POWER FEED INSTALLATION  
Model M-4400 Table Feed  
Supermax 1-1/2, 16VA

REFERENCE DRAWINGS ENCLOSED
NA-5444  Bevel Gear Installation
NB-5693  Power Feed Installation
ND-6293  Type 150 Servo Drive
ND-6292  Type 140 Servo Power Feed
0800-80437  Parts List I.D. Sheet K-4400
0800-80001  Servo Power Feed Installation

PREPARATION

Step 1: Remove the nut, crank, dial assembly and key from the right-hand side of the mill. Using the bearing retainer as a template, spot three holes.

Step 2: Drill and tap 1/4-20 x 1/2” socket head cap screw.

Step 3: Screw the shaft extension onto the lead screw and tighten.

Step 4: Using the hole provided as a pilot, drill 1/8” diameter hole through and pin in place using the 1/8 x 5/8” diameter roll pin. File smooth.

POWER FEED INSTALLATION

Step 1: Secure bearing retainer B-5692 to table with three 1/4-20 x 1/2” long socket head cap screws.

Step 2: Slide the spacer and bearing race onto the lead screw.

Step 3: Slide the power feed over the bearing race and secure with two 1/4-20 x 1.0” long socket head cap screws.

BEVEL GEAR INSTALLATION

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

Step 2: When shimming of the bevel gear is complete, replace the key.

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 to keep chips from entering the gear train. Four washers are provided for this, two solid and two laminated. Shim as required.

Step 2: In the following sequence put on the dial and the dial locking nut. Insert the 4 mm woodruff key and slide the handle in place. Tighten with the 1/2-20 locking nut.
LIMIT SWITCH INSTALLATION

Step 1: Remove the T-shaped table stop bracket and, using the same screws, install the limit switch.

Step 2: Put the cable clamp on the cable and secure, using the right-hand chip scraper screw.

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.
- Rotate gear from side to side, remove or add shims as required to obtain .015/.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.
- Control handle @ neutral position

**STEP 4**
LUBRICATION

- Install key
- Seal

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**BEVEL GEAR INSTALLATION**

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