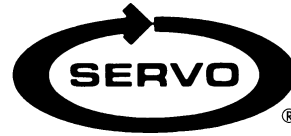


# POWER FEED INSTALLATION

## Model M-1350 Cross Feed

### Kondia G, FV-1, Hurco SM1, and others



#### REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-1231	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:* Remove the nut, handcrank, dial, dial hub, and key from the lead screw.
- Step 2:* Replace the Kondia bearing retainer with the bearing retainer provided.
- Step 3:* Slide the bearing race onto the adaptor.
- Step 4:* Slide the adaptor and bearing race onto the lead screw and secure to bearing retainer with the 1/4-20 x 1/2" long socket head cap screws.
- Step 5:* Remove the bearing race.

#### POWER FEED INSTALLATION

- Step 1:* Screw the shaft extension onto the lead screw and tighten.
- Step 2:* Using the hole provided as a pilot, drill 1/8" diameter through the lead screw and pin the shaft extension in place using the 1/8 diameter x 5/8" long roll pin. File smooth.
- Step 3:* Slide the spacer and bearing race onto the lead screw.
- Step 4:* Secure the power feed to the adaptor using the 1/4-20 x 1" long socket head 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, put on the dial locking nut, add the spacer #1230, and insert the woodruff key. Slide the Kondia handcrank and washer in place. Secure with the handcrank nut #1229.

## LIMIT SWITCH INSTALLATION

*Step 1:* See limit switch installation on drawing ND-1231.

## 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!

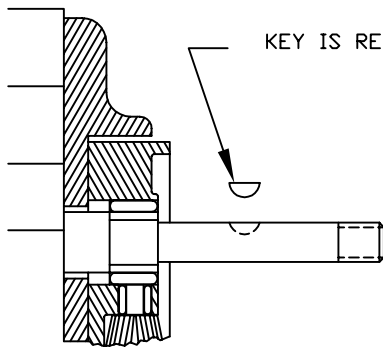
Prevent contact during fast traverses.

### **SERVO PRODUCTS COMPANY**

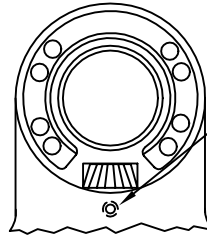
433 North Fair Oaks Avenue, Pasadena, CA 91103 USA  
Phone: 800.521.7359 or 626.796.2460 Fax: 626.796.3845

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

Call for the location of our regional Service Centers.

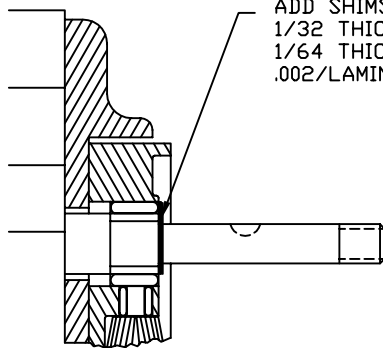


KEY IS REMOVED DURING SHIMMING

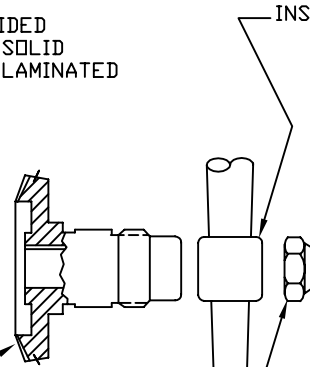


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1  
PREPARATION



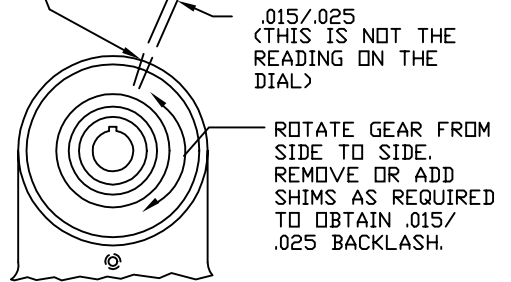
ADD SHIMS PROVIDED  
1/32 THICK ARE SOLID  
1/64 THICK ARE LAMINATED  
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



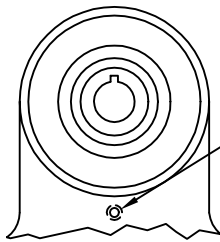
.015/.025  
(THIS IS NOT THE READING ON THE DIAL)

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

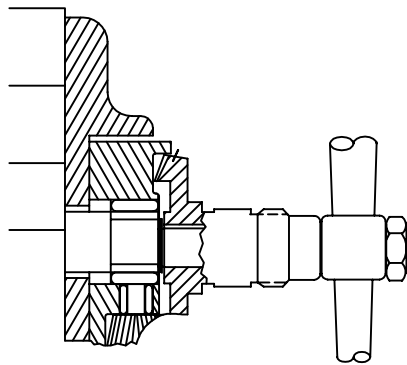
STEP 2  
SHIMMING BEVEL GEAR

TIGHTEN NUT.

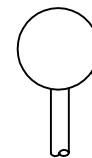
**CAUTION:** IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

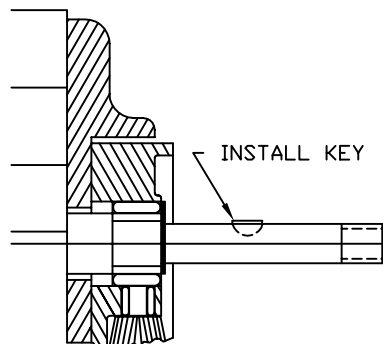


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.

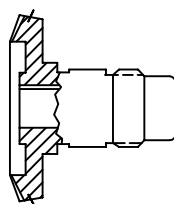


CONTROL HANDLE @ NEUTRAL POSITION

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.

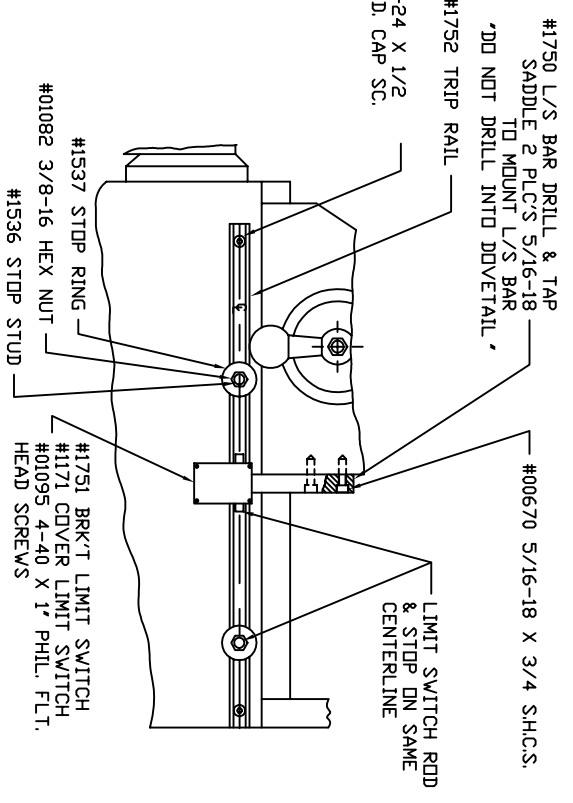
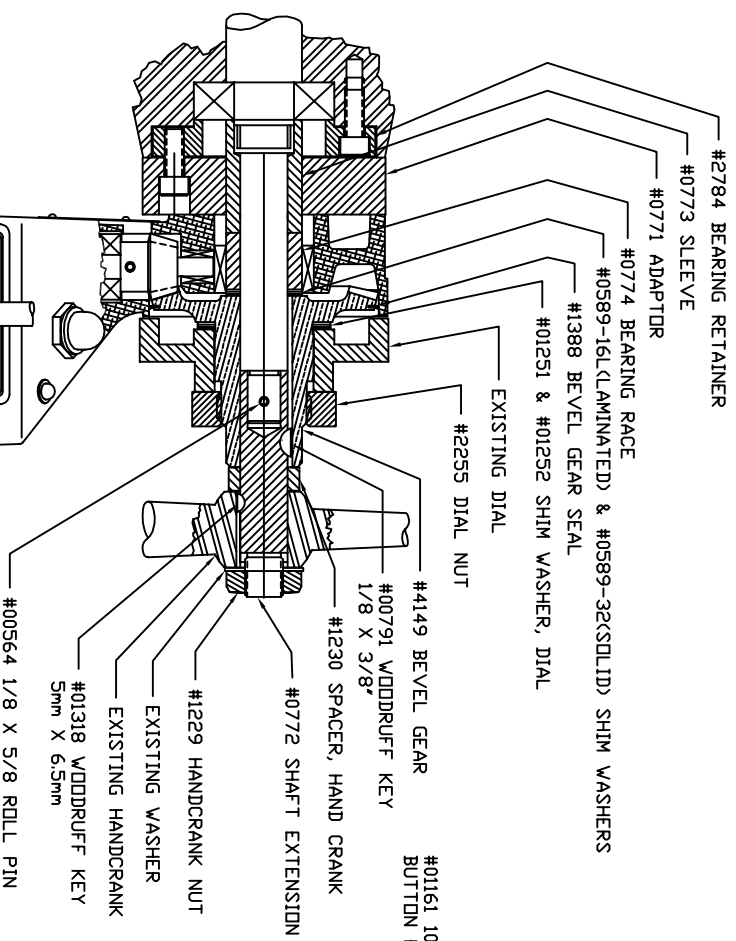
SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

NA-5444 C

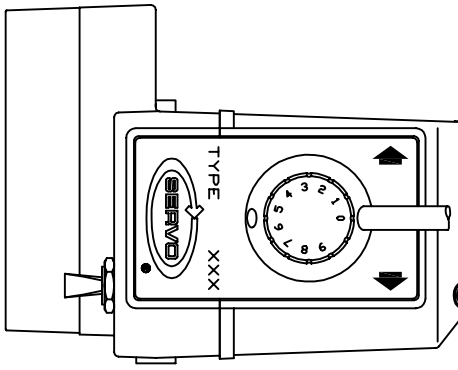
STEP 4  
LUBRICATION

REVISION		DATE	DRAWN	CHECKED
ECD	LTR	DESCRIPTION		



LIMIT STOP MAY BE MOUNTED  
ON LEFT SIDE OF KNEE.

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



UNLESS OTHERWISE SPECIFIED,  
DIMENSIONS ARE WITHIN 0.1  
FLATNESS TO BE WITHIN 0.1  
CONCENTRICITY TO BE WITHIN 0.1  
REMOVE SHARP EDGES AND CORNERS  
0.005 MIN.  
DRAWING STANDARD PER ANSI Y14.5M-1982

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WHICH MAY NOT BE DISCLOSED TO OTHERS  
WITHOUT THE WRITTEN AUTHORITY FROM AN OFFICER OF  
SERVO PRODUCTS COMPANY.

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES &  
TOLERANCES ARE LISTED  
FRACTIONS DECIMALS ANGLES  
± 1/64 ± .005 ± .005 ± 1/2°

CONTRACT NO.	APPROVALS	DATE
	DRAWN G. BUINN	7/18/95
	CHECKED	

FINISH	DID NOT SCALE DRAWING	COMPUTER NO.
		NB1231A.DWG

SERVO PRODUCTS COMPANY  
 433 N. FAIR BANKS AVE., PASADENA, CALIFORNIA 91103  
**INSTALLATION DRAWING**  
 KONDIA  
 MODEL 1350  
 SIZE CODE IDENT NO. DRAWING NO. REV.  
 B 0800-80042 NB-1231 A  
 SCALE 5/8 SHEET 1 OF 1