

## Troubleshooting on the rear axle

Condition	Cause	Remedy
Load reversals	<ul style="list-style-type: none"> <li>a) Excessive backlash</li> <li>b) Output shaft(s) faulty</li> <li>c) Propeller shaft</li> </ul>	<ul style="list-style-type: none"> <li>a) Adjust torsional face runout</li> <li>b) Replace output shaft(s)</li> <li>c) Refer to troubleshooting propeller shaft</li> </ul>
Traction and coasting noise	Excessive or insufficient backlash	Adjust torsional face runout
Drumming	<ul style="list-style-type: none"> <li>a) Propeller shaft</li> <li>b) Rubber mount of rear axle carrier faulty</li> <li>c) Rubber mount on final drive suspension defective</li> <li>d) Rubber mount of control arm faulty</li> <li>e) Rubber mount on traction strut defective</li> <li>f) Output shaft(s) faulty</li> </ul>	<ul style="list-style-type: none"> <li>a) Refer to troubleshooting propeller shaft</li> <li>b) Replace rubber mounts</li> <li>c) Replace rubber mounts</li> <li>d) Replacing control arm, refer to 33 32 071</li> <li>e) Replacing traction strut, refer to 33 32 091</li> <li>f) Replacing output shaft(s), refer to 33 21 000</li> </ul>
Oil loss	<ul style="list-style-type: none"> <li>a) Radial shaft seal(s) leaking</li> <li>b) Vent clogged</li> <li>c) Wrong oil grade</li> </ul>	<ul style="list-style-type: none"> <li>a) Replacing radial shaft seal(s), refer to 33 11 021/ 33 11 151</li> <li>b) Clean vent</li> <li>c) Replace final drive oil</li> </ul>
Vibration	<ul style="list-style-type: none"> <li>a) Wheels imbalanced</li> <li>b) Rims have lateral/radial runout</li> <li>c) Tires have radial runout</li> <li>d) Output shaft faulty</li> <li>e) Propeller shaft</li> </ul>	<ul style="list-style-type: none"> <li>a) Balance wheels</li> <li>b) Replace rims if necessary</li> <li>c) Match or replace tyres</li> <li>d) Replacing output shaft, refer to 33 21 000</li> <li>e) Refer to troubleshooting propeller shaft</li> </ul>

Condition	Cause	Remedy
Rattling noise	<ul style="list-style-type: none"> <li>a) Shock absorbers loose</li> <li>b) Shock absorbers (refer to troubleshooting shock absorbers)</li> <li>c) Upper shock absorber rubber mount faulty</li> </ul>	

	<ul style="list-style-type: none"> <li>d) Lower shock absorber rubber mount faulty</li> <li>e) Rubber mount on rear axle carrier faulty</li> <li>f) Stabilizer bracket loose</li> <li>g) Stabilizer rubber mount faulty</li> <li>h) Stabilizer broken</li> </ul>	<ul style="list-style-type: none"> <li>a) Tighten shock absorbers</li> <li>b) Replace shock absorbers if necessary</li> <li>c) Replace rubber mounts</li> <li>d) Replace shock absorbers</li> <li>e) Replace rubber mounts</li> <li>f) Tighten bracket</li> <li>g) Replace rubber mounts</li> <li>h) Replacing stabilizer</li> </ul>
Rubbing noise	Oil on stabilizer rubber mounts	Replace rubber mounts
Grinding noise only when driving in curves	Wheel bearings faulty	Replacing wheel bearing, refer to 33 41 151
Poor handling or direction stability	<ul style="list-style-type: none"> <li>a) Rubber mounts on control arm / traction strut unserviceable</li> <li>b) Rubber mount of rear axle carrier faulty</li> <li>c) Rear axle geometry not okay</li> </ul>	<ul style="list-style-type: none"> <li>a) Replacing control arm / traction strut, refer to 33 32 071/ 33 32 091</li> <li>b) Replace rubber mounts</li> <li>c) Check/adjust wheel alignment, replace faulty components if necessary</li> </ul>
Unsteady taking of curves due to self-steering or poor rear end track stability	<ul style="list-style-type: none"> <li>a) Rubber mount of rear axle carrier faulty</li> <li>b) Rubber mount on final drive suspension defective</li> <li>c) Shock absorber action (refer to troubleshooting shock absorbers) inadequate</li> </ul>	<ul style="list-style-type: none"> <li>a) Replace rubber mounts</li> <li>b) Replace rubber mounts</li> <li>c) Replace shock absorbers</li> </ul>

Condition	Cause	Remedy
Excessive tire wear	Rear axle geometry not okay	Check/adjust wheel alignment, replace faulty components if necessary
Prolonged body shake when driving across uneven surface.	Shock absorber action (refer to troubleshooting shock absorbers) inadequate	Replace shock absorbers
Rocking of body when driving over successive rough road surfaces	Shock absorber action (refer to troubleshooting shock absorbers) inadequate	Replace shock absorbers
Body dipping while accelerating	Shock absorber action (refer to troubleshooting shock absorbers) inadequate	Replace shock absorbers
Wheels jumping even on normal	Shock absorber action (refer to	Replace shock absorbers

**Troubleshooting shock absorber**

Condition	Cause	Remedy
Shock absorbers knocking (bottoming)	a) Rubber damper faulty b) Shock absorbers worn	a) Check/replace rubber mounts b) Replace shock absorbers
Shock absorber noise	a) Shock absorbers loose b) Shock absorbers worn	a) Tighten shock absorbers b) Replace shock absorbers
Worn down areas (flattened areas) on tire profile	Shock absorbers worn	Replace shock absorbers