7. WHEEL ALIGNMENT

Following order is to be maintained while doing wheel alignment

i) Camber angle

ii) Caster angle

iii) Toe-in

iv) Wheel lock angle

Caution : *Not following the above order will lead to incorrect wheel alignment even though individual adjustments are done correctly.*

Note : *All adjustments for wheel alignment are to be done in UNLADEN CONDITION ONLY.*

Following precautions to be taken before commencing wheel alignment.

- Vehicle should be unladen and parked on level surface.
- Front tyre should have uniform wear and inflated to correct pressure.
- Height of front LH & RH Hub cap centre from ground level should be equal (counter check for even tyre wear and inflation).
- Ensure that hub play is correct.
- Ensure that silent bushes in front suspension are in satisfactory condition.
- Ensure that front suspension fasteners are tightened to specified torque.
- Ensure that there is no play in steering linkages and suspension ball joints.

Note

In case wheel alignment is done using computerised wheel aligner, please follow instruction manual of equipment manufacturer.

7A. CAMBER ANGLE ADJUSTMENT (Fig. 22)

- While adjusting camber angle nobody should sit inside the vehicle.
- To adjust camber angle, add or remove shims between the chassis frame and the spindle of upper wishbone mounting.
- Adding shims will reduce the camber angle and removing shims will increase the camber angle. Adjust camber angle to 0° + 30'.

Note :

After addition or removal of shims tighten the bolts to 18 mkg. Recheck camber angle.

7B. CASTOR ANGLE ADJUSTMENT (Fig. 22)

- Adding shim at location 'A' will reduce the castor and at location 'B' will increase the castor. Adjust caster angle to 3° ± 30' as shown in (Fig. 22)
- Check castor angle. If castor angle is not within 3° ± 30' add only one shim of 0.8 mm thick at location 'A' or 'B' as shown in (Fig. 22) it will increase angle by 16'.

Note : Variation in castor between LH/RH sides should not exceed 45'.

After adding shim, tighten the bolts to 18 mkg. torque. Recheck castor angle.

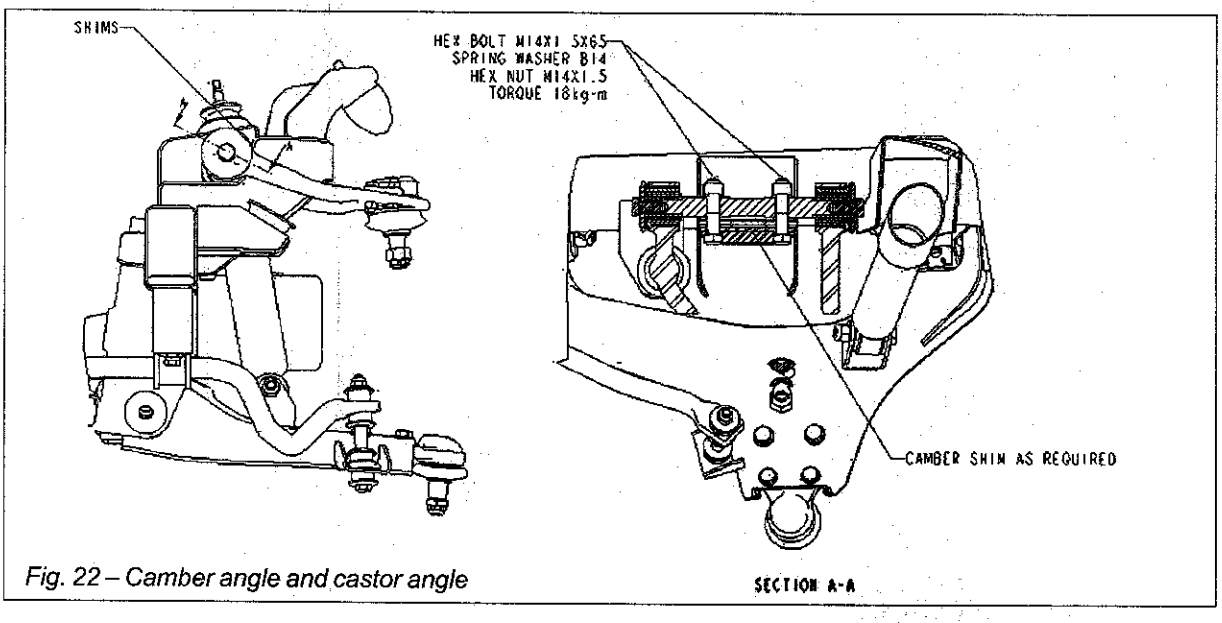

Fig. 22 – Camber angle and castor angle