

UNITurn & UNIMill
The cool tool

POWER FEED

P/N 3001 (120V.)— P/N 3011 (240V.)

Reducing the diameter of a long shaft or a long part can be a tedious task requiring a lot of turning on the feedscrew. Obtaining a good finish on such a part requires slow, steady movement on the cutting tool, something hard to achieve when feeding the tool by hand. The **UNITurn** Power Feed was developed to eliminate this problem. A clutch mechanism permits quick disengagement of the motor so that you can hand feed the cutter whenever you desire. The power feed is from right to left at a constant (non-adjustable) speed of approximately 1.00 inches per minute. This speed was carefully selected and is appropriate for virtually all jobs you might want to do, making an expensive variable speed control unnecessary.

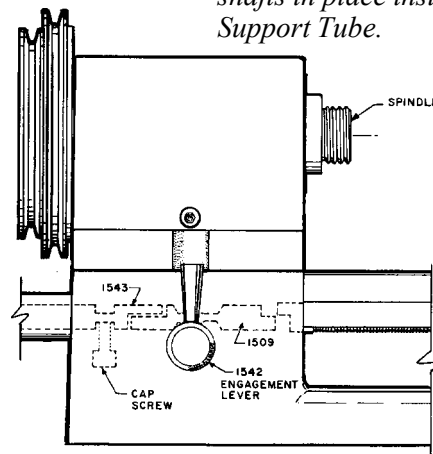
It is important to realize that the feed is an independent drive with a constant speed; whereas the spindle speed can vary. If spindle R.P.M. lowers, the cut becomes heavier, which in turn lowers spindle R.P.M. even more. As you can see, the end result could bind up the machine and bring it to a stop. Always bear this in mind when using this unit. If spindle speed starts dropping from too heavy a cut, disengage the feed drive first, then either take a lighter cut (approximately .015" in aluminum) or speed up the motor.

MOUNTING INSTRUCTIONS

1. Remove the headstock, the flat head socket screw under the headstock, and the socket head cap screw under the base.
2. Grease the shaft with flats on both ends (P/N 1509) and slide shaft into the protruding lead screw support tube situated directly below the main spindle pulley. Ensure end with small flat enters first. Now slide shaft with a single flat (P/N 1543) into the lead screw support tube. To guarantee that the shaft is "home", turn shaft one or two revolutions while applying gentle inward pressure to end of shaft. (See Figure 1.)

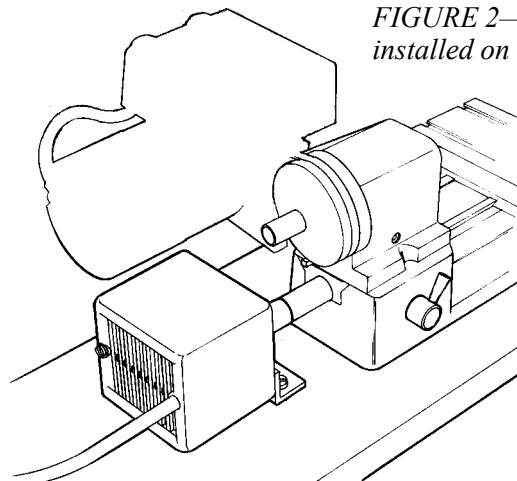
NOTE: If insertion or movement of the Engagement Lever is difficult, try loosening the two screws on the bottom of the machine that hold the bed to the base. Move the bed slightly until a good fit occurs.

FIGURE 1—Lead Screw engagement shafts in place inside Lead Screw Support Tube.



3. Replace screws removed in Step 1, making sure that point of screw goes into machined groove, and check that shaft from Step 2 is free to rotate.
4. Pull out black plug button (below nameplate) on side of lathe and slide shaft of Engagement Lever (P/N 1542) into hole, handle facing upward. It may be necessary to rotate shaft about 30° backwards and forwards to get it to engage properly.
5. Engage shaft of Power Feed unit and mount with bolts or sheet metal screws to same base as Lathe so shafts line up.

FIGURE 2—Power Feed installed on base.



The cool tool®
TOOL
www.thecooltool.com

Modellbauwerkzeug & Präzisionsmaschinen G .m.b.H.
Modelmaking & Precision Tools Ltd. Vienna / Austria
Fabriksgasse 15, A-2340 Mödling info@thecooltool.com
phone: +43-2236-892 666 fax: +43-2236-892666-18

POWER FEED PARTS LIST

NO. REQ.	PART NO.	DESCRIPTION
1	1509	Sliding Shaft
1	1541	"O" Ring
1	1542	Engagement Lever
1	1543	Fixed Shaft
2	4051	Skt Hd Cap Screws, 10-32 x 3/8"
1	4052	Cup Pt Set Screw, 10-32 x 3/16"
1	4509	Sheet Metal Screw, #4 x 1/4"
1	4510	Power Feed Bracket
1	4511	Power Feed Cord w/Switch (U.S.A.)*
1	4512	Power Feed Motor Case
1	4513	Power Feed Motor (110V.)
1	4514	Power Feed Coupler
1	4063	Power Cord (U.K.)*
1	4064	Power Cord (Europe)*
1	4521	Rotary On/Off Switch (240V.)*
1	4525	Power Feed Motor (240V.)

*NOTE: U.S. models (P/N 3001) come with a rocker type on/off switch on the power cord, while U.K. and European models (P/N 3011) come with a toggle type on/off switch mounted on the side of the motor case.