

Figure 6-14. Series I CNC Head, R-Ram (Sheet 1)

2J-601 CAP  
1-01-1033 SCR. (3)

1-18-0252 BRG.  
1-18-1977 S.WASHER

1-18-0848 RET. RING

2J-546 SLEEVE (2)  
1-01-1125 SCR. (2)

2J-505 HOUSING  
2J-533 PULLEY  
2J-663 (1-18-2122) KEY

1-18-0855 RET. RING

2J-534 PULLEY  
2J-536 KEY

2J-506 CAP  
1-01-1031 SCR. (2)

2J-710 SPACER

2J-707 HUB  
1-55-2106 BELT

2J-513 SLEEVE

77-0192 PLATE  
1-98-0449 SCR. (4)

77-0161 MOTOR MTG. BRKT.

1-41-3212 JUNCTION  
1-41-3220 COMP BUSH (3)  
1-41-3253 COMP SLEEVE (4)  
1-41-3222 ELBOW  
1-41-3225 NYLON TUBING  
1-41-3229 COPPER TUBING  
1-01-1195 B.H.C.S.  
1-41-3210 METER UNIT  
1-41-3219 COMP. NUT

1-66-5105 SWITCH (2)  
1-77-0121 R.H.M.S. (4)  
1-01-1961 WASHER (4)  
1-66-5458 WASHER (4)  
1-01-1703 NUT (4)  
77-0185 BRKT (2)  
1-01-1030 S.H.C.S. (4)

77-0191 CONTROL COVER  
77-0224 GASKET  
1-77-0216 H.H.B. (4)  
1-11-1912 WASHER (4)

77-0166 COVER  
1-01-1044 S.H.C.S. (1)  
1-01-1040 S.H.C.S. (1)

77-0159 QUILL HSG.

2-20-0102 THUMB SCR.

77-0264 BLOCK  
1-01-1036 (2) S.H.C.S.

77-0218 ROD

2J-507 PLATE

77-0176  
SPEED CHANGER ASSY  
1-01-1037 S.H.C.S. (4)

2J-618 WASHER  
1-18-0254 BRG.  
1-18-2071 SPRING (3)  
2J-540 RET. RING  
2J-598 HUB GEAR  
2J-512 SPACER  
1-18-0803 SNAP RING  
1-18-0254 BRG.  
1-18-1794 NUT - USE  
H.V. LOCTITE

1-98-0281 S.H.C.S. (4)  
1-01-1966 WASHER (4)

1-77-0150 LOCKWASHER  
1-77-0149 NUT

77-0178 BRG. RET.  
77-0177 BRG. RET.  
77-0118 BRG.  
1-01-1082 S.H.C.S. (4)

77-0100 SCR. ASSEM.  
77-0181 PULLEY  
77-0200 KEY  
1-01-0879 SNAP RING (2)  
1-01-1215 S.S.S.

77-0179 PLATE  
1-01-1021 S.H.C.S. (6)

77-0183 TORQUE BAR  
1-01-1031 S.H.C.S. (2)  
77-0188 STOP  
1-66-5491 H.H.C.S.  
1-11-1912 WASHER

1-19-1790 NUT  
1-19-1942 WASHER

1-01-0241 BRG.

J-176 SLEEVE

77-0213 QUILL

1-19-0240 BRG. (2)

J-170 SPACER  
J-171 SPACER

J-169 SHIELD

77-0109 SPINDLE  
ERICKSON Q.C. SPINDLE  
1-5T-0801 LOCK NUT (1)  
1-5T-0802 DRIVE KEY (2)  
1-5T-0803 WRENCH (1)  
1-01-1007 S.H.C.S. (2)

A-A

GREASE 22 OZ.  
SUN OIL #EP-74

2J-511 GEAR

2J-705 PULLEY

2J-613 KEY

1-18-0254  
1-01-1031  
77-0192

C-C

77-0218  
1-01-1195  
77-0224  
J-514

2J-526 PIVOT  
1-01-1745 NUT  
2J-602 WASHER  
1-01-0604 PIN

**1-01-0880 SNAP RING (1)**

TT-0195 COVER  
1-98-0449 B.H.C.S. (4)

1-01-1065 S.H.C.S. (3)  
1-01-1069 S.H.C.S. (2)

2J-647 KEY  
~~2J-648 PULLEY~~  
1-01-1222 S.S.S.  
1-77-0084 SNAP RING (1)

2J-642 PULLEY  
2J-648 BUSH. (2)  
2J-646 KEY  
1-01-1016 S.H.C.S.

2J-644 COLLAR  
2J-645 KEY  
1-01-1425 R.H.M.S.  
2J-661 SPRING

77-0143 COLLAR  
1-72-1060 S.H.C.S. (3)  
1-01-1056 S.H.C.S. (2)

2J-528 CAP  
1-18-1975 SPG. WASHER (2)  
1-01-1011 S.H.C.S. (2)

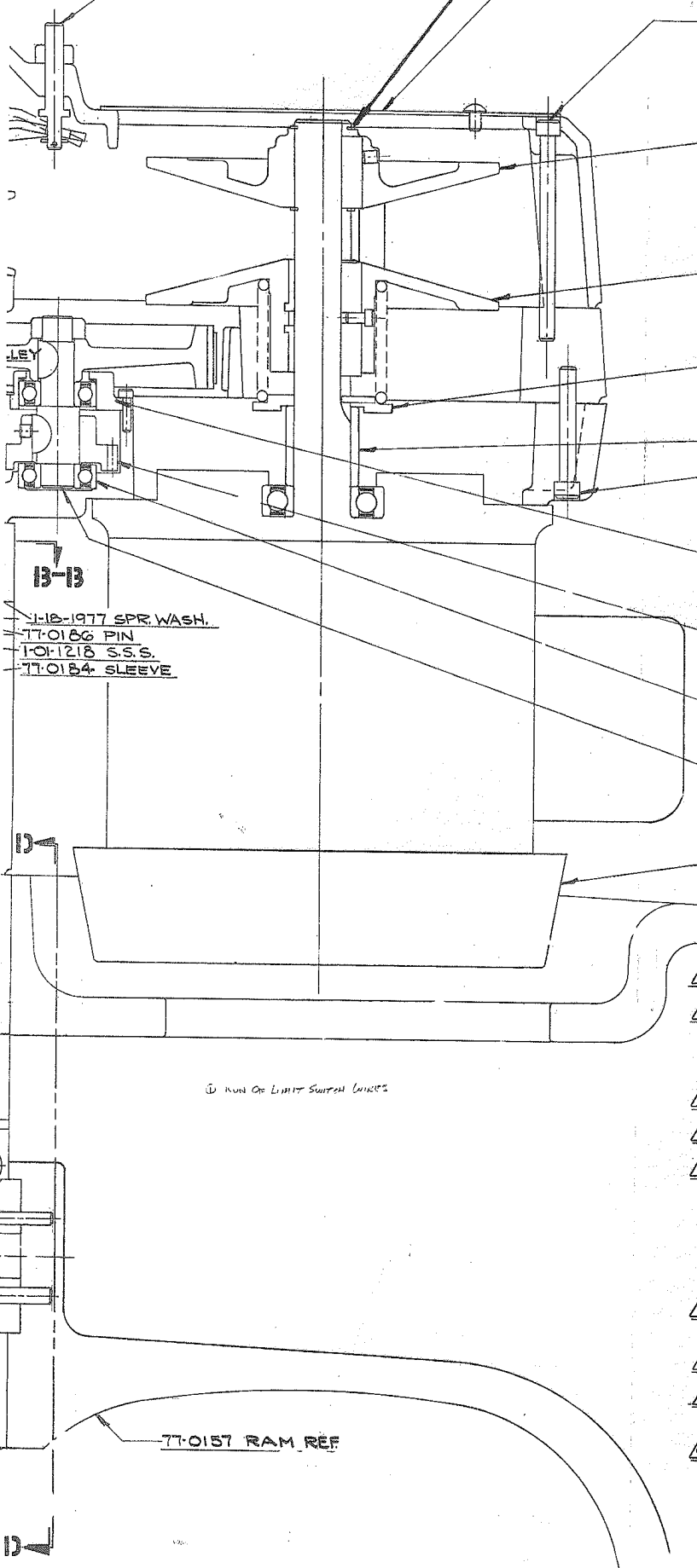
2J-529 GEAR  
1-01-1287 S.S.S.

1-18-0235 BRG. (2)

2J-527 SHAFT  
1-19-1738 NUT  
1-01-3079 KEY (2)

1-77-0101 MOTOR  
1-01-1150 H.H.S. (2)   
1-19-1922 LOCK WASH (2)

REV.	DESCRIPTION	BY	DATE
A	SEE ECN 1584	WAG	02/77
B	ECN 1839	RM	
C	ECN 1090	DB	
D	ECN 2181	GG	06/78



**NOTES**

- 1 BEND ALL TABS DOWN ON 1-77-0150 BEFORE ASSEMBLING RETAINER 77-0178.
- 2 TORQUE TO ROTATE BALL QUILL IS 13.4 IN. OZ. MAX. WHEN EXTENDING THE QUILL & 19.1 IN. OZ. MAX. WHEN RETRACTING THE QUILL. THIS IS EQUAL TO A 28 OZ. PULL ON BELT 1-77-0252 EXTENDING & A 40 OZ. PULL RETRACTING THE QUILL.
- 3 BEND COPPER TUBE AS SHOWN IN SIDE VIEW TO DIRECT OIL ON TO BALL QUILL EXTENSION.
- 4 ADJUST MOTOR FOR BELT 1-77-0232 TO HAVE 66 LBS. TENSION =  $\frac{1}{8}$  FOR 5 LB. FORCE IN CENTER OF BELT.
- 5 TO INSTALL MOTOR, SET SPEED CHANGER TO MAX R.P.M. & PULL VARI-DRIVE BELT TO CENTER OF SPINDLE. INSTALL MOTOR WITH 2J-642 PULLEY & 1-77-0084 RETAINING RING ASSEMBLED ON IT KEEPING VARI-DRIVE BELT ON OUTSIDE OF MOTOR SHAFT. DEPRESS 2J-642 PULLEY, KEEPING THE BELT TO THE OUTSIDE & INSTALL THE 2J-643 PULLEY & THE 1-01-0880 RETAINING RING.
- 6 SET SWITCH 1-66-5809 WITH PLATE 77-0179 AT 2.406 DIM. & ADJUST SCREW 66-5897 TO .312 DIM.
- 7 SET SWITCHES 1-66-5105 TO TRIP AT 2.600 & 4.961 DIM'S.
- 8 ADJUST STOP 77-0188 TO .005-.010 CLEARANCE AFTER SWITCH 1-66-5809 HAS BEEN SET. SEE NOTE 6.
- 9 RUN LUBE SUPPLY LINE THRU RAM & DOWN THRU COLUMN TO A HOLE IN THE REAR OF THE COLUMN 24" UP FROM THE BOTTOM.

Run On Limit Switch Lines

77-0157 RAM REF

77-0223 CAP  
1-01-1194 B.H.C.S. (4)  
77-0222 WIPER  
J-514 NUT

SHEET 1 OF 2

<b>Bridgeport MACHINES</b> <small>BRIDGEPORT, CONN. U.S.A.</small>			
MAIL	PART NO.	<b>SERIES 1 CNC HEAD ASSEMBLY</b>	
M.T.		SCALE	FULL
ASSY.		APP.	
DR. L. I.	DATE 1/15/77	REL. D.	

UNLESS OTHERWISE SPECIFIED  
ALL DIMENSIONS TO BE IN INCHES  
ALL DIMENSIONS TO BE IN INCHES  
ALL DIMENSIONS TO BE IN INCHES  
ALL DIMENSIONS TO BE IN INCHES

77-0180  
ADJ. SCREW

10-1370  
S.S.S.

J-140  
GEAR

10-1216  
S.S.S. REF

1-65-2110  
BELT REF.

77-0142  
PULLEY REF.

J-144  
GEAR REF

1-01-3077  
KEY

77-0189  
COVER REF.

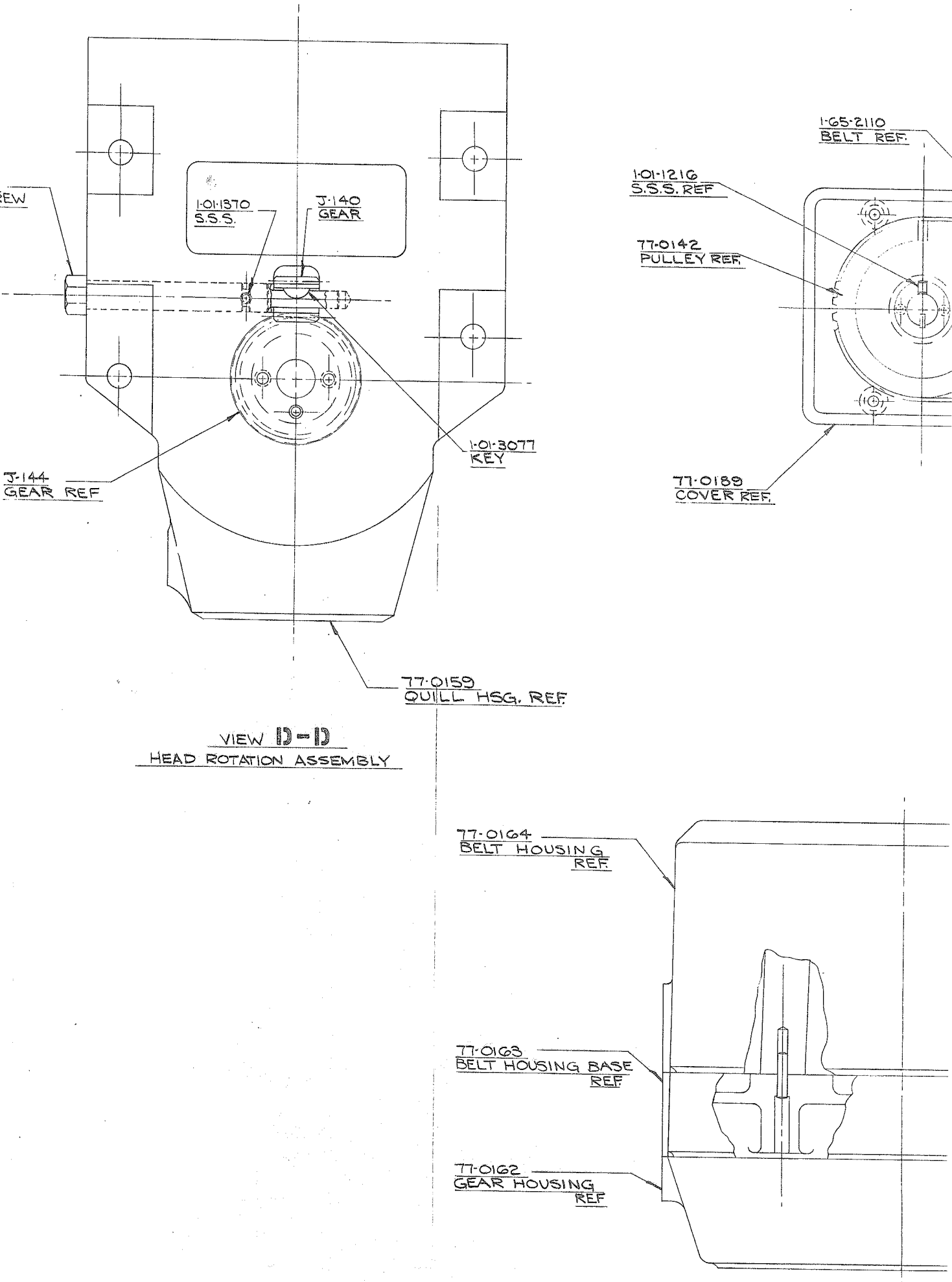
77-0159  
QUILL HSG. REF.

VIEW D-D  
HEAD ROTATION ASSEMBLY

77-0164  
BELT HOUSING  
REF

77-0163  
BELT HOUSING BASE  
REF

77-0162  
GEAR HOUSING  
REF



VIEW C-C  
Z-AXIS ASSEMBLY

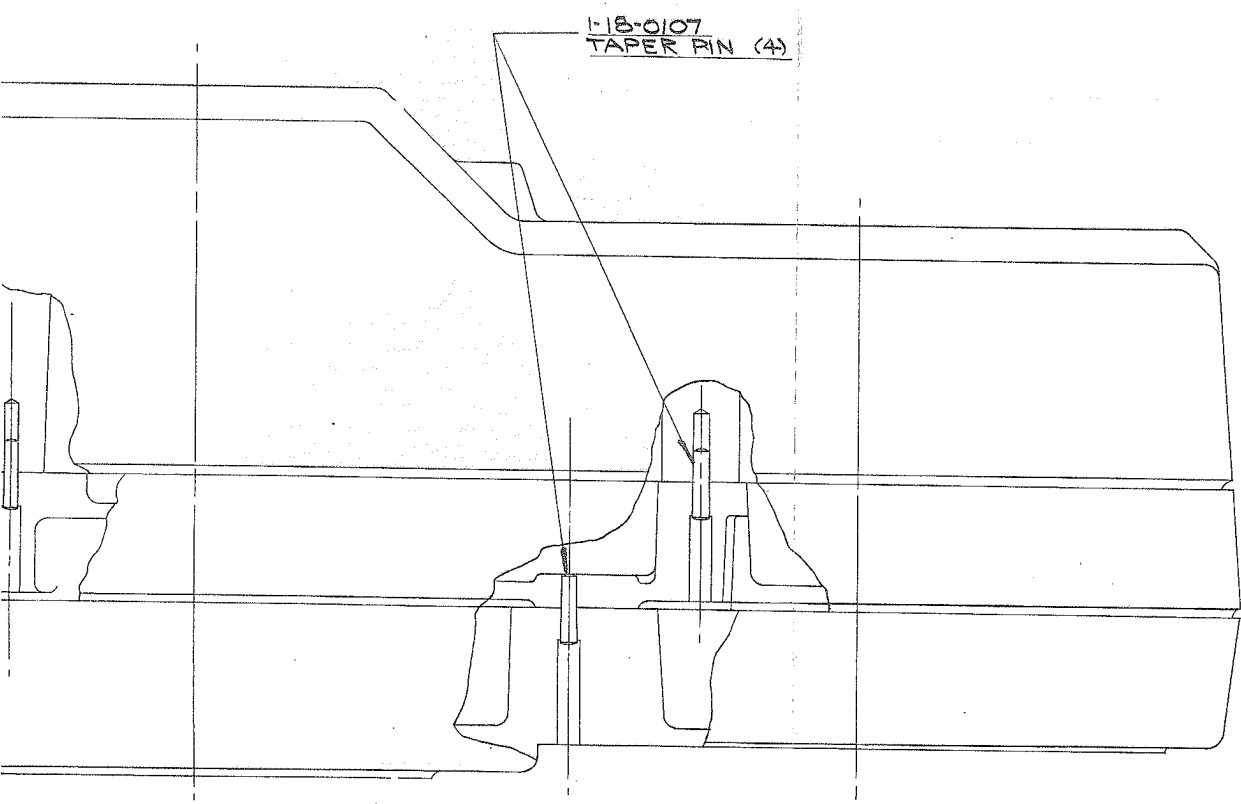
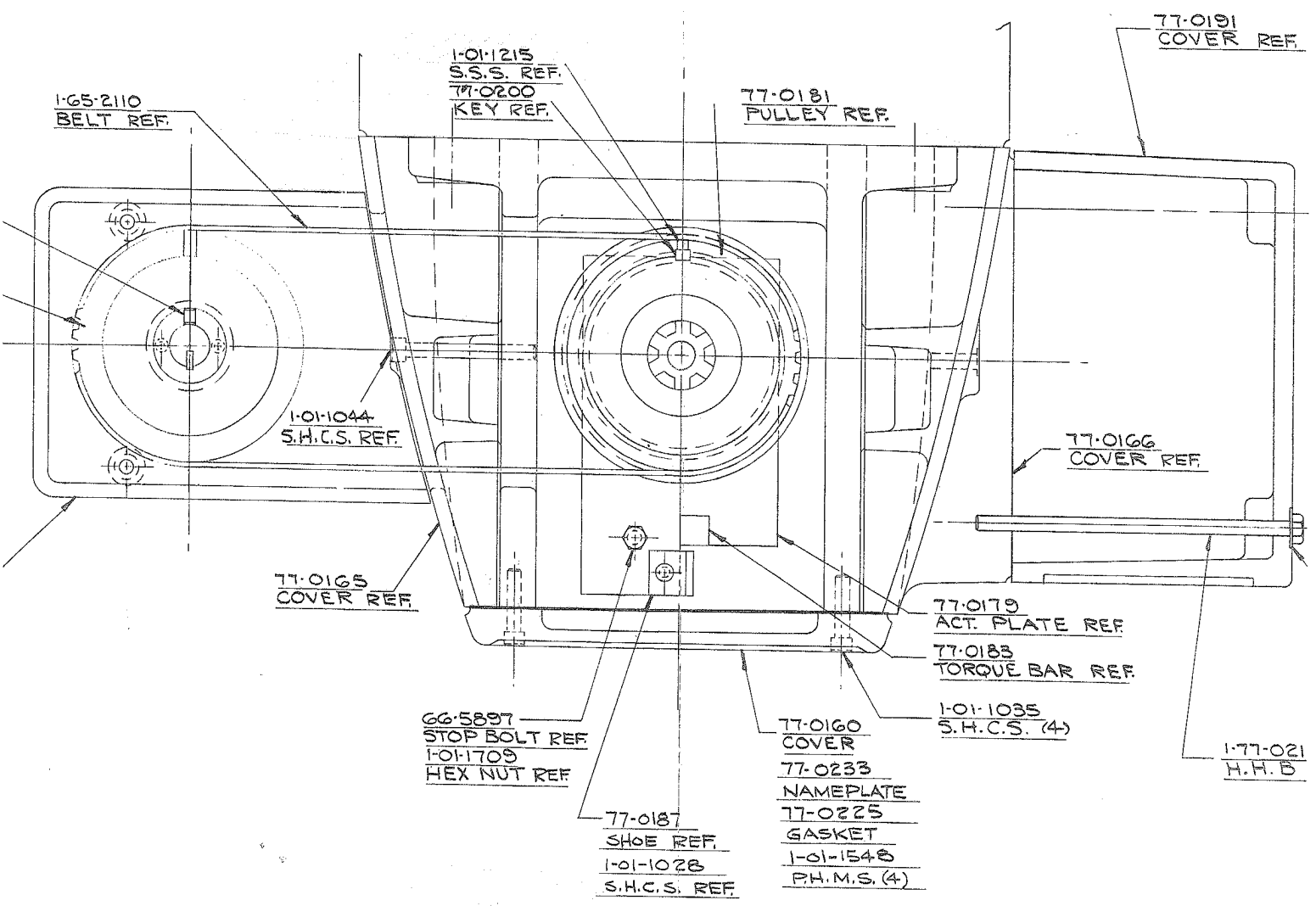
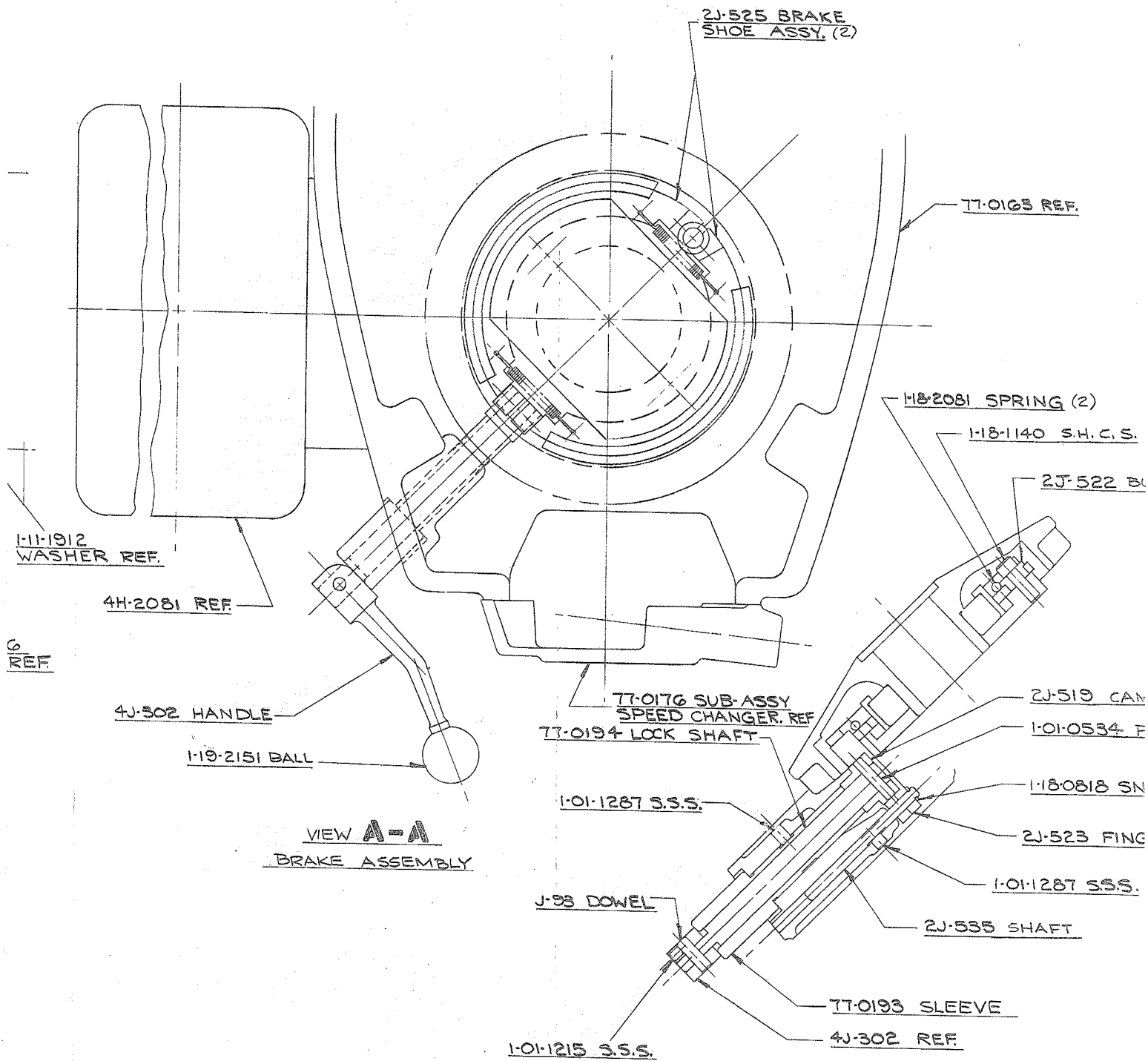
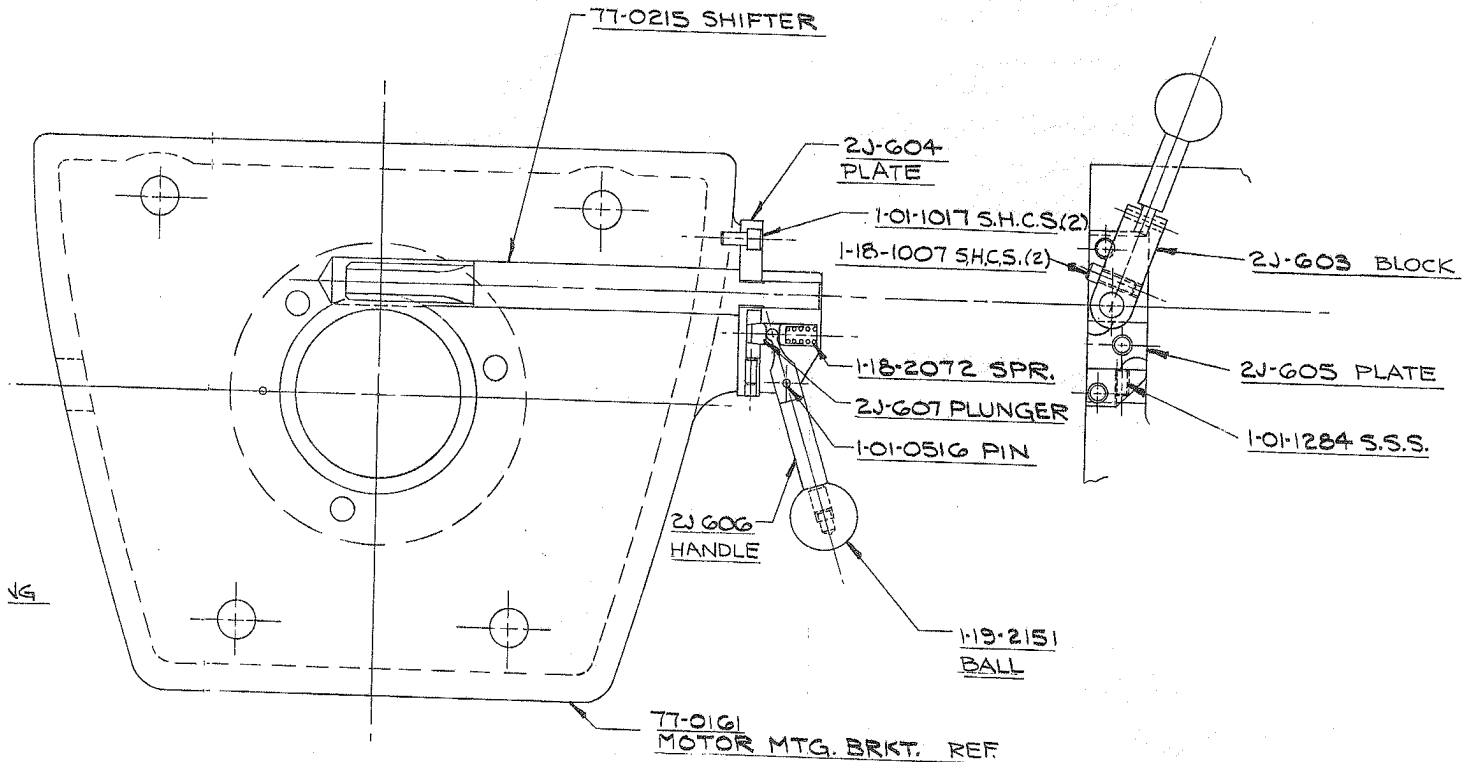


Figure 6-14. Series I CNC Head, R-Ram (Sheet

REV.





VIEW **B-B**  
 HI-LO SHIFTER ASSEMBLY

RING  
 3(2)

UNLESS OTHERWISE SPECIFIED  
 ALL FRACTIONAL DIMENSIONS TO BE  $\frac{1}{32}$   
 ALL DECIMAL DIMENSIONS TO BE  $\pm .005$   
 ALL CHAMFERS TO BE APPROX.  $45^\circ$   
 ALL RADII TO BE  $\frac{1}{16}$   
 ALL SHARP EDGES TO BE REMOVED

<b>Bridgeport</b> MACHINES, a <b>TRUMPF</b> COMPANY	
BRIDGEPORT, CONN. U.S.A.	
MATL.	PATT. NO.
H.T.	SERIES I CNC HEAD ASSEMBLY
ASSY.	QTY.
SCALE FULL	APPR.
DR. J. J. DATE 1/16	REV.
	77-0003