

LOAD SENSING VALVE

GENERAL

The load sensing valve senses the weight applied to the rear axle and governs the amount of braking effort applied to the rear brakes i.e. more weight on the axle allows greater braking effort.

In order to obtain the correct braking effort throughout the weight range it is essential that the valve is set accurately.

All checks and adjustments must be carried out on the vehicle in its operating condition but in an unladen state.

SETTING PROCEDURE

Special Tool — Trammel gauge

Initial Setting and Resetting

Vehicles leaving the factory are set to the lightest operating condition and no information is stamped on the Brake Data plate.

Chassis/cab models must have the valve reset as soon as the vehicle has had its body and other equipment fitted. Proceed as follows:-

Initial Setting

- Weigh the rear axle.
- Referring to the chart in Data (sub-section M 010), locate the appropriate weight range under the relevant model and note dimension 'Y' and free travel dimension.
- Set the locally made trammel gauge (described in sub-section M 020) to the 'Y' dimension.

- Referring to Fig. 1 slacken off the clamp bolt (1) and slide the adjusting block (8) to the bottom of the spring tail (3).
- Remove clevis pin to release spring eye (4) from valve lever (5).
- Using the trammel gauge previously set to dimension 'Y', suspend the spring assembly from the valve lever as shown (6).
- Slide adjusting block upwards to contact the rubber bush (2) and tighten clamp bolt.
- Remove the trammel gauge and pull the spring eye upwards to align with valve lever. Refit clevis and locking clip to retain in position.
- Cut off the spring tail protruding below the adjusting block.*
- Remove the brake data plate from the cab step toe panel and stamp onto it the information which was previously noted.

Rear axle weight

Valve travel

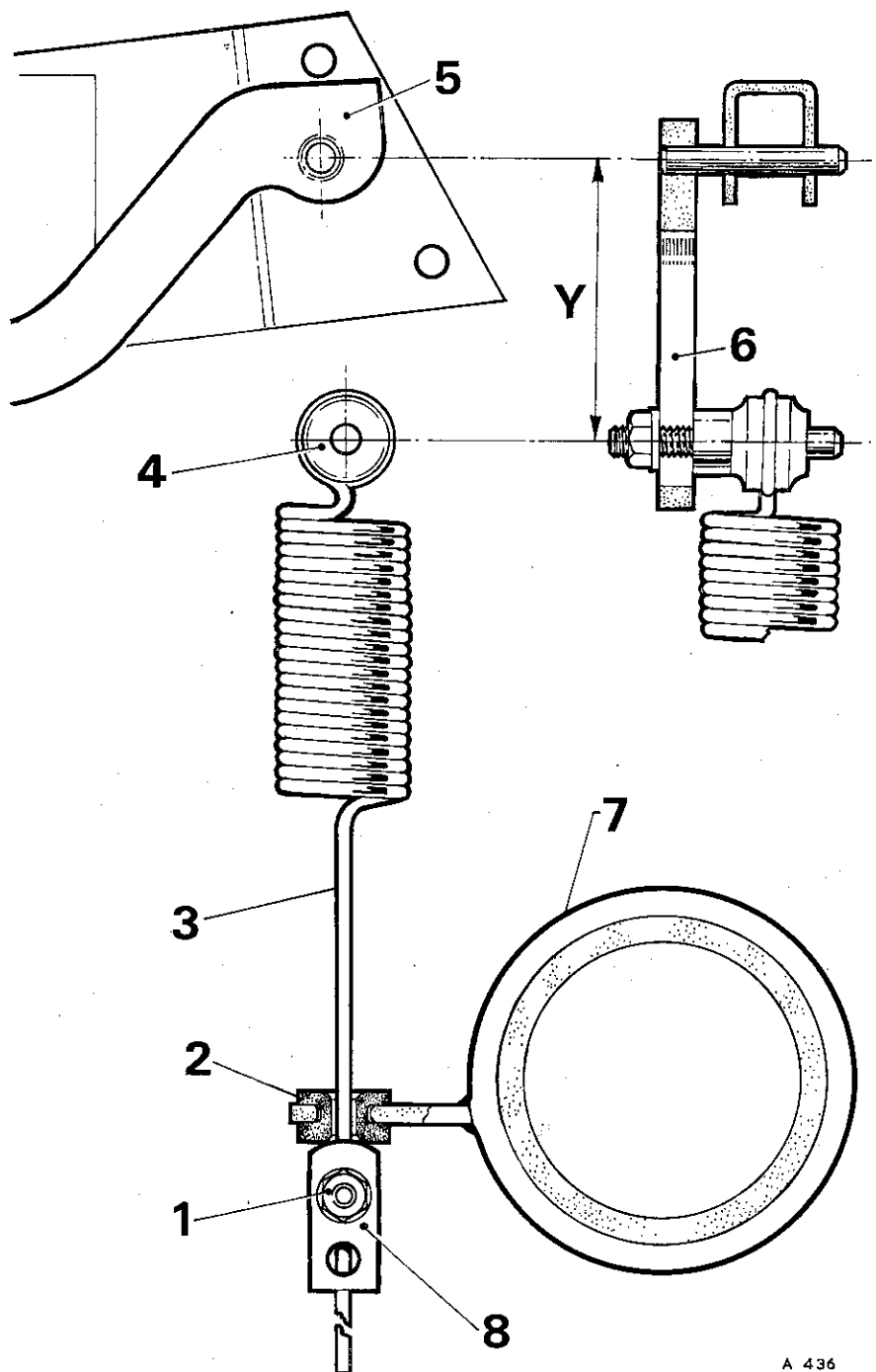
Dimension 'Y'

- Refit the brake data plate and ensure that it is secure.

Resetting

Resetting will be necessary on any vehicle having changes made which alters the unladen weight on the rear axle e.g. additional equipment or new body.

It will also be necessary to stamp and fit a new brake data plate.



- 1 CLAMP BOLT
- 2 RUBBER BUSH
- 3 SPRING TAIL
- 4 SPRING EYE

- 5 VALVE LEVER
- 6 TRAMMEL GAUGE
- 7 REAR AXLE
- 8 ADJUSTING BLOCK

Fig. 1 Load Sensing Valve Adjustment

DESCRIPTION AND MODIFICATIONS

This may seem a little out of place but I have heard about problems with people stealing work and selling it - for example on eBay.

If you're reading this and you bought this manual anywhere then you have been ripped off.

Please contact me via my email mikejamson@hotmail.com Otherwise I can be found on the dodge50 facebook page, if not then get in contact with Greg and he can pass the message on to me.

I have not done this pdf manual for my own personal gain and wish to see the community of 50 series owners benefit from the information here, and I do not want to see the community get taken advantage of and somebody else gain from it unfairly.

The information in pdf format will hopefully allow more of these wonderful trucks to stay on the road by providing information to everybody.

This has been quite a long and involved process to scan the manual and to convert it into a pdf format. I do apologise as I have used several different scanners and several different computers to do it, so there are no doubt some errors hidden throughout, as well as some editing errors.

I have aimed to balance quality and file size and hope that this balance meets to everybody's approval.

If you see an error please let me know and I will fix it as soon as I can.

Load Sensing Valve

Service Check

It is essential that the initial setting is checked at the periods specified in the Planned Maintenance Schedule.

Proceed as follows:-

- a. Set trammel gauge to dimension 'Y' as stamped on the brake data plate.
- b. Disconnect spring from valve lever.
- c. Without stretching the spring hold it up so that the adjusting block contacts the rubber bush. In this position the trammel gauge should fit easily through the valve lever and spring eye.
- d. If the trammel gauge will not fit, the adjusting block should be reset.

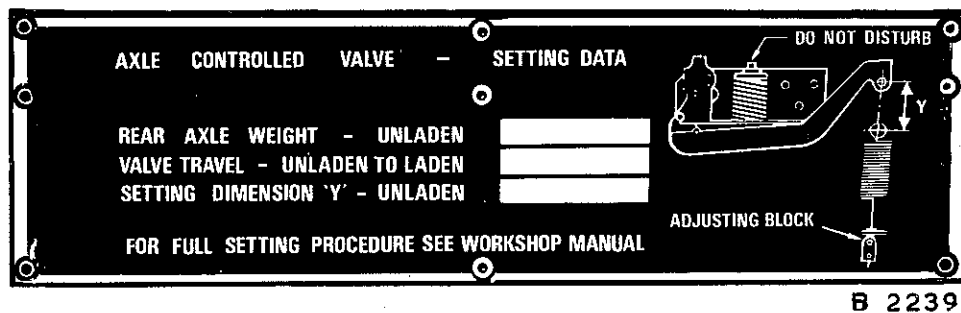


Fig. 2 Brake Data Plate