

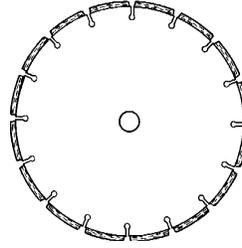
TROUBLE SHOOTING DIAMOND BLADES

BURNING



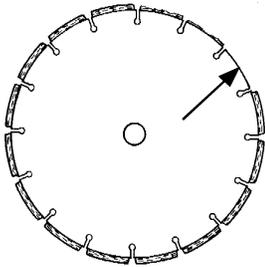
- CAUSE:** Insufficient coolant (water) at the cutting surface of a wet cut core bit or blade.
- REMEDY:** Increase the flow of water and check for proper direction of the water to the cutting surface.
- CAUSE:** Insufficient cooling (air)
- REMEDY:** Allow the blade to cool every few feet of cut by running it

BLADE WILL NOT CUT (GLAZING)



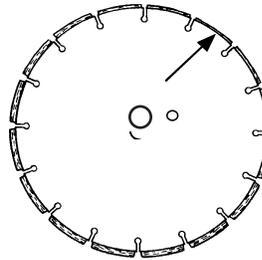
- CAUSE:** Blade is too hard for material being cut. (Wrong spec.) Bond will not wear away to expose new diamonds.
- REMEDY:** Choose a softer bond.
- CAUSE:** Material being cut is too hard.
- REMEDY:** Dress or sharpen the blade with a soft concrete block or old abrasive wheel to expose new diamonds. If continual dressing is needed change to a softer bond.
- CAUSE:** Insufficient power to permit blade to cut properly.
- REMEDY:** Check and tighten belts and make sure adequate horsepower is available for application

SEGMENT LOSS



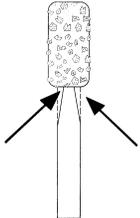
- CAUSE:** On stone or masonry blades the material may not have been held firmly which allowed the blade to twist or jam.
- REMEDY:** Material must be held firmly.
- CAUSE:** Overheating due to an inadequate supply of water. Look for burning or discoloration near missing segments.
- REMEDY:** Provide adequate supply of water.
- CAUSE:** Undercutting which wears away blade core and weakens the weld between segment and core.
- REMEDY:** Increase water supply and if material being cut is very abrasive switch to wear-resistant cores.
- CAUSE:** Blade is too hard for material being cut causing excessive dullness and the segment separates because of impact, fatigue or frictional heat.
- REMEDY:** Use the proper blade specification for material being cut.

WORN OUT-OF-ROUND



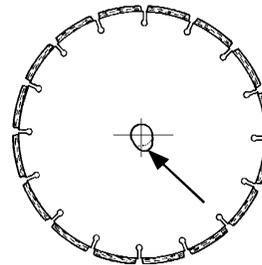
- CAUSE:** Worn shaft bearings on saw which allows blade to run eccentric.
- REMEDY:** Install new bearings.
- CAUSE:** Engine not properly tuned which causes "hunting".
- REMEDY:** Tune the engine.
- CAUSE:** Blade arbor hole is damaged.
- REMEDY:** If blade is in good condition the core may be re-bored.
- CAUSE:** Blade mounting arbor is worn or is the wrong size.
- REMEDY:** Replace worn arbor bushing or arbor shaft.
- CAUSE:** Bond is too hard for material causing machine to "pound" at regular intervals, thereby wearing one half of the blade more than the other.

UNDERCUTTING



- CAUSE:** A condition in which the steel core wears at a faster rate than the diamond segments. It is caused by highly abrasive material grinding against the core.
- REMEDY:** The blade core should be equipped with undercut protectors or polyarc segments.

ARBOR OUT OF ROUND



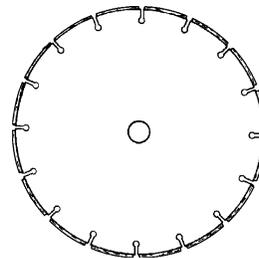
- CAUSE:** Blade collar is not properly tightened allowing it to turn or rotate on shaft.
- REMEDY:** Tighten collars.
- CAUSE:** Worn or dirty collars which do not allow proper blade clamping.
- REMEDY:** Clean and replace if necessary.
- CAUSE:** Blade not properly mounted.
- REMEDY:** Rebore arbor hole if within

LOSS OF TENSION



- CAUSE:** Blade is used on a misaligned saw.
- REMEDY:** Check for proper saw alignment.
- CAUSE:** Blade is excessively hard for the material being cut.
- REMEDY:** Correct bond spec.
- CAUSE:** Material slippage causing blade to twist.
- REMEDY:** Maintain a firm grip on material while cutting.
- CAUSE:** Undersize or mis-matched blade collars.
- REMEDY:** Minimum 3-7/8" - 4-1/2" on concrete saws, 6" Minimum on blades over 30".
- CAUSE:** Blade used at improper RPM.
- REMEDY:** Check shaft RPM.
- CAUSE:** Improper mounting on arbor shaft allows collars to bend blade when tightened.
- REMEDY:** Make sure blade is securely on arbor shoulder until outside flange and nut are firmly tightened.

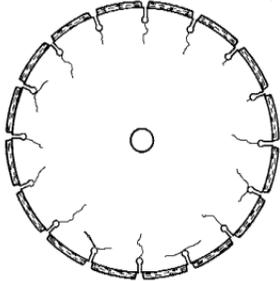
EXCESSIVE WEAR UNDERCUTTING



- CAUSE:** Using the wrong blade spec. on highly abrasive materials.
- REMEDY:** Change to a more abrasive resistant bond.
- CAUSE:** Lack of sufficient coolant to the blade often detected by excessive wear in the center of the segment.
- REMEDY:** Make sure water supply system is functioning properly.
- CAUSE:** Wearing out-of-round accelerates wear. Usually caused by bad bearings, loose or worn "V" belts.
- REMEDY:** Replace bad bearings or worn "V" belts

TROUBLE SHOOTING DIAMOND BLADES

CORE CRACKS



CAUSE: Blade is too hard for material being cut.

REMEDY: Change to softer bond.

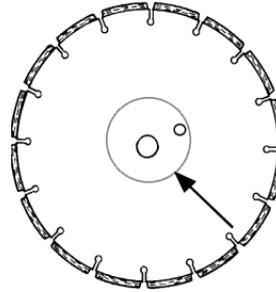
CAUSE: Excessive cutting pressure, or jamming or twisting of the blade

REMEDY: The saw operator should use a steady even pressure without twisting the blade in the cut.

CAUSE: Overheating through inadequate water supply or not allowing a dry blade to intermittently cool down.

REMEDY: Use adequate water on wet cutting blades and allow adequate air flow on dry blades.

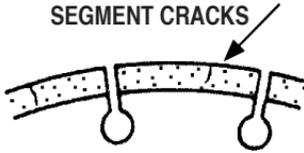
MISMOUNTING



CAUSE: Blade collars are not properly tightened or are worn out.

REMEDY: Check tightness and replace collars if necessary.

SEGMENT CRACKS



CAUSE: Blade is too hard for the material being cut.

REMEDY: Use correct blade with a softer bond.

UNEVEN SIDE WEAR



CAUSE: Insufficient water, generally on one side of blade.
REMEDY: Make sure water is being distributed evenly on both sides of blade.

CAUSE: Equipment problem which causes blade to wear out of round.

REMEDY: Replace bearings, worn arbor shaft or misaligned spindle.

CAUSE: Saw Head is misaligned.

REMEDY: Check saw head alignment for squareness both vertically and horizontally.