

Springs – Front and Rear

FRONT ROAD SPRING

To Remove

Slacken road wheel nuts (L.H. wheel nuts have L.H. threads).

Remove front underlay.

Raise front of vehicle and fit axle stands under chassis frame.

Remove road wheel.

Place a trolley jack under the front axle and raise sufficiently to take the weight of the axle without loading the spring.

Remove the two U-bolts securing the axle beam to spring, collect U-bolt pad. Displace shock absorber attachment plate.

Unlock tab on rear shackle bolt and remove bolt.

Models 235, 45 and 55

Remove front shackle nut and washer.

Models 266 and 75

Unlock tab on front shackle bolt and remove bolt.

Remove spring and collect packing taper plate.

Note: Note the position of the thin end of the packing taper plate (except with power steering).

To Dismantle

Mark one end of each leaf to ensure that it is replaced in the same position on re-assembly.

Remove the spring clip bolts and distance tubes from the clips secured to the spring leaves.

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SPRINGS FRONT AND REAR

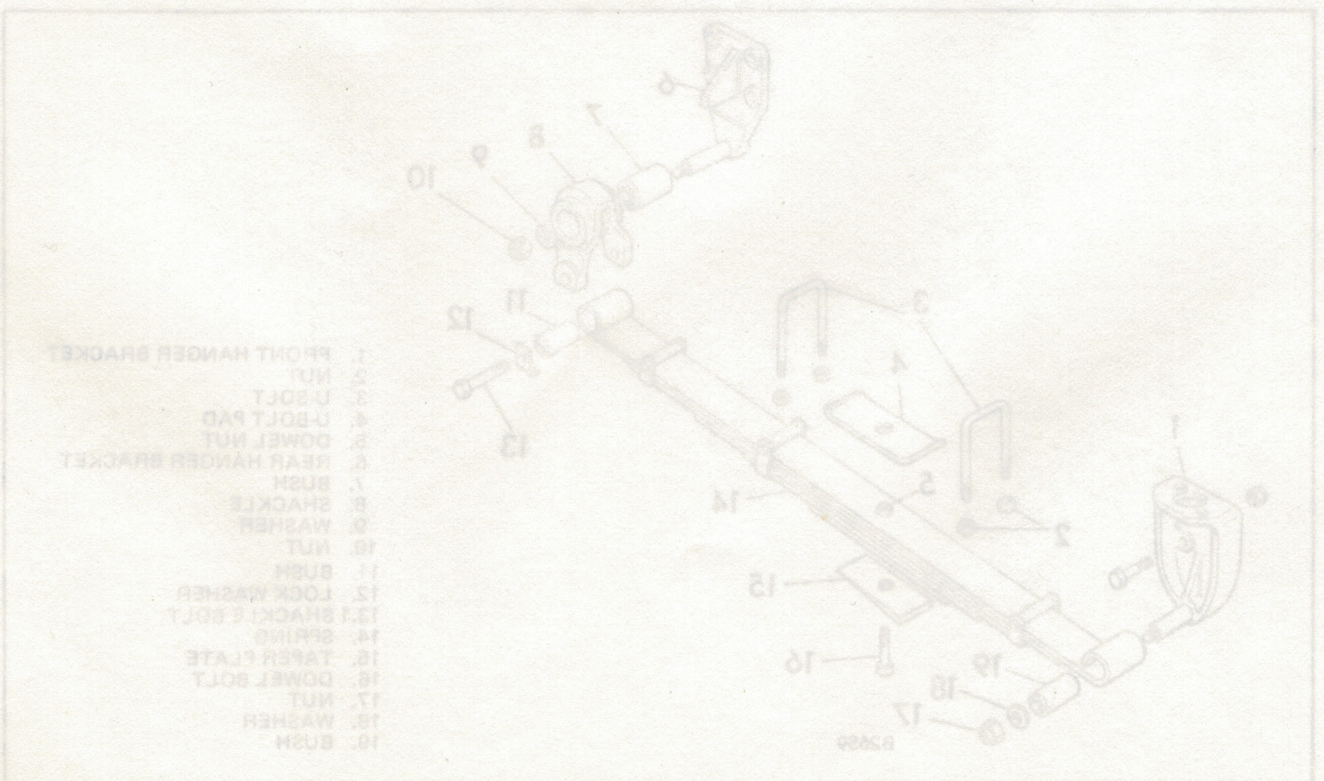


Fig. 1 Front spring details – Models 235, 45 and 55

SUSPENSION AND FRONT AXLE

Springs — Front and Rear

FRONT ROAD SPRING

To Remove

Slacken road wheel nuts (L.H. wheel nuts have L.H. threads).

Remove front undertray.

Raise front of vehicle and fit axle stands under chassis frame.

Remove road wheel.

Place a trolley jack under the front axle, and raise sufficiently to take the weight of the axle without loading the spring.

Remove the two U-bolts securing the axle beam to spring, collect U-bolt pad. Displace shock absorber attachment plate.

Unlock tab on rear shackle bolt and remove bolt.

Models S35, 46 and 56

Remove front shackle nut and washer.

Loosen rear upper shackle nut, displace shackle clear of spring.

Remove spring and collect packing taper plate.

Note: Note the position of the thin end of the packing taper plate (except with power steering).

Models S66 and 75

Unlock tab on front shackle bolt and remove bolt.

Remove spring and collect packing taper plate.

Note: Note the position of the thin end of the packing taper plate (except with power steering).

To Dismantle

Mark one end of each leaf to ensure that it is replaced in the same position on re-assembly.

Remove the spring clip bolts and distance tubes from the clips secured to the spring leaves.

Unscrew the dowel bolt nut and remove the dowel bolt.

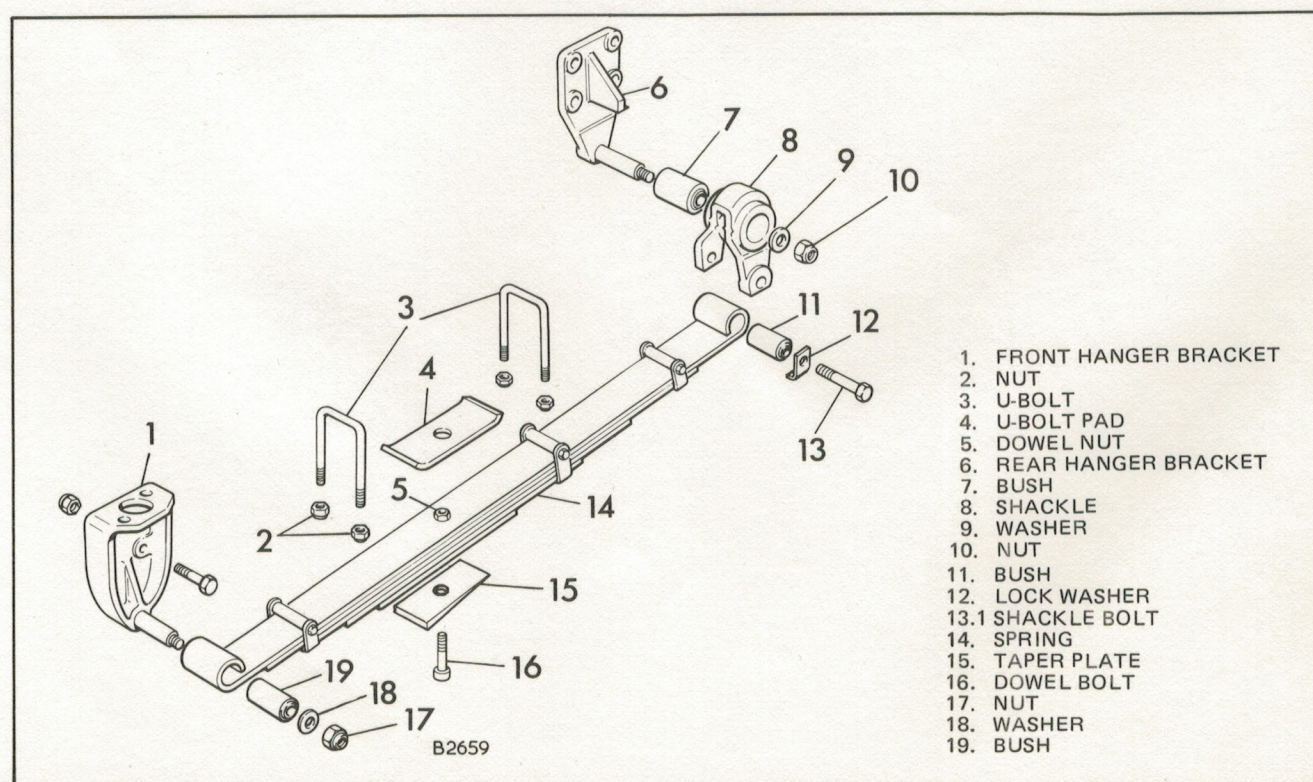


Fig. 1 *Front spring details – Models S35, 46 and 56*

Springs – Front and Rear

Inspection and Overhaul

Clean each spring leaf with paraffin, dry thoroughly, and examine each leaf for cracks. Renew all cracked leaves. Grind, or file flat any ridging which may have occurred at the tips of leaves.

Examine the dowel bolt. Renew the bolt if worn or if the threads are damaged.

Examine the spring bushes for wear or damage, renew as necessary.

Check the spring clips, and reset any which have become bent. Peen over any loose rivets and renew any damaged distance tubes and bolts.

Check the U-bolts for stretch or damaged threads. Renew if necessary.

To Re-assemble

Apply a film of graphite grease to the spring leaves.

Reverse the dismantling procedure, ensuring that the leaves are in their original positions.

To Refit

Reverse the removal procedure, ensuring that the thin end of the packing taper plate (when fitted) is to the rear. Use new nuts when refitting the U-bolt. Torque tighten all nuts and bolts to the Data figure.

To Renew Spring Bushes (In situ)

Special Tools

Spring bush remover/replacer	RG 566
Adaptor to RG 566	RG 566-1

Remove front undertray.

Raise front of vehicle and fit axle stands under chassis frame.

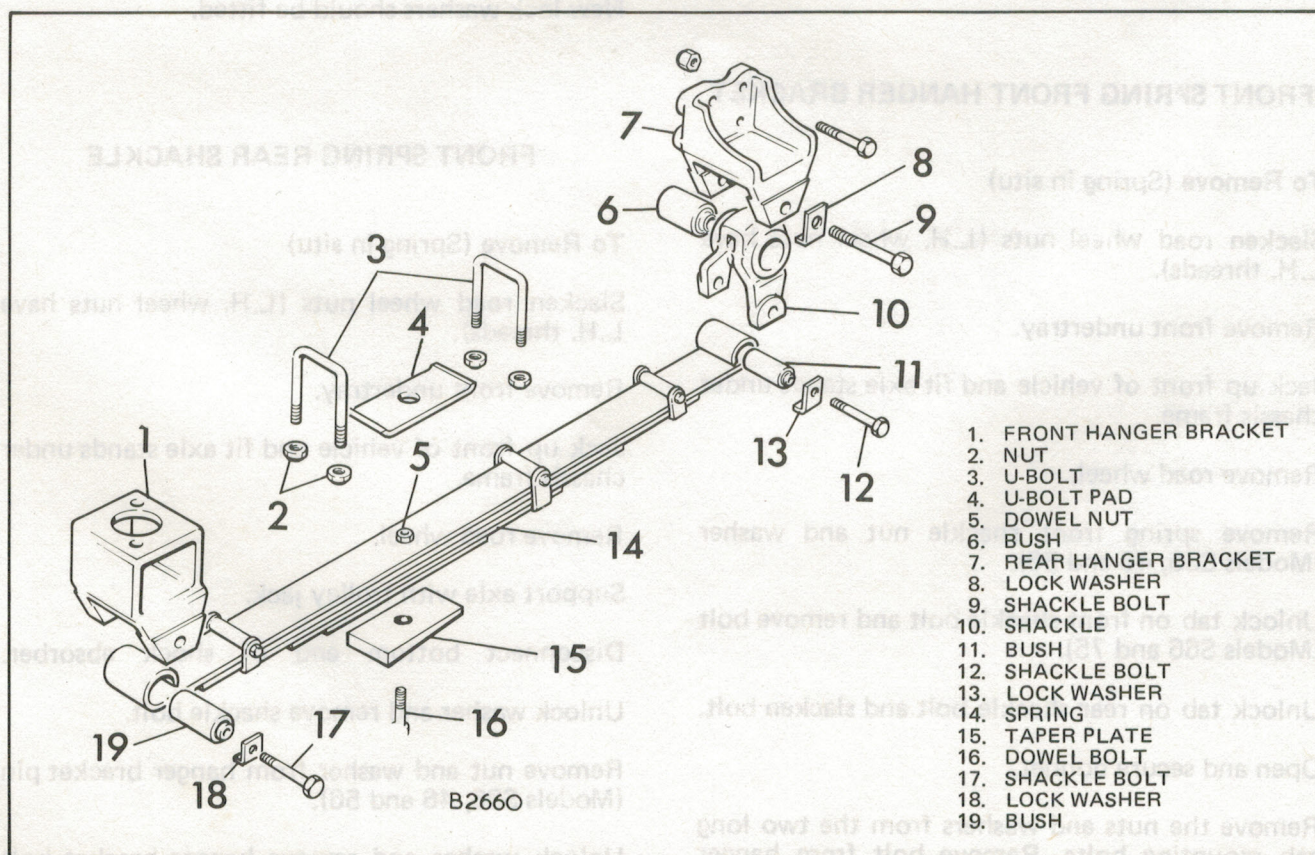


Fig. 2 Front spring details – Models S66 and 75

SUSPENSION AND FRONT AXLE

Springs — Front and Rear

Place a trolley jack under the front axle, and raise sufficiently to take the weight of the axle without loading the spring.

Disconnect shock absorber from spring attachment plate.

Unlock washer and remove front and rear shackle bolts (Models S66 and 75).

Unlock washer and remove rear shackle bolt (Models S35, 46 and 56).

Note: The spring must be removed from the vehicle to renew the front bush.

Lower the spring sufficiently to clear the shackle.

On Models S66 and 75 use Special Tool RG 566 to extract the spring front bushes.

The front spring rear bushes (all models) can be extracted using Special Tool RG 566 and adaptor RG 566-1.

To refit a new spring bush reverse the removal procedure and fit new lock washers.

Mark and remove lower UJ pinch bolt on steering column. Jack up the front of cab to provide access to rubber mounting.

Remove two mounting nuts and bolts.

Remove rubber mounting from hanger bracket.

Support axle with trolley jack.

Disconnect bottom end of shock absorber.

Remove nuts and bolts securing hanger bracket to chassis frame.

Remove hanger bracket (Models S66 and 75).

Lower axle, rotate and remove hanger bracket (Models S35, 46 and 56).

Inspection

Check the hanger bracket for cracks or damage.

To Refit

Refitting is a reversal of the removal procedure. New lock washers should be fitted.

FRONT SPRING FRONT HANGER BRACKET

To Remove (Spring in situ)

Slacken road wheel nuts (L.H. wheel nuts have L.H. threads).

Remove front undertray.

Jack up front of vehicle and fit axle stands under chassis frame.

Remove road wheel.

Remove spring front shackle nut and washer (Models S35, 46 and 56).

Unlock tab on front shackle bolt and remove bolt (Models S66 and 75).

Unlock tab on rear shackle bolt and slacken bolt.

Open and secure bonnet.

Remove the nuts and washers from the two long cab mounting bolts. Remove bolt from hanger being removed.

FRONT SPRING REAR SHACKLE

To Remove (Spring in situ)

Slacken road wheel nuts (L.H. wheel nuts have L.H. threads).

Remove front undertray.

Jack up front of vehicle and fit axle stands under chassis frame.

Remove road wheel.

Support axle with trolley jack.

Disconnect bottom end of shock absorber.

Unlock washer and remove shackle bolt.

Remove nut and washer from hanger bracket pin (Models S35, 46 and 56).

Unlock washer and remove hanger bracket bolt (Models S66 and 75).

Springs – Front and Rear

Lower axle until spring clears shackle.

Remove shackle from hanger bracket.

Inspection

Check the shackle for cracks or damage.

If necessary renew the bush using Special Tool RG 566.

To Refit

Refitting is a reversal of the removal procedure. New lock washers should be fitted.

FRONT SPRING REAR HANGER BRACKET

To Remove (Spring in situ)

Slacken road wheel nuts (L.H. wheel nuts have L.H. threads).

Remove front undertray.

Jack up front of vehicle and fit axle stands under chassis frame.

Remove road wheel.

Unlock washer and slacken shackle bolt.

Remove nut and washer from hanger bracket pin (Models S35, 46 and 56).

Unlock washer and remove hanger bracket bolt (Models S66 and 75).

Remove four nuts and bolts securing hanger bracket to chassis frame.

Remove hanger bracket (Models S66 and 75).

Rotate hanger bracket forward and remove from spring shackle (Models S35, 46 and 56).

Inspection

Check the hanger bracket for cracks or damage.

To Refit

Refitting is a reversal of the removal procedure. New lock washers should be fitted.

REAR ROAD SPRING

To Remove

Slacken road wheel nuts (L.H. wheel nuts have L.H. threads).

Raise rear of vehicle and support on stands located behind the spring rear hanger brackets.

Remove the road wheel.

Place a trolley jack under the rear axle and raise sufficiently to take the weight of the axle without loading the spring.

Remove the two U-bolts securing axle to spring.

Unlock the washers on the front and rear spring shackle bolts, and remove bolts.

Lower the axle and remove the spring from the vehicle.

To Dismantle

Mark one end of each leaf to ensure that it is replaced in the same position on re-assembly.

Secure the spring firmly in clamps or a vice.

Remove the spring clip bolts and distance tubes from the clips secured to the spring leaves.

Unscrew the dowel bolt nut and remove the dowel bolt.

Gradually release the vice or clamp pressure so that the leaves do not spring rapidly apart.

Inspection and Overhaul

Clean each spring leaf with paraffin, dry thoroughly, and examine each leaf for cracks. Renew all cracked leaves. Grind or file flat any ridging which may have occurred at the tips of leaves.

Examine the dowel bolt. Renew the bolt if worn, or the threads are damaged.

Examine the spring bushes for wear or damage, renew as necessary.

Check the spring clips, and reset any which have become bent. Peen over any loose rivets and renew any damaged distance tubes and bolts.

SUSPENSION AND FRONT AXLE

Springs – Front and Rear

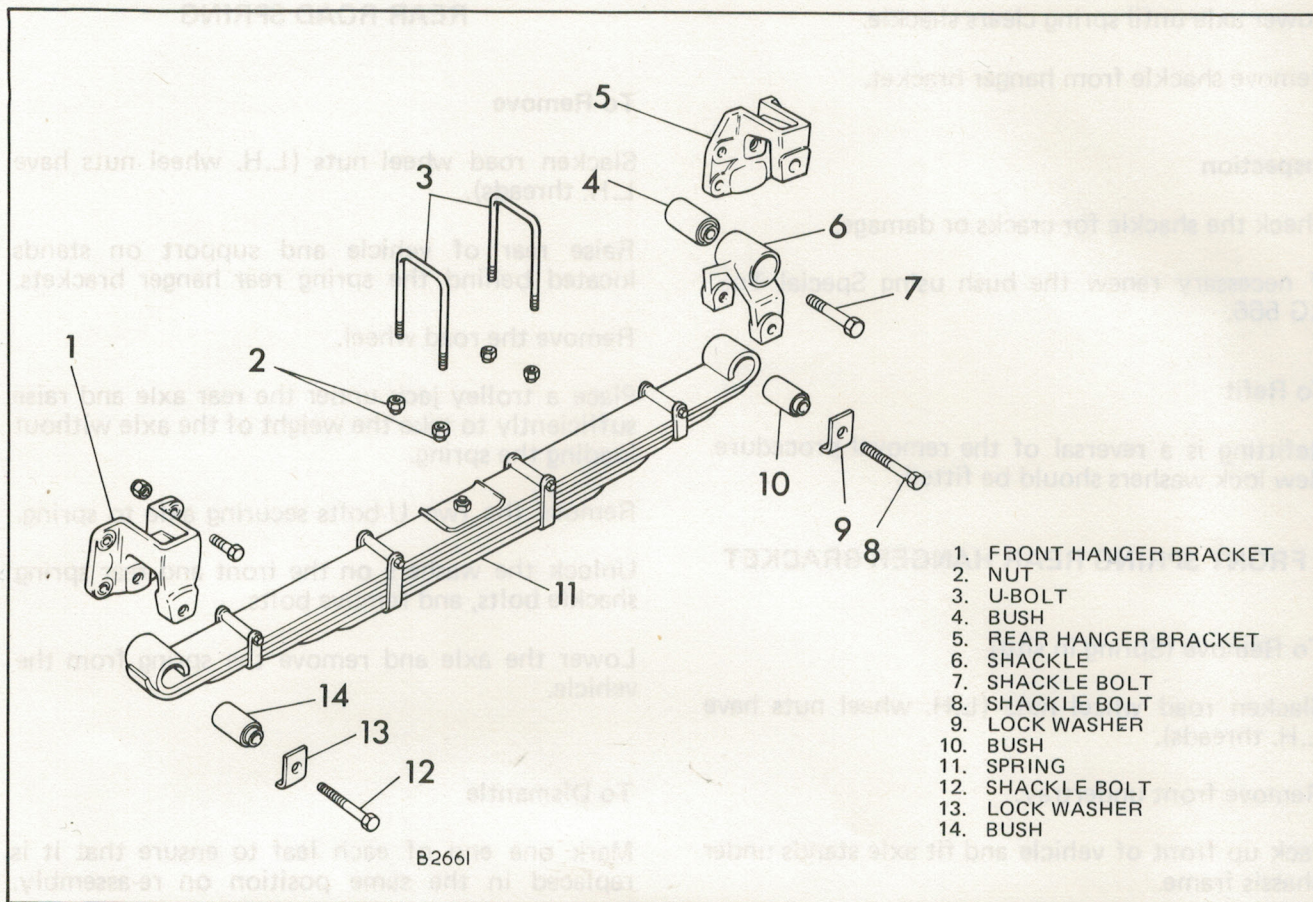


Fig. 3 Rear spring details

Check the U-bolts for stretch or damaged threads. Renew if necessary.

To Re-assemble

Apply a film of graphite grease to the spring leaves.

Reverse the dismantling procedure, ensuring that the leaves are in their original positions.

To Refit

Reverse the removal procedure ensuring that the spring dowel bolt locates in the hole in the spring platform. Use new nuts when refitting the U-bolts. Torque tighten all nuts and bolts to Data figures. Check the setting of the load sensing valve (see Section M241).

To Renew Spring Bushes (In situ)

Special Tool	
Spring bush remover/replacer	RG 566

Slacken road wheel nuts (L.H. wheel nuts have L.H. threads).

Raise rear of vehicle, and support on stands located behind the spring rear hanger brackets.

Remove the road wheel.

Place a trolley jack under the rear axle and raise sufficiently to take the weight of the axle without loading the spring.

Unlock the washers on the front and rear spring shackle bolts, and remove bolts.

Lower the axle until the spring bushes are clear of the hanger/rear shackle.

Using Special Tool RG 566 extract the spring bush.

To refit a new spring bush, reverse the removal procedure and fit new lock washers.

Springs – Front and Rear

REAR SPRING REAR SHACKLE

To Remove (Spring in situ)

Slacken road wheel nuts (L.H. nuts have L.H. threads).

Raise rear of vehicle and support on stands located behind the spring rear hanger brackets.

Remove the road wheel.

Place a trolley jack under the rear axle and raise sufficiently to take the weight of the axle without loading the spring.

Unlock the washers on the shackle bolts, remove bolts.

Lower the axle and remove shackle.

Inspection

Check the shackle for cracks or damage.

If necessary renew the bush using Special Tool RG 566.

To Refit

Refitting is a reversal of the removal procedure. New lock washers should be fitted.

REAR SPRING HANGER BRACKETS

To Remove (Spring in situ)

Slacken road wheel nuts (L.H. nuts have L.H. threads).

Raise rear of vehicle and support on stands located behind the spring rear hanger brackets.

Remove the road wheel.

Place a trolley jack under the rear axle and raise sufficiently to take the weight of the axle without loading the spring.

Unlock the washers on the hanger shackle bolts, remove bolts.

Lower the axle until spring bush and shackle bush are clear of hanger brackets.

Remove nuts and bolts securing hanger brackets to chassis frame, remove hanger brackets.

Inspection

Check the hanger brackets for cracks or damage.

To Refit

Refitting is a reversal of the removal procedure. New lock washers should be fitted.