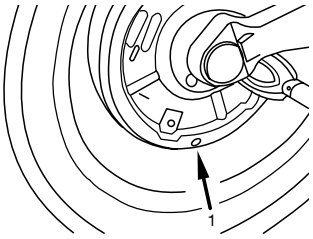
eco-TRAILER

OWNER'S MANUAL

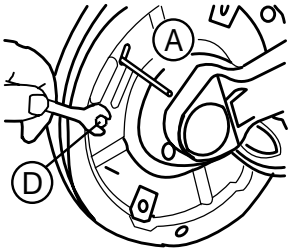
Trailer	Model / Part #	Serial # / VIN
Hitch	48.	
Axle 1	46.	
Axle 2	46.	
Axle 3	46.	
	Maximum Gross Trailer Weight	Kg
	Maximum Nose Weight	150 Kg

BRAKES

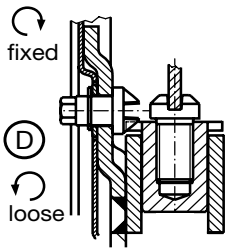


- Check brake lining wear - every 5,000 km
- Brake lining wear is dependent on the style of driving. Careful driving saves brake linings and tyres. As soon as a brake lining has been worn to a thickness of 2 mm, the brake shoe must be replaced. Stiff or stretched brake springs, the coils of which are no longer closed tightly together, must also be replaced.
- Brake shoe assemblies must be replaced as a set for each axle.
- For a visual check, remove the plug (arrow) from the brake backplate.

RE-ADJUSTMENT OF THE BRAKE SYSTEM



left and right wheel side



- Wheel brake - every 2,000 to 3,000 kms of travel.
- Jack up the trailer. Release the towing equipment, handbrake lever and brake linkage (free from tension).
- Lock the reversing cam of the wheel brake from outside by means of a locking pin (A) and insert pin through the hole in the backplate (D).
- With an 8 mm spanner, turn adjuster until the wheel locks in the forward direction of travel.
- Activate parking brake several times to centralise the brake shoes.
- Turn the hex adjuster anti-clockwise until wheel is running free in forward direction of travel (approx. 2 full turns).
- With parking brake activated, check equaliser bar is at right angles to brake rod. It may be necessary to re-adjust brakes or adjust length of brake cables (screw clevis in/out as required).
- To test, partially apply parking brakes and check for similar brake torque on all wheels (in forward direction of travel).
- Remove 4 mm locking pin from reversing cam.

AXLE MAINTENANCE INSTRUCTIONS

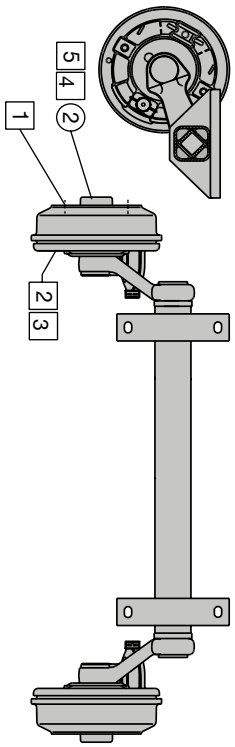
The following installation, operating and maintenance instructions relate to BPW rubber suspension axles. They are a constituent part of the warranty conditions.

Completion of the maintenance work in accordance with the prescribed intervals is essential in order to maintain the operating safety and roadworthiness of the vehicle.

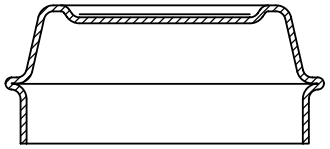
The correction of any defects found, or the replacement of any worn parts, should be carried out by a BPW accredited service workshop unless the vehicle user has at his disposal appropriately skilled in-company employees and the necessary workshop facilities. It is strongly recommended that only original BPW components are used. Our warranty becomes null and void if spare parts other than original BPW parts are used.

LUBRICATION AND MAINTENANCE WORK

Lubrication maintenance work	Initially	After 500 km	Every 2,000 - 3,000 km or annually	Every 5,000 km or annually	After 2 years
Change wheel hub bearing grease (does not apply to compact bearings).				◆	
Maintenance work					
1. Check wheel bolts for firm seating.	◆				
2. Check brake play. If necessary, re-adjust.	◆		◆		
3. Check brake lining wear.				◆	
4. Check lateral play of wheel bearing. If necessary, re-adjust:					
Compact bearings				◆	
Coventional bearings		◆	◆		
5. Check hub caps for firm seating.			◆		
- check tyres for uneven wear			◆		

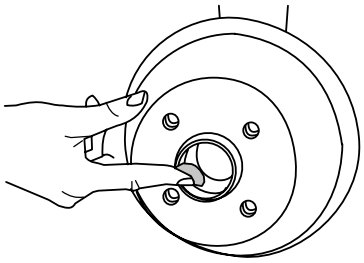


AXLE MAINTENANCE INSTRUCTIONS - BEARINGS

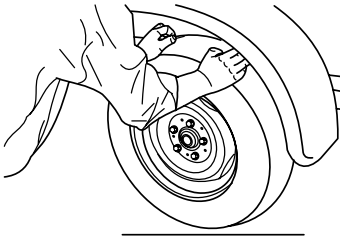


TAPER ROLLER BEARINGS

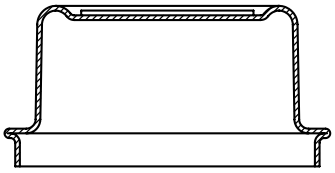
- ► Axles fitted with taper roller bearings are recognisable by a tapered type hub cap.
- ► Remove wheels and wheel hubs. Mark dismounted wheel hubs and bearing races so that their identity is not mistaken during re-assembly.
- ► Clean wheel hubs thoroughly inside and outside. Completely remove any grease.
- ► Clean taper roller bearings and seals (using diesel oil) and check for re-useability.
- ► Work BPW special longlife grease ECO Li91 into the cavities between the taper roller and cage. Smear grease into the hub's outer bearing race.
- ► Fill the hub caps ¾ full with grease.
- ► Fit wheel hubs, adjust the bearing play and refit the hub caps.



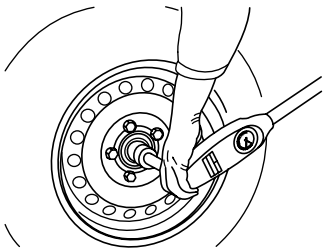
CHECK LATERAL PLAY OF WHEEL BEARING - if necessary, re-adjust.
Jack up the trailer, release brakes. Turn wheels manually and rock. If any bearing play is noticeable, adjust the bearings.



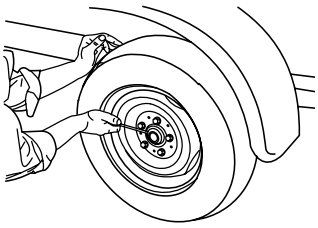
CONVENTIONAL TAPER ROLLER BEARINGS
After the first run under load conditions, then every 2,000 - 3,000 kms -
Taper roller bearings are recognisable by the conical profile of the rollers.
Lever off hub cap. Remove split pin from axle nut and tighten so that rotation of the wheel is slightly braked.
Turn back the axle nut to the next possible split pin and bend ends slightly outwards. Check wheel rotation, refit hub cap.
IMPORTANT - The grease in the hub and bearing must not be contaminated with dirt during this work!



COMPACT BEARINGS - every two years.
Compact bearings are recognisable by their cylindrical cap shape.
Compact bearings comply with the latest durability requirements. They are maintenance-free due to permanent lubrication and are designed for high mileages. The brakes are accessible more easily.
With the ECO hub system (up to manufacture in 6/97) the entire bearing system with hub can simply be pulled off the axle stub with the integrated axle nut and re-installed.
With axles manufactured after 6/97, first dismantle the axle nut. The brake drum with the compact bearing can then be removed from the axle stub.



Tightening torques:
AF 32 M = 280 Nm
AF 41 M = 330 Nm
(no bearing play adjustment)
If noticeable bearing play is felt, the compact bearings should be replaced.



Check hub caps for firm seating - every 2,000 - 3,000 kms
Check for firm seating with a screwdriver.

- ► Wheels tyres used are:

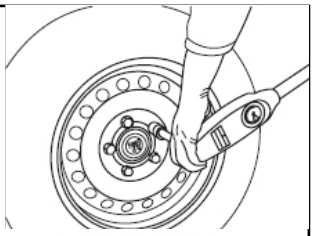
  155/70R12C (90 PSI).

- ► Check wheel bolts for firm seating :

  After the first run under load conditions, likewise after each wheel change.

  Tighten wheels bolts crosswise using a torque wrench to the correct tightening torque (below).

  M12 x 1.5 bolt 90-100 Nm 19 mm A/F socket size



Tightening sequence