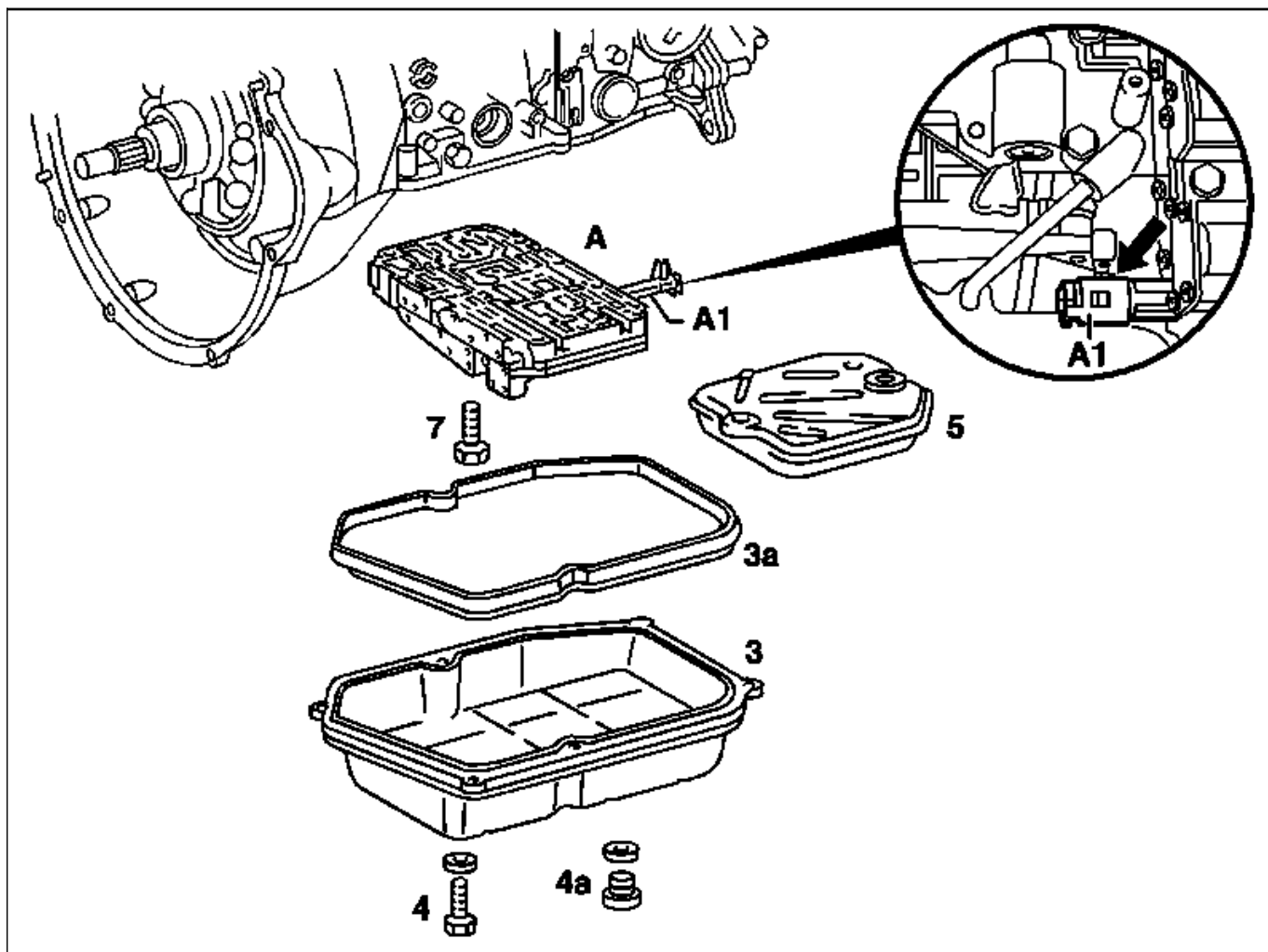


## 27-400 Removing, installing, dismantling and assembling shift valve body

Operation number of the operation texts and work units or standard texts and flat rates:  
27-5025, 27-5100.



P27-5338-57

### Note

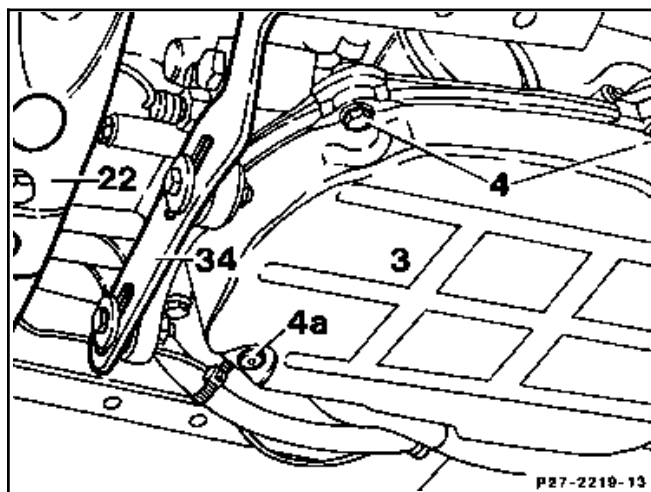
Ensure the utmost cleanliness at all times when working on the shift valve body. Work should be performed on a plastic base as far as possible. Fuzzy cloths must not be used; chamois leathers are particularly suitable. After dismantling, all parts must be washed and blown dry with compressed air.

Oil drain plug (4a) .....	Drain oil, pour in oil after repairs and correct oil level (Maintenance Manual, op. item 2710), 14 Nm (item 1).
Retaining bolts (4) .....	Unscrew, screw in, 8 Nm. Remove oil pan (3), check gasket (3a).
Oil filter (5) .....	Remove, mount.

- Shift valve body (A)..... Remove, install. To do this, unscrew and screw in bolts (7), 8 Nm. Note different bolt lengths.
- Shift valve body and damper housing ..... Range selector valve (A1) must engage in driver (item 5).  
Dismantle and assemble (items 6-12).

### Removing and installing

- 1 Unscrew oil drain plug (4a) and allow oil to drain.
- 2 Unscrew retaining bolts (4) and remove oil pan (3).
- 3 Remove oil filter.

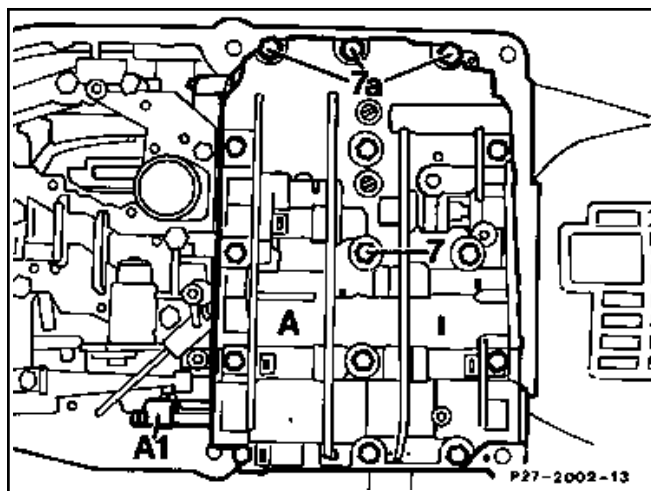


P27-2219-13

- 4 Set selector lever to "P".
- 5 Unscrew retaining bolts (7) and remove shift valve housing (A).

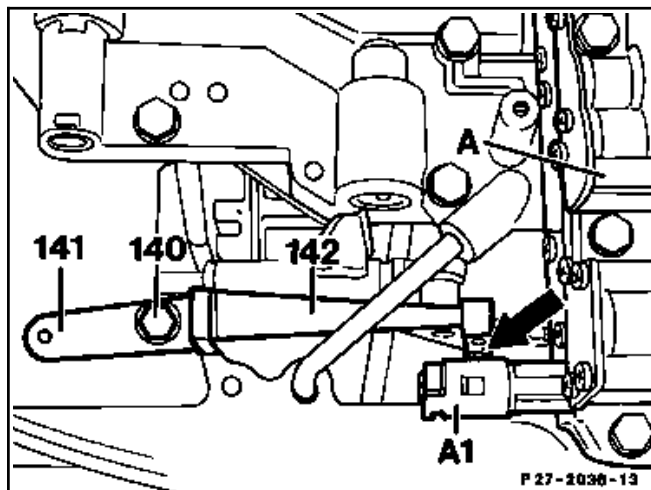
### Installation note

The three bolts (7a) are 50 mm, the others are 55 mm long. Tightening torque 8 Nm.



P27-2002-13

Ensure that the range selector valve (A1) engages in the driver (arrow).

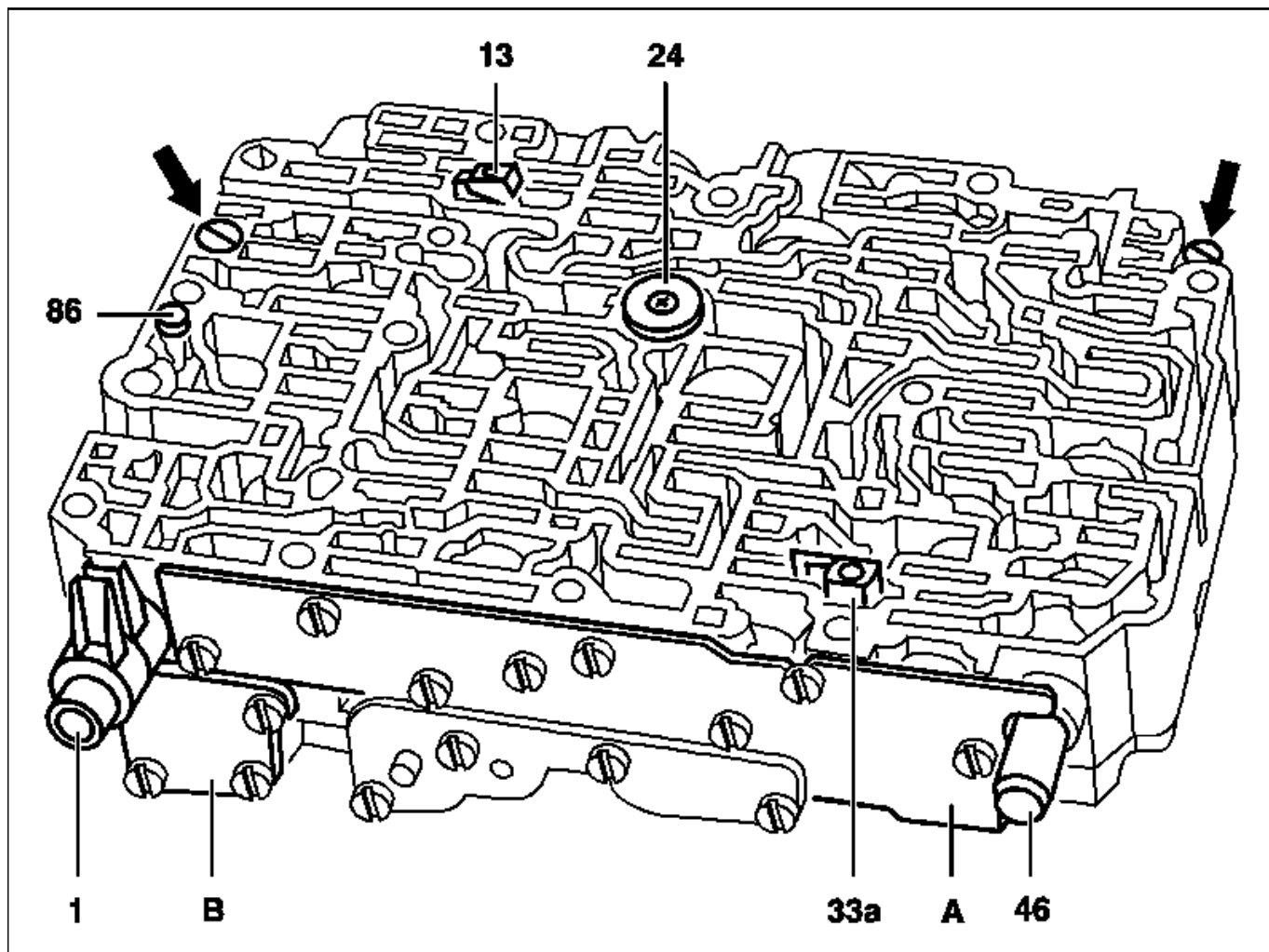


P27-2036-13

### Zerlegen, Zusammenbauen

6 Unscrew bolts (arrows). Remove valves (13, 24, 86) and strainer (33a).

7 Hold shift valve body (A) and damper housing (B) together and turn over.



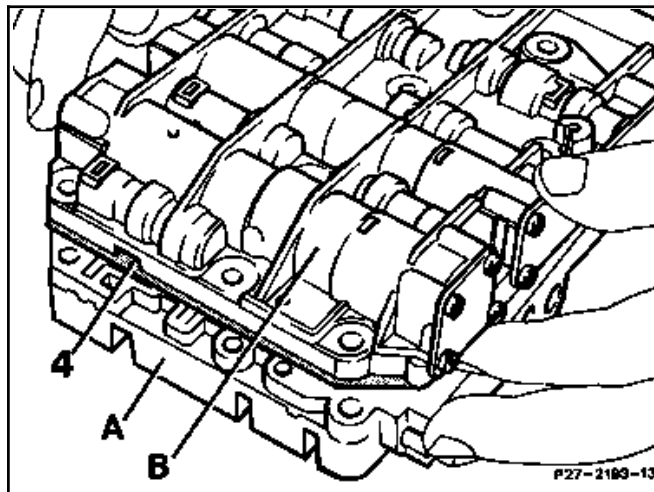
P27-5339-57

A	Shift valve housing	33a	Strainer, shift valve B2
B	Damper housing	46	Plunger regulating valve, control pressure
1	Selector valve	86	Drain valve LB 3
13	Reed-type check valve with bore		
24	Check valve, primary pump (not used any more after the omission of the secondary pump)		

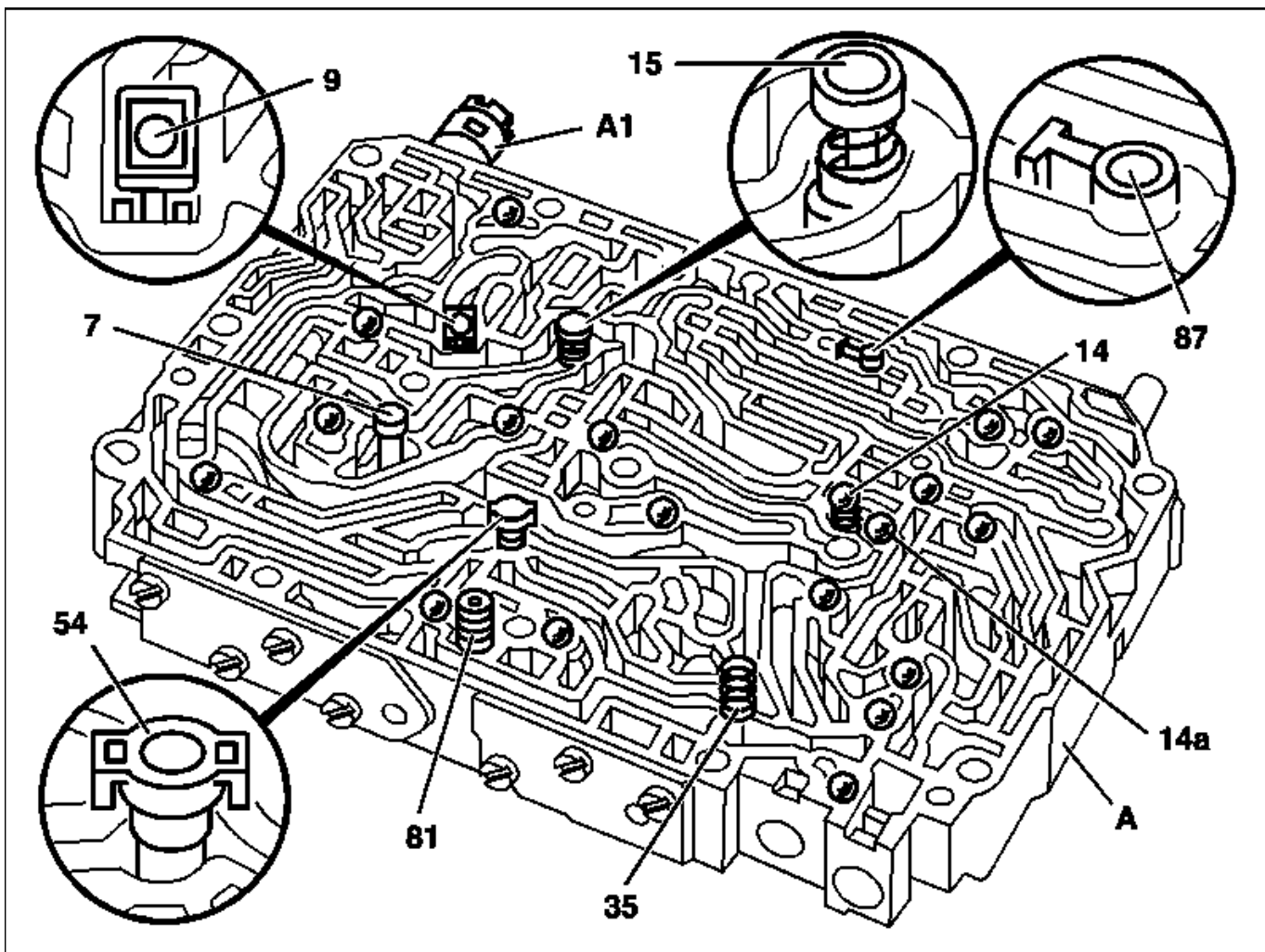
### Installation note

Only tighten bolts (arrows) slightly so that both housing sections can still be adjusted against each other, as far as the bolts permit. Insert valves (13, 24, 86) and strainer (33a) in shift valve body.

8 Carefully lift off damper housing (B) together with intermediate plate (4).



P27-2193-13



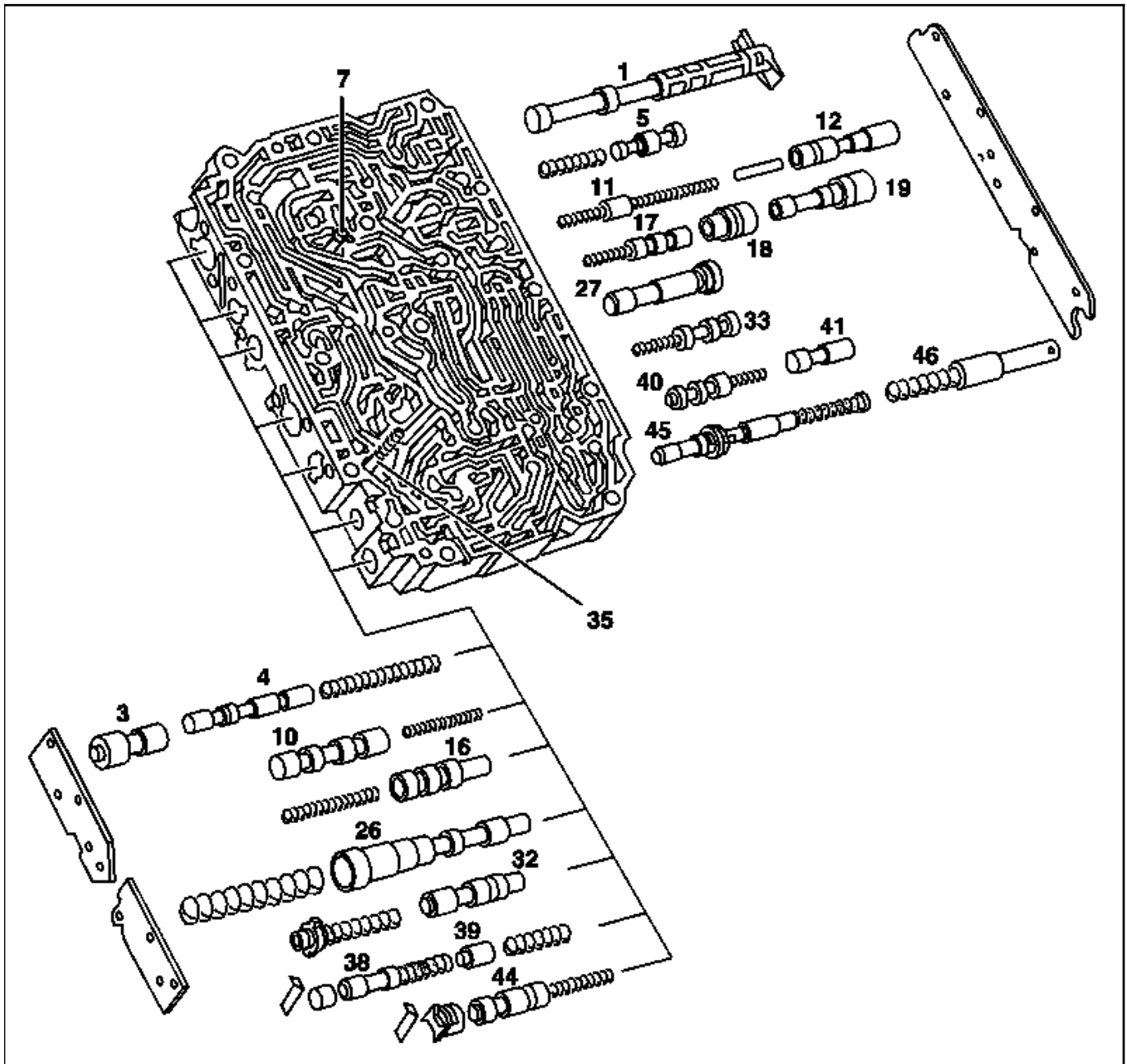
P27-5340-57

A	Shift valve body	15	Pressure valve
A1	Selector valve	35	Shift pin, lubricating pressure
7	Shut-off valve K1	54	Check valve
9	Check valve without bore	81	Strainer filter
14	Valve balls (17 or 18 each)	87	Throttle valve K2
14a	Valve ball, cut-in damper "R" omitted as from transmission no. 3 747 000		

9 Remove all 18 or 17 valve balls (14).  
The valve ball marked 14 is located on a tapered spring.

10 Take out valves, filter and shift pin.

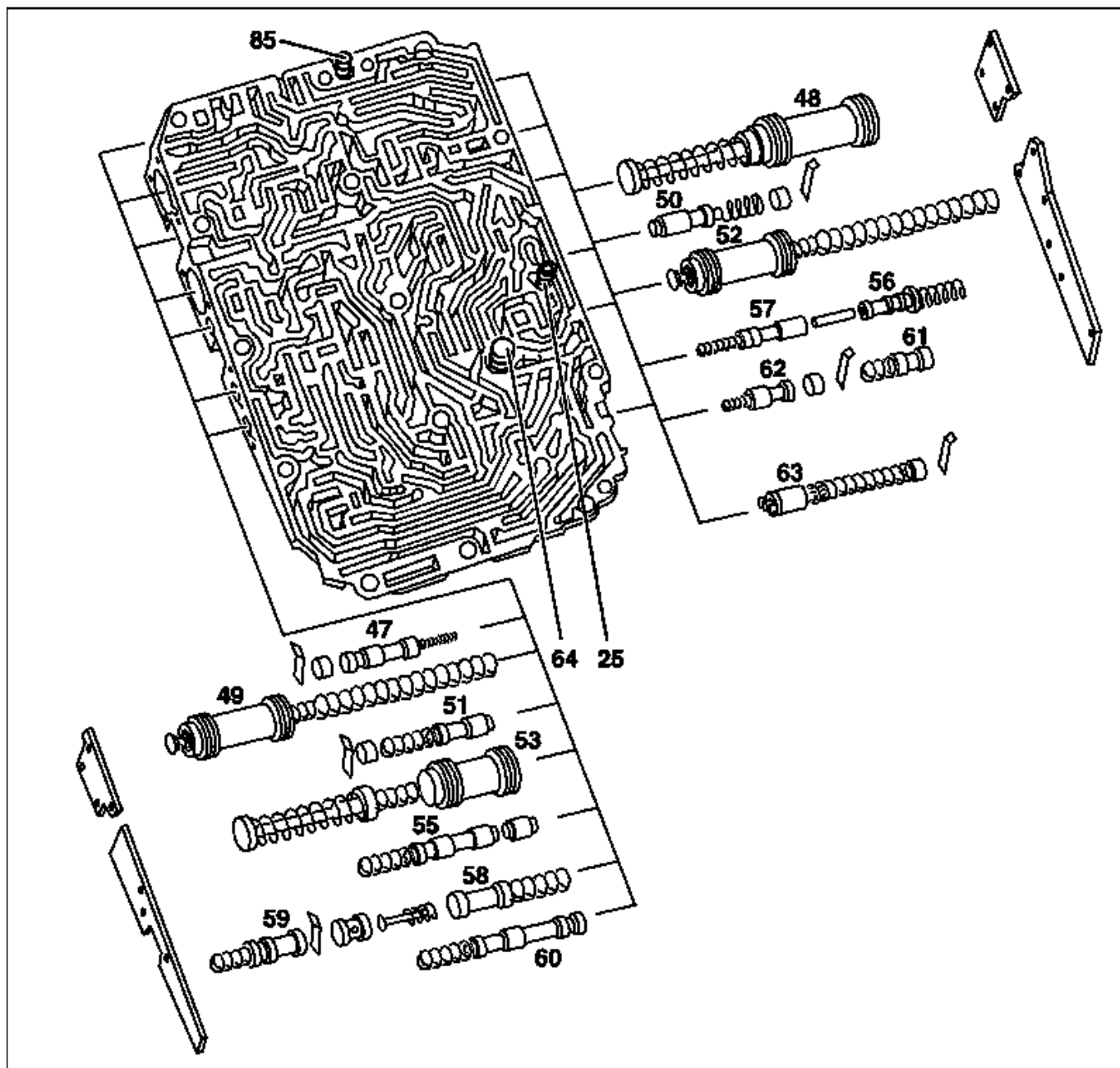
11 If necessary, unscrew side covers from shift valve body, check plungers and valves for smooth running and swarf.



P27-5341-59

1	Selector valve	26	Control valve, working pressure
3	Plunger, command valve 2 - 3	27	Plug, shift valve, bridging clutch
4	Command valve 2 - 3	32	Control valve, full throttle
5	Control valve, converter adaptation	33	Shift valve B2
7	Shut-off valve K1	35	Shift pin, lubricating pressure
10	Shift valve B1	38	Control valve B1
11	Plunger, command valve 3 - 4	39	Plunger, control valve B1
12	Command valve 3 - 4	40	Shift valve, kickdown
16	Control valve, basic pressure	41	Shift valve, governor pressure
17	Command valve 1 - 2	44	Booster valve, governor pressure
18	Sleeve, command valve 1 - 2	45	Control valve, control pressure
19	Plunger, command valve 1 - 2	46	Plunger, control valve, control pressure

12 If necessary, unscrew side covers from shift valve body, check plungers and valves for smooth running and swarf.



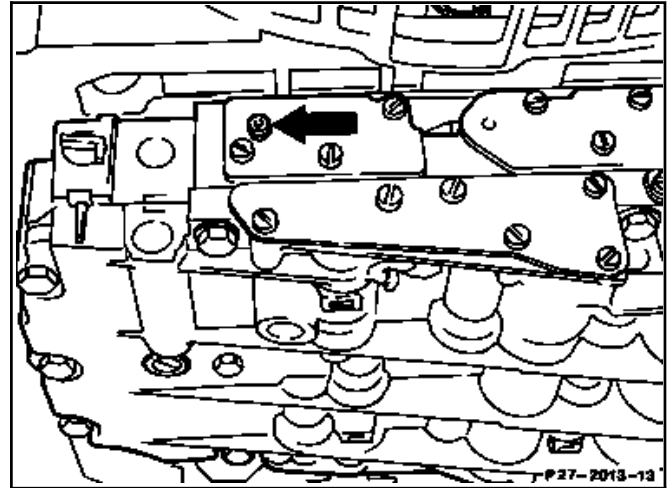
P27-5342-59

25	Valve, vacuum (modulating pressure)	57	Control valve, damper B1
47	Control valve, shift pressure	58	Control valve, damper switching on (inoperative as of transmission no. 3 447 000)
48	Damper K1	59	Shift valve K2
49	Damper K2	60	Detent valve B2
50	Control valve, damper K1	61	Shut-off valve, brake circuit
51	Control valve, damper K2	62	Shut-off valve, RV1
52	Damper B1	63	Damper, kickdown
53	Damper switching on	64	Lubricating pressure valve
55	Shut-off valve RV2	85	Pressure limiting valve
56	Shift valve, sliding gearshift		

## Installation note

Depending on the model of transmission or vehicle, the springs are installed either in front of or behind the valve. For this reason, the sequence of valves and springs must be noted when dismantling the shift valve housing or the damper housing.

13 The arrow indicates the location of the hexagon socket screw for the full-throttle control pressure. Rotating the screw clockwise produces earlier full-throttle or kickdown upshifts. The opposite direction delays the upshifts.



P27-2013-13