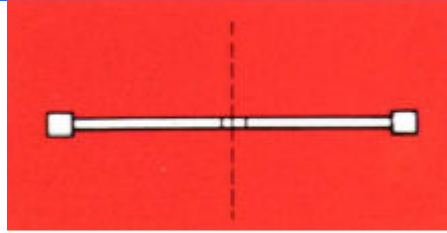


Blade worn out of round



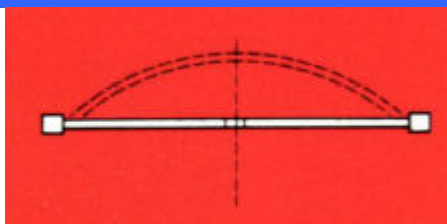
CAUSES

- Shaft bearings are worn (masonry and concrete).
- Engine is not properly tuned on concrete saws, causing surges in blade rotation.
- Blade arbor hole is damaged from previous mismounting.
- Blade mounting arbor is worn, probably in a groove-like formation from previous blades.
- Blade is slipping on arbor shaft.
- Bond is too hard for material, causing a “pounding” and wearing one half of the blade more than the other half.

REMEDIES

- ✓ Install new blade shaft bearings or blade shaft, as required.
- ✓ Tune engine according to manufacturer manual.
- ✓ If steel center thickness is 3mm or less at arbor hole, but diamond segment can still be used, rebraze the segments onto new steel center. If steel center is 3mm or more, rebores arbor hole and bush to original size.
- ✓ Replace worn shaft or mounting arbor bushing.
- ✓ On masonry saws, tighten blade collar. On concrete saws, make certain that drive pin is functioning.
- ✓ Use proper blade specification.

Loss of tension



CAUSES

- Steel center has been overheating.
- Steel center has been overheating as a result of blade spinning on arbor.
- Steel center has been overheating from rubbing the side of material being cut.
- Unequal pressure at blade clamping collars.
- Improper blade specification; blade is too hard for the material being cut.

REMEDIES

- ✓ Check water flow, distribution and lines.
- ✓ Tighten the blade shaft nut. Make certain the drive pin is functioning (on concrete saws).
- ✓ Properly align the saw to prevent square cutting. Make certain blade R.P.M. is correct so the blade operates at its tensioned speed.
- ✓ Blade clamping collars should be identical in diameter and the recommended size.
- ✓ Use a softer bonded blade to reduce operating stresses.

Uneven segment wear



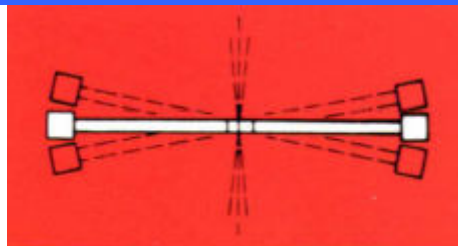
CAUSES

- Insufficient water (usually on one side of blade).
- Equipment defects cause the segments to wear unevenly.
- Saw head is misaligned.

REMEDIES

- ✓ Flush out water system and check flow and distribution to both sides of blade.
- ✓ Replace bad bearings, worn arbor shaft or misaligned to spindle. (Concrete saws: engine must run smoothly to prevent harmonic vibration).
- ✓ Check saw head alignment for squareness both vertically and horizontally.

Blade wobbles



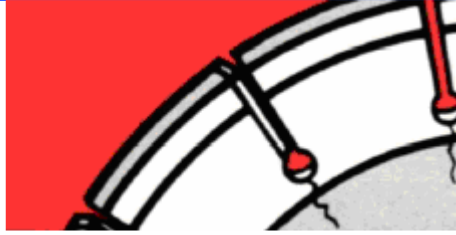
CAUSES

- Blade is mounted on a defective saw.
- Blade runs at improper operating speed.
- Blade collar diameters are not identical. Blade bands as a result of dropping or twisting.

REMEDIES

- ✓ Check for bad bearings, bent shaft, or worn mounting arbor. Check clamping discs to make sure they are clean, flat and of correct diameter.
- ✓ Make certain that blade shaft is running at recommended R.P.M. to match tensioned speed of the saw. For concrete saws, use a tachometer to check and see that engine is at proper speed.
- ✓ Use proper size blade collars.

Cracks in steel center



CAUSES

- Blade flutters in cut as a result of losing blade tension.
- Blade specification is too hard for the material being cut.

REMEDIES

- ✓ Tighten the blade shaft nut. Make sure blade is running at proper tensioned speed and that drive pin is functioning properly.
- ✓ Use a softer blade bond to eliminate stresses which create cracks.

Blade will not cut



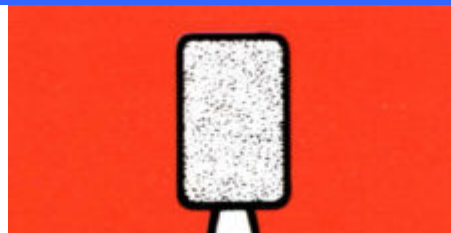
CAUSES

- Blade is too hard for material being cut.
- Blade has become dull as a result of being used on too hard a material.
- Blade does not cut material it was specified for.

REMEDIES

- ✓ Select proper blade specification for material being cut.
- ✓ Sharpen by cutting on a lightweight abrasive building block to expose diamonds. If continual sharpening is required, the blade is too hard for the material being cut.
- ✓ Make sure blade is correct. If so, allow it to dress itself on the material to be cut. If it does not dress itself, sharpen as you would a dull blade.

Undercutting the steel center



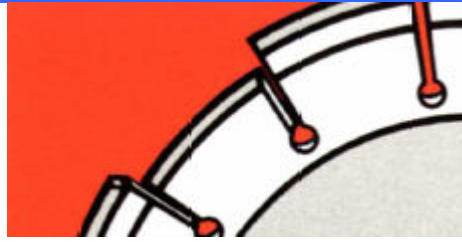
CAUSES

- Abrasion of steel center due to highly abrasive fines generated during cutting.

REMEDY

- ✓ Use as much water as possible to flush out fines generated during cutting, or use wear-retardant cores.

Segment loss



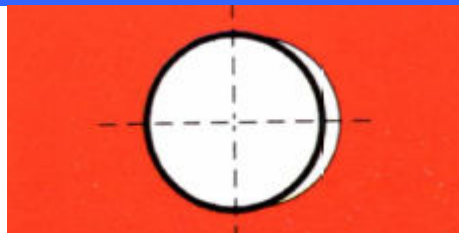
CAUSES

- Material is not being firmly secured.
- Overheating due to lack of water.
- Steel center is worn from undercutting.
- Defective blade collars are setting blade out of alignment.
- Blade is too hard for material being cut.
- Blade is cutting out of round, causing a pounding motion.
- Improper blade tension.

REMEDIES

- ✓ Hold material firmly against backstop.
- ✓ Check water feed lines and make sure flow is adequate on both sides of blade.
- ✓ Use sufficient water to flush out the cut.
- ✓ Clean blade collars or replace if collars are under recommended diameter.
- ✓ Use proper blade specification for material being cut.
- ✓ Replace worn bearings; realign blade shaft or replace worn blade mounting arbor.
- ✓ Give shaft speed of equipment when ordering blades. (Concrete saws: check spindle speed with tachometer to ensure blade is running at correct R.P.M. and blade is tensioned for correct R.P.M.).

Arbor hole out-of-round



CAUSES

- Blade collar is not properly tightened, permitting blade rotation or vibration on the shaft.
- Blade collars are worn or dirty, not allowing proper blade clamping.
- Blade is not properly mounted.

REMEDIES

- ✓ Tighten the shaft nut with a wrench to make certain that the blade is adequately secured.
- ✓ Clean blade collars, making sure they are not worn. Tighten arbor nut properly.
- ✓ Make certain the blade is mounted on the proper shaft diameter before tightening shaft nut. On concrete saws, make sure the pin hole slides over drive pin.