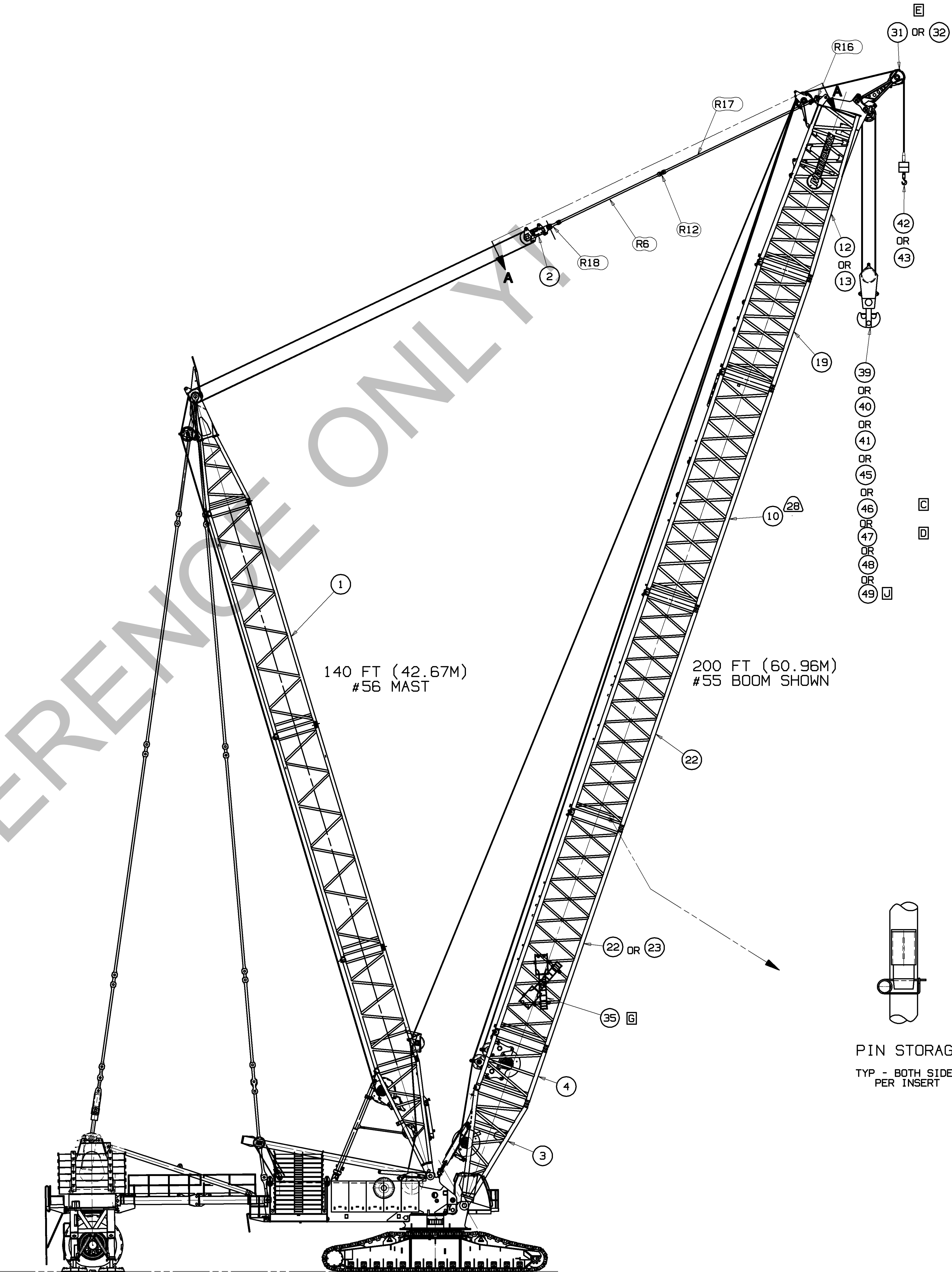
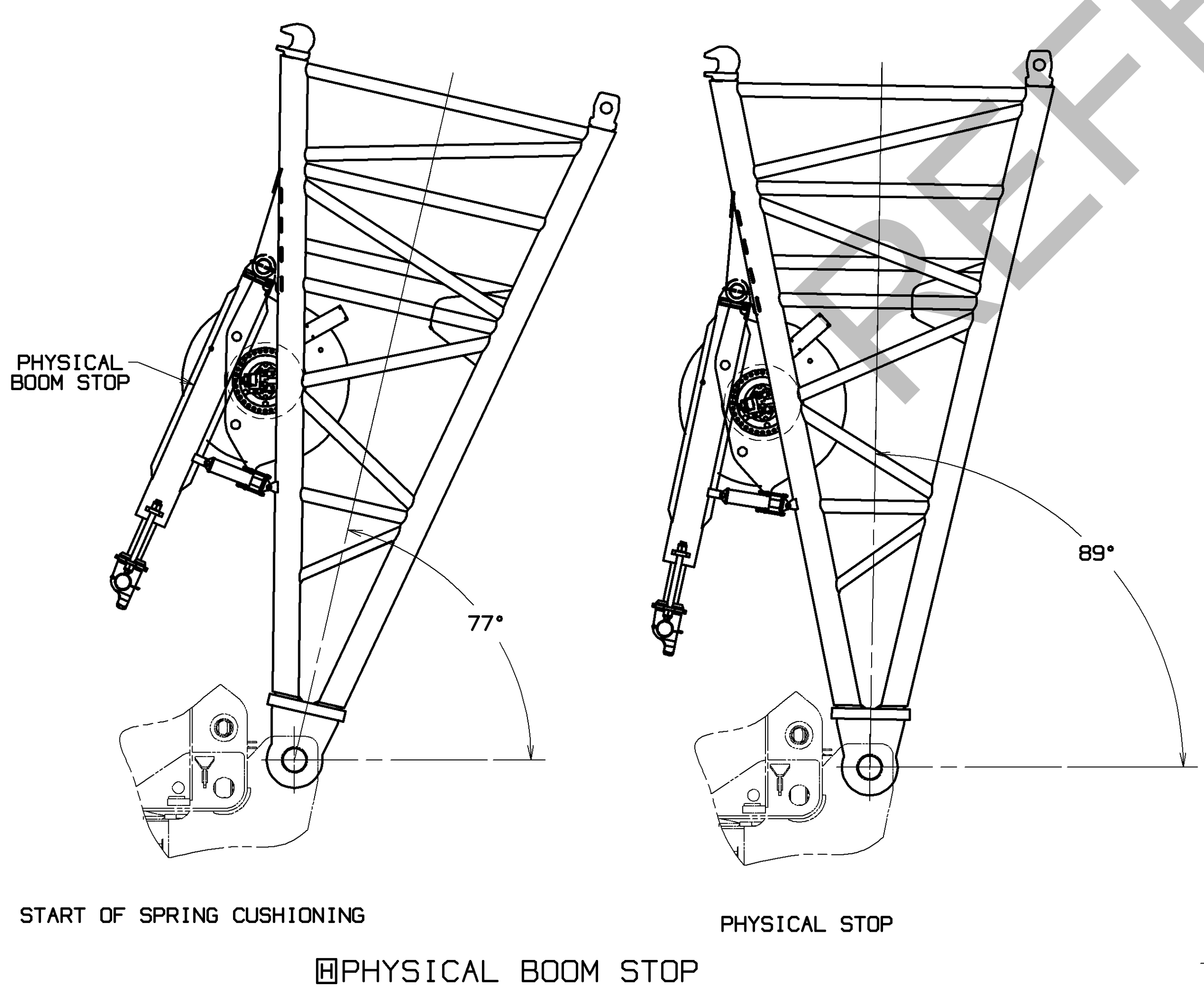
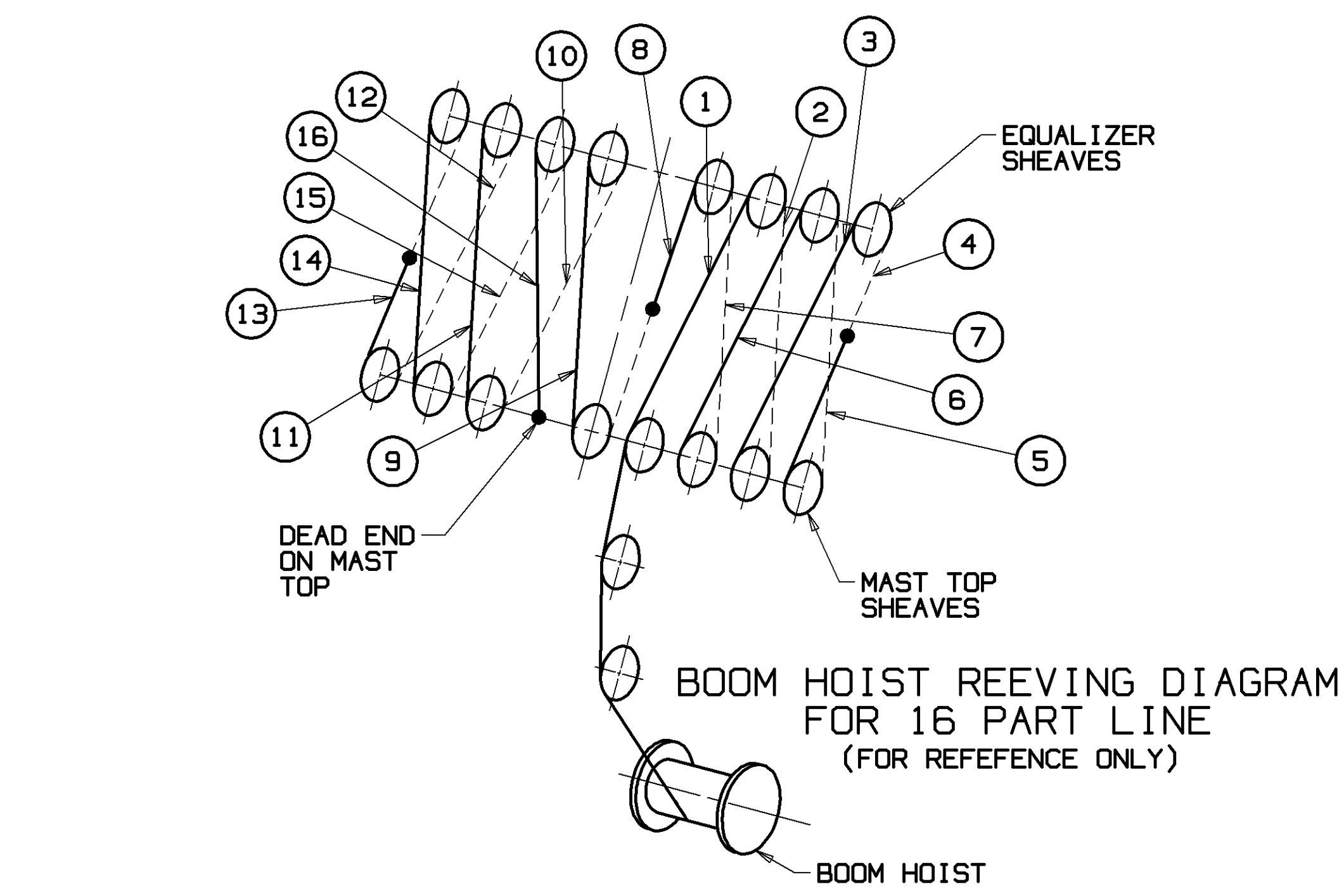


ASSEMBLIES REQ'D. FOR VARIOUS BOOM LENGTHS										
ITEM NO.		(18) (2)	(19) (2)	(20)	(22) (4)	(23) (4)	(25) (11)	(13) (26) (11)	(50) (7)	
BOOM LENGTH		20 FT 6.10 M INSERT ASSEMBLY #55 BOOM WITHOUT STRAPS	20 FT 6.10 M INSERT ASSEMBLY #55 BOOM WITH STRAPS	40 FT 12.19 M INSERT ASSEMBLY #55 BOOM WITH STRAPS	40 FT 12.19 M INSERT ASSEMBLY #55 BOOM WITHOUT STRAPS	40 FT 12.19 M INSERT ASSEMBLY #55 BOOM WITH SHEAVES	40 FT 12.19 M INSERT ASSEMBLY #55 BOOM (MEDIUM)	40 FT 12.19 M INSERT ASSEMBLY #55 BOOM W/BACKSTAY STRAP BRACKETS	INTERMEDIATE SUSPENSION	
FEET	METERS								REQUIRED	
140	42.7	0	0	0	1 OR 1	0	0	0	N	
160	48.8	1	0	0	1 OR 1	0	0	0	N	
180	54.9	0	0	0	2/1 OR 0/1	0	0	0	N	
200	60.9	0	1	0	2/1 OR 0/1	0	0	0	N	
220	67.1	0	2	0	2/1 OR 0/1	0	0	0	N	
240	73.2	0	1	1	2/1 OR 0/1	0	0	0	N	
260	79.2	0	2	1	2/1 OR 0/1	0	0	0	N	
280	85.3	0	0	2	2/1 OR 0/1	0	0	0	N	
300	91.4	0	2	2	2/1 OR 0/1	0	0	0	N	
320	97.5	0	1	2	2/1 OR 0/1	1 OR 1	1	1	N	
340	103.6	0	2	2	2/1 OR 0/1	1 OR 1	1	1	N	
360	109.7	0	1	3	2/1 OR 0/1	1 OR 1	1	1	N	
380	115.8	0	2	2	2/1 OR 0/1	2/1 OR 0/1	2/1 OR 0/1	2/1 OR 0/1	Y	
400	121.9	0	0	3	2/1 OR 0/1	2/1 OR 0/1	2/1 OR 0/1	2/1 OR 0/1	Y	
420	128.0	0	2	2	2/1 OR 0/1	3/2 OR 0/1	3/2 OR 0/1	3/2 OR 0/1	Y	
440	134.1	0	1	3	2/1 OR 0/1	3/2 OR 0/1	3/2 OR 0/1	3/2 OR 0/1	Y	



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DECIMAL PLACES	FRACTIONS	PERCENTS	ANGLES
(1) PLACE 0.1	1/10	10%	1°
(2) PLACE 0.01	1/100	1%	1/16°
(3) PLACE 0.001	1/1000	0.1%	1/64°

MANITOWOC CRANES, INC.
1251 F
DR. M.J.W.
CR. M.J.W.
APP. BLS

BOOM RIGGING
#55/55A W/140FT MAST

DATE
05-27-03
REV. LNK
FB

PRIVATE LABELING
REQUIREMENT TO
CONFORM TO
ENGINEERING
SPECIFICATION
8829103794 FOR
COMPONENTS LISTED
IN 88290-06-006

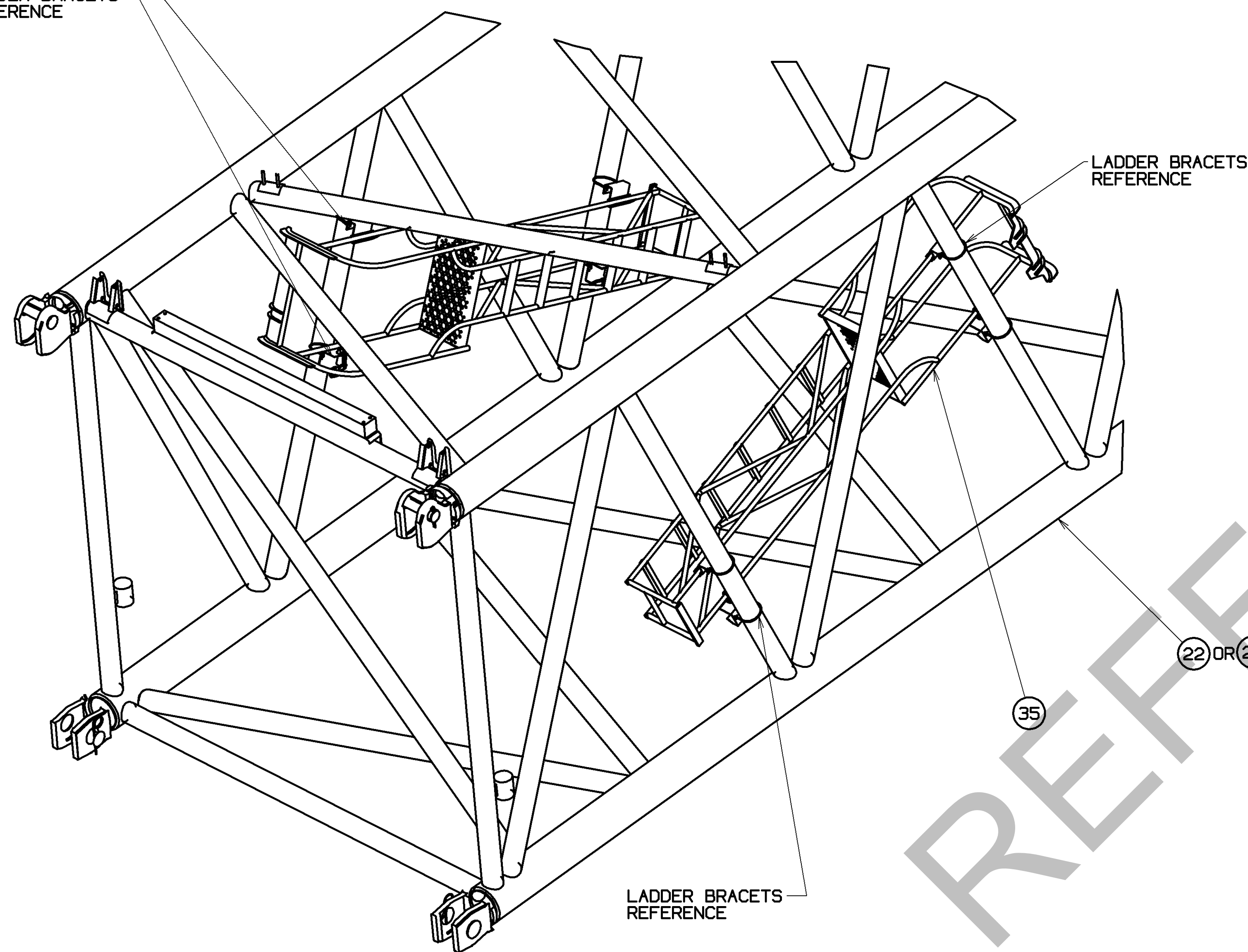
NOT SCALE THIS DRAWING

DATE
05-27-03
REV. LNK
FB

DATE
05-27-03
REV. LNK
FB

DATE
05-27-03
REV. LNK
FB

LADDER BRACETS
REFERENCE



SECURE LADDER IN BRACKETS FOR STOWING AND SHIPPING

INTERMEDIATE
SUSPENSION

1 SEE CHART FOR NO. REQ'D.

2 MAXIMUM NO. OF 20 FT (6.10 M)
INSERT ASSEMBLIES = 2.

3 SEE SHEET 3 FOR BOOM MAKEUP

4 FOR ITEMS 22 AND 23 IN CHART

QUANTITIES WITH / ARE:

X/X OR X/X

WITH LUFFING JIB PREP.
WITHOUT LUFFING JIB PREP.
WITH LUFFING JIB PREP.
WITHOUT LUFFING JIB PREP.

5 SEE 1 AND 4

6 SEE 1 AND 2

7 SEE SHEET 3 & 4 FOR INTERMEDIATE
SUSPENSION INFORMATION.

8 USE FOR 2 PART LINE ON UPPER BOOM POINT.
ALSO USED FOR MACHINE ASSEMBLY WITH 30 FT
LIVE MAST. FOR 28mm ROPE ONLY.

9 WIRE ROPE GUIDE PARTS IN THIS INSERT ARE REQ'D
FOR LUFFING JIB ONLY BUT MAY REMAIN IN PLACE
WHEN USING THIS ASSEMBLY.

10 ALL JIB BACKSTAY STRAPS, LINKS AND PINS STOWED
WITH INSERTS AND BOOM TOP MUST BE REMOVED
FOR USE WITH THIS ASSEMBLY.

11 FOR ITEMS 25 AND 26 IN CHART

QUANTITIES WITH / ARE:

X/X OR X/X

WITH LUFFING OR
FIXED JIB PREP.
WITHOUT LUFFING OR
FIXED JIB PREP.
WITH LUFFING OR
FIXED JIB PREP.
WITHOUT LUFFING OR
FIXED JIB PREP.

12 320 FT THRU 440 FT BOOM LENGTH REQUIRES
40 FT MEDIUM INSERTS ADJACENT TO THE
#55 OR #55A BOOM TOP. SEE TABLE ON SHEET 1
FOR NO. REQUIRED.

13 THIS INSERT IS NORMALLY REQUIRED FOR
MACHINES WITH CERTAIN BOOM/FIXED JIB OR
LUFFING JIB COMBINATIONS. SEE TABLE ON
SHEET 1 FOR NO. REQUIRED.

14 A13195 CAN BE USED IN PLACE OF A05447

15 81007957 REQUIRED WITH INTERMEDIATE
SUSPENSION. TO BE SHIPPED AS A LOOSE ITEM
CONTAINING PARTS FOR THE INTERMEDIATE
SUSPENSION.

16 BUTT 20 FT I.D. TAG #A05447 OR A13195.

17 INSERT 10 FT I.D. TAG #A05448 OR 81010441.

18 INSERT 20 FT I.D. TAG #A05449 OR 81010341.

19 INSERT 40 FT I.D. TAG #A05450 OR 81010349.

20 INSERT 40 FT W/SHEAVES I.D. TAG #A05451 OR
A17124 OR 81010350.

21 INSERT 40 FT W/EQUALIZER RAILS I.D. TAG
#A05454 OR 81010351 OR 81019361.

22 INSERT 40 FT (MEDIUM) I.D. TAG #A05452 OR
81010352.

23 TOP 30 FT I.D. TAG #A05453.

24 TOP 30 FT I.D. TAG #A08897 OR 81010649.

25 INSERT 40 FT (MEDIUM) W/BACKSTAY STRAP
BRACKETS I.D. TAG #A10034.

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

BOOM SECTION ASSY	OPTIONAL CAT WALK ASSY
A05403	81016912
A05391	81016914
A05393, A08899	81016913
A05383, A07118	81016906
A07119, A05385	
A05387, A05389	81016907
A10051	

27 OPTIONAL CAT WALK ASSEMBLY 81018755 REQUIRED
FOR BOOM BUTT ASSY A05403 FOR MACHINES
WITHOUT AUX DRUM.

BILL OF MATERIAL				ASSEMBLIES USED IN
QTY	NO.	DESCRIPTION	MATERIAL	
BOOM RIGGING ASSEMBLY				
1	1	MAST ASSEMBLY	A05378	
2	1	EQUALIZER ASSEMBLY	A06258	
3	1	20 FT BUTT ASSEMBLY - #55 BOOM	A05403	16,26
4	1	10 FT INSERT ASSEMBLY #55 BOOM	A05381	17,26
5				
6				
7				
8				
9				
10	1	INSERT ASSY #55 40FT W/EO RAILS	A05391	2,3,26
11				
12	1	TOP 30 FT ASSEMBLY #55 BOOM	A05393	23,26
13	1	TOP 30 FT ASSEMBLY #55A BOOM	A08899	24,26
14				
15				
16				
17				

REVISIONS
03-31-11 DJS ADDED ITEM 29
08-06-11 JMG BIDDED
02-15-12 RJS ADDED NOTE
03-28-12 RJS ADDED ITEM 52
03-28-12 RJS REVISED NOTE

NO. REQ'D. FOR THE FOLLOWING ITEMS ARE IN TABLES

18	20 FT INSERT ASSY #55 BOOM (W/O STRAPS)	A05383	6,18,26
19	20 FT INSERT ASSY #55 BOOM (W/STRAPS)	A07118	6,18,26
20	40 FT INSERT ASSY #55 BOOM (W/ STRAPS)	A07119	1,19,26
21			
22	40 FT INSERT ASSY #55 BOOM (W/O STRAPS)	A05385	5,19,26
23	40 FT INSERT ASSY #55 BOOM W/ SHEAVES	A05387	5,9,20,26
24			
25	40 FT INSERT ASSY #55 BOOM MEDIUM	A05389	1,22,26
26	40 FT INSERT ASSY #55 BOOM MED W/ BACKSTAY STRAPS	A10051	1,25,26
27			
28			
29			
30			

OPTIONAL PARTS

31	UPPER BOOM POINT ASSEMBLY	170419	
32	UPPER BOOM POINT ASSEMBLY	A08516	
33	CAT WALK ASSY 20 FT #55 BOOM BUTT	81016912	26
34	CAT WALK ASSY 40 FT #55 INSERT	81016914	26
35	BOOM ASSEMBLY LADDER STORAGE	81011123	
36	CAT WALK ASSY 30 FT #55 OR #55A TOP	81016913	26
37	CAT WALK ASSY 20 FT #55 INSERT	81016906	26
38	CAT WALK ASSY 40 FT #55 INSERT	81016907	26
52	CAT WALK ASSY 20 FT #55 BUTT W/O DRUM	81018755	27

BLOCKS AND WEIGHT BALL OPTIONS

39	500T HOOK ASSEMBLY	A07773	
40	450T HOOK ASSEMBLY	A07752	
41	350T HOOK ASSEMBLY	A08833	
42	100T HOOK ASSEMBLY	236505	8
43	HOOK 30T SWIVEL ASSEMBLY	A00816	
44			
45	600MT HOOK ASSEMBLY	A08832	
46	600MT HOOK ASSEMBLY	A08995	
47	250MT HOOK ASSEMBLY	A14753	
48	450MT HOOK ASSEMBLY	A14754	
49	BLOCK 200 TON DUPLEX HOOK	81015924	

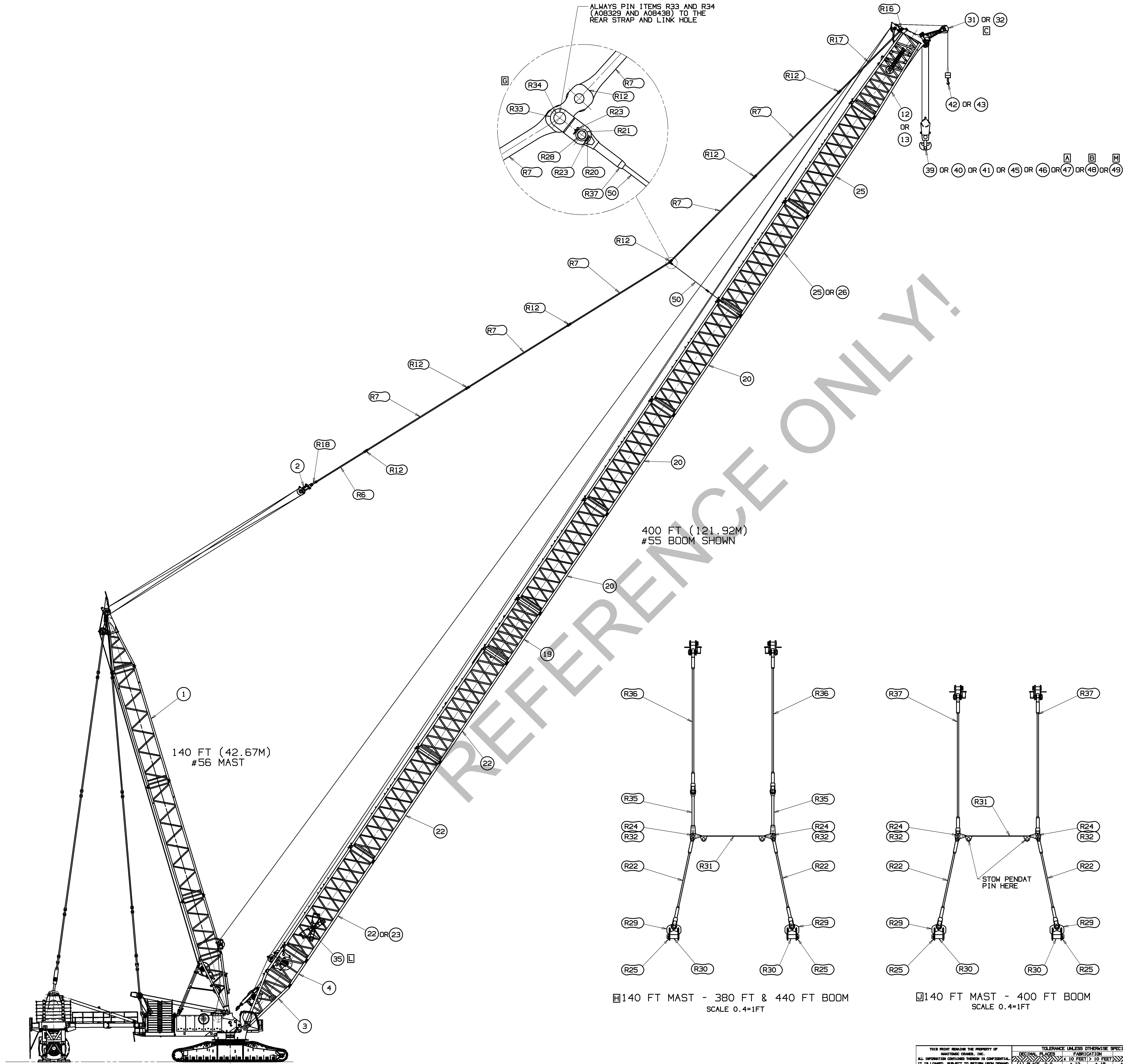
INTERMEDIATE SUSPENSION ASSEMBLY

50	INTERMEDIATE SUSPENSION ASSEMBLY	A07457	7
51	PARTS BOX FOR PART STORAGE	81007957	15

28 84026888 CAN BE USED IN PLACE OF A05391.

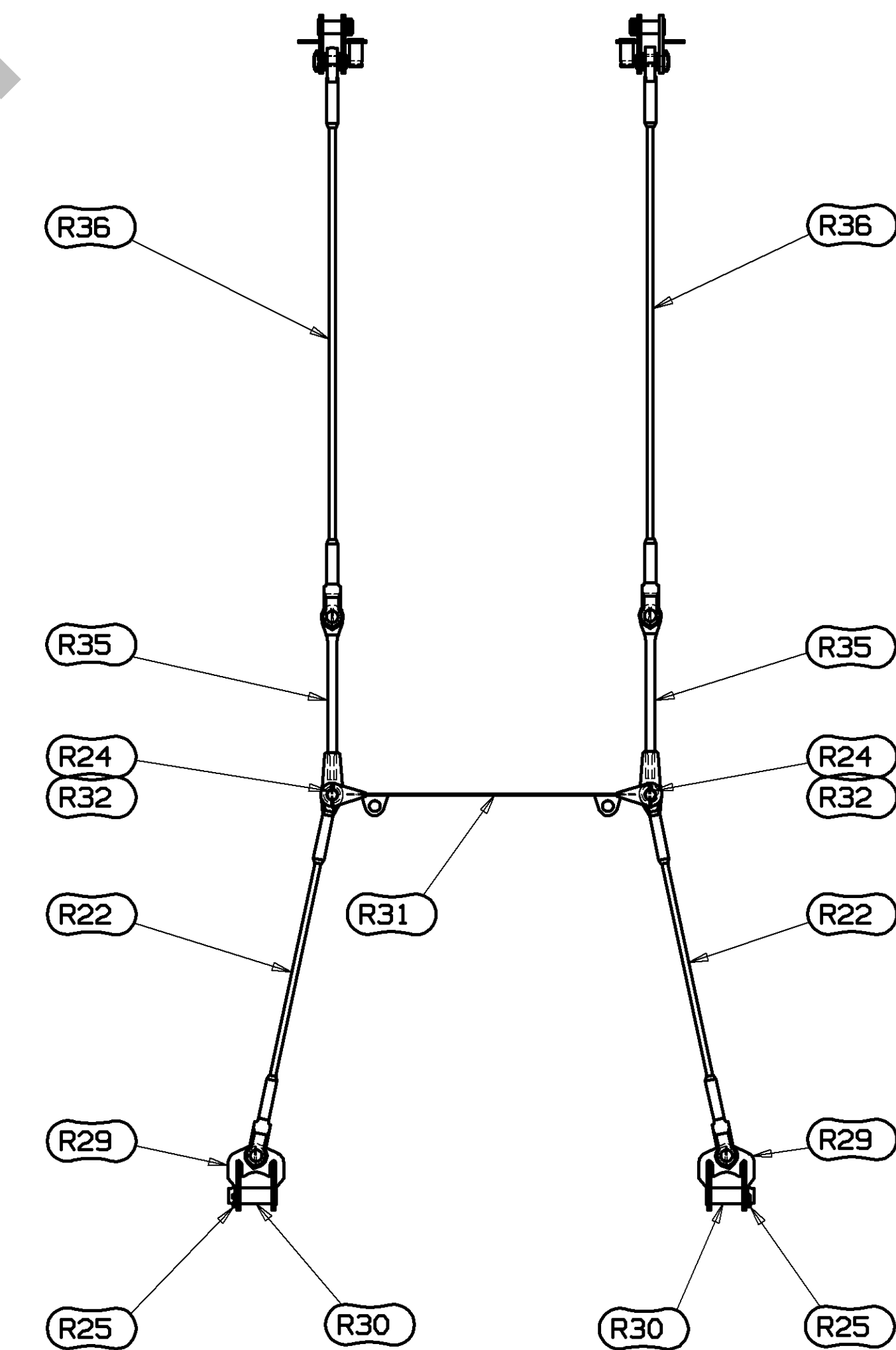
SUPERSEDES A05377 SHEET 2 OF 4 OF 10-29-09

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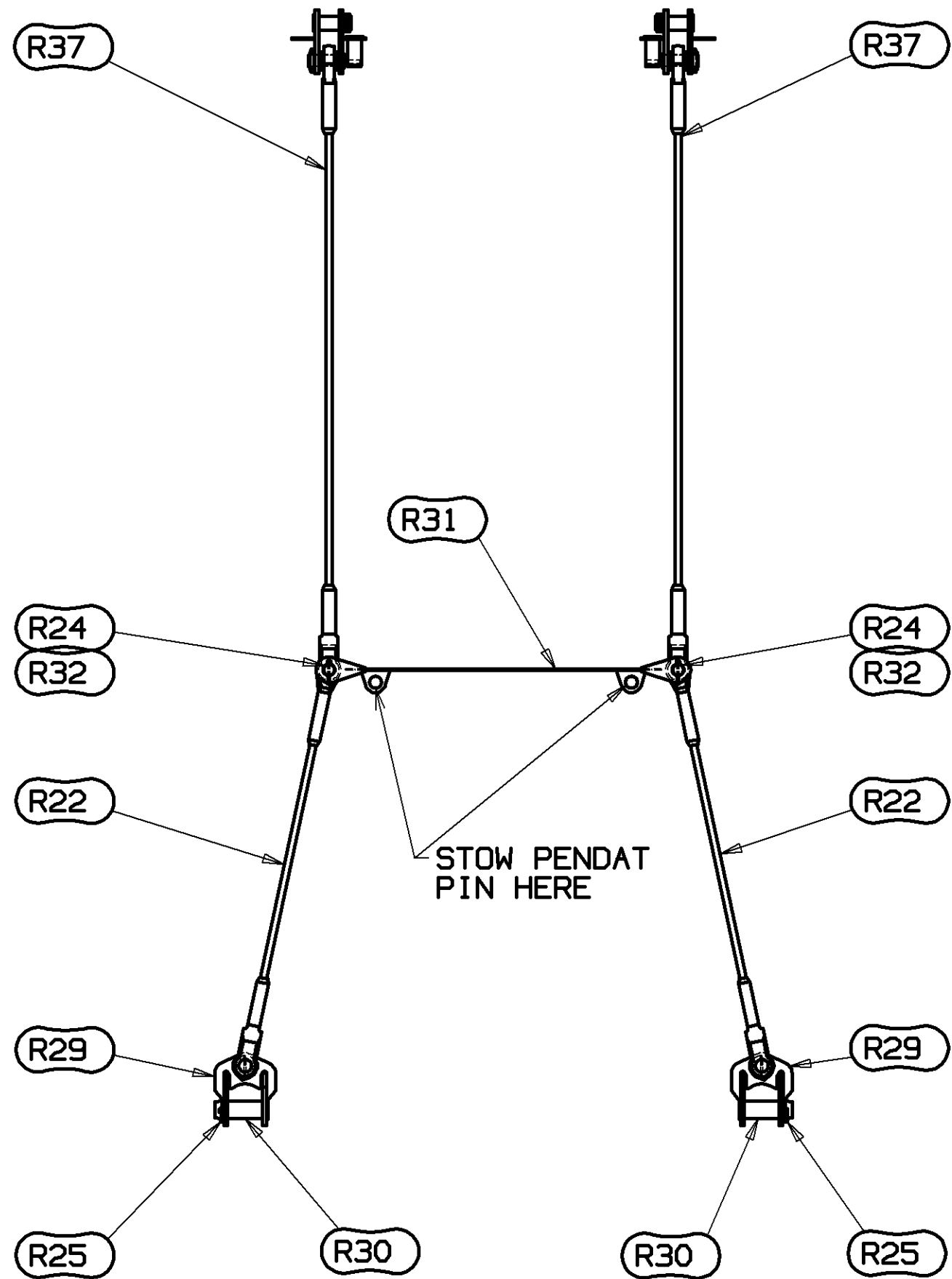


BILL OF MATERIAL					ASSEMBLIES USED ON
QTY	NO.	DESCRIPTION	UNIT	MATERIAL	
INTERMEDIATE SUSPENSION					
50	1	INTERMEDIATE SUSPENSION ASSEMBLY		A07457	
R20	2	PIN 2 HOLE 0.50 DIA X 3.72 LG		179194	
R21	2	COLLAR 3.50 DIA. X 1.00 LG		179195	
R22	2	PENDANT 1.375 DIA X 7 FT 3 IN LG		277158	2
R23	8	PIN COTTER .250 X 1.50		562105	
R24	4	PIN COTTER .375 X 4.00		562152	
R25	2	PIN SAFETY .243 OD X 5.00		563640	
R26	2	PIN COTTER 2 HOLE		A06150	
R27	2	COLLAR		A06151	
R28	2	PIN COTTER 1 HOLE W/HD 2.50 OD X 6.35 LG		A08321	
R29	2	LINK		A08322	
R30	2	PIN COTTER 1 HOLE W/HD 3.75 DIA X 9.61 LG		A08323	
R31	1	LINK CONNECTING		A08324	
R32	2	PIN COTTER 2 HOLE 2.50 DIA X 6.40 LG		A08325	
R33	4	LINK INTERMEDIATE SUSPENSION		A08329	
R34	2	PIN COTTER 1 HOLE W/HD 3.00 DIA X 6.36 LG		A08438	
140 FT MAST - 380 FT & 440 FT BOOM					1
R35	2	LINK CONNECTING		A08326	
R36	2	PENDANT 1.375 DIA X 10 FT 11 IN LG		A08328	
140 FT MAST - 400 FT BOOM					1
R37	2	PENDANT 1.375 DIA X 10 FT 11 IN LG		A08328	
140 FT MAST - 420 FT					2
R38	2	PENDANT 1.375 DIA X 7 FT 3 IN LG		277158	
R39	2	PENDANT 1.375 DIA X 10 FT 11 IN LG		A08328	

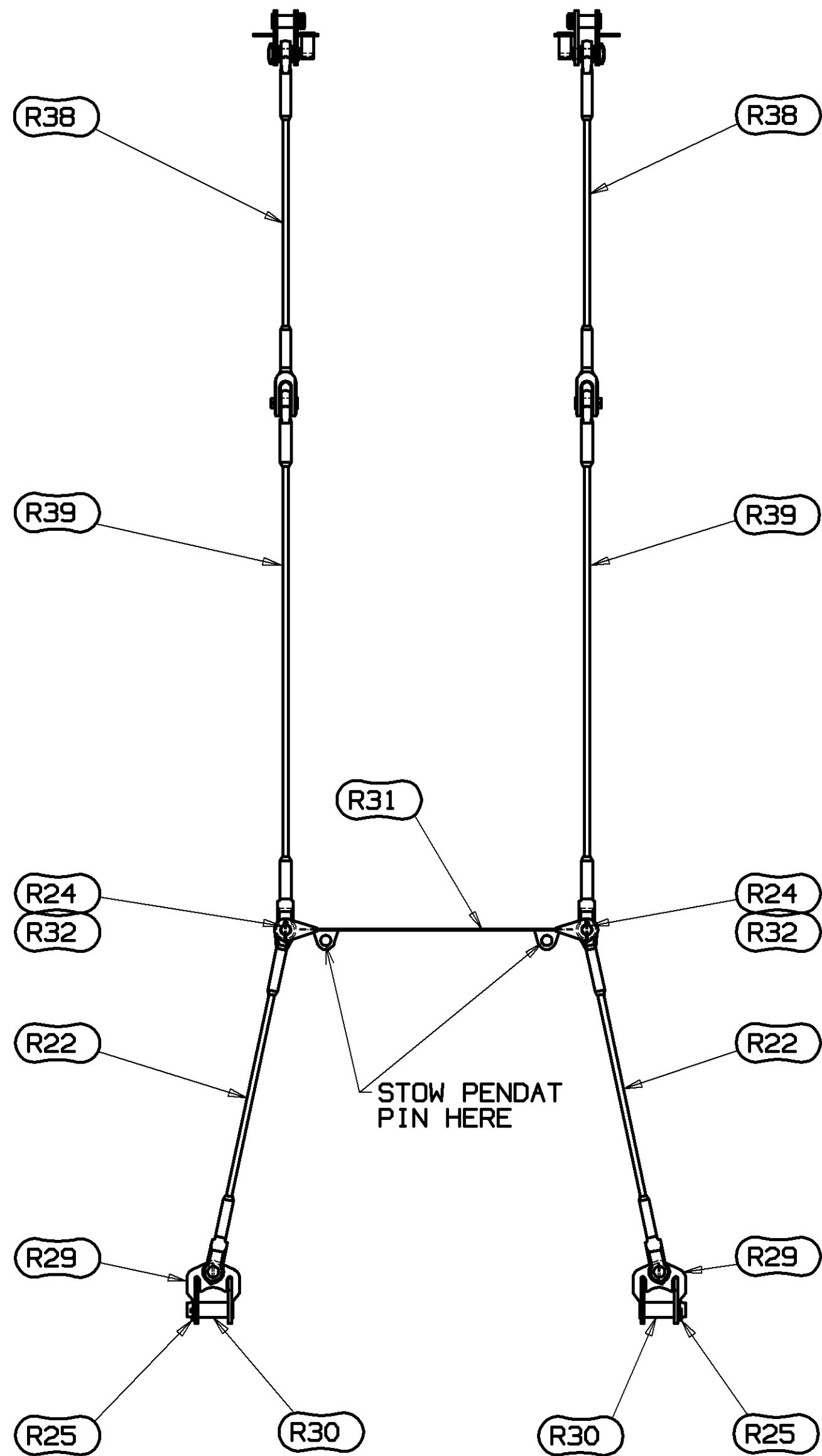
- E 1 BETWEEN THE BOOM TOP ASSEMBLY A05393 AND THE INTERMEDIATE SUSPENSION NEEDS TO BE 1 X 40 FT INSERTS.
- F 2 BETWEEN THE BOOM TOP ASSEMBLY A05393 AND THE INTERMEDIATE SUSPENSION NEEDS TO BE 2 X 40 FT INSERT.



140 FT MAST - 380 FT & 440 FT BOOM
SCALE 0.4=1FT



140 FT MAST - 400 FT BOOM
SCALE 0.4=1FT



140 FT MAST - 420 FT BOOM
SCALE 0.4=1FT

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MARITOWEE CRANES, INC. Maritowee, Wisconsin MODEL 18000		BOOM RIGGING #55/55A W/140FT MAST		DATE 01-26-04 REV. LNK FB	DATE 01-26-04 REV. LNK FB