TECHNICAL BULLETIN

TSB-TB01

Identifying Noisy Clutch System Bearings

When diagnosing the source of bearing noises in the clutch system of a vehicle it is often difficult to pinpoint the noisy bearing accurately and in many cases the release bearing is incorrectly identified as being at fault. This often results in unnecessary replacement of the release bearing without solving the noise problem.

The following simple test can be used to ensure correct identification of noisy bearings in the clutch system. Before using this test, make sure the clutch release mechanism has been correctly adjusted in accordance with the instructions in the vehicle workshop repair manual and then follow the steps described below in sequence. Note that if the vehicle is fitted with a ratchet adjuster clutch release mechanism where the release bearing is in constant contact with the cover assembly diaphragm fingers, the release bearing should be held back manually from the diaphragm fingers before starting the test.

STEP 1. GEARBOX BEARING TEST

Pull up the handbrake, make sure the gearbox is in neutral and start the engine. Do not touch the clutch pedal at this stage. If any bearing noise is heard, the gearbox bearings are at fault. If no noise can be heard, go on to Step 2.

STEP 2. RELEASE BEARING TEST

With the gearbox still in neutral and the engine running, depress the clutch pedal only to the end of the release bearing free play. This will bring the release bearing into contact with the cover assembly diaphragm fingers, but will not disengage the clutch. If any bearing noise is heard, the release bearing could be at fault. If no noise is heard at this stage, go on to Step 3.

STEP 3. FLYWHEEL PILOT BEARING TEST

Finally, with the gearbox still in neutral and the engine running, push the clutch pedal fully to the floor to disengage the clutch. Any noise heard now will be coming from the flywheel pilot bearing.

Please refer to the following sketch when using this test.







