

# Model 2100 or 2100-I<sup>(1)</sup> Power Tool

## Operating Instructions

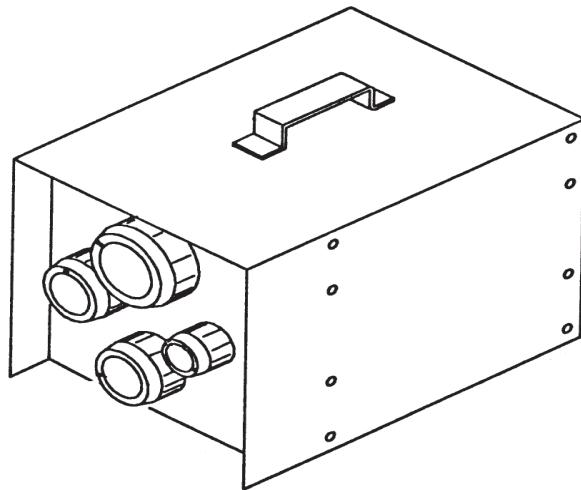
### Introduction

The Model 2100 or 2100-I power tool consists of a grinding drum centrally located between a set of four mandrels and is a 50 cycle, 240 volt unit. The tool is capable of tapering 2" and 3" RED THREAD® II and RED THREAD IIA pipe and scarfing 3" and 4" RED THREAD II and RED THREAD IIA pipe. The tapering and scarfing angle is factory set. To compensate for wear of the grinding drum, NOV Fiber Glass Systems provides a thickness adjustment (see Section C).

**Warning:** When tapering pipe with a 2000 series power tool, DO NOT rotate pipe with your hand over the end of the pipe as this could result in serious injury. Place both hands firmly around the pipe a minimum of 2" from the end of the pipe and rotate counter clockwise. Keep a firm grip on the pipe at all times and keep moving in a constant motion. If your grip is loosened, the grinding drum could grab the pipe and spin it backwards resulting in the pipe being locked up on the tool and possibly causing injury. If 2" pipe has a protective mesh covering, retract the mesh approximately 12" from the end of the pipe before tapering.

### To Taper

1. Cut pipe ends square ( $\pm 1/8"$ ), and set tool in either the horizontal or the vertical position.
2. Turn motor on allowing a few seconds until the motor reaches speed before using.
3. a. Slowly insert the pipe onto the mandrel, making sure alignment is as even as possible.  
b. Rotate in a counter-clockwise direction until the end of the pipe rests against the back plate. Do not turn the pipe too quickly, as this can stall the motor.  
c. If the motor starts to bog down, slow your rotation and insertion, but do not stop. The sound of the motor will indicate whether the motor is bogging down.  
d. Keep turning until the pipe is making minimum contact with the grinding drum. Make two to three complete revolutions and retract pipe from the tool while continuing to rotate pipe.  
e. Turn motor off.

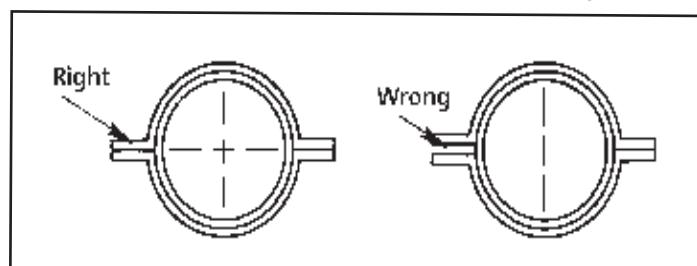


4. If the grinding drum locks up on the pipe, **turn the motor off immediately** and try to wiggle the pipe loose. If this does not work, cut the pipe off as near the mandrel as possible, loosen the mandrel (Allen head bolt inside of mandrel), remove pipe, and retighten the mandrel.
5. Occasionally check the tapered pipe by inserting a field-made spigot into the bell of a factory fitting, and compare the insertion with the insertion of a factory spigot into the same bell. Insertion tolerance for the field-made spigot is  $\pm 1/8"$ . **NOTE: When using a pipe with T.A.B.™ threads for comparison, recognize that factory spigots with T.A.B. threads typically insert 1/4" less than factory spigots without T.A.B. threads.**

### To Scarf

1. Follow steps 1 through 4 from Section A.
2. Occasionally check the machined pipe by inserting the scarfed pipe end into a secondary containment two-piece fitting. Close down around the pipe end

Figure 1.0

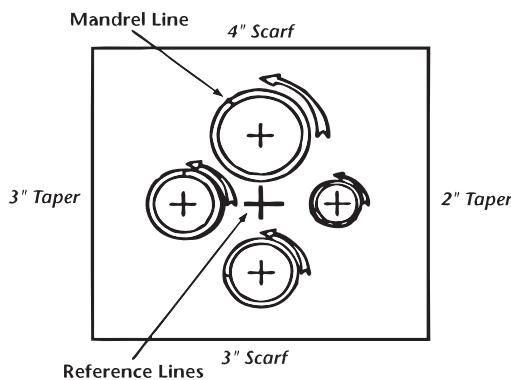


and check the fit of the pipe/fitting joint. The pipe should fit snugly, and the flanges of each containment fitting should mate flush with no apparent gaps (see Fig. 1.0).

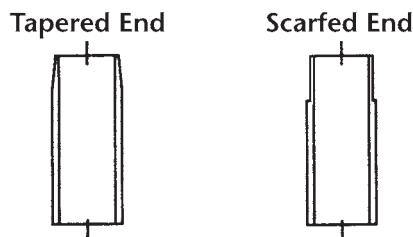
#### To Adjust Thickness

1. Loosen the Allen head bolt located in the center of the hollowed out mandrel.
2. Adjust machined thickness as follows:

Figure 2.0



- a. Rotate mandrel line away from reference line to increase thickness, i.e. to make thicker (see Fig. 2.0).
- b. Rotate mandrel line towards reference line to decrease thickness, i.e. to make thinner.
- c. Tighten the Allen head bolt securely.



#### PRODUCT FEATURES AND BENEFITS

- Weighs approximately 50 lbs.
- Electrically powered.
- Tapers 2" or 3" pipe in just 10 seconds.
- Scarfs 3" pipe in 20 seconds.
- Scarfs 4" pipe in 35 seconds.
- No loose blades, blade holders, or mandrels
- Specially designed for tapering and scarfing RED THREAD IIA piping.

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