POWER FEED INSTALLATION
Model M-0200 Table Feed
Bridgeport Mill & Others

REFERENCE DRAWINGS ENCLOSED
NA-5444  Bevel Gear Installation
NB-0296  Power Feed Installation
ND-6293  Type 150 Servo Power Feed
ND-6292  Type 140 Servo Power Feed
0800-80001  Servo Power Feed Operation
0800-80426  Parts List I.D. Sheet K-0200

PREPARATION
Step 1: Gather together the following items that you will need to complete this installation.
   a) soft hammer
   b) 3/4” socket wrench
   c) set of inch hex wrenches
   d) grease
   e) 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: Remove the four cap screws holding the bearing housing in place.

Step 5: Using a soft hammer, tap the bearing housing off. Clean the end surface of the table.

POWER FEED INSTALLATION
Step 1: With the table in the extreme left-hand position, install the adaptor with the four cap screws

► NOTE On some machines the drive pin holes do not line up with the adaptor. Remove and discard the pins in such cases. The four cap screws are all that is necessary.

Step 2: Slide the 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.
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, replace the key (if removed), dial, and dial locking nut. Slide the handle in place and tighten with 1/2-20 locknut #01115.

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 the two cap screws holding the T-shaped table stop. Place the limit switch spacers into the T-stop and install limit switch using 3/8-16 x 1-1/4” long 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 0.4 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
0.002/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 TURING 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 ADJUSTING 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

INSTALL KEY

SEAL

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NA-5444 C