

POWER FEED INSTALLATION

Model M-9012 Table Feed

Victor VSK or VK



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-57283	Power Feed Installation
ND-6293	Type 150 Servo Power Feed
ND-6292	Type 140 Servo Power Feed
0800-80001	Servo Power Feed Operation

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, 1/8" 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:* Move the table to the extreme left.
- Step 3:* Remove the nut, handle, and dial assembly from the right hand end of the table.
- Step 4:* Slide the power feed over the bearing race and push it against the bearing housing.
- Step 5:* Select three mounting holes on the feed and use the transfer punch to transfer the hole locations to the bearing housing.
- Step 6:* Drill #7 (.201" diameter) holes to .75" deep. Then tap 1/4-20 to .5" deep.
- Step 7:* Screw the shaft extension #0333 onto the lead screw and tighten.
- Step 8:* Using the cross hole on the shaft extension as a pilot, drill 1/8" diameter through. Pin in place using the 1/8" x 5/8" long roll pin #00564. Both ends of the roll pin must be flush or below the shaft surface. File if necessary. Sand smoothly to maintain proper shaft diameter.
- Step 9:* Thoroughly clean all parts and lubricate.

POWER FEED INSTALLATION

Step 1: With the table in the extreme left-hand position, install the power feed with the three cap screws #01959. (On some mills, the drive pin holes do not line up with the adaptor. Remove the pins. The cap screws will be sufficient.)

BEVEL GEAR INSTALLATION

Step 1: Follow the drawing NA-5444 for installation of the bevel gear. Adjust for proper gear backlash.

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: Screw the dial nut #2255 onto the bevel gear and then screw the spacer #1230 onto the shaft. Install the Woodruff key #00614. Slide the existing handle onto the shaft and tighten with locknut #0683.

LIMIT SWITCH INSTALLATION

Step 1: Remove the standard stop pieces. Install the 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 limit switch spacers into the T-stop. Install the limit switch using 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

➔ **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. Secure using 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.

Please read **WARNINGS** on the following page.

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!

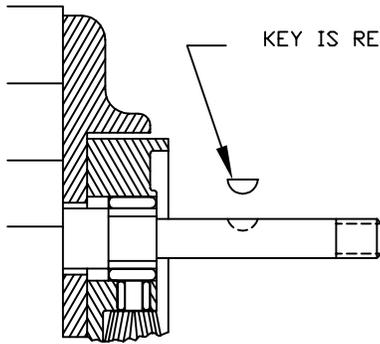
Prevent contact during fast traverses.

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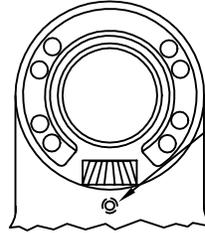
433 North Fair Oaks Avenue, Pasadena, CA 91103 USA
Phone: 800.521.7359 or 626.796.2460 Fax: 626.796.3845

Web: servoproductsco.com

Call for the location of our regional Service Centers.

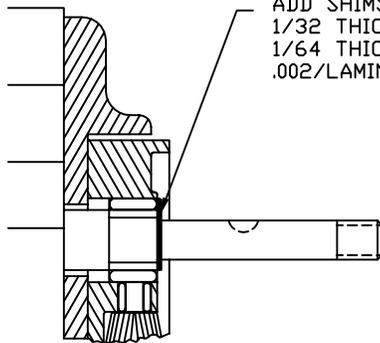


KEY IS REMOVED DURING SHIMMING

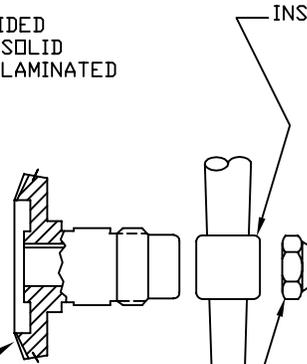


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1
PREPARATION



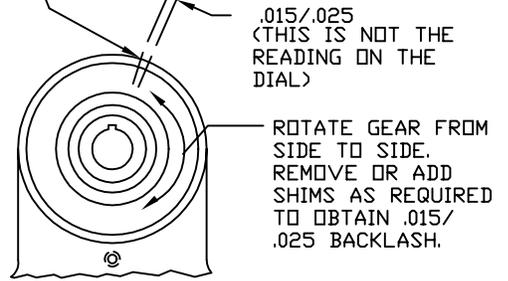
ADD SHIMS PROVIDED
1/32 THICK ARE SOLID
1/64 THICK ARE LAMINATED
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



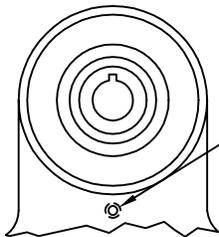
.015/.025
(THIS IS NOT THE READING ON THE DIAL)

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

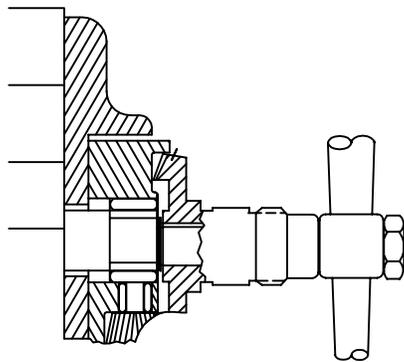
STEP 2
SHIMMING BEVEL GEAR

TIGHTEN NUT.

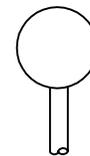
CAUTION: IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



LOOSEN SETSCREW

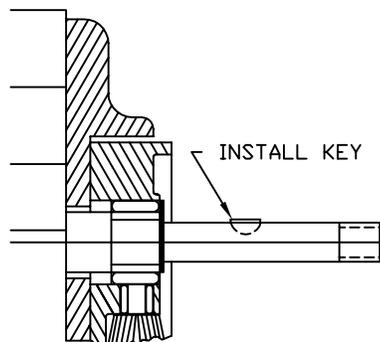


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.

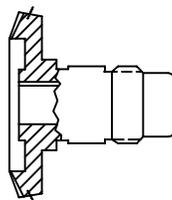


CONTROL HANDLE @ NEUTRAL POSITION

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)

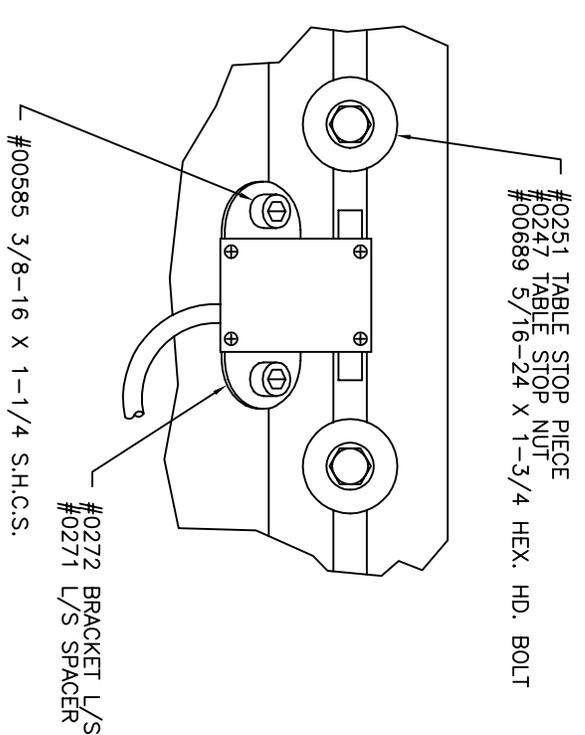
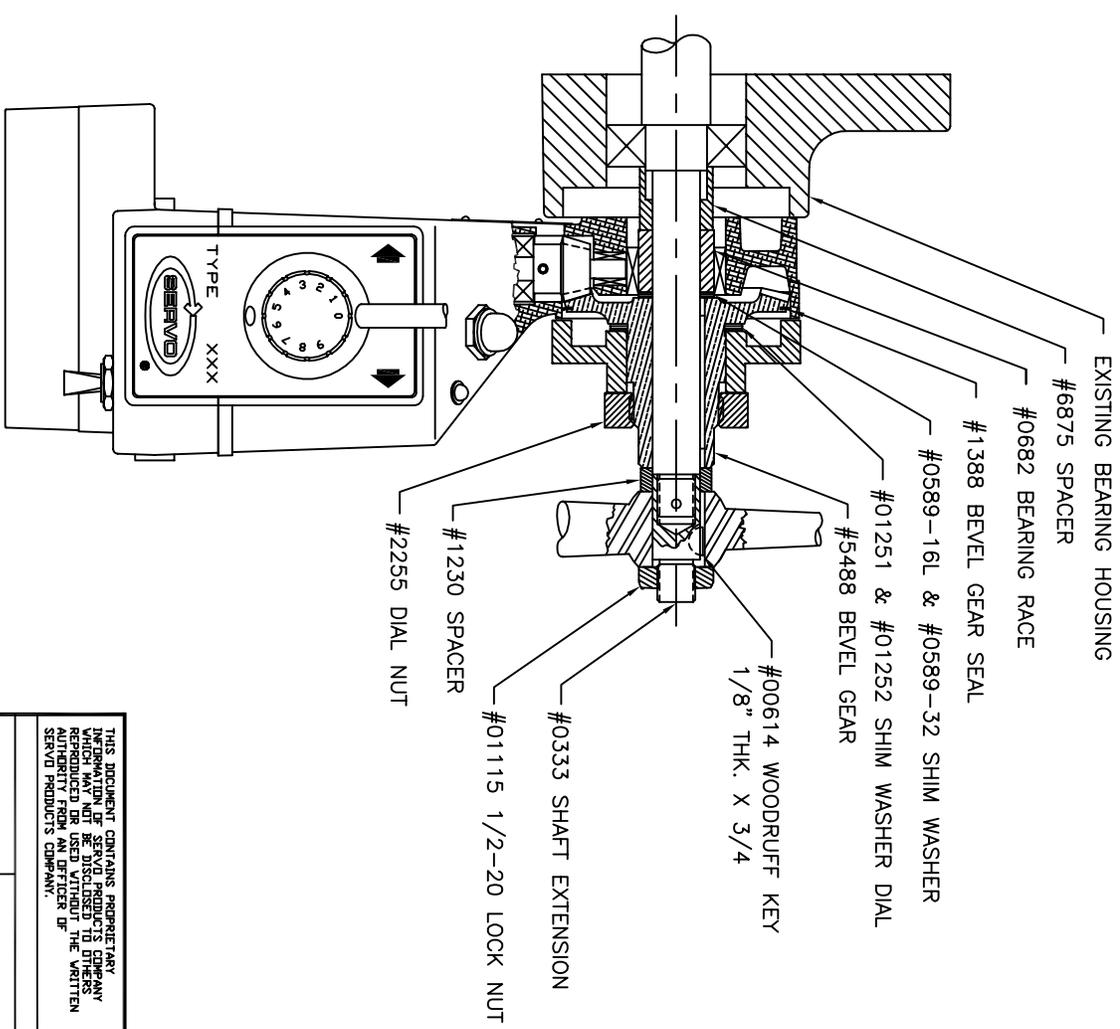
PICTURES IN THIS DRAWING ARE FOR REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

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BEVEL GEAR INSTALLATION

NA-5444 C

REVISION		DATE	DRAWN	CHECKED
ECD	LTR	DESCRIPTION		



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 AS FOLLOWS: FRACTIONS: DECIMALS: ANGLES: ± 1/64" ± .005" ± .005" ± 1/2°

UNLESS OTHERWISE SPECIFIED, FINISHES ARE: NEXT ASSY: USED DN: APPLICATION: DID NOT SCALE DRAWING: COMPUTER ND.

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CONTRACT NO.	APPROVALS	DATE
	M.W.	1/8/02
	CHECKED	

SERVO PRODUCTS COMPANY
433 ND FAIR DAMS AVE., PASADENA CALIFORNIA 91103

INSTALLATION DRAWING
MODEL 9012

SIZE	CODE IDENT ND.	DRAWING ND.
B	0800-80480	NB-57283
SCALE 5/8	SHEET 1	OF 1

A B C D 4 3 2 1