POWER FEED INSTALLATION
Model M-2150 Cross Feed
Enterprise, Holke, Marena 10

REFERENCE DRAWINGS ENCLOSED
NA-5444 Bevel Gear Installation
NB-2240 Power Feed Installation
ND-6293 Type 150 Servo Power Feed
ND-6292 Type 140 Servo Power Feed
0800-80001 Servo Power Feed Operation

PREPARATION

Step 1: Gather together the following items that you will need to complete this installation.
   a) 3/8” electric hand drill
   b) 1/8” drill, #7 drill
   c) 1/4-20 tap
   d) 9/32” transfer punch
   e) flat file
   f) 3/4” socket wrench
   g) set of inch hex wrenches
   h) grease
   i) clean shop rag

Step 2: Remove the nut, handwheel, dial, dial hub and key from the lead screw.

Step 3: Place the bearing race into the adaptor.

Step 4: Slide the adaptor and bearing race onto the lead screw.

Step 5: Transfer the three counterbored hole locations to the bearing bracket.

Step 6: Remove the adaptor and bearing race from the mill. Drill and tap 1/4-20 x 3/8” minimum depth three places.

Step 7: Attach the adaptor to the mill using the 1/4-20 x 1-1/2” long cap screws provided.

POWER FEED INSTALLATION

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

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

Step 3: Slide the spacer and bearing race onto the lead screw.
Step 4: Slide the Power Feed over the bearing race and secure to the adaptor using two 1/4-20 x 1-1/2” long cap screws provided.

BEVEL GEAR INSTALLATION

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

DIAL AND HANDWHEEL INSTALLATION

Step 1: After getting the proper gear 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. Three 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 and place the 5 mm key in the shaft extension. Slide the handcrank onto the shaft extension and secure using washer and locking nut provided.

LIMIT SWITCH INSTALLATION

Install the limit switch as shown on the installation drawing.

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.

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**STEP 1**
PREPARATION

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

**INSTALL HANDCRANK.**

**MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.**
- .015/.025 (THIS IS NOT THE READING ON THE DIAL)

**ROTATE GEAR FROM SIDE TO SIDE. REMOVE OR ADD SHIMS AS REQUIRED TO OBTAIN .015/.025 BACKLASH.**

**TIGHTEN NUT.**

**PUSH BEVEL GEAR AGAINST SHIMS.**

**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**

**SEAL**

**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.**

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BEVEL GEAR INSTALLATION

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