

# FAULT DIAGNOSIS CHART



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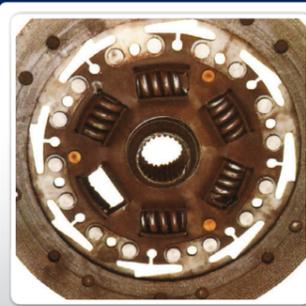


## RELEASE BEARING NOT LUBRICATED

**CAUSE** No lubricant applied to grease recess on installation

**EFFECT** Jerky clutch operation and heavy pedal

**REMEDY** If bearing bore is scored then renew the bearing, filling grease groove with good quality high melting point grease prior to fitting. If necessary renew the bearing guide tube

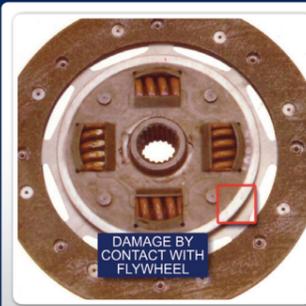


## BROKEN DAMPER SPRINGS AND WORN CENTRE

**CAUSE** Misalignment of engine to gearbox

**EFFECT** Noise and vibration leading to total failure

**REMEDY** As 'broken segment necks' below, but specially check for correct position and condition of gearbox dowels and dowel holes



## DAMAGED DRIVEN PLATE

**CAUSE** Driven plate fitted wrong way round

**EFFECT** Clutch inoperative

**REMEDY** Replace driven plate assembly and check cover assembly for damage, renew if necessary



## OIL CONTAMINATED DRIVEN PLATE

**CAUSE** Oil leak from gearbox main shaft seal or from engine main bearing seal

**EFFECT** Progressing through clutch drag, judder and finally slip

**REMEDY** Eliminate oil leak and renew clutch components



## WORN BEARING GUIDE TUBE

**CAUSE** Long service life or incorrect lubrication during installation

**EFFECT** Jerky clutch operation, heavy pedal action

**REMEDY** Replace worn part and lubricate lightly with approved grease



## BROKEN SEGMENT NECKS

**CAUSE** Angular misalignment of engine and gearbox

**EFFECT** Loss of drive

**REMEDY** Correct the misalignment which may be due to bent engine back plate, burrs or debris trapped between mating faces, cracked bell housing; worn pilot or gear box bearings; incorrect or missing dowels



## DAMAGED SPLINE

**CAUSE** Failure to correctly align spine with driven plate during gearbox installation

**EFFECT** Clutch drag

**REMEDY** Replace driven plate and take care during gearbox installation

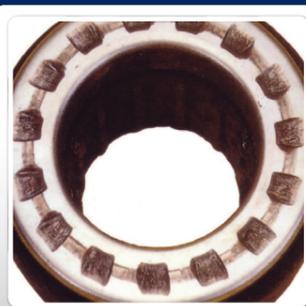


## OVERHEATED, CRACKED FACINGS

**CAUSE** Prolonged slipping of the clutch

**EFFECT** Clutch drag followed by loss of drive

**REMEDY** Rectify cause of clutch slip and then replace all necessary clutch components. Check flywheel for damage



## WORN RELEASE BEARING THRUST FACE

**CAUSE** Excessive misalignment of release bearing

**EFFECT** Noisy and jerky clutch pedal action

**REMEDY** Correct the cause of the misalignment and renew bearing

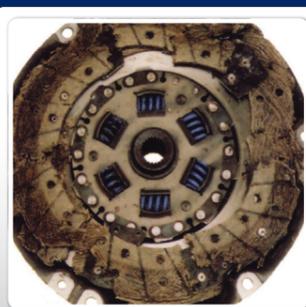


## INCORRECT SPLINE GREASE USED

**CAUSE** Use of non-recommended lubricant on splines

**EFFECT** Clutch drag due to dirt contamination of spline

**REMEDY** Thoroughly clean 1st motion gearbox input shaft and apply a smear of approved grease. Renew driven plateA



## BURST DRIVEN PLATE

**CAUSE** Excessive rotational speed caused by incorrect gear selection

**EFFECT** Total clutch failure

**REMEDY** Renew all clutch components and check for consequential damage to other components



## WORN AWAY HUB SPLINES

**CAUSE** Bent first motion shaft or worn gearbox bearings

**EFFECT** Loss of drive

**REMEDY** Correct the gearbox fault and replace the driven plate

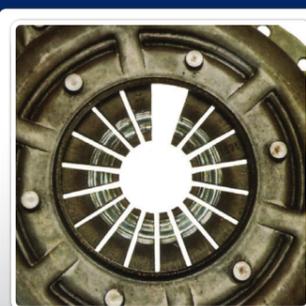


## BENT DRIVE STRAP

**CAUSE** Overtravel of the bearing, allowing a spring finger to contact the drive plate

**EFFECT** Clutch drag

**REMEDY** Renew cover assembly using the correct retainer clips and correct clutch compressing tool



## BROKEN SPRING FINGERS

**CAUSE** Incorrect location of cover assembly on flywheel

**EFFECT** Overtravel of the bearing, allowing a spring finger to contact the drive plate

**REMEDY** Ensure release mechanism, including auto adjuster, is working correctly. Properly re-set and replace complete clutch and any other damaged parts



## HEAT PATCHED PRESSURE PLATE

**CAUSE** Weakened or damaged drive straps

**EFFECT** Clutch drag

**REMEDY** Renew cover assembly  
Handle clutch components with care



## HUNG GEARBOX

**CAUSE** Gearbox has not been fully installed and left unsupported

**EFFECT** Clutch drag due to the damage within the spline

**REMEDY** Replace clutch kit and use a cradle to support the gearbox

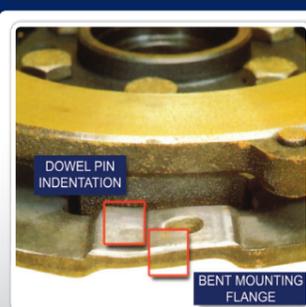


## BROKEN PRESSURE PLATE

**CAUSE** Overheating due to clutch slip

**EFFECT** Total clutch failure

**REMEDY** Eliminate the cause of clutch slip and renew all clutch components. Check for consequential damage

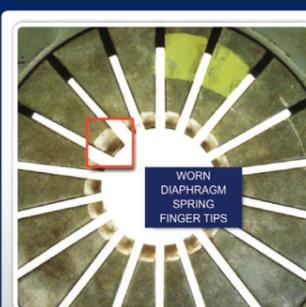


## DISTORTED COVER MOUNTED FLANGE

**CAUSE** Incorrect location of cover assembly on flywheel

**EFFECT** Vibration and clutch drag

**REMEDY** Check dowels for damage and correctly fit a new cover assembly



## WORN DIAPHRAGM SPRING FINGERS

**CAUSE** Failure to maintain a contact between bearing and clutch assembly

**EFFECT** Jerky clutch engagement

**REMEDY** Renew cover assembly, check release mechanism (including self adjustment) for correct operation. Observe correct adjustment frequency and procedure



## OIL CONTAMINATED

**CAUSE** Clutch fluid has not been maintained & become contaminated

**EFFECT** Fluid leakage due to internal seal expansion

**REMEDY** Replace CSC & check clutch for contamination. Flush & replace clutch fluid