POWER FEED INSTALLATION
Model M-9100 Table Feed
Enco Mills

REFERENCE DRAWINGS ENCLOSED
NA-5444 Bevel Gear Installation
NB-57055 Power Feed Installation
ND-6293 Type 150 Servo Drive
ND-6292 Type 140 Servo Drive
0800-80001 Servo Power Feed Operation

PREPARATION

Step 1: Move the table to the extreme left.

Step 2: Remove the nut, handle, dial assembly, and key from the right-hand end of the table.

POWER FEED INSTALLATION

Step 1: Slide the bearing race onto the lead screw.

Step 2: Slide the power feed onto the bearing race and against the bearing bracket.

Step 3: Using the power feed as a template, spot two holes.

Step 4: Remove the bearing bracket.

Step 5: Drill and tap 1/4-20 through two places.

Step 6: Reinstall the bearing bracket.

Step 7: Slide the spacer and the bearing race onto the lead screw.

Step 8: Slide the power feed over the bearing race and secure to the bearing bracket using two 1/4-20 x 1" 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.

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, replace the key (if removed) and dial locking nut. Slide the handle in place and tighten with the 1/2-20 lock nut.
LIMIT SWITCH INSTALLATION

Step 1: Remove the standard table stop pieces and install the table stop pieces furnished. Put the standard stops back in a position to prevent feed stops from being set beyond extreme table travel.

Step 2: Remove two cap screws holding the T-shaped table stop. Place limit switch spacers into the T-stop and install the limit switch using 3/8-16 x 1-1/4" socket head cap screws.

Step 3: The T-stop is retained to act as a positive stop where required for manual operation.

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: Put the cable clamp on the cable and secure to 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.
KEY IS REMOVED DURING SHIMMING

TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING)

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.

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.

STEP 2
SHIMMING BEVEL GEAR

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

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 3
DOUBLE CHECK OF SHIMMING

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.

STEP 4
LUBRICATION

SERVO PRODUCTS COMPANY
BEVEL GEAR INSTALLATION
NA-5444 C