

# POWER FEED INSTALLATION

## Model M-9117 Table Feed

### Chevalier Mill



#### REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-57512	Power Feed Installation
ND-6293	Type 150 Servo Power Feed
ND-6292	Type 140 Servo Power Feed
0800-80001	Servo Power Feed Operation

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#### PREPARATION

- Step 1:* Move the table to the extreme left-hand position.
- Step 2:* Remove the nut, handle, dial assembly, and key from the lead screw. Save the key for installation later.
- Step 3:* Remove the four cap screws from the bearing housing. Save the screws for installation later.
- Step 4:* Using a soft hammer, tap the bearing housing off. Clean the end surface of the table.

#### POWER FEED INSTALLATION

- Step 1:* Slide the bearing race #0246 onto the lead screw.
- Step 2:* Slide the adaptor #0239-4 with the feed onto the bearing race.
- Step 3:* Secure the assembly to the end of the table with the saved 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:* Put on the dial locking nut and slide the handcrank in place. Secure with the 1/2-20 lock nut provided.

#### 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 on installation drawing NB-57512.

*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:* Secure the cable using the cable clamp provided. Use the screw provided to attach the clamp to the right-hand side of the chip scraper.

## **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.

## **SERVO PRODUCTS COMPANY**

Web: [www.servoproductsco.com](http://www.servoproductsco.com)

### **CALIFORNIA BRANCH**

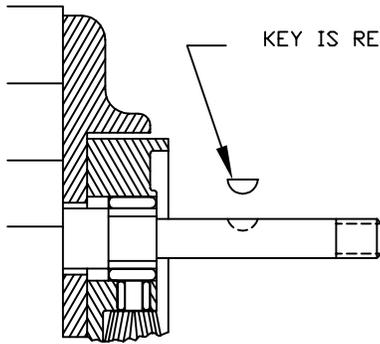
14254 Valley Blvd., Unit A  
City of Industry, CA 91746  
Ph. 626.961.7800 Fax 626.961.2444

### **HEADQUARTERS**

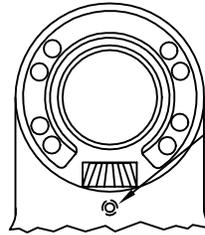
34940 Lakeland Blvd.  
Eastlake, OH 44095  
Ph. 440.942.9999 Fax 440.942-9100

### **FLORIDA BRANCH**

8950 131<sup>st</sup> Ave. N.  
Largo, FL 33773  
Ph. 727.585.8555 Fax 727.585.6555

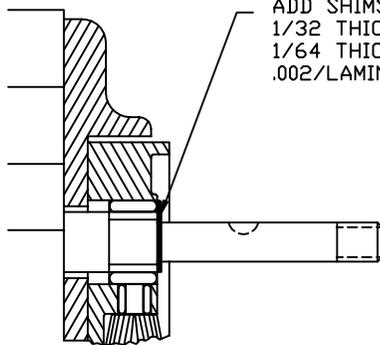


KEY IS REMOVED DURING SHIMMING

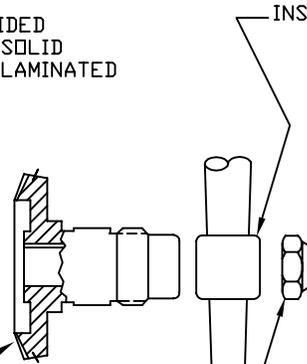


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1  
PREPARATION



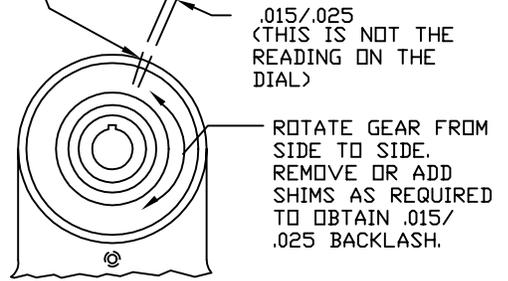
ADD SHIMS PROVIDED  
1/32 THICK ARE SOLID  
1/64 THICK ARE LAMINATED  
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



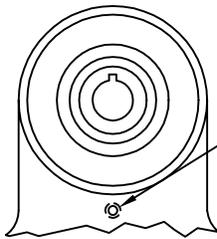
.015/.025  
(THIS IS NOT THE READING ON THE DIAL)

ROTATE GEAR FROM SIDE TO SIDE.  
REMOVE OR ADD SHIMS AS REQUIRED TO OBTAIN .015/.025 BACKLASH.

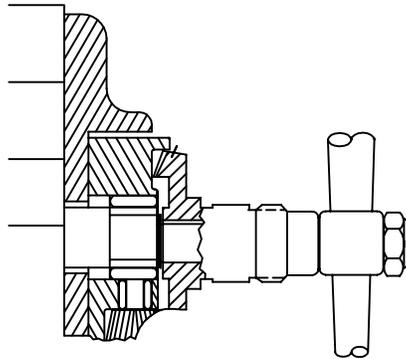
STEP 2  
SHIMMING BEVEL GEAR

TIGHTEN NUT.

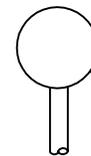
**CAUTION:** IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

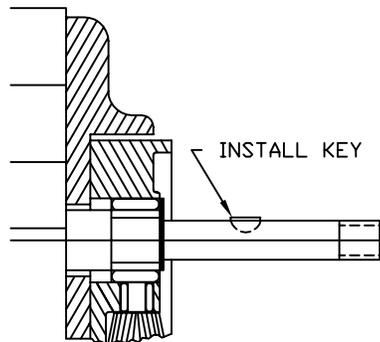


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.

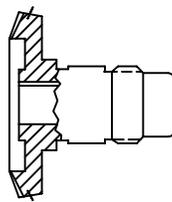


CONTROL HANDLE @ NEUTRAL POSITION

STEP 3  
DOUBLE CHECK OF SHIMMING



INSTALL KEY



SEAL

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

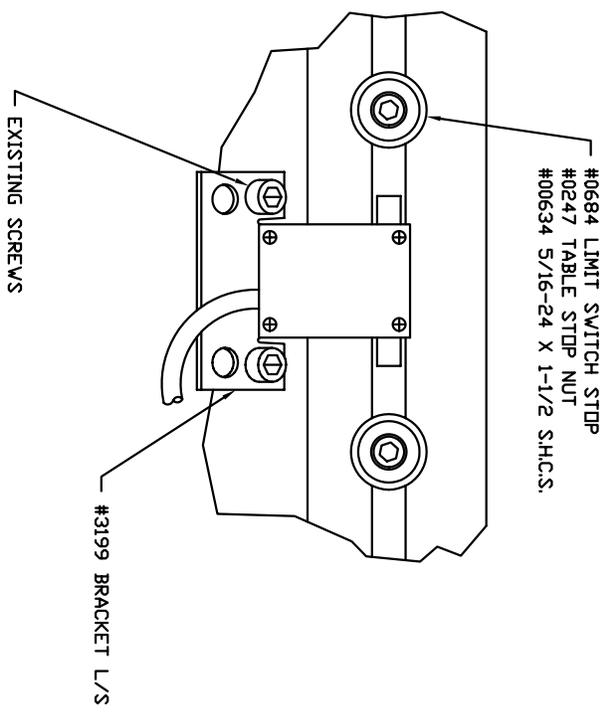
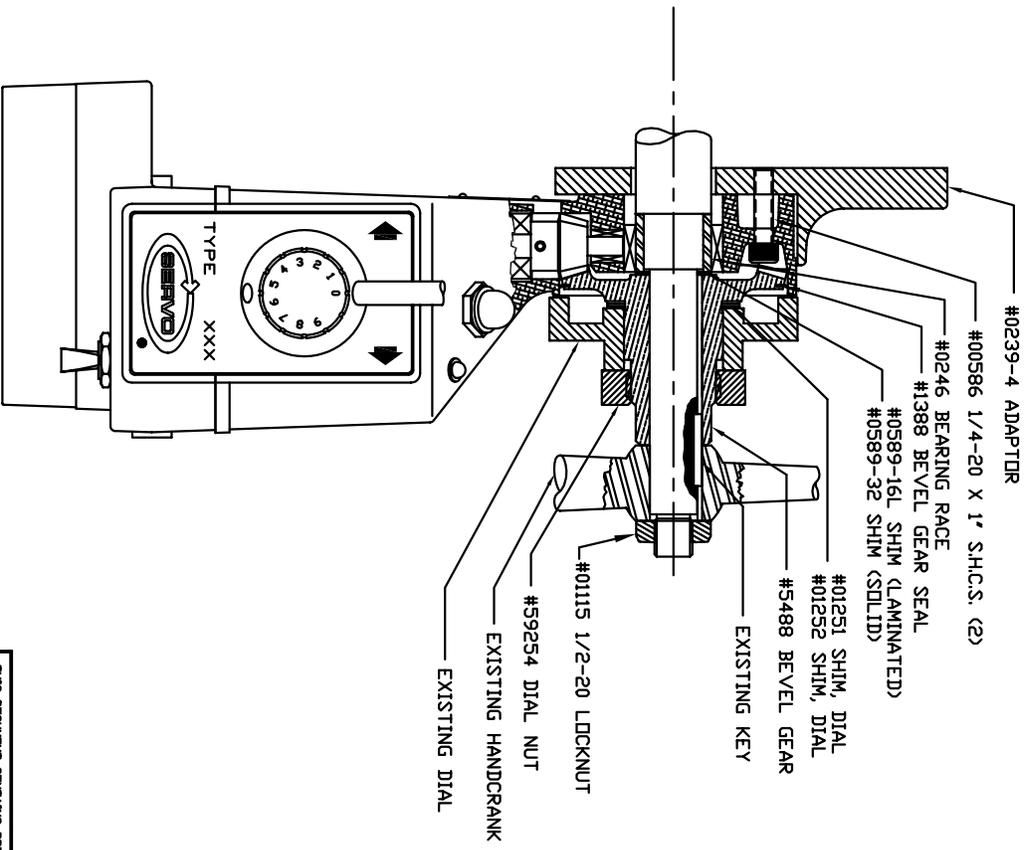
PICTURES IN THIS DRAWING ARE FOR REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

NA-5444 C

REVISION		DATE	DRAWN	CHECKED
ECD	LTR			



NOTES: 1. REVIEW ALL INSTALLATION INSTRUCTIONS AND POWER FEED OPERATIONS BEFORE TURNING ON SERVO POWER FEED.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES & TOLERANCES ARE DECIMALS ± 1/64. ANGLES ARE DECIMALS ± 1/2°. MATERIAL: XXX ± .005. FINISH: XXX ± .005. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES & TOLERANCES ARE DECIMALS ± 1/64. ANGLES ARE DECIMALS ± 1/2°. MATERIAL: XXX ± .005. FINISH: XXX ± .005. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES & TOLERANCES ARE DECIMALS ± 1/64. ANGLES ARE DECIMALS ± 1/2°. MATERIAL: XXX ± .005. FINISH: XXX ± .005.

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CONTRACT NO.	APPROVALS	DATE
DRAWN T. KU		12/15/92
CHECKED		

**SERVO PRODUCTS COMPANY**  
 34940 LAMOND BLVD., EASTLAKE, OH 44195  
**INSTALLATION DRAWING**  
**MODEL 9117**

SIZE	CODE IDENT. NO.	DRAWING NO.	REV.
B	0800-80514	NB-57512	A
SCALE 5/8		SHEET 1 OF 1	

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