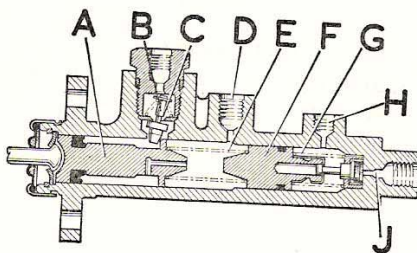


Master cylinder, overhaul—Operation L-17-A

Master cylinder, dismantle

1. Remove the metal dust cover retainer, pull back the rubber dust cover, and remove the circlip retaining the operating rod; withdraw the operating rod complete.
2. Remove the tipping valve housing adaptor, situated on top of the master cylinder. Remove the 'O' ring seal from the adaptor.
3. Depress the piston and withdraw the tipping valve assembly.



J494

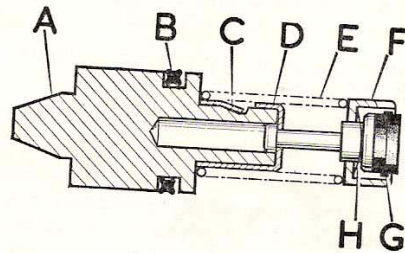
Cross-sectional view of tandem master cylinder

- | | |
|-----------------------|----------------------------|
| A—Primary plunger | F—Secondary plunger |
| B—Tipping valve | G—Secondary spring |
| C—Primary supply port | H—Rear outlet port |
| D—Front outlet port | J—Centre valve supply port |
| E—Intermediate spring | |

Note: The rear outlet port (H) is shown on top of the cylinder body for ease of explanation, whereas in actual fact it is located at 90° to the front outlet port (D)

4. Remove the primary plunger and spring, together with the remainder of the internal parts, either by shaking the cylinder body or applying compressed air to the port at the end of the master cylinder.
5. **Note:** In order to renew the centre valve head seal and special dished spring washer behind the valve head, it is necessary to dismantle the secondary plunger assembly. To do this the prong of the spring retainer must be prised away, thus releasing the secondary spring, which will immediately expand to its free length and forcibly eject the valve head and polythene spacer. Therefore, care must be taken to prevent possible injury to operator or loss of valve head parts.

6. After disengaging the spring retainer and releasing the secondary spring, disengage the valve stem from the keyhole-shaped orifice in the end of the retainer. Remove the polythene spacer, dished washer and valve head seal from the valve head. Note that the secondary spring has a 'tinned' finish for identification purposes.



J497

Cross-sectional view of secondary plunger

- | | |
|---------------------|-------------------------|
| A—Secondary plunger | E—Secondary spring |
| B—Seal | F—Spacer |
| C—Retainer prong | G—Seal |
| D—Retainer | H—Special dished washer |

Cleaning

Replace all the seals and parts with these contained in the overhaul kit. Clean the remaining parts and cylinder thoroughly with Castrol Girling Crimson Brake and Clutch Fluid. Examine the bore of the cylinder and plungers for physical score marks, ridges and corrosion. Check that the bore is smooth to touch. If there is the slightest doubt regarding the condition of the bore or the plungers, then a new master cylinder should be fitted.

Master cylinder, reassemble

1. Lubricate all parts immediately before assembly with unused Castrol Girling Crimson Brake and Clutch Fluid (Specification SAE 70 R3).
2. Fit the seals to the primary and secondary plungers.
3. Fit the valve head seal, the smallest diameter leading on to the valve head. Position the dished spring washer on the valve stem so that it 'flares' away from the valve stem shoulders, as illustrated. Fit the polythene spacer on the valve head.