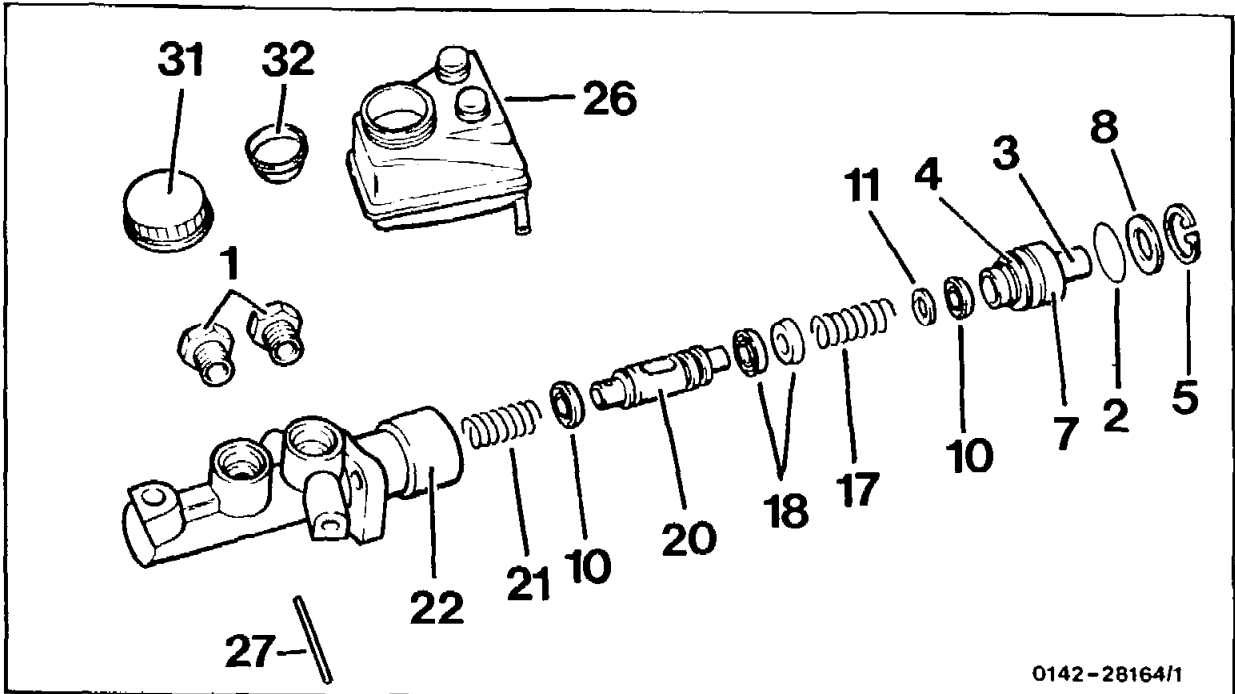


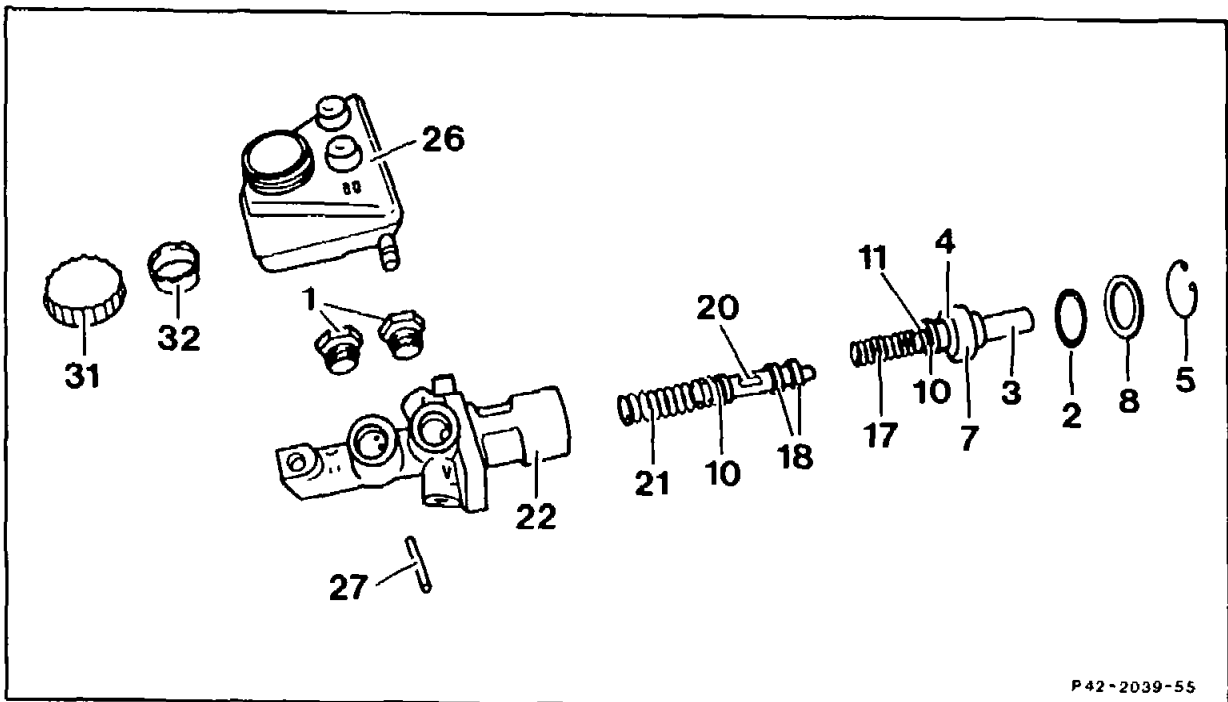
42-0315 Reconditioning stepped tandem master brake cylinder

Preceding work:
Remove stepped tandem master brake cylinder (42-0310).

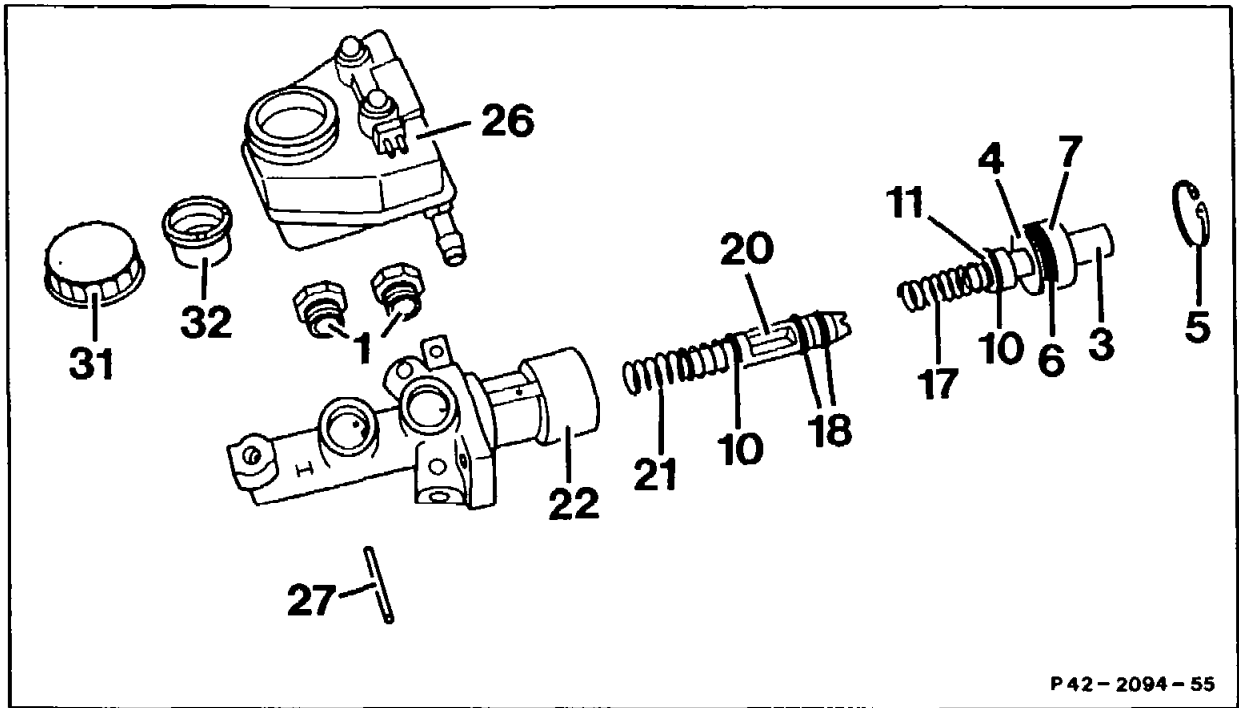
Operation no. of operation texts and work units or standard texts
and flat rates:
42-1581



Toves tandem master brake cylinder (models 124, 201)



Lucas/Girling tandem master brake cylinder (models 124, 201)



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Bendix tandem master brake cylinder (model 201)



Do not attempt to recondition the switchable master brake cylinder in model 124.036 as of 02/93.

Brake fluid supply reservoir (26), cap (31) and screen (32)

remove, clean (items 1 and 6).



Dispose of brake fluid properly!

Reservoir plugs (1)

remove, install (item 1).

Cylindrical pin (27)

pull out, insert by pressing in piston (3) (item 2).

Snap ring (5)

remove, install, remove piston (3) (item 3).

Piston (20)

knock out of housing (22) by tapping lightly (item 4).

Housing (22)

clean. Check for damage (item 5). Coat bore with brake cylinder paste.

Repair kit


install (item 5).

Data

Model		201.018 201.022 201.023 201.024 201.028 201.1	124 1) 201.029 201.034 201.035	124.034 124.036 2) 201.036	124.036 3)
Manufacturer ⁴⁾		Teves Bendix Lucas	Teves Lucas	Teves Lucas	Teves
Cylinder dia. Pushrod circuit	Zoll	7/8	15/16	1	1 1/16
	mm	22.22	23.81	25.40	26.99
Floating circuit	Zoll	11/16	3/4	3/4	1
	mm	17.46	19.05	19.05	25.4
Piston stroke Pushrod circuit	mm	17	17	17	19
	mm	15	15	15	13

1) Not 124.034/036.

2) Fitted up to 01/93 and .

3) Fitted as of 02/93, except .

4) Girling company designation replaced by Lucas.

Note

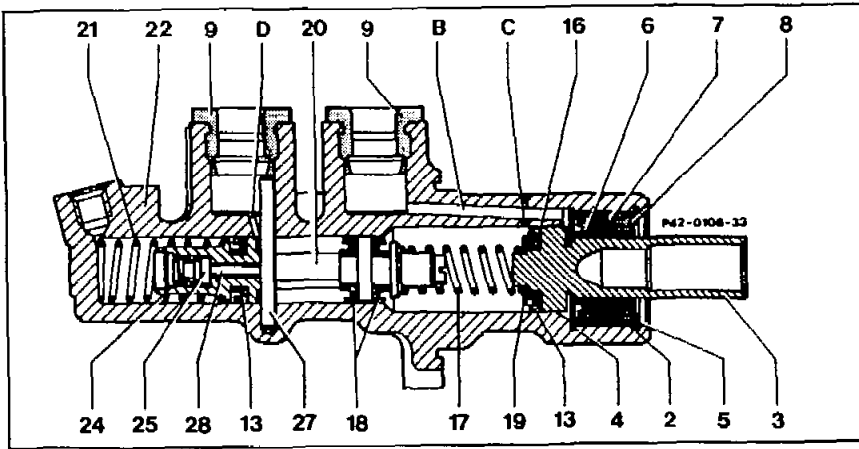
The tandem master brake cylinder with central valve is made of light alloy and does not have stop screws.

This tandem master brake cylinder is distinguished from the previous tandem master brake cylinders by an intermediate piston with integrated central valve eliminating the need for an expansion orifice in the intermediate piston brake circuit. The function of the expansion orifice in this brake circuit is assumed by the central valve.

Lubricant

ATE brake cylinder paste

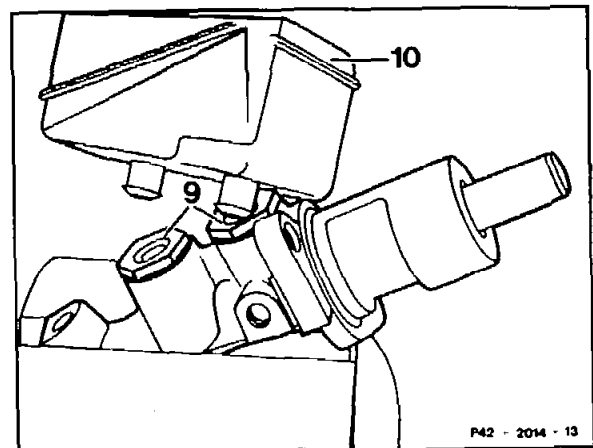




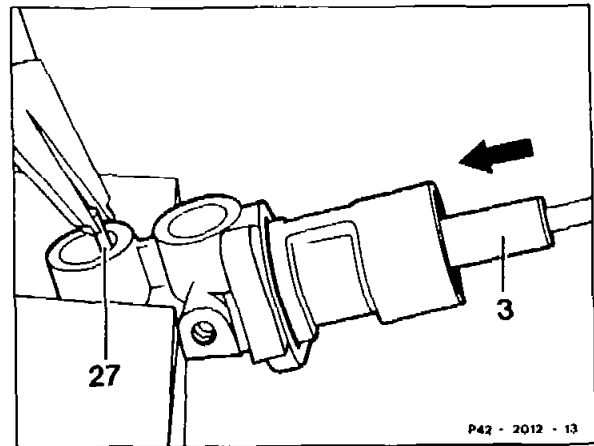
- | | | | |
|----|--------------------------|----|---------------------------|
| 2 | O-ring | 19 | Piston (floating circuit) |
| 3 | Piston (pushrod circuit) | 20 | Piston (floating circuit) |
| 4 | Stop washer | 21 | Pressure spring |
| 5 | Snap ring | 22 | Housing |
| 6 | Secondary boot | 24 | Valve spring |
| 7 | Bushing | 25 | Valve seal |
| 8 | Stop washer | 27 | Cylindrical pin |
| 9 | Reservoir plug | 28 | Valve pin |
| 13 | | B | Supply bore |
| 16 | Pressure spring | C | Expansion bore |
| 17 | Pressure spring | D | Supply and expansion bore |
| 18 | Separating boots | | |

Removal

- 1 Removal brake fluid supply reservoir (10), then pull reservoir plugs (9) out of tandem master brake cylinder

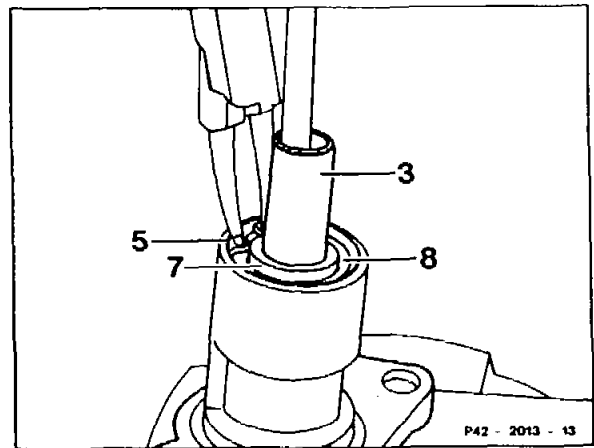


2 Press piston (3) in slightly with punch and pull cylindrical pin (27) out of housing with suitable pliers.



3 Remove snap ring (5), then remove piston (3) from housing together with secondary seal assembly.

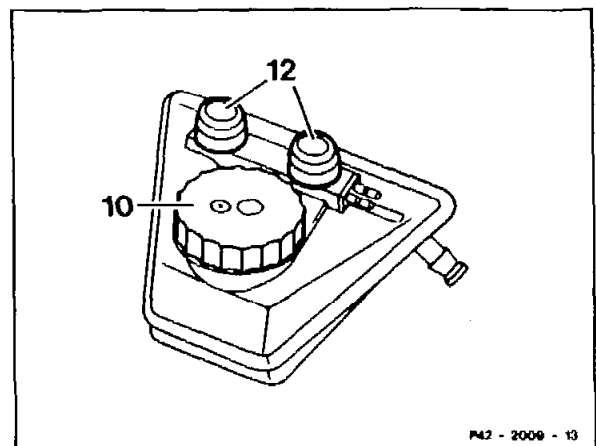
4 Tap housing against wooden base lightly to knock out complete piston for floating circuit.



5 Clean housing. Check bore for scoring and damage. **Do not overhaul housing** which are scored or damaged, i.e. replace complete master brake cylinder.

6 Screw off cap (10) and remove sieve. The contact (12) cannot be removed.

7 Clean all parts thoroughly with new brake fluid ensuring that all residues are rinsed out of the brake fluid supply reservoir.

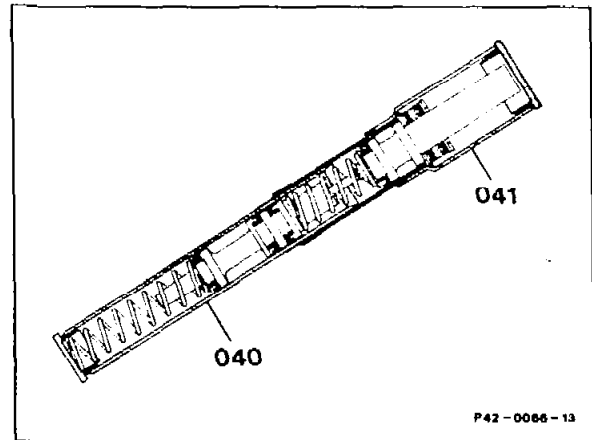


Installation

8 Coat bore in housing lightly with brake cylinder paste. Remove packing sleeves (040) from sleeve (041). Remove secondary seal assembly and piston for pushrod circuit from sleeve (041).

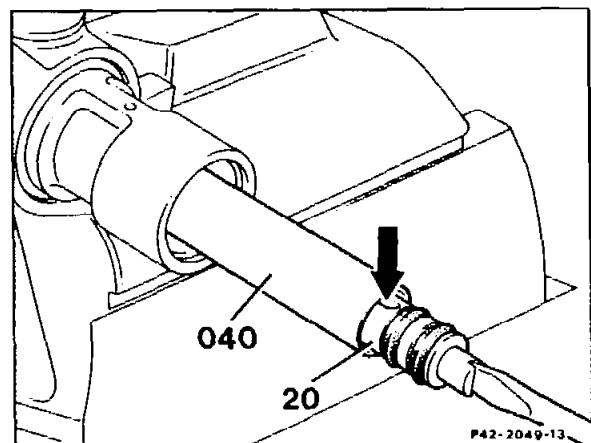
Note

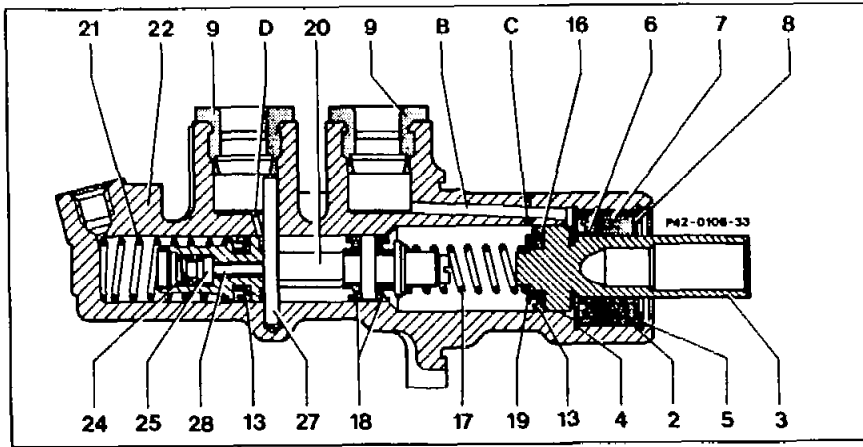
Repair kits and housings from different manufacturers can be used as desired.



9 Clamp housing at slight inclination with bore pointing downward.

Insert packing sleeve (040) into bore, then push spring and floating piston (20) into housing against stop with a screwdriver. Ensure that the guide slot in the piston (see arrow) is perpendicular. The position of the piston can be corrected as required with a screwdriver.

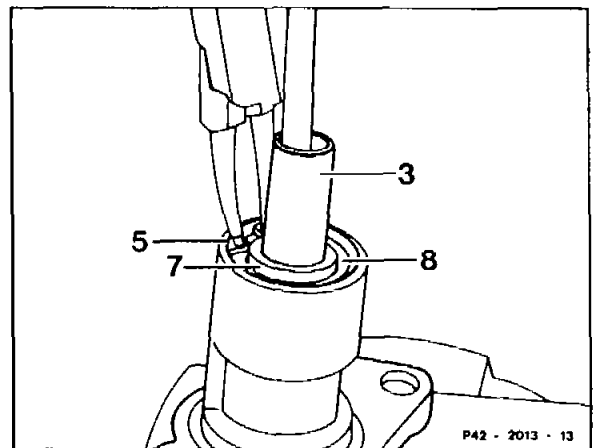




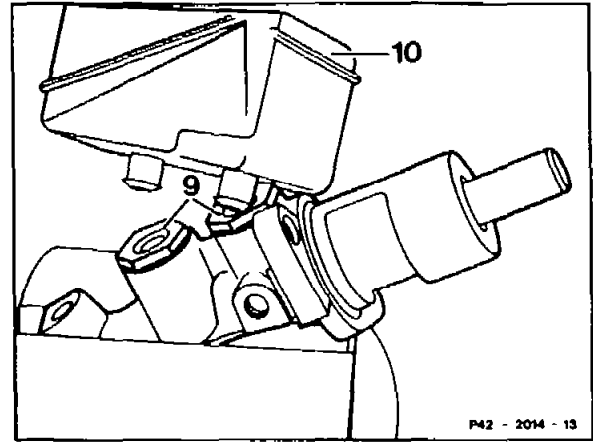
- | | | | |
|----|--------------------------|----|---------------------------|
| 1 | Reservoir plugs | 17 | Pressure spring |
| 2 | O-ring | 18 | Separating boots |
| 3 | Piston (pushrod circuit) | 20 | Piston (floating circuit) |
| 4 | Stop washer | 21 | Pressure spring |
| 5 | Snap ring | 22 | Housing |
| 6 | Secondary boot | 24 | Valve spring |
| 7 | Bushing | 25 | Valve seal |
| 8 | Stop washer | 27 | Cylindrical pin |
| 9 | Supply disc | 28 | Valve pin |
| 10 | Primary boot | B | Supply bore |
| 11 | Support ring | C | Expansion bore |
| | | D | Supply and expansion bore |

10 Insert cylindrical pin (27) into housing and through guide slot in floating piston.

11 Clamp tandem master brake cylinder so that cylinder bore points upward. Insert secondary seal assembly together with pushrod piston and spring (17) into cylinder housing and press down with punch. Hold piston (7), insert stop washer (8) and install snap ring (5). Ensure that snap ring is properly seated in groove in housing.



12 Coat reservoir plugs (9) lightly with brake cylinder paste and insert into housing. First insert one pipe fitting of brake fluid supply reservoir (10) into housing, turn 180° and press second pipe fitting into housing. Ensure that parts contact each other properly.



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