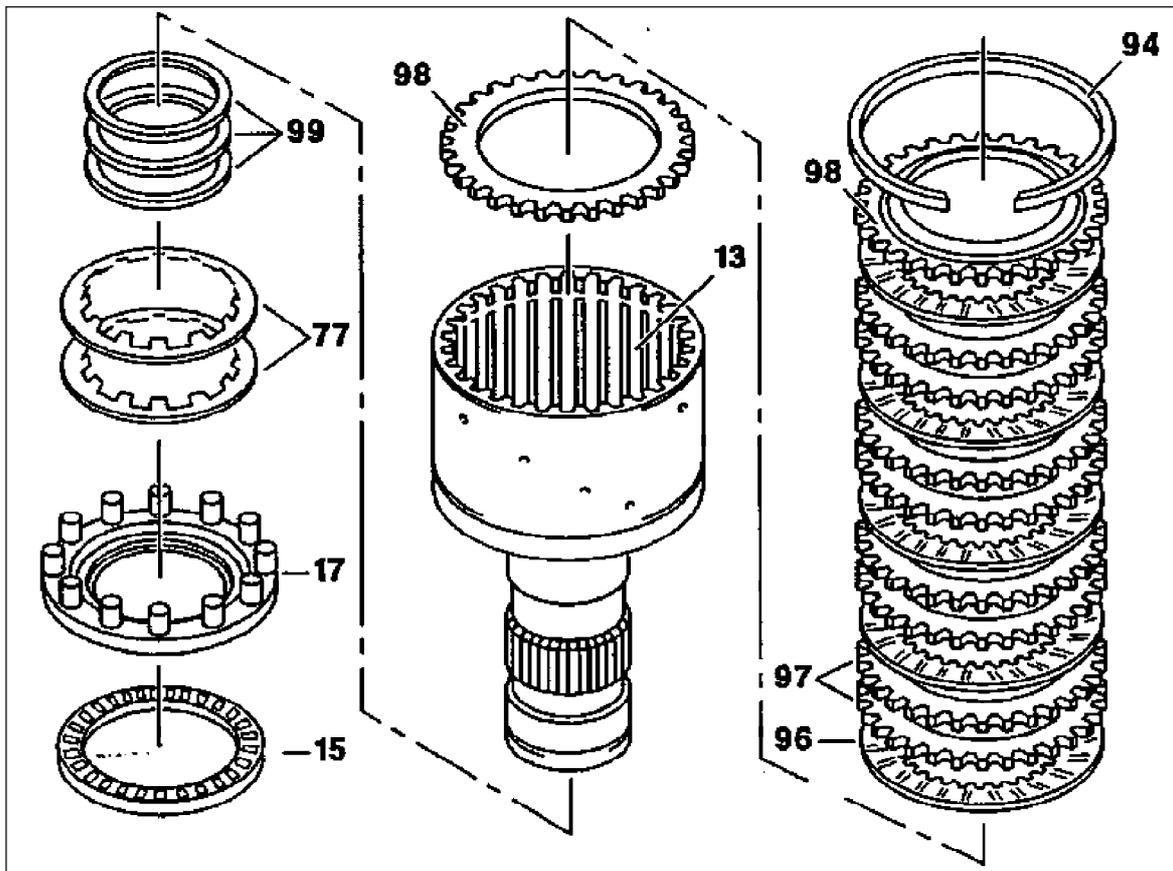


28-302 Repairing outer multi-disk carrier of front axle drive train (AV)

Preceding work:

Outer multi-disk carrier of front axle drive train (AV) removed (28-300, section C).

A. Dismantling and assembling



P28-5078-57

| | |
|---|--|
| Snap ring (94) _____ | Remove, install. Remove multi-disk stack. Replace burnt disks. |
| Final disk (98) _____ | Install. Alternately install one inner multi-disk (96) and two outer multi-disks (97). |
| Outer multi-disk carrier of front axle drive train (AV) _____ | Measure. |

Note

Place new disks in ATF oil for approx. 1 hour prior to assembly.

B. Checking pre-load of front axle drive train disk spring and adjusting, if necessary.

Note

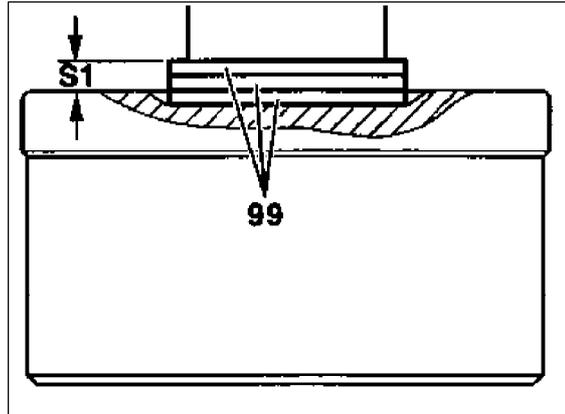
This check is only required after replacing the transfer case housing, the front axle drive train piston or thrust pad.

1st version: Transfer case no. 1 to 13 710

1 The dimension "S1" is adjusted by inserting different shims (99).

Basic dimension: S1=0.9 mm

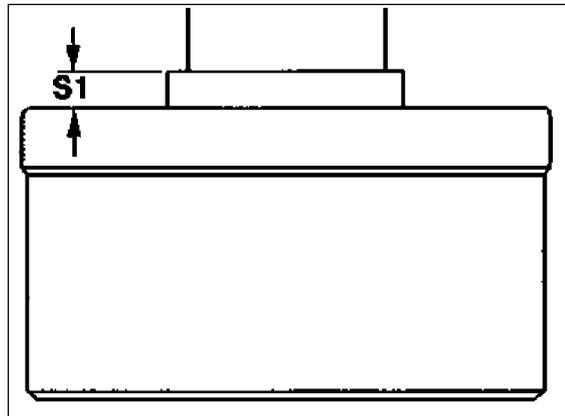
Shims are available in the following thicknesses 0.5; 0.6; 0.7; 0.8 and 0.9 mm.



P28-5074-13

2nd version: Transfer case no. 13 711 to 26 616

The dimension "S1" is specified by the design. Adjustment via shims is not necessary.

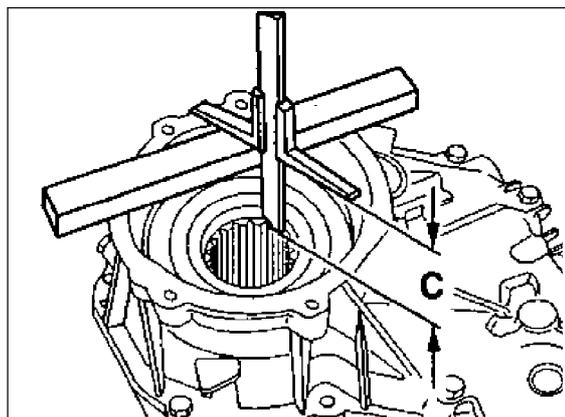


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3rd version: Transfer case no. 26 617!

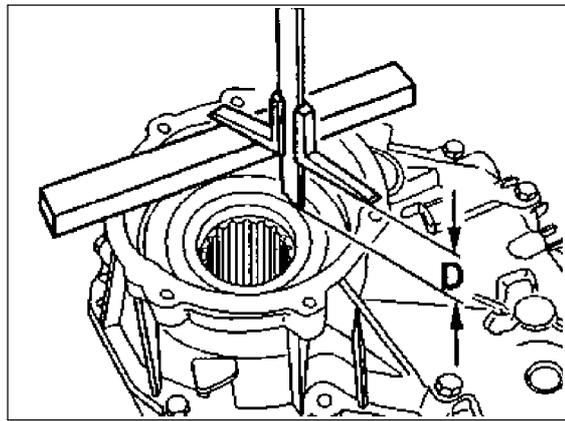
Calculate dimension "A1".

2 Determine the dimension "C" between the end face of gear and sealing surface of the transfer case housing using measuring bridge 124 589 03 31 00 and depth gauge.



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3 Determine the dimension "D" between the stop face of thrust bearing and sealing surface of the transfer case housing using measuring bridge 124 589 03 31 00 and depth gauge.



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4 Calculate dimension "A1"

Calculation formula: $A1 = C - D$

Specified dimension: 19.5 - 20.1 mm

Example:

C = 88.4 mm

D = 68.4 mm

$A1 = 88.4 - 68.4 \text{ mm} = 20.0 \text{ mm}$

5 Determine thickness "S1" of shims.

Calculation formula: $S1 = 21.8 - A1$

Specified dimension: 1.6 - 2.3 mm

Note

The dimension 21.8 mm is specified by design.

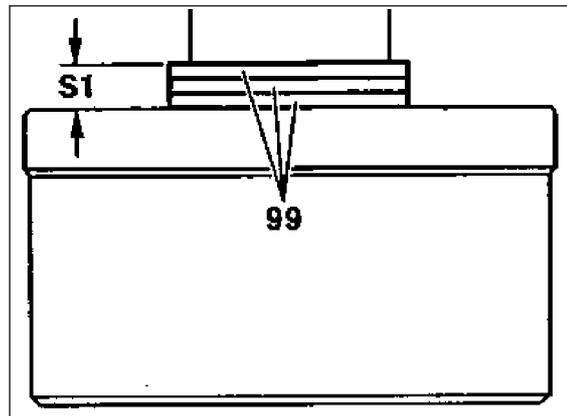
Example:

$A1 = 20.0 \text{ mm}$

$S1 = 21.8 - 20.0 = 1.8 \text{ mm}$

Two shims (99) of 0.9 mm thickness are to be inserted.

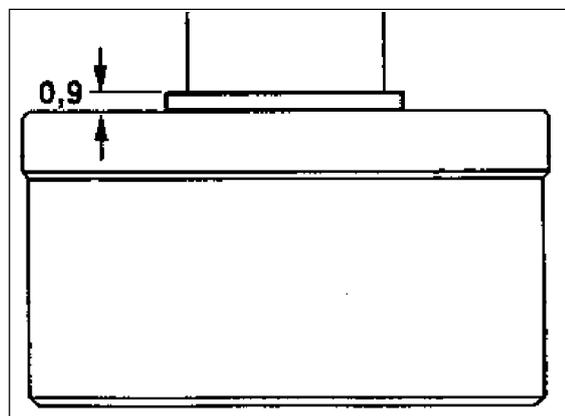
Shims are available in the following thicknesses 0.5; 0.6; 0.7; 0.8 and 0.9 mm.



P28-5081-13

Parts note:

Only the outer multi-disk carrier of the front axle drive train with a flat surface is still delivered as a spare part. If this has to be replaced in a 1st or 2nd version of the transfer case, a 0.9 mm shim is to be inserted.



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C. Checking multi-disk play of front axle drive train and adjusting, if necessary.

- 1 Install outer multi-disk carrier of front axle drive train in transfer case housing (28-300, section C).
- 2 Measure play "**S2**" between the final disk and inner multi-disk using a feeler gauge, while compressing the multi-disk stack (arrows).

Note

Specified dimension up to transfer case no.

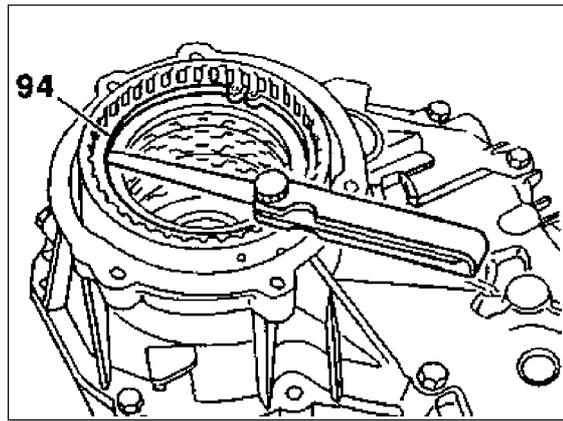
26.616:

1.3 - 1.7 mm

Specified dimension as of transfer case no.

26.617:

0.6 - 1.0 mm

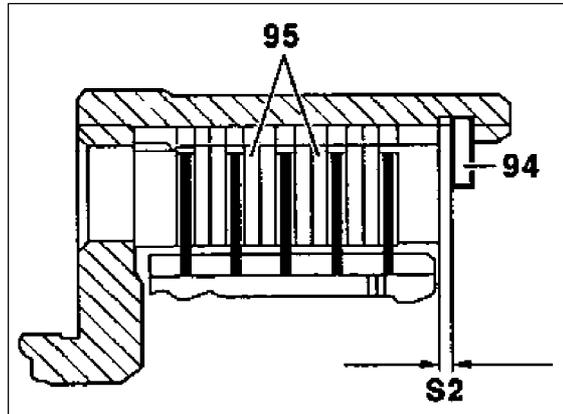


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- 3 Correction of loose play "**S2**" depending on the version of the outer multi-disk carrier (different groove width) via snap rings (94) and/or outer multi-disks (95).

Note

Snap rings of 1.8 mm to 3.6 mm are available in increments of 0.2 mm and outer multi-disks of 1.8, 2.0 and 2.2 mm.



P28-5068-13