POWER FEED INSTALLATION
Model M-0206 Table Feed
Bridgeport Mill
Replaces Bridgeport 6F and 8F Electronic Feed

REFERENCE DRAWINGS ENCLOSED

NA-5444	Bevel Gear Installation
NB-2339	Power Feed Installation
ND-6293	Type 150 Servo Drive
ND-6292	Type 140 Servo Drive
0800-80001	Servo Power Feed Operation

PREPARATION

Step 1: Move the table to the extreme left.

Step 2: Remove the Bridgeport power feed from the right-hand end of the table, including the coupling to the lead screw. Save the cap screws that attached the feed to the table.

Step 3: Remove and retain the following parts from the Bridgeport feed: dial, dial nut, handcrank, spring, spring seat, washer, and handcrank sleeve.

IF: If the Bridgeport 6F feed has a new style safety handle, retain the following parts: dial, dial nut, and hub.

Step 4: For the new style safety handle, modify the Bridgeport hub as shown on installation drawing NB-2339 in Detail "B".

POWER FEED INSTALLATION

Step 1: Slide the shaft extension onto the lead screw shaft.

IF: If the lead screw is .750" diameter (instead of .812"), slide sleeve #58984 over the shaft, as shown on installation drawing NB-2339 Detail "C".

Step 2: Lubricate the shaft with a light coat of grease then slip the bearing race #0470 onto the shaft extension.

Step 3: Snug the power feed unit to the adaptor #0239-4 with two 1/4-20 x 1" long socket head cap screws.

Step 4: Slip the unit over the race to center it with the shaft. Snug down the adaptor with cap screws saved earlier.

Step 5: Adjust the position of the shaft extension such that the front of the race #0470 is flush with the needle bearing case on the power feed. Tighten the shaft extension to the lead screw with #05894 set screw.

Step 6: Remove the adaptor and power feed assembly.

Step 7: Following the existing pilot hole, drill through the shaft extension using a 3/16" diameter drill. Finish the hole using a #7 (.201" diameter) drill. Remove the shaft extension. Open the spot face side of the hole to 1/4"

diameter and tap 1/4-20 through the other side. Also open the hole on the lead screw to 1/4" through.

Step 8: Reinstall and tighten the shaft extension to the lead screw using the 1/4-20 x 1-1/2" long socket head cap screws with nyloc #05895 provided.

Step 9: Slide the adaptor and Power Feed assembly onto the shaft extension. Secure the adaptor with the four cap screws. Then tighten the two #00586 1/4-20 x 1" long socket head cap screws.

BEVEL GEAR INSTALLATION

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

DIAL AND HANDWHEEL INSTALLATION

Step 1: After getting the proper gear 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. Three plastic (.030" thick) and five brass (.005" thick) washers are provided for this. Shim as required.

Step 2: In the following sequence, install the key #6977 (cut to fit), dial and dial nut. Slide the clutch #57449, spring, handcrank sleeve, handcrank, and washer #57487 in place and tighten with 5/16-18 x 1" long socket head cap screws with nyloc #05161.

IF: If the Bridgeport 6F feed has a new style safety handle, see installation drawing NB-2339 Detail "A".

LIMIT SWITCH INSTALLATION

Step 1: Remove the standard table stop pieces and install the table stop pieces furnished. Put the standard stops back in a position to prevent feed stops from being set beyond extreme table travel.

Step 2: Remove the two cap screws holding the T-shaped table stop. Place the limit switch spacers into the T-stop and install limit switch using two 3/8 x 16 x 1-1/4" long socket head cap screws.

Step 3: The T-stop is retained to act as a positive stop where required for manual operation.

NOTE *For proper operation, the electrical limit switch should be engaged .4 inch before the mechanical stop to allow for coasting of the table. The T-stops are often not symmetrical and may need to be ground to obtain proper operation.*

Step 4: Put the cable clamp on the cable and secure to the right-hand chip scraper screw.

OPERATION

See separate *Servo Power Feed Operation* sheet. Plug the table feed into a source of 120 volt, 50 or 60 cycle power.

Please read **WARNINGS** on the following page.

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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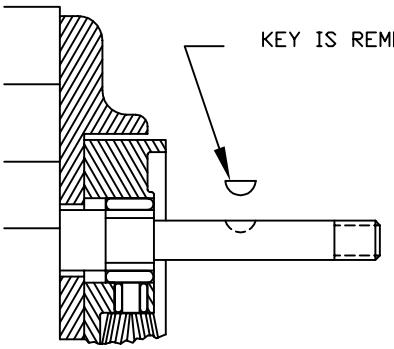
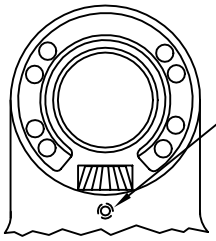
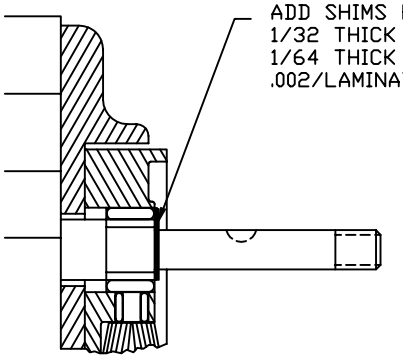
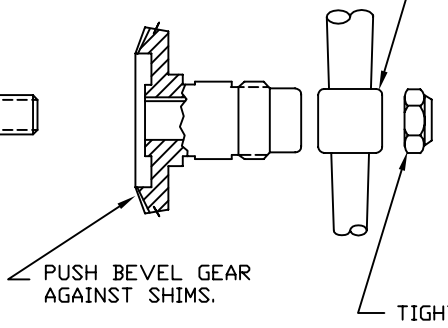
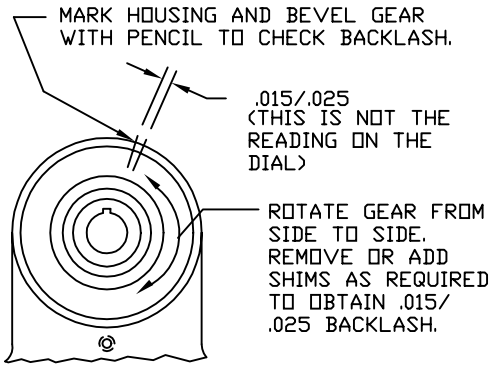




STEP 1
PREPARATION

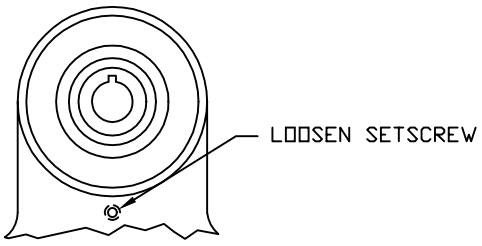


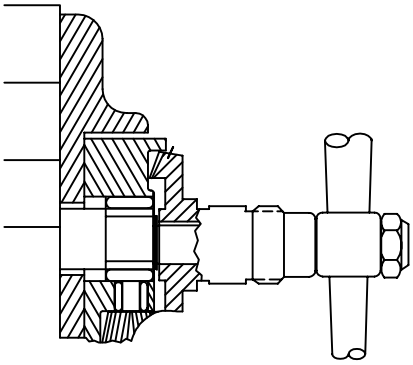




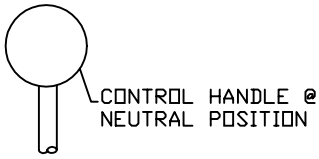
STEP 2
SHIMMING BEVEL GEAR

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

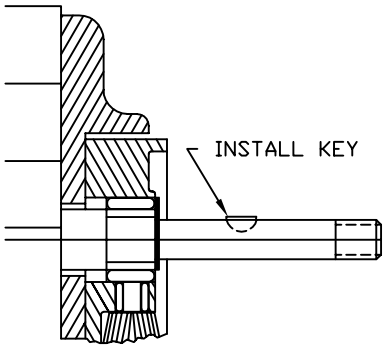


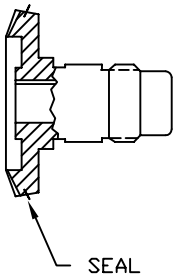


WITH POWER FEED IN NEUTRAL POSITION, TURN HANDCRANK. IF EXCESSIVE GEAR NOISE OR BINDING OCCURS, SHIMS NEED TO BE ADDED. WHEN ADDING SHIMS, REPEAT STEPS 1 AND 2.



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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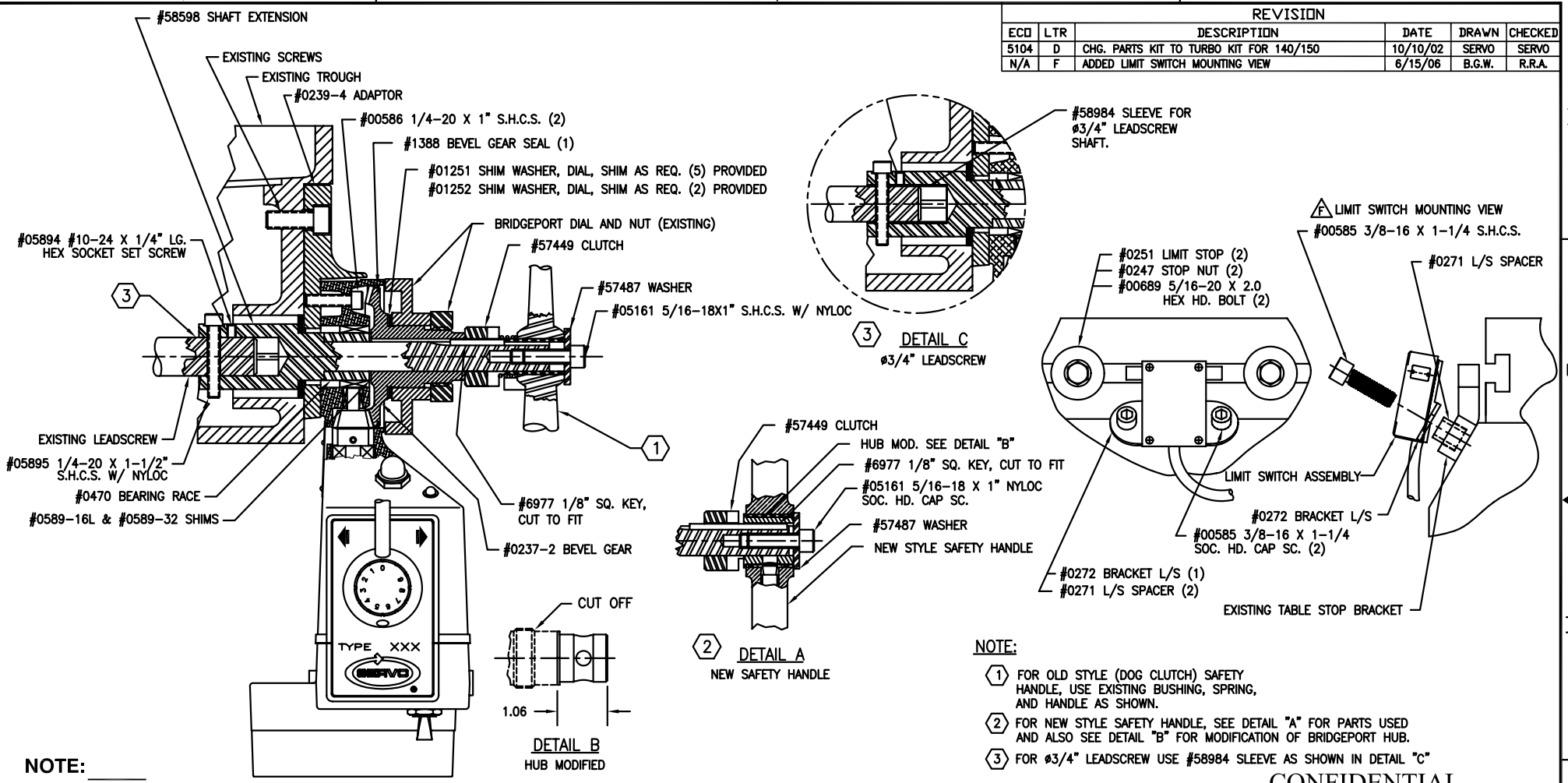
BEVEL GEAR INSTALLATION

NA-5444 C

REVISION					
ECO	LTR	DESCRIPTION	DATE	DRAWN	CHECKED
5104	D	CHG. PARTS KIT TO TURBO KIT FOR 140/150	10/10/02	SERVO	SERVO
N/A	F	ADDED LIMIT SWITCH MOUNTING VIEW	6/15/06	B.G.W.	R.R.A.



NOTE:

1) REVIEW ALL INSTALLATION INSTRUCTIONS AND POWER FEED OPERATIONS BEFORE TURNING ON SERVO POWER FEED.

2) USE NB-2339 REV C FOR FEEDS UP TO S/N 564147
USE NB-2339 REV D OR HIGHER AFTER FEED S/N 564147

NOTE:

(1) FOR OLD STYLE (DOG CLUTCH) SAFETY HANDLE, USE EXISTING BUSHING, SPRING, AND HANDLE AS SHOWN.

(2) FOR NEW STYLE SAFETY HANDLE, SEE DETAIL "A" FOR PARTS USED AND ALSO SEE DETAIL "B" FOR MODIFICATION OF BRIDGEPORT HUB.

(3) FOR ø3/4" LEADSCREW USE #58984 SLEEVE AS SHOWN IN DETAIL "C"

CONFIDENTIAL

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 ± 1/64 DECIMALS .XX ± .01 .XXX ± .005 ANGLES ± 1/2°

MATERIAL: NOTED

FINISH:

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS	DATE
DRAWN G. AMADOR	3/9/90
CHECKED	

COMPUTER NO. NB2339_F.dwg

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

INSTALLATION DRAWING MODEL 206

SIZE	CODE IDENT NO.	DRAWING NO.	REV.
B	0800-80091	NB-2339	F

SCALE 1/2 SHEET 1 OF 1

M-0206 TABLE FEED PARTS IDENTIFICATION LIST

00689
Hex Hd Bolt
Qty = 2

0247
Stop Nut
Qty = 2

0251
Limit Stop
Qty = 2

0266
Limit Switch Gasket
Qty = 1

0272
Limit Switch Bracket
Qty = 1

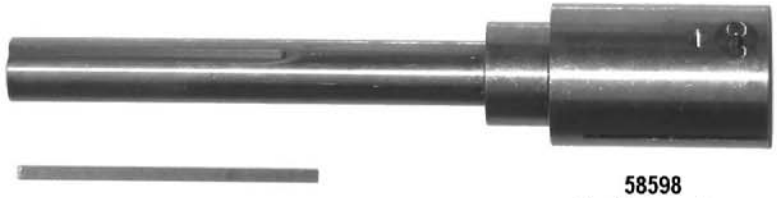
06928
Phil Pan Hd Screw
Qty = 4

0271
Limit Switch Spacer
Qty = 2

00585
Soc Hd Cap Screw
Qty = 2

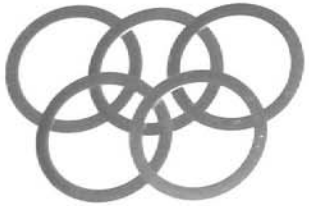
05161
SHCS
w/Nylock
Qty = 1

57487
Washer
Qty = 1



6977
Key
Qty = 1

58598
Shaft Extension
Qty = 1



01251
Brass Shim
Qty = 5

01252
Plastic Shim
Qty = 2

0237-2
Bevel Gear
Qty = 1

57449
Clutch
Qty = 1

58984
Sleeve
Qty = 1

05895
SHCS
w/Nylock
Qty = 1

05894
Soc Set Screw
Qty = 1

0589-32
.032 Shim
Qty = 5

0589-16L
.016 Shim
Qty = 3

0470
Bearing Race
Qty = 1

00586
Soc Hd Cap Screw
Qty = 3

0239-4
Adaptor
Qty = 1