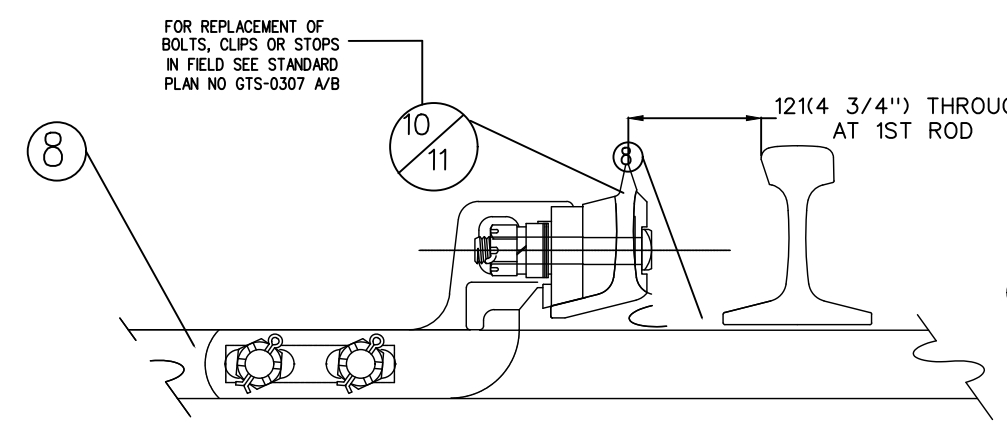
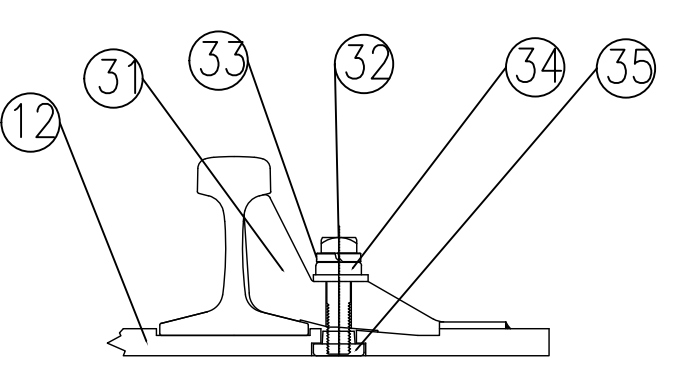


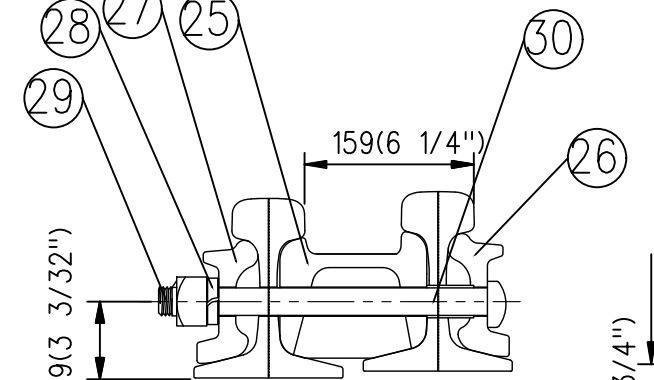
**GENERAL ARRANGEMENT**  
DRAWING NO GTS-0155 A  
RIGHT HAND TURNOUT



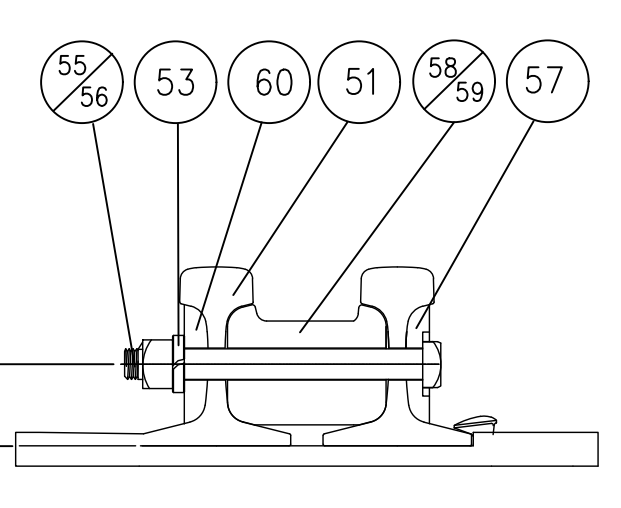
"MJ" CLIP ASSEMBLY



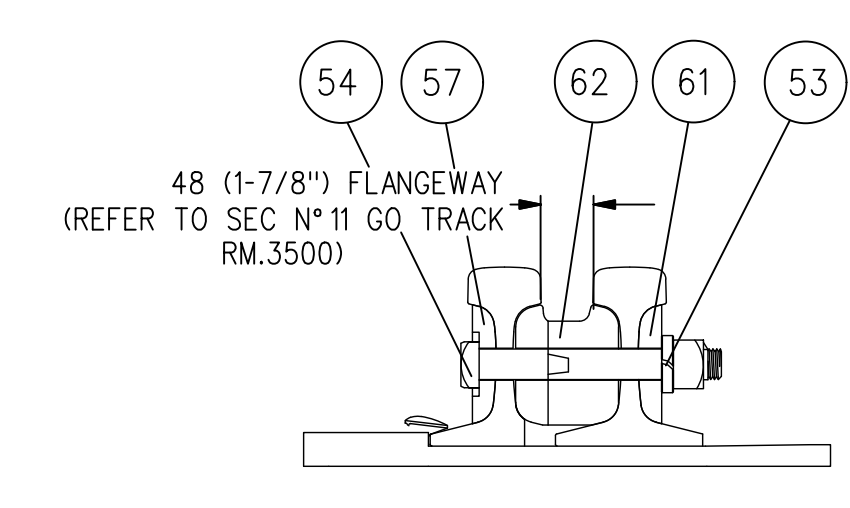
ADJUSTABLE RAIL BRACE ASSEMBLY



HEEL BLOCK ASSEMBLY

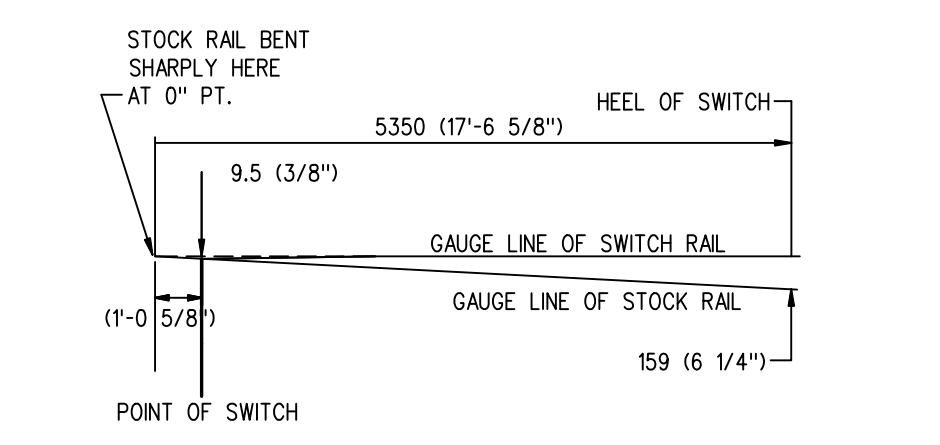


GUARD RAIL ASSEMBLIES

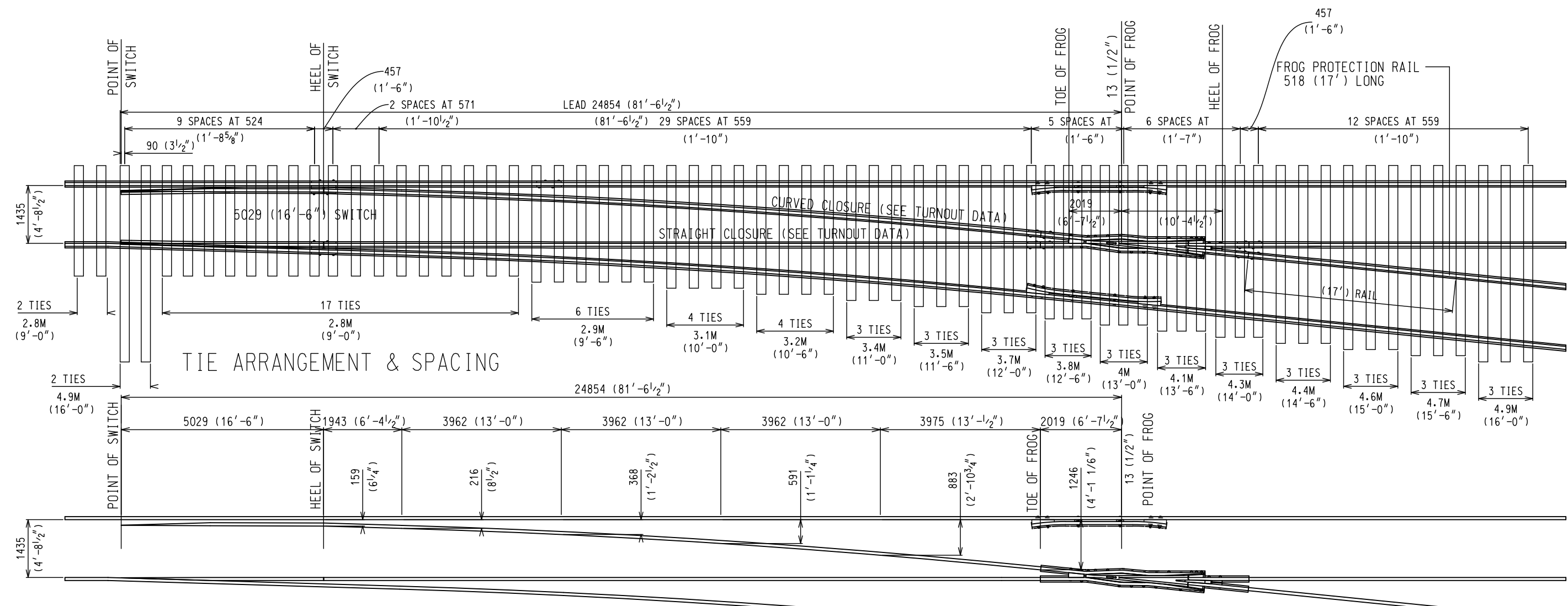


SPLICE BAR ASSEMBLY

- NOTES**
- TURNOUT TO BE INSTALLED AND MAINTAINED IN ACCORDING WITH THE LATEST ISSUE OF: RM.3500 TURNOUTS RM.3502 POWER, SPRING AND INSTALLED SWITCH RM.3506 SWITCH STAND, SWITCH LAMPS AND TARGETS, WHERE APPLICABLE
  - WHEN REFERRING TO MANUAL TURNOUTS, DRAWING NUMBER MUST BE STATED AS A OR B: A-RIGHT HAND TURNOUT B-LEFT HAND TURNOUT
  - FOR GENERAL ARRANGEMENT OF SWITCH STAND & COMBINATION SEE GTS-701 AND GTS-702
  - FOR THE VARIOUS STANDARD TURNOUT COMBINATIONS SEE INDEX SHEET GTS-0
  - TURNOUT GEOMETRY, FOR TABLES OF DIMENSIONS AND OFFSETS SEE GTS-2



STOCK RAIL BENDING DETAIL



TIE ARRANGEMENT & SPACING



OFFSET DIAGRAM

**TURNOUT DATA:**

FROG NO -----10

LENGTH OF SWITCH-----16'-6"

HEEL SPREAD-----6 1/4"

LEAD-----81'-6 1/2"

PS TO H.F.-----91'-11"

58'-5" STRAIGHT CLOSURE LENGTH MADE UP BY A 58'-5" RAIL OR:

A 39' AND 19'-5" RAIL

A 36' AND 22'-5" RAIL

A 33' AND 25'-5" RAIL

A 30' AND 28'-5" RAIL

58'-7" CURVE CLOSURE LENGTH MADE UP BY A 58'-7" RAIL OR:

A 39' AND 19'-7" RAIL

A 36' AND 22'-7" RAIL

A 33' AND 25'-7" RAIL

A 30' AND 28'-7" RAIL

METRIC CONVERSION: 1 inch=25.4mm, 1 foot=304.8mm

1	18/07/27	ADDED IMPERIAL TO METRIC CONVERSION NOTE	
No.	Date	Revision	By Approved

Standard / NO. 10 TURNOUT-16'-6" POINT SPRING SWITCH -R.B.M. FROG 132LB. R.E. RAIL

Drawn MG Checked GGS Approved [Signature] Engineering & Asset Management



Date DEC 15, 2017 Plan Number GTS-0155 Rev 1

REFERENCE: TS-155 A/B Sheet 1 OF 1

**BILL OF MATERIALS FOR GTS-0155**

ITEM	DESCRIPTION	STANDARD DRAWING	MARK NO.	QUANTITY	
				A	B
<b>SWITCH PACK</b>					
1	1st. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0522	GP100/GP100	1	1
2	2nd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0522	GP105/GP101	1	-
-	2nd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0522	GP101/GP102	-	1
3	3rd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0522	GP128/GP101	1	-
	3rd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0522	GP101/GP127	-	1
4	4th. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0522	GP112/GP101	1	-
	4th. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0522	GP101/GP111	-	1
5	MILD STEEL STRAP	GTS-0356C	356C	2	2
6	MILD STEEL STRAP	GTS-0356A	356A	1	1
7	DOUBLE SPRING WASHER - TYPE FE6	GTS-1310	-	36	36
8	SWITCH ROD	GTS-0344B	344B	1	1
9	SWITCH ROD	GTS-0344C	344C	2	2
10	RIGHT SAMSON POINT RAIL	GTS-0348A	348A	-	1
	RIGHT POINT RAIL	GTS-0318A	318A	1	-
11	LEFT SAMSON POINT RAIL	GTS-0348B	348B	1	-
	LEFT POINT RAIL	GTS-0318B	318B	-	1
12	SWITCH PLATE	GTS-0508	SP315	2	2
13	SWITCH PLATE	GTS-0509	SP316	6	6
14	SWITCH PLATE	GTS-0510	SP317	2	2
15	SWITCH PLATE	GTS-0511	SP335	2	2
16	SWITCH PLATE	GTS-0511	SP336	2	2
17	SWITCH PLATE	GTS-0511	SP337	2	2
18	HOOK TWIN TIE PLATE	GTS-0503	LR23	6	6
19	HOOK TWIN TIE PLATE	GTS-0503	L23	6	6
20	HOOK TWIN TIE PLATE	GTS-0503	LR27	8	8
21	HOOK TWIN TIE PLATE	GTS-0503	L27	8	8
22	HOOK TWIN TIE PLATE	GTS-0503	LR31	4	4
23	HOOK TWIN TIE PLATE	GTS-0503	L31	3	3
24	HOOK TWIN TIE PLATE	GTS-0503	L31J	1	1
25	HEEL BLOCK	GTS-0360	16-6&22GP1-S	2	2
26	BENT SPLICE BAR(4 HOLE) - 132/136 LB. R.E.	GTS-1204D	1204D	2	2
27	STRAIGHT SPLICE BAR (4 HOLE) - 132/136 LB. R.E.	GTS-1203	-	1	1
28	SPRING WASHER for 1 - 1/8" DIA. BOLT	GTS-1301	-	12	12
29	1 - 1/8" DIA. - 7 NC OVAL NECK TRACK BOLT X 12 - 1/2" LG. C/W SQ. NUT	GTS-1320/4	-	8	8
30	PIPE THIMBLE - 1 - 1/4" DIA. X 2 - 3/8" LONG	GTS-0345J	J	2	2
31	ADJUSTABLE RAIL BRACE	GTS-0354	132M-14	12	12
32	7/8" DIA. 9 UNC SQ. HD. BOLT X 3-3/4" LG.	GTS-1308/5	-	24	24
33	SPRING WASHER for 7/8" DIA. BOLT	GTS-1301	-	24	24
34	DOUBLE WASHER	GTS-0354	M-10	12	12
35	DOUBLE NUT	GTS-0354	M-9	12	12
36	UNDERCUT STOCK RAIL - 132 LB. R.E. 39' - 0" LG.	GTS-1105C	1105C	1	1
37	PANDROL CLIP - PR 631A	GTS-1322	-	2	2
<b>FROG</b>					
38	#10-132 LB. RAIL BOUND MANGANESE STEEL FROG	GTS-0823	-	1	1
<b>FROG PACK</b>					
39	HOOK TWIN TIE PLATE	GTS-0503	L23	8	8
40	HOOK TWIN TIE PLATE	GTS-0503	LR27	2	2
41	HOOK TWIN TIE PLATE	GTS-0503	L27	10	10
42	HOOK TWIN TIE PLATE	GTS-0503	LR31	2	2
43	HOOK TWIN TIE PLATE	GTS-0503	L31	2	2
44	HOOK TWIN TIE PLATE	GTS-0503	LR23J	2	2
45	HOOK TWIN TIE PLATE	GTS-0503	L23J	2	2
46	HOOK TWIN TIE PLATE	GTS-0503	LR27J	2	2
47	HOOK TWIN TIE PLATE	GTS-0503	L27J	2	2
48	STRAIGHT SPLICE BAR (4 HOLE) - 132/136 LB. R.E.	GTS-1203	-	4	4
49	SPRING WASHER for 1 - 1/8" DIA. BOLT	GTS-1301	-	16	16
50	1 - 1/8" DIA. - 7 NC OVAL NECK TRACK BOLT X 5-7/8" LG. C/W SQ. NUT	GTS-1320/1	-	16	16
<b>GUARD RAIL PACK</b>					
51	FROG GUARD RAIL 11' - 0" LONG	GTS-1106	-	2	2
52	HOOK TWIN TIE PLATE	GTS-0503	L23	32	32
53	SPRING WASHER for 1 - 3/8" DIA. BOLT	GTS-1301	-	12	12
54	1-3/8" DIA. - 6 UNC SQ. HD. BOLT X 9 - 1/2" LG. C/W SQ. NUT	GTS-1309/100	-	4	4
55	1-3/8" DIA. - 6 UNC SQ. HD. BOLT X 10 - 1/2" LG. C/W SQ. NUT	GTS-1309/102	-	4	4
56	1-3/8" DIA. - 6 UNC SQ. HD. BOLT X 11" LG. C/W SQ. NUT	GTS-1309/104	-	4	4
57	HEAD WASHER	GTS-0837J	837J	12	12
58	END CASTING LEFT HAND 132 LB. R.E.	GTS-0848	GG2-S	2	2
59	END CASTING RIGHT HAND 132 LB. R.E.	GTS-0848	GG3-S	2	2
60	TAIL WASHER (BEVELLED)	GTS-0837B	837B	8	8
61	TAIL WASHER (NOT BEVELLED)	GTS-0837K	837K	4	4
62	ADJUSTABLE BLOCK 132 LB. R.E.	GTS-0848	GG1-S	8	8
***TO UPGRADE EXISTING TURNOUT, REPLACE 132 LB. PLATES WITH EQUIVALENT 136 LB. PLATES. ***					
*** MINOR TIE SPACING ADJUSTMENTS MAY BE NECESSARY. ***					
<b>TURNOUT PACKAGES</b>					
<b>TURNOUT NUMBER</b>	<b>DESCRIPTION</b>	<b>QUANTITY PER TURNOUT</b>			
GTS- 155A	FROG RBM 10 - 132	1			
	SW-PK INS HO NO. 10A - 132 LBS.	1			
	GR-PK 132 11' - 0"	1			
	FR-PK RBM 10 - 132	1			
GTS- 155B	FROG RBM 10 - 132	1			
	SW-PK INS HO NO. 10B - 132 LBS.	1			
	GR-PK 132 11' - 0"	1			
	FR-PK RBM 10 - 132	1			
<b>ABBREAVATIONS</b>					
SW - PK - SWITCH PAK		SAM - SAMSON		SGM - SELF	
FR - PK - FROG PAK		GUARD MANGANESE		RBM - RAIL	
GR - PK - GUARD RAIL PAK		HO - HAND OPERATED			
INS - INSULATED		BOUND MANGANESE			
		SO - SPRING OPERATED			
		PO - POWER OPERATED			
NOTE: 1 - For a new installation, necessary rail, bonded insulated joints, splice bars, bolts, washers, rail anchors, connecting rod, switch stand, targe and reflectorized target kit may be required in addition to the materials listed above					
<b>BILL OF SWITCH TIES FOR HAND AND SPRING OPERATION</b>					
TIES 180 X 230 mm (7" X 9")					
LENGTH					
METRES	FEET/INCHES	NO. OF PIECES			
2.8	9' - 0"	19			
3.1	10' - 0"	10			
3.4	11' - 0"	7			
3.7	12' - 0"	6			
4.0	13' - 0"	6			
4.3	14' - 0"	6			
4.6	15' - 0"	6			
4.9	16' - 0"	8			
TOTAL NUMBER OF TIES - 68					