

ADVISORY BULLETIN

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Sidewall Bulge (Pinch Shock)

Appearance of Damage –

Bulge or a deformation in the sidewall of the tyre.



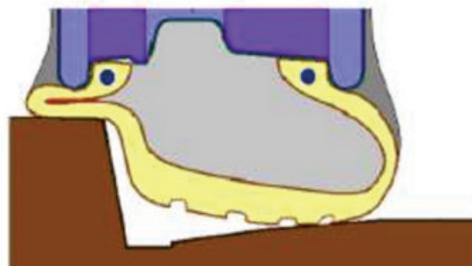
Cause of the damage –

A severe impact can cause the tyre sidewall to be pinched between the rim and the road surface, which may cut or weaken the casing ply(s). This type of damage is often seen as a bulge/bubble or a tear in the sidewall.

Explanation of the Damage –

What is Pinch Shock? When your vehicle accidentally runs over a solid object such as a pot-hole or kerb, the tyre takes a severe shock to the tread area (which is in contact with the road) resulting in the sidewall of the tyre to over-flex beyond its limit. This over-flexing of the tyre causes the sidewall to get pinched between the rim and the road surface.

Casing plies inside the tyre are broken by a severe impact due to hitting a pothole or a kerb.



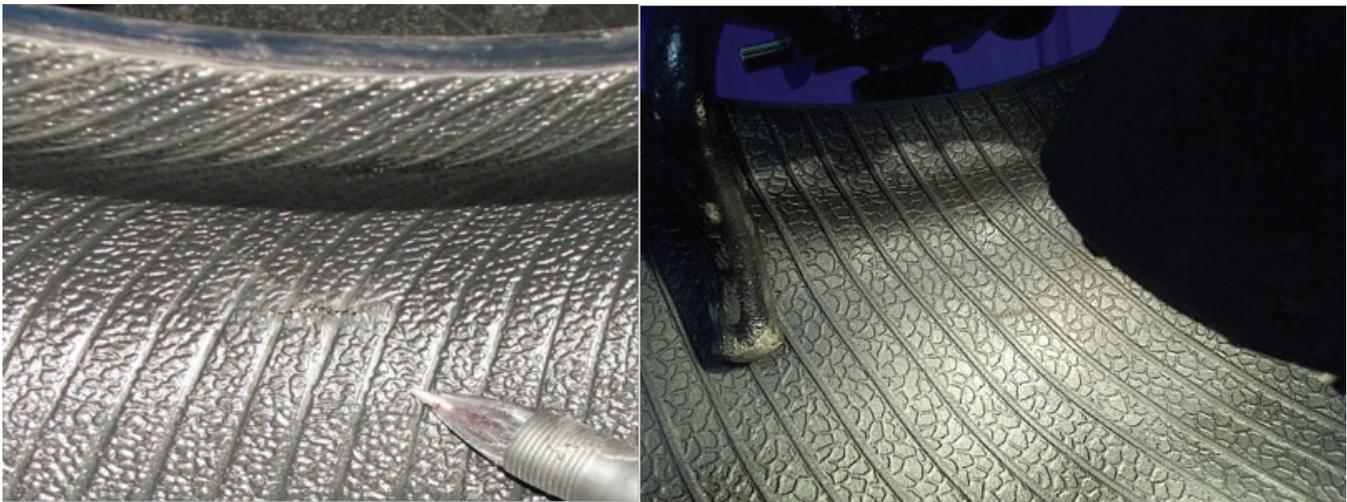
This Bulletin should be considered as being of a general advisory nature only. In case of conflict with existing recommendations issued by a vehicle manufacturer, these latter recommendations should apply.

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This pinching of the tyre sidewall breaks the casing plies inside the tyre. This specific spot of the tyre with the internal injury which is only supported by the rubber construction becomes the weakest point in the tyre. Therefore, the pressurised air inside the tyre pushes the damaged area from the surface level of the sidewall, resulting in a bulge. This bulge may become visible immediately after contact with an object, or if the contact was only sufficient to weaken the Plies. Normal operation can result in the ply breaking or becoming visible at a later time. This is important as customers/users may not recall the pinch incident or indeed someone else may have been driving at the time.

Evidence of a pinch shock is generally visible on the tyres inner liner, requiring the tyre to be dismantled from the rim to confirm the cause of damage.



How to Avoid?

Try to avoid road damages such as pothole, kerbs, or other obstacles. Under inflated tyre increases the possibility of pinch shock, so always maintain proper inflation pressure.

Recommendation –

Regardless of the actual cause, continuing to drive on a tyre with a bulge is extremely dangerous as it could burst at any time. The tyre must be removed from the car immediately and scrapped.

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