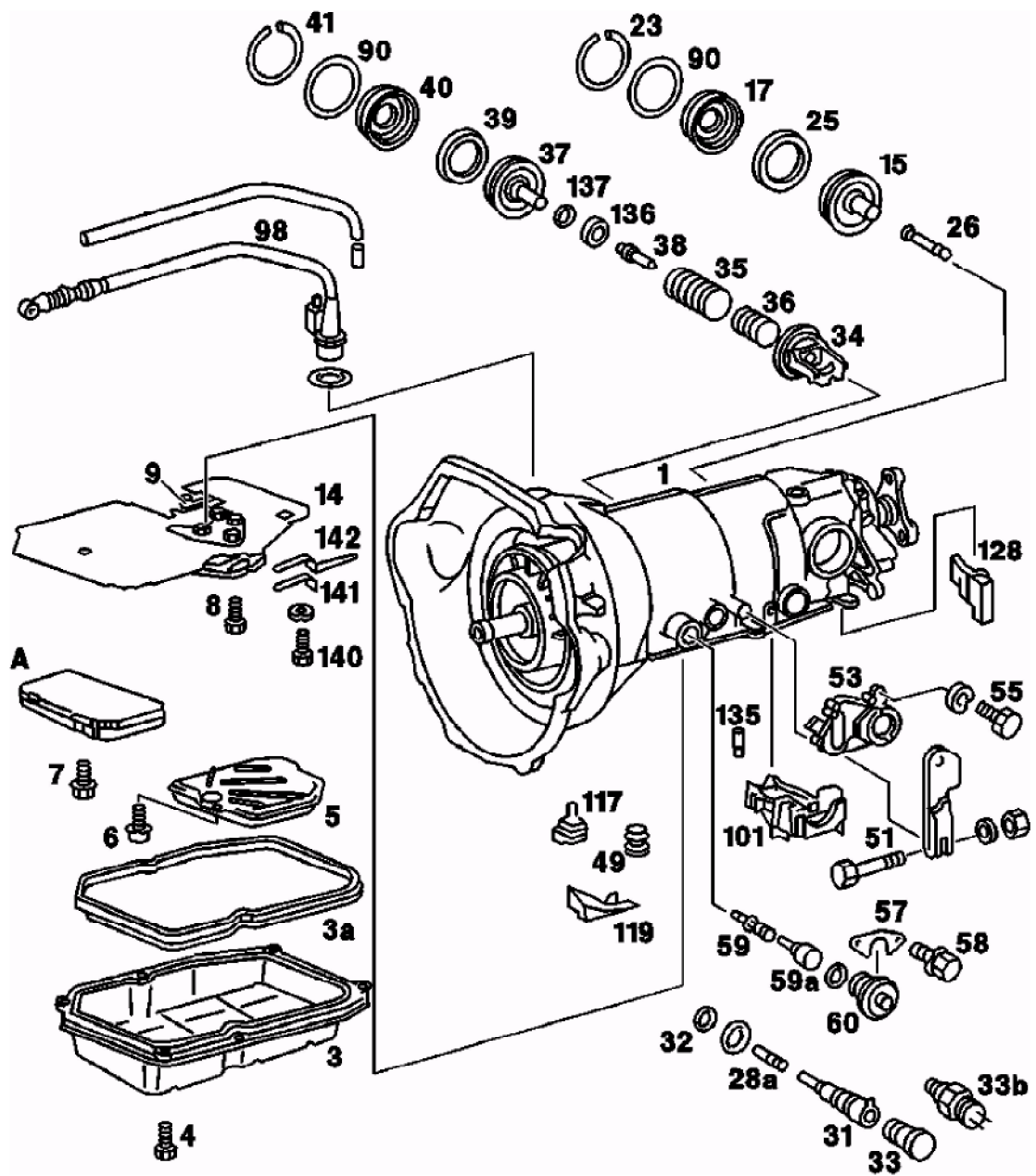
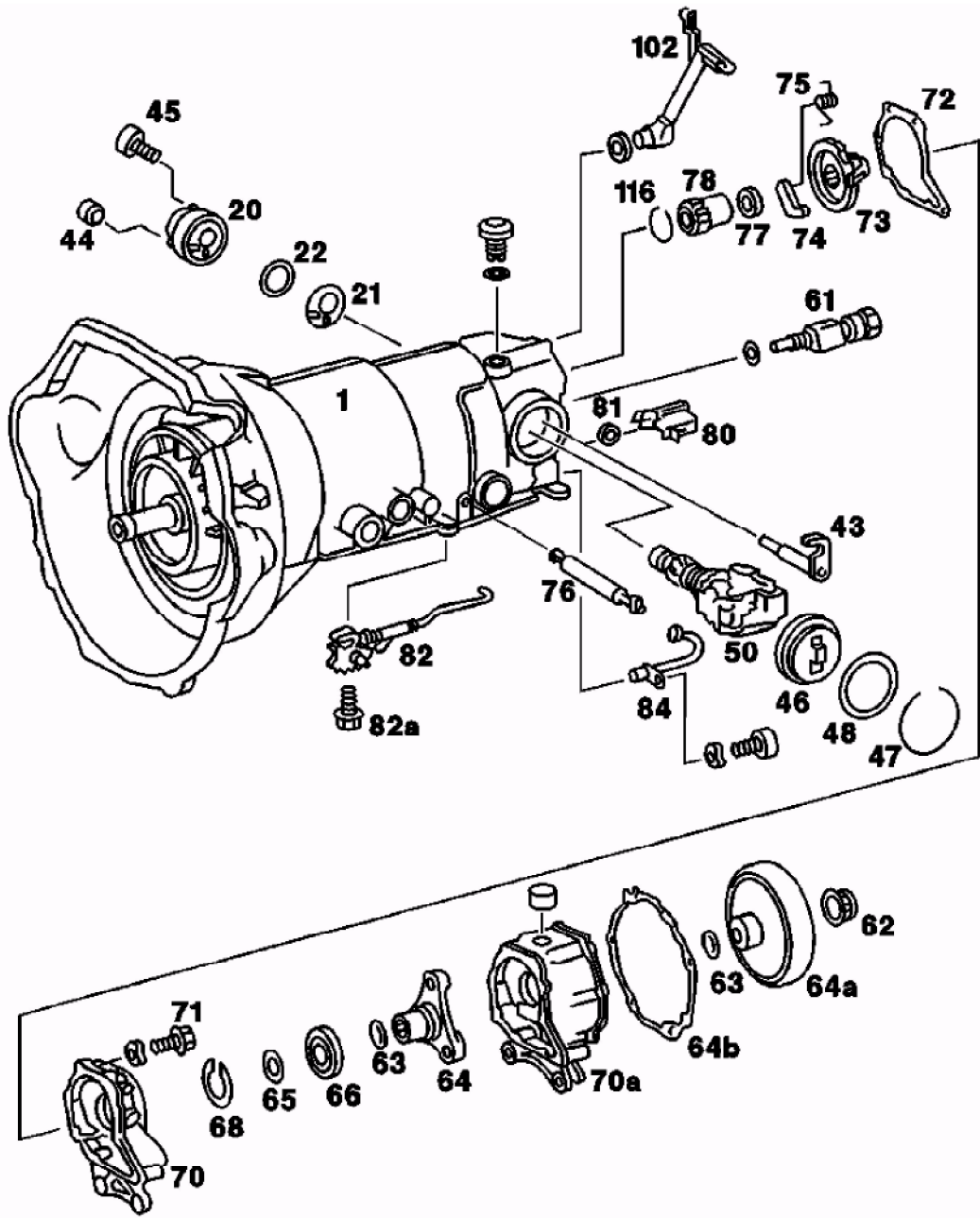


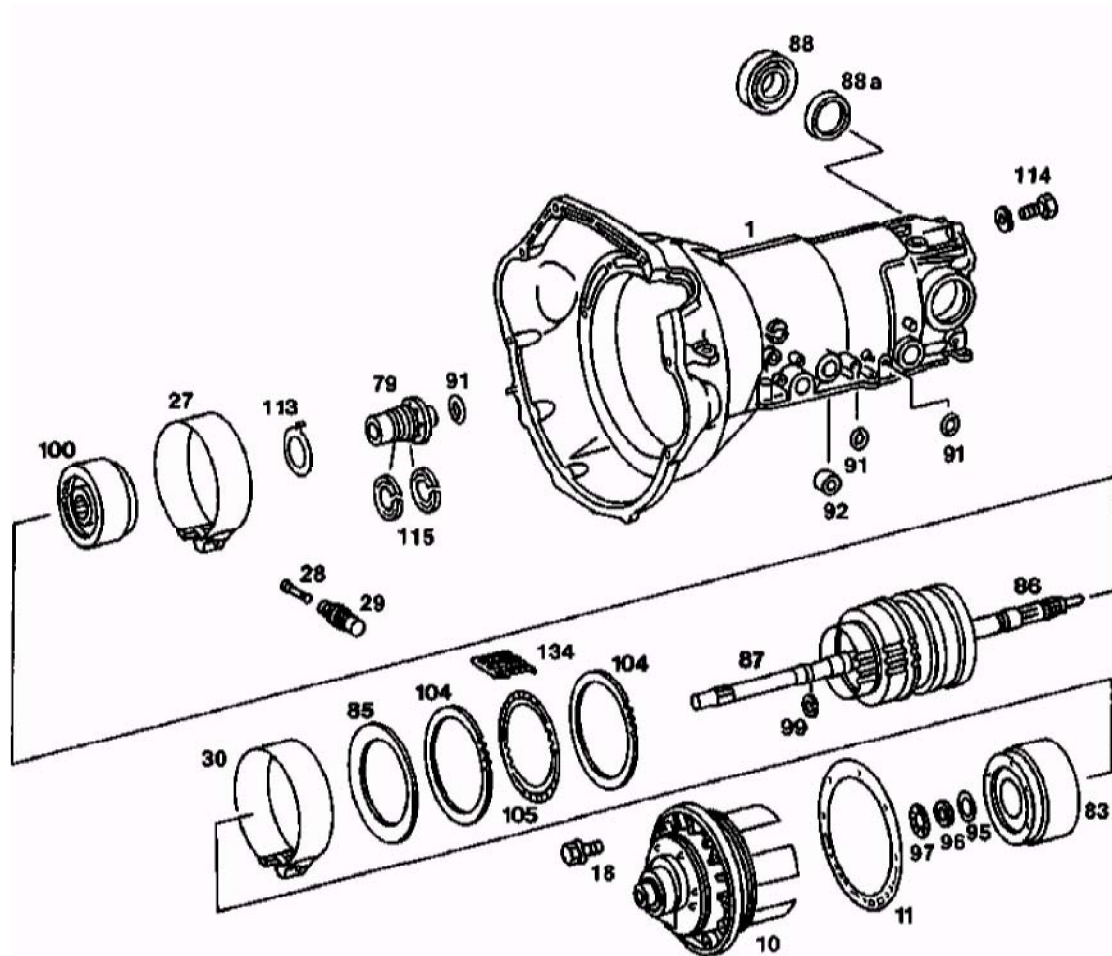
Operation no. of operation texts and work units or standard texts and flat rates: (07-4010)



Control pressure cable (98)	Slacken, remove and attach locking device with screwdriver (item 1)
Transmission (1)	Clamp on assembly trestle 116 589 06 59 00 and mounting plate 126 589 10 63 00 (item 2).
Oil pan (3)	Remove, install. Hexagon bolts 8 Nm (item 3).
Oil filter (5)	Remove, install. Cross-head bolts 4 Nm (item 4).
Shift valve housing (A)	Remove, install (27-400), 8 Nm, note different length of bolts (item 5).
Leaf spring (142) and bracket (141)	Remove and install with hexagon bolt (140), 8 Nm (item 6).
Lower cover (13) with intermediate plate (14) and oil Pipe (9)	Remove, install. Bolts with washers (8), 8 Nm. Raise complete unit and dismantle lower cover (27-435). Check clearance between shut-off plunger and stop for spring linkage (0.4-1.0 mm) (item 7).
One-way valve (49), brake band guide B2 (101), locating pin (135), oil deflector (119), temperature throttle (117)	Remove, install (item 8).
Filler piece (128)	If fitted, check that it is secure.
Brake band plunger cover B2 (17)	Remove by extracting circlip (23) (item 9).
Brake band plunger B2 (15)	Remove, install. When installing, adjust clearance "L" with thrust pin (26) 5.5 - 6 mm (item 127).
Brake band plunger B1 (37)	Remove and install with assembly device 201 589 03 59 00. Remove circlip (41), cover (40) and return springs (35, 36). When installing, adjust clearance "L" to 1.8 - 2.4 mm as described in items 118 to 124. Check measuring device 126 589 06 21 00, lip sealing ring (39) (items 12-15).
Brake band guide B1 (34)	Remove, install (item 16).
Thrust element of thrust bearing B1 (31)	Remove, install; unscrew, screw on screw plug (33) or transmission overload protection switch (33b), 70 Nm. Replace O-rings (32) (item 17).
Range selector lever (52)	Pull off by unscrewing hexagon bolt (51), 8 Nm (item 19).
Starter lockout switch (53)	Remove by unscrewing bolts (55), 8 Nm. Locate when installing (see item 20).
Vacuum unit (60)	Remove and install with retaining plate, 8 Nm. Remove and insert modulating pressure control valve (59) and heat expansion pin (59a) (items 21,22).



Kickdown solenoid valve (61)	Unscrew, screw on, 20 Nm (items 23, 111).
Joint flange (64), or internally-gear wheel (64a)	Remove, install. Slacken twelve-point collared nut (62), 120 Nm, lock (items 24, 110). Wrench socket 126 589 02 09 00.
Washer (65)	Remove (item 25).
Rear transmission cover (70) or adapter housing (70a)	Unscrew, screw on hexagon bolts (71), 13 Nm (8.8), or 28 Nm (12.9). Then remove cover by tapping gently with a hammer and dismantle (27-440). Check seal (items 26, 27, 107).
With electronic speedometer, parking lock gear (73) with rotor, parking lock pawl (74) and spring (75)	Remove, install (items 29, 103, 104).
Oil pipe (102) for mechanical speedometer drive	Disconnect, connect (item 30).
Parking lock gear (73), parking lock pawl (74) and spring (75)	Remove, install (items 30, 103, 104).
Shim (77)	Determine thickness by measuring axial play of output shaft (item 105). Attachment 126 589 04 31 00 Measuring sleeve 126 589 06 14 00
Plastic guide (80) and roller (81)	Pull off, push on (items 31, 100 and 101).
Spring linkage with notched plate (82)	Unscrew, screw in hexagon socket bolt (82a), then pull out shaft (76) and remove notched plate (item 32).
Oil pipe (84)	Remove, install, 8 Nm (items 33, 97).
Secondary pump (20)	Remove, install. Nut (44) 6 Nm, allen bolts (45) 8 Nm, (items 35, 96). Remove O-ring (22) and intermediate plate (21) (items 36, 94).
Centrifugal governor (50)	Pull out after removing circlip (47) and cover (46), insert. To do this, the axial retainer (43) must be swiveled back (items 37 - 38, 90 - 92).
Axial retainer (43), helical gear (78) and snap ring (116)	Remove, install (items 39 - 41, 88, 89).

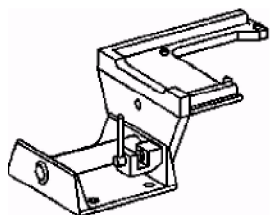


P27-0153-59

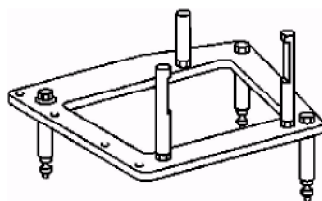
<p>Front transmission cover (10)</p>	<p>Remove, install complete. Bolts with washers (18) 13 Nm, dismantle (27-630), note location of teflon rings. Before installation, measure axial clearance "B" for clutch K1 and adjust. 0.4 - 0.6 mm (see item 83). Then insert shim (95), friction ring (96) and axial bearing into clutch K1.</p>
<p>Gear set (69)</p>	<p>Remove complete. When installing, adjust clearance "L" = 1.5 - 2.0 mm of multiple-disc clutch B3 (item 76). Insert discs (133) and belleville spring (85) (item 44).</p>
<p>Brake band B1 (30) and clutch K1</p>	<p>Remove and install with gear set (see items 45, 78).</p>
<p>Damping spring (134)</p>	<p>Remove, install (item 47, 74).</p>
<p>Thrust pin (28)</p>	<p>Remove, install (item 48, 125).</p>
<p>Clutch K2 (100)</p>	<p>Pull out; when installing, push onto gear set and push in with gear set (items 49, 69).</p>
<p>Brake band B2 (27)</p>	<p>Remove, install by compressing brake band as much as possible (68) (items 50, 68).</p>
<p>Support disc (113)</p>	<p>Remove, install (item 66).</p>
<p>Thrust element B2 (29)</p>	<p>Pull out, check and insert with tab upwards (items 51, 64).</p>

Support flange (79)	Remove, install. Bolts (114) 11 Nm. Stick teflon rings (115) into groove with grease (items 54, 60 - 62).
Guide ring (88a) and lip sealing ring (88)	Check and replace if necessary. Drift is shop-made tool (item 56).
O-rings (91, 92), sealing rings (92) and aluminum sealing rings (90)	Check and replace if necessary (items 57 - 59).

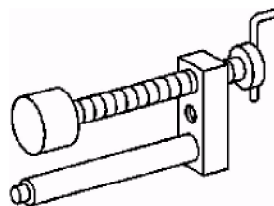
**Special tools**



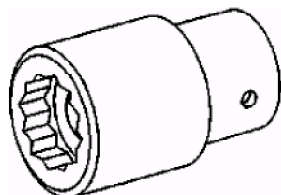
116 589 06 59 00



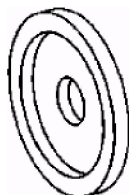
126 589 10 63 00



201 589 03 59 00



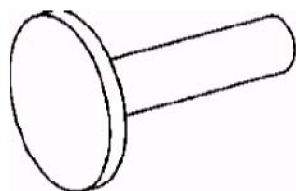
126 589 02 09 00



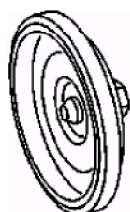
129 589 06 23 00



126 589 04 31 00



126 589 00 35 00



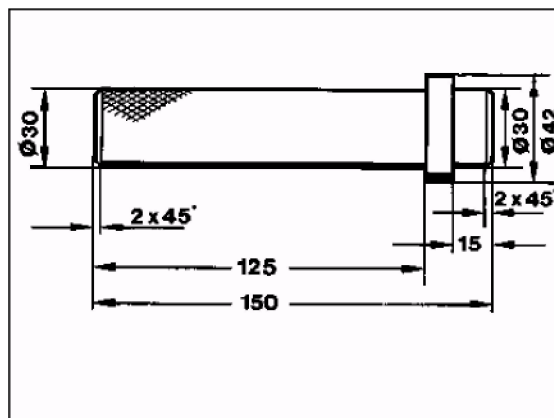
126 589 06 21 00



000 589 52 37 00

**Shop-made tool**

Drift



## Adjustment data

mm

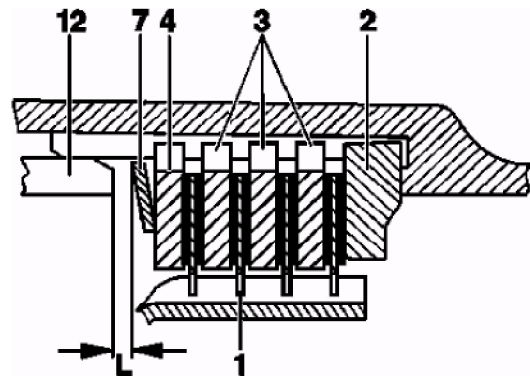
Total axial play, in clutch K1 and K2	0.6-1.0
Clearance "L" of multiple-disc brake B3	1.5-2.0
Clearance between linkage stop and shut-off plunger in spring linkage	0.4-1.0
Clearance, brake band B1	1.8-2.0
Clearance, brake band B2	5.5-5.7
Axial play of output shaft "C"	0.4+0.1

## Dimensions

Shims, axial bearing K1	0.1; 0.2; 0.5
Shims, helical gear/parking lock gear	0.1; 0.2; 0.5
Thrust pin, brake band plunger B2	47.2; 48.0; 48.8 and 49.6
Washers for thrust pin, brake band plunger B1	0.5; 1.0 and 1.5

Multiple-disc sequence for LB3  
Plunger side

- 1 Inner multiple-discs
- 2/3/4 Outer multiple-discs
- 7 Disk spring
- 12 Above plunger LB3



P27-5322-13

## Disc versions

Designation	Item No.	Thickness in mm
Inside discs	1	2.1
Outside discs	2	7.7
	3 optional for compensating play	2.3 or 2.8
	4	2.8; 3.3; 3.8

## Note

During assembly, particular care must be taken when handling the sealing surface of the oil distributor plate cast in the transmission housing. The utmost cleanliness must also be ensured. The transmission will only function properly if there is no dirt on the transmission components or in the oil circuit. For this reason, always remove sealant residues after dismantling, wash all parts carefully, flush out oil channels and blow clean with compressed air.

Rubber seals must not be permitted to come into contact with benzine, which may attack the rubber. Use alcohol to clean rubber parts.

Also ensure that the parts do not come into contact with woolen cloths, as any fuzz adhering to the parts may result in malfunctions.

In vehicles with 4MATIC, the adapter housing with internal gear is fitted in place of the rear transmission cover and 3-arm flange. The repair procedure is largely identical for both versions.