

WELDING PROCESS - SMAW - MANUAL SHIELDED METAL-ARC WELDING

MATERIAL SPECIFICATIONS - A514 REG. (T-1).

WELDING MATERIAL - AWS 1/8 E9018-M

WELDING EQUIPMENT - D.C. MOTOR GEN. OR RECTIFIER, PREHEATING EQUIPMENT, ASBESTOS BLANKETS, PROTECTIVE COVER FOR WELDERS & WELD AREA.

WELDING MACHINE SETTINGS- 1/8" DIA. 120-145 AMPS. D.C. REVERSE POLARITY.

WELD - SECTION B-B & C-C.

JOINT DESIGN - GROOVE

PREHEAT - 150° F.

NOTE:PREHEAT MUST BE MAINTAINED DURING THE WELDING CYCLE.

INTERPASS TEMP. - 400° F.MAX.

POSTHEAT: MAINTAIN 350° F. TEMP. FOR 1 HR. AFTER WELDING AND WRAP WITH DOUBLE THICKNESS OF ASBESTOS BLANKETS. LET COOL SLOWLY.

PROCEDURE:

- 1.REMOVE ALL RUST, SLAG, DIRT, PAINT, OILS & GREASES IN WELD AREA.
- 2.GRIND AND/OR WIRE BRUSH ALL BEVELS AND FUSION AREAS TO BRIGHT METAL.

NOTE: ALL NICKS, GOUGES AND NOTCHES MUST BE REMOVED BY GRINDING TO A SMOOTH CONTOUR.

- 3.PREHEAT TO 150° F. AREAS TO BE WELDED.

NOTE: PREHEAT MUST BE MAINTAINED DURING THE WELDING CYCLE.
ALL WELDING ELECTRODE MUST BE KEPT IN A HEATED ELECTRODE BOX (250° F.) IN THE WELD AREA.

4. INSPECTION

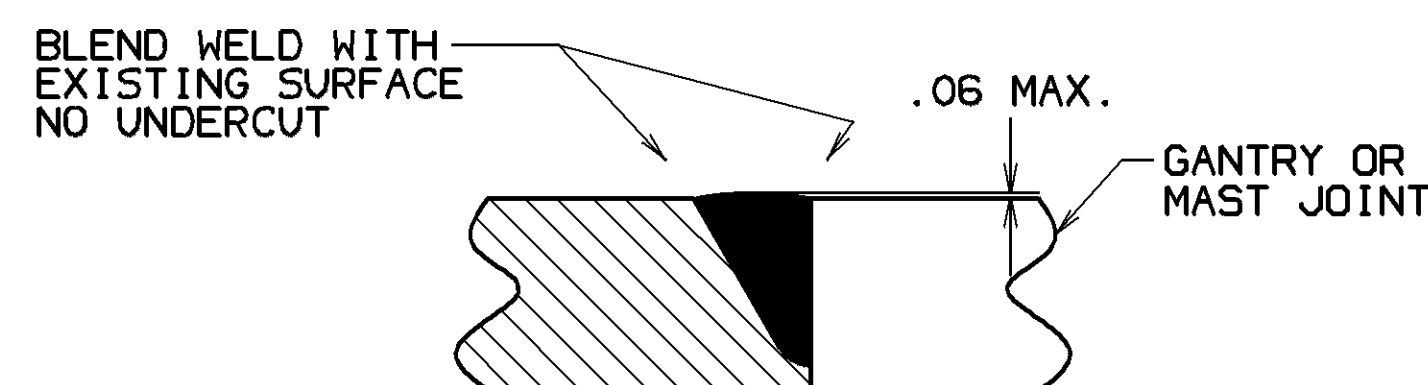
VISUAL AND DYE-PENETRANT INSPECT THE ROOT PASSES FOR DEFECTS (SLAG INCLUDES, POROSITY, OVERLAPS AND UNDERCUTS).

NOTE: ALL DEFECTS (SLAG INCLUSIONS, POROSITY, OVERLAPS AND UNDERCUTS) IN THE WELD JOINT MUST BE REMOVED DURING THE WELDING CYCLE. EACH PASS OF WELD MUST BE CLEANED AND VISUAL INSPECTED BEFORE MAKING THE NEXT PASS.

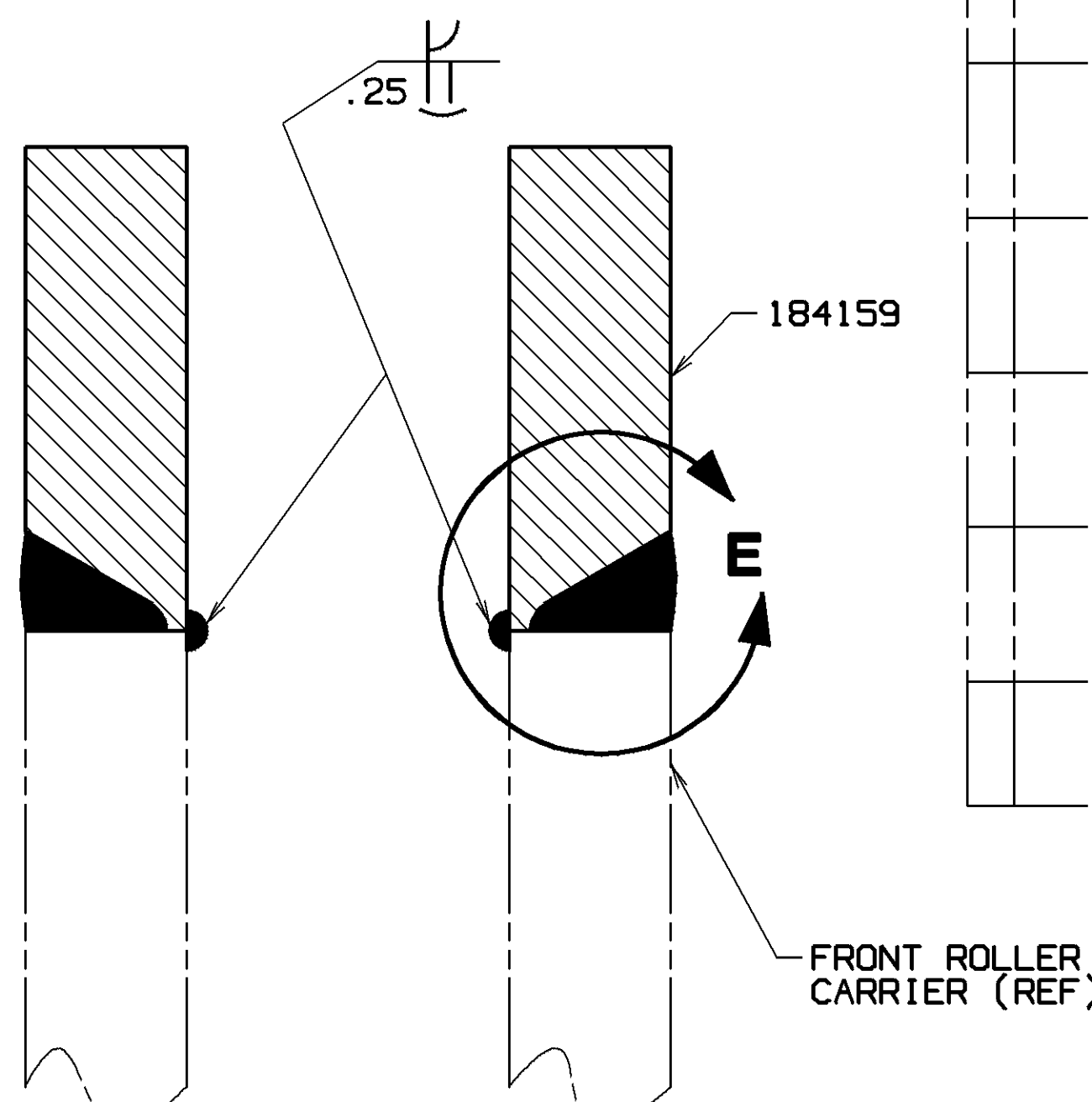
VISUAL INSPECT THE COMPLETED WELD FOR DEFECTS.

SURFACE GRIND WELDS AS SHOWN IN DETAIL E.

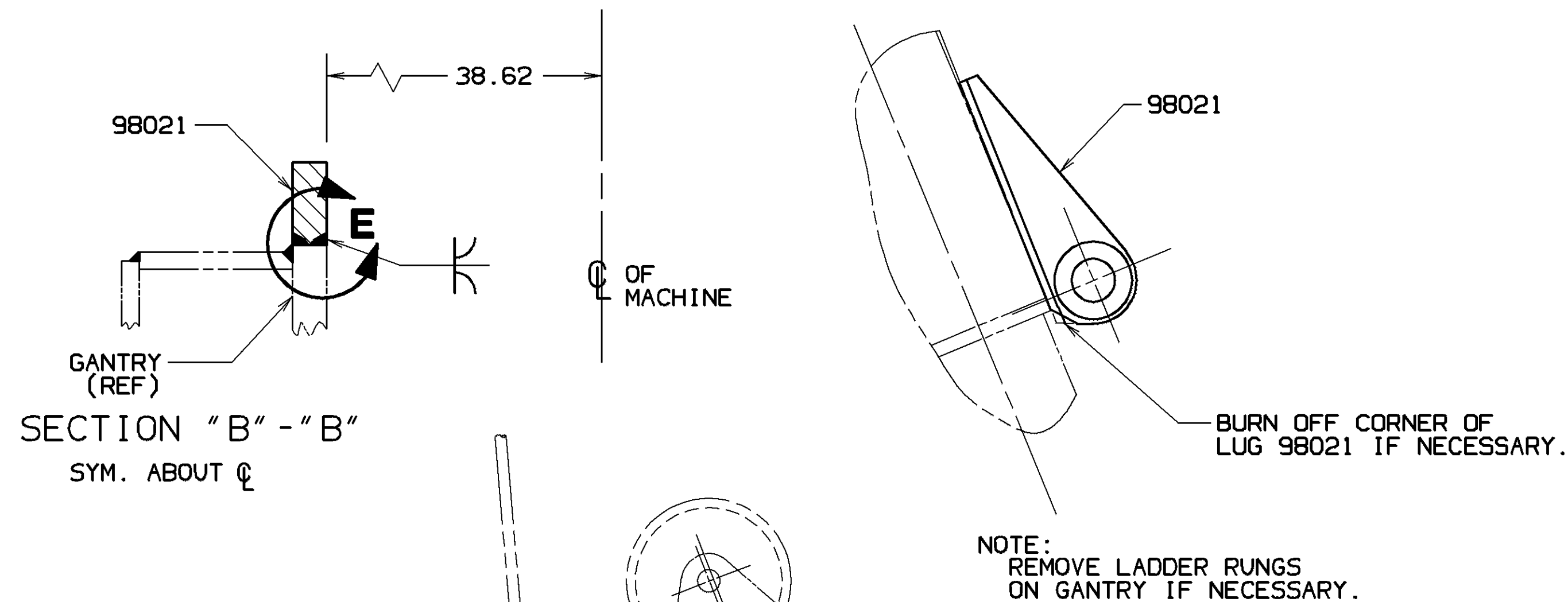
MAGNETIC PARTICLE INSPECT THE COMPLETED WELDS WHEN THE WELDS ARE COLD. (AFTER 48 HRS.)



DETAIL "E"



SECTION "C" - "C"
SYM. ABOUT C



BACKHITCH PENDANTS
SEE MAST ASSEMBLY

CAUTION
DO NOT EXCEED THE 16.75
DIMENSION FOR MIN. THREAD
ENGAGEMENT OF (146821) AND
(146822) INTO CONNECTOR
(98022).

INSTALLATION PROCEDURE

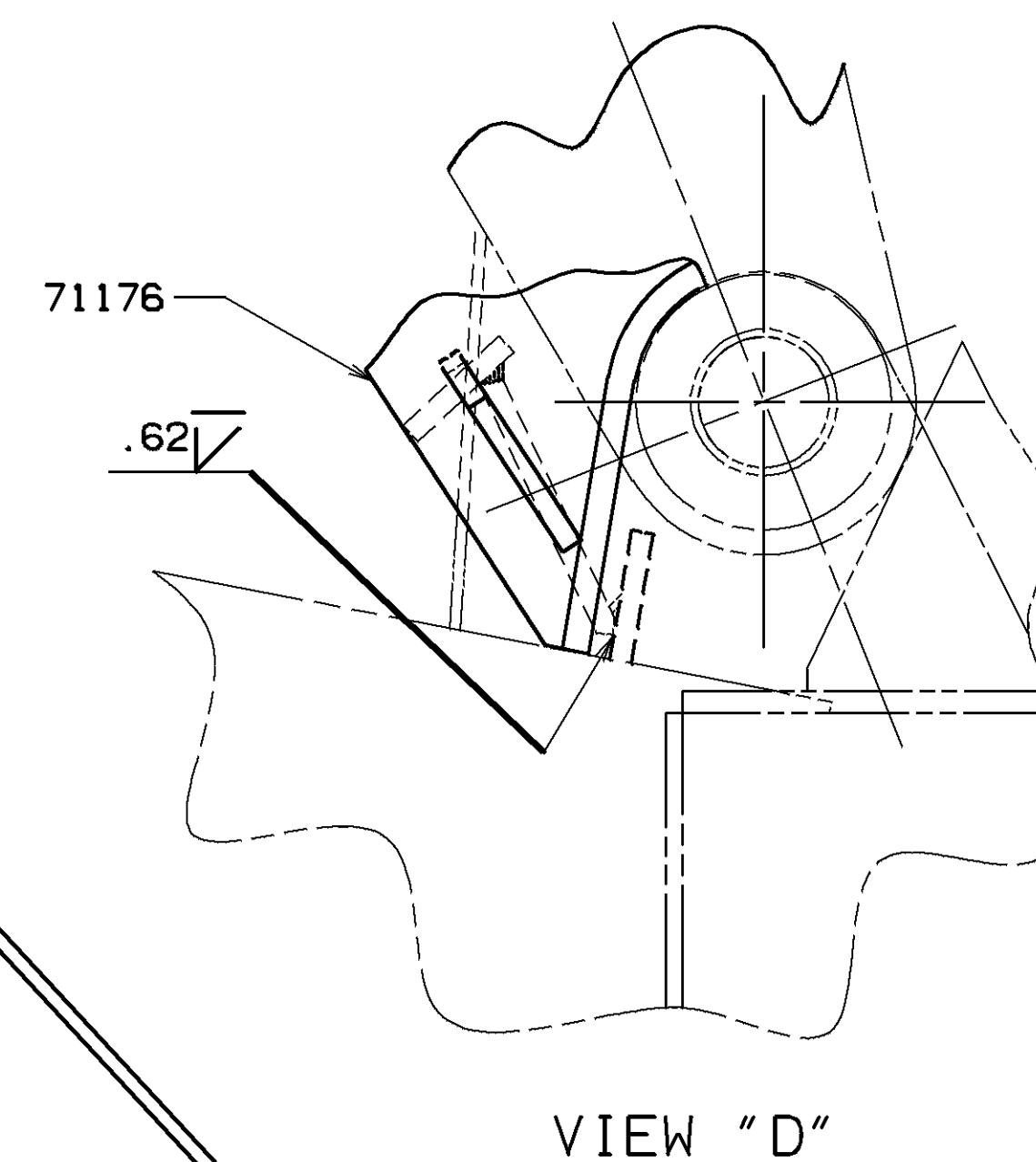
NOTE 1:
POSITION AND WELD LUGS (98021) TO GANTRY AND BRACKET (184159)
TO ROLLER CARRIER AS SHOWN, PER THE SPECIFIED WELDING PROCEDURE.

NOTE 2:
ATTACH SUSPENSION PENDANTS (277139) TO GANTRY LUG (98021) AND TO
LOWER TAKE-UP ASSEMBLY ON ROLLER CARRIER AS SHOWN.
LUBRICATE THREADS ON EYE BOLTS (98017) WITH "NEVER-SEEZ" OR
EQUIVALENT. LEAVE SUSPENSION PENDANTS SLACK AT THIS TIME.

NOTE 3:
REPLACE STANDARD BACKHITCH STRAP AND TAKE-UP WITH LINK (98023)
AND ADJUSTABLE CONNECTORS AS SHOWN. LUBRICATE THREADS ON
ADJUSTABLE CONNECTORS WITH "NEVER-SEEZ" OR EQUIVALENT. LINK
(98023) SHOULD BE PIVOTED TOWARD THE REAR OF THE MACHINE AND
THE BACKHITCH PENDANTS LEFT SLACK.

NOTE 4:
FOR TENSIONING THE BOOM TRAVEL SUPPORT AND SPECIAL TRAVEL
INSTRUCTIONS SEE DRAWING SHOWN IN TABLE BELOW.

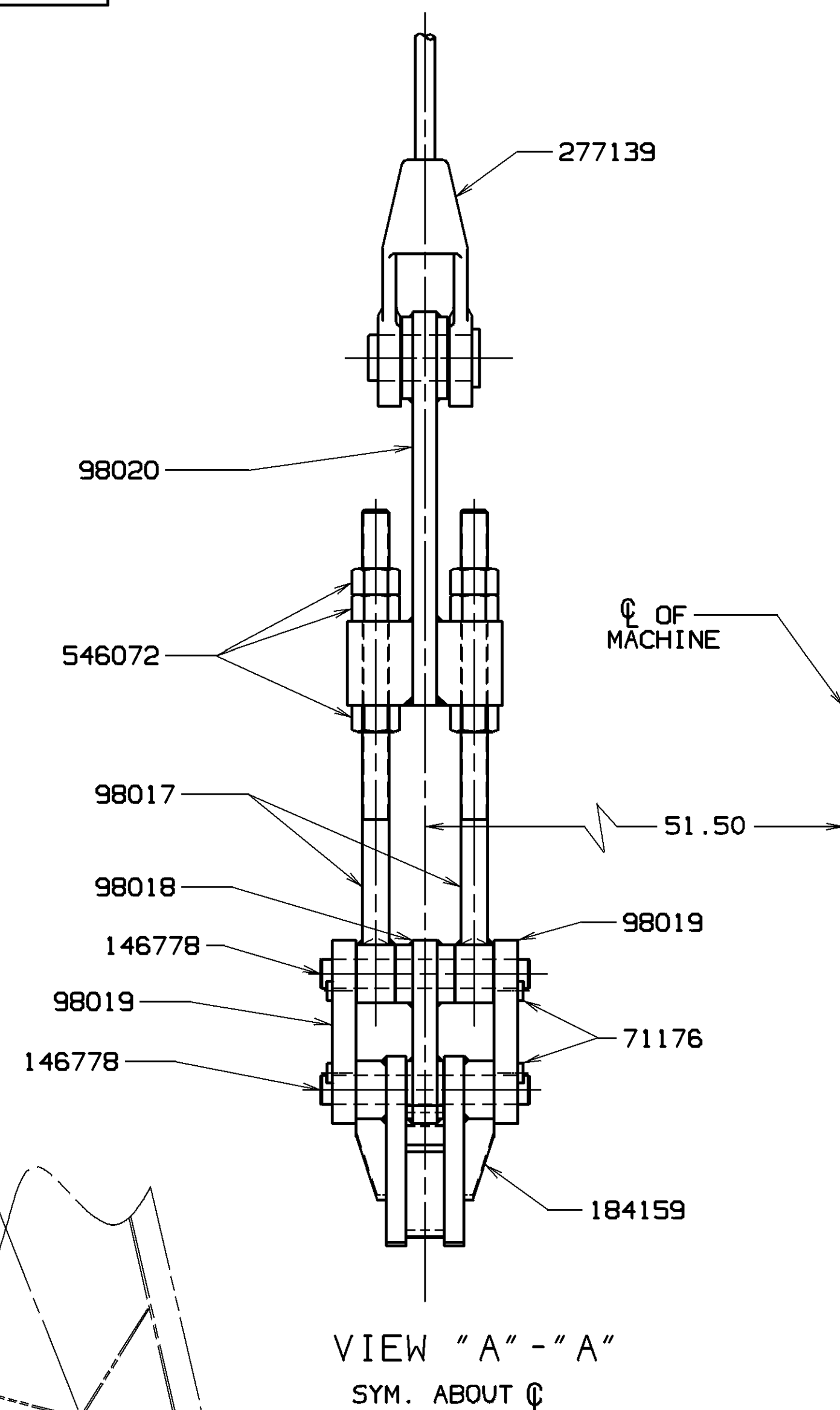
BOOM NUMBER	BOOM LENGTH	JIB NUMBER	JIB LENGTH	JIB ANGLE	AUXILIARY COUNTERWEIGHT	DRAWING NUMBER
#38	260 FT	27AB	140 FT	32°	263,500 LBS.	184509
#38	260 FT	27AB	120 FT	6°	263,500 LBS.	184509
#63	180 THRU 380	—	—	—	263,500 LBS.	184509
#63	260 FT	27AB	80,100,120	6°	263,500 LBS.	184509
#63	280 FT	27AB	80 & 100 FT	6°	263,500 LBS.	184509
#63	300 FT	27AB	80 FT	6°	263,500 LBS.	184509
#65	180 THRU 360	—	—	—	263,500 LBS.	184509
#65	240 FT	27AB	80,100,120	6°	263,500 LBS.	184509
#65	260 FT	27AB	80 & 100 FT	6°	263,500 LBS.	184509
#65	280 FT	27AB	80 FT	6°	263,500 LBS.	184509



BILL OF MATERIAL						ASSEMBLIES USED IN
ITEM NO.	QTY	DESCRIPTION	LENGTH	MATERIAL	CODE NO. OR DWG. NO.	
8	1	PIN KEEPER			71176	
4	2	EYE BOLT			98017	
2	2	LUG			98018	
4	2	LUG			98019	
2	2	TAKE UP			98020	
2	2	LUG			98021	
2	2	CONNECTOR			98022	
2	2	LINK			98023	
2	2	HEX NUT			142908	
2	2	PIN			140891	
4	4	SHAFT			146778	
2	2	ADJUSTABLE CONNECTOR			146821	
2	2	ADJUSTABLE CONNECTOR			146822	
2	2	BRACKET			184159	
2	2	HEX NUT			147062	
2	2	PENDANT			277139	
122.750-4UNC-2B HVY. HEX NUT					546072	
1	1	HYD. TENSIONING SUB-ASSEMBLY			176120	

1 SEE DWG. #144600

2 OPTIONAL



VIEW "A" - "A"
SYM. ABOUT C

DWG. NO.
66013

SUPERSEDES 66013 OF 3-19-82

DESIGNED BY JN	MANUFACTURED BY Mantawee Cranes, Inc. Mantawee, Wisconsin	DATE 9-16-82
CHECKED BY RAD	MODEL 4600 S-4 RING S-3	REVISION NO. BOOM TRAVEL SUPPORT
APPROVED BY MR		ASSEMBLY 66013