Load Sensing Valve

LOAD SENSING VALVE

GENERAL

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

In order to obtain the correct braking effort throughout the load 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.

VALVE SETTING DATA

See Data Section.

VALVE SETTING PROCEDURE

Special Tool - Trammel gauge

Initial Setting and Resetting

Vehicles leaving the factory are set to the lightest condition and 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

- a. Weigh the rear axle.
- Referring to the chart in Data (sub-section MA020, locate the appropriate weight range under the relevant model and note dimension 'Y' and free travel dimension.
- c. Set the locally made trammel gauge (described in sub-section MA040) to the 'Y' dimension.

- d. Referring to Fig. 1 slacken off the clamp bolt (1) and slide the adjusting block (8) to the bottom of the spring tail (3).
- e. Remove clevis pin to release spring eye (4) from valve lever (5).
- f. Using the trammel gauge previously set to dimension 'Y', suspend the spring assembly from the valve lever as shown (6).
- g. 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.
- i. Cut off the spring tail protuding 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 load - unladen

Axle travel - unladen to laden

Setting Dimension 'Y' - unladen

k. 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.

Page 2

Load Sensing Valve

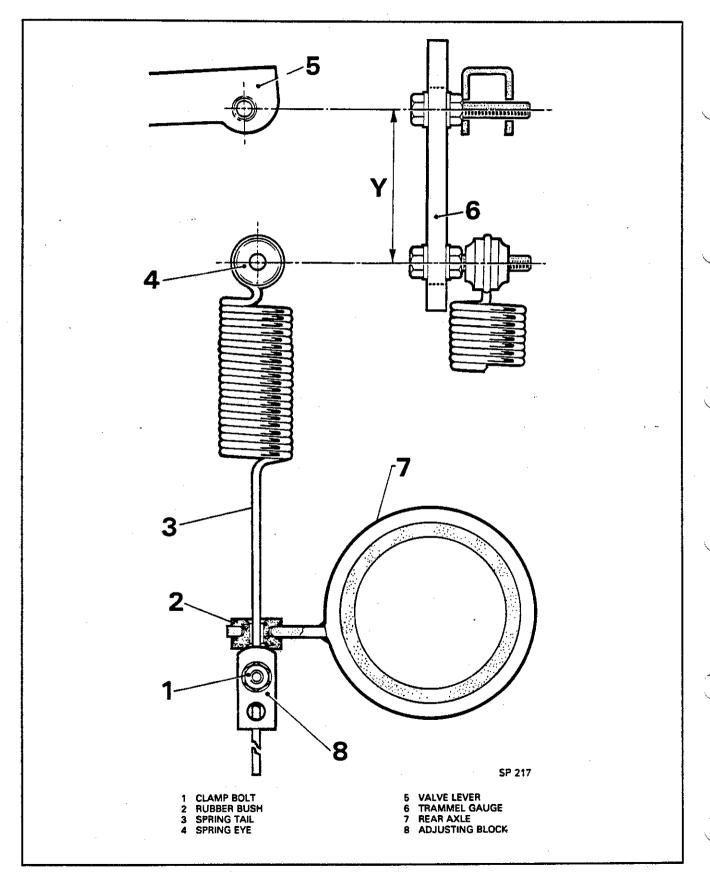


Fig. 1 Load Sensing Valve Adjustment

Load Sensing Valve

Service Check

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

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.

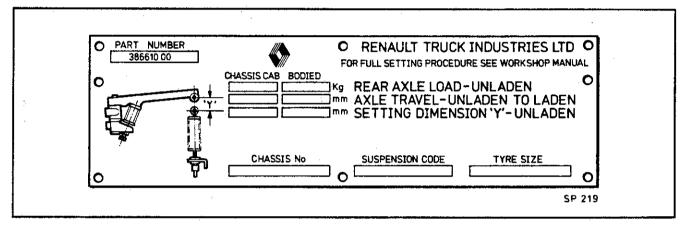


Fig. 2 Brake Data Plate