

Light Vehicle Inspection Manual

Appendix E Retreaded Tyres

Appendix E - Retreaded Tyres

The Northern Territory *Motor Vehicles (Standards) Regulations 2003* - Australian Vehicle Standards Rules permits the use of retreaded tyres in accordance with *Australian Standard (AS)1973 Pneumatic tyres - Passenger car, light truck, and truck/bus - Retreading and repair processes*.

Summarised requirements

1. **Marking on one side:** Each retreaded tyre shall bear on at least one side wall or shoulder the following marking:
 - a. The nominal size of the tyre.
 - b. The word 'RADIAL' or 'R' in the size designation, for a radial ply tyre.
 - c. The word 'TUBELESS' if applicable.
 - d. The maximum load rating, ply rating, or service description of the tyre.

Note:

In the case of a remould, the service description is to be clearly identified as the original service description applicable to the tyre when new.

2. **Marking on both sides:** Each retreaded tyre shall bear on both side walls or shoulders the following marking:
 - a. The word 'RETREAD' or 'REMOULD' if applicable.
 - b. For passengers car tyres, the maximum speed rating, expressed as follows:
 - i. For radial ply tyres: 'MAX SPEED 140km/h', or 'MAXIMUM SPEED 140km/h', or 'SPEED LIMITED 140km/h'.
 - ii. For diagonal ply tyres: 'MAX SPEED 120km/h' or 'MAXIMUM SPEED 120km/h', or 'SPEED LIMITED 120km/h'.
 - iii. For tyres having winter treads: 'MAX SPEED 110km/h' or 'MAXIMUM SPEED 110km/h', or 'SPEED LIMITED 110km/h'.

Note:

The maximum speed rating shall be placed adjacent to 'Retread' or 'Remould', as applicable.

3. **For light truck tyres,** the maximum speed rating, expressed as follows:
 - a. For tyres having an original speed category when new of 'L' (120km/h) or higher, 'MAX SPEED 120km/h', or 'MAXIMUM SPEED 120km/h', or 'SPEED LIMITED 120km/h'.
 - b. For tyres having an original speed category when new of less than 'L' (120km/h), the original speed category.

Note:

The maximum speed rating shall be placed adjacent to 'Retread' or 'Remould', as applicable.

4. For truck/bus tyres:

- a. The speed equivalent to the original speed category.

Note:

Retention of the original speed category on both side walls is sufficient to satisfy this requirement.

- b. If structural belts have been replaced, the word 'REBELTED'.
- c. The word 'REGROOVABLE' if the retread is specifically designed for regrooving. Only tyres marked regroovable are permitted to be regrooved.

Note:

After major repairs have been carried out in the crown area, regrooving may be performed to reinstate tread grooves.

5. For speed limited truck/bus tyres:

- a. The original speed symbol shall be removed from the tyre.
- b. Each speed limited tyre shall bear on both sidewalls (or shoulder) of the retreaded tyre the following marking, max. speed 80km/h or speed limited to 80km/h.

Method and position of marking

All new marking (except for date code) on a retreaded tyre shall be in letters not less than 4mm high, be permanently and legibly marked in the shoulder or upper side wall of the tyre and be durable for the life of the retread. Date coding shall be a digit week/year code. Branding with a hot iron is not permitted on passenger car or light truck tyres.

Removal of marking

The following information shall be removed from the tyre during retreading:

1. The word 'TUBELESS' if a tyre originally designated as tubeless has been converted to tube type.
2. The word 'REGROOVABLE' if the retread is not designed for regrooving.
3. Any previous retreader's name or registered trademark.
4. Any marks of approval.

Removal or mutilation of any original tyre speed category symbol is not permitted on passenger car and light truck tyres. Any original speed category for truck/bus tyres must not be removed.

Marking on repaired tyres

1. All major repairs shall be marked in a legible and permanent manner with the identification of the repairer and the date on which the repair was carried out.

Note:

Marking is not required for unreinforced repairs.

2. The word 'TUBELESS' shall be removed if the tyre, originally designed as tubeless, has been converted to tube type. Branding with a hot iron is not permitted on passenger car or light truck tyres.

Definitions

Shall: indicates that a statement is mandatory.

Retreading: is the process of reconditioning a worn tyre by top capping, full capping, remoulding, or the application of a pre-cured tread.

Remoulding: is a retreading process in which new rubber is applied to the casing extending from bead area to bead area.

Top capping: is a retreading process in which tread rubber is applied only to the tread area of the buffed casing.

Full capping: is a retreading process in which new tread rubber is applied to the area of the casing normally in contact with the road and extending over the shoulder area.

Shoulder: is the transitional area of a tyre between the side wall and the crown.

Pre-cured retreading: is the process by which a previously cured and patterned tread is cured to the casing.