POWER FEED INSTALLATION
Model M-2100/3200 Table Feed
Holke Machinist, Marena 10 & others

REFERENCE DRAWINGS ENCLOSED
NA-5444 Bevel Gear Installation
NB-2265 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) #7 drill, 1/8” drill
   c) 1/4-20 tap
   d) 9/32” diameter transfer punch
   e) flat file
   f) 3/4” socket wrench
   g) set of inch hex wrenches
   h) grease
   i) clean shop rag

Step 2: Move the table to the extreme left.

Step 3: Remove the nut, handle and dial assembly from the right-hand end of the table.

Step 4: Locate the tapped holes in the bearing retainer end cap by sliding #1178 bearing race onto the lead screw to the shoulder. Slide the adaptor #0771 onto the bearing race against the bearing bracket. Transfer the three counterbored hole locations through the adaptor to the end bracket using a 9/32” diameter transfer punch.

Step 5: Remove the adaptor and bearing race from the lead screw and tap 1/4-20 to 3/8” deep minimum thread into the end cap three places.

Step 6: Add #2267 shaft extension and tighten.

Step 7: 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.

POWER FEED INSTALLATION

Step 1: With the table in the extreme left-hand position, install the adaptor with the three 1/4-20 x 1/2” socket head cap screws.

Step 2: Slide the two spacers and bearing race onto the lead screw.
Step 3: Slide the Power Feed onto the bearing race and push flush to the end of the adaptor. Secure with two 1/4-20 x 1” long socket head cap screws.

BEVEL GEAR INSTALLATION

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

Step 2: One spacer may be shortened to allow proper shimming of the bevel gear.

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, place the 5 mm Woodruff key in the shaft extension, slide the handcrank onto shaft extension, followed by 1/2” S.A.E. washer, and secure with the 1/2-20 locking nut.

LIMIT SWITCH INSTALLATION

Refer to drawing NB-2265 for modifications and installation of the limit switch.

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 THICK ARE SOLID
  - 1/64 THICK ARE LAMINATED
  - .002/LAMINATION

- **INSTALL HANDCRANK.**
- **MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.**
  - 0.015/0.025 (THIS IS NOT THE READING ON THE DIAL)
  - ROTATE GEAR FROM SIDE TO SIDE. REMOVE OR ADD SHIMS AS REQUIRED TO OBTAIN 0.015/0.025 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**
- **SEAL**

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**BEVEL GEAR INSTALLATION**

NA-5444 C
1. Review all installation instructions and power feed operation before turning on servo power feed.

2. See detail A for dimensions and parts list.

3. MIN THREADED Depth (2 places).

4. Remove plunger from center line for location.

5. Locate limit switch box with limit switch installation.

6. Modify solid stop as shown.