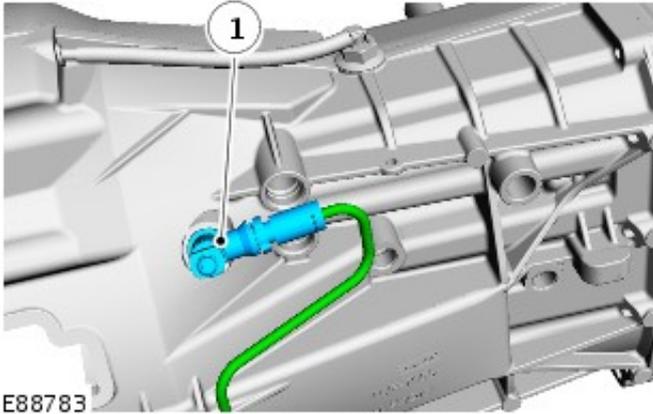


the pedal box.

## CONCENTRIC SLAVE CYLINDER OUTLET ASSEMBLY

- NOTE: Right hand drive vehicle shown.



Item	Part Number	Description
1	-	Slave cylinder outlet assembly and peak torque limiter

The concentric slave cylinder outlet assembly connects the external pipes with the release system contained within the clutch housing. A securing bracket locates the assembly in the correct orientation and a seal is provided between the assembly and the clutch housing.

Contained within the slave cylinder outlet assembly is a peak torque limiter. This component is designed to restrict the hydraulic fluid flow during the clutch pedal up-stroke. Under normal pedal actuation this restriction can not be detected, but in the event of an unintentional pedal release (e.g. wet shoe slipping off the clutch pedal) the peak torque limiter limits the fluid return rate and protects the transmission and driveline from excessive shock loads, which might cause damage.

On left hand drive vehicles, the hydraulic pipework contains an anti-vibration damper plugged into the peak torque limiter. This is used to reduce pedal roar/vibrations during clutch operation.

## CONCENTRIC SLAVE CYLINDER

The concentric slave cylinder assembly contains the release bearing and the hydraulic slave cylinder. The assembly is attached to the front end of the transmission via 3 bolts. These bolts are asymmetrically positioned to ensure correct angular location of the slave cylinder, which is also spigot-mounted for positional fit. In its free condition the slave cylinder is fully extended, but it positions itself automatically as the clutch housing is fitted to the engine. The assembly requires no setting or adjustment.

## CLUTCH COVER ASSEMBLY

The clutch cover assembly comprises a pressure plate, cover and diaphragm and is mounted on and rotates with the flywheel.

The pressure plate is machined to provide a smooth surface for the drive plate to engage on. Lugs on the outer diameter of the pressure plate connect it via leaf springs to the cover. The leaf springs have leaves, which assist in pulling the pressure plate away from the drive plate when the clutch pedal is depressed.

The cover houses all pressure plate components. Shouldered rivets support the diaphragm inside the cover. The rivets heads are chamfered to allow the diaphragm to pivot when pressure is applied to it by the release bearing. Holes in the cover locate on dowels on the flywheel and further holes provide for the attachment of the cover to the flywheel. Larger holes in the cover provide ventilation for the drive plate and pressure plate and flywheel contact surfaces.

The diaphragm comprises a cast ring with fingers. The diaphragm is attached to the cover with shouldered rivets. The inner head of each rivet is chamfered to allow the diaphragm to pivot when the clutch is depressed or released. When pressure is applied to the fingers of the diaphragm by the release bearing, the diaphragm pivots on the rivets and moves away from the pressure plate, releasing the force applied to the pressure plate and allowing the drive plate to slip between the pressure plate and the flywheel.

## CLUTCH DRIVEN PLATE

The clutch driven plate is sandwiched between the flywheel and the pressure plate of the clutch cover assembly. The clutch driven plate has a splined hub, which engages with the splines on the primary shaft from the transmission. The splined hub is located in an inner plate, which contains 3 compression pre-damper springs. The inner plate is retained by the springs, which can compress in both directions to cushion engine vibration at idle speed. The inner plate is located on 4 larger compression springs, which are located in a central plate. The hub is sandwiched between the central plate and the friction damper. The friction damper comprises friction washers located between the hub and the central plate. The friction washers reduce transmission noises and vibrations due to engine cyclic excitation.