PREPARATION

Step 1: Remove the nut, handle, and dial assembly from the right-hand end of the table.

Step 2: Remove the bearing retainer from the end bracket.

POWER FEED INSTALLATION

Step 1: Slip on the bearing retainer #2784 and spot the three countersunk holes. Drill and tap 1/4-20 x 1/2" deep. Secure with 1/4-20 x 7/8" long socket head cap screws.

Step 2: Slip the bearing race #0682 inside the adaptor #0771. Slide them onto the lead screw up to the end bracket. Secure the adaptor with the three 1/4-20 x 1/2" long socket head cap screws. Remove the bearing race.

Step 3: Add the sleeve #0773 as shown, followed by the bearing race #0682.

Step 4: Install the power feed to the adaptor using the 1/4-20 x 1" long socket head cap screws.

Step 5: Screw the shaft extension onto the lead screw and tighten.

Step 6: You may wish to add the roll pin after determining the shims required for the bevel gear. Using the hole provided as a pilot, drill 1/8" diameter through the lead screw and pin the extension in place using the 1/8 diameter x 5/8" long roll pin. File smooth.

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: After shimming the dial, put on the dial locking nut and insert the woodruff key #5486 for the handcrank. Slide the existing handcrank in place and secure 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: Install the limit switch as shown in drawing ND-5616.

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.
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.

TIGHTEN SLIGHTLY (HOLDS
BEVEL PINION STATIONARY
DURING SHIMMING).

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/
.025 BACKLASH.

STEP 2
SHIMMING BEVEL
GEAR

PUSH BEVEL GEAR
AGAINST SHIMS.

TIGHTEN NUT.

STEP 3
DOUBLE CHECK OF SHIMMING

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

LOSEN 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

REMOVE GEAR, PACK WITH GREASE.
(Do NOT USE SILICONE TYPE GREASE)
REPLACE GEAR.
(Do NOT LOSE ANY SHIMS)

PICTURES IN THIS DRAWING ARE FOR
REFERANCE ONLY. SEE INSTALLATION
DRAWING OF CORRESPONDING MODEL
FOR EXACT PARTS CONFIGURATION.

SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

NA-5444 C

FORM 0800-80002 7/25/95
LIMIT SWITCH INSTALLATION

1. Review all installation instructions and power feed operation.

NOTE:

0271 Spacer Limit Switch

00595 3/8-16 x 1-1/4" S.C.S.

00520 Limit Switch Mounting View

00694 5/16-24 x 2" Nut

0229 Stop Nut

1388 Bellow Seal

01725 Shim Washer Sat.

01725 Shim Washer Sat.

00594 1/8 x 5/8 Roll Pin

0227 Bellow Cear

5496 Woodruff Key (MOD)

0111 Lock Nut 1/2-20

5603 Shaft Extension

1/8 x 3/8

0091 Woodruff Key

5925+ Dia Nut

0589-16L Laminated Shim

0589-32 Soud Shim

0652 Bearing Race

0774 Bearing Retainer

0773 Sleeves