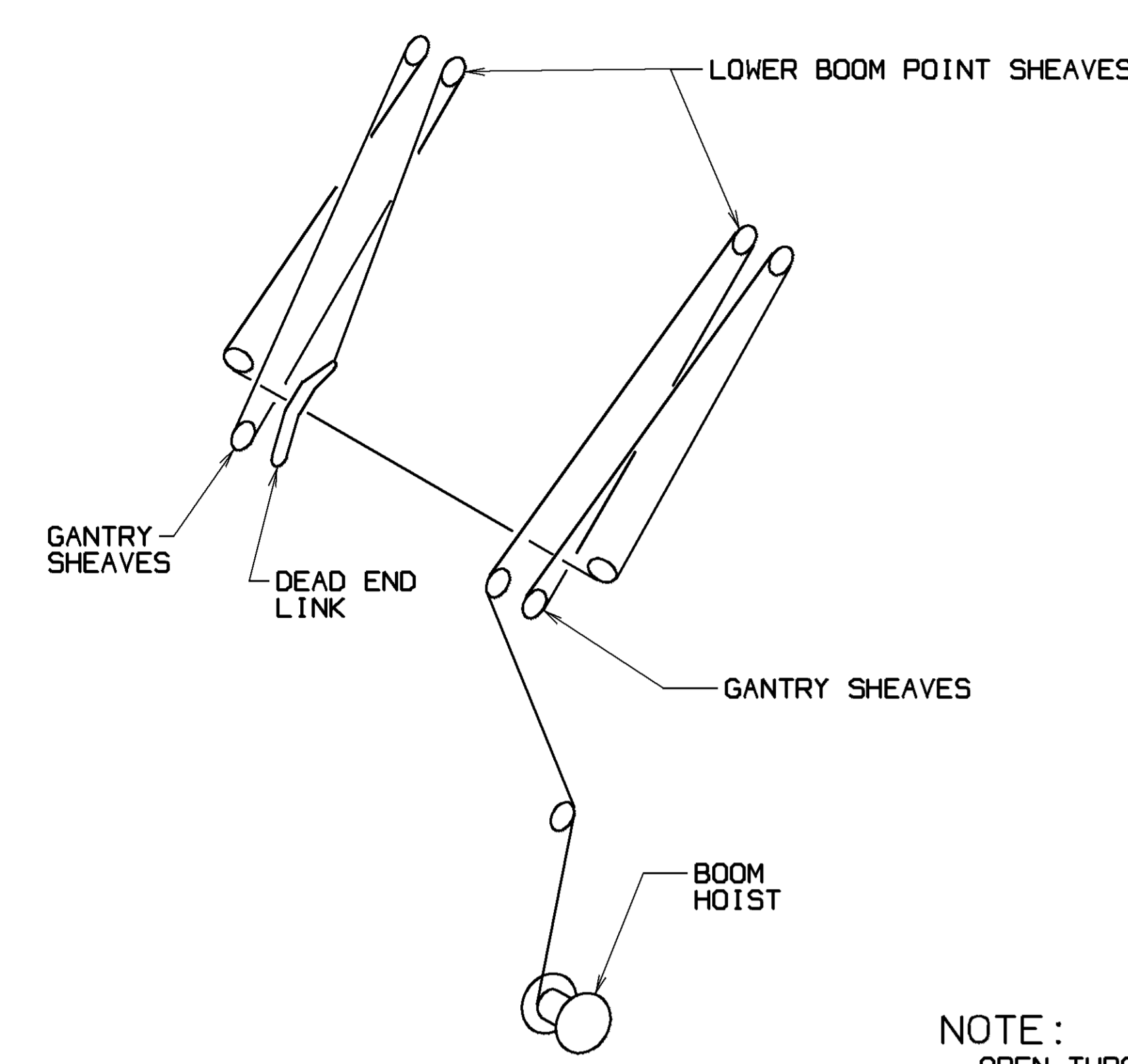


REQUIRED FOR CLAMHELL								
DWG. NO.	160923-2	160924-2	160925-2	161058	162812	162809	162810	
BOOM LENGTH	10FT. INSERT (SEE INSERT NOTES)	20FT. INSERT	40FT. INSERT	WIRE ROPE ROLLER GUIDE ASSEM.	WIRE ROPE ROLLER GUIDE ASSEM.	WIRE ROPE GUIDE ASSEM. LOWER	WIRE ROPE GUIDE ASSEM. UPPER	BOOM HOIST ROPE LENGTH
70 FT.	0			0	1	0	1	780 FT.
80 FT.	10 FT. OF INSERT			0	1	0	1	860 FT.
90 FT.	20 FT. OF INSERT			1	1	1	1	940 FT.
100 FT.	30 FT. OF INSERT			1	2	1	1	1,020 FT.
110 FT.	40 FT. OF INSERT			1	2	1	1	1,100 FT.
120 FT.	50 FT. OF INSERT			1	2	1	1	1,180 FT.

REQUIRED FOR DRAGLINE							
DWG. NO.	160923-2	160924-2	160925-2	161058	162812	164708	
BOOM LENGTH	10FT. INSERT (SEE INSERT NOTES)	20FT. INSERT	40FT. INSERT	WIRE ROPE ROLLER GUIDE ASSEM.	WIRE ROPE ROLLER GUIDE ASSEM.	WIRE ROPE GUIDE ASSEM. UPPER	BOOM HOIST ROPE LENGTH
70 FT.	0			0	2	0	780 FT.
80 FT.	10 FT. OF INSERT			0	2	0	860 FT.
90 FT.	20 FT. OF INSERT			1	1	1	940 FT.
100 FT.	30 FT. OF INSERT			1	1	1	1,020 FT.
110 FT.	40 FT. OF INSERT			1	1	1	1,100 FT.
120 FT.	50 FT. OF INSERT			2	1	1	1,180 FT.

BILL OF MATERIAL				ASSEMBLIES USED ON
QTY	DESCRIPTION	MATERIAL	QTY	
70 FT. BASIC BOOM PARTS				
1	BOOM SIGN		22656	
1	GANTRY ASSEMBLY		162678	
1	UPPER BOOM POINT ASSEMBLY		162720	
1	UPPER BOOM POINT ASSEMBLY		162721	
1	BOOM TOP (40 FT.)		173368	
1	LOWER BOOM POINT ASSEMBLY		162771	
1	BOOM BUTT (30 FT.)		165161-3	
1	BOOM BUTT (30 FT.)		165161-9	
1	BOOM BUTT (30 FT.)		165161-4	
OPTIONAL				
1	REMOTE LUB PIPING FOR 164708		164828	

- 1 1-SHEAVE - DRAGLINE ONLY.
- 2 2-SHEAVES - DRAGLINE OR CLAMHELL.
- 3 OPEN THROAT INVERTED
- 4 DRAGLINE OR CLAM/DRAG COMBINATION
- 5 LIFT, DRAGLINE, AND CLAMHELL
- 6 CLAMHELL
- 7 NOT SHOWN
- 8 S/N'S 396005 AND 396006 HAVE HAD BUTT DWG. NO. 162820-3 MODIFIED TO BUTT DWG. NO. 420673 WHICH IS SUPERSEDED BY BUTT DWG. NO. 165161-3.

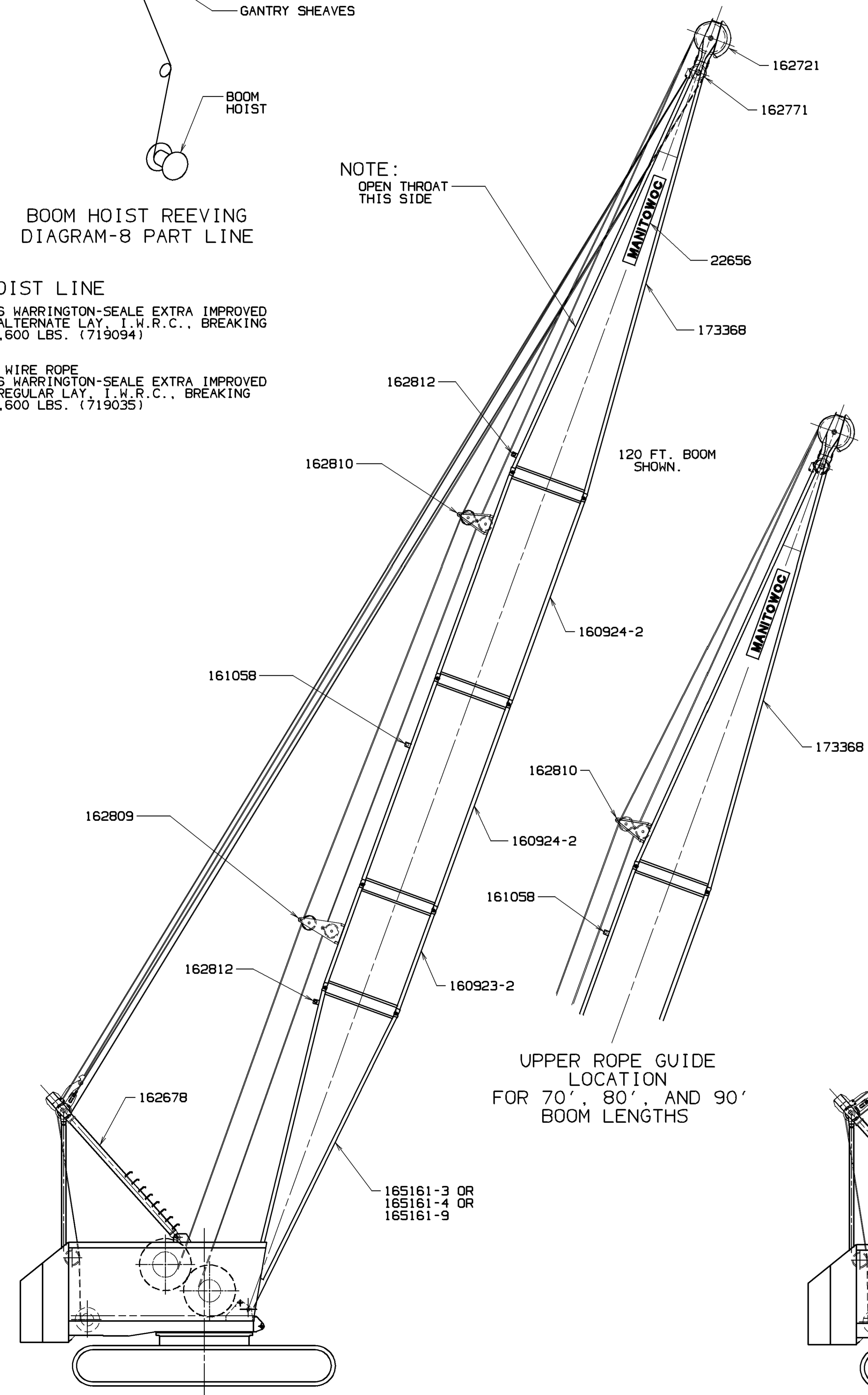


BOOM HOIST REEVING DIAGRAM-8 PART LINE

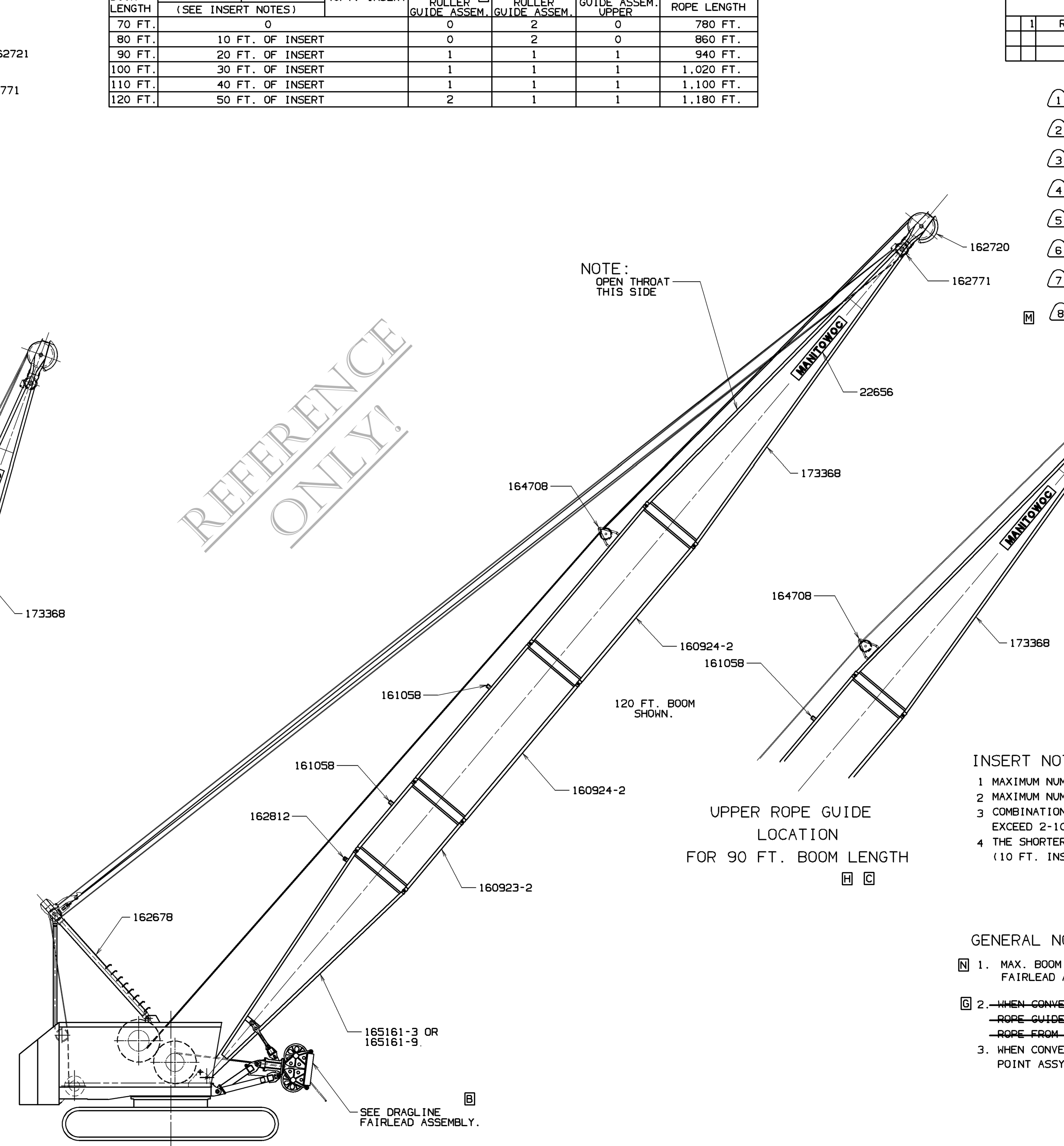
BOOM HOIST LINE

.875 - 6 X 26 WARRINGTON-SEALE EXTRA IMPROVED PLOW STEEL, ALTERNATE LAY. I.W.R.C., BREAKING STRENGTH, 79,600 LBS. (719094)

ALTERNATE WIRE ROPE .875 - 6 X 26 WARRINGTON-SEALE EXTRA IMPROVED PLOW STEEL, REGULAR LAY. I.W.R.C., BREAKING STRENGTH, 79,600 LBS. (719035)



CLAMHELL RIGGING



DRAGLINE RIGGING

REFERENCE ONLY!

- INSERT NOTES:
- 1 MAXIMUM NUMBER OF 10 FT. INSERTS = 2
 - 2 MAXIMUM NUMBER OF 20 FT. INSERTS = 2
 - 3 COMBINATION OF 10 FT. AND 20 FT. INSERTS CANNOT EXCEED 2-10 FT. + 1-20 FT. OR 1-10 FT. + 2-20 FT.
 - 4 THE SHORTER INSERTS MUST BE CLOSEST TO THE BUTT. (10 FT. INSERTS FIRST, THEN THE 20 FT. INSERTS)

- GENERAL NOTES
1. MAX. BOOM ANGLE = 70° FOR CLAM OR WHEN DRAGLINE FAIRLEAD ASSEMBLY NO. 165265 IS ATTACHED.
 2. WHEN CONVERTING FROM CLAM TO DRAG, UPPER WIRE ROPE GUIDE 162810 MAY BE USED IN PLACE OF 162811. ROPE FROM DRUM MUST RUN ACROSS UPPER SHEAVE.
 3. WHEN CONVERTING FROM CLAM TO DRAG, UPPER BOOM POINT ASSY. 162721 MAY BE USED IN PLACE OF 162720.

SCALE	1:75-12	Mantowoc Cranes, Inc.	#39A BOOM RIGGING
DR	RH	Mantowoc, Wisconsin	ASSEMBLY FOR
OR	LS	MOD. 3950D	DRAGLINE AND CLAMHELL
APP	PWR		CONTINUOUS BOOM HOIST