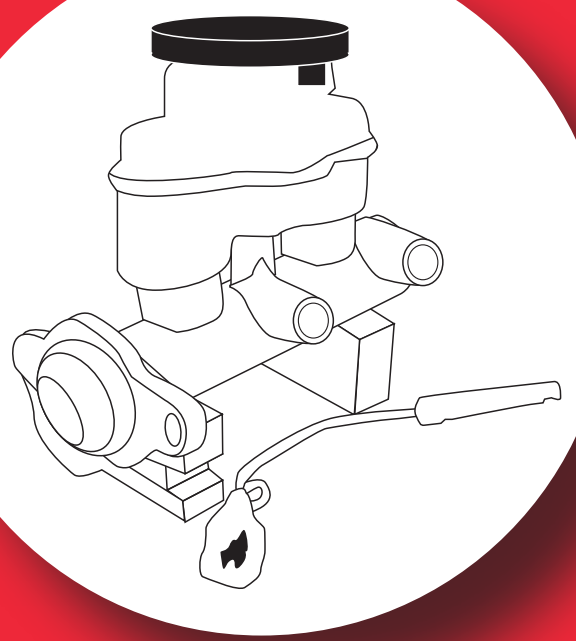


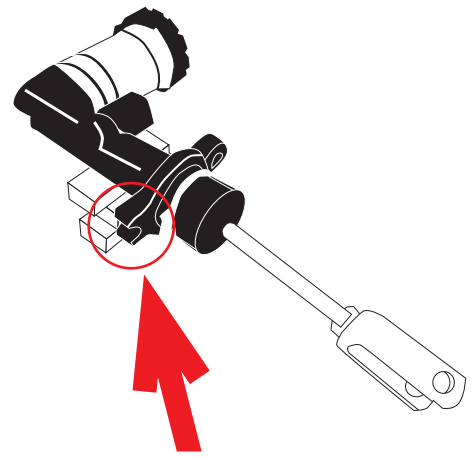
# FAULT FINDING

## BRAKE & CLUTCH HYDRAULIC CYLINDERS



### BRAKE MASTER CYLINDER

- 1) SPONGY BRAKE PEDAL AFTER BLEEDING MAY MEAN A FAULTY MASTER
- 2) LEAKING MASTER MEANS DAMAGE TO SEALS
- 3) IF BLACK BRAKE FLUID IS SEEN IN A NEW MASTER THEN OLD FLUID WAS USED WHICH COULD CAUSE DAMAGE - NO RFC
- 4) ENSURE NEW PART RETURNED IN BOX AND NOT CUSTOMERS OLD PART/ GENUINE PART
- 5) PARTS THAT HAVE BEEN OPENED AND TAMPERED WITH BY CUSTOMERS - NO RFC



• BROKEN MOUNTING  
• BROKEN PUSHROD

### CLUTCH MASTER METAL / PLASTIC

- 1) IF BLACK BRAKE FLUID IS SEEN IN A NEW MASTER THEN OLD FLUID WAS USED WHICH COULD CAUSE DAMAGE - NO RFC
- 2) LEAKING MASTER MEANS POSSIBLE DAMAGE TO SEALS
- 3) BROKEN MOUNTINGS INDICATES INCORRECT TIGHTENING PROCEDURE AND UNCLEAN SURFACE - NO RFC
- 4) IF LEAKING FROM PIPE FITTING, CHECK CROSS THREADS / OVER TIGHTENING - NO RFC
- 5) A BENT OR BROKEN PUSHROD INDICATES FAULTY CLUTCH PEDAL PARTS OR INCORRECT FITMENT NOT A FAULTY CYLINDER - NO RFC
- 6) ENSURE NEW PART RETURNED IN BOX AND NOT CUSTOMERS OLD PART/ GENUINE PART
- 7) PARTS THAT HAVE BEEN OPENED AND TAMPERED WITH - NO RFC

### WHEEL CYLINDER

- 1) DAMAGED FERRULES DUE TO INCORRECT FITMENT - NO RFC
- 2) ENSURE NEW PART RETURNED IN BOX AND NOT CUSTOMERS OLD PART/ GENUINE PART
- 3) IF LEAKING FROM PIPE FITTING, CHECK CROSS THREADS - NO RFC
- 4) PARTS THAT HAVE BEEN OPENED AND TAMPERED WITH - NO RFC
- 5) LEAKING FROM BLEEDER NIPPLE OR BROKEN BLEEDER NIPPLE = OVER TIGHTENING - NO RFC

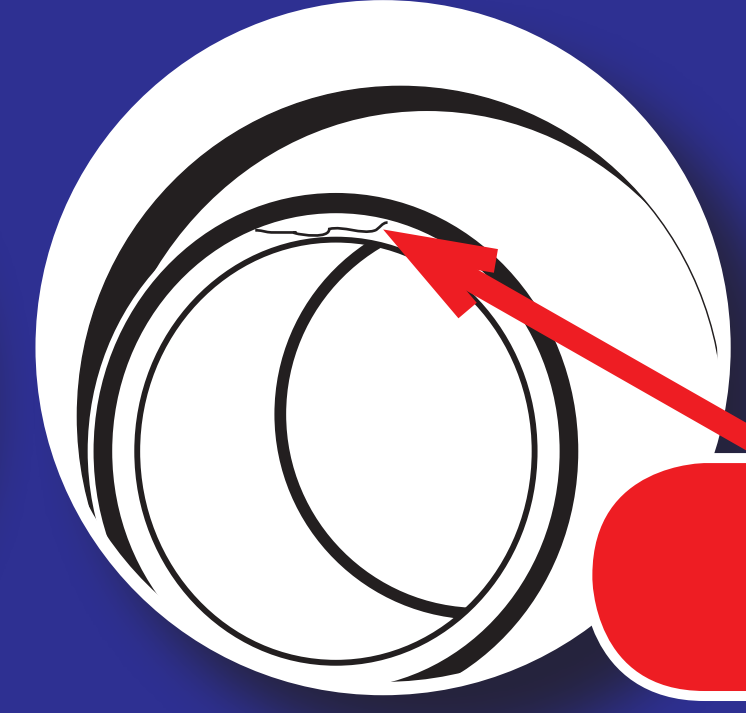
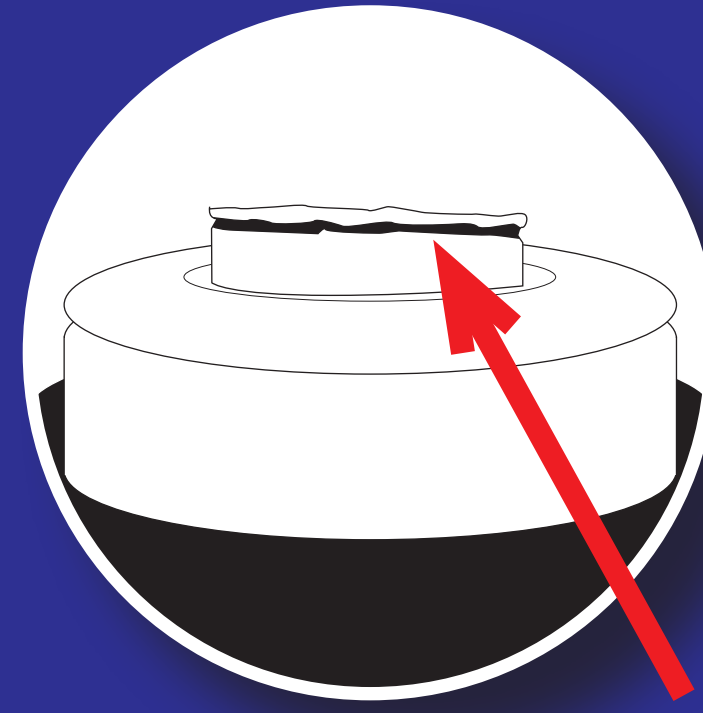
CHECK FOR DAMAGED FERRULE

### CLUTCH SLAVE METAL / PLASTIC

- 1) DAMAGED PISTON/ SEALS OR IF INTERNALS HAVE POPPED/OVER STROKED MEANS INCORRECT FITMENT OF PUSHROD DURING BLEEDING - NO RFC
- 2) LEAKING CYLINDER CAN ALSO BE CAUSED BY CONTAMINATED FLUID (BLACK FLUID) - MOISTURE (CAUSES RUST) FINE PARTICLES (CAUSES FATIGUE) - NO RFC
- 3) BROKEN MOUNTINGS MEANS INCORRECT TIGHTENING PROCEDURE AND UNCLEAN SURFACE - NO RFC
- 4) IF LEAKING FROM PIPE FITTING, CHECK CROSS THREADS / OVER TIGHTENING - NO RFC
- 5) PARTS THAT HAVE BEEN OPENED AND TAMPERED WITH - NO RFC
- 6) LEAKING FROM BLEEDER NIPPLE OR BROKEN BLEEDER NIPPLE = OVER TIGHTENING - NO RFC

MAJOR SEAL DAMAGE DUE TO A SIGNIFICANT OVER STROKE OF THE SLAVE CYLINDER

### CONCENTRIC SLAVE CYLINDER



THE INTERNAL SEAL HAS SIGNIFICANT DAMAGE

- 1) A DAMAGED END CAP IS DUE TO OVER STROKING\* OR INCORRECT ASSEMBLY OF THE FRICTION PLATE (OVER STROKING WILL ALSO DAMAGE THE INTERNAL SEAL) - NO RFC  
\*OVER STROKING = DO NOT PUMP THE PEDAL RAPIDLY.

THE CSC REAR SEAL HAS BECOME DISLODGED FROM ITS SEAT

- 2) A POPPED SEAL INDICATES INCORRECT BLEEDING PROCEDURE OR INCORRECT FITMENT PROCEDURE - NO RFC

ALUMINIUM METAL FILINGS CAUSING LEAKAGE FROM GEAR SIDE

- 3) ANY CONTAMINANTS FOUND IN CLAIMED PARTS LIKE SILICONE SEALER (WHICH IS NOT BRAKE FLUID COMPATIBLE) CAN CAUSE MAIN SEAL LEAKAGE - NO RFC

- 4) A CRACKED BODY INDICATES INCORRECT MOUNTING PROCEDURE OR BLEEDING PROCEDURE - NO RFC

CRACKED CSC BEARING

- 5) CRACKED BEARING GUIDE INDICATES INCORRECT MOUNTING PROCEDURE (OVER TORQUED BOLTS OR BOLTS MISSING) OR CSC MISALIGNMENT - NO RFC

THE WEAR ON THE BEARING CONTACT FACE INDICATES THIS ISSUE

- 6) A RELEASE BEARING IN THIS CONDITION ON A CLAIMED PART INDICATES EXCESSIVE MISALIGNMENT OF THE RELEASE BEARING AS WELL AS EXCESSIVE PRE-LOAD OF THE RELEASE BEARING - NO RFC

Hydraulic cylinders are safety critical and should be fitted by a qualified person in an accredited work shop.

CPD offers a 6 month warranty on AUTO CYLINDER products, limited to material or manufacturing defects, signs of abnormal operating conditions or fitting faults are excluded.

Please include claim analysis form with all credit returns.

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