POWER FEED INSTALLATION
Model M-800 Table Feed
Ex-Cell-O 602
(no coolant trough)

REFERENCE DRAWINGS ENCLOSED
NA-5444        Bevel Gear Installation
NB-0514        Power Feed Installation
ND-6293        Type 150 Servo Drive
ND-6292        Type 140 Servo Drive
0800-80001      Servo Power Feed Installation

PREPARATION

Step 1: Relax the tension on the lead screw thrust using the procedure below.
The lead screw thrust is taken up in the ball bearing found in the right-hand bearing bracket. The thrust adjustment is taken up with the jam nuts on the left-hand end of the screw. It is necessary to loosen the jam nuts and move the screw to the left about 1/16" to properly install the Model 800 table feed.

Step 2: Remove the right-hand bearing bracket from the mill, saving the 5/16 diameter screws for use later.

POWER FEED INSTALLATION

Step 1: Slide the power feed over the lead screw and secure with the screws saved from the bearing bracket.

Step 2: Re-adjust the lead screw thrust. Note that the snap ring on the bearing now bears against the table feed. The lead screw should have no end play relative to the table. (Backlash in the table nut is a separate, unrelated adjustment.)

Step 3: Slide spacer #519 onto the lead screw and against the ball bearing.

Step 4: Rework the dial per drawing ND-0514 detail A. Then cut the brass shoe to length to suit the thumbscrew.

BEVEL GEAR INSTALLATION

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

Step 2: Screw the handwheel on the shaft and tighten against the gear to locate the pilot hole. Using the pilot hole in the bevel gear, drill 3/16 through the shaft and install the 3/16 x 1-1/4" long roll pin.

Step 3: Remove the handwheel.
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: Add the brass shoe, thumbscrew, handwheel, and nut. The lead screw should now turn freely and have no end play relative to the table.

LIMIT SWITCH INSTALLATION

Step 1: Remove the existing T-shaped table stop bracket. Save the screws.

Step 2: Remove the limit switch assembly from the bracket #0545. Install the limit switch bracket in the original stop location using the screws saved above or in the optional location shown on drawing ND-0514 figure A.

Step 3: Replace the limit switch and the gasket #266 on the bracket.

NOTE For proper operation, the electrical limit switch should be engaged .4 inch before the mechanical stop to allow for coasting of the table. The T-stops are often not symmetrical and may need to be ground to obtain proper operation.

Step 4: Locate a suitable place for the limit switch cord cable clamp and tap 8-32 thread by 3/8" deep. Fasten the clamp with the screw provided.

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

**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.

TIGHTEN NUT.

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

LOosen SETSCREW

**STEP 3**  
DOUBLE CHECK OF SHIMMING

**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

NA-5444 C