

# POWER FEED INSTALLATION

## Model M-5000 Table Feed

### Acra 9x45, 10x54 and Concord



#### REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-6295	Power Feed Installation
ND-6293	Type 150 Servo Drive
ND-6292	Type 140 Servo Drive
0800-80001	Servo Power Feed Operation

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#### PREPARATION

- Step 1:* Move the table to the extreme left.
- Step 2:* Remove the nut, handle, and dial assembly from the right-hand end of the table.
- Step 3:* Remove the four cap screws holding the bearing housing in place.
- 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 onto the lead screw.
- Step 2:* Slide the adaptor with the power feed onto the bearing race and push flush to the end of the table.

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

- Step 3:* With the table in the extreme left-hand position, install the adaptor #0239-4 with the four 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), dial, and dial locking nut. Slide the handle in place and tighten with 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. Install the limit switch using the two existing 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.

## SERVO PRODUCTS COMPANY

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

### CALIFORNIA BRANCH

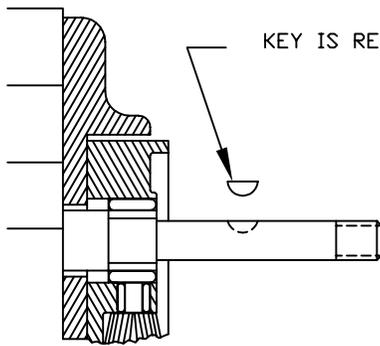
14254 Valley Blvd., Unit A  
City of Industry, CA 91746  
Ph. 626.961.7800 Fax 626.961.2444

### HEADQUARTERS

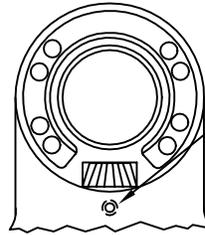
34940 Lakeland Blvd.  
Eastlake, OH 44095  
Ph. 440.942.9999 Fax 440.942-9100

### FLORIDA BRANCH

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

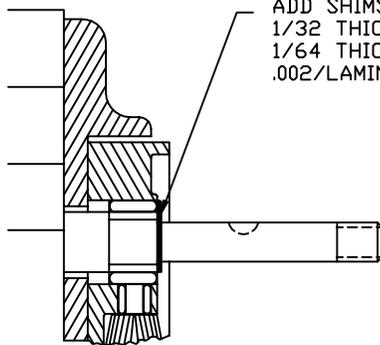


KEY IS REMOVED DURING SHIMMING

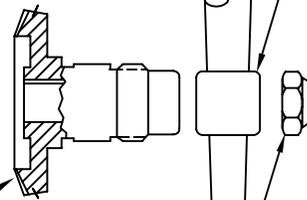


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1  
PREPARATION



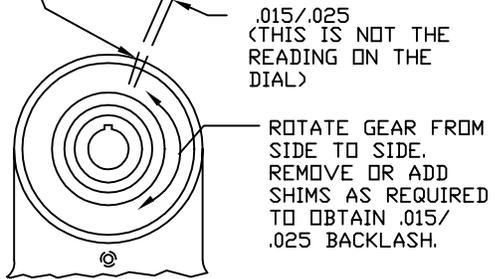
ADD SHIMS PROVIDED  
1/32 THICK ARE SOLID  
1/64 THICK ARE LAMINATED  
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



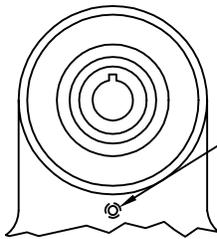
.015/.025  
(THIS IS NOT THE READING ON THE DIAL)

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

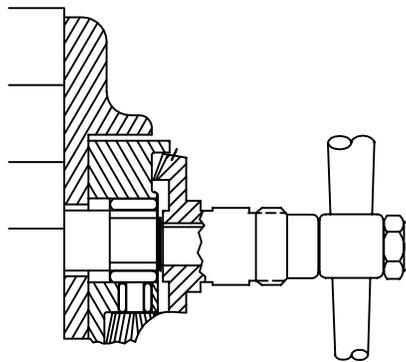
TIGHTEN NUT.

STEP 2  
SHIMMING BEVEL GEAR

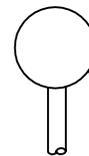
**CAUTION:** IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

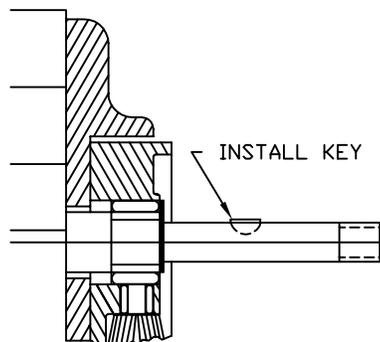


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



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.

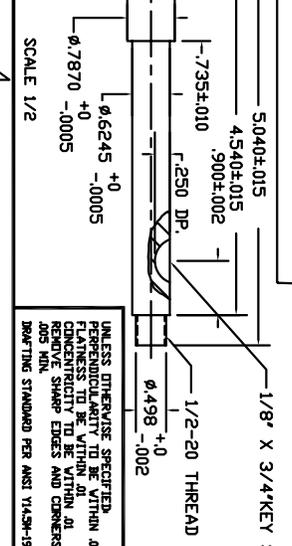
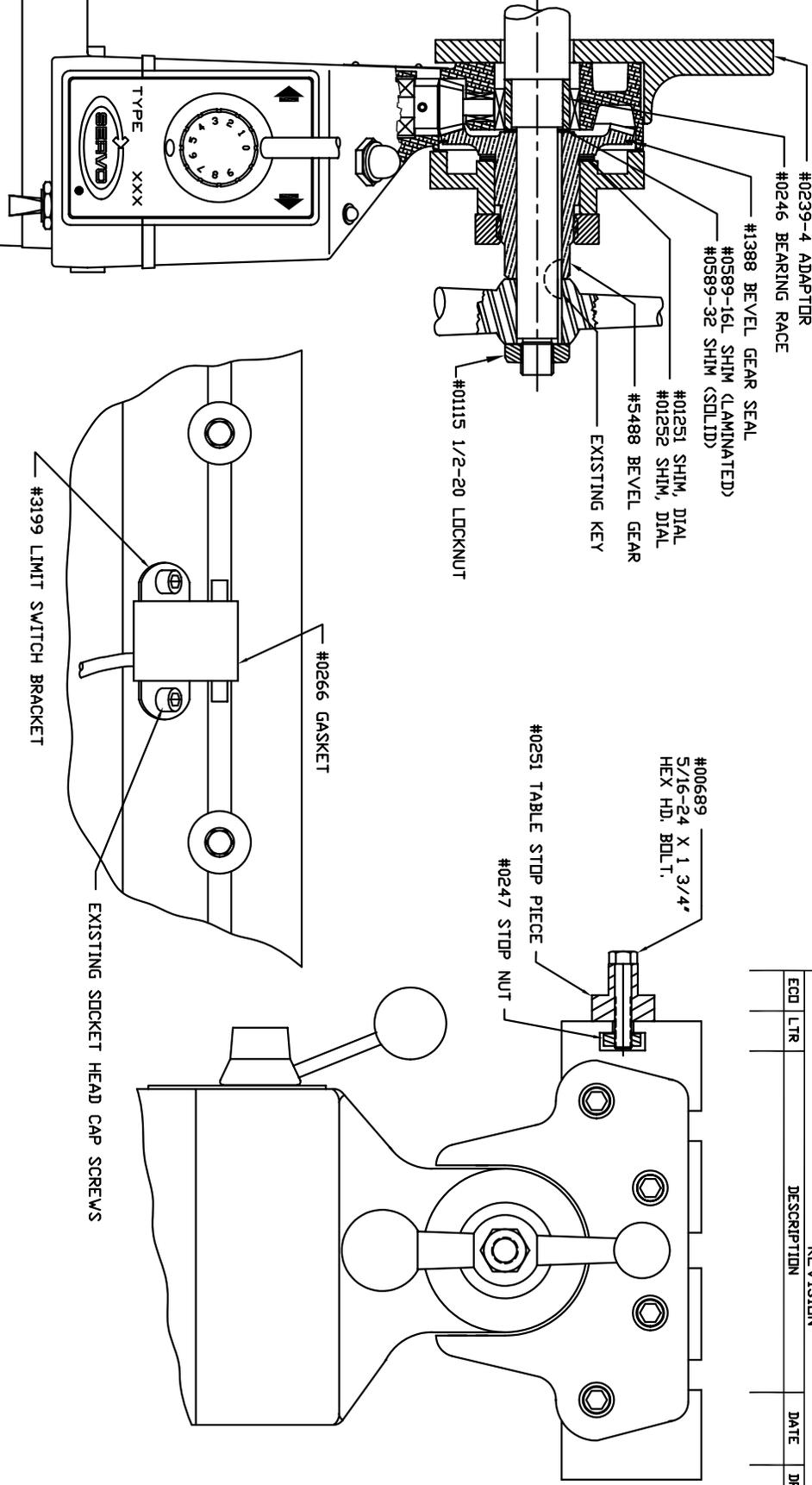
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BEVEL GEAR INSTALLATION

NA-5444 C

STEP 4  
LUBRICATION

REVISION		DATE	DRAWN	CHECKED
ECD	LTR	DESCRIPTION		



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & TOLERANCES ARE AS FOLLOWS: DECIMALS ± 1/64 .XX ± .005 ANGLES ± 1/2° MATERIAL NOTED CHECKED

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CONTRACT NO.	APPROVALS	DATE
	BROWN G. BUNN	6/26/95
COMPUTER NO.		
NB66295.DWG		

**SERVOD PRODUCTS COMPANY**  
 34940 LAKELAND BLVD., EASTLAKE, OH 44095  
**INSTALLATION DRAWING**  
 MODEL 5000 10 X 54  
 9 X 45  
 SIZE CODE IDENT. NO. DRAWING NO. REV.  
 B 0800-80168 NB-6295 A  
 SCALE 5/8 SHEET DF

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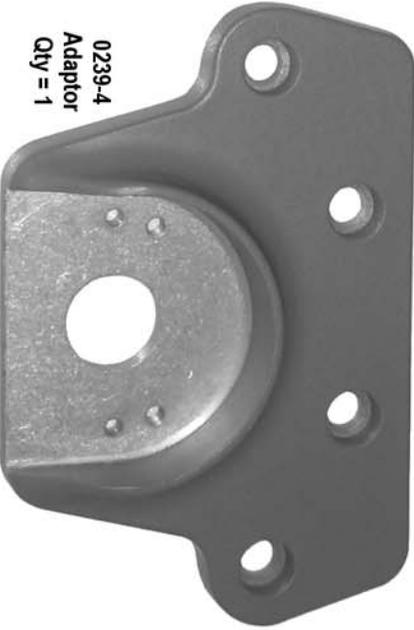
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# M-5000 TABLE FEED PARTS IDENTIFICATION LIST

- 
**00579**  
 Clamp  
 Qty = 1
- 
**01050**  
 Clamp  
 Qty = 1
- 
**00688**  
 Phil Pan Hd Screw  
 Qty = 1
- 
**0266**  
 Limit Switch Gasket  
 Qty = 1
- 
**3199**  
 Limit Switch Bracket  
 Qty = 1
- 
**06928**  
 Phil Pan Hd Screw  
 Qty = 4

- 
**00689**  
 Hex Hd Bolt  
 Qty = 2
- 
**0247**  
 Stop Nut  
 Qty = 2
- 
**0251**  
 Limit Stop  
 Qty = 2
- 
**01115**  
 Lock Nut  
 Qty = 1
- 
**59254**  
 Dial Nut  
 Qty = 1
- 
**01251**  
 Brass Shim  
 Qty = 5
- 
**01252**  
 Plastic Shim  
 Qty = 2
- 
**5488**  
 Bevel Gear  
 Qty = 1

- 
**0589-32**  
 .032 Shim  
 Qty = 2
- 
**0589-16L**  
 .016 Shim  
 Qty = 2
- 
**0246**  
 Bearing Race  
 Qty = 1
- 
**00586**  
 Soc Hd Cap Screw  
 Qty = 2
- 
**00595**  
 Roll Pin  
 Qty = 2
- 
**00596**  
 Roll Pin  
 Qty = 2
- 
**0239-4**  
 Adaptor  
 Qty = 1