TECHNICAL BULLETIN

MICHELIN X[®] TWEEL[™] SSL AND TMF AIRLESS RADIAL TIRE HOW TO REPAIR SPOKE CRACKS



Spoke Edge Cracks

Repaired Cracks

Repairing spokes can double the remaining spoke life. The sooner a crack is found and repaired, the longer the spoke will last.

ACTION REQUIRED

Inspect the Michelin X[®] TWEEL[™] SSL or TMF airless radial tire tire for spoke cracks as often as is convenient, such as whenever the machine is inspected, cleaned, sent in for maintenance, or whenever the tires are rotated. It's easiest to inspect the tires when unmounted.

Clean spokes if caked with dirt or other material to make cracks more apparent. A pressure washer works well. Any rocks wedged between spokes should be pried loose to prevent future damage. With the aid of a flashlight, look for spoke cracks along the edge of each spoke on both sides of the tire. Be careful to identify even quarter inch long cuts and tears.

To look for cracks on the inside of a tire while it's mounted on a machine, clean all spoke surfaces, then look between each pair of spokes using a flashlight and carefully search for cracks on the far side of the spoke. Tires with cracks on the machine side will have to be unmounted to allow access to make the crack repair.

Repair any cracks that are found by following the repair steps on the reverse side.



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Required Tools



Milwaukee 48-22-4030 Aviation Snips, Straight Cutting



Hole Punch – "Big Leather Punch" from Brettuns Village (brettunsvillage.com/leather/tools/tools/#punch)











Spoke Repair Instructions

- Check to see whether or not the 5mm hole punch can reach the crack tip.
- 2. If the punch tool can't reach the crack tip, use the aviation snips to cut away spoke material at shallow angles to the crack until the tool can reach the crack tip.
- 3. Use the hole punch to make a 5mm hole that completely removes the crack tip.
- 4. If the crack faces leading up to the punched hole still touch, use the aviation snips to cut away material on both sides of the crack so that there is a gap between the faces all the way up to the hole.
- 5. Use a flashlight to look at the far side of the punched hole and doublecheck that the crack tip is completely removed. If a small crack is still visible, use the punch to elongate the hole until the crack tip is removed.

Crack Repair Example



