



AXLE SERVICE & MAINTENANCE

AXLE MAINTENANCE



Recommended Service Schedule

- On delivery or 500km
 - Check torque adjustment of all wheel nuts.
 - Check that wheels turn freely.

- After every 5,000km
 - Check and adjust brakes.
 - Lubricate slack adjusters and camshaft bush's.
 - Check wheel bearing end float and adjust as required.

- After every 25,000km
 - Lubricate slack adjusters and camshaft bush's.
 - Remove hubcaps and inspect bearings and lubricant.
 - Replace grease if it appears contaminated.
 - Check and ensure hub seal is not weeping.
 - Adjust wheel bearings and reset the torque for the axle nuts.
 - Check for brake wear and repair and adjust as required.
 - Check function of all brake components.
 - Check function of brake boosters.

- After every 100,000km
 - As per 25,000km service
 - Remove, clean and inspect bearings and replace as required.

3T AXLE BEARING ADJUSTMENT



TEA recommends that the bearings are checked after 5000km and every 20,000km thereafter.

The inspection consists of rotating the wheel to ensure a smooth rotation and to check for excessive movement of the bearing.

Adjustment Procedure

1. After disassembly check the bearing for correct operation and clean all components
2. Apply a light film of Anti-fret paste to the bore of the bearing.
3. Slide the bearing onto the spindle. Ensure there are no burrs or wear marks on the spindle. These can be cleaned with emery paper.
4. Fit the axle nut spacer and nut. Always replace the nut. **DO NOT REUSE**. Torque the nut to 480Nm. This should be done whilst turning the bearing.
5. After refitting the brake drum, hubcap ensure the wheel end turns freely.

5T AXLE BEARING ADJUSTMENT



TEA recommends that the bearings are checked after 5000km and every 20,000km thereafter.

Adjustment Procedure

1. Install the thrust washer and the castellated nut, torque the nut to 270Nm (200lb/ft) while rotating the hub in both directions.
2. Back off the nut one full turn.
3. Re-torque to 50Nm while rotating the hub in both directions.
4. Back off the nut 1/6 of a turn, do not include socket back lash.
5. Turn nut to nearest slot and install a new cotter (split pin) in the axle spindle hole.
6. Check the hub rotates freely.
7. Bearing end float should be 0.025 - 0.127mm (0.001 - 0.005"). For longer bearing life, keep it to the lower end of the tolerance – 0.001". No pre load is allowed on bearing.
8. The above procedures are recommended installation procedures; however it is paramount that point 7 is the final outcome.
9. Ensure the hub cap is in good order and refitted with a new gasket.

6T AXLE BEARING ADJUSTMENT



TEA recommends that the bearings are checked after 5000km and every 25,000km thereafter.

Adjustment procedure.

1. After lubricating and checking all components are clean and greased appropriately, fit a new seal to the hub. Reassemble all components.
2. Fit inner nut and torque nut to 270Nm(200ft/lb) whilst rotating the hub back and forward.
3. Back off nut one full turn
4. Re-torque nut to 68Nm(50ft/lb) while rotating the hub in both directions
5. Back off nut $\frac{1}{4}$ to $\frac{1}{3}$ turn. Do not include play in adjusting spanner.
6. Install the lock washer without disturbing the bearing setting.
7. Fit outer nut and torque to 400Nm(300ft/lb)
8. Check that the hub rotates freely.
9. Check bearing end float which should be 0.025-0.127mm(0.001-0.005"). If required readjust bearings to achieve this free play.

TORQUE SETTINGS



Axles			
	Imperial Thread	Metric Thread	Max Torque
3T Axle Lock Nut		M45 x 1.5	480Nm
3T Cap Screw	Requires loctite	M12 x 1.5	130 – 150Nm
5T Axle Nut	See previous pages.		
6T Axle Lock Nut	2 5/8" UNF		400Nm
Hub Cap Bolts	5/16" UNC		20 – 35Nm
Camshaft Bracket Bolts		M8 x 1.5	30 – 35Nm
Wheel Nuts		M14 x 1.5	135 – 150Nm
		M12	90 – 100Nm
		M20	400 - 430Nm

