

BAR TROUBLESHOOTING CHART

NORMAL BAR RAIL



Correct bar rail condition results in optimum cutting performance.

UNEVEN BAR RAILS



Cause:

Uneven cutter filing or dull cutters.

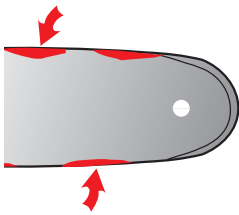
Result:

Uneven rail wear, with chain leaning on one side, and will not cut straight. Action will result in shallow groove.

Remedy:

Replace guide bar.

BLUE SPOT ON RAILS



Cause:

Pinched or closed rails. Friction between drive link and rail. Chain passing through area causes rails to turn blue.

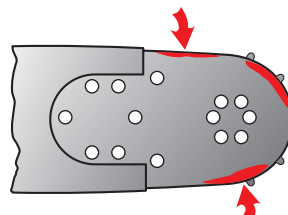
Result:

Blue areas may be on one or both rails. Heat caused by friction causes metal to soften.

Remedy:

Replace bar.

NOSE AREA TURNED BLUE



Cause:

Nose was pinched. Friction generated from rotating sprocket.

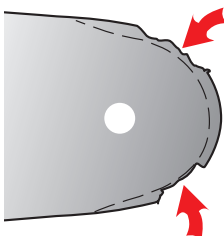
Result:

Nose edge turns blue.

Remedy:

Replace sprocket nose assembly.

BROKEN SECTION OF STELLITE TIP



Cause:

Drive links were forced sideways due to unusual operating conditions.

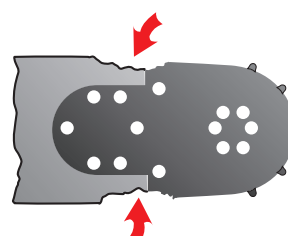
Result:

Section broken out of hardtip material (stellite).

Remedy:

Possibility of repairing by qualified shop, or replace bar.

CHIPPING AND FRETTING AT NOSE JUNCTION



Cause:

Incorrect limbing technique. Loose chain tension. Excessive pressure.

Result:

Chipping and fretting at nose junction.

Remedy:

Replace nose assembly and dress bar rails. If bar rail chipping is severe, replace bar body.

BAR TROUBLESHOOTING CHART

WORN BAR RAILS



Cause:
Forcing a dull chain to cut or using heavy feed force.

Result:
Chain wobbles in groove, and will not cut straight. Bottom of cutters and side links wear quickly.

Remedy:
Straighten bar rails.

CLOSED-IN RAILS

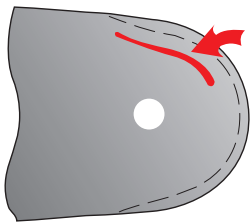


Cause:
Force has been used, when cutting attachment has been pinched in cut.

Result:
Chain jams.

Remedy:
Open up bar groove.

RAIL FAILURE AT NOSE

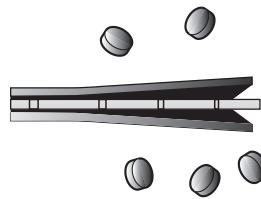


Cause:
Excessive side forces on nose rail due to operating accident.

Result:
Split rail at bottom of groove at nose.

Remedy:
Possibility of repairing by qualified shop, or replace bar.

NOSE ASSEMBLY OPENING

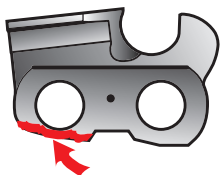


Cause:
Chain derailed. Nose twisted. Excessive use of nose for carving.

Result:
Nose rails spread. Loss of roller bearings.

Remedy:
Replace nose assembly.

EXCESSIVE WEAR AND CHIPPING

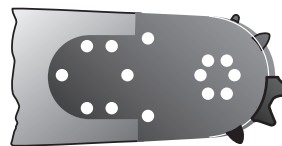


Cause:
Loose chain tension.

Result:
Material wear and chipping behind stellite and at nose end.

Remedy:
Reverse bar. Adjust chain tension as recommended.

BROKEN SPROCKET



Cause:
Chain derailed. Irregular operating conditions, which forced drive link sideways.

Result:
Nose rails spread. Loss of roller bearings. Broken sprocket.

Remedy:
Replace nose assembly.

APPLICATION GUIDE



BAR TROUBLESHOOTING CHART

THIN RAIL



Cause:
Chain leaning in groove.
Cutting crooked.

Result:
Thin rail on one or both sides of bar. Inside wear on bottom of groove.

Remedy:
Replace bar.

WIRE EDGE RAIL

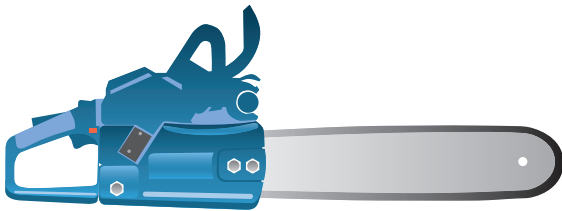


Cause:
Cutting pressure on edge of bar rails.

Result:
Outer rail edges will wear. Rail chipping will result if edge is not removed.

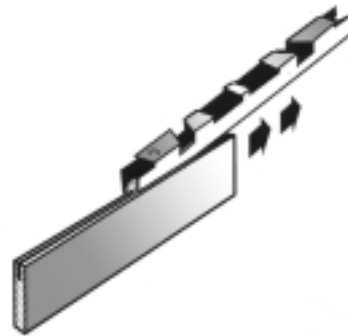
Remedy:
remove wire edge using a flat file on edge of bar face.

CORRECT BAR TENSIONING



- 1) Loosen guide bar mounting nut.
- 2) Tighten tension screw until the bottom of the side links just contact the bottom of the guide bar rails.
- 3) When chain is tensioned correctly, it should pull freely around guide bar.
- 4) Hold bar tip upwards and tighten mounting nuts.

GROOVE CLEANING



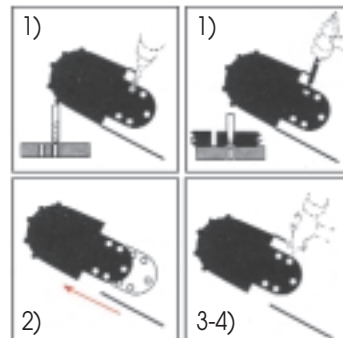
- 1) Clean guide bar grooves regularly.
- 2) Clean oil holes.

LUBRICATING NOSE SPROCKET



- 1) Clean out grease hole before inserting grease nozzle.
- 2) Rotate the nose sprocket while pumping grease into bearings.

REPLACING SPROCKET NOSE ASSEMBLES



- 1) Punch or drill rivets out.
- 2) Remove damaged nose.
- 3) Replace with new nose.
- 4) Peen rivets carefully. Do not hit bar body.