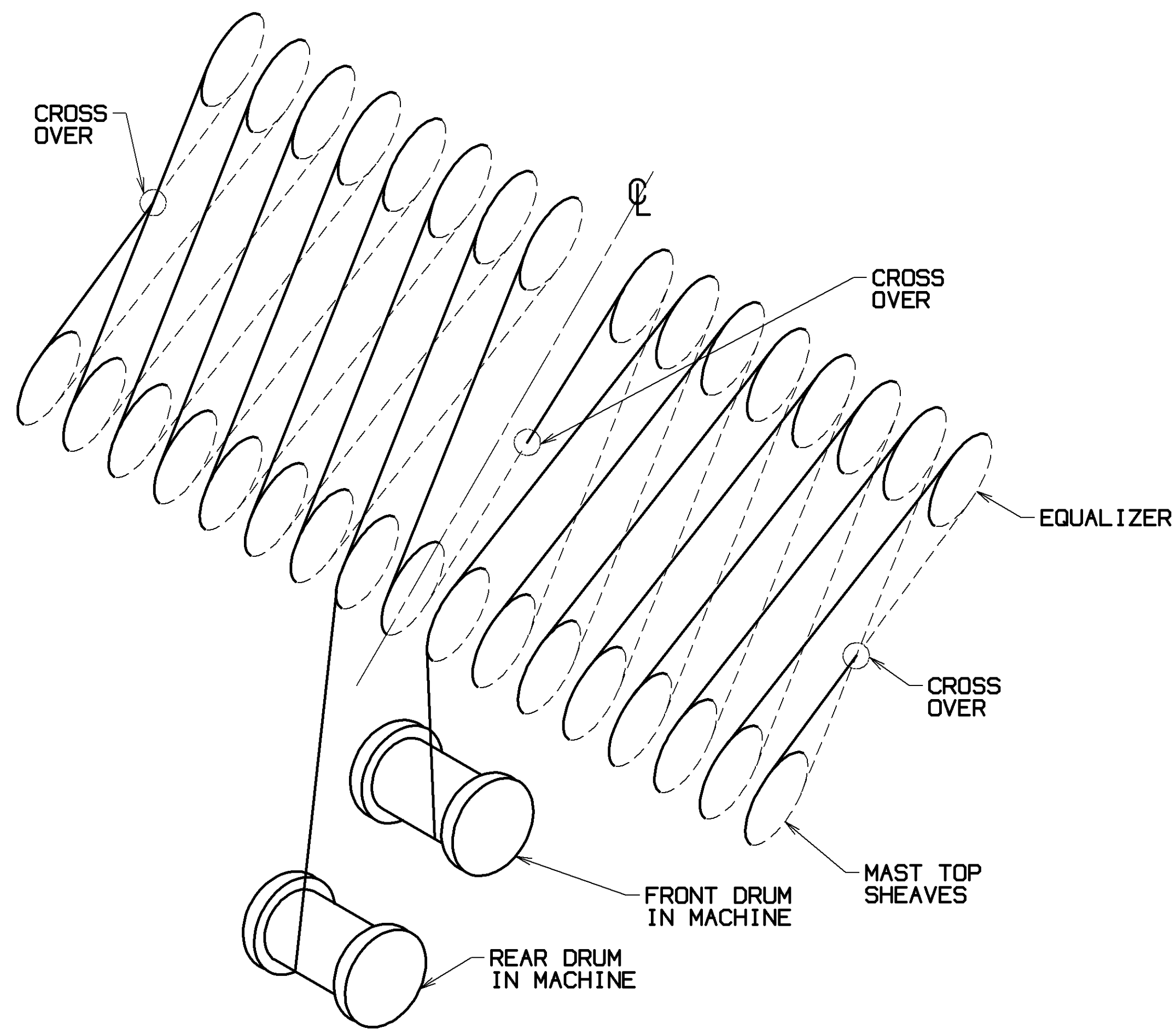
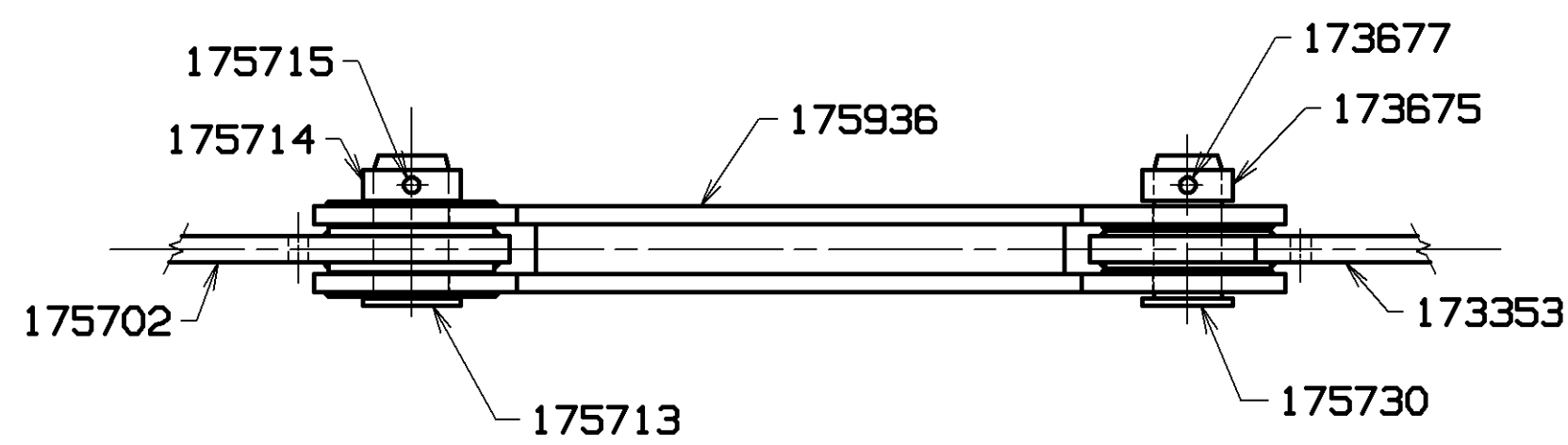


REQ'D FOR #75A BOOM LENGTHS

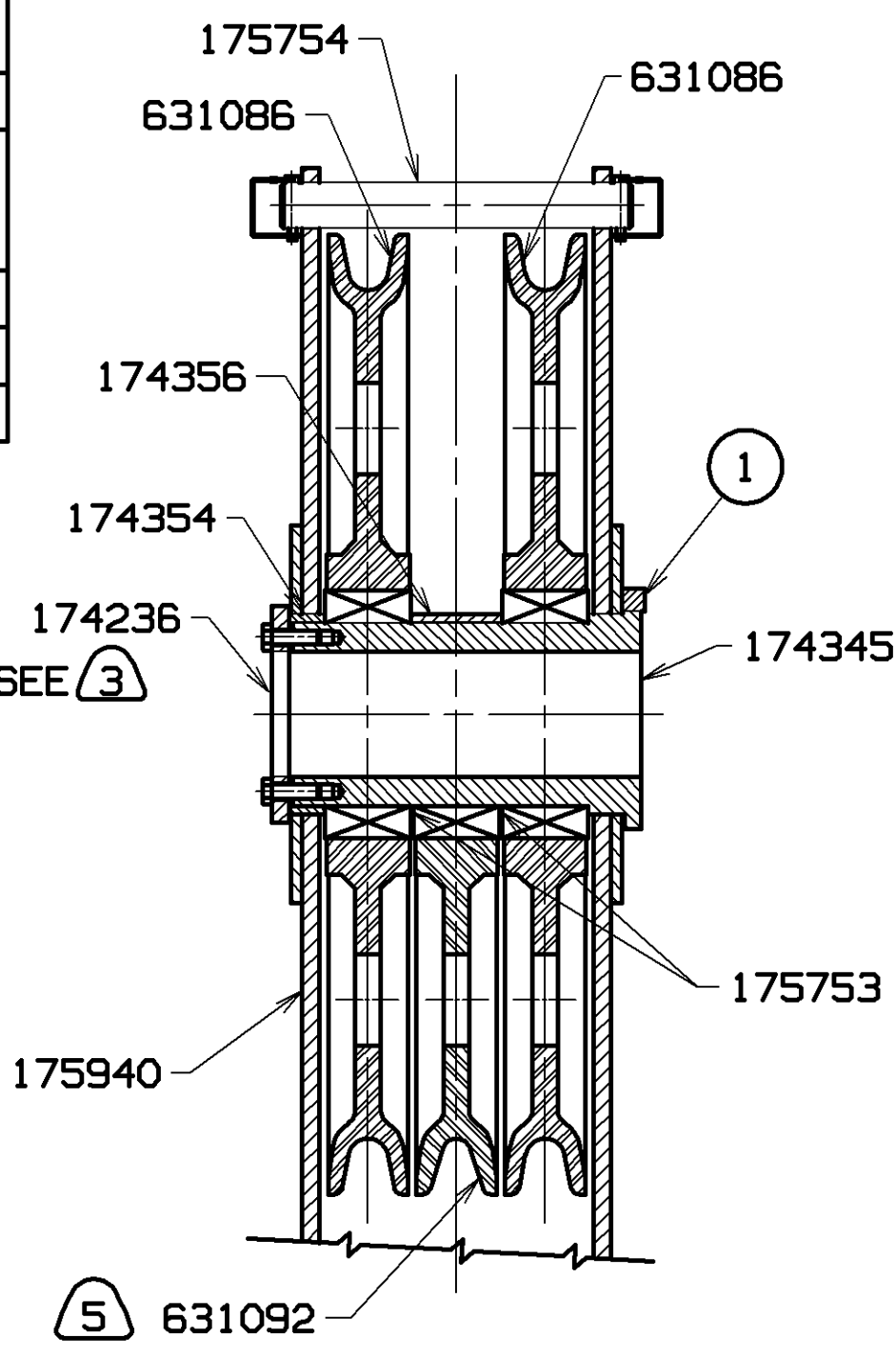
DWG. NO.	173459	174969-3	175940	175003	173352	173353	173355	81033574	173404	173675	173677	174916	174917	144401	175197	175202
BOOM LENGTH	25 FT 7.62 M INSERT	50 FT 15.24 M #75A INSERT	50 FT 15.24 M TOP	337.58' 8.37 M BASIC STRAP	25 FT 7.62 M STRAP	50 FT 15.24 M STRAP	15.00 .38 M LINK	19.00 .48 M LINK	PIN	COLLAR	PIN	TIMBER	TIMBER	PIN	STRAP BRACKET ASSEMBLY	STRAP BRACKET ASSEMBLY
303 FT-92.35 M BASIC	0	0	1	2	2	0	0	4	4	8	8	0	2	2	4	0
328 FT-99.97 M	1	0	1	2	4	0	4	4	8	12	12	1	2	2	8	0
353 FT-107.59 M	0	1	1	2	2	2	4	4	8	12	12	2	2	2	8	2



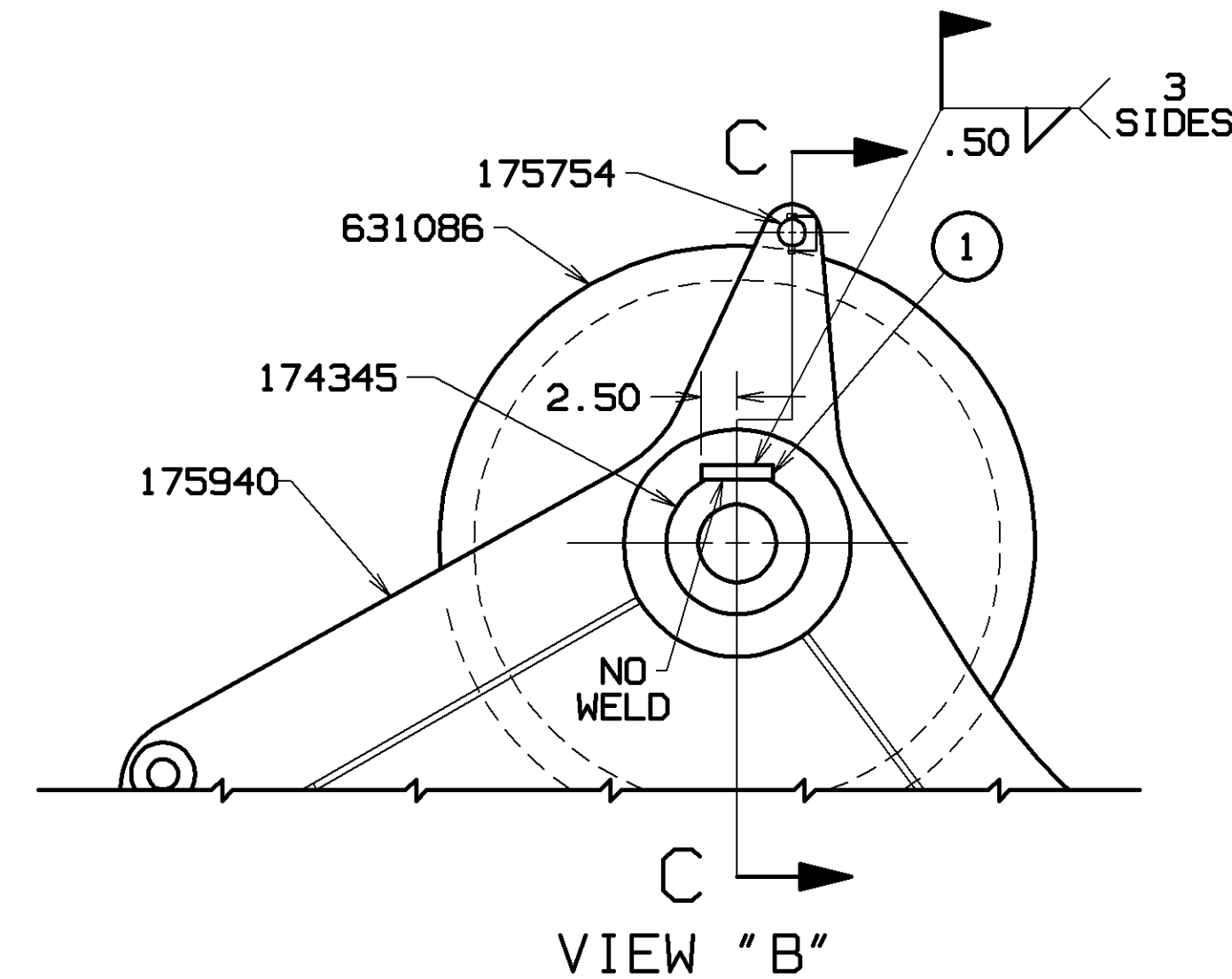
BOOM HOIST REEVEING DIAGRAM FOR 32 PART LINE
9,000 FT (2,743.2 M) OF 1.00 FLEX-X 626 (113,800 LBS. BREAKING STRENGTH)
MEC CODE NO. 719369 SEE (2) OR
ALTERNATE WIRE ROPE
9,000 FT (2,743.2 M) OF 1.00 CONSTRUCTEX, (125,000 LBS. BREAKING STRENGTH)
MEC CODE NO. 719394 SEE (2)



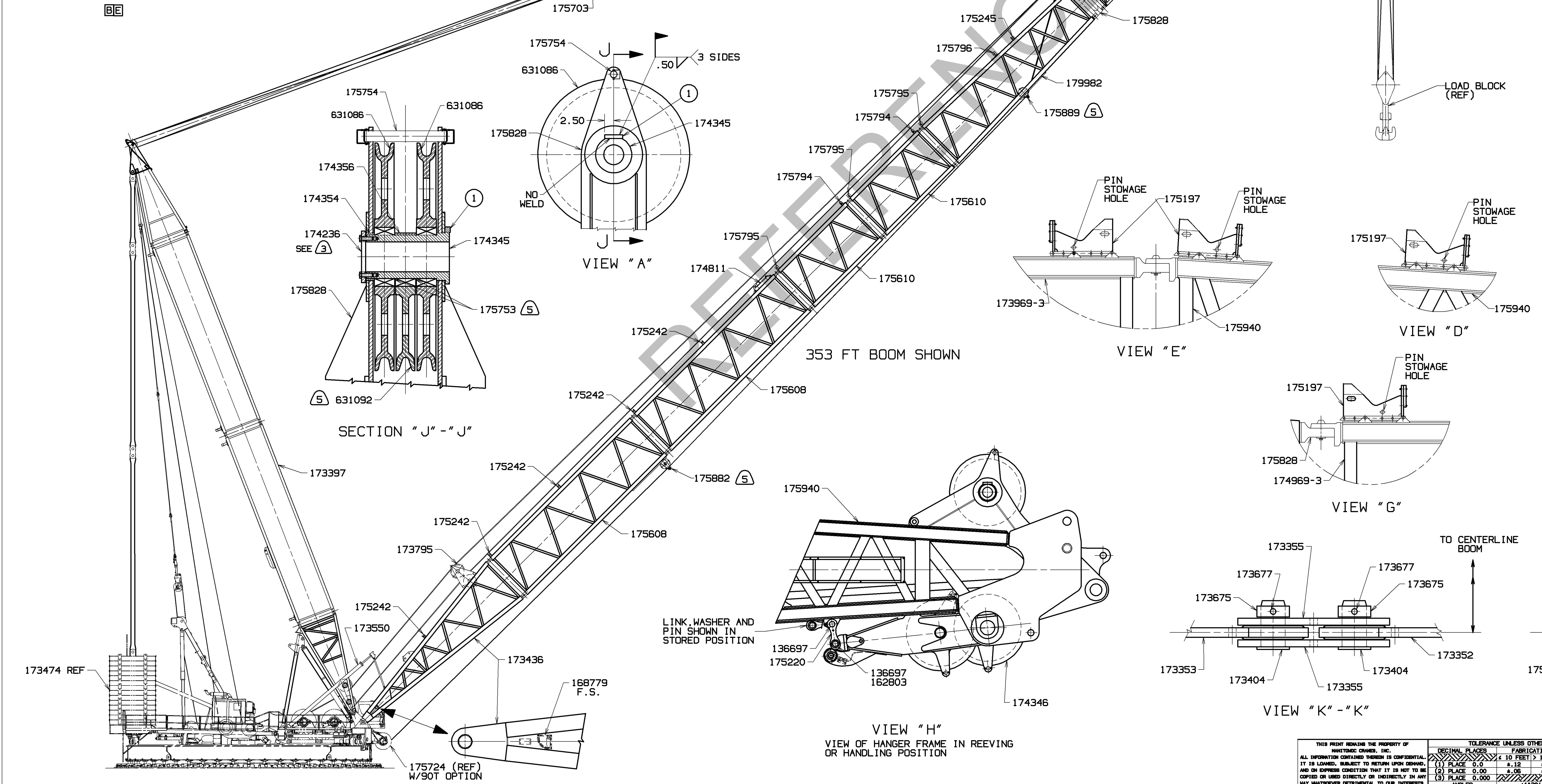
VIEW "M" - "M"



SECTION "C" - "C"



VIEW "B"



DO NOT SCALE THIS DRAWING

BILL OF MATERIAL				ASSEMBLED USED IN	
QTY	ITEM NO.	DESCRIPTION	UNIT	MATERIAL	QTY
#72A BOOM AND BASIC PARTS					
1	2	1.00 X 1.00	5.00	CF 1018	
2	BOOM SIGN		22656		
4	PIN		136697		
4	WASHER		162803		
1	BOOM ANGLE INDICATOR ASSEMBLY		168779		
1	#75 MAST ASSEMBLY		173397		
1	50 FT (15.24 M) TRANSITION		179982		
1	50 FT (15.24 M) BUTT #72 BOOM		173436		
1	BOOM STOP ASSEMBLY FOR #72 BOOM		173550		
1	WIRE ROPE GUIDE ASSEMBLY #72 BOOM		173795		
2	END PLATE		174236		
1	EQUALIZER ASSEMBLY		174257		
2	SLEEVE		174345		
1	LOWER BM POINT HANGER FRAME ASSY.		174346		
2	SPACER		174354		
2	SPACER		174356		
1	EQUALIZER PLATFORM ASSEMBLY		174811		
4	LINK		175220		
5	TIMBER GUARD ASSEMBLY		175242		
1	TIMBER GUARD ASSEMBLY		175245		
2	50 FT (15.24 M) INSERT #72A BOOM		175608		
2	25 FT (7.62 M) INSERT #72A BOOM		175610		
12	LINK-15.00 (.38 M)		175701		
8	25 FT (7.62 M) BOOM SUPPORT STRAP		175702		
4	LINK-15.00 (.38 M)		175703		
16	PIN		175713		
16	COLLAR		175714		
16	PIN		175715		
4	PIN		175730		
2	ROPE GUARD		175754		
2	STRAP BRACKET ASSEMBLY		175794		
3	STRAP BRACKET & TIMBER GUARD ASSEM.		175795		
1	STRAP BRACKET ASSEMBLY		175796		
1	STRAP BRACKET ASSEMBLY		175797		
1	#72A TO #75A BOOM ADAPTER FRAME		175828		
2	LINK		175936		
4	SHEAVE 42.00 DIA, 1.62 ROPE - STEEL		631086		

OPTIONAL - 90T UPPER POINT WITH 1.125 WIRE ROPE

1	BOOM POINT ASSEMBLY-UPPER	175731
4	SPACER	175753
1	WIRE ROPE GUIDE ASSEMBLY	175882
1	WIRE ROPE GUIDE ASSEMBLY	175889
2	SHEAVE 42.00 DIA, 1.12 ROPE - STEEL	631092

- (1) 900 U.S. TON
- (2) 1.00 WIRE ROPE FOR USE WITH OPTIONAL LAGGING #502369 (REF. DRUM SHAFT ASSEMBLY) NEITHER 25 mm NOR 26 mm METRIC ROPE WILL SPOOL CORRECTLY FOR THIS LAGGING AND SHOULD NOT BE CONSIDERED AS ALTERNATE ROPES.
- (3) BOLT TORQUE: (WITH LOCTITE #271) APPLY TO THDS, LOCTITE #271 (MEC CODE NO. 622292) CAPSCREWS W/END PLATE 174236 TORQUE TO 115 FT. LBS.
- (4) NEVER-SEEZ: APPLY NEVER-SEEZ OR EQUIVALENT TO THE FOLLOWING: ALL SLEEVE I.D.
- (5) SEE OPTIONAL 90T UPPER POINT BILL OF MATERIAL

A BOOM TOP 174000 WITH MODIFICATION 421204 MAY BE SUBSTITUTED FOR BOOM TOP 175940.

TOLERANCE UNLESS OTHERWISE SPECIFIED			
DECIMAL PLACES	FRACTIONS	TO CENTERLINE	BOOM
(1) PLACE 0.0	±.12	±.18	±.05
(2) PLACE 0.00	±.06	±.12	±.015
(3) PLACE 0.000	±.006	±.012	±.006
ANGLES	±1°	±30'	±30'

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DR. KO	Maritowoc, Wisconsin	#72A/75A BOOM	
DR. KO	MODEL M-1200R	#75 MAST	
APP R/JN			

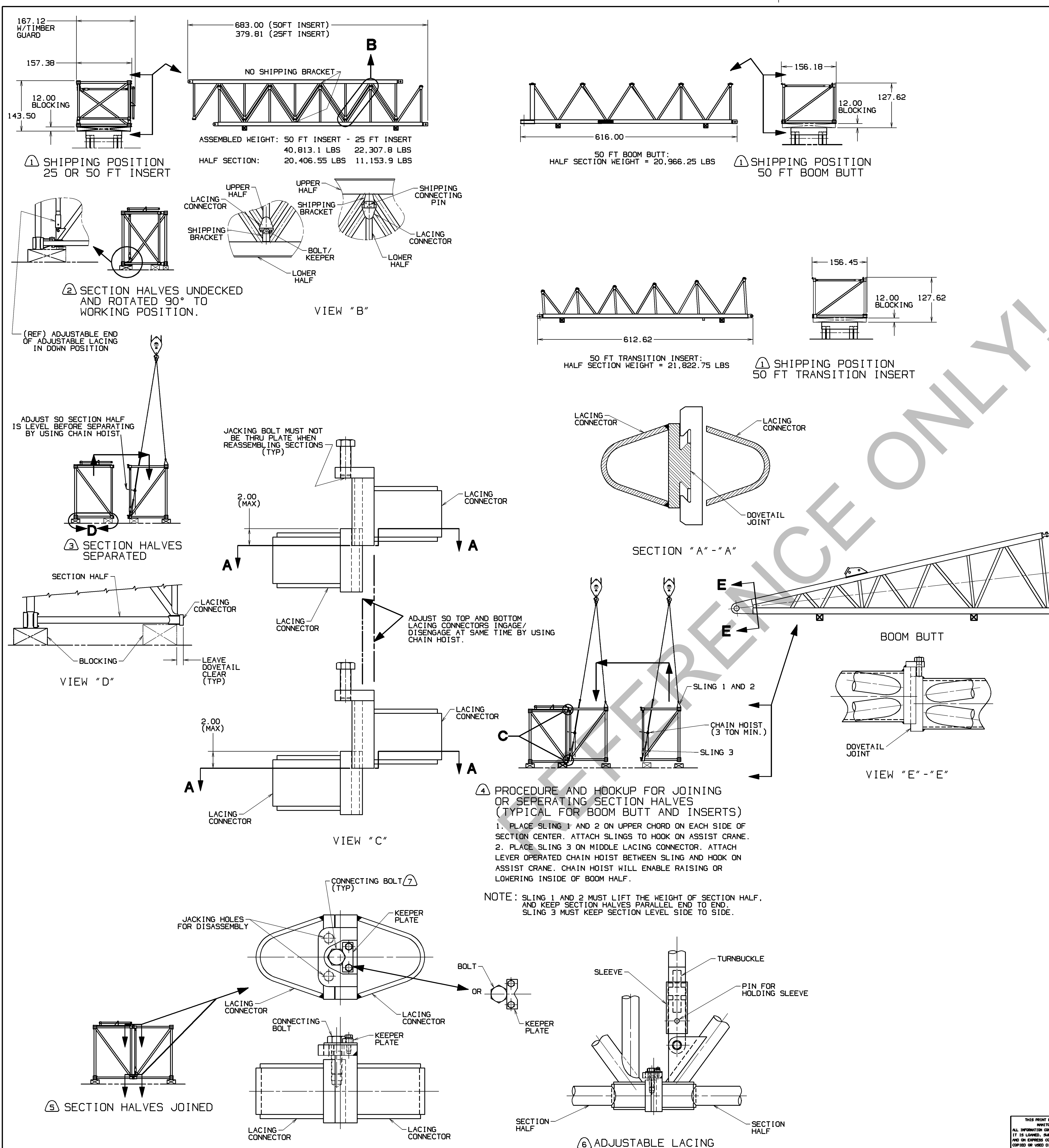
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 6829103794 FOR COMPONENTS LISTED IN 682900-06-1026

DATE 6-3-94

PATTERN NO.

175956

SHT 1 OF 2



GENERAL

ALL #72A BOOM SECTIONS ARE SHIPPED IN HALVES TO COMPLY WITH HEIGHT AND WIDTH SHIPPING RESTRICTIONS. THE 50 FT AND 25 FT SECTION HALVES ARE SHIPPED BOLTED TOGETHER. THE BOOM BUTT AND TRANSITION SECTION HALVES ARE SHIPPED SEPARATELY. EACH BOOM SECTION WAS CONSTRUCTED AS TWO MATCHED HALVES. STAMPED INTO THE CASTING AT THE FOUR LOWER CONNECTING LUGS OF EACH BOOM SECTION ARE THE BOOM NUMBER, THE PART NUMBER, AND A MANUFACTURING CODE. WHEN ASSEMBLING ANY BOOM SECTION, INCLUDING THE BOOM BUTT AND THE TRANSITION SECTION, MAKE SURE THESE NUMBERS MATCH. SEE DELTA (1) FOR WEIGHT AND SHIPPING DIMENSIONS.

CAUTION

HANDLE BOOM WITH CARE TO AVOID DAMAGING LACINGS AND CHORDS. USE NYLON SLINGS TO HANDLE BOOM SECTIONS. DO NOT USE HOOKS, CHAINS OR WIRE ROPE SLINGS. LIFT AGAINST CHORDS ONLY. NEVER AGAINST LACINGS. DO NOT ATTACH LIFTING SLINGS TO LACINGS OR AT A POINT WHERE TWO LACINGS COME TOGETHER, EXCEPT FOR 3 POINT HANDLING OF HALF SECTION. SEE DELTA (4).

DISASSEMBLING SECTION HALVES FROM SHIPPING POSITION (SECTION HALVES MUST BE IN DELTA (2) POSITION)

1. SECTION HALF MUST BE BLOCKED AS SHOWN IN VIEW "D".
2. ADJUST SO SECTION HALF IS LEVEL BEFORE SEPERATING. USE HOOKUP AS SHOWN IN DELTA (4).
3. REMOVE BOLTS AND KEEPERS FROM SHIPPING BRACKETS TO ALLOW SEPERATION OF TWO HALVES OF BOOM SECTION. (SEE VIEW "B" DELTA (1)).
4. DISENGAGE CONNECTING PIN FROM HOLE IN SHIPPING BRACKETS BY LIFTING UPPER HALF SLIGHTLY. ADJUST CHAIN HOIST TO LEVEL SECTION SO PINS DO NOT BIND UP. LIFT SECTION OFF PINS AND THEN SWING AWAY. (SEE DELTA (3)).

ASSEMBLING BOOM SECTIONS

(THE FOLLOWING PROCEDURES APPLY TO ALL BOOM SECTIONS INCLUDING THE BUTT AND THE TRANSITION INSERT)

1. SECTION HALF MUST BE BLOCKED AS SHOWN IN VIEW "D".
2. CHECK THAT ALL MATING SURFACES ON DOVETAIL LACING CONNECTORS ARE CLEAN AND DRY. CLEAN AS NECESSARY. (REF. SECTION "A" - "A".
- NOTE: SURFACES ON DOVETAIL LACING CONNECTORS ARE PLATED, DO NOT COAT THESE SURFACES WITH "NEVER-SEEZ".
3. USE HOOKUP AS SHOWN IN DELTA (4). PLACE EACH HALF OF BOOM IN APPROXIMATE POSITION FOR ASSEMBLY WITH SECTION HALVES LEVEL, SIDE TO SIDE AND FRONT TO BACK. BLOCK AS NECESSARY TO ASSURE HALVES REMAIN LEVEL. ALL LACING CONNECTORS OF SECTION HALVES MUST BE IN INITIAL POSITION AT THE SAME TIME (AS SHOWN IN VIEW "C") BEFORE LOWERING.
4. LOWER SECTION HALVES. THEN HAND-TIGHTEN BOLT TO HOLD LACING CONNECTORS TOGETHER. SEE DELTA (5).
5. TORQUE ALL LOWER CONNECTING BOLTS TO 600 FT-LBS. (813 N m) THEN TORQUE ALL UPPER BOLTS TO 600 FT-LBS. (813 N m)

CAUTION: TORQUING LOWER BOLTS BEFORE UPPER BOLTS IS REQUIRED TO PREVENT COMPRESSION OF THE ADJUSTING LACING. ADJUSTABLE LACING WAS TORQUED TO CORRECT TENSION AT FACTORY AND SHOULD NOT NEED TO BE RETORQUED WHEN BOOM IS ASSEMBLED.

6. INSTALL KEEPER PLATE TO HOLD BOLT IN PLACE. TORQUE BOLT HEAD AS NEEDED SO HEAD FITS KEEPERS NOTCHED OR FLAT SIDE. SEE DELTA (5).

RESETTING ADJUSTABLE LACING TENSION

(NOTE: ADJUSTABLE LACING IS TORQUED SO LACING IS ALWAYS IN TENSION.)

IF BOOM LACING CONNECTORS LOOSEN OVER TIME DUE TO WEAR OR OTHER CAUSES, CHECK THE TORQUE OF THE TURNBUCKLE NUT ON THE ADJUSTABLE LACING.

1. REMOVE PIN HOLDING SLEEVE IN PLACE AND SLIDE SLEEVE UP AND OUT OF THE WAY. (SEE DELTA (6)).
2. CLEAN AND LUBE THREADS FOR ADJUSTABLE LACING AS NEEDED.
3. USING OPEN END TORQUE WRENCH, TORQUE NUT ON TURNBUCKLE TO 250 FT-LBS TENSION. (365 N m)
4. SLIDE SLEEVE BACK INTO PLACE AND INSERT PIN.

DISASSEMBLY BOOM SECTIONS FOR SHIPPING

(THE FOLLOWING PROCEDURES APPLY TO ALL BOOM SECTIONS INCLUDING THE BUTT AND THE TRANSITION INSERT)

1. SECTION HALF MUST BE BLOCKED AS SHOWN IN VIEW "D".
2. USE HOOKUP AS SHOWN IN DELTA (4). ADJUST SECTION HALF IN APPROXIMATE POSITION FOR DISASSEMBLY WITH SECTION HALVES LEVEL, SIDE TO SIDE AND FRONT TO BACK.
3. REMOVE BOLTS AND KEEPER PLATES FROM LACING CONNECTORS. SEE DELTA (5).
4. PLACE TWO CONNECTING BOLTS INTO JACKING HOLES PROVIDED TO UNLOCK DOVETAIL CONNECTIONS. SEE DELTA (5). FOR BUTT SECTION THE LARGE DOVETAIL MUST BE SEPERATED FIRST. AFTER ALL OTHER DOVETAIL JOINTS HAVE BEEN SEPERATED, FULLY ENGAGE CONNECTING BOLTS IN LARGE DOVETAIL JOINT TO PREVENT BINDING. (SEE VIEW "E" - "E" DELTA (4)).
- LIFT UPPER HALF SLIGHTLY AND ADJUST CHAIN HOIST TO LEVEL SECTION SO JOINTS DO NOT BIND. (SEE VIEW "C")
- LIFT SECTION TO DISENGAGE, THEN REMOVE HALF OR MOVE TO SHIPPING POSITION.

ASSEMBLING SECTION HALVES FOR SHIPPING

(APPLIES TO 25 AND 50 FT INSERTS)

1. SECTION HALF MUST BE BLOCKED AS SHOWN IN VIEW "D".
2. ADJUST SO SECTION HALF IS LEVEL WITH EACH OTHER. USE HOOKUP AS SHOWN IN DELTA (4).
3. SWING SECTION HALVES TOGETHER AS SHOWN IN DELTA (3). LOWER SECTION HALF INTO SHIPPING CONNECTOR PINS AND SECURE WITH BOLTS AND KEEPERS. SEE VIEW "B" DELTA (1).
4. TURN COMPLETED INSERT 90° INTO SHIPPING POSITION. SEE DELTA (1).

7 REF. 1.25-7UNC-2A X 3.50 LG. CAPSCREW - MANITOWOC CODE NO. 612928

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