POWER FEED INSTALLATION
Model M-9130 Table Feed
Clausing Kalamazoo

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PREPARATION

*Step 1:* Move the table to the extreme left.

*Step 2:* Remove the nut, handle, dial assembly, and key from the lead screw. Save the key for installation later.

*Step 3:* Slide shaft spacer #6728 and bearing race #0774 onto the lead screw.

*Step 4:* Slide the power feed over the bearing race. Select and transfer three mounting holes onto existing bearing retainer or use supplied bearing retainer #6544.

*Step 5:* If using existing bearing retainer, remove to drill and tap 1/4-20 through and then reinstall otherwise use supplied #6544 bearing retainer.

*Step 6:* Screw the shaft extension onto the lead screw.

*Step 7:* Slide the bevel gear onto the lead screw to ensure proper fit. Then remove the bevel gear.

*Step 8:* Drill a 1/8” diameter hole through the shaft using the hole provided in the shaft extension as a pilot. Pin the shaft extension to the lead screw using the 1/8 diameter x 5/8” long roll pin. File smooth.

POWER FEED INSTALLATION

*Step 1:* Slide the power feed onto the bearing race and secure to the bearing retainer using the provided 1/4-20 x 1” long socket head cap screws. *Be sure the power feed is installed square with the shaft.*

BEVEL GEAR INSTALLATION

*Step 1:* Use the 3 mm parallel key you saved before for the bevel gear installation.

*Step 2:* 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: Put on the dial locking nut.

Step 3: Install the 3 mm key provided in the shaft extension.

Step 4: Slide the handcrank onto the end of the shaft extension 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 the two cap screws holding the T-shaped table stop bracket. Place the short spacers into the counterbored holes in the T-stop. Place the limit switch assembly on the spacers and locate using the two 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.

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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 using the right-hand chip scraper screw.

OPERATION

See separate Servo Power Feed Operation sheet. Unit will operate on either 50 or 60 cycles.

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.

SERVO PRODUCTS COMPANY
Web: www.servoproductsco.com

CALIFORNIA BRANCH
14254 Valley Blvd., Unit A
City of Industry, CA 91746
Ph. 626.961.7800  Fax 626.961.2444

HEADQUARTERS
34940 Lakeland Blvd.
Eastlake, OH 44095
Ph. 440.942.9999  Fax 440.942-9100

FLORIDA BRANCH
8950 131st Ave. N.
Largo, FL 33773
Ph. 727.585.8555  Fax 727.585.6555
**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.

PUSH BEVEL GEAR AGAINST SHIMS.

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**

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 REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

NA-5444 C
M-9130 TABLE FEED PARTS IDENTIFICATION LIST

- 01050 Clamp  Qty = 1
- 0266 Limit Switch Gasket  Qty = 1
- 3199 Limit Switch Bracket  Qty = 1
- 60928 Phil Pan Head Screw  Qty = 4
- 0271 Limit Switch Spacer  Qty = 2
- 00565 Soc Head Cap Screw  Qty = 2
- 05038 Soc Head Cap Screw  Qty = 2
- 00689 Hex Hd Bolt  Qty = 2
- 0247 Stop Nut  Qty = 2
- 0251 Limit Stop  Qty = 2

- 03495 Key  Qty = 1
- 00564 Roll Pin  Qty = 1

- 01115 Lock Nut  Qty = 1
- 5556 Shaft Extension  Qty = 1
- 57716 Spacer  Qty = 1
- 6745 Spacer  Qty = 1
- 59254 Dial Nut  Qty = 1
- 01251 Brass Shim  Qty = 2
- 01252 Plastic Shim  Qty = 2
- 4134 Bevel Gear  Qty = 1

- 0589-32 .032 Shim  Qty = 4
- 0589-16L .016 Shim  Qty = 1
- 9774 Bearing Race  Qty = 1
- 6728 Spacer  Qty = 1
- 00586 Soc Hd Cap Screw  Qty = 2
- 03594 Soc Head Cap Screw  Qty = 3

- 6544 Bearing Retainer  Qty = 1