

# OPEN SIDEWALL SPLICE

## SIDEWALL AREA—CASING CONDITIONS

### APPEARANCE

Regular smooth opening of the top layer of sidewall rubber that may appear radially or diagonally. Appearance is similar to a cut, however, the opening extends at a sharp angle into the sidewall rubber. No cords are exposed.

### PROBABLE CAUSE(S)

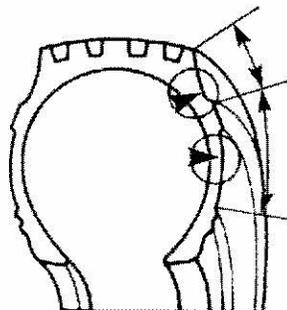
Manufacturing process.

### ACTION

**Tire:** Remove the tire from service. Consult your tire manufacturer.

**Vehicle:** None

**Operations:** None



### CONDITION CODE

ALPHA	NUMERIC
OZ	1215

# SIDEWALL PENETRATION

## SIDEWALL AREA—CASING CONDITIONS

### APPEARANCE

Any damage caused by an object that goes through the sidewall of the tire.

### PROBABLE CAUSE(S)

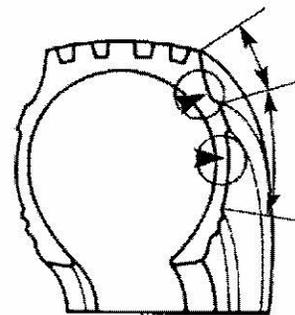
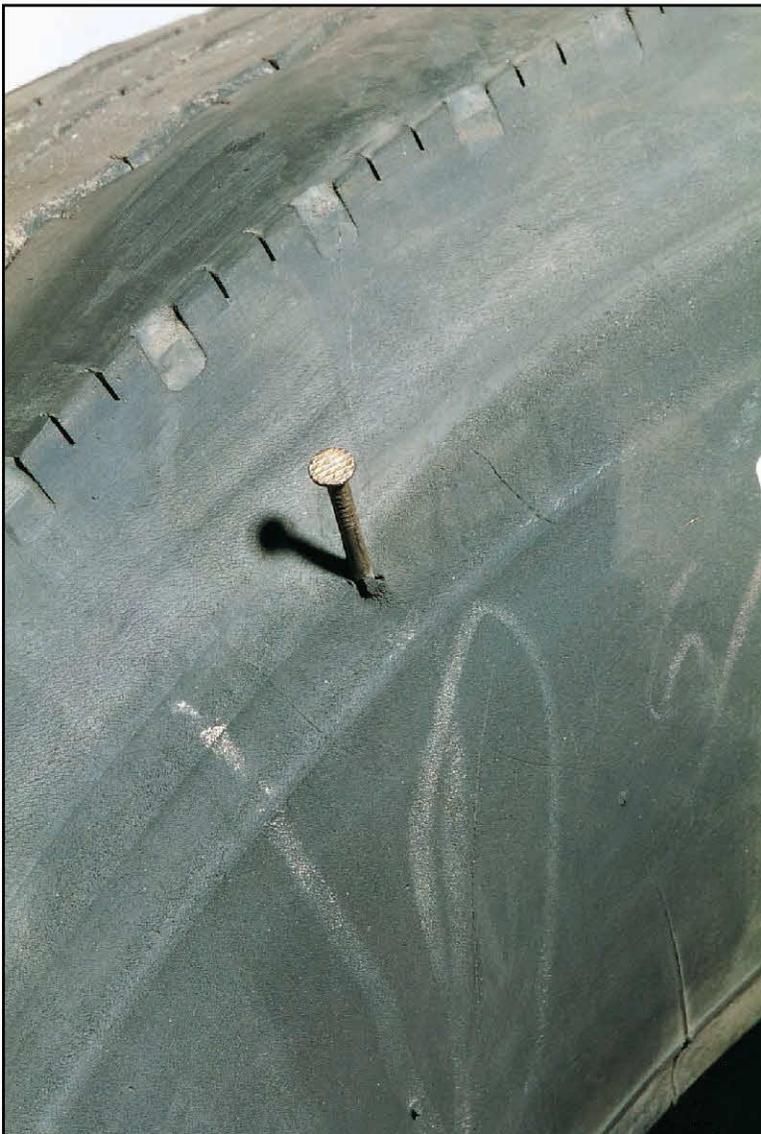
Road debris and, occasionally, vandalism with a sharp puncturing instrument.

### ACTION

**Tire:** Have the tire inspected by your tire repair supplier to determine reparability.

**Vehicle:** None

**Operations:** Avoid road hazards.



### CONDITION CODE

ALPHA	NUMERIC
SP	1216

# CRACK AT EDGE OF RETREAD WING

## SIDEWALL AREA—CASING CONDITIONS

### APPEARANCE

Circumferential crack at the base of the tread skirt.

### PROBABLE CAUSE

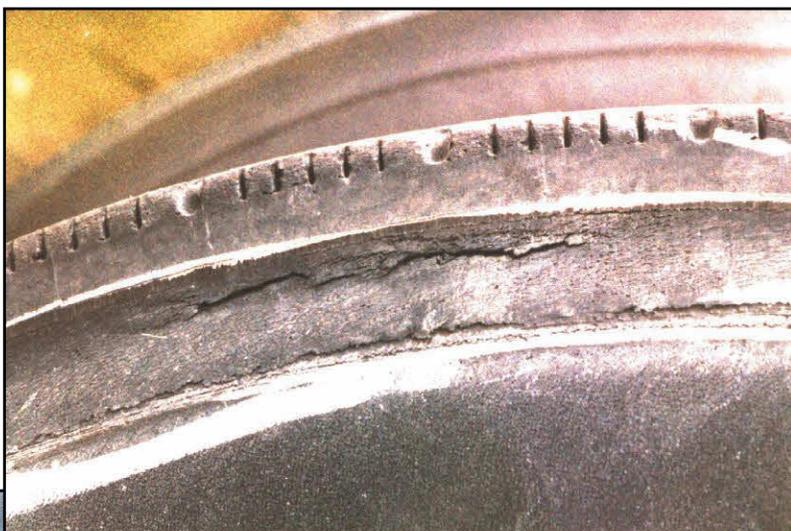
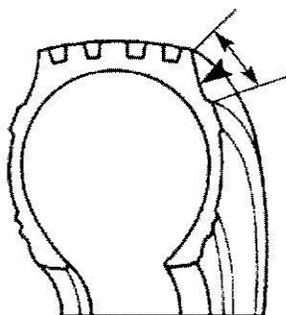
Improper buff texture.

### ACTION

**Tire:** Consult your retread supplier for warranty consideration and possibility of retreading again or continued use.

**Vehicle:** None.

**Operations:** None.



### CONDITION CODE

ALPHA	NUMERIC
CW	1217

# CRACKING DUE TO EXCESSIVE SIDEWALL BUFF

## SIDEWALL AREA—CASING CONDITIONS

### APPEARANCE

Circumferential cracks in the shoulder area originating on the outside of the tire.

### PROBABLE CAUSE

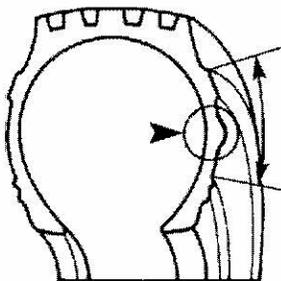
Improper buff texture.

### ACTION

**Tire:** Consult your retread supplier for warranty consideration. Otherwise, scrap the tire.

**Vehicle:** None.

**Operations:** None.



CONDITION CODE

ALPHA  
CB

NUMERIC  
1218

# CIRCUMFERENTIAL FATIGUE RUPTURE (ZIPPER)

## SIDEWALL AREA—CASING CONDITIONS

### APPEARANCE

A circumferential break in the mid to upper sidewall exposing an even line of broken cords.

### PROBABLE CAUSE(S)

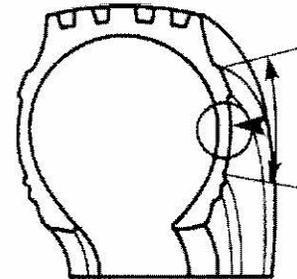
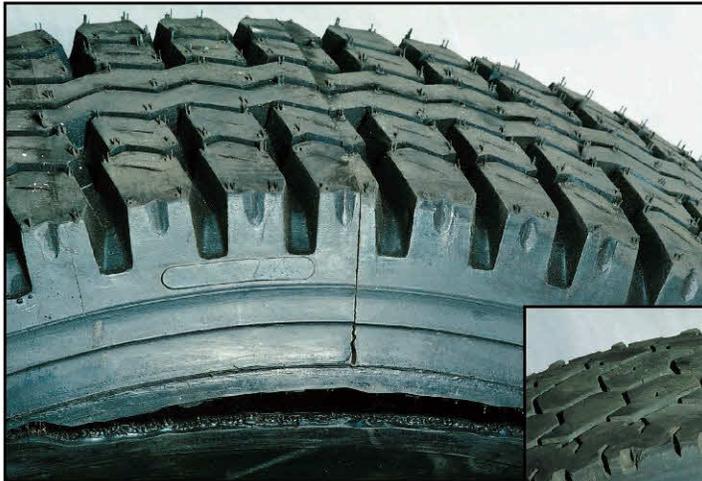
Severe underinflation or overloading which produces casing cord fatigue.

### ACTION

**Tire:** Scrap tire.

**Vehicle:** None

**Operations:** Any tire operated at 80 percent or below the desired inflation pressure should be removed from service and handled according to TMC RP 209. Thoroughly inspect all tires prior to repair and retreading; always use a safety cage during inflation.



### CONDITION CODE

ALPHA	NUMERIC
ZP	1219

# RUN FLAT

## SIDEWALL AREA—CASING CONDITIONS

### APPEARANCE

Sidewalls exhibit jagged cracks usually 360° around tire. Chunks of sidewall may be missing as well. In advanced stages, tires will lose their tread and belt package, eventually resulting in two sidewalls.

### PROBABLE CAUSE(S)

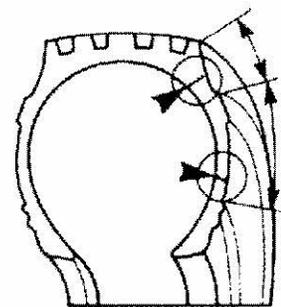
Loss of inflation pressure. Diagnosis of cause of inflation loss becomes difficult or impossible as this condition progresses.

### ACTION

**Tire:** Scrap tire.

**Vehicle:** None

**Operations:** Review tire inflation maintenance and breakdown procedures.



### CONDITION CODE

ALPHA	NUMERIC
RF	1606

# RUN FLAT—ONLY SIDEWALLS REMAINING

## SIDEWALL AREA—CASING CONDITIONS

### APPEARANCE

The tread and belt package are gone, leaving only the sidewalls.

### PROBABLE CAUSE

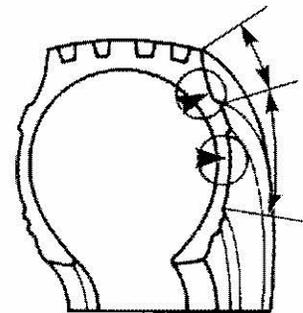
Running severely underinflated or flat for an extended period of time. Diagnosis of cause of inflation loss is difficult if not impossible.

### ACTION

**Tire:** Scrap the tire remains.

**Vehicle:** None.

**Operations:** Perform frequently scheduled air pressure checks and pre-trip inspections.



### CONDITION CODE

ALPHA	NUMERIC
RF	1606

# PENETRATIONS AND ROAD HAZARDS

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Evidence of a puncture or damage by a foreign object through the crown area; may result in loss of air and/or separation.

### PROBABLE CAUSE(S)

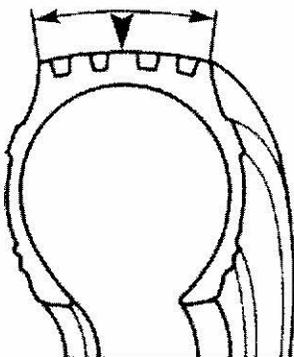
Road hazard or foreign object.

### ACTION

**Tire:** Consult your repair facility for possibility of repair. If the damage is beyond limits and/or a separation is evident, scrap tire.

**Vehicle:** None

**Operations:** Eliminate yard debris and review pre-trip inspection procedures.



CONDITION CODE

ALPHA  
RH

NUMERIC  
1607

# VEHICLE DAMAGE

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Abrasions, cutting or chipping in tread or shoulder area, usually 360° around tire.

### PROBABLE CAUSE(S)

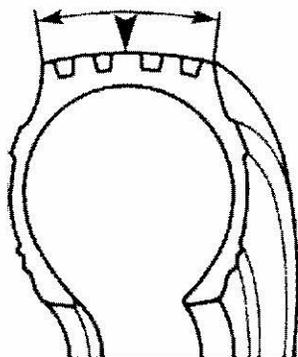
Contact with vehicle components, such as mud flap brackets, trailer wheel house molding, bumpers, etc.

### ACTION

**Tire:** If cuts are not deeper than the base of the tread groove, return to a dual position. If the damage is deeper, retread if possible. If the condition is more severe, scrap tire.

**Vehicle:** Analyze the cause of the condition and correct. Ensure the tire does not come in contact with the vehicle.

**Operations:** Review driving procedures and pre-trip inspection practices.



CONDITION CODE

ALPHA  
VD

NUMERIC  
1604

# BRAKE SKID DAMAGE

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Localized spot of excessive wear across the tread face showing abrasion marks from the tread sliding on the road surface; damage may extend into the casing.

### PROBABLE CAUSE(S)

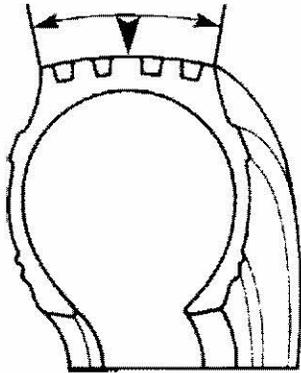
Brake skid usually occurs on trailer and drive tires. Aggravated by new brakes (high friction, not worn in), unbalanced brake system, aggressive use of brakes, driver abuse and unloaded vehicles. Frequently associated with gravel surfaces.

### ACTION

**Tire:** If condition does not extend below 2/32" of tread, duals can be rematched to position flat spots 180° from each other. Since flat spotting tends to repeat in the same location, rotation should be performed as soon as possible. If more severe, the tire can be repaired or retreaded if damage is not into the belts. If damage is too excessive, scrap tire.

**Vehicle:** Check brake system components and brake balance.

**Operations:** Review driving procedures.



CONDITION CODE

ALPHA  
BS

NUMERIC  
1301

# FORKLIFT DAMAGE/CUTS & SNAGS

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Individual or multiple cuts, usually in the tread grooves in a localized area of the crown.

### PROBABLE CAUSE(S)

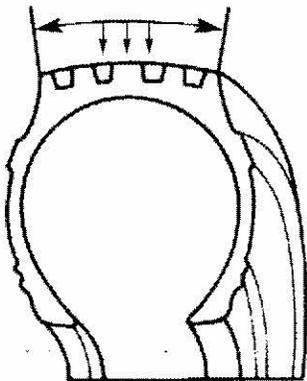
Caused during shipping and handling by lift truck forks or similar equipment.

### ACTION

**Tire:** Do not place in service. Determine responsibility for the damage.

**Vehicle:** None

**Operations:** Inspect new tires upon receipt.



CONDITION CODE

ALPHA  
FD

NUMERIC  
1602

# WILD WIRE

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Wire protruding through the exterior or interior surface of the tire.

### PROBABLE CAUSE(S)

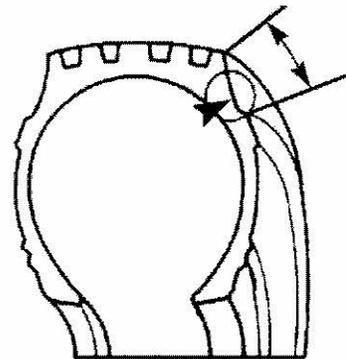
Loose or separated bead or body wires usually associated with a penetration.

### ACTION

**Tire:** If a penetration is evident, scrap the tire. If not, consult your tire manufacturer.

**Vehicle:** None

**Operations:** None



CONDITION CODE

ALPHA  
WW

NUMERIC  
1302

# DELAMINATION

## CROWN AREA—CASING CONDITION

### APPEARANCE

Layers of rubber in the tread are visible and peeling apart.

### PROBABLE CAUSE

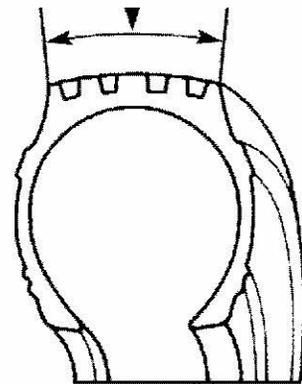
Excessive mold lube, a rubber compounding problem, surface scorch of the tread rubber or poor mold fitment.

### ACTION

**Tire:** The tread can be run out if the condition is not severe, although tread mileage may be reduced. If preferred, consult your retreader for possible warranty adjustment and retread the tire again.

**Vehicle:** None.

**Operations:** None.



### CONDITION CODE

ALPHA	NUMERIC
DL	1303

# LUG BASE CRACKING

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

One or more cracks in the tread rubber located between and at the base of lugs. Advanced conditions may result in lug tears.

### PROBABLE CAUSE(S)

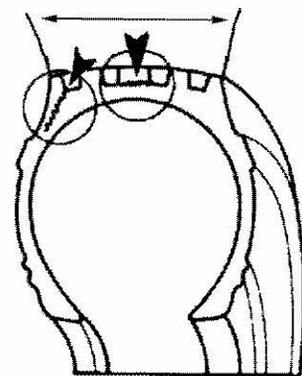
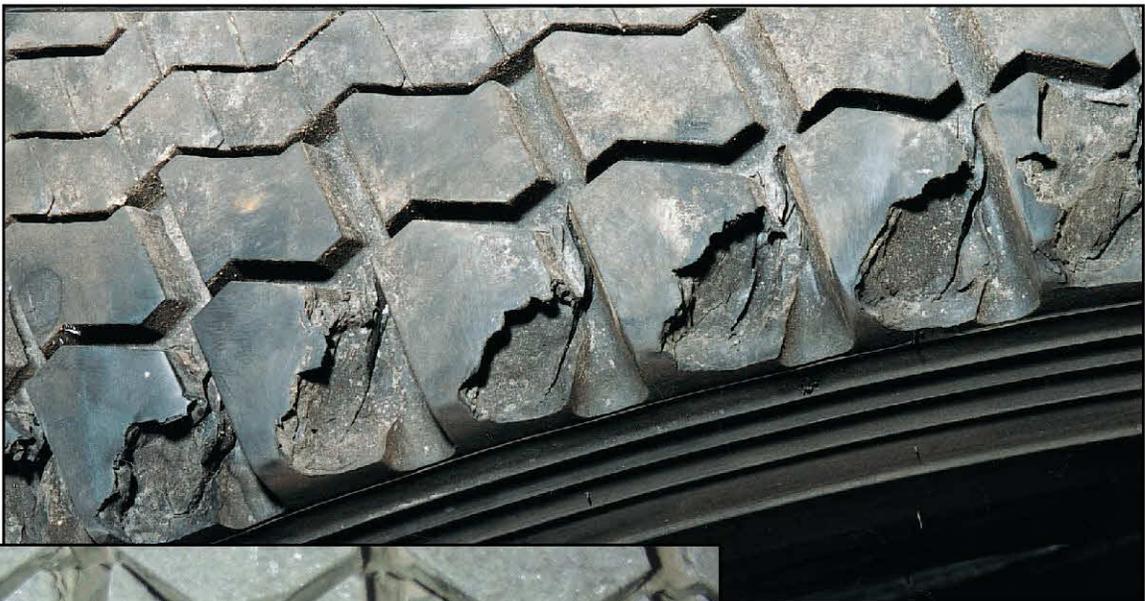
Caused by a combination of drive-axle torque, load and heat. Could also be caused by a manufacturing process or can be due to tire construction or started by stone drilling. It is aggravated by underinflation.

### ACTION

**Tire:** If cracks do not extend into cord material, continue in service. If cracks extend into the cord material, consult your tire manufacturer.

**Vehicle:** None

**Operations:** None



CONDITION CODE

ALPHA	NUMERIC
LB	1304

# RETREAD LUG BASE CRACKING/TEARING

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Cracking is evident at the base of the tread lugs. Some lugs may be torn from the tread in severe cases.

### PROBABLE CAUSE(S)

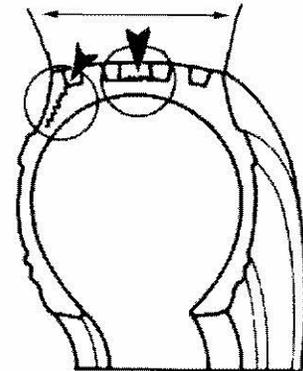
The wrong tread design was used for the operation (single axle, high torque drive application with deep traction tread design may contribute to this condition), incorrect tread rubber compound, excessive or lack of undertread, or over curing.

### ACTION

**Tire:** Consult your retreader for possible warranty adjustment. Retread if possible.

**Vehicle:** None

**Operations:** Review tread design selection for application and work with your retreader to address possible retread process problems.



### CONDITION CODE

ALPHA	NUMERIC
LB	1304

# CHIPPING/FLAKING/CHUNKING TREAD

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Rough, abraded tread surface with numerous small flakes or chunks of tread removed.

### PROBABLE CAUSE(S)

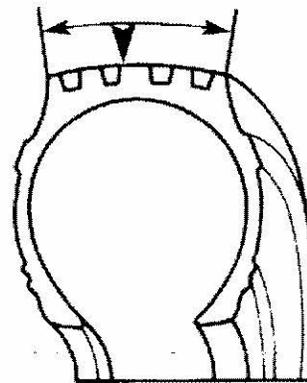
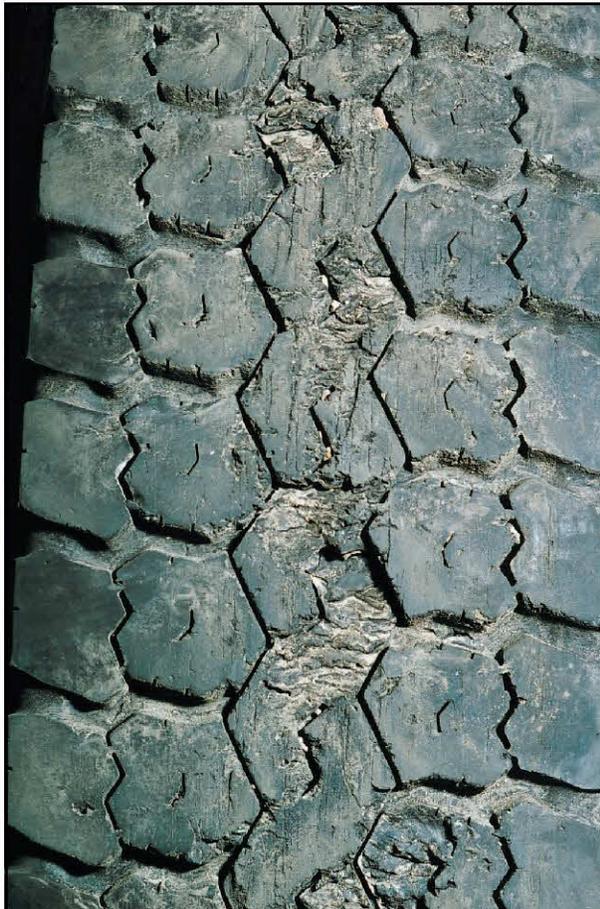
Caused by tire running over curbs or rails or by severe localized impacts. Can also be caused by operation of tires with over-the-road tread rubber compounds on gravel surfaces and haul roads; misapplication of the tire to service conditions. Aggravated by high torque, underinflation, overinflation and sharp turning, especially on drive tires.

### ACTION

**Tire:** Tires with minor chipping and flaking can be returned to service. If damage extends below 2/32" retread the tire. If steel is visible, consult your retreader for the possibility of repair and retread.

**Vehicle:** None.

**Operations:** Review tire selection, tire operation and driving procedures.



CONDITION CODE

ALPHA  
CC

NUMERIC  
1305

# STONE DRILLING

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Damage caused by stones trapped in the tread which penetrate the tread base and may extend into the belts.

### PROBABLE CAUSE(S)

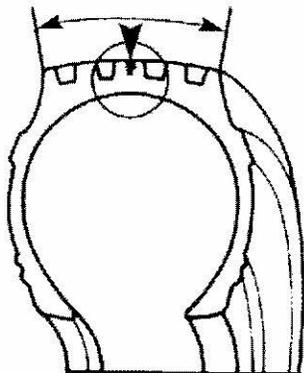
Overinflation, tread design and/or misapplication of the tire to service conditions (gravel roads/ quarry operation).

### ACTION

**Tire:** Remove remaining stones and return to service. If penetrations are into the belts, consult the retreader or your tire manufacturer. If unable to retread, scrap the tire.

**Vehicle:** None

**Operations:** Review air pressure specification and tire selection.



CONDITION CODE

ALPHA  
DR

NUMERIC  
1306

# REGROOVING DAMAGE

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Exposed belts at the base of the regroove.

### PROBABLE CAUSE(S)

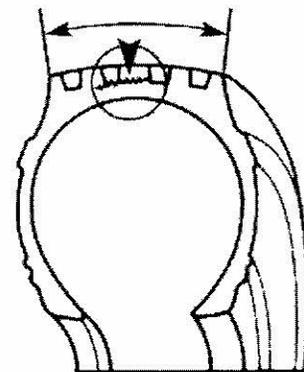
Regrooving too deep.

### ACTION

**Tire:** Consult your retreader for the possibility of retreading.

**Vehicle:** None

**Operations:** Review the cost effectiveness of regrooving. Refer to TMC RP 203 for information on regrooving.



### CONDITION CODE

ALPHA	NUMERIC
RD	1307

# DYNAMOMETER TYPE DAMAGE

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Swollen, spongy area hidden inside the center rib/lug extending up to 360° around the tire. Can cause a flat wear spot or may surface as a localized cavity.

### PROBABLE CAUSE(S)

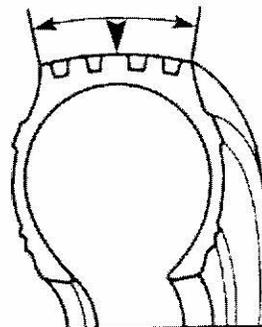
Excessive heat buildup on a dynamometer, also on high speed, lightly loaded overinflated applications using deep lug tires. New deep tread on/off highway tires may develop this condition on vehicles in transit for delivery.

### ACTION

**Tire:** Consult your retreader for the possibility of retreading.

**Vehicle:** None

**Operations:** Review dynamometer procedures. Review load/inflation and/or tire selection. Review in-transit vehicle delivery practices.



### CONDITION CODE

ALPHA	NUMERIC
DD	1308

# PETROLEUM/CHEMICAL PRODUCT DAMAGE

## CROWN AREA—CASING CONDITIONS

### APPEARANCE

Localized spot of blistered, spongy or deteriorated rubber in tread area.

### PROBABLE CAUSE(S)

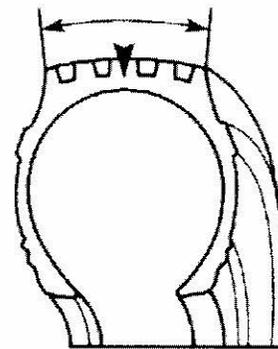
Exposure to chemicals, which attack tread rubber.

### ACTION

**Tire:** Scrap the tire.

**Vehicle:** None

**Operations:** Identify and eliminate source of contamination.



### CONDITION CODE

ALPHA	NUMERIC
PD	1601