POWER FEED INSTALLATION
Model M-5080 Knee Feed
Acra 10x54, Victor 16VSK or VK

REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-57658	Limit Switch Installation
NB-6308	Power Feed Installation
ND-6292	Type 140 Servo Drive
0800-80001	Servo Power Feed Operation

PREPARATION

Step 1: Remove the drive clutch from the elevating jack shaft.

Step 2: Remove the dial nut and dial carrier. Turn the dial carrier counter clockwise to remove.

Step 3: Slide the bearing race onto the jack shaft.

Step 4: Slide the bearing retainer #57904 over the bearing race and rotate it such that the power feed unit can be mounted vertically.

Step 5: Transfer three mounting holes onto the bearing retainer.

Step 6: Remove the adaptor, bearing race and bearing retainer. Then tap 1/4-20 threads through the retainer.

Step 7: Pull the jack shaft out of the knee. ***Hold inboard end up*** while removing to avoid damage to the pinion gear.

Step 8: Press the bearing off the jack shaft.

Step 9: Drill and ream the end of the jack shaft .4375 diameter by 13/16 deep. The .4375 diameter must be concentric to the shaft o.d. within .002 TIR. Chamfer 1/32 x 1/2 diameter. ***For best results, machining should be done in a lathe.***

Step 10: Place the shaft extension into the end of the jack shaft. Drill 3/16 diameter through the shaft and pin the extension with the 3/16 x 5/8 roll pin. File smooth.

Step 11: Reassemble the jack shaft.

Step 12: Replace the jack shaft in the machine.

Step 13: Replace the bearing retainer.

POWER FEED INSTALLATION

Step 1: Slide the spacer #6740 onto the jack shaft followed by the bearing race #1178.

Step 2: Add the adaptor #3214 and secure using the three cap screws supplied. Remove the bearing race.

Step 3: Add the spacer #6811 followed by the bearing race.

Step 4: With the spacer and bearing race in place, slide the power feed and secure with 1/4-20 x 1" long socket head cap screws provided.

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, place key in shaft, and slide handwheel in place. Add the washer and locking nut.

LIMIT SWITCH INSTALLATION

Step 1: See limit switch installation drawing NB-57658 and drawing NB-6308.

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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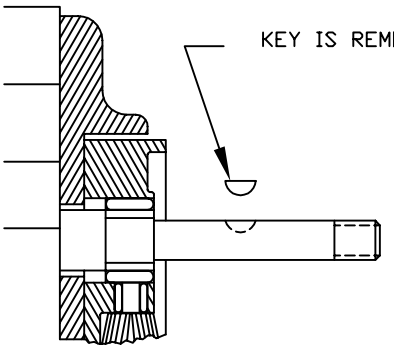
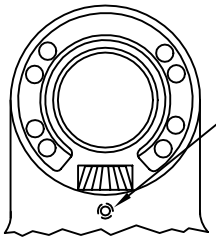
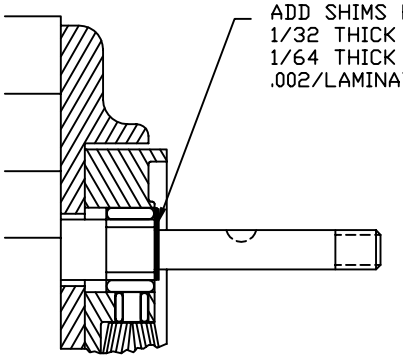
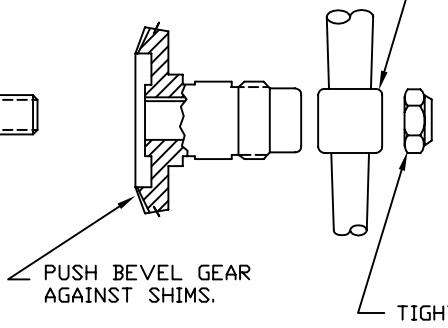
Web: www.servoproductsco.com
Call for the location of our regional Service Centers.

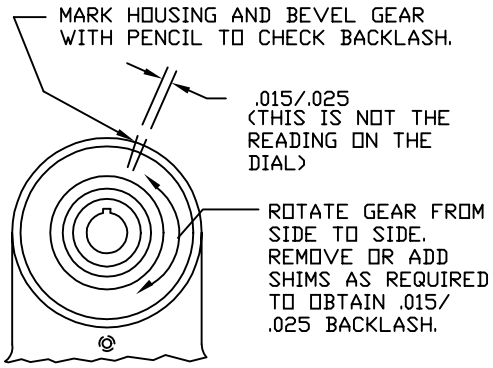




STEP 1
PREPARATION

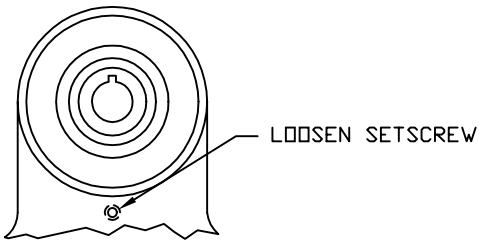


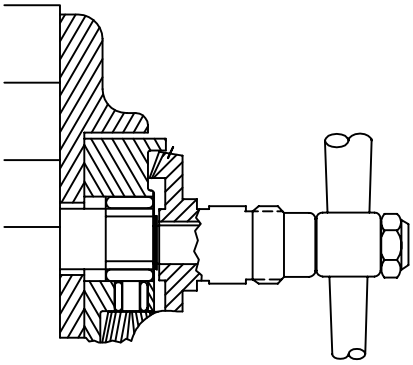




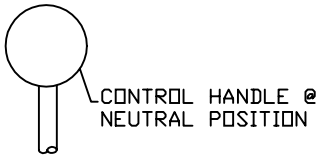
STEP 2
SHIMMING BEVEL GEAR

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

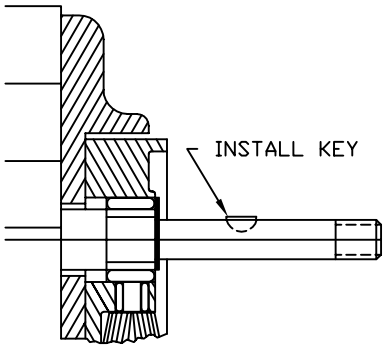


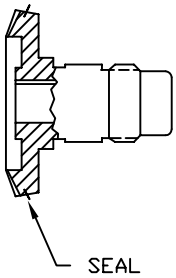


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



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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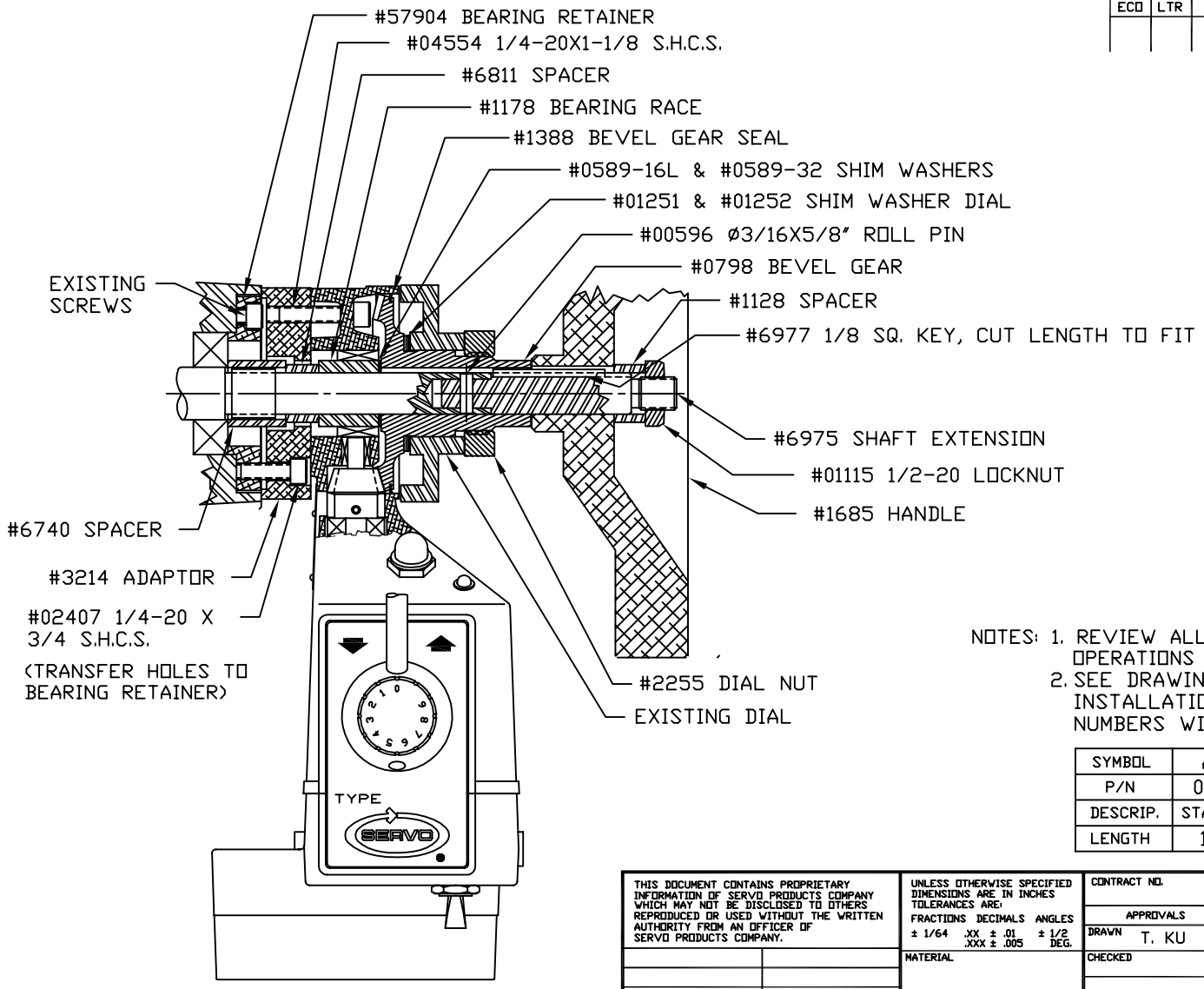
BEVEL GEAR INSTALLATION

NA-5444 C

REVISION				
ECO	LTR	DESCRIPTION	DATE	APPROVED



NOTES: 1. REVIEW ALL INSTALLATION INSTRUCTIONS AND POWER FEED OPERATIONS BEFORE TURNING ON SERVO POWER FEED.
2. SEE DRAWING NB-57658 FOR KNEE FEED LIMIT SWITCH INSTALLATION. USE FOLLOWING TABLE TO RELATE PART NUMBERS WITH LETTER SYMBOLS ON DWG NB-57658

SYMBOL	A-1	A-2	B	C	D
P/N	0405	1350	1133	05292	1752
DESCRIP.	STANDOFF	STANDOFF	BRACKET	5/16-18 S.H.C.S.	TRIP RAIL
LENGTH	1.12	.56	-	2.50	-

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
± 1/64 .XX ± .01 ± 1/2 DEG.
.XXX ± .005

MATERIAL

FINISH

DO NOT SCALE DRAWING

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.

NEXT ASSY	USED ON
APPLICATION	

CONTRACT NO.

APPROVALS	DATE
DRAWN T. KU	03/17/93
CHECKED	

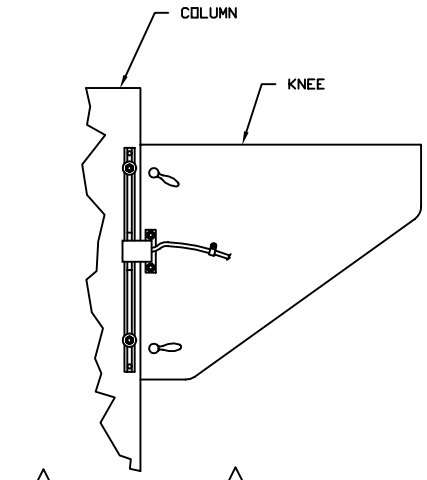
SERVO PRODUCTS COMPANY
433 NO. FAIR OAKS AVE., PASADENA CALIFORNIA 91103

INSTALLATION DRAWING MODEL 5080, 10"X54"

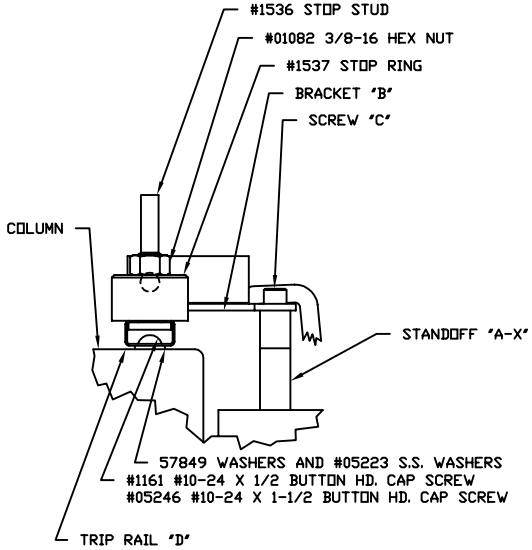
SIZE	CODE IDENT NO.	DRAWING NO.
B	0800-80180	NB-6308 F

SCALE 5/8 SHEET 1 OF 1

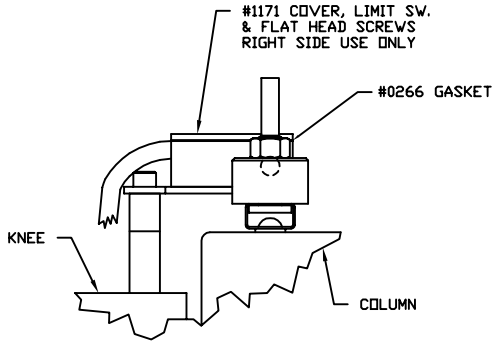
REVISION					
ECO	LTR	DESCRIPTION	DATE	DRAWN	CHECKED



LEFT SIDE OF COLUMN

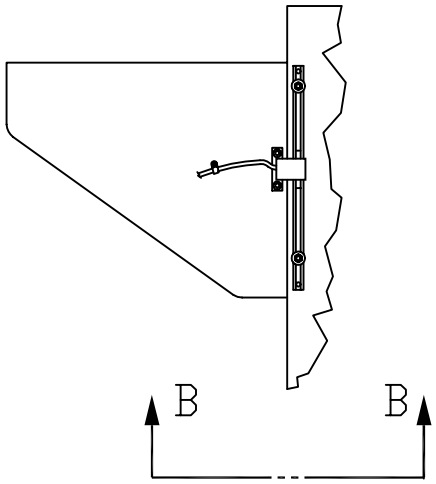


VIEW A-A



VIEW B-B

SAME COMPONENTS AS IN VIEW "A-A"
EXCEPT AS SHOWN



RIGHT SIDE OF COLUMN

NOTES:

1. LIMIT SWITCH MAY BE MOUNTED ON EITHER SIDE OF THE COLUMN.

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

MATERIAL

FINISH

DO NOT SCALE DRAWING

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.

NEXT ASSY	USED ON
APPLICATION	

CONTRACT NO.

APPROVALS	DATE
DRAWN T. KU	03/18/93
CHECKED	

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

INSTALLATION DRAWING LIMIT SWITCH, KNEE

SIZE	CODE IDENT NO.	DRAWING NO.	REV.
B	0800-80540	NB-57658	B

SCALE NONE SHEET OF