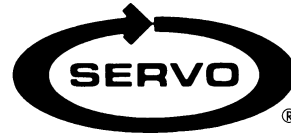


# POWER FEED INSTALLATION

## Model M-6550 Cross Feed

### Victor 16VSK or VK



#### REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-1538	Limit Switch Installation
NB-6877	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:* Place the adaptor plate #6859 onto the existing bearing housing.
- Step 3:* Transfer three mounting holes from the adaptor plate to the bearing housing. Drill and tap 1/4-20 by 1/2" deep threads.
- Step 4:* Secure the adaptor plate to the bearing housing using the 1/4-20 x 1/2" long socket head cap screws. Torque all three screws to 120 in-lb.

#### DRIVE UNIT INSTALLATION

- Step 1:* Screw the shaft extension onto the lead screw and tighten.
- Step 2:* Using the cross hole on the shaft extension as a pilot, drill 1/8 diameter through and pin in place using the 1/8 x 5/8 long roll pin. Both ends of the roll pin must be flush or below the shaft surface. File if necessary. Sand smoothly to remove burr.
- Step 3:* Slide the spacer #6235 and the bearing race #0682 onto the lead screw.
- Step 4:* Secure the power feed to the adaptor using the 1/4-20 x 1-1/8" 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. Four washers are provided for this, two solid and two laminated. Shim as required.
- Step 2:* In the following sequence, put on the dial locking nut, add spacer, insert the key, slide the existing handcrank and washer in place. Secure with the lock nut provided.

## LIMIT SWITCH INSTALLATION

*Step 1:* See limit switch installation drawing NB-1538 enclosed.

## 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!

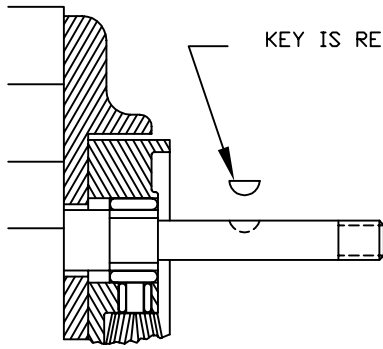
Prevent contact during fast traverses.

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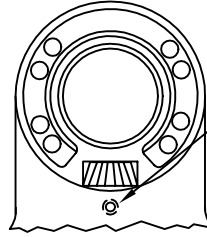
433 North Fair Oaks Avenue, Pasadena, CA 91103 USA  
Phone: 800.521.7359 or 626.796.2460 Fax: 626.796.3845

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

Call for the location of our regional Service Centers.

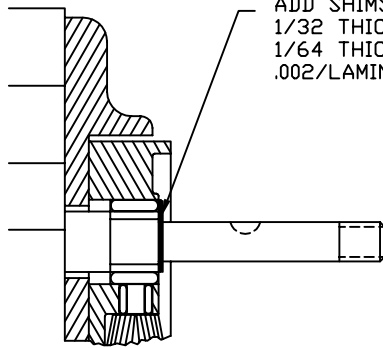


KEY IS REMOVED DURING SHIMMING

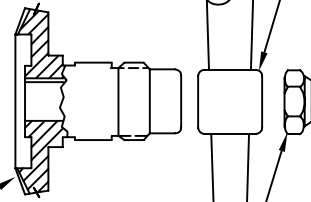


TIGHTEN SLIGHTLY (HOLDS BEVEL PINION STATIONARY DURING SHIMMING.)

STEP 1  
PREPARATION



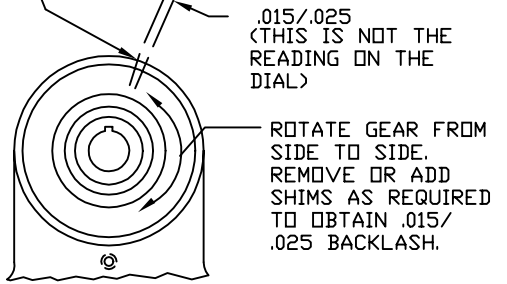
ADD SHIMS PROVIDED  
1/32 THICK ARE SOLID  
1/64 THICK ARE LAMINATED  
.002/LAMINATION



PUSH BEVEL GEAR AGAINST SHIMS.

INSTALL HANDCRANK.

MARK HOUSING AND BEVEL GEAR WITH PENCIL TO CHECK BACKLASH.



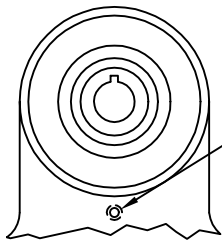
.015/.025  
(THIS IS NOT THE READING ON THE DIAL)

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

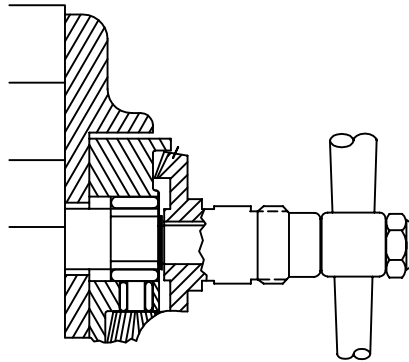
TIGHTEN NUT.

STEP 2  
SHIMMING BEVEL GEAR

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



LOOSEN SETSCREW

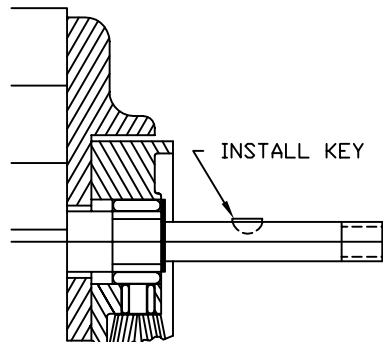


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



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)

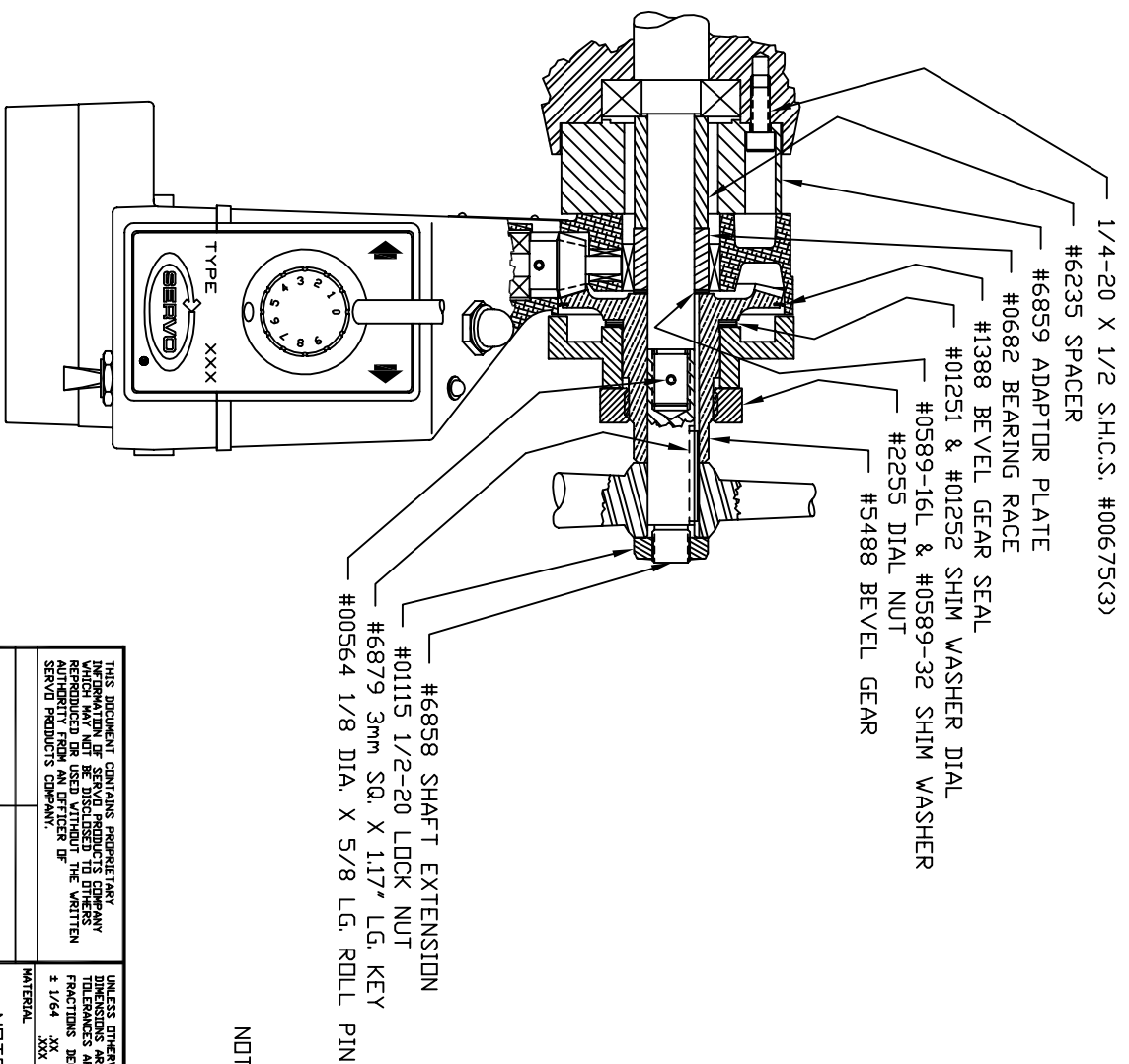
PICTURES IN THIS DRAWING ARE FOR REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

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BEVEL GEAR INSTALLATION

NA-5444 C

STEP 4  
LUBRICATION



NOTES: 1. REVIEW ALL INSTALLATION INSTRUCTIONS AND POWER FEED OPERATIONS BEFORE TURNING ON SERVO POWER FEED.  
 2. SEE DRAWING D1538 FOR INSTALLATION OF LIMIT SWITCH.

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS ARE TO BE WITHIN .015 INCHES UNLESS OTHERWISE SPECIFIED. REMOVE SHARP EDGES AND CORNERS .005 MIN.

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. FRACTIONS DECIMALS ANGLES ± 1/64 .XX ± .05 ± 1/2 DEG.

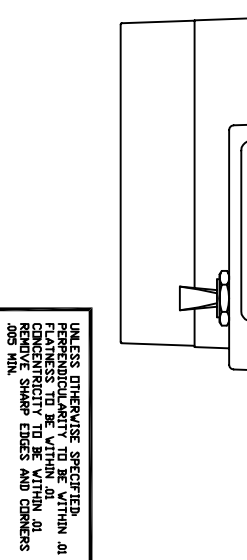
CONTRACT NO.		APPROVALS		DATE
		DRAWN J. TUCKER		2/11/97
		CHECKED		

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 433 N. FAIR OAKS AVE., PASADENA CALIFORNIA 91103

MODEL 6550  
 INSTALLATION DRAWING  
 VICTOR 16VSK or VK

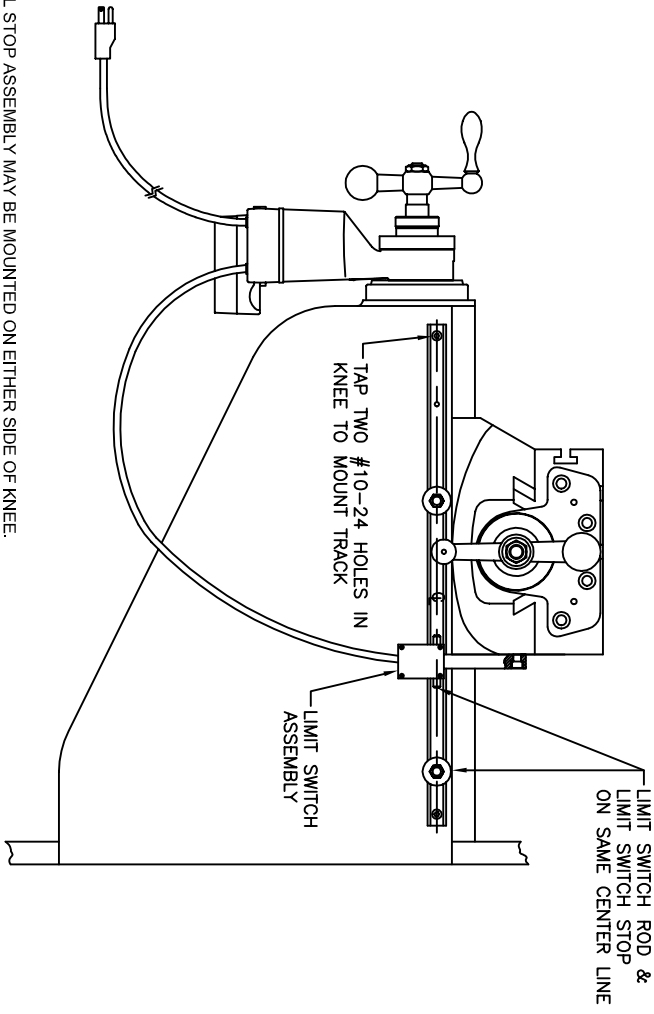
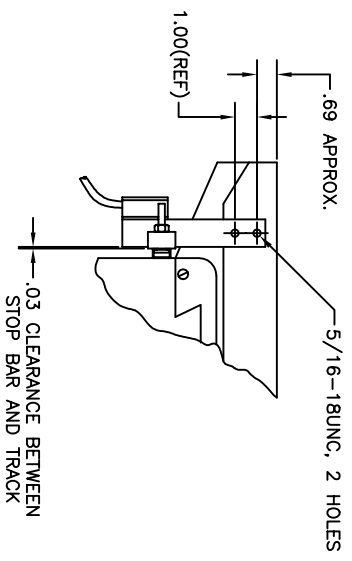
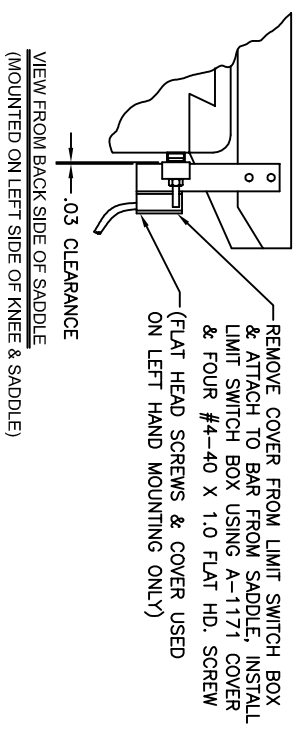
SIZE B CODE IDENT. NO. 0800-80369 DRAWING NO. NB-6877  
 SCALE 5/8 SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS ARE TO BE WITHIN .015 INCHES UNLESS OTHERWISE SPECIFIED. REMOVE SHARP EDGES AND CORNERS .005 MIN.



4 3 2 1 4 3 2 1

REVISION		DATE	DRAWN	CHECKED
ECC	LTR			
DESCRIPTION				



- NOTES:
1. CROSS TRAVEL STOP ASSEMBLY MAY BE MOUNTED ON EITHER SIDE OF KNEE
  2. WHEN MILL HAS MEASURING ATTACHMENT, MOUNT LIMIT SWITCH, STOPS & TRACK ON OPP. SIDE.
  3. REFERENCE DRAWING ONLY. INSTALLATION SHOWN IS A BRIDGEPORT MILL.

VIEW FROM BACK SIDE OF SADDLE  
(MOUNTED ON RIGHT SIDE OF KNEE & SADDLE)

UNLESS OTHERWISE SPECIFIED  
PERPENDICULARITY, PARALLELISM,  
STRAIGHTNESS, FLATNESS, ROUND-  
CONCENTRICITY, CYLINDRICITY TO BE  
WITHIN .01 TOTAL OR .040/IN.  
SURFACE ROUGHNESS WITHIN 125  
REMOVE SHARP CORNERS AND  
EDGES .005 MIN. DRAFTING  
STANDARD PER ANSI Y14.5M-1982

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

CONTRACT NO.	APPROVALS	DATE
	T. KU	02/01/01
MATERIAL	CHECKED	
FINISH		
DO NOT SCALE DRAWING		
APPLICATION	USED ON	
NEXT ASSY		

**SERVO** 433 NO. FAIR OAKS AVE., PASADENA CALIFORNIA 91103

**SERVO PRODUCTS COMPANY**

INSTALLATION DRAWING  
LIMIT SWITCH, CROSS FEEDS

SIZE B CODE IDENT NO. 0800-8002-1 DRAWING NO. NB-1538 REV. A

SCALE NONE SHEET 1 OF 1

