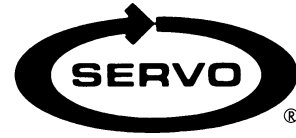


# POWER FEED INSTALLATION

## Model M-4500 Table Feed

### Holke S/N 5172+



#### REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-5883	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 and MOUNTING HARDWARE INSTALLATION

*Step 1:* Gather together the following items that you will need to complete this installation.

- a) 3/8" electric hand drill
- b) #7 drill
- c) 1/4-20 tap
- d) 9/32" diameter transfer punch
- e) flat file, sand paper
- f) 3/4" socket wrench
- g) set of inch hex wrenches
- h) grease
- i) clean shop rag

*Step 2:* Remove the nut, handle, dial assembly and key from the right hand end of the table.

*Step 3:* Slide the spacer and bearing race onto the lead screw.

*Step 4:* Slide the Power Feed over the bearing race so that it sits square to the bearing bracket. Using the Power Feed as a template, spot two mounting holes.

*Step 5:* Remove the Power Feed, bearing race, spacer and bearing bracket.

*Step 6:* Drill and tap 1/4-20 two places.

*Step 7:* Reassemble the bearing bracket to the mill.

#### POWER FEED INSTALLATION

*Step 1:* Slide the spacer onto the lead screw.

*Step 2:* Slide the bearing race onto the lead screw.

*Step 3:* Slide the Power Feed over the bearing race and secure to the bearing bracket using two 6 mm x 1 mm in the top and two 1/4-20 x 1" long socket head cap screws in the bottom.

*Step 4:* Modify dial if required. See Detail A.

## BEVEL GEAR INSTALLATION

- Step 1:* Follow the drawing NA-5444 for installation of the bevel gear. Adjust for proper gear backlash.
- Step 2:* One spacer may have to be shortened to allow proper shimming of the bevel gear.

## DIAL AND HANDWHEEL INSTALLATION

- Step 1:* After getting the proper gear 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. Three 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, spacer and handcrank onto shaft, followed by 1/2" SAE washer, and secure with the 1/2-20 locking nut.

## LIMIT SWITCH INSTALLATION

Refer to drawing NB-5883 for modifications and installation of the limit switch.

## 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.**

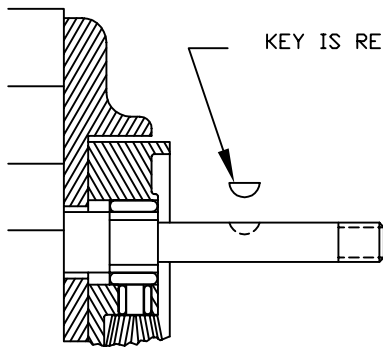
Clearances between the surfaces of the hand crank and the non-moving parts of the equipment on which the hand crank is installed must be at least one-fourth inch (1/4") to prevent injury. Modification of existing hand crank or replacement may be required.

***Do not operate*** without proper clearance!

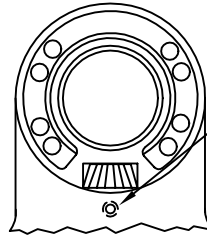
Prevent contact during fast traverses.

## 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.

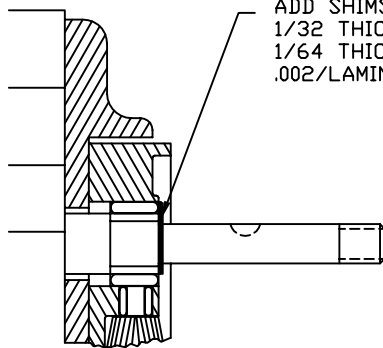


KEY IS REMOVED DURING SHIMMING

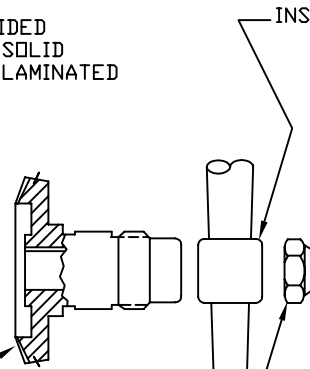


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1  
PREPARATION



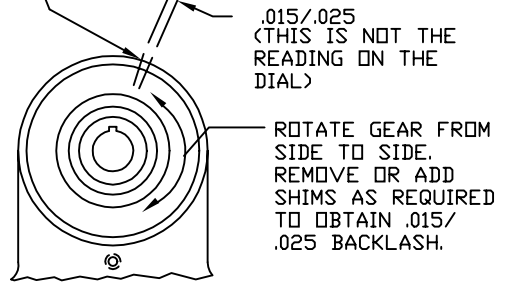
ADD SHIMS PROVIDED  
1/32 THICK ARE SOLID  
1/64 THICK ARE LAMINATED  
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



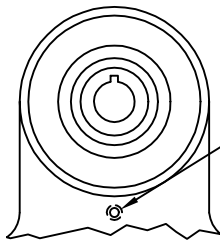
.015/.025  
(THIS IS NOT THE READING ON THE DIAL)

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

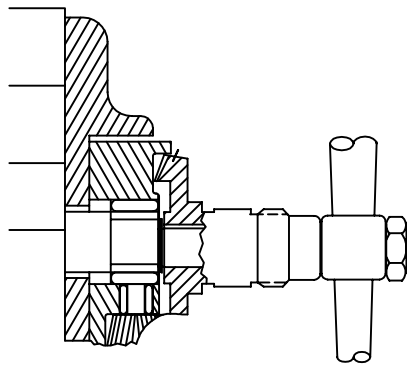
STEP 2  
SHIMMING BEVEL GEAR

TIGHTEN NUT.

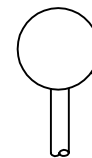
**CAUTION:** IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

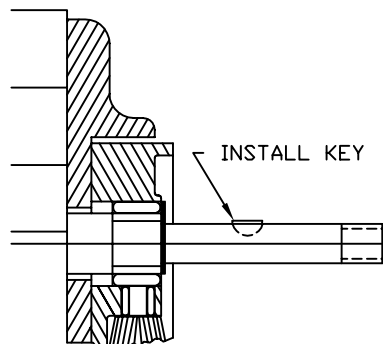


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.

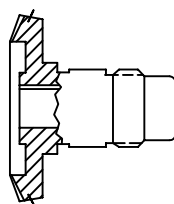


CONTROL HANDLE @ NEUTRAL POSITION

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.

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BEVEL GEAR INSTALLATION

NA-5444 C

STEP 4  
LUBRICATION

