



S.No	Complaints	Possible Cause	Check (or) correction
1	Hard or rough ride	<ul style="list-style-type: none"><li>Excessive tyre pressure</li><li>Defective shock absorber</li><li>Excessive friction in suspension spring</li></ul>	<ul style="list-style-type: none"><li>Readjust to correct pressure</li><li>Repair (or) replace</li><li>Lubricate, realign parts</li></ul>
2	Sway on turns	<ul style="list-style-type: none"><li>Loose stabilizer bar</li><li>Sagging springs</li><li>Castor incorrect</li></ul>	<ul style="list-style-type: none"><li>Tighten it</li><li>Repair or replace</li><li>Adjust</li></ul>
3	Spring breakage	<ul style="list-style-type: none"><li>Overloading</li><li>Defective shock absorber</li><li>Loose U-bolts</li></ul>	<ul style="list-style-type: none"><li>Avoid overloading</li><li>Repair or replace</li><li>Keep bolts tight</li></ul>
4	Sagging springs	<ul style="list-style-type: none"><li>Broken leaf</li><li>Spring weak</li><li>Defective shock absorber</li></ul>	<ul style="list-style-type: none"><li>Replace</li><li>Replace</li><li>Repair or replace</li></ul>
5	Noises	Could come from any loose, worn(or) unlubricated part in the suspension system	<ul style="list-style-type: none"><li>Maintain proper lubrication</li><li>Replace worn parts</li></ul>

## REPAIR AND MAINTENANCE OF LEAF SPRING

Leaf springs generally give trouble free service but sometimes due to overloading, rough driving or driving on a bad road they get broken.

In case of a broken leaf, it will be necessary to remove the spring assembly from the chassis. On removing the centre bolt, the leaf can be separated and the broken leaf replaced. Do not forget to apply graphite greases in between spring leaves and assemble the same with bolt.

Sometimes due to continuous use, the spring assembly gets sagged or gets straightened under these circumstances, remove the spring assembly, dismantle the leaf spring and hammer each leaf spring throughout its length one by one on anvil which will give desired curve. This hammering of each leaf is called cambering of springs.

In case of replacing the broken leaf from a spring assembly which gone flat, it is necessary to camber rest of the springs also as stated above. It should, however be noted that while cambering one



spring assembly it is very necessary to camber the opposite side of spring assembly also failing which the vehicle will remain tilted to one side.

### Here is a list of defects which may occur in the springs

- ✚ Vehicle out of level due to broken or flattened spring.
- ✚ Low fender due to broken or weak spring.
- ✚ Wrong shackle position due to weak spring.
- ✚ Broken shackle.
- ✚ Cracked leaves.
- ✚ Damaged rubber bumper.
- ✚ Sagged spring hits bottom of the frame.
- ✚ Helpers contact too soon.
- ✚ Loose eyes.
- ✚ Wrapped up spring.
- ✚ Worn bushing in master leaf.
- ✚ Defective or worn-out 'U' bolts.
- ✚ Loose or worn axle clips.
- ✚ Shared or broken centre bolt.
- ✚ Shifted leaves.
- ✚ Broken rebound clip.