## Truck Tyre Injury Guidance

# Fatigue Failure "Zipper"







AREA: CARCASS & LINER

CONDITION: Circumferential break in the mid to upper sidewall exposing an even line

of broken cords.



#### **CAUSES:**

 Severe under-infl ation or overloading which produces casing cord fatigue. This is particularly common on twinned tyres on drive or trailer positions where one of the two tyres could be carrying additional loads as a result of the other being under-infl ated.

#### **RECOMMENDATIONS:**

- Do not overload tyres. Maintain recommended inflation pressure for the axle loads imposed.
- Use dual tyres properly so that the difference of overall diameter will be minimal.
- Use new tubes for new tyres, and check valve cores to avoid air leakage.
- In case of new tyres, check the air pressure again one day after it was mounted.
- Remove moisture from insides of tyres completely when mounted.

### **HOW TO CHECK:**

In order to fi nd out if the damaged tyre was used under low air pressure and/or overload, inspect the tread to see whether shoulder wear/heel & toe wear/abraded marks show, and inspect the bead to see whether it is deformed/abraded.

Any tyre removed from operation that was running at 80% or below the recommended inflation pressure should be isolated from service and thoroughly inspected prior to repair or retreading. Always use a safety cage during inflation.

