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Replacement / Alternative Wheel & Tyre Regulations by State.

Changes outside the guidelines listed below require assessment and approval by an authorised automotive engineer.

NEW SOUTH WALES

Current Regulations - Roads & Traffic Authority Vehicle Standards Information, Guidelines for alternative wheels and tyres, Revision #4 , November 1999.

WHEELS

Maximum width of replacement wheels is 26mm wider than the largest optional wheel recommended by the vehicle manufacturer. *This also applies to front-wheel-drive and constant four-wheel-drive vehicles.*

For four-wheel-drive vehicles, the maximum width of front wheels is the lesser of the maximum width for rear wheels or 8", unless the vehicle manufacturer lists optional wheels wider than 8".

Other requirements for replacement wheels:

- * The wheel rim width must not be less than the minimum width fitted by the vehicle manufacturer for that specific model.
- * **The fitment of wheel spacers between the wheel mounting face and the hub is not permitted unless O.E.**
- * The wheel and tyre must not foul any part of the body or suspension under all operating conditions and must be contained in the bodywork when the wheels are in the straight ahead position.
- * The wheels must be designed for the hub's P.C.D., i.e. no slotting of the stud holes, or re-drilling of hubs and/or stud holes is permitted.

WHEEL TRACK

Wheel track must not be increased by more than 25mm beyond the maximum specified by the vehicle manufacturer for that vehicle. For vehicles with diagonally-split braking systems, the wheel track must remain as O.E.



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NEW SOUTH WALES (Continued)

TYRES (Continued)

Overall Diameter

The overall diameter of the wheel and tyre combination must be no more than 15mm larger than the largest diameter wheel and tyre combination specified for the vehicle and not more than 15mm smaller than the smallest diameter wheel and tyre combination specified for the vehicle.

Tyre Load Rating

Any replacement tyre must have a load rating equal to or better than the minimum load rating stated by the vehicle manufacturer on the tyre placard. This can be stated on the tyre placard as either a load index or as the load per axle.

Tyre Speed Rating

It is recommended that the speed rating of replacement tyres is equal to or better than the minimum speed rating stated by the vehicle manufacturer on the tyre placard.

***If the minimum speed rating stated by the vehicle manufacturer on the tyre placard is less than 140kph (speed rating of "N"), then tyres with a lower speed rating cannot be fitted.**

***If the minimum speed rating stated by the vehicle manufacturer on the tyre placard is higher than 140kph, then tyres of a lower speed rating can be fitted, but the replacement tyres must have a speed rating of at least 140kph (speed rating of "N").**

*** If the replacement tyres fitted (including "winter tread " tyres or retreads) have a speed rating less than the minimum speed rating stated by the vehicle manufacturer on the tyre placard, a warning label must be affixed to the vehicle, as shown below:**



"The label must be at least 40mm x 40mm in size, made of durable material, with not less than 2mm high black lettering on an orange coloured background."

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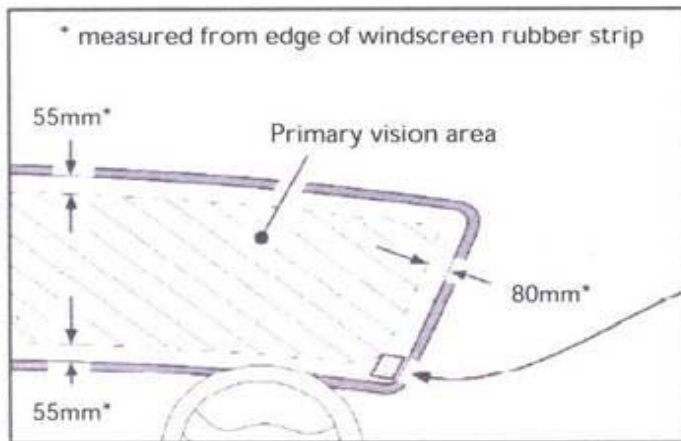
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NEW SOUTH WALES (Continued)

TYRES (Continued)

Speed Rating (Continued)



"The label must be located in an area conspicuous to the driver, usually on the inside of the windscreen, outside of the primary vision area, which is the area the driver normally looks through when driving the vehicle".

Other Information

The NSW regulations relating to fitment of alternative wheels and tyres also notes:
" You should also be aware that modifications to your car could make the insurance cover void. Always check your insurance company before you make an alteration to your car."

VICTORIA

**Current Regulations - vic roads, vehicle standards information 8, Guide to Modifications for Motor Vehicles, section 8, wheels and tyres, May 2003.
Also Roadworthiness Requirements, Vehicle Standards information No. 26, Section A, Wheels and Tyres.**

WHEELS

Maximum width of replacement wheels is 25mm wider than the largest optional wheel recommended by the vehicle manufacturer.



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VICTORIA (Continued)

WHEELS (Continued)

Other requirements for replacement wheels:

- * The wheel rim width must not be less than the minimum width fitted by the vehicle manufacturer for that specific model.
- * **The fitment of wheel spacers between the wheel mounting face and the hub is not permitted unless O.E.**
- * The wheel and tyre must not foul any part of the body or suspension under all operating conditions and must be contained in the bodywork when the wheels are in the straight ahead position.
- * Repaired or damaged alloy wheels are not acceptable.
- * The wheels must be designed for the hub's P.C.D., i.e. no slotting of the stud holes, or re-drilling of hubs and/or stud holes is permitted.
- * Aluminium alloy wheels ("mags") are acceptable provided they meet all requirements relating to replacement wheels and wheel track and are legibly and durably marked to show compliance to one of the following standards: *AS 1638 Australian Standard, DOT Department of Transport USA, JWLT Japanese Light Alloy Wheel Truck & Bus, JWLT Japanese Light Alloy Wheel, JIS Japanese Industry Standard, KBA German TUV Certification, VIA Vehicle Inspection Association Japan.*

WHEEL TRACK

The maximum allowable wheel track increase is:

- * 25mm for a front axle or rear axles with independent suspension,
- * 50mm for other rear axle types,
- * Zero for front-wheel-drive vehicles with McPherson struts and negative scrub-radius steering geometry or a diagonally split braking system.

TYRES

Overall Diameter

The overall diameter of the wheel and tyre combination must be no more than 15mm larger than the largest diameter wheel and tyre combination specified for the vehicle and not more than 15mm smaller than the smallest diameter wheel and tyre combination specified for the vehicle.



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VICTORIA (Continued)

TYRES (Continued)

Tyre Load Rating

Any replacement tyre must have a load rating equal to or better than the minimum load rating stated by the vehicle manufacturer on the tyre placard. This can be stated on the tyre placard as either a load index or as the load per axle.

Tyre Speed Rating

For vehicles with a GVM of 4.5 tonne or less with four or more wheels, the original speed rating of the tyre casing must be at least the lesser of:

- * 140km/h for a passenger car with special features for off-road use such as 4WD,
- * 180km/h for any other passenger car,
- * 120km/h for any other motor vehicle not described above,
- * the vehicle's top speed.

All Rim and tyre combinations must be in accordance with the recommendations contained in the Tyre and Rim Standard Manual published by the Tyre and Rim Association of Australia.

QUEENSLAND

Current Regulations - Queensland Transport "All about modifications to motor vehicles" - an extract from the Transport Operations (Road Use Management - Vehicle Standards and Safety) Regulation 1999.

WHEELS

- * The wheel and tyre must not foul any part of the body or suspension under all operating conditions and must be contained in the bodywork when the wheels are in the straight ahead position.
- * The wheels must be designed for the hub's P.C.D., i.e. no slotting of the stud holes, or re-drilling of hubs and/or stud holes is permitted.
- * **The fitment of wheel spacers between the wheel mounting face and the hub is not permitted unless O.E.**
- * Steering limit stops must not be adjusted to reduce the turning circle in order to allow the fitment of alternative wheels and tyres.



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Replacement / Alternative Wheel & Tyre Regulations by State.

QUEENSLAND (Continued)

WHEELS (Continued)

* For vehicles built after July 1, 1985, replacement wheels must be indelibly marked showing compliance with approved standards, these include: *Standards Australia, Wheel Industries Association (Australia), Japanese Industrial Standard, Technischer Uberwachungen Verein.*

WHEEL TRACK

The maximum allowable wheel track increase is:

- * Up to 26mm more than the maximum specified by the vehicle manufacturer for a car or car derivative, for that particular model,
- * Up to 50mm more than the maximum specified by the vehicle manufacturer for off-road passenger vehicles fitted with front and rear beam axles.

TYRES

Overall Diameter

The overall diameter of the wheel and tyre combination must be no more than 15mm larger than the O.E. diameter wheel and tyre and not more than 26mm smaller than the O.E. diameter wheel and tyre.

Tyre Width

The maximum tyre width for a car or car derivative must not be more than 1.3 times the vehicle manufacturer's widest optional tyre. The maximum tyre width for an off-road passenger vehicle fitted with front and rear beam axles must not be more than 1.5 times the vehicle manufacturer's widest optional tyre.

Tyre width must not be narrower than the narrowest optional tyre, as indicated on the vehicle's tyre placard.

Tyre Load Rating

Any replacement tyre must have a load rating equal to or better than the minimum load rating stated by the vehicle manufacturer on the tyre placard. This can be stated on the tyre placard as either a load index or as the load per axle.



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QUEENSLAND (Continued)

TYRES (Continued)

Tyre Speed Rating

For vehicles with a GVM of 4.5 tonne or less with four or more wheels, the original speed rating of the tyre casing must be at least the lesser of:

- * 140km/h for a passenger car with special features for off-road use such as 4WD,
- * 180km/h for any other passenger car,
- * 120km/h for any other motor vehicle not described above,
- * the vehicle's top speed.

The tyre to rim fitting and tyre to rim combination must be in accordance with the Tyre and Rim Standards Manual published by the Tyre & Rim Association of Australia.

NORTHERN TERRITORY

Current regulations - Northern Territory Government, Department of Infrastructure, Planning and Environment. Information Bulletin V44, Alternative Rims and Tyres, Effective 20 February, 2003.

WHEELS

For passenger cars, the maximum width of replacement wheels is 26mm wider than the largest optional wheel recommended by the vehicle manufacturer.

****For four-wheel-drive off-road passenger vehicles, replacement rim widths must not be 51mm larger than the manufacturer's standard minimum rim width. Where replacement rims are offered by the vehicle manufacturer, the maximum allowable rim width will be regarded as the width of the widest optional rim, or the width of the standard rim, plus 51mm, whichever is the greatest.***

NOTE: Sedan tyre derivative 4WD vehicles with constant 4WD or "on-demand" 4WD systems are not considered to be "four-wheel-drive off-road passenger vehicles".

* The wheels must be designed for the hub's P.C.D., i.e. no slotting of the stud holes, or re-drilling of hubs and/or stud holes is permitted.



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NORTHERN TERRITORY (Continued)

WHEELS (Continued)

* The fitment of wheel spacers between the wheel mounting face and the hub is not permitted unless O.E.

* The wheel and tyre must not foul any part of the body or suspension under all operating conditions and must be contained in the bodywork when the wheels are in the straight ahead position.

* All replacement wheels must be indelibly marked with the wheel's nominal diameter and width, and an acceptable standards mark, for aluminium alloy wheels these are:
Wheel Industries Association (Australia) - WIA, Standards Association Australia (SAA), Technischer Überwachungen Verien (TUV), Japanese Industrial Standard (JIS).

WHEEL TRACK

The maximum allowable wheel track increase is:

* Up to 26mm more than the maximum specified by the vehicle manufacturer for a car or car derivative for that particular model,

* Zero for front-wheel-drive vehicles with McPherson struts and negative scrub-radius steering geometry.

* up to 51mm more than the maximum specified by the vehicle manufacturer for off-road passenger vehicles. Where the vehicle manufacturer offers the option of a wider track (where wider wheels are optional), the maximum allowable track will be regarded as the width of the maximum wheel track offered by the manufacturer, or the track of the standard vehicle, plus 51mm, whichever is the greatest.

TYRES

Overall Diameter

The overall diameter of the wheel and tyre combination must be no more than 15mm larger than the O.E. diameter wheel and tyre and not more than 15mm smaller than the O.E. diameter wheel and tyre.

Tyre Load Rating

Any replacement tyre must have a load rating equal to or better than the minimum load rating stated by the vehicle manufacturer on the tyre placard. This can be stated on the tyre placard as either a load index or as the load per axle.



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NORTHERN TERRITORY (Continued)

TYRES (Continued)

Tyre Speed Rating

For vehicles with a GVM of 4.5 tonne or less with four or more wheels, the original speed rating of the tyre casing must be at least the lesser of:

- * 140km/h for a passenger car with special features for off-road use such as 4WD,
- * 180km/h for any other passenger car,
- * 120km/h for any other motor vehicle not described above,
- * the vehicle's top speed.

Where tyres are fitted that have a speed rating that is lower than the minimum speed rating stated on the tyre placard, a warning label must be affixed to the vehicle, as per New South Wales Regulations.

Tyres must only be fitted to the appropriate size wheel rim as specified in the the Tyre and Rim Standards Manual published by the Tyre & Rim Association of Australia.

TASMANIA

Current Regulations - Quoted from "National Code of Practice for Light Vehicle Modifications " (NCOP), Section LS, Part 4.

WHEELS

- * Replacement aluminium alloy rims must comply with one of the following standards: *Wheel Industries Association (Australia) - (WIA), Standards Association Australia (SAA), Technischer Uberwachungen Verien (TUV), Japanese Industrial Standard (JIS).*
- * All rims fitted to a front or rear axle must be of the same diameter, offset, width and mounting configuration, except for temporary spares.
- * Where a two axle vehicle is fitted with different width single tyres, the narrower tyres must not be less than 70% of the width of the wider tyres.
- * The wheels must be designed for the hub's P.C.D., i.e. no slotting of the stud holes, or re-drilling of hubs and/or stud holes is permitted.
- * **The fitment of wheel spacers between the wheel mounting face and the hub is not permitted unless O.E.**



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TASMANIA (Continued)

WHEELS (Continued)

* The wheel and tyre must not foul any part of the body or suspension under all operating conditions and must be contained in the bodywork when the wheels are in the straight ahead position.

WHEEL TRACK

The maximum allowable wheel track increase is:

- * up to 25mm more than the maximum specified by the vehicle manufacturer for passenger car.
- * Zero for front-wheel-drive vehicles with McPherson struts and negative scrub-radius steering geometry, unless the vehicle manufacturer specifies wider wheel option that provides increased track.
- * Up to 25mm more than the maximum specified by the vehicle manufacturer for off-road and four wheel drive vehicles, except vehicle fitted with beam axles front and rear, where a wheel track increase of 50mm is allowed.
- * A reduction of wheel track is not permitted.

TYRES

Overall Diameter

For *passenger cars* or passenger car derivatives, The overall diameter of the wheel and tyre combination must be no more than 15mm larger and not more than 26mm smaller than that of any tyre designated by the vehicle manufacturer for that model.

For *off-road passenger or commercial vehicles*, The overall diameter of the wheel and tyre combination must be no more than 50mm larger and not more than 26mm smaller than that of any tyre designated by the vehicle manufacturer for that model.

Where a vehicle has its GVM re-rated, the tyre load capacity must be capable of the carrying of the revised GVM, both in total and across individual axles.



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TASMANIA (Continued)

TYRES (Continued)

Tyre Speed Rating

For vehicles with a GVM of 4.5 tonne or less with four or more wheels, the original speed rating of the tyre casing must be at least the lesser of:

- * 140km/h for a passenger car with special features for off-road use such as 4WD,
- * 180km/h for any other passenger car,
- * 120km/h for any other motor vehicle not described above,
- * the vehicle's top speed.

Tyre Width

The maximum tyre width for a car or car derivative must not be more than 1.3 times the vehicle manufacturer's widest optional tyre. The maximum tyre width for an off-road passenger or commercial vehicle must not be more than 1.5 times wider than the vehicle manufacturer's widest optional tyre.

Where "non-standard" tyres and rims are fitted to a vehicle, the combination of tyre and rim must meet the size requirements of ADR 23, or for vehicles manufactured before January 1, 1974: Tyre and Rim Standard Manual of the Tyre and Rim Association of Australia, 1981 Tire & Rim Association Inc. Year Book, British Standard BS AU50, Japan Automobile Tire Manufacturers Association Year Book, Japanese Industrial Standards, (JIS-D4202).

*When converting a passenger car's wheels and tyres to those fitted to a high performance version of that model, the matching suspension components such as springs, shock absorbers and sway bars from the high performance model **should** also be used.

Toyo Tyre & Rubber Australia Limited



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A.C.T.

Refer to Tasmania

Current Regulations - Quoted from "National Code of Practice for Light Vehicle Modifications " (NCOP), Section LS, Part 4.

SOUTH AUSTRALIA

Refer to Tasmania

Current Regulations - Quoted from "National Code of Practice for Light Vehicle Modifications " (NCOP), Section LS, Part 4.

WESTERN AUSTRALIA

Refer to Tasmania

Current Regulations - Quoted from "National Code of Practice for Light Vehicle Modifications " (NCOP), Section LS, Part 4.

National Code of Practice for Light Vehicle Modifications

The Federal Government is currently attempting to get all states and territories to adopt this code, which includes regulations for alternative wheels and tyres, in Section LS, Part 4.

Currently Tasmania, South Australia, A.C.T., and Western Australia have adopted this code of practice. The current regulations for alternative wheels and tyres for Queensland and Victoria are very similar to those included in the N.C.O.P. for light vehicle modifications.