



CLUTCH TECHNICAL GUIDE

TBC92

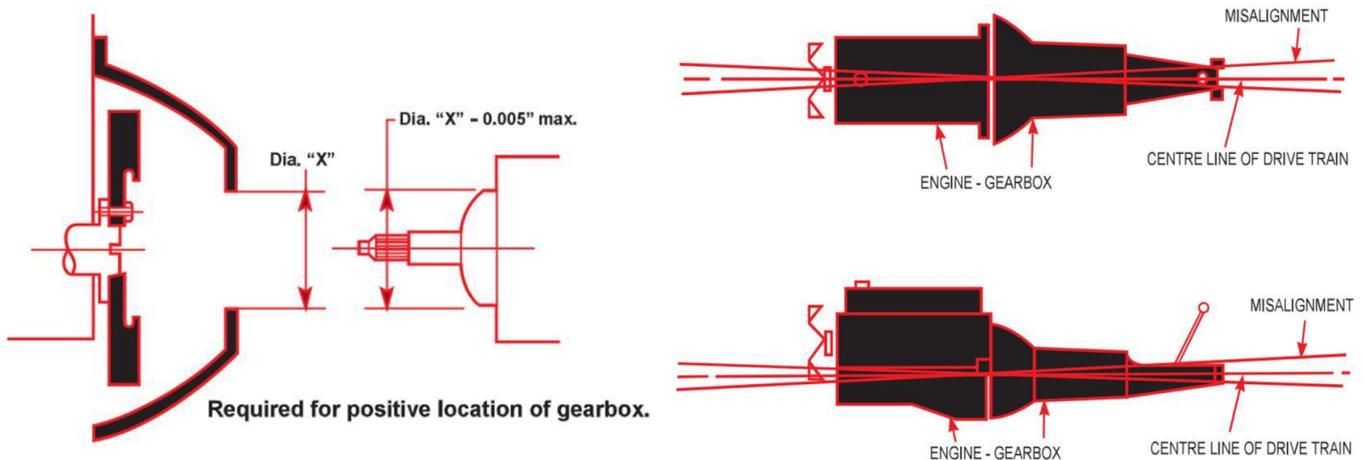
Misalignment Explained

Does the old clutch you removed show any of these signs of wear?

- Broken clutch plate
- Worn diaphragm fingers
- Red dust covering the clutch components
- Loose pivot rings inside the cover assembly
- Burrs on the clutch plate hub
- The release bearing guide has worn on one side

If it does, the clutch has probably failed due to driveline misalignment.

Fitting a new clutch without rectifying any misalignment issues will lead to possible premature failure of the new clutch you're about to install.



What causes misalignment?

The most common causes of driveline misalignment are:

- Missing or damaged dowel pins allowing the transmission to be bolted off-centre.
- Mislocated front bearing retainer.
- Foreign matter between the engine block and the transmission mounting faces.
- Missing or worn pilot/spigot bearing.
- Broken block flange.

What are the symptoms of misalignment?

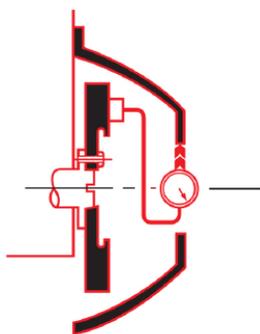
- Pedal graunch with the engine running.
- Deterioration of the clutch until non-release occurs.
- Failed drive plate.
- Red dust covering the clutch and/or groove worn in the diaphragm by the release bearing.

How do I prevent misalignment?

Whenever you are replacing a clutch, inspect the old components. If misalignment is present, you will need to determine the cause and rectify it so that it doesn't occur again.

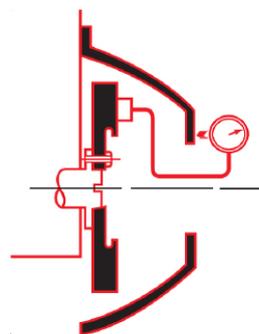
- Inspect all dowels and dowel holes for condition.
- Inspect the release bearing guide and replace it if necessary.
- Clean all mating surfaces.
- Inspect block flange for damage.
- During reinstallation, ensure the clutch plate is aligned with pilot/spigot bearing.
- Ensure that the gearbox input shaft is aligned with the clutch hub, and that the gearbox is guided into position correctly.

Remember: If misalignment is present, fitting a new clutch kit will not fix the cause of the problem and the misalignment will quickly destroy the new clutch.



STEP 1

Mount indicator to flywheel and determine concentricity of bell housing bore to centre line of crank rotation, SPECIFICATION: 0.15mm max, T.I.R.



STEP 2

With indicator still mounted to flywheel ensure rear surface of housing is square. SPECIFICATION: 0.15mm max, T.I.R.