POWER FEED INSTALLATION
Model M-9508 Cross Feed
Kent 3VK, 5VK, Acer 3VS, 3VK and others

REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-57225	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: Using the hole provided as a pilot, drill 1/8" diameter through the lead screw. 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 to the bearing housing.

Step 2: Slide the adaptor onto the lead screw (counterbore facing outside).

Step 3: Slide the bearing race onto the lead screw and into the adaptor for proper alignment of the adaptor.

Step 4: Secure the adaptor to the bearing retainer using three 1/4-20 x 1" long socket head cap screws.

Step 5: Remove the bearing race.

Step 6: Slide the spacer and bearing race onto the lead crew.

Step 7: Slide the power feed onto the bearing race and secure to the adaptor using two 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. Two plastic (.030" thick) and five brass (.005" thick) washers are provided for this. Shim as required.

Step 2: Put on the dial locking nut. Slide the handcrank onto the end of the shaft extension and tighten with the 1/2-20 lock 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

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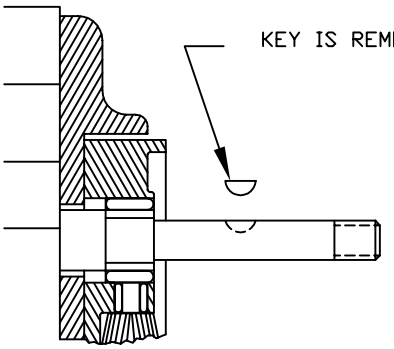
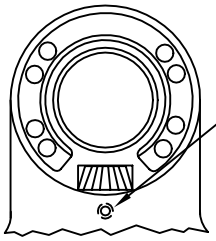
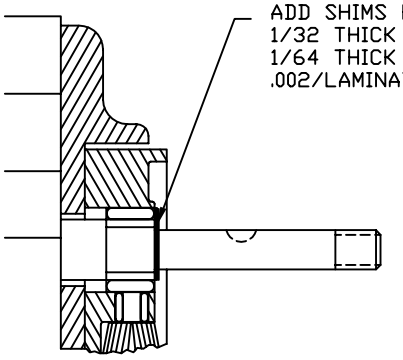
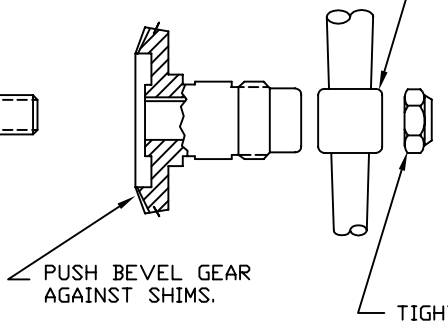
FLORIDA BRANCH
8950 131st Ave. N.
Largo, FL 33773
Ph. 727.585.8555 Fax 727.585.6555

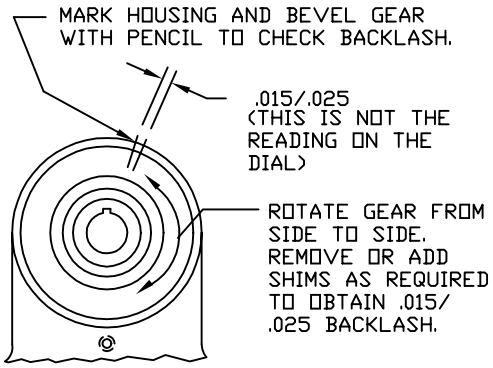




STEP 1
PREPARATION

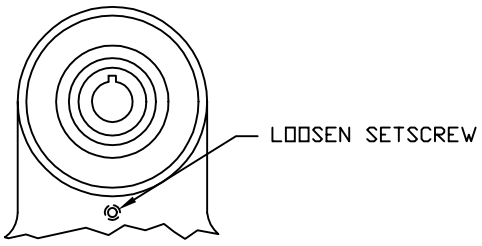


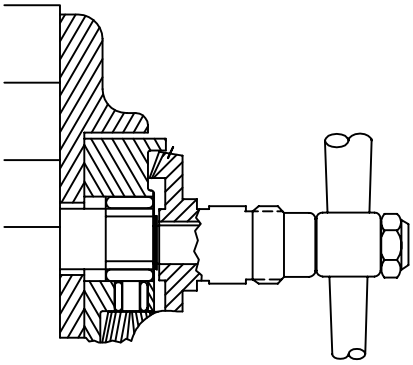




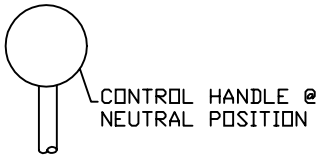
STEP 2
SHIMMING BEVEL GEAR

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

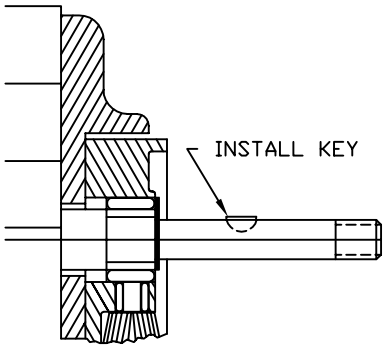


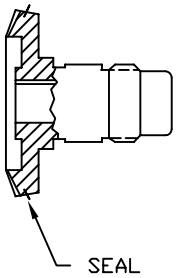


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



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.

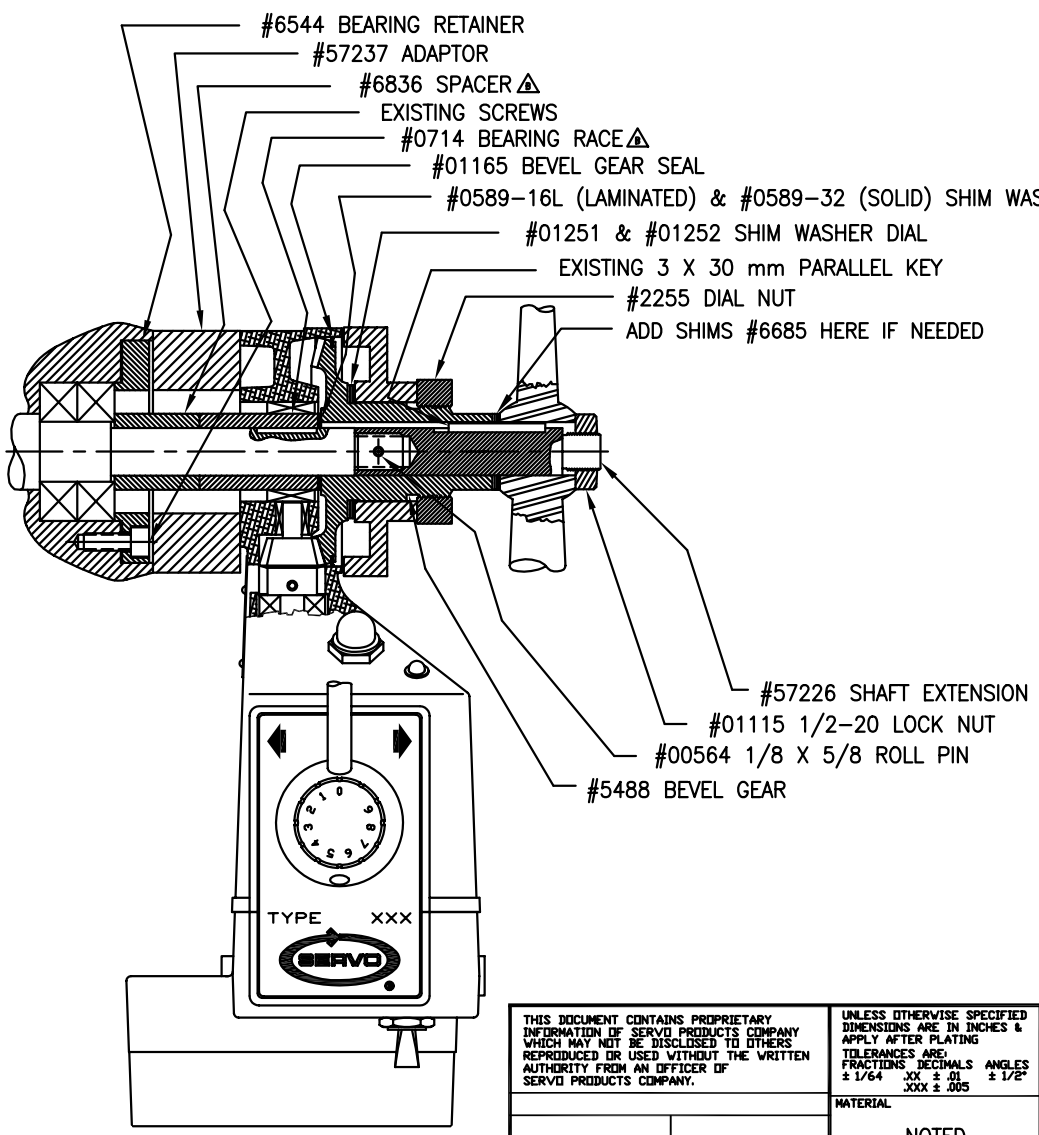
STEP 4
LUBRICATION

SERVO PRODUCTS COMPANY

BEVEL GEAR INSTALLATION

NA-5444 C

REVISION					
ECO	LTR	DESCRIPTION	DATE	DRAWN	CHECKED
N/A	B	6836 WAS 57228, 0714 WAS 0334	4-22-08	B.G.W.	R.R.A.



CONFIDENTIAL

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 G. BADEA	06/25/91
CHECKED	

COMPUTER NO. NB57225_B.dwg

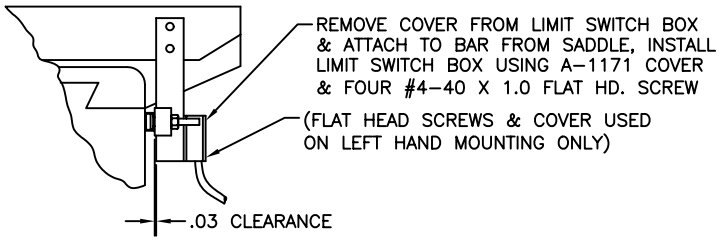
SERVO PRODUCTS COMPANY
34940 LAKELAND BLVD., EASTLAKE, OHIO 44095

INSTALLATION DRAWING
MODEL 9508
KENT 3VK & 5VK, ACER 3VS & 3VK

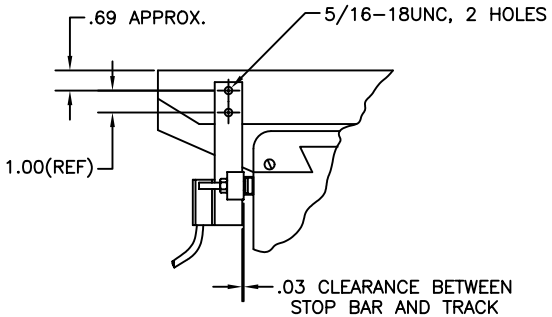
SIZE	CODE IDENT NO.	DRAWING NO.	REV.
B		NB-57225	B

SCALE 5/8 SHEET 1 OF 1

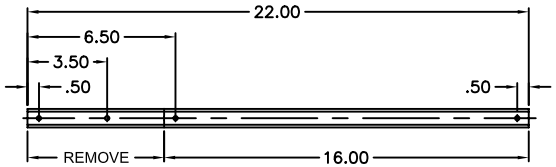
REVISION					
ECO	LTR	DESCRIPTION	DATE	DRAWN	CHECKED



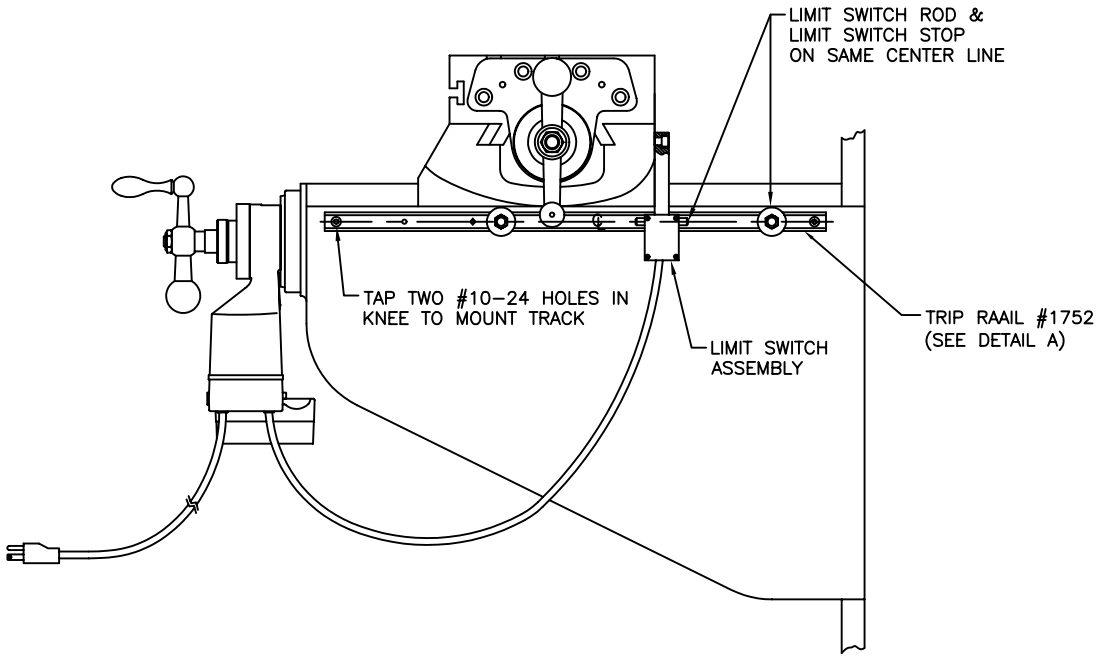
VIEW FROM BACK SIDE OF SADDLE
(MOUNTED ON LEFT SIDE OF KNEE & SADDLE)



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



DETAIL A
(MODIFICATION FOR 12" CROSS TRAVEL)



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.
4. TRIP RAIL IS DESIGNED FOR 16" CROSS TRAVEL. IT CAN BE MODIFIED FOR 12" CROSS TRAVEL (SEE DETAIL A)

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
34940 LAKELAND BLVD., EASTLAKE, OH 44095

INSTALLATION DRAWING
LIMIT SWITCH, CROSS FEEDS

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

SCALE NONE SHEET OF