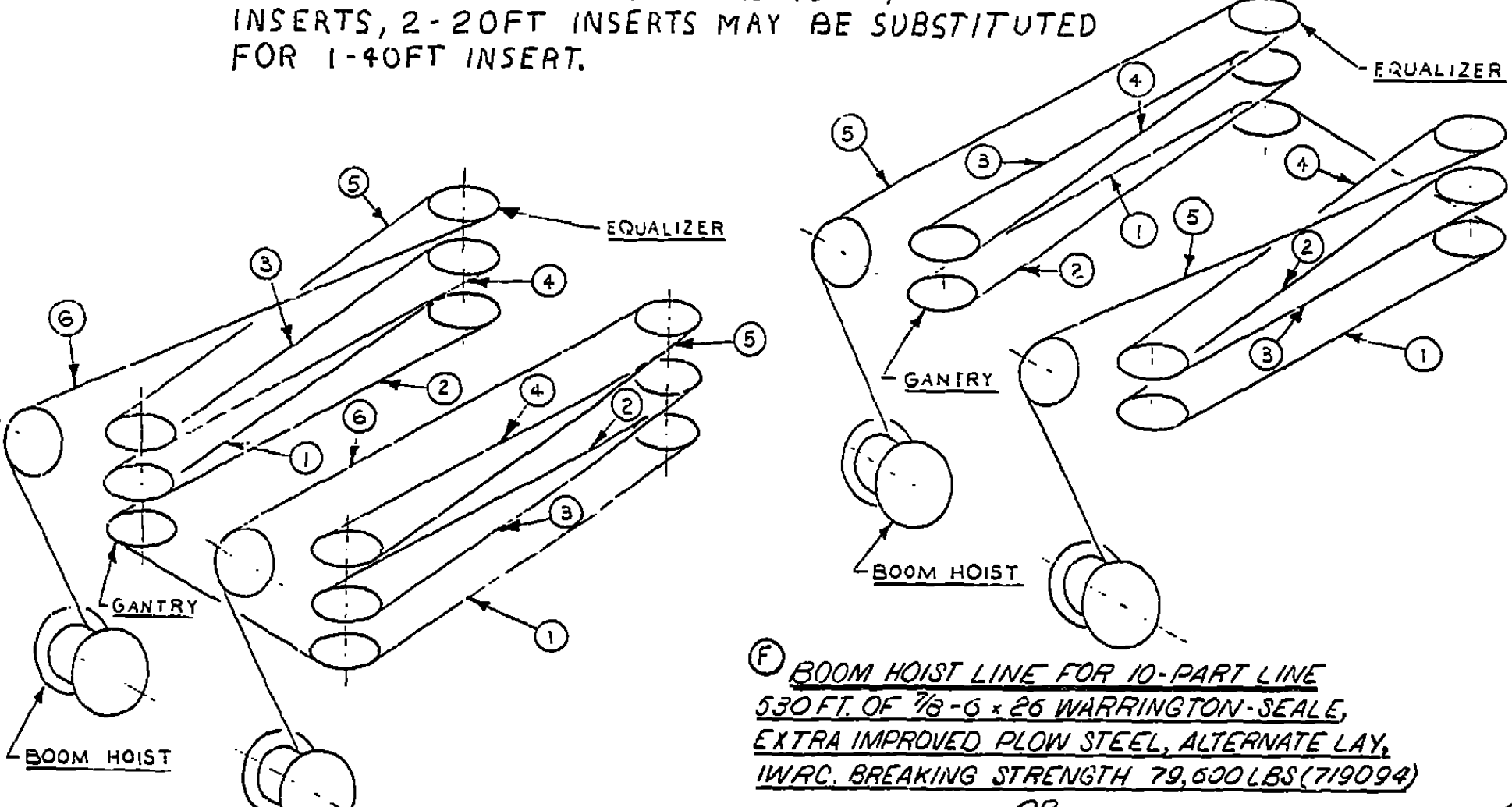


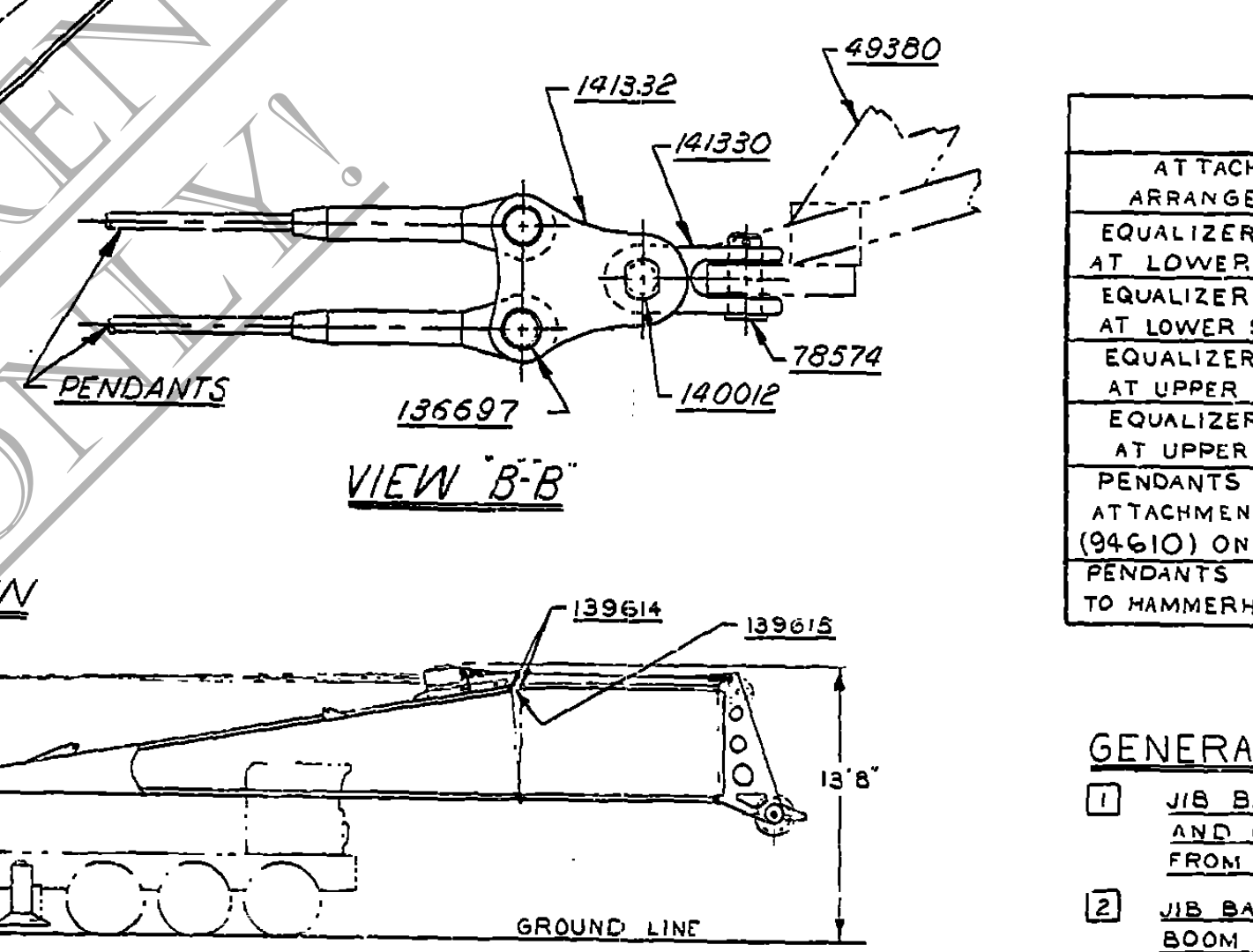
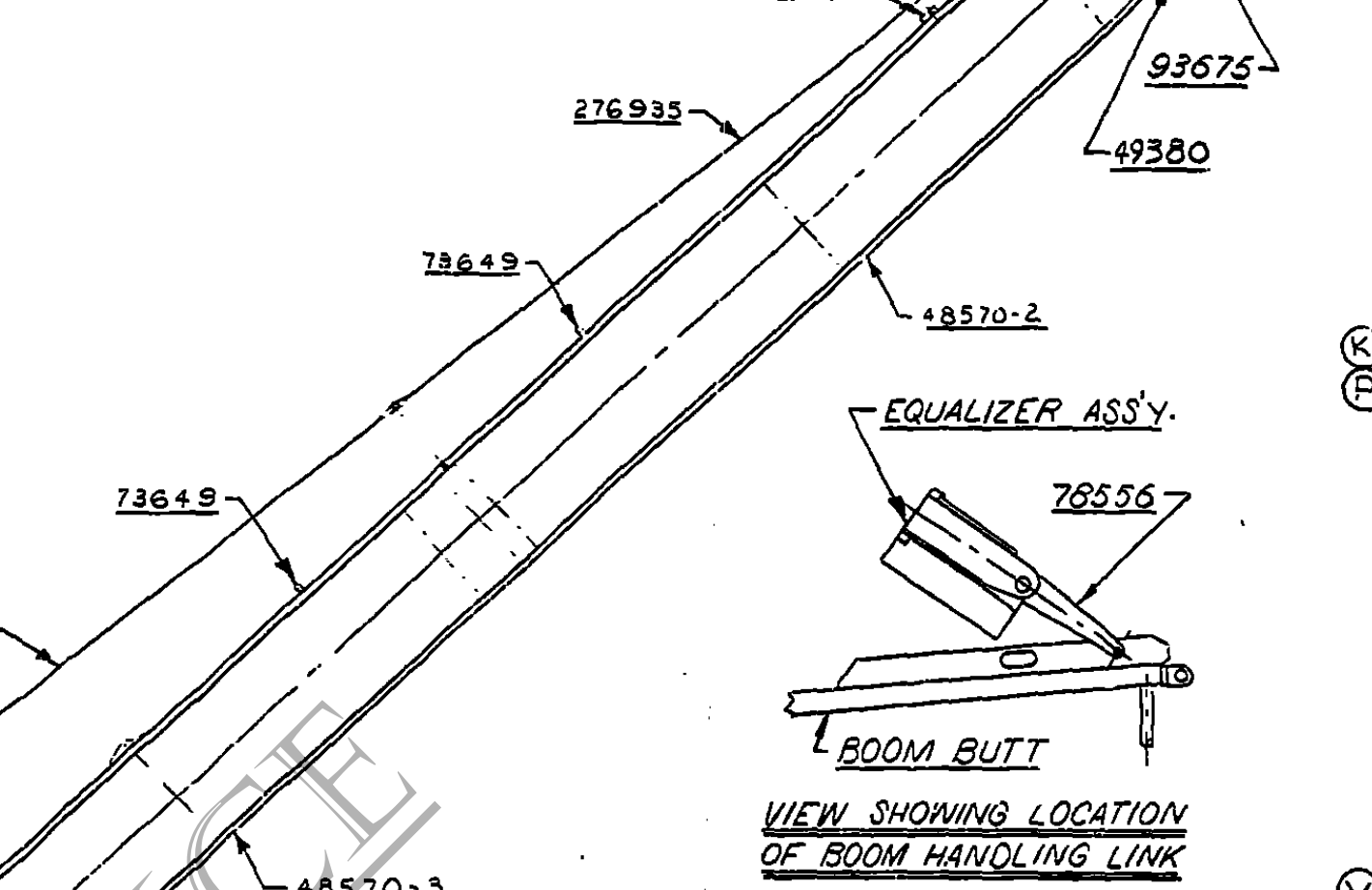
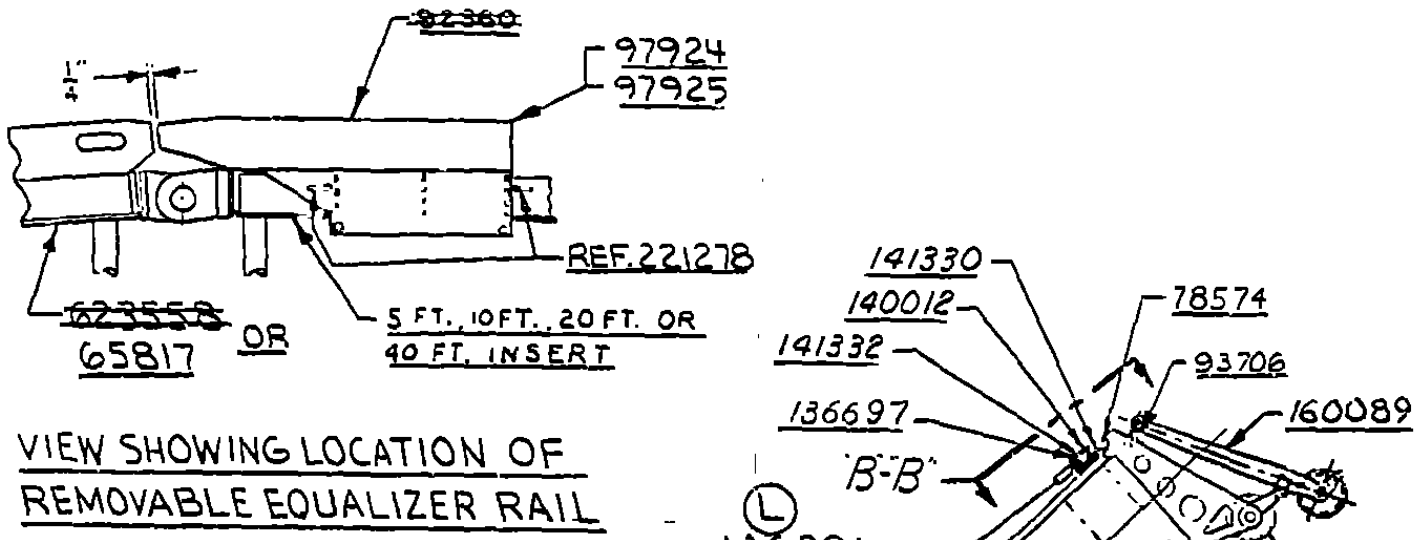
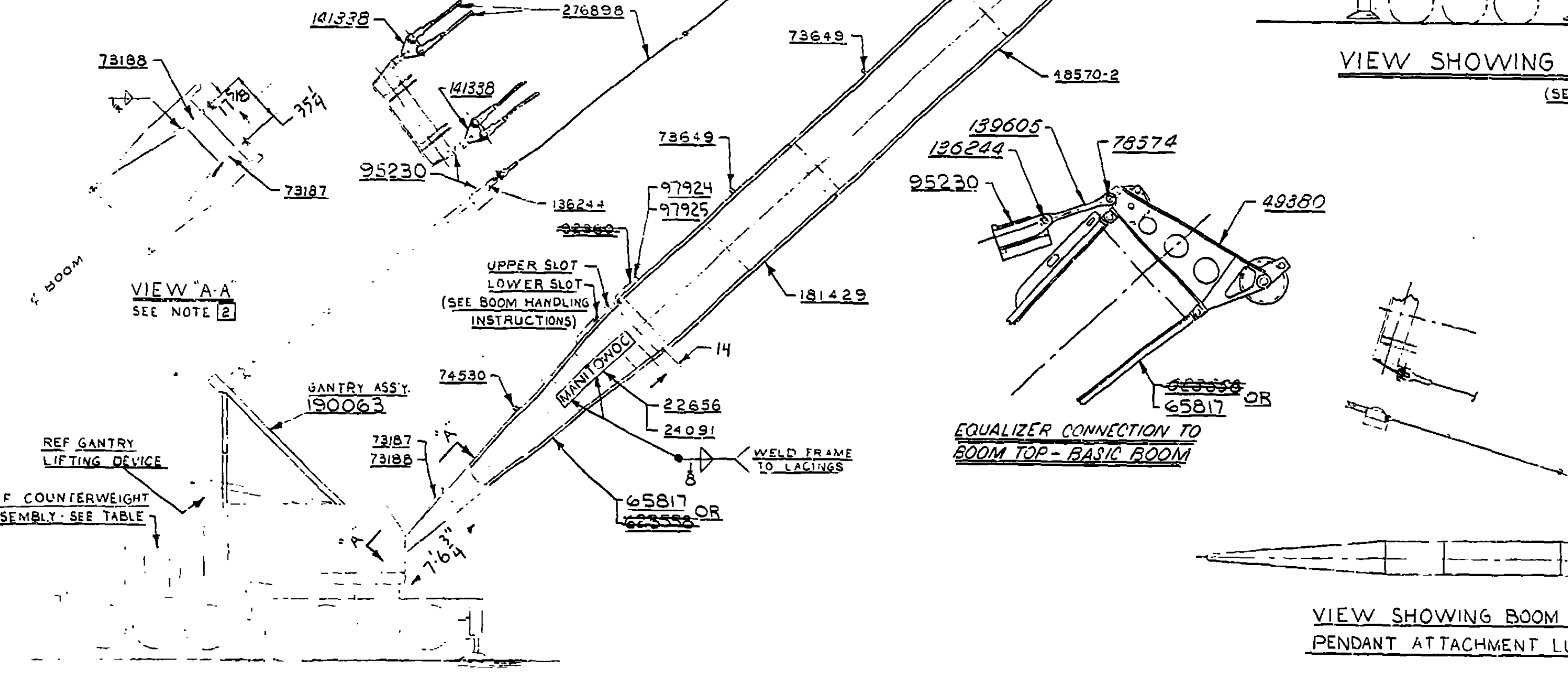
DWG NO	RECOMMENDED FOR VARIOUS BOOM LENGTHS															
	49384	181394	181429	48570-2	48570-3	276945 DWG # 77535	276897 DWG # 77535	276898 DWG # 77535	276935 DWG # 77535	73649	141332	141330	140012	141338	136697	146291
BOOM LENGTH	5 FT HEAVY DUTY INSERT	10 FT HEAVY DUTY INSERT	20 FT HEAVY DUTY INSERT	40 FT INSERT	40 FT INSERT W/1/8" BACK STAY	PENDANTS 5 FT.	PENDANTS 10 FT.	PENDANTS 20 FT.	PENDANTS 40 FT.	WIRE ROPE ROLLER GUIDE ASSY	PENDANT LINK	PENDANT LINK	PIN	LINK	PIN	WIRE ROPE ROLLER GUIDE ASSY
38'	1	0	0	0	0	4	0	0	0	0	2	2	2	2	4	0
43'	0	1	0	0	0	0	4	0	0	0	2	2	2	2	4	0
48'	1	1	0	0	0	4	4	0	0	0	2	2	2	2	4	0
53'	0	0	1	0	0	0	4	0	0	0	2	2	2	2	4	0
63'	0	1	1	0	0	0	4	0	0	0	2	2	2	2	4	0
73'	0	0	0	1	0	0	0	4	0	0	2	2	2	2	4	0
83'	0	1	0	1	0	0	4	0	4	0	2	2	2	2	4	0
93'	0	0	1	1	0	0	0	4	4	0	2	2	2	2	4	0
103'	0	1	1	1	0	0	4	4	4	0	2	2	2	2	4	0
113'	0	0	0	1	1	0	0	4	4	0	2	2	2	2	4	0
123'	0	1	0	1	1	0	4	0	8	3	2	2	2	2	4	0
133'	0	0	0	1	1	0	0	4	8	4	2	2	2	2	4	0
143'	0	1	1	1	1	0	4	4	8	5	2	2	2	2	4	0
153'	0	0	0	2	1	0	0	0	12	5	2	2	2	2	4	0
163'	0	1	0	2	1	0	4	0	12	6	2	2	2	2	4	0
173'	0	0	1	2	1	0	0	0	12	6	2	2	2	2	4	0
183'	0	1	1	2	1	0	4	4	12	6	2	2	2	2	4	0
193'	0	0	0	3	1	0	0	0	16	7	2	2	2	2	4	0
203'	0	1	0	3	1	0	4	0	16	8	2	2	2	2	4	0
213'	0	0	1	3	1	0	4	0	16	8	2	2	2	2	4	0

NOTE: TABLE SHOWS THE MINIMUM NO. OF INSERTS REQ'D. FOR BOOM LENGTHS WITH NO 10FT & NO 20FT INSERTS, 2-20FT INSERTS MAY BE SUBSTITUTED FOR 1-40FT INSERT.

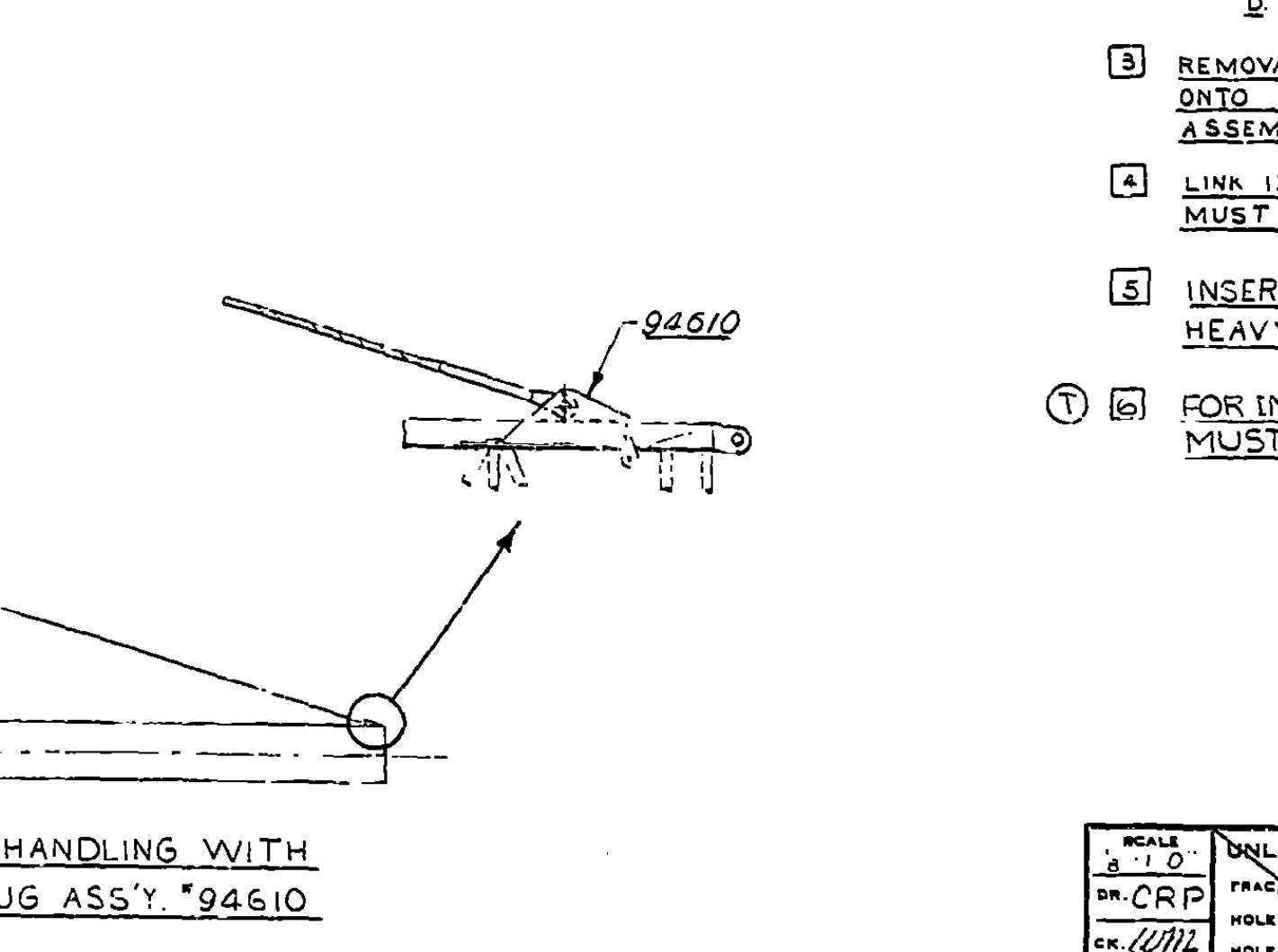


BOOM HOIST LINE FOR 10-PART LINE
530 FT. OF 7/8" - 6 x 26 WARRINGTON-SEALE, EXTRA IMPROVED PLOW STEEL, ALTERNATE LAY, IWRC, BREAKING STRENGTH 79,600 LBS (719094)
OR
530 FT. OF 7/8" - 6 x 26 WARRINGTON-SEALE, EXTRA IMPROVED PLOW STEEL, REGULAR LAY, IWRC, BREAKING STRENGTH 79,600 LBS (719035)

BOOM HOIST LINE FOR 12-PART LINE
620 FT. OF 7/8" - 6 x 26 WARRINGTON-SEALE, EXTRA IMPROVED PLOW STEEL, ALTERNATE LAY, IWRC, BREAKING STRENGTH 79,600 LBS (719094)
OR
620 FT. OF 7/8" - 6 x 26 WARRINGTON-SEALE, EXTRA IMPROVED PLOW STEEL, REGULAR LAY, IWRC, BREAKING STRENGTH 79,600 LBS (719035)



VIEW SHOWING BOOM IN TRAVELING POSITION (SEE NOTE: 4)



BILL OF MATERIAL							ASSEMBLER USED ON
ITEM NO.	QTY	SIZE	LENGTH FT. IN.	MATERIAL	CODE NO. OF DWG. NO.	REMARKS	

33 FT. BASIC BOOM			REVISIONS
NO.	DWG. NO.	DESCRIPTION	
2	22656	BOOM SIGN	3-16-73 CRP
2	24091	BOOM SIGN FRAME	ADDED
1	190063	GANTRY ASSEMBLY	DELETED
1	49380	HAMMERHEAD TOP	WAS CWT. HANDLING LINKS
1	74530	WIRE ROPE ROLLER GUIDE ASSEMBLY	ADDED
2	78574	PIN	DELETED
2	78556	BOOM HANDLING LINK	WAS CWT. HANDLING LINKS
2	93675	REMOVABLE EQUALIZER RAIL	DELETED
1	93675	BOOM POINT SHAFT ASSEMBLY	DESCRIPTION CORRECTED
1	93706	WIRE ROPE GUIDE ASSEMBLY	6-4-73 CRP
1	97924	REMOVABLE EQUALIZER RAIL - R.H.	ADDED
2	136244	PENDANT PIN	10-29-74 DWD
1	97925	REMOVABLE EQUALIZER RAIL - L.H.	WAS 49390
2	139605	LINK	WAS 94064
1	65817	BOOM BUTT - FOR 165 TON	7-7-78 JN
1	95230	EQUALIZER ASSEMBLY	ADDED

OPTIONAL PARTS			REVISIONS
NO.	DWG. NO.	DESCRIPTION	
1	73187	R.H. JIB BACKSTAY LUG	3-18-81 JN
1	73188	L.H. JIB BACKSTAY LUG	DELETED
1	94610	PENDANT ATTACHMENT LUG ASSEMBLY	SEE NOTE 2
4	139614	PIN	FOR BOOM HANDLING
2	139615	LINK	SEE NOTE 4
1	93113	PLATFORM FOR BOOM BUTT	11-10-81 CRP
1	139226	NOT HANDLING ASSY. FOR 123 JIB	ADDED
1	160089	UPPER BOOM POINT ASSEM.	8-11-89 DG

BOOM HANDLING INSTRUCTION				
ATTACHMENT ARRANGEMENT	GANTRY POSITION	MAX. LG. OF BOOM MANOVED	BOOM MAKE UP	REMARKS
EQUALIZER PINNED AT LOWER SLOT	UP	50 FT.	BUTT / INSERTS ONLY	(LOWER SLOT) EQUALIZER LANDS AT THIS LOCATION WHEN LOWERED ONTO BUTT
EQUALIZER PINNED AT LOWER SLOT	DOWN	40 FT.	BUTT / ONE 10 FT. INSERT	(UPPER SLOT) CONNECT EQUALIZER TO THIS HOLE WITH BOOM HANDLING LINKS # 78556
EQUALIZER PINNED AT UPPER SLOT	UP	70 FT.	BUTT / INSERTS ONLY	
EQUALIZER PINNED AT UPPER SLOT	DOWN	50 FT.	BUTT / INSERTS ONLY	
PENDANTS PINNED TO ATTACHMENT LUG (94610) ON INSERTS	UP	160 FT.	BUTT / INSERTS ONLY	ONE 40 INSERT IS THE MAXIMUM LENGTH TO BE CANTILEVERED FOR ANY LENGTH OF BOOM
PENDANTS ATTACHED TO HAMMERHEAD TOP	DOWN	123 FT.	BUTT, INSERTS & TOP. NO JIB	BOOM CARRIED IN HORIZONTAL POSITION

- GENERAL NOTES:
- JIB BACKSTAY LUGS ON INSERT # 48570-3 ARE USED FOR BOOM LENGTHS OF 113 FT. AND OVER. LOCATE INSERT SO THAT JIB BACKSTAY LUG IS APPROX 60 FT. FROM THE BASE OF THE HAMMERHEAD TOP.
 - JIB BACKSTAY LUGS ON THE BOOM BUTT ARE OPTIONAL AND ARE TO BE USED ONLY WITH BOOM LENGTHS OF 63', 73', 83' AND 93 FT. FOLLOWING CONDITIONS APPLY:
A. MAXIMUM JIB ANGLE TO BOOM IS 20° FOR #123 JIB / #124 JIB
B. MAXIMUM JIB STRUT LENGTH IS 12'-6"
C. JIB BACKSTAY LINES MUST BE DISCONNECTED BEFORE LOWERING EQUALIZER TO BOOM BUTT.
D. PENDANT BACKSTAYS CANNOT BE USED WITH LUGS ON BUTT.
 - REMOVABLE EQUALIZER RAIL - EQUALIZER MAY BE SLID FORWARD FROM BUTT ONTO THIS RAIL TO PROVIDE SLACK FOR CHANGING PENDANTS OR ASSEMBLING AND DISASSEMBLING BOOM.
 - LINK 139615 IS USED ONLY FOR MINIMUM TRAVELING CLEARANCE OF 13'-8" AND MUST NOT BE USED WHILE MAKING LIFTS.
 - INSERTS DWG. # 49384, 181394 / 181429 MUST BE INSTALLED WITH HEAVY CHORDS AS THE LOWER CHORDS OF THE BOOM.
 - FOR INSERTS MANUFACTURED BEFORE APRIL 1981, SHEAR STOPS, CODE NO. 22-278, MUST BE ADDED TO USE REMOVABLE EQUALIZER RAILS, 97924 & 97925.

SUPERSEDES # 49419 OF 2-24-72

SCALE 1" = 10'	UNLESS NOTED	MANITOWOC ENGINEERING CO.	BOOM RIGGING ASSY. # 9A
DR. CRP	FRAC. DIM.	MANITOWOC, WISCONSIN	3 FT. HAMMERHEAD TOP - DEEP
CR. WLL	HOLE DIA.	MATERIAL	SECTION - DOUBLE 1 1/2" PENDANTS
APP	HOLE CENTER	MODEL	3900 T SERIES II

- REVISIONS
- 3-16-73 CRP
- ADDED
- DELETED
- WAS CWT. HANDLING LINKS
- DESCRIPTION CORRECTED
- 6-4-73 CRP
- ADDED
- 10-29-74 DWD
- WAS 49390
- WAS 94064
- 7-7-78 JN
- ADDED
- 6-28-79 DWD
- WAS 73649
- ADDED
- ADDED
- ADDED
- DELETED
- 3-18-81 JN
- DELETED
- ADDED
- 5-6-81 CRP
- DELETED
- 11-10-81 CRP
- ADDED
- 8-11-89 DG
- ADDED
- 8-17-89 DRS
- CORRECTED

DWG. NO. 49419

REVISED DATE 2-15-73

PATTERN NO. CODE NO. 49419

