefully examine the cross shaft bearings for wear or lack of lubrication, particularly on the withdrawal arm side.
- 5. Check the release bearing which must revolve smoothly while being turned under firm pressure between the hands.
- Critically examine the flywheel pilot bearing, looking for wear or 'bellmouthing' however slight.
 Should any of these components be found unserviceable then the parts must be replaced.
 Before reassembly ensure that the driven plate moves freely on the splined shaft, at the same time revolve the plate to check for excessive 'run out' of the facings.
 Lightly smear the front cover snout and the release fork trunnions with Lockheed High Temperature Anti-Seize Copper

Grease.

Where a Borg and Beck clutch is fitted as a service replacement for a Laycock assembly, due to the difference in mounting flange thickness of the two types the mounting bolts must be shortened to a length not exceeding 3/4" (19 mm.) under the head, otherwise the bolts may bottom in the holes and leave the Borg and Beck clutch loose on the flywheel. The correct position for connecting the slave cylinder pushrod on the clutch withdrawal shaft drop arm is as follows:

Triumph 2.5 Pl Mk 1 and 2 Upper hole.
Triumph 2000 Mk 1 and 2. TR6 and STAG Centre hole

CLUTCH AND FLYWHEEL SPECIALISTS



