TSB - GM11



## TSB-GM11 Part A: Clutch Release Mechanism Problems

Applies to ClutchPro kits:

KGM20009, KGM18001, KGM22019, KGM23004, KGM23005 (OPEL ASTRA, BARINA & CALIBRA)

When fitting a clutch to Opel Astra, Barina & Calibra vehicles, the clutch release mechanism should be carefully inspected to ensure that there are no worn or damaged parts. It is not necessary to remove the gearbox when fitting a clutch to many of these vehicles and the condition of the release mechanism is therefore seldom checked, resulting in clutch non-release, hard pedal action, vibration and slipping problems.

The gearbox input shaft sleeve, clutch release fork and clutch release shaft bushes should be carefully inspected for wear. A worn input shaft sleeve will prevent the release bearing from moving freely, causing hard clutch pedal action, vibration and slipping problems. A worn clutch release fork will cause misalignment of the release bearing on the gearbox input shaft sleeve and cover assembly diaphragm fingers, resulting in clutch non-release and vibration problems. Worn release shaft bushes will cause excessive play in the release shaft resulting in clutch non-release, hard pedal action, slipping and vibration problems. A distorted or worn clutch release fork securing bolt will allow the release fork to rotate on the release shaft, resulting in clutch non-release problems.

A new original Opel clutch cable should always be fitted when the clutch is replaced in order to prevent clutch nonrelease, hard pedal action, and slipping problems. The clutch cable is a wearing part and should be renewed with every clutch replacement as it is not possible to inspect a worn clutch cable visually with any accuracy. It has been found that most aftermarket replacement clutch cables available for these vehicles are poorly manufactured and become extremely stiff after a short period of operation in the vehicle.

Part B: Astra, Combo Calibra, Holden Barina & Nissan Pulsar Clutch Release Mechanism Adjustment

When fitting a clutch to these FWD vehicles the clutch release mechanism should be adjusted correctly in order to prevent clutch non-release, slipping and noise problems. The clutch release mechanism in these vehicles operates in a pre-loaded condition with no clutch pedal free play clearance, and the release mechanism should be adjusted as follows:

- 1. Measure the distance between the clutch pedal pad and the bottom edge of the steering wheel rim.
- 2. Depress the clutch pedal fully and measure the distance between the depressed clutch pedal and the steering wheel rim.
- 3. The difference between the two measurements should be 138mm.
- 4. If the measurement is not 138mm, adjust the clutch cable length using the clutch cable adjuster nut.
- 5. Recheck the measurement and adjust the cable length until the measurement is 138mm.
- 6. Depress the clutch pedal a few times and check the measurement again as a final step.

When fitting a new clutch to these vehicles the clutch cable should be replaced with an original Opel part in order to prevent hard clutch pedal action problems. The clutch cable is a wearing part and should be renewed with every clutch replacement as it is not possible to inspect a worn clutch cable visually with any accuracy. It has been found that most aftermarket replacement clutch cables available for these vehicles are poorly manufactured and become extremely stiff after a short period of operation in the vehicle.



