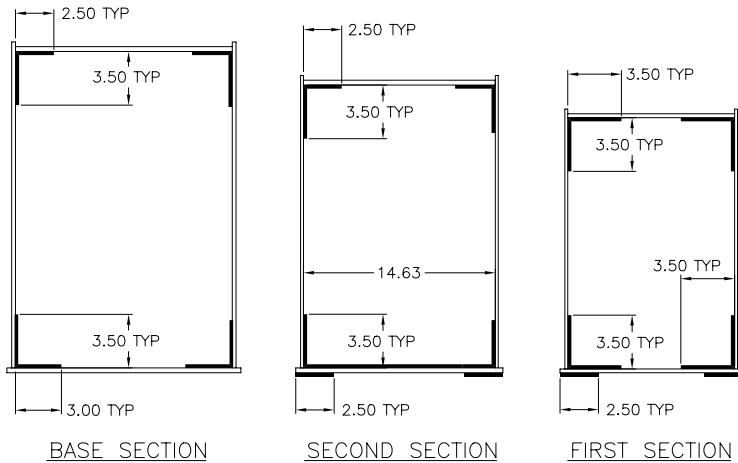


BILL OF MATERIAL				
ITEM NO.	PART NUMBER	QTY	DESCRIPTION	UNIT WEIGHT
111				
112	2029-061012	12	FH SCR ϕ 0.38 X 0.75	0.04
113	2029-061016	12	FH SCR ϕ 0.38 X 1.00	0.04
114				
115				
116				
117				
118	4000276-002	4	SLIDER PAD 11" 3-H	0.50
119	5001929-001	4	SHIM (.047 THK)	0.27
120	5001929-002	4	SHIM (.074 THK)	0.43
121	5001929-003	2	SHIM (.134 THK)	0.77

TOTAL BOOM ASSEMBLY WEIGHT-- 8873.0 LBS



LUBRICATION PATTERNS FOR BOOM SECTIONS
APPLY THIN FILM OF GREASE ACCORDINGLY

TORQUE SPECIFICATIONS

- NOTE:
TORQUE REQUIREMENTS FOR SLIDER PAD BOLTS.
- BOLT 5/16"-18UNC
TORQUE TO 13 FT. LBS / 156 IN. LBS
 - BOLT 3/8"-16UNC
TORQUE TO 23 FT. LBS / 276 IN. LBS
 - THREADLOCKER (LOCTITE) PRODUCT NO. 242
USE ONLY ON SCREWS WHICH DO NOT HAVE THE
LOCKING PATCH - SEE DRAWING 2029-TABULA

BILL OF MATERIAL				
ITEM NO.	PART NUMBER	QTY	DESCRIPTION	UNIT WEIGHT
52	5000304-004	16	SHIM (.047 THK)	0.15
53	5000304-005	12	SHIM (.074 THK)	0.24
54	5000304-006	12	SHIM (.134 THK)	0.43
55				
56				
57	4000276-003	4	SLIDER PAD 9" 3-HOL	0.35
58	5001059-004	3	SHIM (.047 THK)	0.20
59	5001059-005	3	SHIM (.074 THK)	0.32
60	5001059-006	2	SHIM (.134 THK)	0.57
61				
62	4000289-001	8	SLIDER PAD 5"	0.11
63	5000305-001	16	SHIM (.047 THK)	0.09
64	5000305-002	16	SHIM (.074 THK)	0.14
65	5000305-003	8	SHIM (.134 THK)	0.26
66				
67	5000370-003	2	SPACER PIPE	0.61
68	5000672-004	3	CABLE GUIDE F/ROLR	1.80
69	5000672-005	3	CABLE GUIDE	1.20
70				
71	5001098-002	1	COVER BASE SECT	5.40
72	5000804-001	2	POINTER	1.80
73				
74	2001-081020	12	BOLT ϕ 0.50 X 1.25	0.11
75	2003-080000	12	FLATWASHER ϕ 0.50	0.02
76	2003-180000	1	FLATWASHER ϕ 1.13	0.10
77	2004-051008	2	BOLT ϕ 0.31 X 0.50	0.02
78	2004-051010	16	BOLT ϕ 0.31 X 0.63	0.03
79	2004-051014	16	BOLT ϕ 0.31 X 0.88	0.03
80	2004-061014	4	BOLT ϕ 0.38 X 0.88	0.04
81	2004-061020	6	BOLT ϕ 0.38 X 1.25	0.05
82	2004-081024	4	BOLT ϕ 0.50 X 1.50	0.12
83				
84				
85	2004-081128	2	BOLT ϕ 0.50 X 8.00	0.51
86	2004-101032	2	BOLT ϕ 0.62 X 2.00	0.23
87				
88	2005-051000	16	HEX NUT ϕ 0.31 NC	0.01
89	2005-081000	2	HEX NUT ϕ 0.50 NC	0.05
90	2005-101000	6	HEX NUT ϕ 0.62 NC	0.10
91	2005-241000	4	HEX NUT ϕ 1.50 NC	0.94
92				
93	2006-050000	50	LOCKWASHER ϕ 0.31	0.01
94	2006-060000	10	LOCKWASHER ϕ 0.38	0.01
95	2006-080000	6	LOCKWASHER ϕ 0.50	0.01
96	2006-100000	4	LOCKWASHER ϕ 0.62	0.02
97	2008-050000	4	FLATWASHER ϕ 0.31	0.01
98	2008-060000	8	FLATWASHER ϕ 0.38	0.01
99	2001-101056	2	BOLT ϕ 0.62 X 3.50	0.36
100	2003-100000	4	FLATWASHER 0.62 HRD	0.03
101	2010-101000	4	JAM NUT ϕ 0.62 NC	0.07
102	2010-241000	4	JAM NUT ϕ 1.50 NC	0.61
103	2011-181000	1	LOCK NUT ϕ 1.13	0.90
104	2013-061006	2	SHLDR BOLT ϕ 0.38	0.05
105	2013-061012	4	SHLDR BOLT ϕ 0.38	0.06
106				
107				
108				
109	2029-051012	8	FH SCR ϕ 0.31 X 0.75	0.02
110	2029-051020	16	FH SCR ϕ 0.31 X 1.25	0.03

BILL OF MATERIAL				
ITEM NO.	PART NUMBER	QTY	DESCRIPTION	UNIT WEIGHT
1	5001893-001	1	BASE SECTION WELD	2851.0
2	5001895-001	1	FIRST SECTION WELD	2118.0
3	5001899-002	1	SECOND SECT WELD	1791.0
4				
5				
6	5001914-002	1	BRACKET EXT SHEAVE	54.20
7	5001036-001	1	BRACKET RET SHEAVE	12.70
8	5001037-001	1	BRACKET RET 2-ROPE	6.54
9	5001918-001	1	BRACKET EXT 4-ROPE	8.46
10	5001324-002	1	SPACER ROPE BKT	10.40
11	5001040-001	1	BRACKET RET 4-ROPE	0.72
12	5001067-001	2	MOUNTING PLATE	2.40
13				
14	5001907-001	2	MOUNTING PAD	2.90
15	6000111-004	3	SHEAVE ASSY BM HD	8.40
16				
17	6000284-001	1	SHEAVE ASSY 4-RET	6.90
18				
19	6000284-003	1	SHEAVE ASSY 4-EXT	47.70
20				
21	4000132-005	3	INNER RACE ϕ 2.00"	0.90
22	4000132-003	2	INNER RACE ϕ 1.68"	0.30
23	4000132-004	2	INNER RACE ϕ 3.50"	2.60
24	5001097-001	1	SPACER INNER RACE	0.26
25	5001097-003	1	SPACER INNER RACE	1.88
26	4900211-001	1	CYL TELESCOPE (WET)	1531.0
27	5001047-001	2	BRACKET TELE CYL	6.30
28	4000523-007	2	ROPE EXTEND ϕ 0.75"	60.87
29	4000523-008	2	ROPE EXTEND ϕ 0.75"	60.87
30				
31				
32	4000056-006	4	ROPE RETRACT ϕ 0.31"	6.69
33				
34	5001913-001	2	PIN BM HD SHEAVE	4.70
35	5001075-002	1	PIN CYL EXT SHEAVE	21.88
36	5001072-001	1	PIN RET SHV 1ST SEC	3.50
37				
38	5001074-001	1	PIN RET ROPE	0.81
39				
40	5000353-002	2	PIN RET ROPE RETNR	0.20
41	5000412-004	2	PIN BOOM ROPE RETN	0.65
42	4000039-001	6	GREASE FITTING STR	0.01
43	4000039-006	3	GREASE FITTING 90°	0.01
44	4000037-200	4	SNAP RING	0.05
45	2091-020350	2	SNAP RING ϕ 3.50	0.10
46	5000008-006	1	KEEPER PLATE	0.12
47				
48	2035-101020	2	COTTER PIN ϕ .15	0.02
49	2035-081016	4	COTTER PIN ϕ 0.12	0.01
50	2039-171148	4	HAIR PIN COTTER	0.03
51	4000057-002	12	SLIDER PAD 7" 3-HOL	0.27

REVISIONS
EN 96-0014
DAS 5-31-96
NEW RELEASE
EN 97-0001-06
DAS 1-24-97
A T/P/N WAS
2008-100000

DOCUMENT CONTROL STATUS:
ELECTRONIC FILE = CONTROLLED
HARDCOPY = UNCONTROLLED

Manitowoc Boom Trucks, Inc.

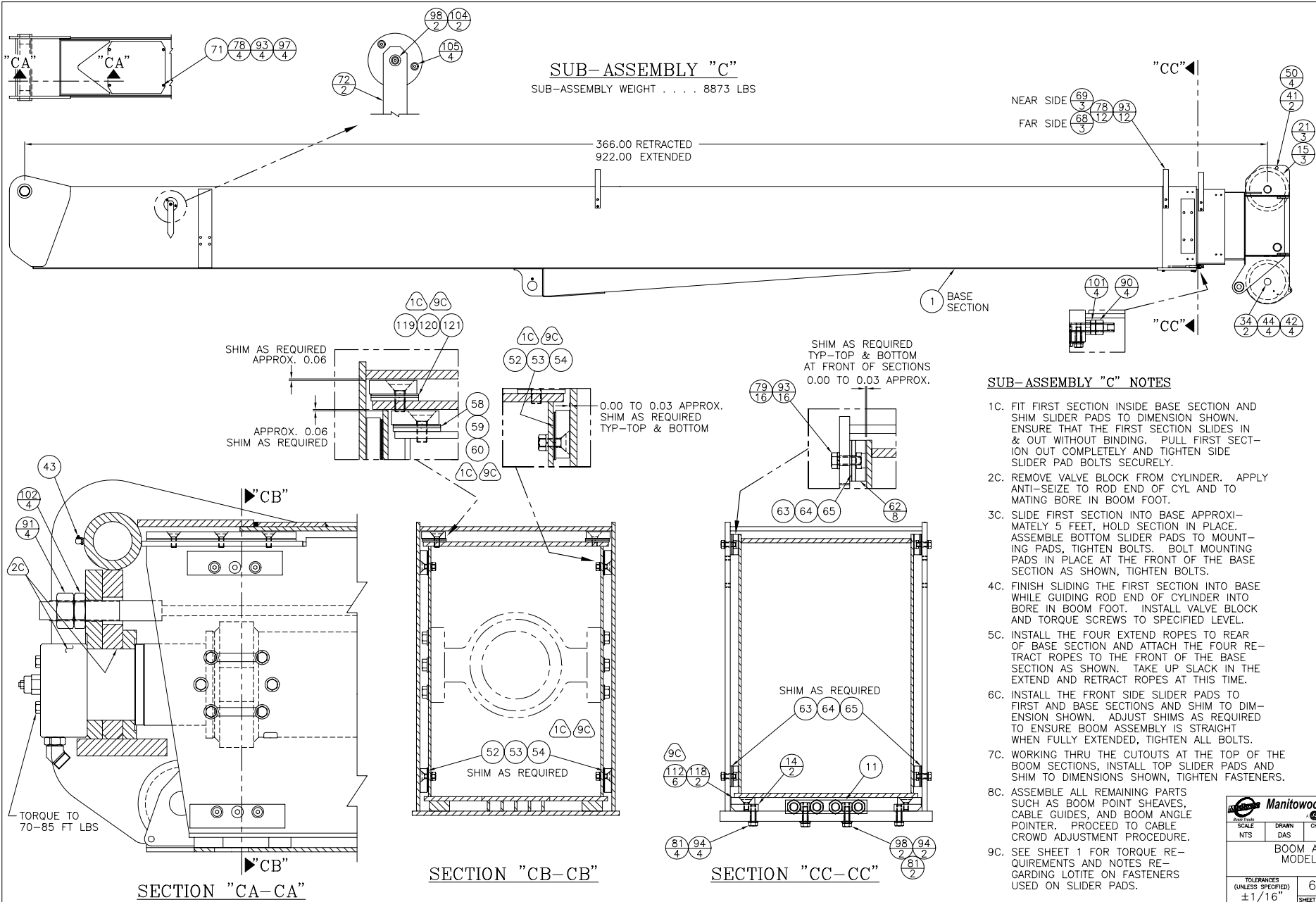
SCALE	DRAWN	CHECKED	APP'D./DATE
NTS	DAS	EO	EO 5/96

BOOM ASSEMBLY
MODEL M3077

TOLERANCES
(UNLESS SPECIFIED)
 $\pm 1/16"$

6000552-003
SHEET 1 OF 4

Used on cranes built up to 7/98



REVISIONS	
EN 96-0014	DAS 5-31-96
NEW RELEASE	
EN 97-0001-06	DAS 1-24-97
A	SEE SHT 1

SUB-ASSEMBLY "C" NOTES

- 1C. FIT FIRST SECTION INSIDE BASE SECTION AND SHIM SLIDER PADS TO DIMENSION SHOWN. ENSURE THAT THE FIRST SECTION SLIDES IN & OUT WITHOUT BINDING. PULL FIRST SECTION OUT COMPLETELY AND TIGHTEN SIDE SLIDER PAD BOLTS SECURELY.
- 2C. REMOVE VALVE BLOCK FROM CYLINDER. APPLY ANTI-SEIZE TO ROD END OF CYL AND TO MATING BORE IN BOOM FOOT.
- 3C. SLIDE FIRST SECTION INTO BASE APPROXIMATELY 5 FEET, HOLD SECTION IN PLACE. ASSEMBLE BOTTOM SLIDER PADS TO MOUNTING PADS, TIGHTEN BOLTS. BOLT MOUNTING PADS IN PLACE AT THE FRONT OF THE BASE SECTION AS SHOWN, TIGHTEN BOLTS.
- 4C. FINISH SLIDING THE FIRST SECTION INTO BASE WHILE GUIDING ROD END OF CYLINDER INTO BORE IN BOOM FOOT. INSTALL VALVE BLOCK AND TORQUE SCREWS TO SPECIFIED LEVEL.
- 5C. INSTALL THE FOUR EXTEND ROPES TO REAR OF BASE SECTION AND ATTACH THE FOUR RETRACT ROPES TO THE FRONT OF THE BASE SECTION AS SHOWN. TAKE UP SLACK IN THE EXTEND AND RETRACT ROPES AT THIS TIME.
- 6C. INSTALL THE FRONT SIDE SLIDER PADS TO FIRST AND BASE SECTIONS AND SHIM TO DIMENSION SHOWN. ADJUST SHIMS AS REQUIRED TO ENSURE BOOM ASSEMBLY IS STRAIGHT WHEN FULLY EXTENDED, TIGHTEN ALL BOLTS.
- 7C. WORKING THRU THE CUTOUTS AT THE TOP OF THE BOOM SECTIONS, INSTALL TOP SLIDER PADS AND SHIM TO DIMENSIONS SHOWN, TIGHTEN FASTENERS.
- 8C. ASSEMBLE ALL REMAINING PARTS SUCH AS BOOM POINT SHEAVES, CABLE GUIDES, AND BOOM ANGLE POINTER. PROCEED TO CABLE CROWD ADJUSTMENT PROCEDURE.
- 9C. SEE SHEET 1 FOR TORQUE REQUIREMENTS AND NOTES REGARDING LOTITE ON FASTENERS USED ON SLIDER PADS.

DOCUMENT CONTROL STATUS:
ELECTRONIC FILE = CONTROLLED
HARD COPY = UNCONTROLLED

Manitowoc Boom Trucks, Inc.

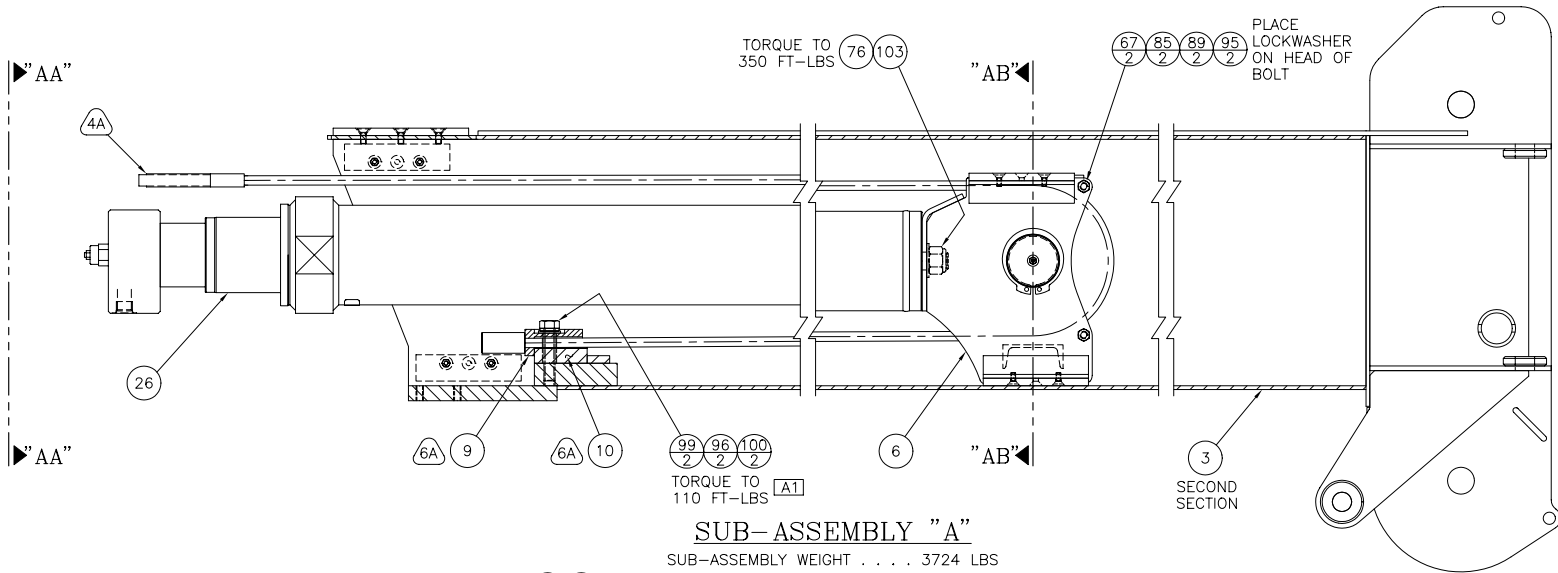
SCALE	DRAWN	CHECKED	APPROV./DATE
NTS	DAS	EO	EO 5/96

BOOM ASSEMBLY
MODEL M3077

TOLERANCES (UNLESS SPECIFIED)	6000552-003
± 1/16"	SHEET 4 OF 4

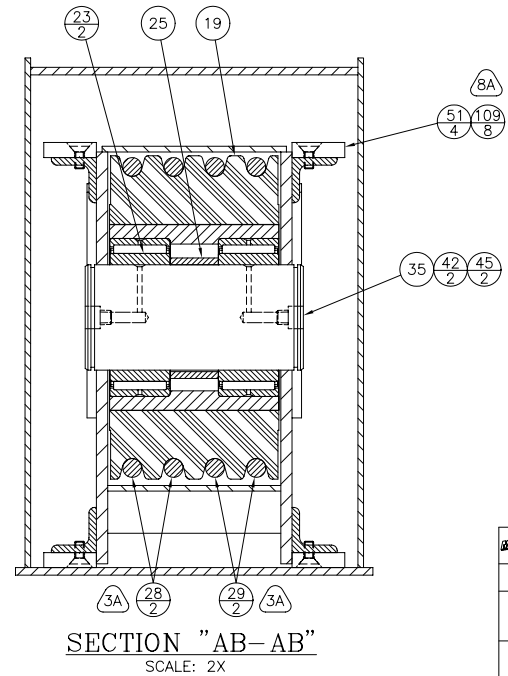
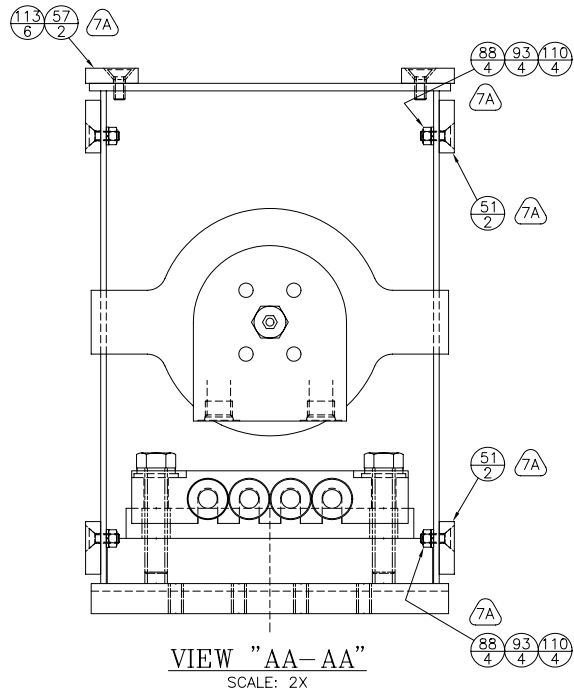
CAD FILE: DAS0040A

REVISIONS
EN 96-0014 DAS 5-31-96 NEW RELEASE
EN 97-0001-06 DAS 1-24-97 [A1] ADDED



SUB-ASSEMBLY "A" NOTES

1. INSPECT AND CLEAN ALL BOOM SECTIONS AND APPLY THIN FILM OF GREASE TO ALL INSIDE SURFACES WHERE SLIDER PADS WILL CONTACT. SEE SHT 1 OF 4.
2. INSTALL EXTEND SHEAVE BRACKET TO THE END OF THE TELESCOPE CYLINDER HOLDING ITS POSITION RELATIVE TO THE TRUNNION ON THE OTHER END OF THE CYLINDER. TORQUE NUT TO THE SPECIFIED TORQUE LEVEL.
3. INSTALL SHEAVE ASSEMBLY, EXTEND ROPES, PIPE SPACERS AND SLIDER PADS TO THE SHEAVE CASE AS SHOWN. MAKE CERTAIN TWO RIGHT LAY ROPES ARE TOGETHER ON ONE SIDE AND TO LEFT LAY ROPES ARE ON THE OTHER SIDE OF THE SHEAVE.
4. USE SOME MEANS OF IDENTIFYING THE EXTEND ROPES TO AVOID CROSSING THEM DURING ASSEMBLY.
5. SLIDE EXTEND SHEAVE BRACKET INTO THE SECOND SECTION.
6. RAISE THE CYLINDER AS HIGH AS POSSIBLE AND INSTALL THE EXTEND ROPE BRACKET. MAKE CERTAIN THAT THE SPACER IS BOTTOMED OUT AGAINST THE SHEAR BAR, AND ALSO THAT THE BRACKET IS BOTTOMED OUT AGAINST THE SPACER SO THAT THE MOUNTING BOLTS DO NOT CARRY ANY SHEAR LOAD.
7. INSTALL REAR SIDE AND TOP SLIDER PADS AS SHOWN. DO NOT TIGHTEN FASTENERS.
8. SEE SHEET 1 FOR TORQUE REQUIREMENTS AND NOTES REGARDING LOCTITE ON FASTENERS USED ON SLIDER PADS.



DOCUMENT CONTROL STATUS:
ELECTRONIC FILE = CONTROLLED
HARDCOPY = UNCONTROLLED

Manitowoc Boom Trucks, Inc.
A COMPANY

SCALE	DRAWN	CHECKED	APPVLD./DATE
NTS	DAS	EO	EO 5/96

BOOM ASSEMBLY
MODEL M3077

TOLERANCES (UNLESS SPECIFIED)	6000552-003
±1/16"	SHEET 2 OF 4

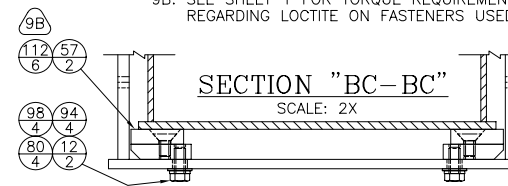
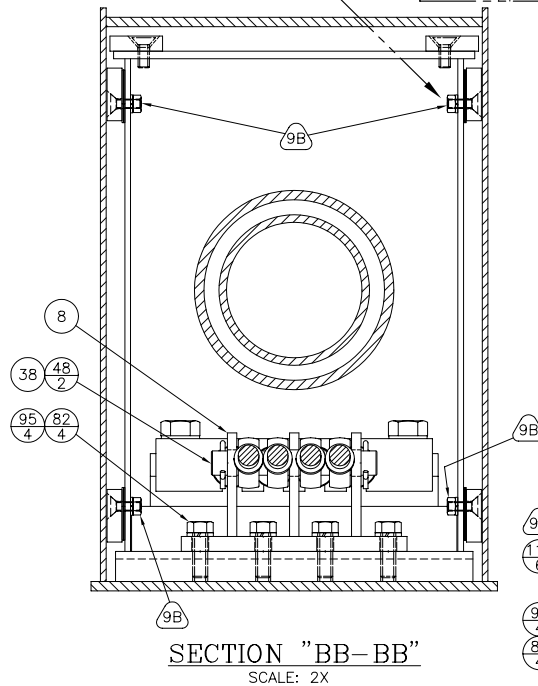
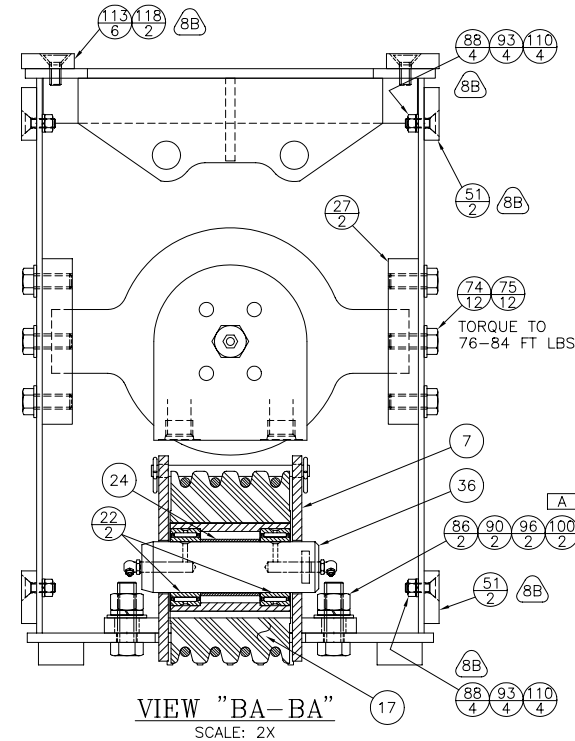
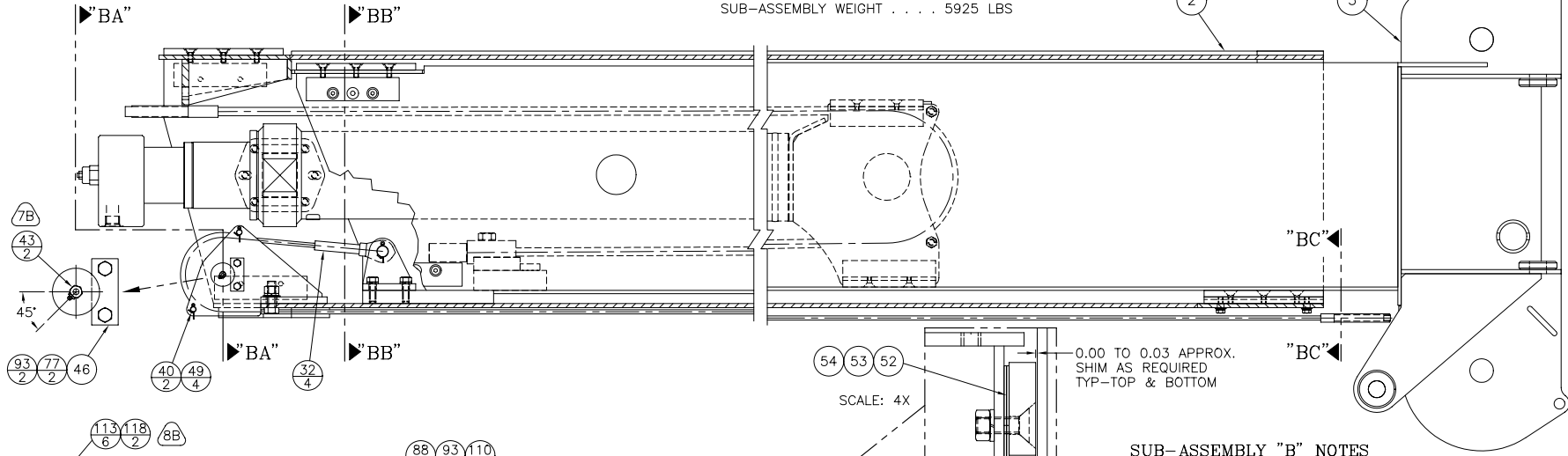
CAD FILE: DAS0036A

SUB-ASSEMBLY "B"

SUB-ASSEMBLY WEIGHT 5925 LBS

FIRST SECTION

SECOND SECTION



SUB-ASSEMBLY "B" NOTES

- 1B. FIT SECOND SECTION INSIDE FIRST SECTION AND SHIM SIDE SLIDER PADS TO DIMENSION SHOWN. ENSURE THAT THE SECOND SECTION SLIDES IN & OUT WITHOUT BINDING. FINALLY, PULL SECTION OUT COMPLETELY AND TIGHTEN SIDE SLIDER PAD BOLTS SECURELY.
- 2B. INSTALL THE FOUR RETRACT ROPES TO BRACKET AND BOLT BRACKET INTO PLACE AT THE REAR OF THE SECOND SECTION. TIGHTEN BOLTS.
- 3B. TO INSTALL THE SECOND SECTION, BEGIN BY PUSHING THE THREADED END OF THE RETRACT ROPES INTO THE FIRST SECTION WHILE SLIDING IN THE SECOND SECTION APPROXIMATELY 5 FEET. HOLD SECOND SECTION IN PLACE.
- 4B. ASSEMBLE BOTTOM SLIDER PADS TO MOUNTING PADS, TIGHTEN BOLTS. BOLT MOUNTING PADS IN PLACE AT THE FRONT OF THE FIRST SECTION AS SHOWN, TIGHTEN BOLTS.
- 5B. FINISH SLIDING SECOND SECTION INTO THE FIRST SECTION.
- 6B. ATTACH TELESCOPE CYLINDER TO FIRST SECTION WITH BRACKETS. ADJUST BRACKETS AS SHOWN AND TORQUE MOUNTING BOLTS TO THE SPECIFIED TORQUE LEVEL.
- 7B. ASSEMBLE RETRACT SHEAVE TO BRACKET AND BOLT INTO PLACE AT REAR OF FIRST SECTION. MAKE CERTAIN THAT THE BRACKET IS BOTTOMED OUT ON BOTTOM OF FIRST SECTION SO THAT MOUNTING BOLTS DO NOT CARRY ANY SHEAR LOAD. ALIGN GREASE ZERK ON PIN AS SHOWN (BOTH SIDES).
- 8B. INSTALL REAR SIDE AND TOP SLIDER PADS TO THE FIRST SECTION, DO NOT TIGHTEN FASTENERS.
- 9B. SEE SHEET 1 FOR TORQUE REQUIREMENTS AND NOTES REGARDING LOCTITE ON FASTENERS USED ON SLIDER PADS.

REVISIONS

EN 96-0014
DAS 5-31-96
NEW RELEASE

EN 97-0001-06
DAS 1-24-97
A SEE SHT 1

DOCUMENT CONTROL STATUS:
ELECTRONIC FILE = CONTROLLED
HARD COPY = UNCONTROLLED

SCALE	DRAWN	CHECKED	APPROV./DATE
NTS	DAS	EO	EO 5/96
BOOM ASSEMBLY MODEL M3077			
TOLERANCES (UNLESS SPECIFIED)		6000552-003	
±1/16"		SHEET	3 OF 4

CAD FILE: DAS0039A