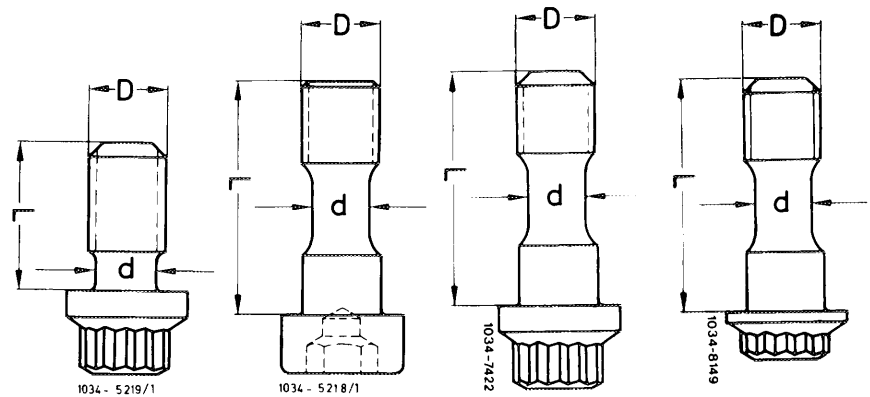


03-410 Removal and installation of flywheel and driven plate

Necked down screws	for manual transmission	for automatic transmission
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		1st version	2nd version	3rd version
Part no.		615 032 05 7	108 990 03 19	110 990 03 19
Thread dia D		M 10 x 1	M 10 x 1	M 10 x 1
Necked down dia d	when new	8.5-0.2	7.7-0.2	7.7-0.2
	minimum dia	8.1	7.3	7.3
Length L		20	31	31

Tightening torques

Necked down screw for driven plate and flywheel	Initial torque	40 Nm
	Torque angle	90-100°

Special tool

Detent



116 589 01 40 00

Note

Do not mix up flywheel for automatic transmission of 110 engine with flywheel for automatic transmission of 4-cylinder engines 115 and 615.

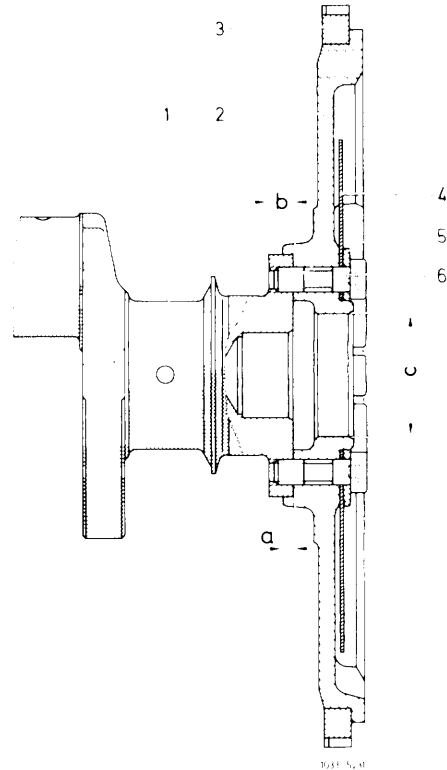
Engine 110 dimension a = 4.5 mm

Engine 115 and 615 dimension a = 6.5 mm

On exchange engines, the mounting bore in flywheel of 35 mm dia can be bored to 50.00–50.016 mm dia (50 H6) for transmission with hydraulic clutch (722.200/202).

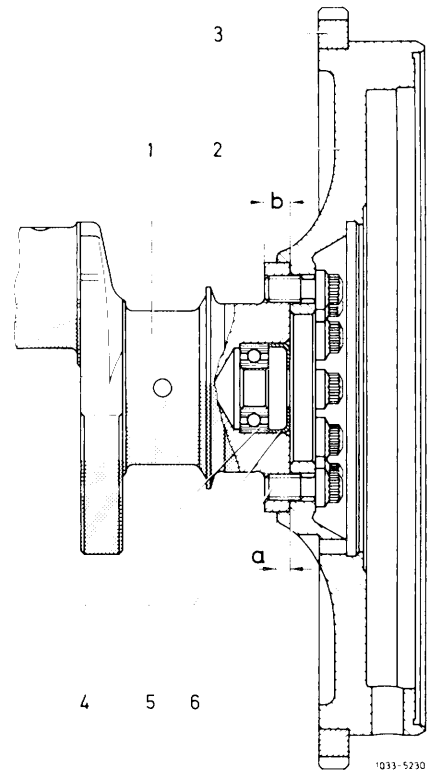
Layout of flywheel and driven plate for automatic transmission

- | | |
|---------------------|--|
| 1 Crankshaft | a = 4.5 mm |
| 2 Flywheel | b = 10 mm |
| 3 Ring gear | c = 50 mm dia (transmission with hydraulic clutch 722.200/202), transmission type K4C025 |
| 4 Driven plate | |
| 5 Disc | |
| 6 Necked down screw | c = 35 mm dia. (transmission with torque converter 722.1), transmission type W4B025 |



Layout flywheel for manual transmission

- | | |
|----------------|---------------------|
| 1 Crankshaft | 5 Closing ring |
| 2 Flywheel | 6 Necked down screw |
| 3 Ring gear | a = 5 mm |
| 4 Ball bearing | b = 10 mm |

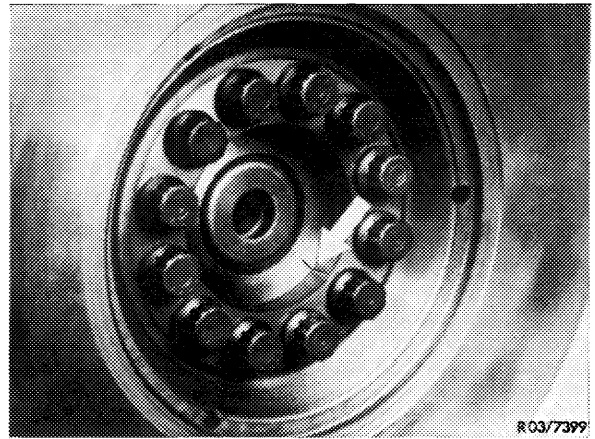


Removal

1 Loosen necked down screws, remove flywheel, driven plate and spacing washer.

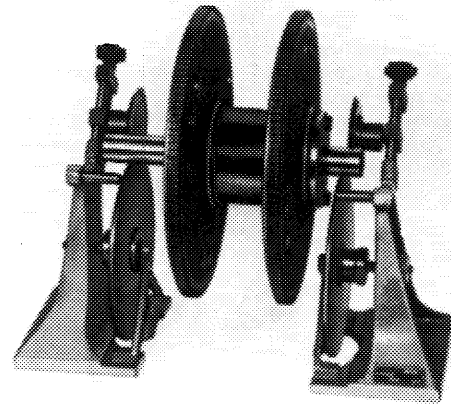
Note: The flywheels and the crankshaft are marked together (arrow).

Flywheel manual transmission



Installation

Note: If a new flywheel is installed, unbalance should be the same as for old flywheel (03-440).



2 Measure necked down dia d of necked down screws.

When the minimum dia is attained, replace necked down screws.

Necked down screws 1st and 2nd version for automatic transmission can be replaced by 3rd version.

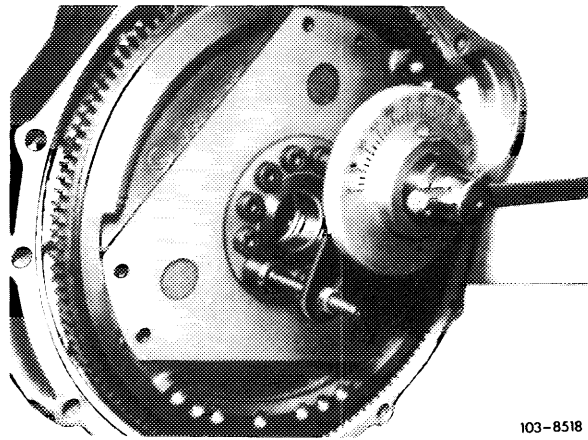
3 Position flywheel on crankshaft journal in such a manner that the markings (arrow) are in alignment.



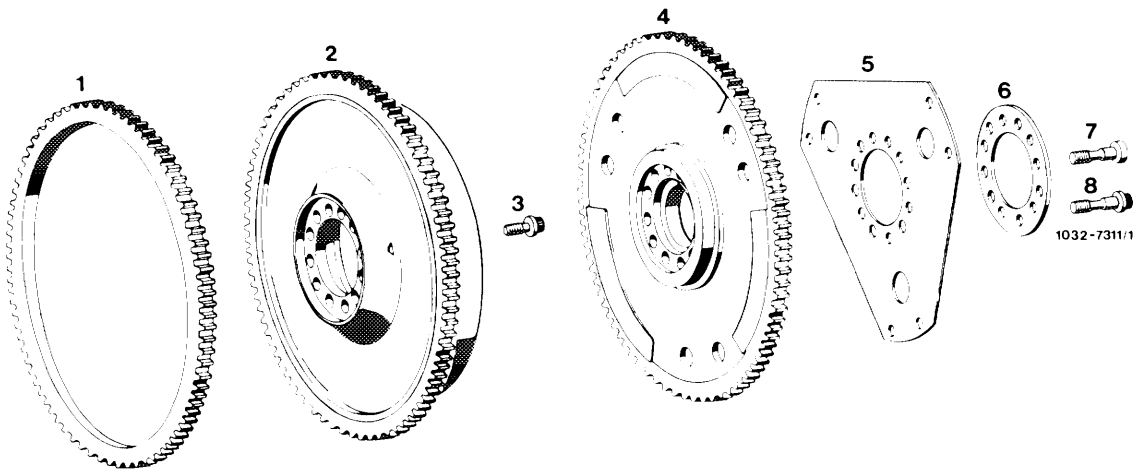
Flywheel automatic transmission

4 Screw-in necked down screws and pre-tighten to 30–40 Nm with torque wrench.

5 Complete angle of rotation torque 90–100° by means of angle of rotation wrench.



103-8518



- 1 Starter ring gear
- 2 Flywheel with starter ring gear for manual transmission
- 3 12 necked down screws
- 4 Flywheel with starter ring gear for automatic transmission

- 5 Driven plate
- 6 Spacing ring
- 7 12 necked down screws 1st version
- 8 12 necked down screws 2nd and 3rd version