

Discover the DITEQ *Difference!*



G-TEQ Training Series

Damaged
FlatTrac™
Rollers.

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Damaged FlatTrac™ Rollers.

The FlatTrac™ rollers can be damage very quickly by not properly maneuvering the saw to align it to the marked line for cutting.

The proper method to align the G-TEQ is to push down on the handles to slightly lift the front wheel and to roll the saw back & forth ONLY on the rear wheels to align it to the line. “wiggling” the saw to align it will damage the FlatTrac™ rollers.

The wheels are made from a soft Urethane to maximize the footprint in the area where the forces on the slab skin from the blade grinding the control joint have a high local concentration. The tight tolerances between the blade and the FlatTrac™ rollers are important and the gap must be maintained between 0.015 and 0.020 inches.

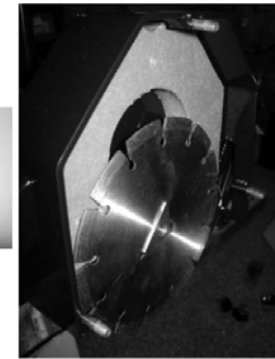
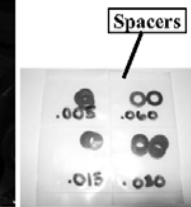
If you see any raveling, STOP cutting, shut off the saw and check the gap per the Operators Instruction Manual.

Most Operators do not have a problem. Some do. The only known cure for those that have seen this problem is EDUCATION.

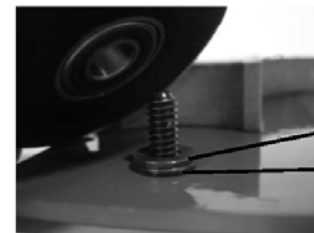
Replacing the FlatTrac™ Rollers, refer to the Operators Instruction Manual.

Replacing, Inspecting and Adjusting the FlatTrac™ roller wheels

The rollers typically last about 30 blades. Wiggling the machine during operation, having rollers out of adjustment, sliding the machine sideways while the blade is turning, etc... all greatly reduce the life of the rollers to the point of potentially immediate unrepairable damage.



The FlatTrac™ rollers are factory adjusted on a new machine for the 0.095" thick blade. To use the thicker 0.220" thick blade the blue spacers need to be removed. The new machines ship with a bag of extra spacers for future adjustments to the machine. These are the red spacers that should not be removed except to realign the rollers.



Red spacer

Blue spacer



Recess is on the outer side opposite the spacers



The gap between the blade and the FlatTrac™ rollers must be between 0.015" and 0.020". The G-TEQ is factory preset as shown in the picture to the left. The G-TEQ is shipped with a rectangular Gauge that is 0.015" thick to perform this measurement as needed. A credit card is about 0.028" thick and is much too thick. For a quick check, if a credit card slips between the rollers and the blade, the gap is too big. To adjust this gap, use the red spacers that are supplied with the machine and with the replacement wheel kit. The red spacers come in thicknesses of 0.005", 0.015", 0.030" and 0.060" and using a combination of the spacers, the gap must be adjusted between 0.015" and 0.020" between the blade and the FlatTrac™ roller.

New Roller



Damaged Roller



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Demonstration Test

The slab used for the test was considered an extreme example, in that the aggregate size is small and it was only a LIGHTLY hand trowel finish to have the aggregate minimally embedded. The slab was very Green still.



Demonstration Test

- 1) Test#1 (see picture on following page) was with a new FlatTrac™ roller. The saw was properly aligned and a control joint was cut.
- 2) Test#2, the saw was align by wiggling it into position before the cut. Extreme ravel.
- 3) Test#3, repeat of Test#2. Even more ravel.



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Hint: Start with the same shims as the old wheel, use them with the new wheel. Put together – measure – adjust shims to match the gap (0.015 to 0.020 inches).



Hint



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Hint: Be certain that the cover is completely assembled and tightened before measuring the gap. Tighten the front one FIRST. Refer to the Operator's Instruction Manual.



Tips to Increase Performance

Most control joint sawing is done with the thin (0.095") blades. Sometimes some sealants or specifications require the thicker blades (0.220").

Always use a steady forward pressure on the saw handle and allow the diamond blade to do the work. Trying to cut faster than the blade will allow will cause raveling.

Gently lower the blade into the cut when starting. Never allow the blade to drop onto the slab.

If you want to increase the forward cutting speed, use a softer bond than you normally use. This allows the diamonds to be exposed quicker. The trade off is that it will wear the blades faster.

Watch very closely for an accumulation of saw cutting dust under the guard. Green concrete is not fully cured thus tends to form clumps. If the concrete is too green, the dust will plug up the blade guard and vacuum port, and then will begin to pile up under the blade guard. You may need to occasionally clean the blade guard. If the forward motion of the saw is too slow, because of the inexperience of an operator or if the blade bond is too hard for the slab conditions, it can cause a phenomena we call 'Lazy dust' in which the dust is not pushed through the vacuum port and begins to fall back into the blade guard and impedes the new dust generated to the point where it is like the concrete is too green.

Choosing the right blade

DITEQ offers many blades to fit the G-TEQ saw which are called Green Concrete Connection Blades. The different colors represent different bond types.



Blue - Extremely hard aggregates, medium sharp sand
Green - Hard aggregates, sharp abrasive sand
Yellow - Medium aggregates, medium sharp sand
Orange - Medium soft aggregates, medium abrasive sand
Red - Extremely soft aggregates, non-abrasive sand
Available in 0.095" (2.4mm) and 0.220" (5.7mm) thickness

The blades are 6-1/2" diameter with a 1/2" hole for the installation of the blade. It only fits on one side of the G-TEQ saw.

...e-Yoke (which means to error proof) the installation of the blade. It is important to use only genuine DITEQ blades with the G-TEQ saw.

When changing the blade, be certain to put all three thumb screws in place to align the holes before any are tightened. Then, tighten the forward lower most thumb screw on the blade access cover plate on the blade guard first to be certain it is properly seated before the other two are tightened.

Estimated cutting rate

The speed will vary with the job conditions and slab formulations. There are many variables.

Soft Aggregates	15 FT/min (4,7m/min)
Medium Aggregates	10 FT/min (3,0m/min)
Hard Aggregates	5 FT/min (1,6m/min)



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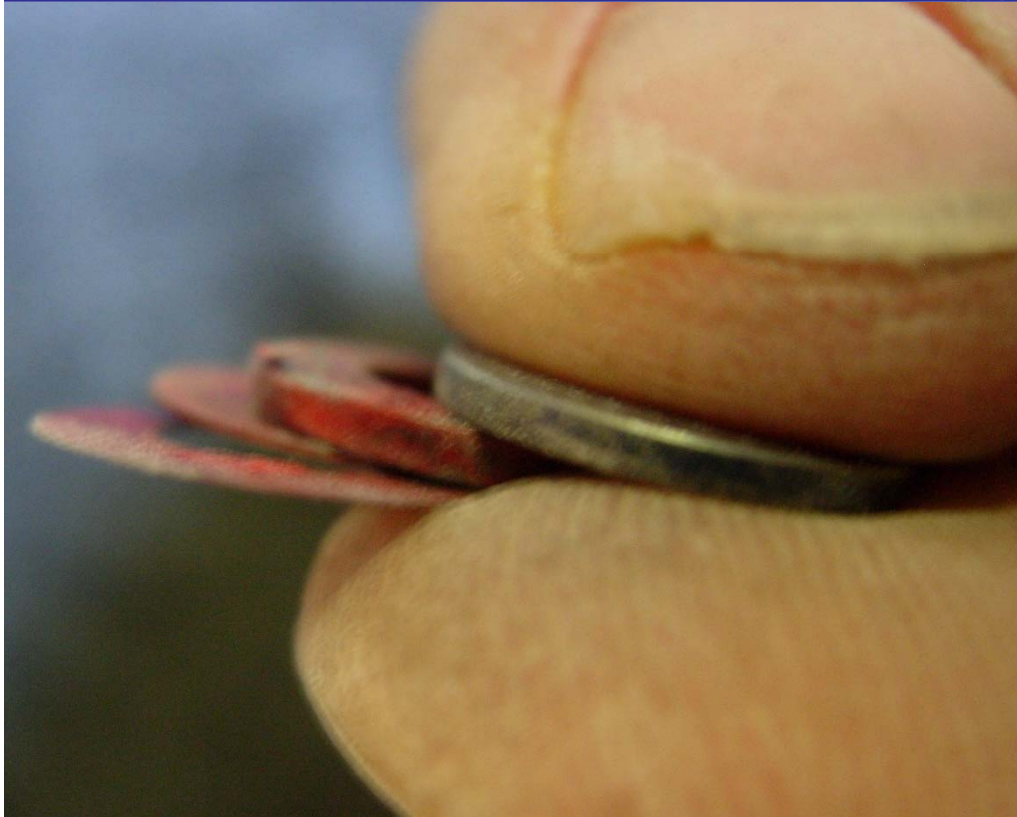


Hint: I personally use an 0.020 thick gauge to check the gap by inserting it in between the wheel & Blade, and it should ever so lightly compress the urethane such that it feels like the correct gap AND when you let go of the gauge it stays in place.

Hint



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Hint: Adjust the number of shims as needed to get the correct gap on both sides of the blade. Then disassemble and apply blue loctite™ to secure the hardware in place for final assembly.

After everything is completely done, **RECHECK** the gap one last time to be certain it is **CORRECT**. This gap is very important to the operation of the saw.

Hint



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Hint: Read and Understand the Operator's Instruction Manual before operating this saw. It is a great product that cuts beautiful control joints IF IT IS USED AND MAINTAINED PROPERLY!



Page 1



Operators Instruction Manual



G-TEQ

Gasoline 450 Model (Shown)
And Electric 200E Model



Extra Early Cutting
of Control Joints In
Green Concrete

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