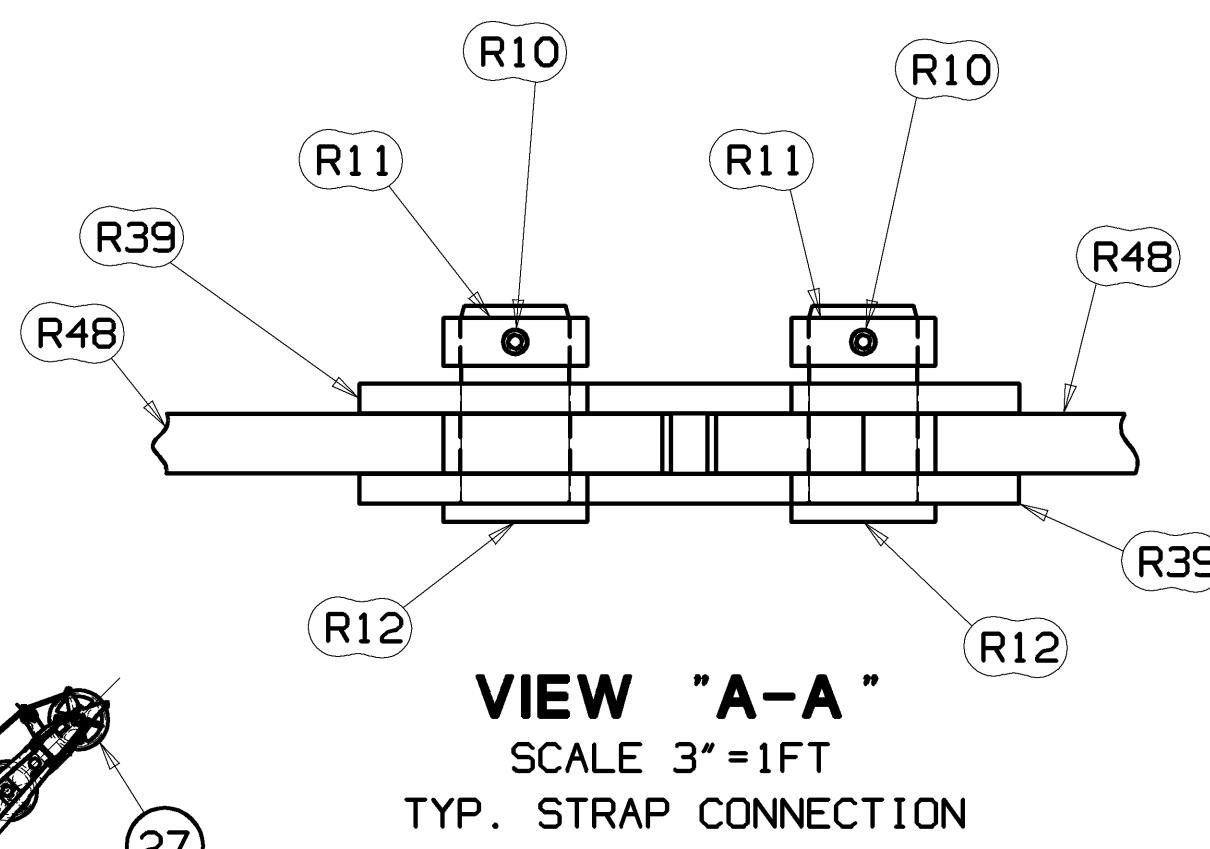
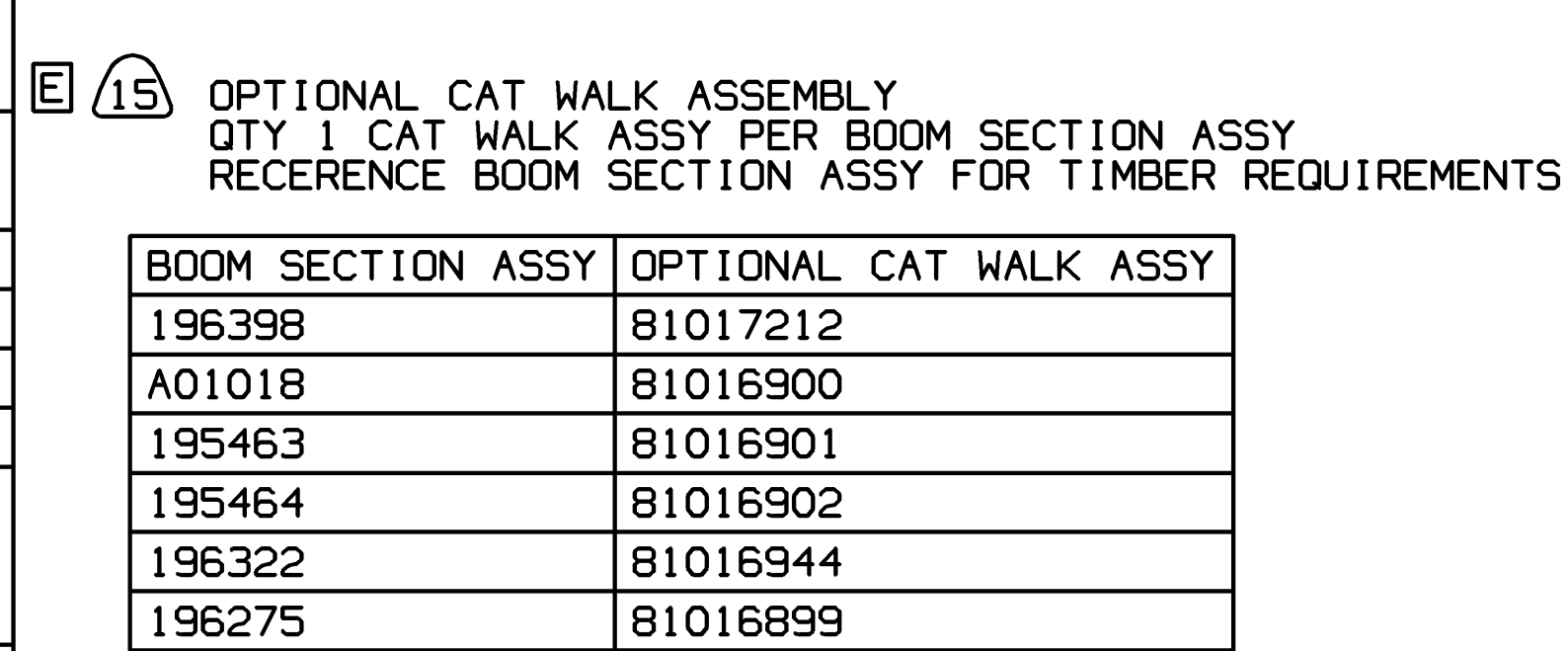


A



VIEW SHOWN WHEN
AUXILIARY DRUM IS USED



8984-1400 LONG REACH TOP ASSEMBLY			
26	1	BOOM TOP ASSEMBLY	196275
R10	2	PIN	179959
R11	2	COLLAR	179862
R12	2	PIN	179863
R40	2	PIN	78292
R54	2	BOOM SIGN	22656
R55	1	LOWER BOOM POINT SHAFT ASSEMBLY	196268
R56	2	SOCKET/WEDGE ASSEMBLY	646246
R57	1	WIRE ROPE GUIDE ASSEMBLY	196204
R58	2	STRAP, BASIC	196276
R42	2	BOOM JOINT PIN	170362
R60	2	PIN	143490
R61	1	BOOM TOP #82LR	196055
R62	1	TIMBER	196312

- ① SEE CHART FOR NO. REQ'D.
- ② ALL JIB ATTACHING HARDWARE (ADAPTERS, SPACERS, SHAFT AND PINS) MUST BE REMOVED FOR BOOM LENGTHS 310 FT. (94.5M) THRU 340 FT. (103.6M).
- ③ WHEN AUXILIARY ROPE SHAFT ASSEMBLY (ITEM 28), IS USED, THE WIRE ROPE GUIDE ASSEMBLY (ITEM 29) AND 10 FT (3.05M), INSERT ASSEMBLY (ITEM 12) ARE REQUIRED. THE 10 FT. (3.05M) INSERT ASSEMBLY (ITEM 12) MUST BE ADJACENT TO THE BOOM BUTT AT ALL TIMES.
- ④ MAXIMUM NO. OF 10 FT (3.05 M) INSERT ASSEMBLIES = 2.
- ⑤ MAXIMUM NO. OF 20 FT (6.10 M) INSERT ASSEMBLIES = 2.
- ⑥ COMBINATION OF 10 FT (3.05 M) AND 20 FT (6.10 M) INSERT ASSEMBLIES CANNOT EXCEED 2 - 10 FT (3.05 M) PLUS 1 - 20 FT (6.10 M) OR 1 - 10 FT (3.05 M) PLUS 2 - 20 FT (6.10 M).
- ⑦ SEE ①, ④ AND ⑥.
- ⑧ SEE ①, ⑤ AND ⑥.
- ⑨ STARTING WITH BOOM BUTT ASSEMBLY, INSERT ASSEMBLIES MUST BE INSTALLED IN ASCENDING LENGTH.
- ⑩ STRAPS ATTACHED TO MAST TOP LINKS ARE CALLED FOR ON BOOM BUTT ASSEM. (ITEM 11)
- ⑪ 40 FT. (12.19M) #82LR INSERT ASSEMBLY (ITEM 15) IS REQUIRED AND MUST ONLY BE USED WITH BOOM LENGTHS 310 FT. (94.5M) THRU 340 FT. (103.6M) AND MUST BE LOCATED ADJACENT TO BOOM TOP INTERMEDIATE SUSPENSION IS ALWAYS LOCATED 130 FT. (39.6M) FROM BOOM POINT. SEE VIEW "B" - "B".

8984-2010 BOOM BUTT ASSEMBLY		
R1	1 BOOM BUTT ASSEMBLY	196398
R2	1 BOOM ANGLE INDICATOR	168779
R3	1 TIMBER	176831
R4	1 WIRE ROPE GUIDE ASSEMBLY	196383
R5	1 BOOM BUTT	195453
R6	1 BOOM STOP ASSEMBLY	195467
R7	6 CLAMP	345678
R8	4 SCREW CAP .50-13UNC X 5.50 LG	612583
R9		
R10	8 PIN	179959
R11	8 COLLAR	179862
R12	6 PIN	179863
R13		
R14	2 PIN	196066
R15	2 COLLAR	196067
R16	2 PIN	196068
R17	2 PIN	196069
R18	4 LINK	196384
R19	2 STRAP	196385
R20	2 STRAP	196386
R21	4 LINK	196387
R22	4 LINK	196388
R23	1 SUPPORT R.H.	196389
R24	1 SUPPORT L.H.	196390
R25	6 PIN	196392
R26	4 PIN	196399
R27	4 LINK	196505
R28	1 PLATFORM	196580
R29	6 NUT HEX .50-13UNC	546056
R30	1 WASHER FLAT .50	709460
R31	2 NUT ELAS. STOP .75-10UNC	548346
R32	8 PIN-SNAP	563823
R33	1 SCREW CAP .50-13UNC X 2.00 LG	612561
R34	2 SCREW CAP .75-10UNC X 5.50 LG	612741
R35	8 WASHER SAE FLAT .50	709702
R36	1 WASHER LOCK .50	710306
R37	6 SNAP PIN	563823

8984-1010 10 FT (3.05M) INSERT ASSEMBLY			QWG. NO.
12	10 FT INSERT ASSEMBLY	A01018715	196100
R10	4PIN	179959	SHT 1 OF 5
R11	4COLLAR	179862	
R12	4PIN, STRAP	179863	
R38	2STRAP	192293	
R39	4STRAP LINK	195984	
R40	4PIN	78292	
R41	110 FT INSERT FOR #82 BOOM	A0101916	
R42	2BOOM JOINT PIN	170362	

B984-2030 20 FT (6.10M) INSERT ASSEMBLY		
R13	20 FT INSERT ASSEMBLY	195463815
R10	4PIN	179959
R11	4COLLAR	179862
R12	4PIN. STRAP	179863
R39	4STRAP LINK	195984
R40	8PIN	78292
R44	2STRAP	192294
R45	1TIMBER 44.25IN X 3.5IN X 2.5IN	81017123
R46	120 FT INSERT FOR #82 BOOM	195455
R42	2BOOM JOINT PIN	170362

1984-2040 40 FT (12.19M) INSERT ASSEMBLY		
14	40 FT INSERT ASSEMBLY	195464
R10	4PIN	179959
R11	4COLLAR	179862
R12	4PIN, STRAP	179863
R39	4STRAP LINK	195984
R40	4PIN	78292
R45	2TIMBER 44.25IN X 3.5IN X 2.5IN	8101723
R48	2STRAP	195460
R49	140 FT INSERT FOR #82 BOOM	195456
R42	2BOOM JOINT PIN	170362

12 JIB CANNOT BE USED WITH THIS ASSEMBLY. UPPER BOOM POINT (ITEM 27) IS REQUIRED FOR BASIC RATING (9 PART LINE). UPPER BOOM POINT (ITEM 27) MUST BE REMOVED FOR 340 FT. (103.6M) BOOM.

(13) SEE DWG. 196289.

(14) 40 FT. (12.19M) INSERT ASSEMBLY WITH BACKSTAY LUG (195465) MAY BE USED IN PLACE OF 40 FT. (12.19M) INSERT ASSEMBLY (ITEM 14).

Ⓡ 16 A01019 MAY BE REPLACED BY 81019327.

SUPERSEDES 196100 SHT 1 OF 5 OF 5-31-01

PRIVATE LABELING
REQUIREMENT TO
CONFORM TO
ENGINEERING
SPECIFICATION
6829103794 FOR
COMPONENTS LISTED
IN G05500-05-035

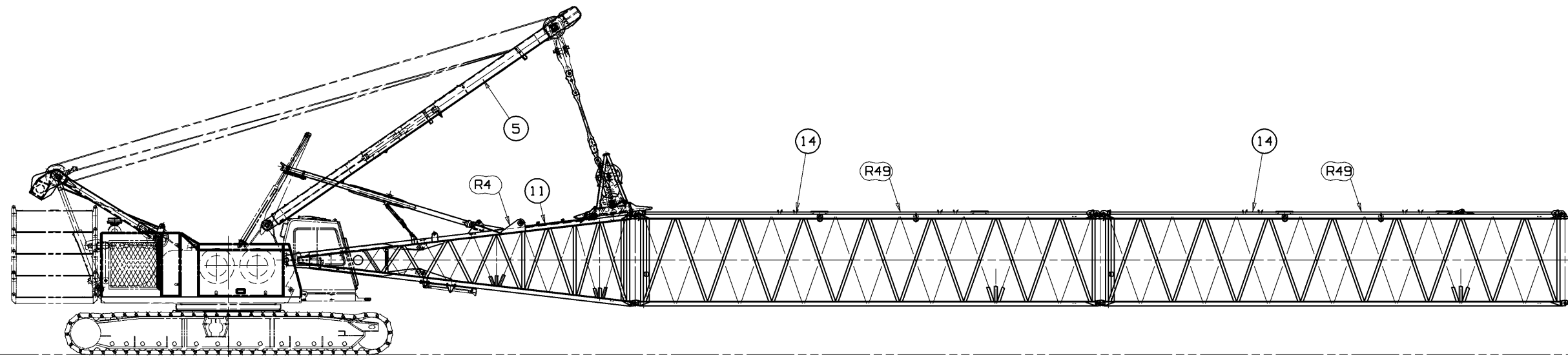
DATE
8-20-01

PATTERN NO.

DWG. NO.
1 0 0 1 0 0

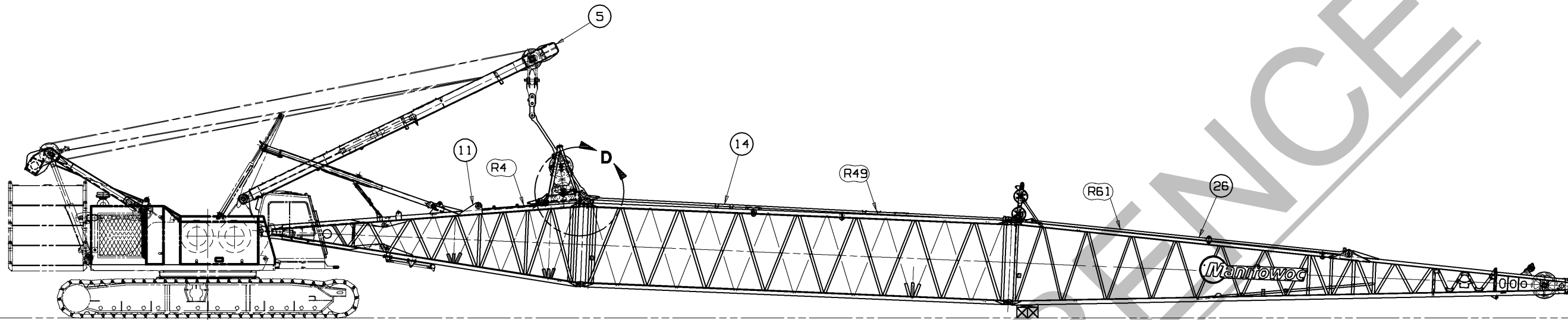
196100

SHT 1 OF 5

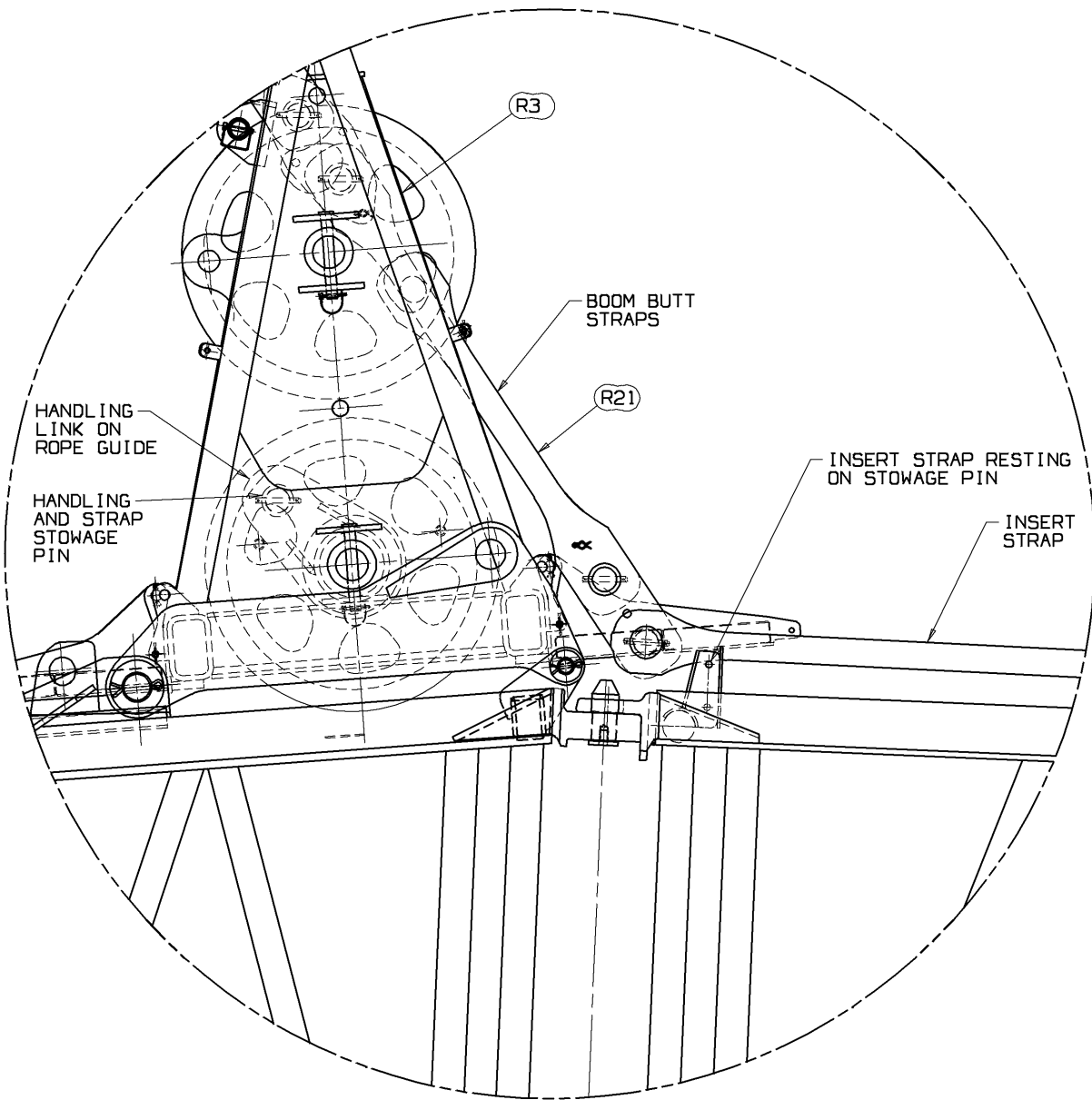


BOOM HANDLING WITH MAST

BOOM HANDLING WITH MAST WITH MAST STRAPS PINNED TO ROPE GUIDE LINKS: MAXIMUM BOOM THAT CAN BE CANTILEVERED IS AS FOLLOWS:			
LENGTH	10 FT. (3.05 M) INSERT	20 FT. (6.10 M) INSERT	40 FT. (12.2 M) INSERT
40 FT. (12.2 M)	2	1	0
50 FT. (15.2 M)	1	2	0
60 FT. (18.3 M)	2	0	1
60 FT. (18.3 M)	0	1	1
80 FT. (24.4 M)	0	0	2

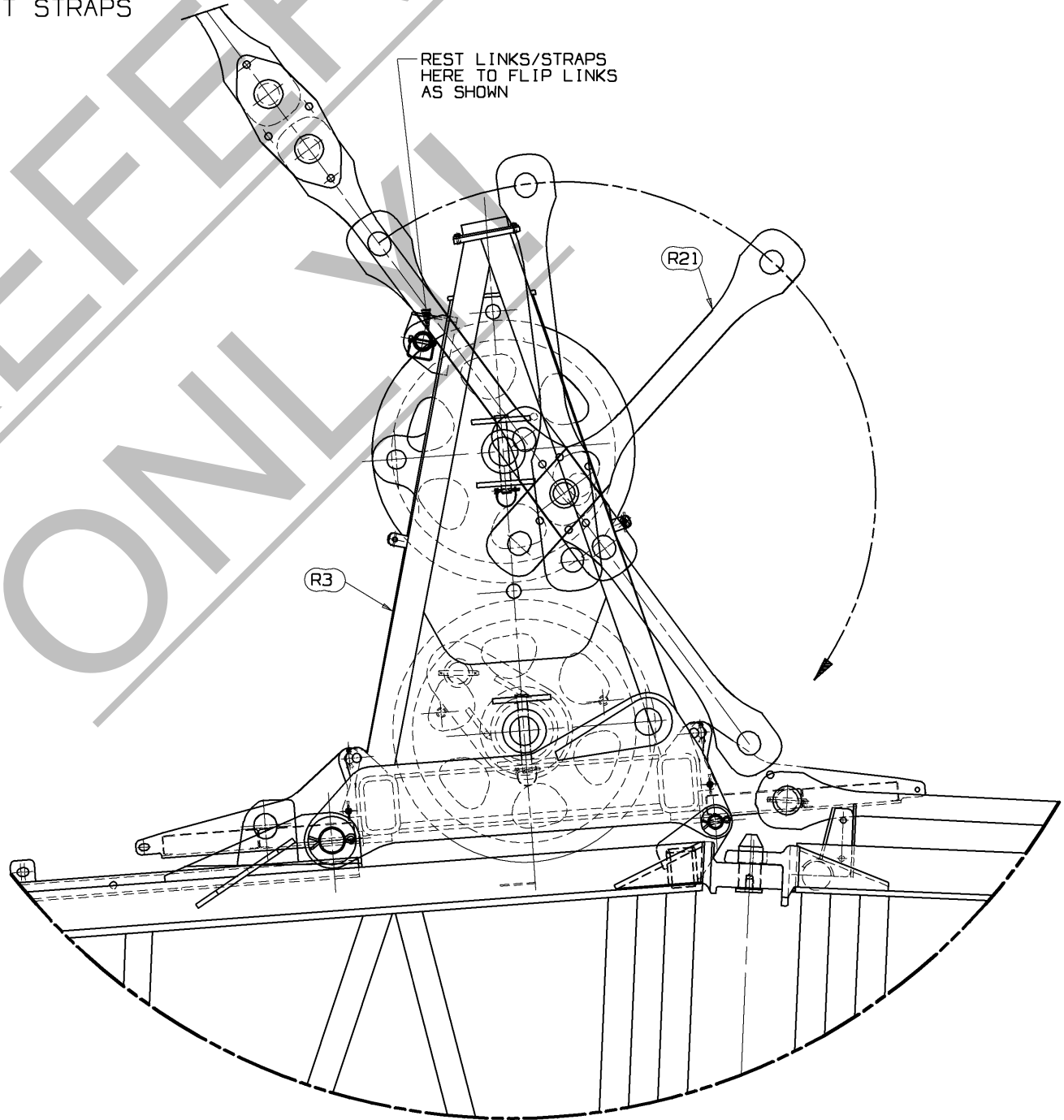


ATTACH OR DISCONNECT
BOOM BUTT STRAPS
FROM INSERT STRAPS



VIEW "D"

TYP FOR 120 FT (36.6M)
THRU 300 FT (91.4M) BOOM LENGTHS.



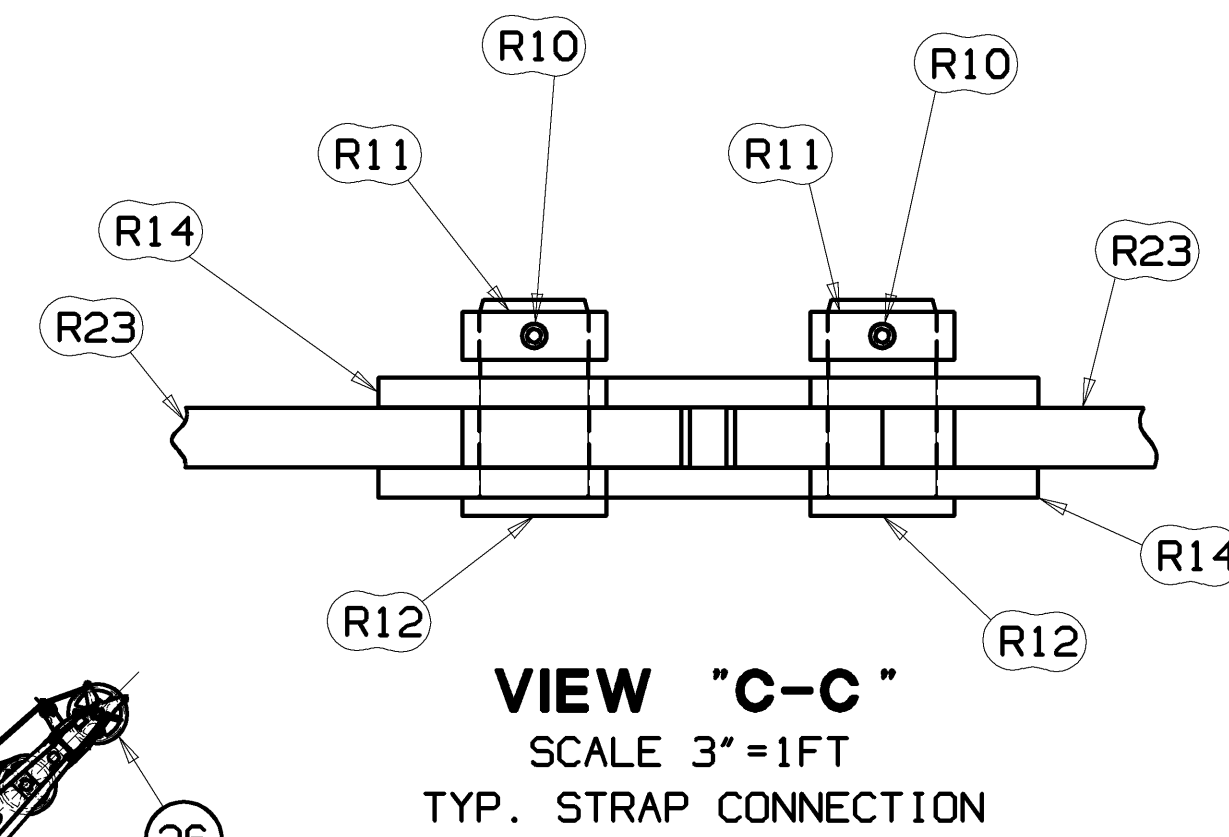
VIEW "D"

TYP FOR 310 FT (94.5M)
THRU 340 FT (103.6M) BOOM LENGTHS.

SUPERSEDES 196100 SHT 3 OF 5 OF 2-09-01

ITEM NO.		11	12	13	14	TABLE 1	TABLE 2
BOOM LENGTH		10 FT 3.05 M INSERT ASSEMBLY	20 FT 6.10 M INSERT ASSEMBLY	40 FT 12.19 M INSERT ASSEMBLY	40 FT 12.19 M #82 LR INSERT	STRAP POSITION	INTERMEDIATE SUSPENSION POSITION
FEET	METERS						
120	36.6	OR 2 0 0	1 2 0	0 0 1	0 0 0	A	O
130	39.6	OR 1 1 0	2 0 0	0 1 0	0 0 0	A	O
140	42.7	OR 2 0 0	0 1 1	1 1 0	0 0 0	A	O
150	45.7	1 2 0	1 1 0	1 1 0	0 0 0	A	O
160	48.8	OR 2 0 0	1 2 0	1 1 2	0 0 0	A	O
170	51.8	OR 1 1 0	2 0 0	1 2 0	0 0 0	A	O
180	54.9	OR 2 0 0	0 1 1	2 2 2	0 0 0	A	O
190	57.9	1 2 0	1 1 0	2 2 3	0 0 0	B	O
200	61.0	OR 2 0 0	1 2 0	2 2 3	0 0 0	B	O
210	64.0	OR 1 1 0	2 0 0	2 3 3	0 0 0	B	O
220	67.1	OR 2 0 0	0 1 1	3 3 3	0 0 0	B	O
230	70.1	1 2 0	1 2 0	3 3 4	0 0 0	B	O
240	73.2	OR 2 0 0	1 2 0	3 3 4	0 0 0	B	O
250	76.2	OR 1 1 0	2 0 0	3 4 4	0 0 0	B	O
260	79.2	OR 2 0 0	0 1 1	4 4 4	0 0 0	B	O
270	82.3	1 2 0	1 2 0	4 4 5	0 0 0	B	O
280	85.3	OR 2 0 0	1 2 0	4 4 5	0 0 0	B	O
290	88.4	OR 1 1 0	2 0 0	4 5 5	0 0 0	B	O
300	91.4	OR 2 0 0	0 1 1	5 5 5	0 0 0	B	O
310	94.5	1 2 0	1 2 0	4 4 5	1 1 1	C	D
320	97.5	OR 2 0 0	1 2 0	4 4 5	1 1 1	C	D
330	100.6	OR 1 1 0	2 0 0	4 5 5	1 1 1	C	E
340	103.6	OR 2 0 0	0 1 1	5 5 5	1 1 1	C	E

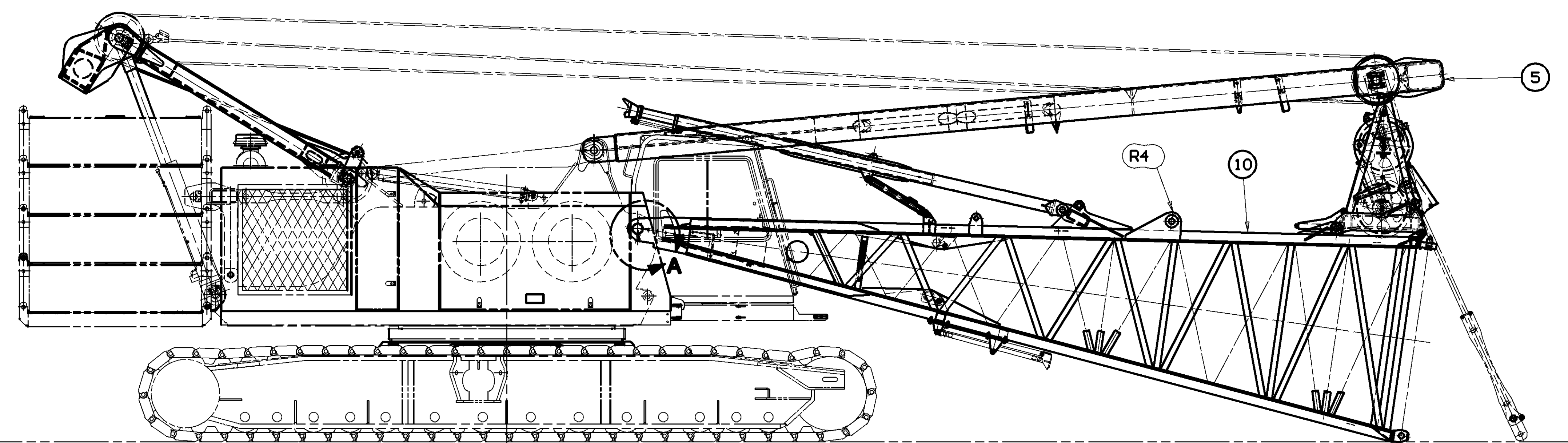
VIEW SHOWN WHEN
AUXILIARY DRUM IS USED



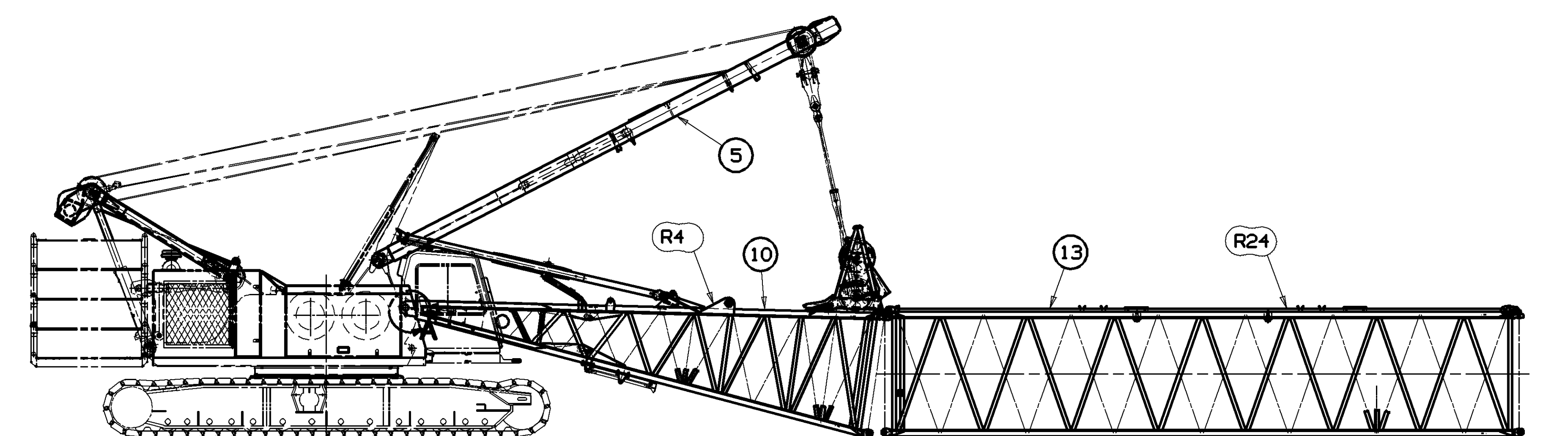
B	IS	OPTIONAL CAT WALK ASSEMBLY QTY 1 CAT WALK ASSY PER BOOM SECTION ASSY REFERENCE BOOM SECTION ASSY FOR TIMBER REQUIREMENTS

**NOTE:
THIS RIGGING AND STRAP
ARRANGEMENT IS USED ON
MACHINE S/N 9991001
THRU S/N 9991050.**

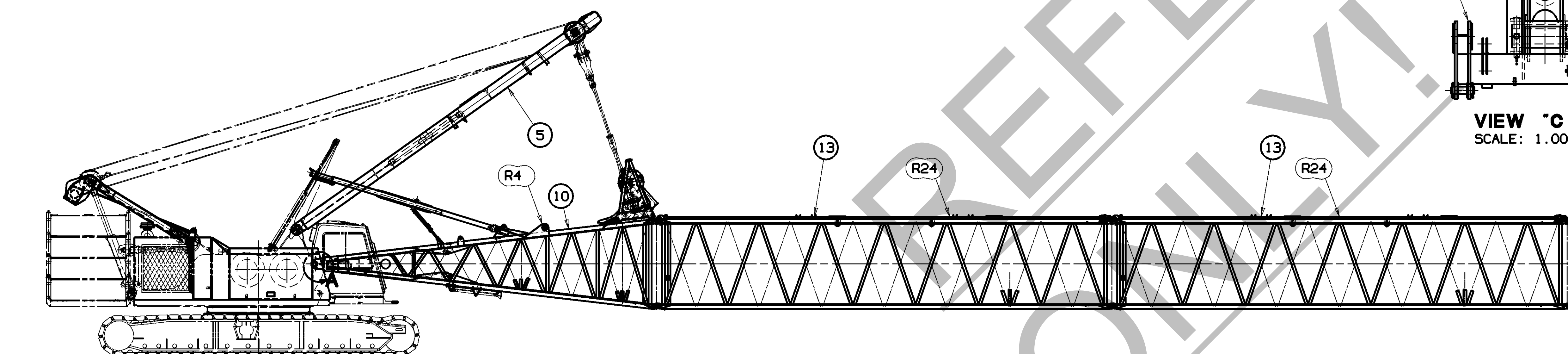
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 6829103794 FOR COMPONENTS LISTED IN GDS500-05-035
DATE 8-20-01
PATTERN NO.
ORG. NO. 196100



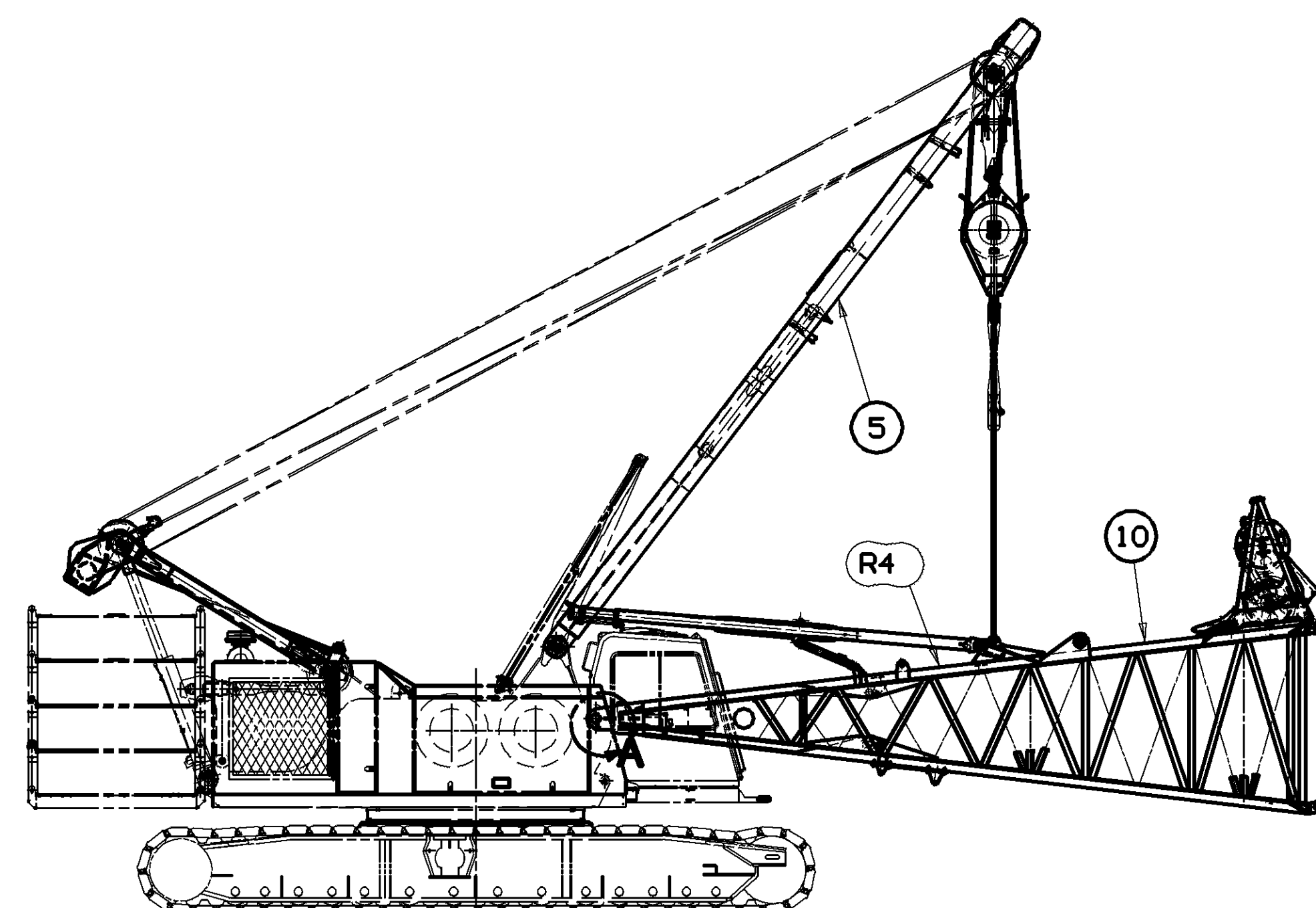
MAST RESTING ON BOOM BUTT WIRE ROPE GUIDE



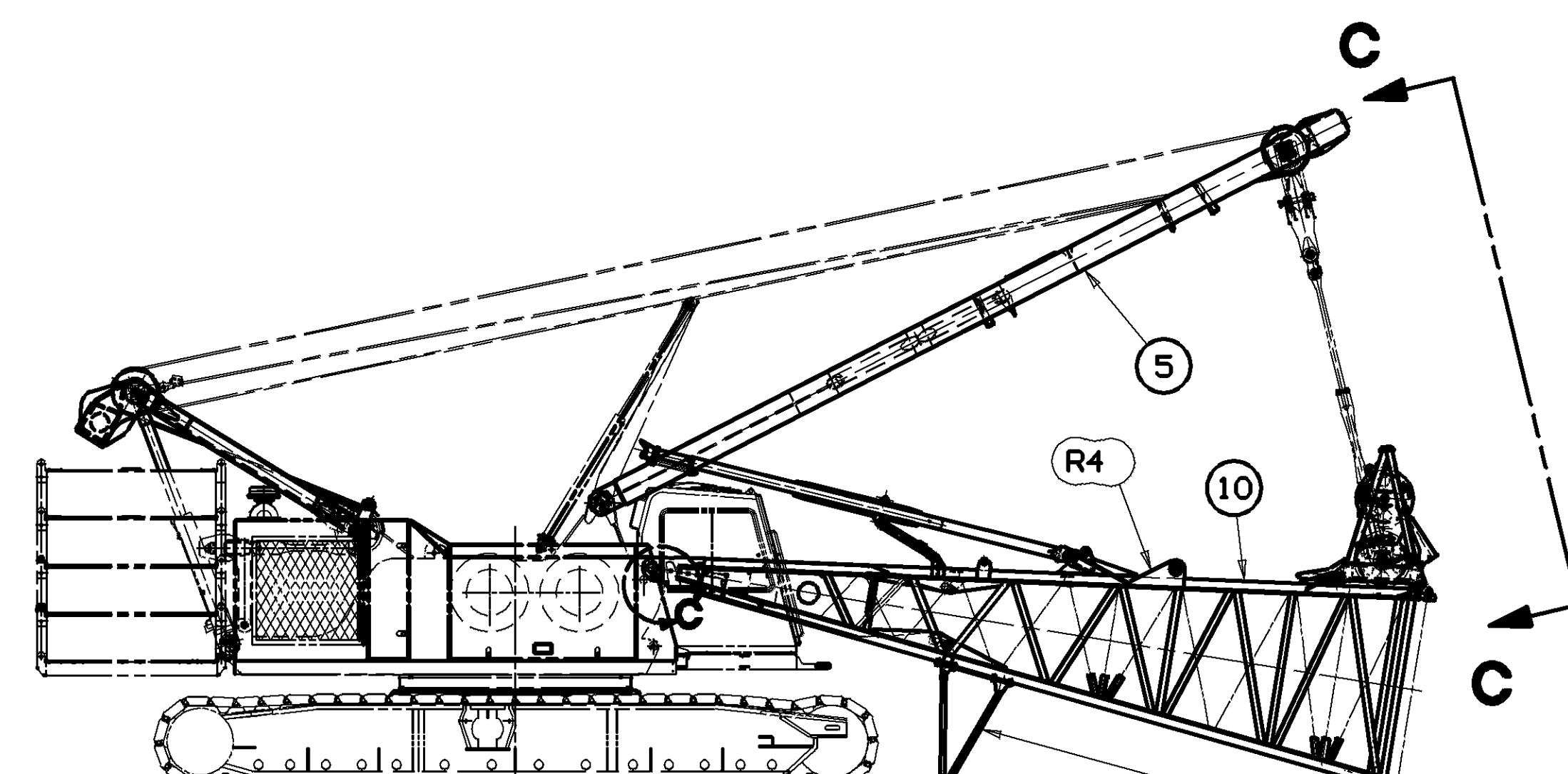
BOOM ASSEMBLY WITH MAST



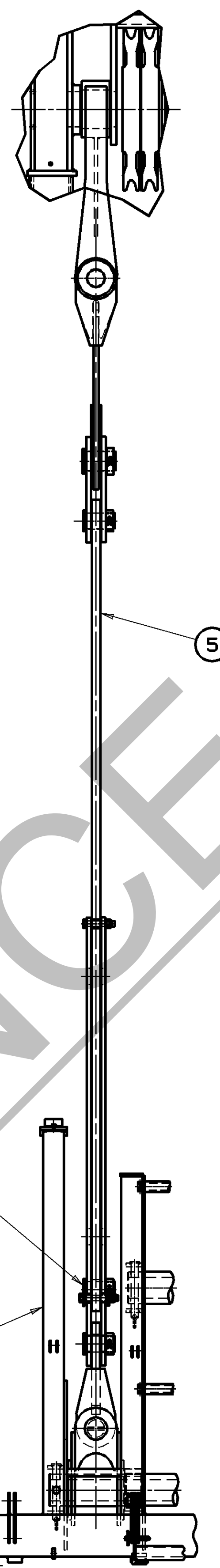
BOOM HANDLING WITH MAST



ATTACHING BOOM BUTT TO ROTATING BED USING AUXILIARY BLOCK IN MAST.



ATTACHING BOOM BUTT TO ROTATING BED USING OPTIONAL BUTT ATTACHING ASSEMBLY.



VIEW "C" - "C"
SCALE: 1.00 = 1 FT.

BOOM ASSEMBLY PROCEDURE

(MAST CAN BE USED TO ASSEMBLE ALL RIGGING COMPONENTS.)

1. ASSEMBLE BOOM COMPLETE, WITHOUT BUTT.
2. ATTACH ROPE GUIDES, STRAPS, LINKS AND PINS AS REQ'D.

WARNING:

MAST STRAPS MUST BE PINNED IN POSITION "A" FOR ALL BOOM HANDLING/ ASSEMBLY OPERATIONS OR DAMAGE TO WIRE ROPE GUIDE AND BOOM BUTT WILL OCCUR. SEE VIEW "A" AND "C" - "C".

3. USING THE MAST WITH AUXILIARY BLOCK OR THE OPTIONAL BOOM BUTT SUPPORT, INSTALL THE BOOM BUTT WITH ROPE GUIDE AND BOOM STOPS TO ROTATING BED. (BOOM STOPS MUST BE IN SHIPPING (LOWER) POSITION.)
4. BOOM DOWN AND ATTACH MAST STRAPS TO BOOM HANDLING LINK ON ROPE GUIDE. (SEE VIEW "C" - "C".)
5. BOOM UP TO CLEAR GROUND WITH BUTT.
6. POSITION MACHINE TO ALIGN UPPER PIN CONNECTOR PINS ON BOOM BUTT WITH UPPER PIN CONNECTOR HOLES IN FIRST BOOM INSERT AND ENGAGE PINS.
7. SLOWLY BOOM UP TO ALIGN LOWER PIN CONNECTOR HOLES IN BOOM BUTT WITH LOWER PIN CONNECTOR HOLES IN FIRST BOOM INSERT AND INSERT PINS.

WARNING:

DO NOT BOOM UP PAST LOWER CONNECTOR HOLES. IF BOOMING UP CONTINUES AFTER CONNECTORS BOTTOM OUT OR AFTER PINS ARE INSERTED, DAMAGE TO ROPE GUIDE AND BOOM BUTT WILL OCCUR.

8. BOOM DOWN TO DISCONNECT MAST STRAPS FROM ROPE GUIDE LINKS.
9. ATTACH BOOM STOP HANDLING PENDANTS TO BOOM STOP TUBES. RAISE AND PIN BOOM STOPS IN WORKING POSITION AND STOW HANDLING PENDANTS ON MAST.
10. ATTACH MAST STRAPS TO BOOM INSERT STRAPS.
11. PIN MAST STRAPS IN PROPER POSITION. SEE TABLE ON SHT 1 AND VIEW "A".
12. BOOM UP TO DESIRED BOOM ANGLE.

TO DISASSEMBLE BOOM

1. BOOM DOWN AND SUPPORT BOOM ON BLOCKING.
2. RETURN MAST STRAP PINS TO POSITION "A". SEE VIEW "C" - "C". DISCONNECT MAST STRAPS FROM BOOM INSERT STRAPS.

3. LOWER BOOM STOPS TO SHIPPING POSITION.

4. CONNECT MAST STRAPS TO HANDLING LINK ON ROPE GUIDE (SEE VIEW "C" - "C").

5. BOOM UP TO REMOVE SLACK FROM MAST STRAPS.

WARNING:

DO NOT BOOM UP TO PUT TENSION INTO MAST STRAPS. (REMOVE SLACK ONLY) TENSION IN MAST STRAPS WILL DAMAGE ROPE GUIDE AND BOOM BUTT.

6. REMOVE LOWER BUTT TO INSERT PINS AND BOOM DOWN TO DISENGAGE UPPER BOOM BUTT TO INSERT PINS.

WARNING:

BOOM MUST BE PROPERLY BLOCKED TO PREVENT SHIFTING DURING PIN REMOVAL.

7. SLOWLY BACK AWAY FROM BOOM.
8. REMOVE BOOM BUTT FROM ROTATING BED WITH MAST.
9. DISASSEMBLE BOOM WITH MAST.

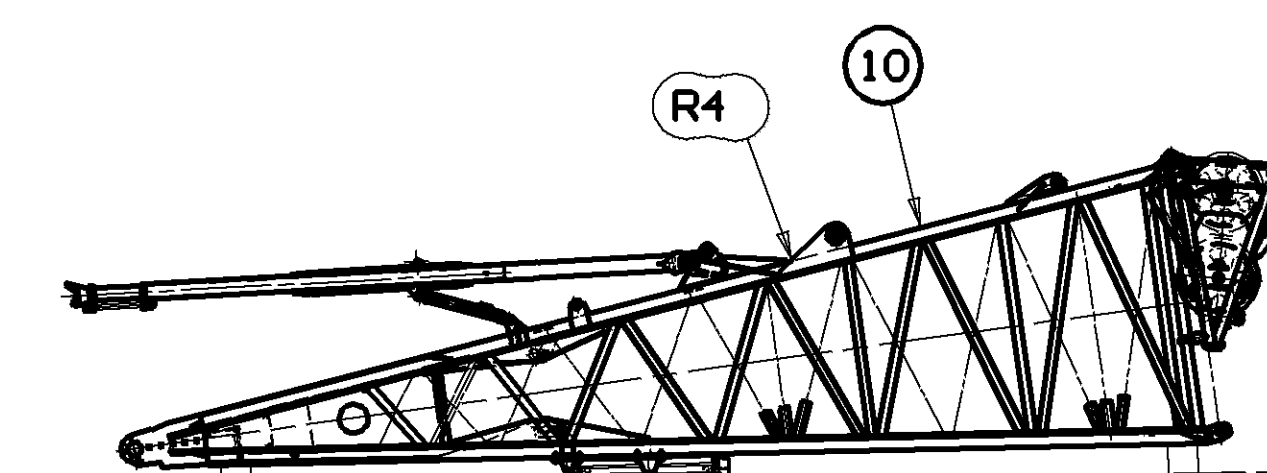
BOOM HANDLING WITH MAST

WITH MAST STRAPS PINNED TO ROPE GUIDE

LINKS; MAXIMUM BOOM THAT CAN BE

CANTILEVERED IS AS FOLLOWS:

LENGTH	10 FT. (3.05 M) INSERT	20 FT. (6.10 M) INSERT	40 FT. (12.2 M) INSERT
40 FT. (12.2 M)	2	1	0
50 FT. (15.2 M)	1	2	0
60 FT. (18.3 M)	2	0	1
60 FT. (18.3 M)	0	1	1
80 FT. (24.4 M)	0	0	2



BOOM BUTT SHIPPING ARRANGEMENT

NOTE:
THIS RIGGING AND STRAP
ARRANGEMENT IS USED ON
MACHINE S/N 9991001
THRU S/N 9991050.

SUPERSEDES 196100 SHT 5 OF 5 OF 2-09-01

TOLERANCE UNLESS OTHERWISE SPECIFIED				MATERIAL				FINISH			
DECIMAL PLACES	FRACTIONS	PERCENT	ANGLES	STAINLESS STEEL	ALUMINUM	COPPER	BRASS	PAINT	WELD	THREAD	OTHER
(1) PLACE 0.0	1/16	± 1.00	± 1.00	16-18	16-18	16-18	16-18	16-18	16-18	16-18	16-18
(2) PLACE 0.00	1/32	± 0.00	± 0.00	16-18	16-18	16-18	16-18	16-18	16-18	16-18	16-18
(3) PLACE 0.000	1/64	± 0.000	± 0.000	16-18	16-18	16-18	16-18	16-18	16-18	16-18	16-18