

DYNAMO FEED INSTALLATION

D1000-9810 Knee Feed

Acer 3VS, 3VK and others



PREPARATION

- Step 1:* Remove the drive clutch, dial, nut, and keys from the elevating jack shaft. Save the parallel key for installation later.
- Step 2:* Pull the jack shaft out of the knee. **Hold inboard end up** while removing to avoid damage to the pinion gear.
- Step 3:* Hold the dial hub in soft jaws and unscrew.
- Step 4:* 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 6:* Place the shaft extension onto the jack shaft. Using the hole provided as a pilot, drill 1/8" diameter through the shaft and pin the extension with the 1/8 diameter x 5/8" long roll pin. File smooth.
- Step 7:* Using the bearing retainer provided, reassemble the jack shaft with the existing socket head cap screws.

POWER FEED INSTALLATION

- Step 1:* Slide the bearing race in place over the shaft.
- Step 2:* Slide the power feed onto the bearing race and tighten the unit using the provided 1/4-20 x 1" long socket head cap screws.

BEVEL GEAR INSTALLATION

Step 1: Install two of the thickest shim washers, then the bevel gear. Measure the gap between the back face of the gear and the front face of the power feed, as shown in Fig. A. of the INSTALLATION & OPERATION MANUAL. Add, remove or replace shims to obtain the .080/.085 in. (2.0 / 2.16 mm) dimension. Install the spacer, handcrank, and nut. Check that the dimension is still ok after the nut is tightened.

Step 2: With feed in neutral, turn hand crank. If it turns freely in one direction but catches in the other, the backlash is too large. Reduce the thickness of the shims. If rough engagement is heard or felt in BOTH directions you need additional shims.

DIAL AND HANDWHEEL 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: In the following sequence, put on the dial locking nut, place the key in the shaft extension, and slide the handwheel in place. Add the washer and locknut.

LIMIT SWITCH INSTALLATION

Refer to the D-1000Z INSTALLATION & OPERATION MANUAL

NOTE: MILLS HAVING COLUMNS WIDER THAN THE KNEE MAY NEED LONGER STANDOFFS AND SCREWS, OR DIFFERENT MOUNTING. DEPENDING ON WHICH SIDE OF THE KNEE THE SWITCH IS MOUNTED, THE SWITCH MAY HAVE TO BE TURNED OVER TO WORK CORRECTLY. TEST THE SWITCH STOPPING DIRECTION MANUALLY BEFORE MOUNTING.

OPERATION

See the INSTALLATION & OPERATION MANUAL

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

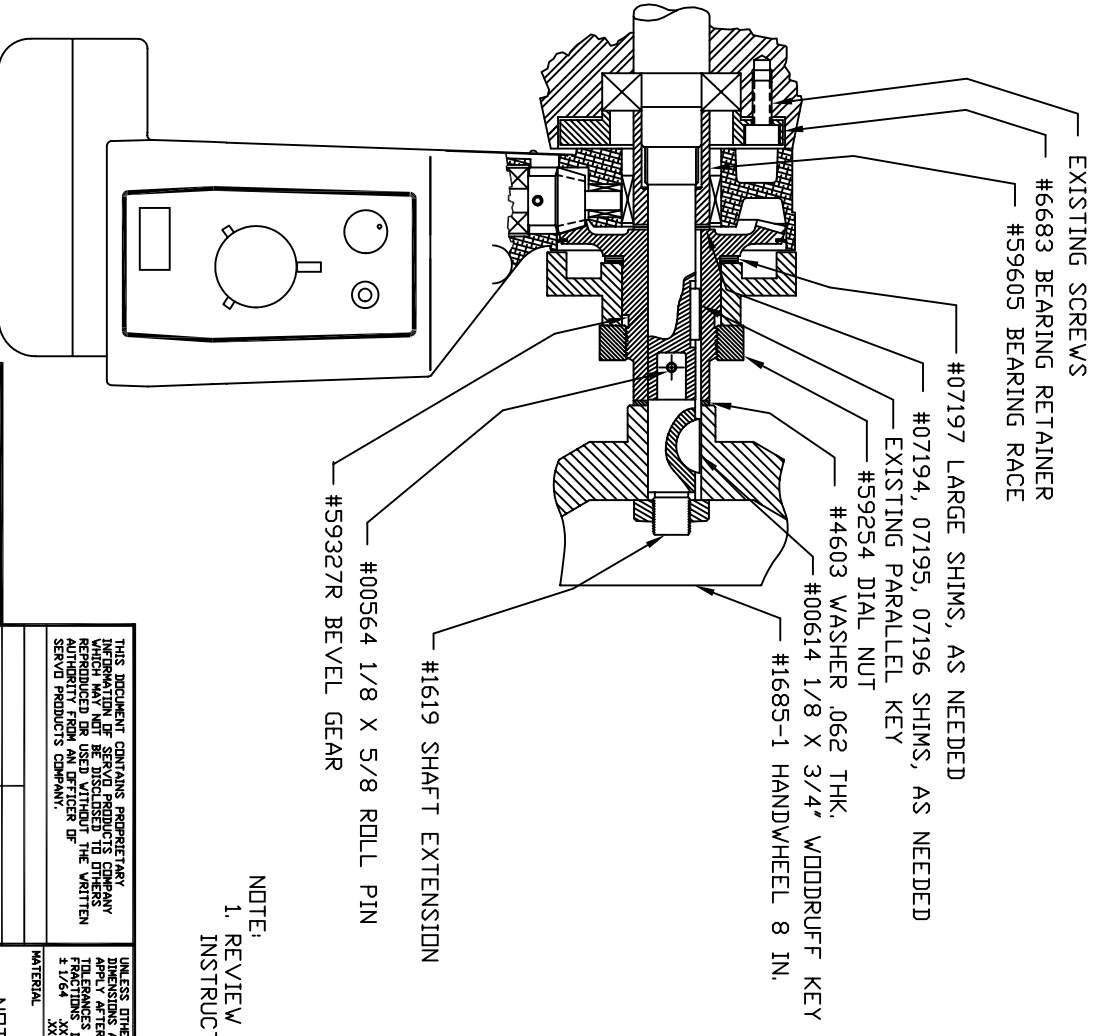
HEADQUARTERS

34940 Lakeland Blvd.
Eastlake, OH 44095
Ph. 440.942.9999 Fax 440.942-9100

FLORIDA BRANCH

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

REVISION		DATE	DRAWN	CHECKED
ECD	LTR			
DESCRIPTION				



NOTE:
1. REVIEW ALL INSTALLATION INSTRUCTIONS AND POWER FEED OPERATION INSTRUCTION BEFORE TURNING ON POWER FEED.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES & TOLERANCES ARE IN FRACTIONS. DECIMALS & ANGLES ARE IN DECIMALS & 1/2°.

UNLESS OTHERWISE SPECIFIED, FINISH IS NONE.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE WITHIN .01 FLATNESS TO BE WITHIN .01 CONCENTRICITY TO BE WITHIN .01 REMOVE SHARP EDGES AND CORNERS .005 MIN.

DRAWING STANDARD PER ANSI Y14.3M-1992

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DRAWING STANDARD PER ANSI Y14.3M-1992

CONTRACT NO.	APPROVALS	DATE
DRAWN BY: BIMA		07/20/09
CHECKED		
NOTED		
FINISH	NONE	
DID NOT SCALE DRAWING		
APPLICATION	USED ON	
NEXT ASSY		

SERVOD PRODUCTS COMPANY
34940 LABELAND BLVD, EASTLAKE, OH 44095

INSTALLATION DRAWING
D1000-MODEL 9810

SIZE: B
CODE IDENT NO: 0800-81002
DRAWING NO: NB-59633
SCALE: 5/8
SHEET: DF