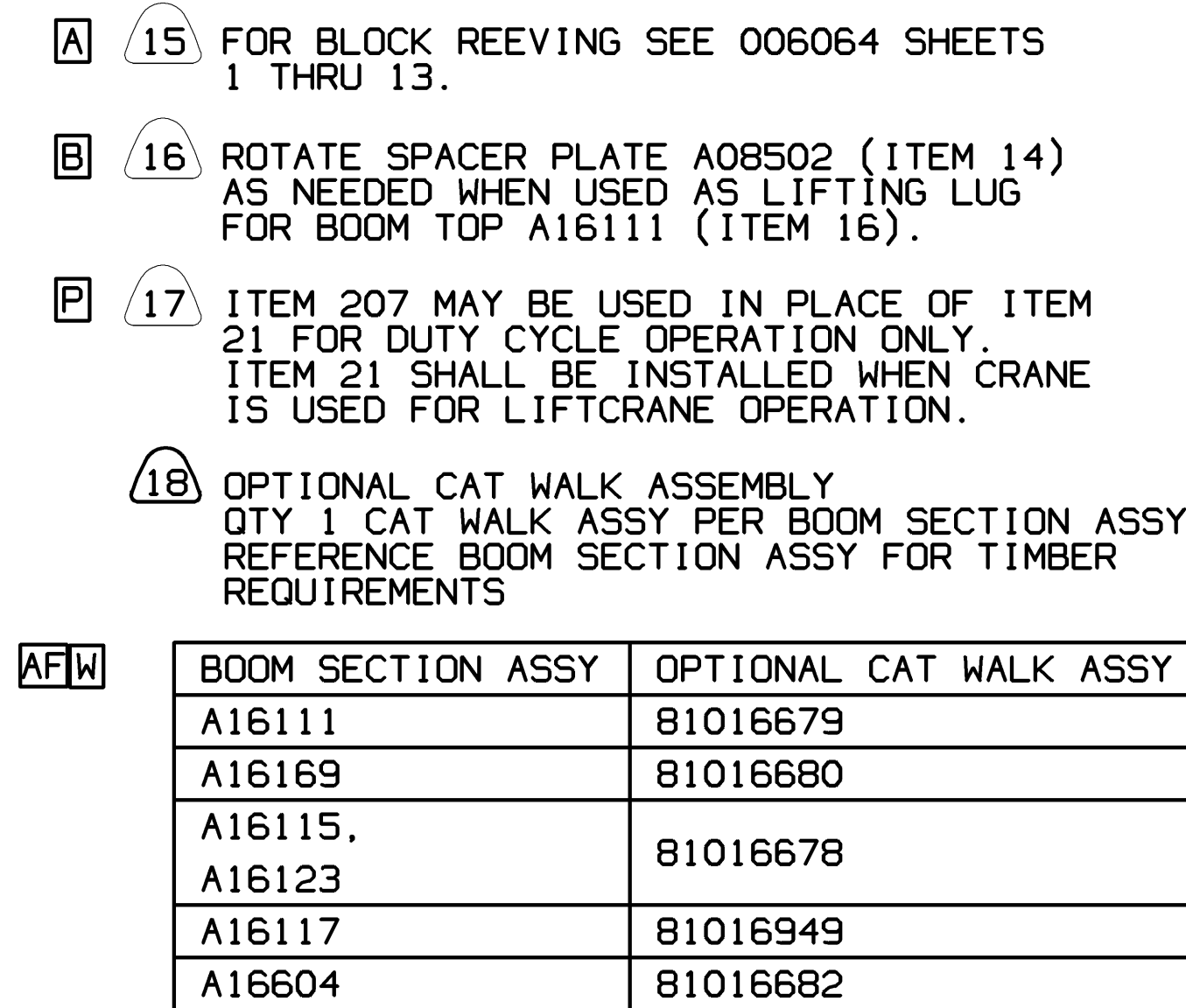


REQ'D. FOR VARIOUS BOOM LENGTHS																
ITEM NO.		111	113	107	110	106	108	109	103	112	105	101	100	102	104	114
BOOM LENGTH		INSERT 3 M (9.8 FT) ASSY	STRAP 3 M (9.8 FT)	INSERT 6 M (19.7 FT) ASSY	STRAP 6 M (19.7 FT)	INSERT 12 M (39.4 FT) ASSY	INSERT 12 M (39.4 FT) W/BACKSTAY ASSY	STRAP 12 M (39.4 FT)	LINK	PIN	PIN SAFETY	PIN	COLLAR	PIN	PIN COTTER	INTER- MEDIATE STRU SEE (1)
METERS	FEET															
20	65.6	0	0	0	0	0	0	0	4	4	4	8	8	8	16	0
23	75.5	1	2	0	0	0	0	0	8	6	6	12	12	12	24	0
26	85.3	0	0	1	2	0	0	0	8	6	6	12	12	12	24	0
29	95.1	1	2	1	2	0	0	0	12	8	8	16	16	16	32	0
32	105.0	0	0	0	0	0	1	2	8	6	6	12	12	12	24	0
35	114.8	1	2	0	0	0	1	2	12	8	8	16	16	16	32	0
38	124.7	0	0	1	2	0	1	2	12	8	8	16	16	16	32	0
41	134.5	1	2	1	2	0	1	2	16	10	10	20	20	20	40	0
44	144.4	0	0	0	0	1	1	4	12	8	8	16	16	16	32	0
47	154.2	1	2	0	0	1	1	4	16	10	10	20	20	20	40	0
50	164.0	0	0	1	2	1	1	4	16	10	10	20	20	20	40	0
53	173.9	1	2	1	2	1	1	4	20	12	12	24	24	24	48	0
56	183.7	0	0	0	0	2	1	6	16	10	10	20	20	20	40	0
59	193.6	1	2	0	0	2	1	6	20	12	12	24	24	24	48	0
62	203.4	0	0	1	2	2	1	6	20	12	12	24	24	24	48	0
65	213.3	1	2	1	2	2	1	6	24	14	14	28	28	28	56	0
68	223.1	0	0	0	0	3	1	8	20	12	12	24	24	24	48	1
71	233.0	1	2	0	0	3	1	8	24	14	14	28	28	28	56	1
74	242.8	0	0	1	2	3	1	8	24	14	14	28	28	28	56	1
77	252.6	1	2	1	2	3	1	8	28	16	16	32	32	32	64	1
80	262.5	0	0	0	0	4	1	10	24	14	14	28	28	28	56	1
83	272.3	1	2	0	0	4	1	10	28	16	16	32	32	32	64	1
86	282.2	0	0	1	2	4	1	10	28	16	16	32	32	32	64	1
89	292.0	1	2	1	2	4	1	10	32	18	18	36	36	36	72	1



AFW	BOOM SECTION ASSY	OPTIONAL CAT WALK ASSY
	A16111	81016679
	A16169	81016680
	A16115, A16123	81016678
	A16117	81016949
	A16604	81016682

BILL OF MATERIAL							ASSEMBLY DATE
ITEM NO.	REQ. NO.	DESCRIPTION	QTY	UNIT	MATERIAL	QTY REQ.	
BOOM ASSEMBLY #76 A16106							A15807
[E]	1	2PIN 2 HOLE .625 DIA X 5.22 LG			A00837		
	2						
	4	2PIN 2 HOLE 3.50 DIA X 7.85			196028		
	5	4PIN COTTER .125 X 1.25			562044		REVISONS
	6	4PIN COTTER .375 X 6.00			562158		02-01-07 RHV A1 ADDED DELTA B1 ADDED DELTA C1 ADDED DELTA D1 ADDED DELTA E1 ADDED DELTA F1 ADDED DELTA G1 ADDED DELTA H1 ADDED DELTA I1 ADDED DELTA J1 ADDED DELTA K1 ADDED DELTA L1 ADDED DELTA M1 ADDED DELTA N1 ADDED DELTA O1 ADDED DELTA P1 ADDED DELTA Q1 ADDED DELTA R1 ADDED DELTA S1 ADDED DELTA T1 ADDED DELTA U1 ADDED DELTA V1 ADDED DELTA W1 ADDED DELTA X1 ADDED DELTA Y1 ADDED DELTA Z1 ADDED DELTA
	9	16SCR CP HX HD M16-2 X 35 8.8 ZC			7126241453		05-07-07 TTB A1 ADDED VIEW B1 ADDED VIEW C1 ADDED VIEW D1 ADDED VIEW E1 ADDED VIEW F1 ADDED VIEW G1 ADDED VIEW H1 ADDED VIEW I1 ADDED VIEW J1 ADDED VIEW K1 ADDED VIEW L1 ADDED VIEW M1 ADDED VIEW N1 ADDED VIEW O1 ADDED VIEW P1 ADDED VIEW Q1 ADDED VIEW R1 ADDED VIEW S1 ADDED VIEW T1 ADDED VIEW U1 ADDED VIEW V1 ADDED VIEW W1 ADDED VIEW X1 ADDED VIEW Y1 ADDED VIEW Z1 ADDED VIEW
	10	16WASHER LOCK M16 ZC			7951240220		06-28-07 RHV A1 ADDED DELTA B1 ADDED DELTA C1 ADDED DELTA D1 ADDED DELTA E1 ADDED DELTA F1 ADDED DELTA G1 ADDED DELTA H1 ADDED DELTA I1 ADDED DELTA J1 ADDED DELTA K1 ADDED DELTA L1 ADDED DELTA M1 ADDED DELTA N1 ADDED DELTA O1 ADDED DELTA P1 ADDED DELTA Q1 ADDED DELTA R1 ADDED DELTA S1 ADDED DELTA T1 ADDED DELTA U1 ADDED DELTA V1 ADDED DELTA W1 ADDED DELTA X1 ADDED DELTA Y1 ADDED DELTA Z1 ADDED DELTA
[F]	13	8PLATE KEEPER 12 MM			A19734		07-12-07 RHV A1 ADDED 68 M (23.1 FT)
	14	2SPACER PLATE 190.6 OD X 90.42 ID X 32 THK			A08502		11-12-07 JVE A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
	15	1BUTT ASSY #76, 5.50M			A16107		11-27-07 JPB A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
	16	1TOP ASSY #76, 9.00M			A16111		12-07-08 JAS A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
	17	1INSERT 5.50M ASSY #76 W/AUX SHEAVES			A16169		12-07-08 JAS A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
	18	2STRAP 5.5M #76 BOOM 31.75 X 63.50			A16393		08-27-08 KKM A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
	19	4LINK CONNECTING #76 BOOM STRAP			A16394		01-22-09 DRC A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
	20	2STRAP TOP #76 BOOM 31.75 X 63.50			A16418		01-22-09 DRC A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
[T]	21	2PIN LOAD 100.0MM DIA X 187.500 LBS			81007960		04-23-10 JAS A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
	22	4LINK LOAD PIN			A16931		04-23-10 JAS A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
[C]	23	2SHIM .134 (in) THK			A16907		04-23-10 JAS A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
[M]	24	4SHIM 14 GA (.074 IN)			81005402		05-10-10 CRM A1 ADDED B1 ADDED C1 ADDED D1 ADDED E1 ADDED F1 ADDED G1 ADDED H1 ADDED I1 ADDED J1 ADDED K1 ADDED L1 ADDED M1 ADDED N1 ADDED O1 ADDED P1 ADDED Q1 ADDED R1 ADDED S1 ADDED T1 ADDED U1 ADDED V1 ADDED W1 ADDED X1 ADDED Y1 ADDED Z1 ADDED
	25						08-12-

① 68 M (223.1 FT), 71 M (233.0 FT),
74 M (242.8 FT), 77 M (252.6 FT),
80 M (262.5 FT), 83 M (272.3 FT),
86 M (282.2 FT) AND 89 M (292.0 FT)
BOOM REQUIRES INTERMEDIATE STRUT ITEM 114.
(SEE SHEETS 3, 4 AND 6)

② MAXIMUM NUMBER OF 3 METER INSERTS = 1.

③ MAXIMUM NUMBER OF 6 METER INSERTS = 1.

④ 3 METER INSERT MUST BE ADJACENT TO 5.5
METER INSERT W/AUX SHEAVES.

⑤ 6 METER INSERT MUST BE ADJACENT TO 5.5
METER INSERT W/AUX SHEAVES OR THE 3 METER
INSERT WHEN INSTALLED. SEE SHEET 2 AND 3
FOR SPECIFIC LOCATION FOR VARIOUS BOOM
LENGTHS.

⑥ BUTT 5.50M WELDMENT I.D. TAG #A16109.

⑦ INSERT 5.50M W/AUX SHEAVES WELDMENT
I.D. TAG #A16170.

⑧ INSERT 3.00M WELDMENT I.D. TAG #A16605.

⑨ INSERT 6.00M WELDMENT I.D. TAG #A16118.

⑩ INSERT 12.00M WELDMENT I.D. TAG #A16116.

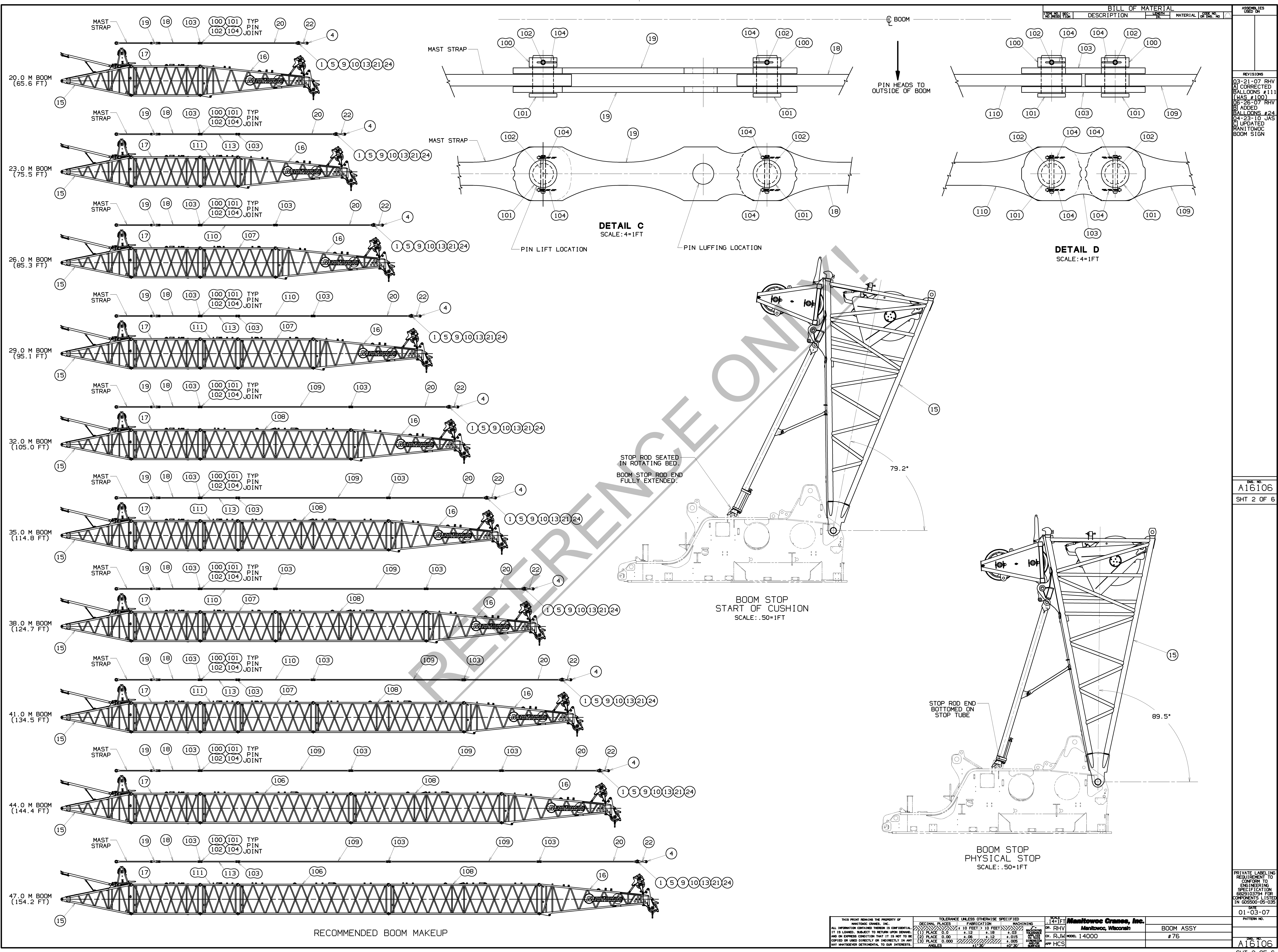
⑪ INSERT 12.00M W/BACKSTAY LUG WELDMENT
I.D. TAG #A16124.

⑫ TOP 9.00M WELDMENT I.D. TAG A16563,
81017261 OR 81020289.

⑬ JIB CANNOT BE USED WITH THIS ASSEMBLY.

⑭ ITEMS 100, 101, 102 AND 104 QUANTITIES
INCLUDE ITEMS THAT ARE STOWED WHEN
INTERMEDIATE STRUT IS USED. (SEE SHEET 6)

	PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 6829103794 FOR COMPONENTS LISTED IN GDS500-05-035
	DATE 01-03-07
	PATTERN NO.
	DWG. NO. A16106



BILL OF MATERIAL				ASSEMBLIES USED ON	
QTY	UNIT	DESCRIPTION	LOCATION	MATERIAL	QTY
1	EA	BOOM			1

REVISIONS	
03-21-07	RHV
A	CORRECTED BALL JOINTS #111 (WAS #100)
06-26-07	RHV
B	ADDED BALL JOINTS #24
04-23-10	JAS
C	UPDATED MANITOWOC BOOM SIGN

Dwg. No.	
A16106	
SHT 2 OF 6	
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 03500-05-026	
DATE	
01-03-07	
PATTERN NO.	
Dwg. No.	
A16106	
SHT 2 OF 6	

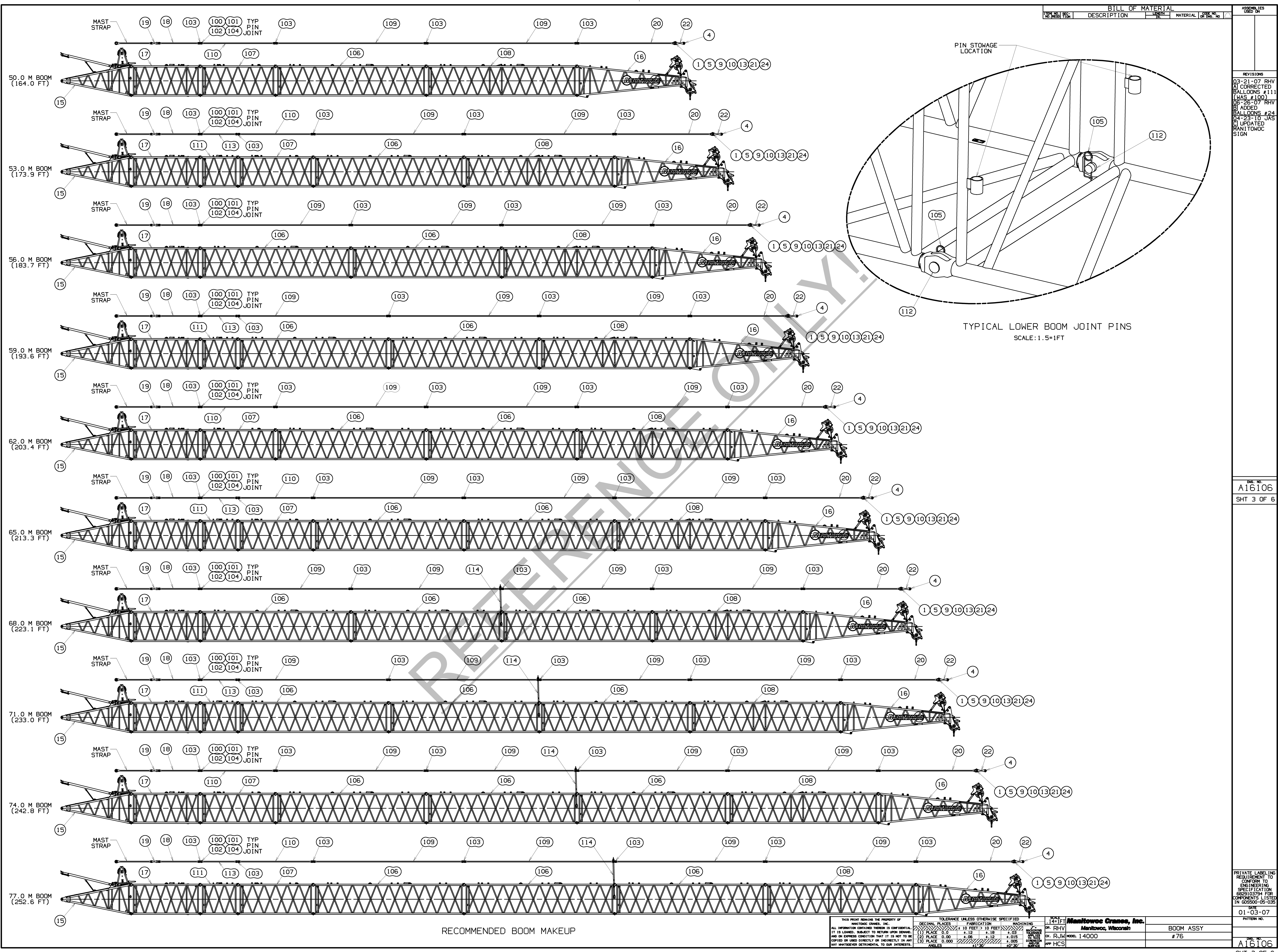
TOLERANCE UNLESS OTHERWISE SPECIFIED	
DECIMAL PLACES	FABRICATION
(1) PLACE 0.0	± 0.12
(2) PLACE 0.00	± 0.06
(3) PLACE 0.000	± 0.03
ANGLES	± 1°

SPACE	MANITOWOC CRANES, INC.
DR. RHV	Manitowoc, Wisconsin
CK. RJW	MODEL 14000
APP HCS	

BOOM ASSY	
# 76	

RECOMMENDED BOOM MAKEUP

DO NOT SCALE THIS DRAWING



BILL OF MATERIAL			
ITEM NO.	QTY	DESCRIPTION	MATERIAL

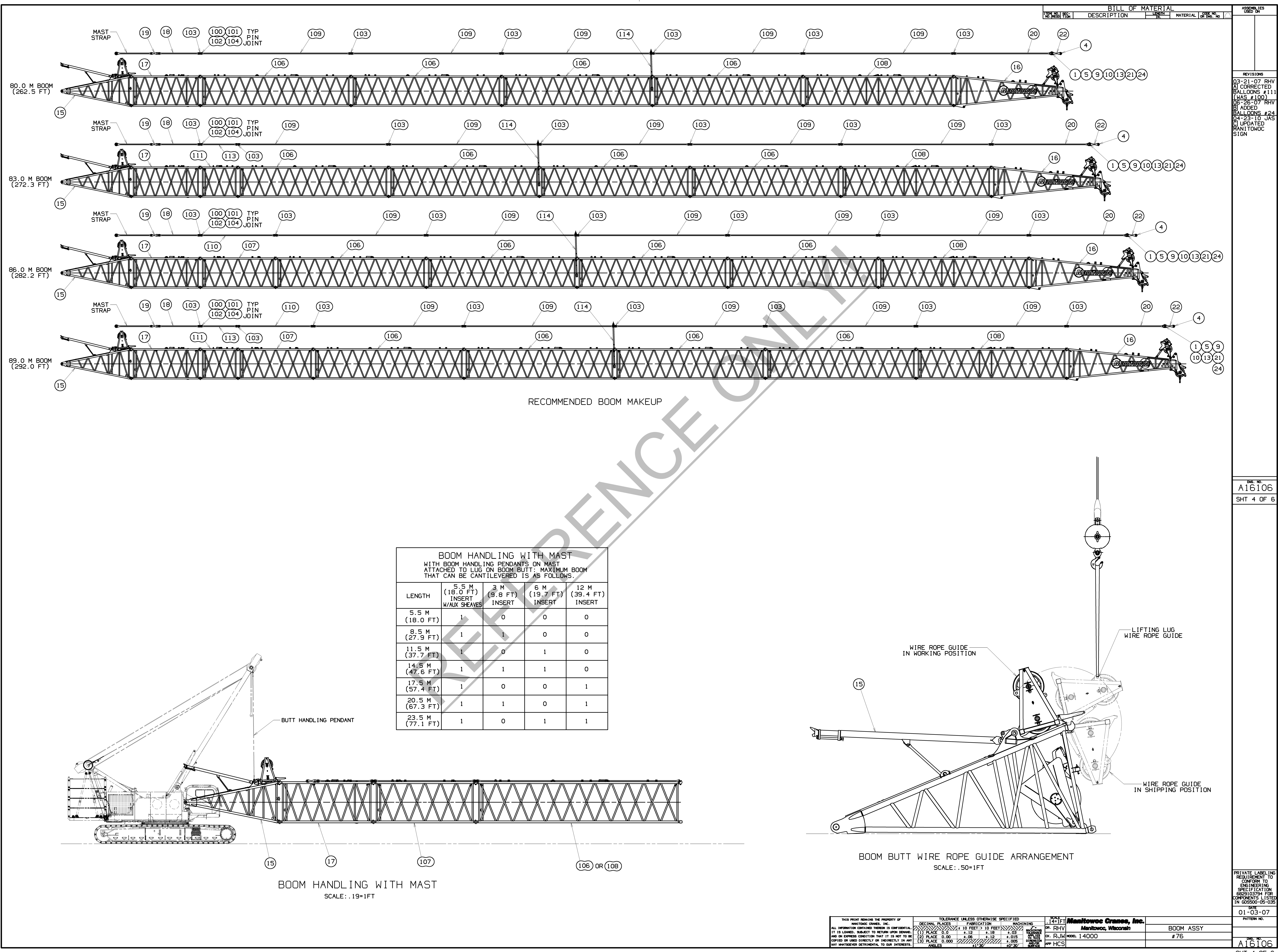
ASSEMBLIES USED IN

REVISIONS
03-21-07 RHV
A) CORRECTED
BALLOONS #111
(WAS #100)
06-26-07 RHV
B) ADDED
BALLOONS #24
04-23-10 JAS
C) UPDATED
MANITOWOC
SIGN

DWG. NO.
A16106
SHT 3 OF 6

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DECIMAL PLACES	FABRICATION	MACHINING	WELDING
(1) PLACE 0.0	±.12	±.18	±.05
(2) PLACE 0.00	±.06	±.12	±.015
(3) PLACE 0.000	±.003	±.006	±.002
ANGLES	±1°30'	±0°30'	±0°30'
SPACE	±.14=1FT		
DR. RHV	Manitowoc, Wisconsin	BOOM ASSY	
CK. RJW	MODEL 14000	#76	
APP. HCS			
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 6629103794 FOR COMPONENTS LISTED IN 65500-05-056			
DATE	01-03-07	PATTERN NO.	
DWG. NO.	A16106		

DO NOT SCALE THIS DRAWING



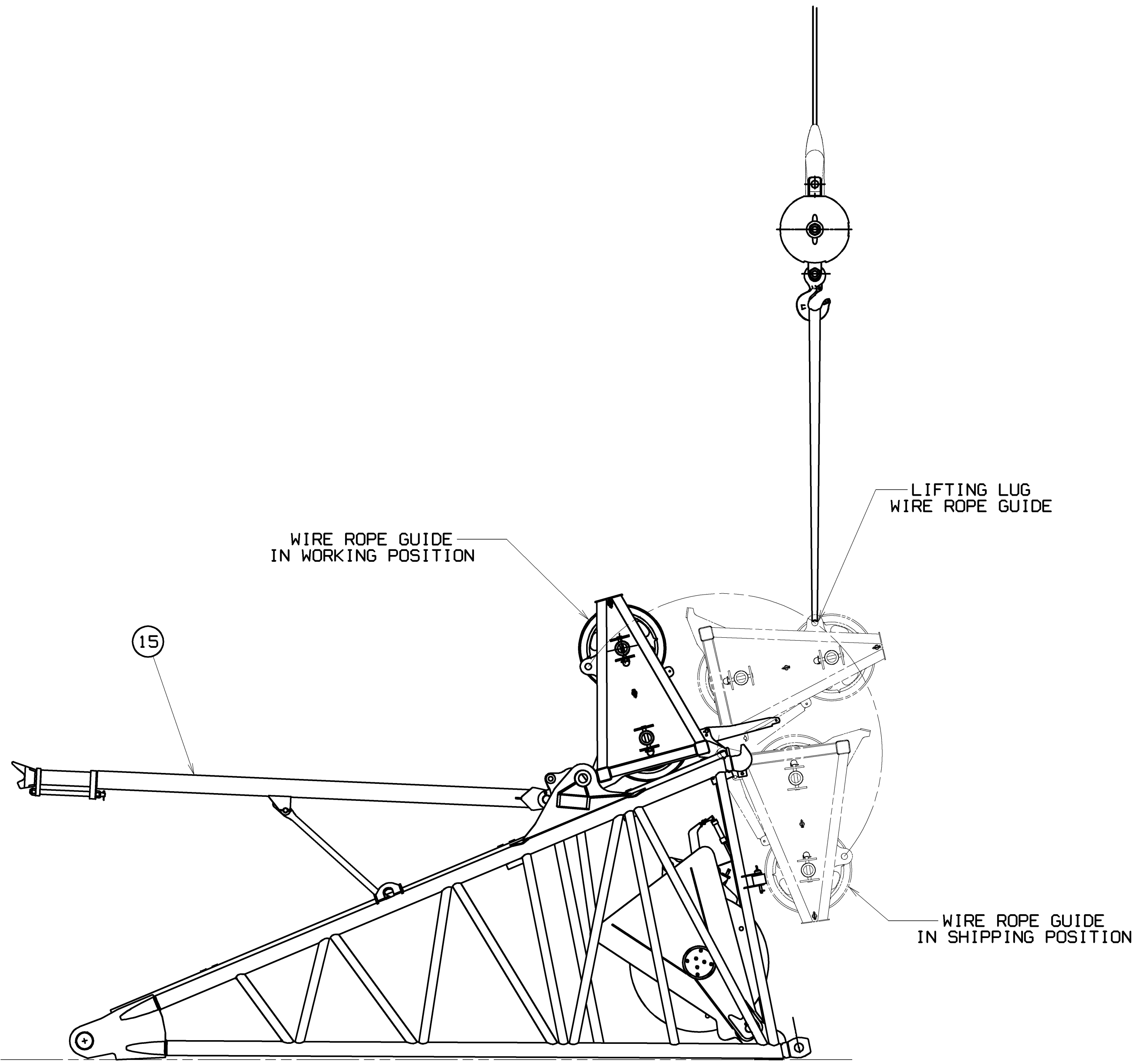
BILL OF MATERIAL			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT

ASSEMBLIES USED ON

REVISIONS
03-21-07 RHV A) CORRECTED BALL JOINTS #111 (WAS #100) 06-26-07 RHV B) ADDED BALL JOINTS #24 04-23-10 JAS C) UPDATED MANITOWOC SIGN

DWG. NO.
A16106
SHT 4 OF 6

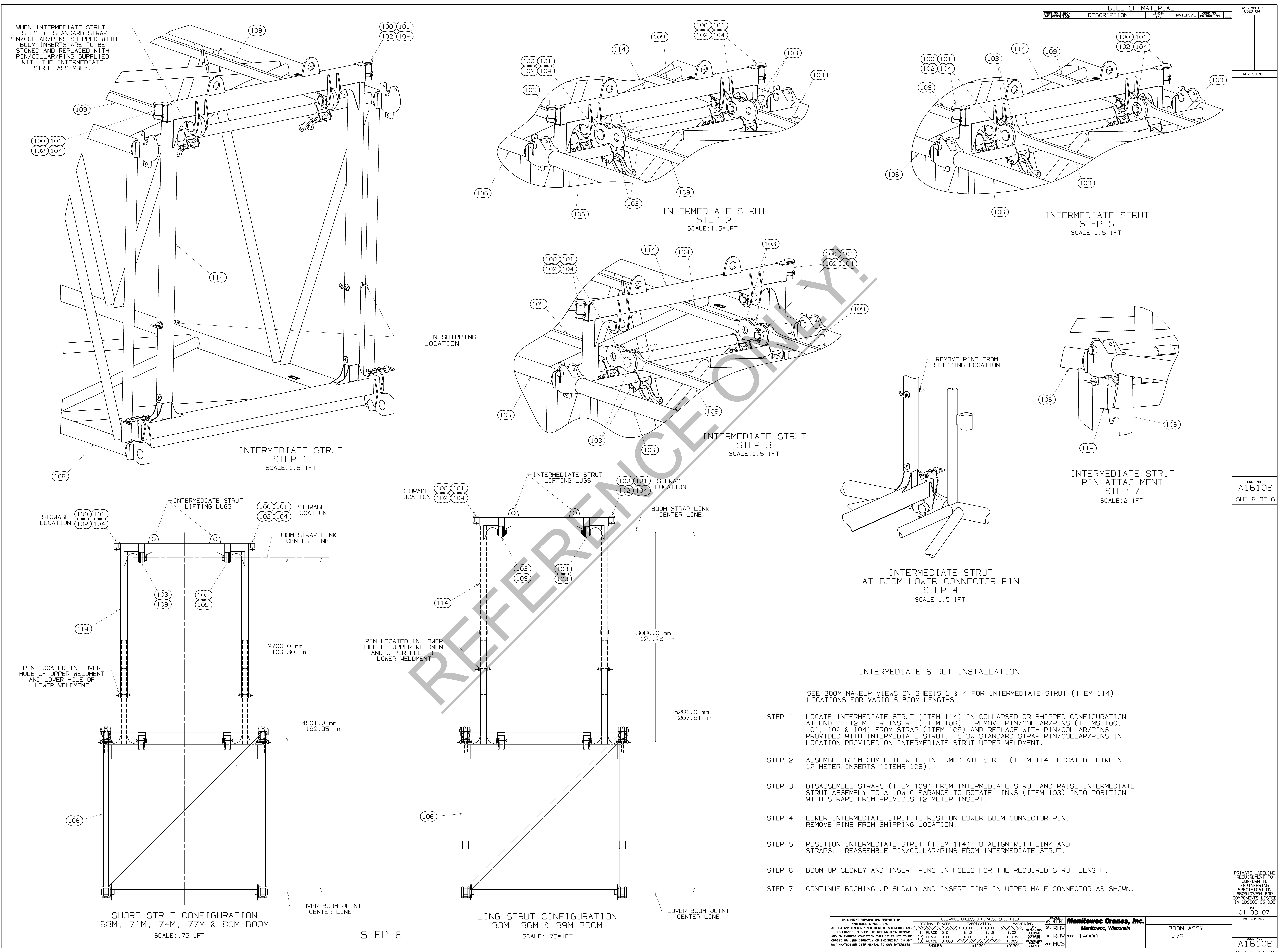
BOOM HANDLING WITH MAST WITH BOOM HANDLING PENDANTS ON MAST ATTACHED TO LUG ON BOOM BUTT: MAXIMUM BOOM THAT CAN BE CANTILEVERED IS AS FOLLOWS.				
LENGTH	5.5 M (18.0 FT) INSERT W/AUX SHEAVES	3 M (9.8 FT) INSERT	6 M (19.7 FT) INSERT	12 M (39.4 FT) INSERT
5.5 M (18.0 FT)	1	0	0	0
8.5 M (27.9 FT)	1	1	0	0
11.5 M (37.7 FT)	1	0	1	0
14.5 M (47.6 FT)	1	1	1	0
17.5 M (57.4 FT)	1	0	0	1
20.5 M (67.3 FT)	1	1	0	1
23.5 M (77.1 FT)	1	0	1	1



BOOM BUTT WIRE ROPE GUIDE ARRANGEMENT
SCALE: .50=1FT

BOOM HANDLING WITH MAST
SCALE: .19=1FT

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(1) PLACE	0.00	±.12	±.18	±.05	±.05	±.05	±.05	±.05	±.05	±.05	±.05
(2) PLACE	0.00	±.06	±.12	±.05	±.05	±.05	±.05	±.05	±.05	±.05	±.05
(3) PLACE	0.000	±.005	±.010	±.005	±.005	±.005	±.005	±.005	±.005	±.005	±.005
ANGLES		±1°	±2°	±0°30'	±0°30'	±0°30'	±0°30'	±0°30'	±0°30'	±0°30'	±0°30'
DATE	01-03-07	PATTERN NO.									
DWG. NO.	A16106	SHT 4 OF 6									



BILL OF MATERIAL			
ITEM NO.	REV.	DESCRIPTION	QUANTITY

ASSEMBLIES USED ON

REVISIONS

DWG. NO.
A16106
SHT 6 OF 6

PRIVATE LABELING REQUIREMENT TO CONFORM TO SPECIFICATION 6829103794 FOR COMPONENTS LISTED IN 682900-05-026
--

DATE
01-03-07

PATTERN NO.

DWG. NO.
A16106

SHT 6 OF 6

TOLERANCE UNLESS OTHERWISE SPECIFIED			
DECIMAL PLACES	FABRICATION	MACHINING	WELDING
(1) .12	$\pm .12$	$\pm .12$	$\pm .05$
(2) .00	$\pm .06$	$\pm .12$	$\pm .015$
(3) .000	$\pm .000$	$\pm .005$	$\pm .005$
ANGLES	$\pm .20^\circ$	$\pm .05^\circ$	

SCALE	AS NOTED	DR. RHY	Manitowoc Cranes, Inc.
CK. RJW	MODEL 14000		BOOM ASSY
APP. HCS			#76