


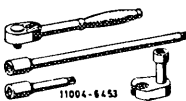
35–560 Checking level controller for leaks

Data

| | | |
|--|---|-------|
| Permissible return flow oil volume on one level controller with vehicle ready-to-drive (adjusting switch in position "N" = normal level", level controller in checking position ¹⁾ located by gauge | after an inoperative period of 4 hours | 8 cc |
| | after an inoperative period of 12 hours | 24 cc |

¹⁾ Checking position: Lever offset 2 mm from center position in direction of "emptying" with reference to locating bore in housing to make sure that oil return duct is unobstructed.

Special tools

| | | |
|---|--|------------------|
| Locating gauge for level controller |  | 116 589 16 23 00 |
| Box wrench element open, 11 mm 1/4" square, complete with change-over ratchet and 2 extensions for pressure oil lines |  | 116 589 00 17 00 |

Conventional tool

| | |
|---|---|
| Graduated flask measuring range 0 to 100 ml | e.g. Ströhlein, D-7000 Stuttgart 1 order no. 9.274 838 |
|---|---|

Note

Checking a level controller for internal leaks will be required when a pressure oil loss between the adjusting switch of the valve unit and the level controller, with the vehicle stopped, results in lighting-up of warning lamp, even though the vehicle level is not dropping. If the vehicle level drops at one axle, a pressure loss between level controller and suspension elements is evident (32–515 "Checking tube shocks for leaks").

Attention!

Following an inoperative period of several hours, the warning lamp may light up.

After an extended inoperative period, e.g. of several days, the vehicle level may also drop at one or both axles.

Dropping of the level, above all at very low ambient temperatures during an extended inoperative period, is normal since the pressure in the central reservoir is completely down after the level controller has repeatedly responded under the influence of a pressure drop in the suspension elements. The capacity of the central reservoir has not been enough to maintain the vehicle level for such an extended period.

Such effects are widely dependent on prevailing temperatures and are normal.

When checking the level controller for internal leaks, the return flow rate of the oil within a given period is measured.

The vehicle should be on its wheels during the checkup.

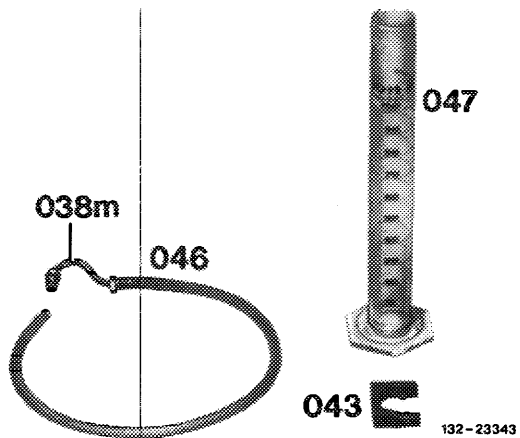
The suspension system or the central reservoir must be filled up to cut-out pressure.

Prior to starting the checkup, also check entire suspension system for external leaks.

The returning oil is flowing into a graduated flask through a measuring hose (046).

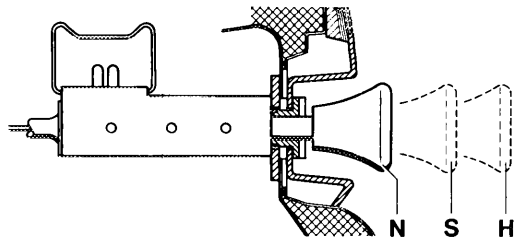
The locating gauge (043) serves to locate the level controller in checking position during leak test.

- 043 Locating gauge (part no. 116 589 16 23 00)
- 046 Measuring hoses for oil return flow 0.5 m long (self-made from plastic hose for windshield washer and pressure testing line (038m) from pressure tester 126 589 02 21 00).
- 047 Graduated flask, measuring range 0 to 100 ml



Checking inlet and outlet valve

1 Move adjusting switch of valve unit in position "N" = normal level.

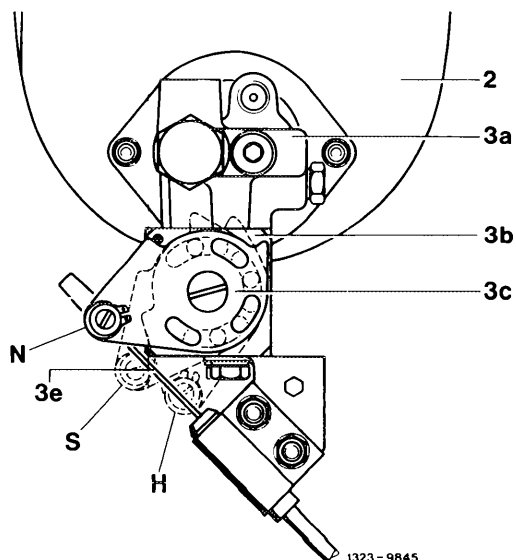


- 2 Oil supply tank
- 3a Pressure regulator of valve unit
- 3b Adjusting switch of valve unit
- 3c Control disk
- 3e Puller for adjusting switch

Positions of adjusting switch:

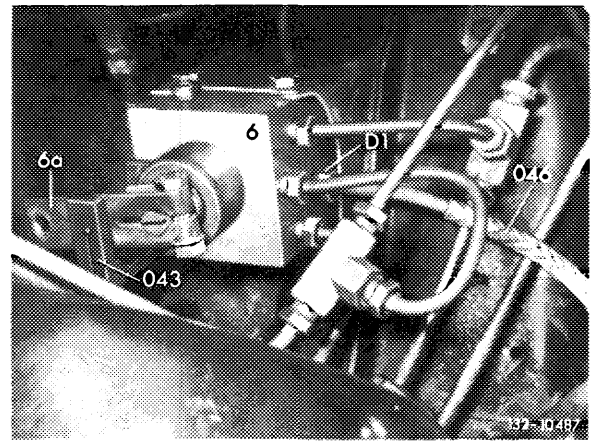
- N = normal level
switch pushed down or control disk against stop at front
- S = detent position
switch locked in center position or control disk pulled into 1st detent
- H = higher level
switch fully pulled or control disk pulled into 2nd detent

Note: In positions "H" and "S" warning lamp at right in instrument cluster is lighting up (red with vehicle symbol).



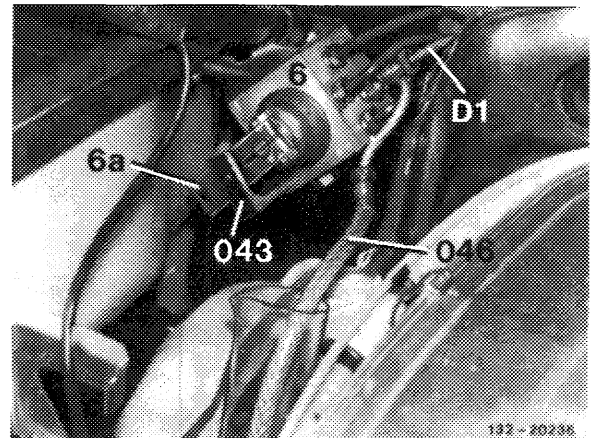
2 Disconnect connecting rod for level controller. Locate level controller by placing gauge (043) into checking position.

Note: On lefthand steering vehicles the level controller is located on front wall at the right, on righthand steering vehicles at the left (on model 116.036).



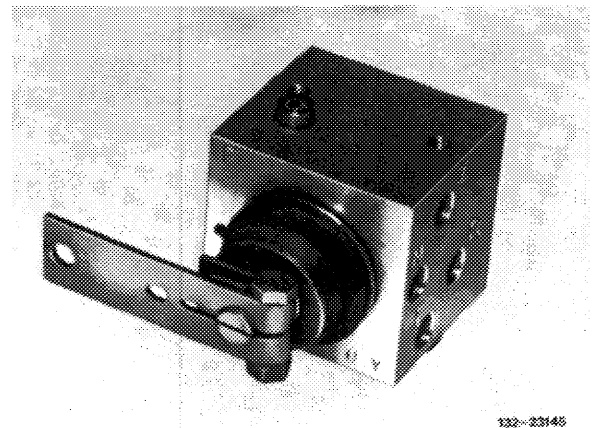
Model 116.036
 6 Level controller for front axle
 6a Lever for level controller
 D1 Connection for return line
 043 Locating gauge
 046 Measuring hose for oil return flow

3 On models 126.033; 126.037 remove bulk head-center piece.



Models 126.033; 126.037
 6 Level controller for front axle
 6a Lever for level controller
 D1 Connection for return line
 043 Locating gauge
 046 Measuring hose for oil return flow

4 Disconnect return line (D1 – connection identification “R”) from level controller, connect measuring hose for oil return flow to pressure line connection M 10 x 1 and connect to graduated flask.



Line connections on level controller

F Connection for pressure line (B5) to pressure reservoirs
 N Connection for control pressure line (C)
 R Connection for return line (D1)
 Z Connection for pressure line (B4) of adjusting switch

Attention!

With the return line closed, never move lever of level controller in direction of “emptying”, since otherwise the pressure oil will emerge at high pressure from suspension elements on level controller!

5 Measure volume of return oil after an inoperative period of 4 to 12 hours.

6 Correct oil level in suspension system (32–600).