

POWER FEED INSTALLATION

Model M-3550 Cross Feed

Clausing M-400EVS, 450EVS & 500EVS



REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-1538	Limit Switch Installation
NB-59373	Power Feed Installation
ND-6292	Type 140 Servo Power Feed
ND-6293	Type 150 Servo Power Feed
0800-80001	Servo Power Feed Operation

PREPARATION

Step 1: Clean the power feed mounting area completely

Step 2: Move saddle to front of mill.

Step 3: Remove the nut, handle and dial from the mill.

MOUNTING INSTALLATION:

Step 1: Slide 0470 bearing race into 59370 adaptor

Step 2: Slide bearing race and adaptor on to lead screw and position adaptor such that the power feed can be mounted vertically.

NOTE: THE BEARING RACE WILL ALLOW CORRECT CENTERING OF ADAPTOR.

Step 3: Using a transfer punch spot 3 places in bearing housing. Remove adaptor and bearing race

Step 4: Drill and tap (#7 drill) 1/4-20 3 places min. 5/8" deep.

Step 5: Install adaptor using 01072 1/4-20 X 1-1/4 S.H.C.S. 3 places

Step 6: Slide 04743 spacers (2) onto lead screw, slide 0470 bearing race onto lead screw.

Step 7: Screw 59371-shaft extension to lead screw. Using pilot hole drill 1/8 dia. thru and secure using 00594-roll pin. File smooth and clean.

Step 8: Slide power feed onto bearing race and secure using 00586 1/4-20 X 1.00 S.H.C.S. 2 places.

NOTE:

If bearing race is not flush with the needle bearing within +/- .005", then either shim behind the bearing race or machine spacer to locate bearing race.

Step 9: Modify 3 mm key approx .50"

BEVEL GEAR INSTALLATION:

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

DIAL AND HANDWHEEL INSTALLATION:

Step 1: Shim dial using 01251 and 01252 shim washers approximately .005" from face of power feed.

Step 2: Install 07177 key washer, 59327 3mm key, existing washer and tighten with 01115 1/2-20 locknut.

LIMIT SWITCH INSTALLATION:

Install limit switch as shown on drawing NB-1538

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

Web: www.servoproductsco.com

CALIFORNIA BRANCH

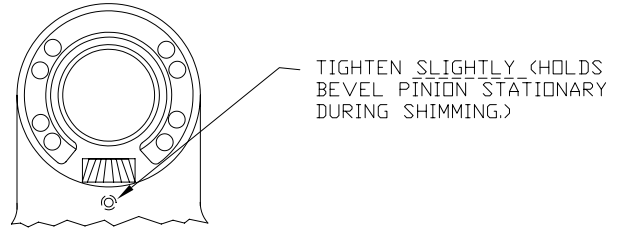
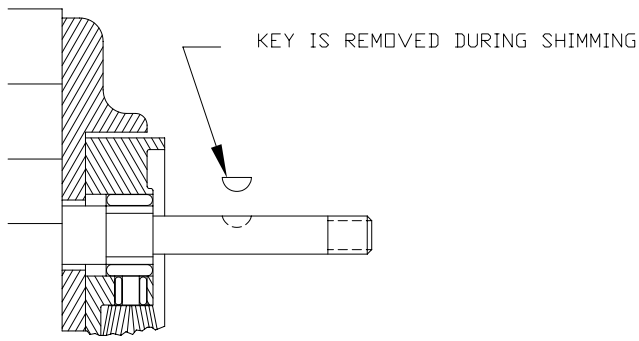
14254 Valley Blvd., Unit A
City of Industry, CA 91746
Ph. 626.961.7800 Fax 626.961.2444

HEADQUARTERS

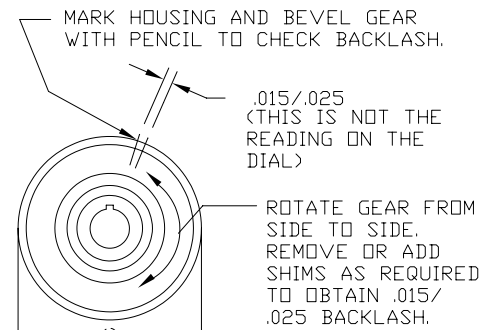
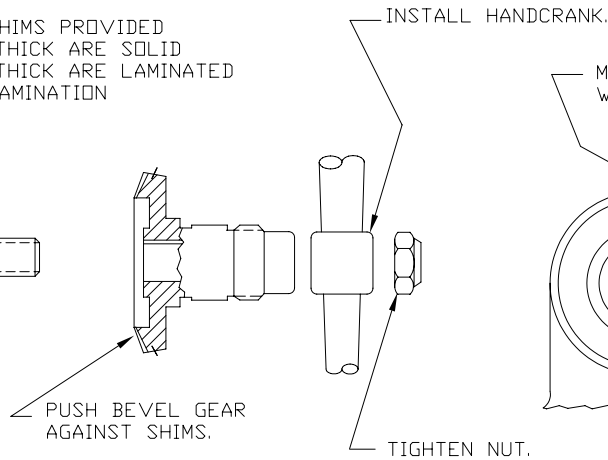
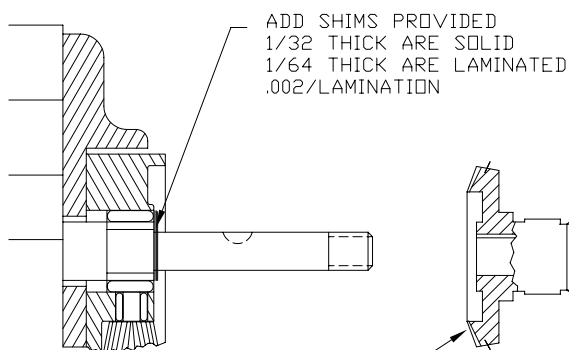
34940 Lakeland Blvd.
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FLORIDA BRANCH

8950 131st Ave. N.
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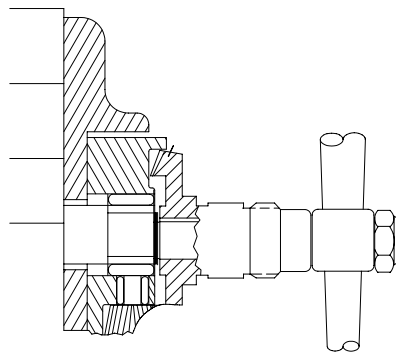
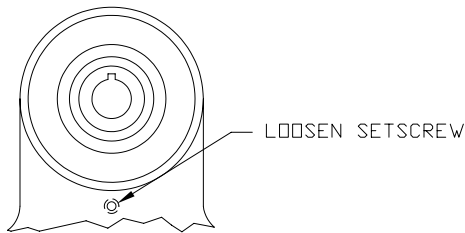


STEP 1
PREPARATION

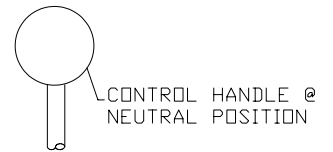


STEP 2
SHIMMING BEVEL GEAR

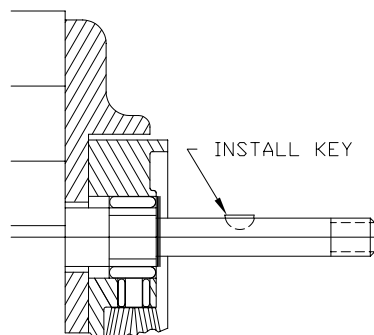
CAUTION: IF BACKLASH IS NOT PROPERLY SET BEFORE TURNING UNIT ON, BEVEL GEAR MAY BE DESTROYED.



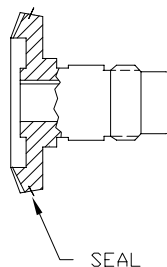
WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



STEP 3
DOUBLE CHECK OF SHIMMING



STEP 4
LUBRICATION



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

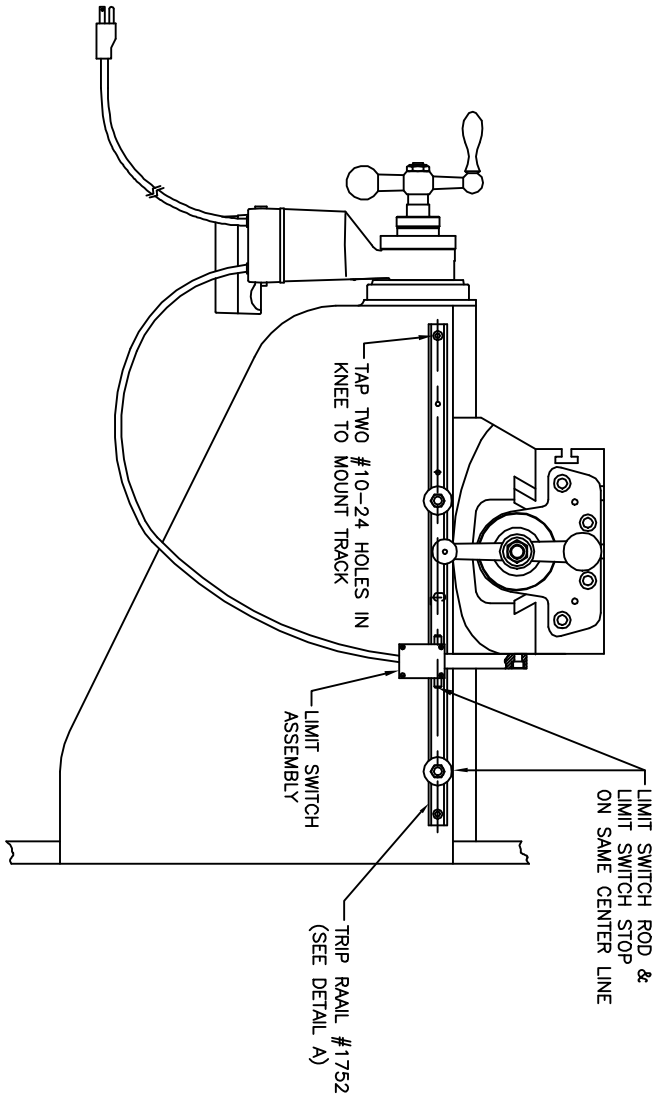
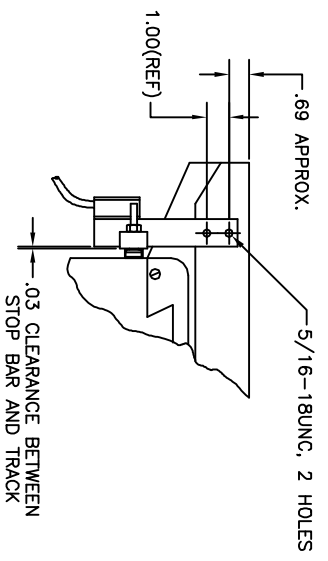
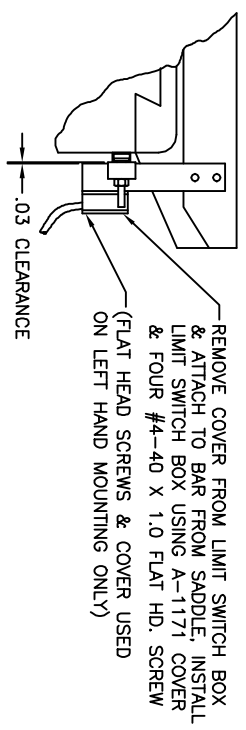
PICTURES IN THIS DRAWING ARE FOR REFERENCE ONLY. SEE INSTALLATION DRAWING OF CORRESPONDING MODEL FOR EXACT PARTS CONFIGURATION.

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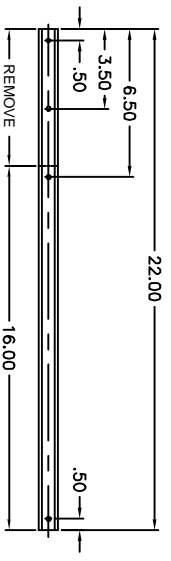
BEVEL GEAR INSTALLATION

NA-5444 C

REVISION		DATE	DRAWN	CHECKED
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.
 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, ROUNDNESS, 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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± .1/64 XXX ± .005	APPROVALS
± 1/2° ANGLES	DATE
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DRAWN T. KU	

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NEXT ASSY				

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

INSTALLATION DRAWING
LIMIT SWITCH, CROSS FEEDS

SCALE NONE

SIZE B

CODE IDENT NO. 0800-80021

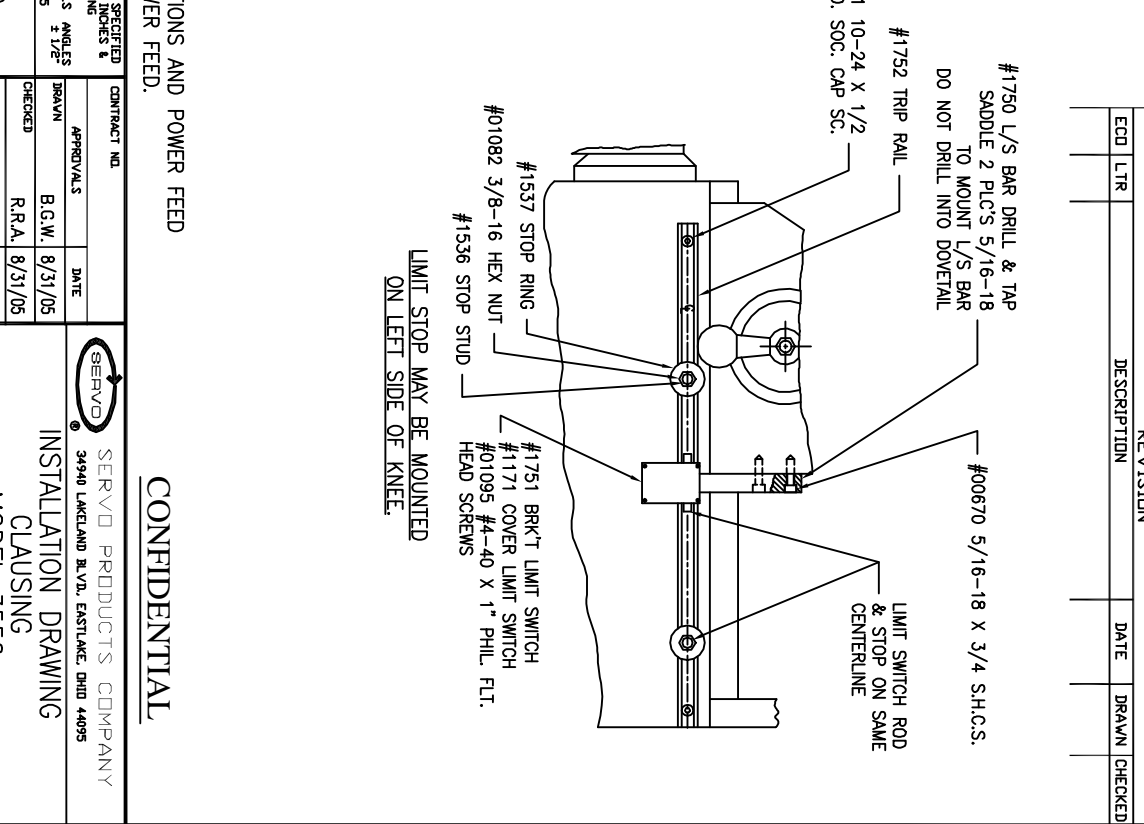
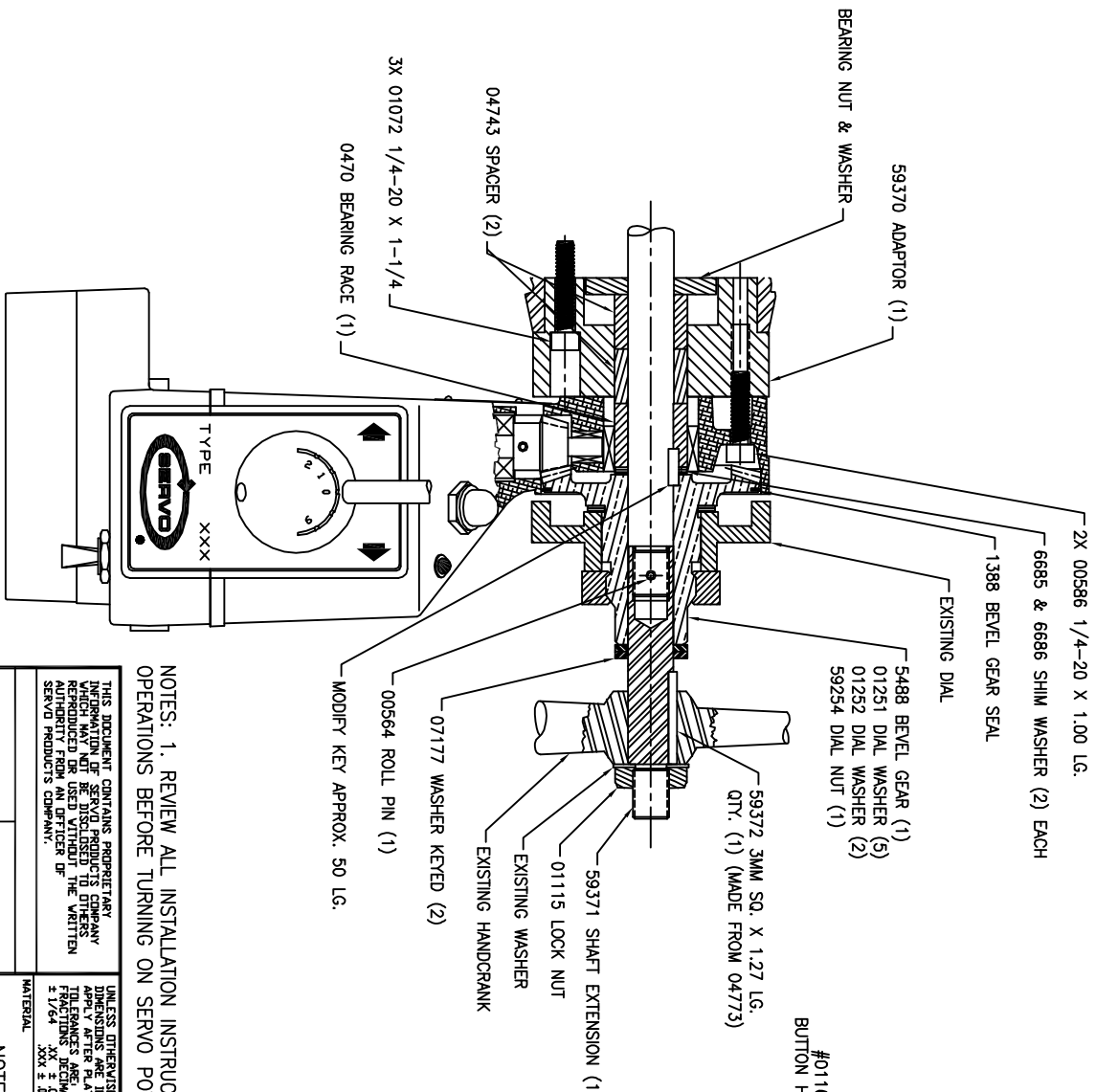
DRAWING NO. NB-1538

SHEET OF B

4 3 2 1

A B C D

REV/VERSION		DATE	DRAWN	CHECKED
ECD	LTR			
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NOTES: 1. REVIEW ALL INSTALLATION INSTRUCTIONS AND POWER FEED OPERATIONS BEFORE TURNING ON SERVO POWER FEED.

CONFIDENTIAL

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	R.R.A.	8/31/05
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SERVOPRODUCTS COMPANY
 34940 LAKELAND BLVD., EASTLAKE, OHIO 44095

INSTALLATION DRAWING
 CLAUSING
 MODEL 3550

SIZE CODE IDENT NO. DRAWING NO. SHEET 1 OF 1
 B NB-59373

SCALE 5/8

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	R.R.A.	8/31/05
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SERVOPRODUCTS COMPANY
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INSTALLATION DRAWING
 CLAUSING
 MODEL 3550

SIZE CODE IDENT NO. DRAWING NO. SHEET 1 OF 1
 B NB-59373

SCALE 5/8