



Southwestern Industries, Inc.

White Paper

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How Do I Use the New Thread Repair Function?

This White Paper directly reflects what's printed in the manual. If you don't happen to have one on hand, feel free to supply a prospective customer, or an existing customer who doesn't have a new manual with this White Paper.

Instructions for Thread Repair

Note: The Thread Repair feature is only available when the user has Advanced Features turned on.

Before starting, we are assuming that you have your threading tool already setup and touched off properly.

Go into **DRO -> DO ONE -> THREAD REPAIR.**

DRO		TOOL# 1		SINGLE	INCH		
EVENT 0			EVENT 1 THREAD REP				
PROGRAM NAME	DO ONE		X BEGIN	█			
EVENT COMMENTS	NO		Z BEGIN				
			X END				
			Z END				
			PITCH				
			# PASSES				
			# OF SPRING PASSES				
			PLUNGE ANGLE				
			SIDE				
			# OF STARTS				
			RPM				
			TOOL #				
<div style="border: 1px solid gray; padding: 5px; background-color: #f0f0f0;"> Make sure your X and Z absolute zeros are set for your threading tool prior to using thread repair feature. </div>							
?			X BEGIN : █				
F1	F2	F3	F4	F5	F6	F7	F8
PAGE FWD	PAGE BACK	DATA FWD	DATA BACK	DATA BOTTOM			

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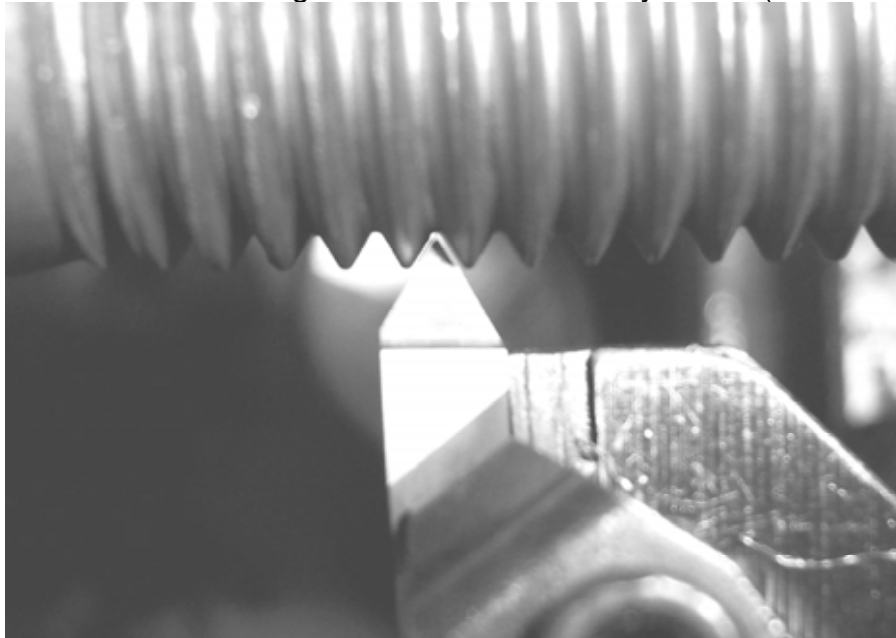
The next screen should look familiar - punch in the data as you normally would into a thread event. Please note the following:

- a) You can still choose a standard or custom thread.
- b) The default (and recommended) plunge angle is 0.
- c) Your data in **PROG** mode will remain unaffected.
- d) Once complete, you can press the **BACK** button to come back and edit this screen if you'd like.

The next screen will ask you to turn the spindle on for a few seconds. It is important to take note when turning the spindle off whether or not the spindle backtracks after it comes to a stop. This will unfortunately throw the whole scheme off. If this occurs, just turn the spindle manually in the forward direction for at least one revolution.

After this step, **DO NOT MOVE THE SPINDLE** until you turn it on to actually run.

Next is the important part. When prompted on the screen, you must try to touch off your tool insert within a known good thread as close as you can (as shown below).



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It is recommended to try standing on a step stool so that you can lean in and look at it directly from above. It also helps to have a flashlight, mirror, or a white piece of paper underneath so that you can better see the amount of gap on either side of your tool.

Note that the Z axis is what you want to try to be as accurate as possible. You do not need to seat the X axis all the way down into the part.

Once you have the tool in a good spot, press the **ABS SET** button to capture the position, back the tool away from your part using the handwheels or jogstick, and then press **NEXT**.

Press **GO** to bring the tool to its start position. Note that this will be approximately +0.25" from the start of the thread in both X and Z.

Turn the spindle on and press **GO** to begin running the thread.