POWER FEED INSTALLATION
Model M-9509 Cross Feed
Kent 2S

REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-57219	Power Feed Installation
NB-1538	Limit Switch Installation
ND-6293	Type 150 Servo Drive
ND-6292	Type 140 Servo Drive
0800-80001	Servo Power Feed Operation

PREPARATION

Step 1: Move the saddle to the front of the mill.

Step 2: Remove the nut, handle, dial assembly, and key from the lead screw. Save the key for installation later.

Step 3: Remove the bearing retainer. Save the screws for installation later.

Step 4: Screw the shaft extension onto the lead screw.

Step 5: Slide the bevel gear onto the lead screw to ensure proper fit. Then remove the bevel gear.

Step 6: Drill 1/8 diameter hole through the shaft using the hole provided in the shaft extension as a pilot. Pin the shaft extension to the lead screw with the 1/8 diameter x 5/8" long roll pin. File smooth.

POWER FEED INSTALLATION

Step 1: Using the existing screws, secure the bearing retainer #6544 to the bearing housing.

Step 2: Slide the shaft spacer #0859 and the bearing race #0470 in place onto the lead screw.

Step 7: Slide the power feed onto the bearing race and secure to the bearing retainer using 1/4-20 x 1" long socket head cap screws.

BEVEL GEAR INSTALLATION

Step 1: Use the 3 mm parallel key you saved before for the bevel gear installation.

Step 2: 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: Put on the dial locking nut. Install the 3 mm parallel key in the shaft extension. Slide the handcrank onto the end of the shaft extension and tighten with the 1/2-20 locking nut.

LIMIT SWITCH INSTALLATION

Step 1: See the 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.

SERVO PRODUCTS COMPANY
433 North Fair Oaks Avenue, Pasadena, CA 91103 USA
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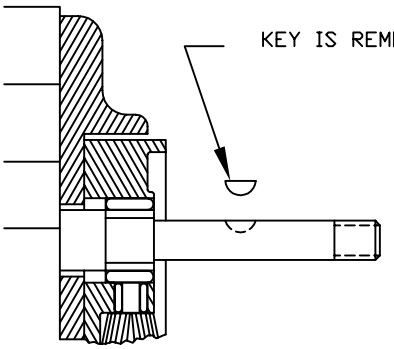
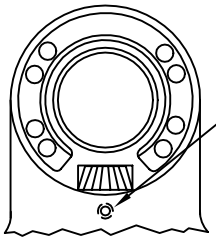
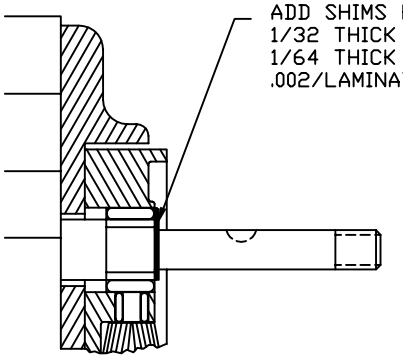
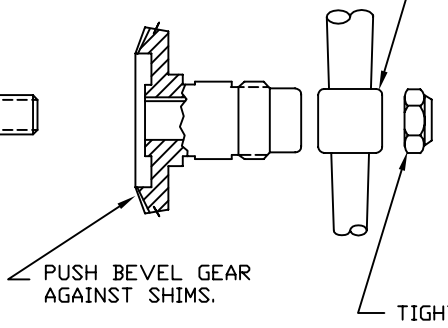
Web: www.servoproductsco.com
Call for the location of our regional Service Centers.

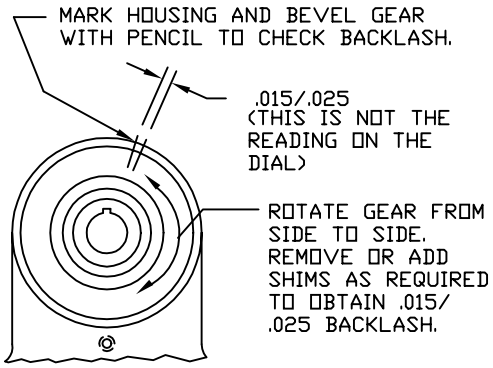




STEP 1
PREPARATION

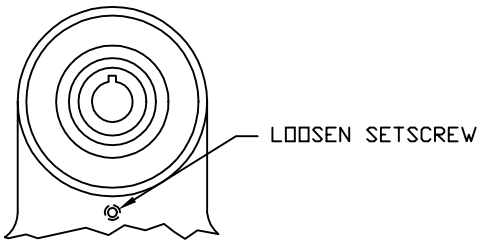


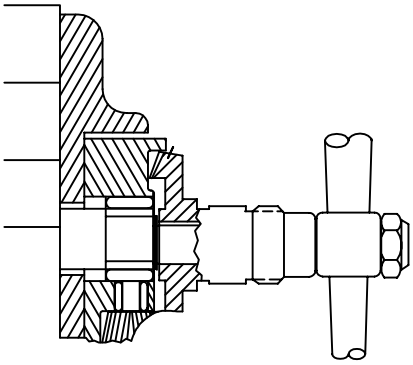




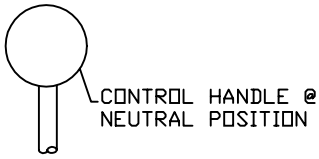
STEP 2
SHIMMING BEVEL GEAR

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

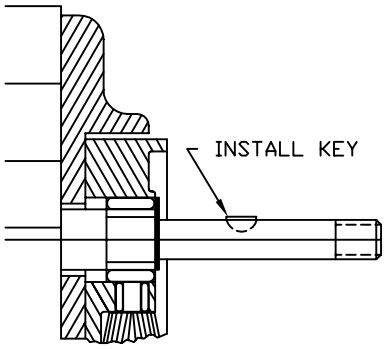


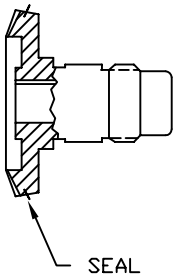


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



STEP 3
DOUBLE CHECK OF SHIMMING





REMOVE GEAR, PACK WITH GREASE. (DO NOT USE SILICONE TYPE GREASE) REPLACE GEAR.
(DO NOT LOSE ANY SHIMS)

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

STEP 4
LUBRICATION

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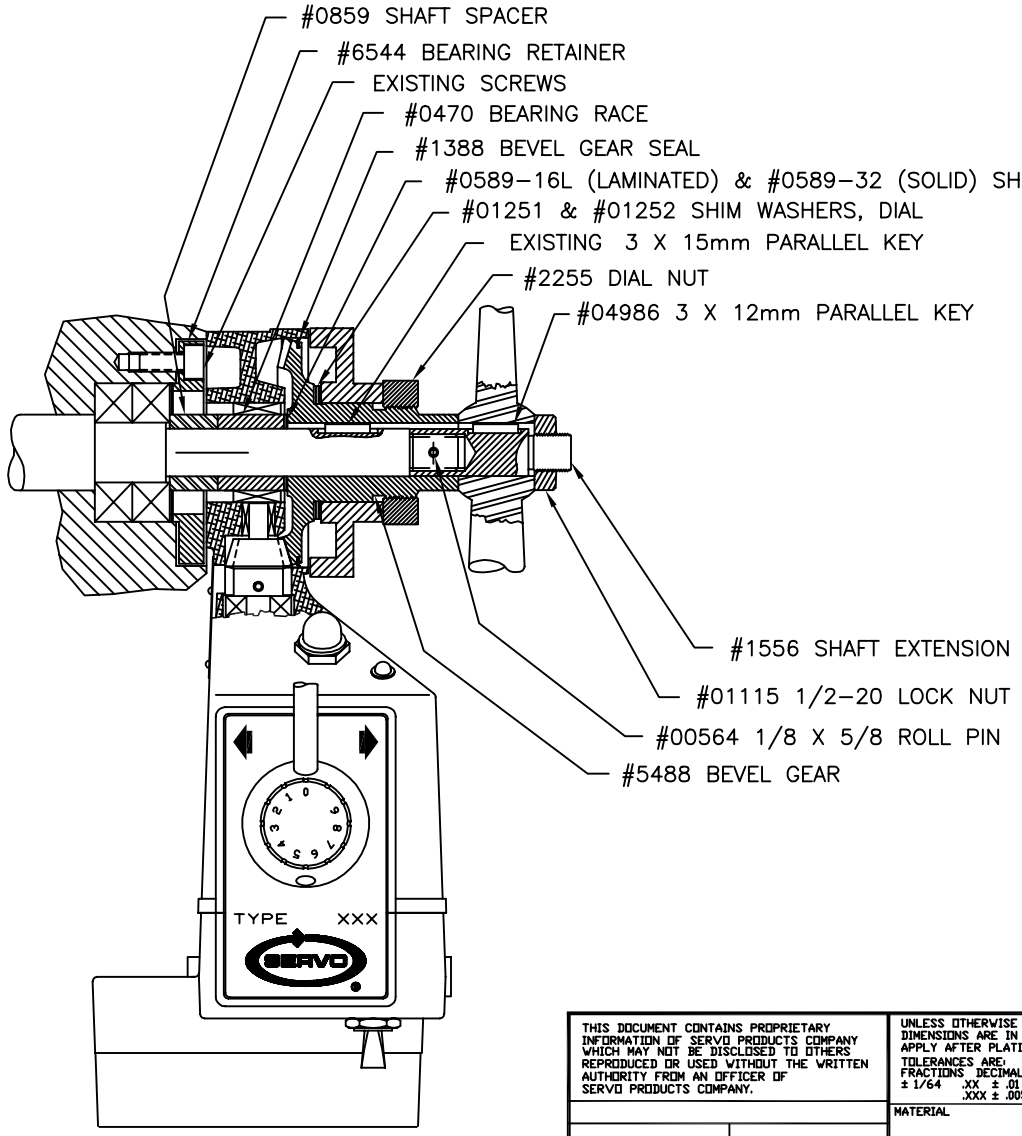
BEVEL GEAR INSTALLATION

NA-5444 C

REVISION					
ECO	LTR	DESCRIPTION	DATE	DRAWN	CHECKED



UNLESS OTHERWISE SPECIFIED:
PERPENDICULARITY TO BE WITHIN .01
FLATNESS TO BE WITHIN .01
CONCENTRICITY TO BE WITHIN .01
REMOVE SHARP EDGES AND CORNERS .005 MIN.
DRAFTING STANDARD PER ANSI Y14.5M-1982

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & APPLY AFTER PLATING
TOLERANCES ARE:
FRACTIONS ± 1/64 DECIMALS .XX ± .01 .XXX ± .005 ANGLES ± 1/2°

MATERIAL: NOTED

FINISH: NONE

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS	DATE
DRAWN M.WU	1/10/02
CHECKED	

COMPUTER NO.

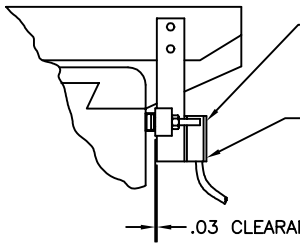
SERVO PRODUCTS COMPANY
433 NO. FAIR OAKS AVE., PASADENA CALIFORNIA 91103

INSTALLATION DRAWING, MODEL 9509 KENT 2S

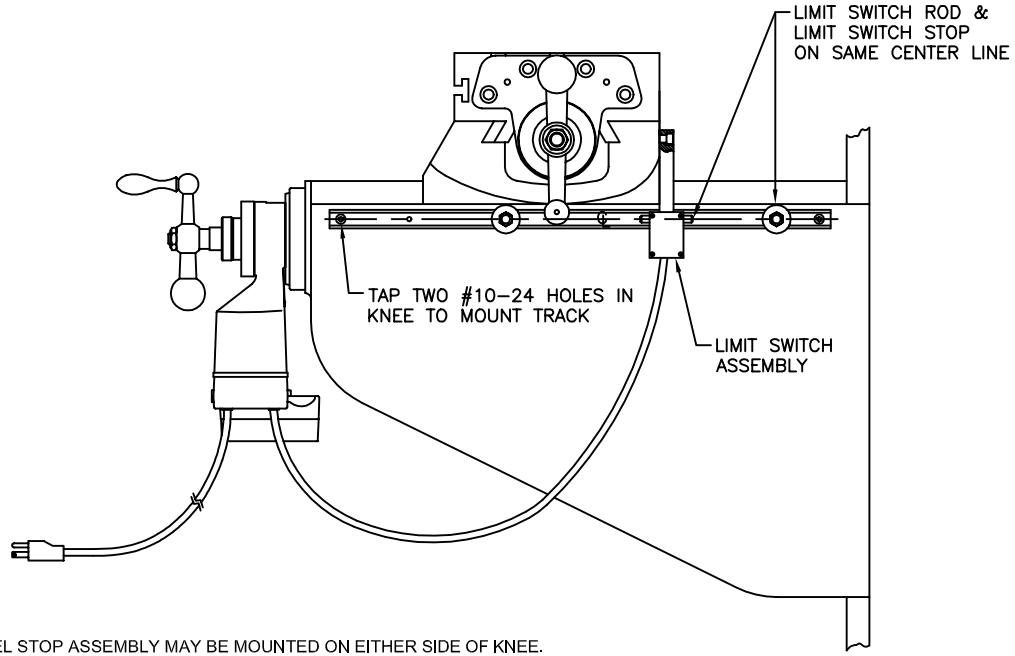
SIZE	CODE IDENT NO.	DRAWING NO.	REV.
B	0800-80467	NB-57219	

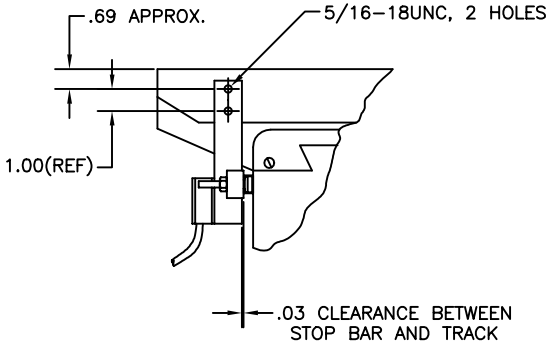
SCALE 5/8 SHEET OF

REVISION					
ECO	LTR	DESCRIPTION	DATE	DRAWN	CHECKED



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





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

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.

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

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & APPLY AFTER PLATING
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
±1/64 .XX ±.01 ± 1/2°
.XXX±.005

MATERIAL
–

FINISH
–

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS	DATE
DRAWN T. KU	02/01/01
CHECKED	

COMPUTER NO.

SERVO PRODUCTS COMPANY
433 NO. FAIR OAKS AVE., PASADENA CALIFORNIA 91103

INSTALLATION DRAWING
LIMIT SWITCH, CROSS FEEDS

SIZE	CODE IDENT NO.	DRAWING NO.	REV.
B	0800-80021	NB-1538	A

SCALE NONE SHEET OF