POWER FEED INSTALLATION
Model M-4250 Cross Feed
Microcut, Wells-Index 837

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PREPARATION

Step 1: Remove the nut, crank, dial assembly, and key from the lead screw.

Step 2: Slide the spacer and then the bearing race onto the lead screw. Slide the power feed over the bearing race.

Step 3: Line up the feed so that it sits square to the bearing housing. Using the power feed as a template, spot two mounting holes.

Step 4: Remove the power feed and bearing race from lead screw.

Step 5: Remove the four screws holding the bearing housing and then remove the bearing housing. (The lead screw can be used to jack the housing off the pins. The lead screw does not have to be removed from the mill.)

Step 6: Drill and tap two holes 1/4-20 x 7/8" deep.

Step 7: Put the bearing housing back onto the knee.

POWER FEED INSTALLATION

Step 1: Screw the shaft extension to the lead screw and tighten.

Step 2: Using the hole provided as a pilot, drill 1/8" diameter through the lead screw. Pin the extension in place using the 1/8 diameter x 5/8" long roll pin. File smooth.

Step 3: Replace the bearing race onto the lead screw.

Step 4: Slide the power feed over the bearing race. Secure using 1/4-20 x 1-1/2" long socket head cap screws provided.

BEVEL GEAR INSTALLATION

Step 1: Follow drawing NA-5444 for installation of the bevel gear. Adjust for proper gear backlash.
DIAL AND HANDCRANK INSTALLATION

Step 1: After getting the proper backlash, the dial should be adjusted to obtain .005" spacing from the face of the power feed. This is important in order to keep chips from entering the gear train. Two plastic (.030" thick) and five brass (.005" thick) washers are provided for this. Shim as required.

Step 2: In the following sequence, put on the dial locking nut, place the key in the shaft, and slide the handcrank onto the shaft extension. Secure using the 1/2-20 lock nut provided.

□ NOTE  A smaller diameter handcrank is supplied in order to have clearance between the cross feed crank and the knee crank.

LIMIT SWITCH INSTALLATION

Step 1: See the limit switch installation on drawings ND-5581 and ND-1538.

OPERATION

See separate Servo Power Feed Operation sheet. Plug the unit into a source of 120 volt, 50 or 60 cycle power.

WARNINGS

Check hand crank clearances before operation.

Clearances between the surfaces of the hand crank and the non-moving parts of the equipment on which the hand crank is installed must be at least one-fourth inch (1/4") to prevent injury. Modification of existing hand crank or replacement may be required.

Do not operate without proper clearance!

Prevent contact during fast traverses.
STEP 1
PREPARATION

STEP 2
SHIMMING BEVEL GEAR

ADD SHIMS PROVIDED
1/32 INCH THICK ARE SOLID
1/64 INCH THICK ARE LAMINATED
.002 INCH LAMINATION

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.

0.015 TO 0.025 INCH (THIS IS NOT THE READING ON THE DIAL)

ROTATE GEAR FROM SIDE TO SIDE. REMOVE OR ADD SHIMS AS REQUIRED TO OBTAIN 0.015 TO 0.025 BACKLASH.

PUSH BEVEL GEAR AGAINST SHIMS.

TIGHTEN NUT.

CAUTION: IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.

STEP 3
DOUBLE CHECK OF SHIMMING

LOosen SETSCREW

WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK IF EXCESSIVE GEAR NOISE OR BINDING OCCURS. SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.

STEP 4
LUBRICATION

INSTALL KEY

REMOVE GEAR, PACK WITH GREASE. (DO NOT USE SILICONE TYPE GREASE)
REPLACE GEAR. (DO NOT LOSE ANY SHIMS)

PICTURES IN THIS DRAWING ARE FOR REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

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