



Fig. 11. Exploded view of brake master cylinder

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| 1. PUSH ROD | 5. PISTON RETURN SPRING |
| 2. CIRCLIP | 6. VALVE SPACER |
| 3. PISTON AND SEAL | 7. SPRING WASHER |
| 4. THIMBLE | 8. CENTRE VALVE AND SEAL |
| 9. MASTER CYLINDER BODY | |

To dismantle and reassemble (See Fig. 11)

1. Ease the dust cover from the piston rod end of the body.
2. Withdraw the push rod assembly from the body by releasing the circlip in the open end of the cylinder bore.
3. Eject the piston and centre valve assembly from the cylinder bore by applying low pressure air to the inlet port.
4. Detach the centre valve from the piston by easing the leaf of the thimble from the shouldered end of the piston.
5. Remove the thimble and piston return spring from the stem of the centre valve by compressing the return spring and passing the small end of the valve stem through the key hole shaped aperture in the thimble.
6. Withdraw the valve spacer and spring washer from the centre valve and ease the seal from the opposite side.
7. Ease the seal from the shouldered end of the piston.
8. Reassembling is the reverse of the dismantling sequence but particular attention must be given to the following:—
 - i. All parts must be meticulously cleaned and re-assembled in equally clean conditions.
 - ii. The seal is fitted to the centre valve, flat face first, with a liberal coating of brake fluid.
 - iii. The spring washer is fitted to the valve stem, domed face first, followed by the valve spacer so its "legs" encase the spring washer and the seal.
 - iv. The thimble is fed into the piston return spring and both fitted to the valve stem, return spring first and located centrally on the valve spacer; the return spring is compressed until the end of the valve stem can be locked in the keyhole shaped aperture in the thimble.
 - v. The tapered seal is fitted to the shouldered end of the piston, flat face first and with a liberal coating of brake fluid.
 - vi. The piston is fitted to the thimble of the centre valve assembly and both positively locked together by pressing the thimble leaf down behind the shoulder of the piston.
 - vii. Smear the piston with Girling Red Rubber Grease and feed the centre valve and piston assembly into the master cylinder, centre valve first, exercising care not to damage the fine edge of the seal and so the thimble leaf will be uppermost when the master cylinder is in its fitted position, thus the air between the piston and thimble will rise as the hydraulic system is bled of air.
 - viii. Smear the inside of the dust cover with Girling Red Rubber Grease and ensure that the circlip, which secures the push rod assembly is fully engaged in its groove inside the open end of the master cylinder.