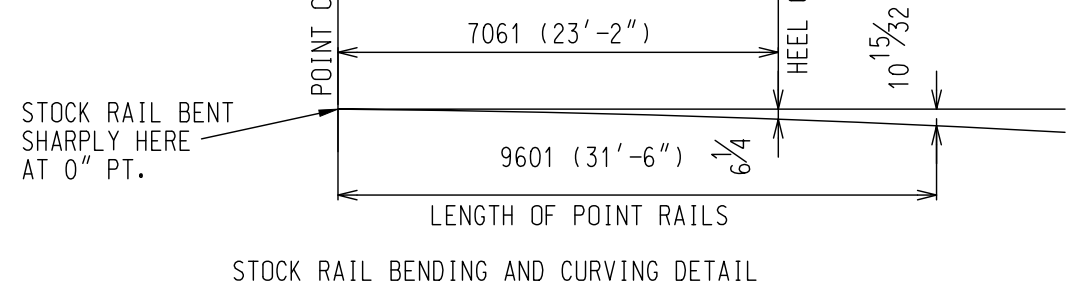


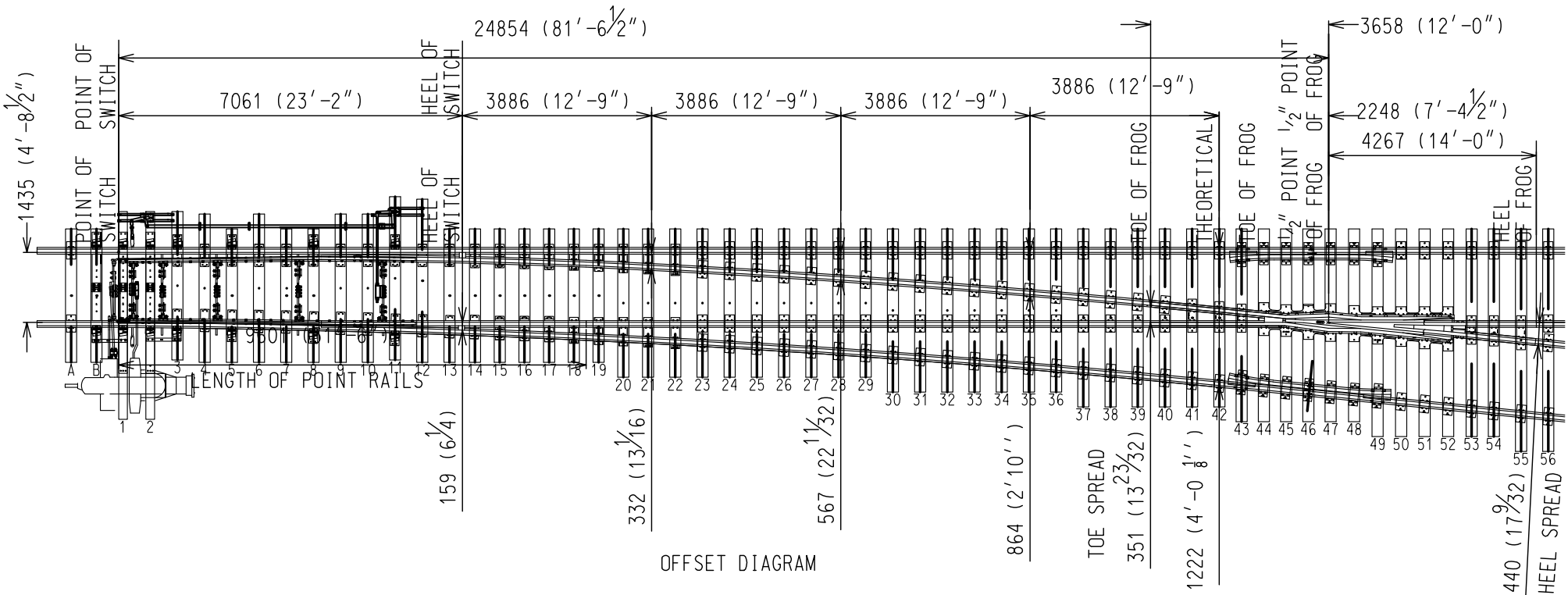
TIE ARRANGEMENT AND SPACING

TURNOUT DATA

FROG NO.	10
LENGTH OF SWITCH PT.	9601 (31'-6")
HEEL SPREAD	159 (6'-1/4")
LEAD	24854 (81'-6 1/2")
P.S. TO H.F.	29121 (95'-6 1/2")
11595 (38'-0 1/2")	STRAIGHT CLOSURE LENGTH MADE UP BY A 11595 (38'-0 1/2") RAIL
11628 (38'-1 25/32")	CURVED CLOSURE LENGTH MADE UP BY A 8275 (27'-1 25/32") & 3353 (11'-0") RAIL



STOCK RAIL BENDING AND CURVING DETAIL



OFFSET DIAGRAM

NOTES:

- TURNOUT TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE LATEST ISSUE OF: GO TRANSIT TRACK STANDARDS-RC-0506-02TRK SECTION 16-TURNOUT INSPECTION
- WHEN REFERRING TO POWER OPERATED TURNOUTS, DRAWING NUMBER MUST BE STATED AS INDICATED:
A-RIGHT HAND TURNOUT P.O. MACHINE ON RIGHT
B-RIGHT HAND TURNOUT P.O. MACHINE ON LEFT
C-LEFT HAND TURNOUT P.O. MACHINE ON RIGHT
D-LEFT HAND TURNOUT P.O. MACHINE ON LEFT
- FOR THE VARIOUS STANDARD TURNOUT COMBINATIONS, SEE INDEX GTS-0000 SHEET 3 OF 3
- TURNOUT GEOMETRY, FOR TABLES OF DIMENSIONS AND OFFSETS, SEE GTS-0002A NO. 10 ALL WELDED TURNOUTS.

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

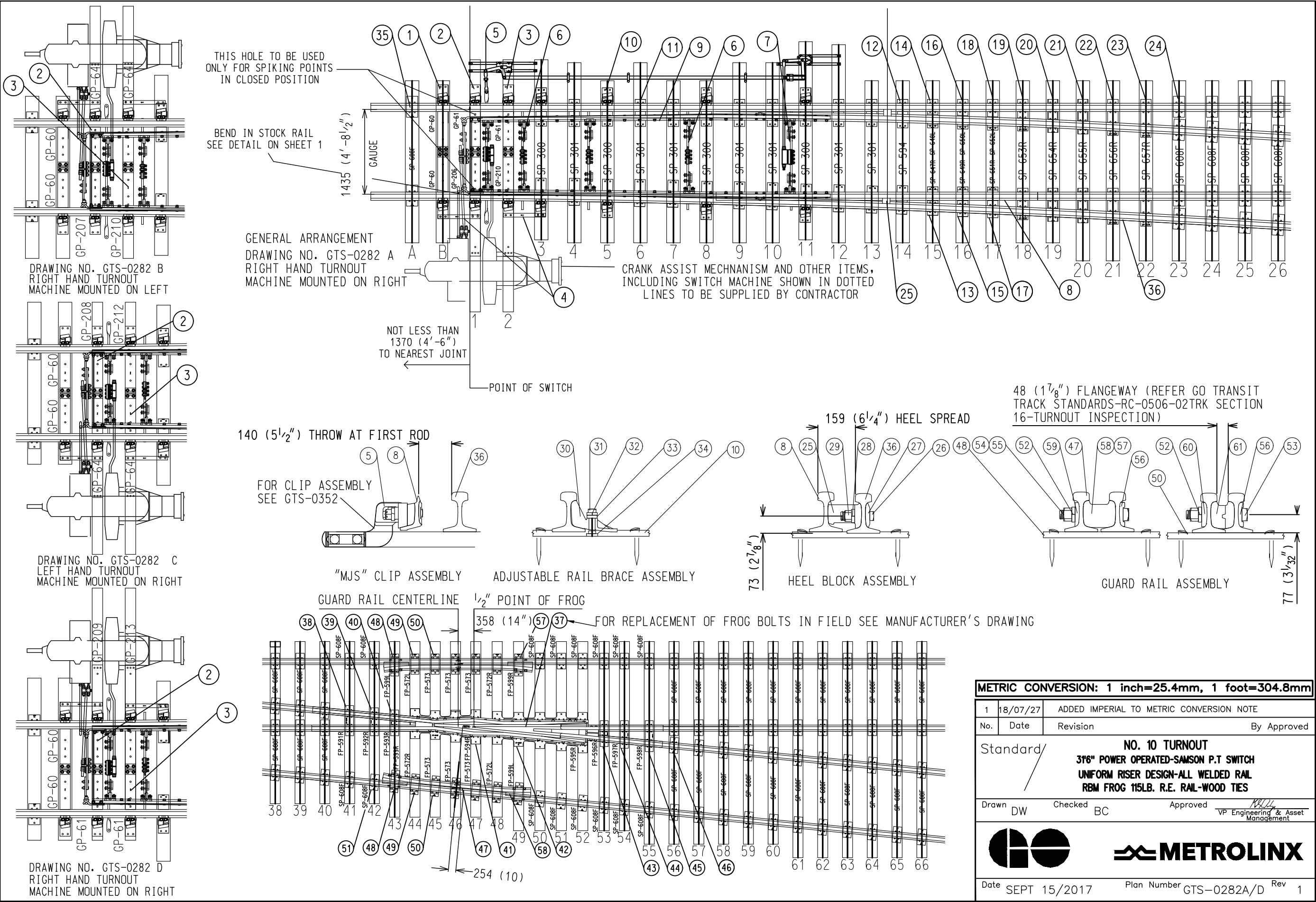
1	18/07/27	ADDED IMPERIAL TO METRIC CONVERSION NOTE
No.	Date	Revision
		By Approved

Standard/ **NO. 10 TURNOUT**
316" POWER OPERATED-SAMSON P.T SWITCH
UNIFORM RISER DESIGN-ALL WELDED RAIL
RBM FROG 115LB. R.E. RAIL-WOOD TIES

Drawn DW Checked BC Approved *[Signature]*
 VP Engineering & Asset Management



Date SEPT 15/2017 Plan Number GTS-0282A/D Rev 1



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**
316" POWER OPERATED-SAMSON P.T SWITCH
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Drawn DW Checked BC Approved *BC*
 VP Engineering & Asset Management



Date SEPT 15/2017 Plan Number GTS-0282A/D Rev 1

BILL OF MATERIALS FOR GTS-0282

ITEM	DESCRIPTION	STANDARD DRAWING	MARK NO.	QUANTITY			
				A	B	C	D
SWITCH PAK							
1	1st. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP60/GP60	1	1	1	1
2	2nd. GAUGE PLATE ASSEMBLY	GTS-0521	GP206/GP61	1	-	-	-
	2nd. GAUGE PLATE ASSEMBLY	GTS-0521	GP207/GP64	-	1	-	-
	2nd. GAUGE PLATE ASSEMBLY	GTS-0521	GP64/GP208	-	-	1	-
	2nd. GAUGE PLATE ASSEMBLY	GTS-0521	GP61/GP209	-	-	-	1
3	3rd. GAUGE PLATE ASSEMBLY	GTS-0521	GP210/GP61	1	-	-	-
	3rd. GAUGE PLATE ASSEMBLY	GTS-0521	GP211/GP64	-	1	-	-
	3rd. GAUGE PLATE ASSEMBLY	GTS-0521	GP64/GP212	-	-	1	-
	3rd. GAUGE PLATE ASSEMBLY	GTS-0521	GP61/GP213	-	-	-	1
4	MILD STEEL STRAP	GTS-0356C	356C	2	2	2	2
5	SWITCH ROD	GTS-0344G	344G	1	1	1	1
6	SWITCH ROD	GTS-0344C	344C	3	3	3	3
7	SWITCH ROD	GTS-0344D	344D	1	1	1	1
8	RIGHT SAMSON POINT RAIL	GTS-0385D	385D	1	1	-	-
	RIGHT SAMSON CURVED POINT RAIL	GTS-0385A	385A	-	-	1	1
9	LEFT SAMSON POINT RAIL	GTS-0385C	385C	-	-	1	1
	LEFT SAMSON CURVED POINT RAIL	GTS-0385B	385B	1	1	-	-
10	SWITCH PLATE	GTS-0508	SP300	8	8	8	8
11	SWITCH PLATE	GTS-0509	SP301	14	14	14	14
12	SWITCH PLATE (RIGHT HAND)	GTS-0509	SP594	2	2	2	2
13	SWITCH PLATE (RIGHT SIDE FOR RIGHT HAND TURNOUT)	GTS-0613	SP647R	1	1	-	-
	SWITCH PLATE (LEFT SIDE FOR LEFT HAND TURNOUT)	GTS-0612	SP648R	-	-	1	1
14	SWITCH PLATE (RIGHT SIDE FOR RIGHT HAND TURNOUT)	GTS-0612	SP648L	1	1	-	-
	SWITCH PLATE (LEFT SIDE FOR LEFT HAND TURNOUT)	GTS-0613	SP647L	-	-	1	1
15	SWITCH PLATE (RIGHT SIDE FOR RIGHT HAND TURNOUT)	GTS-0613	SP649R	1	1	-	-
	SWITCH PLATE (LEFT SIDE FOR LEFT HAND TURNOUT)	GTS-0612	SP650R	-	-	1	1
16	SWITCH PLATE (RIGHT SIDE FOR RIGHT HAND TURNOUT)	GTS-0612	SP650L	1	1	-	-
	SWITCH PLATE (LEFT SIDE FOR LEFT HAND TURNOUT)	GTS-0613	SP649L	-	-	1	1
17	SWITCH PLATE (RIGHT SIDE FOR RIGHT HAND TURNOUT)	GTS-0613	SP651R	1	1	-	-
	SWITCH PLATE (LEFT SIDE FOR LEFT HAND TURNOUT)	GTS-0612	SP652R	-	-	1	1
18	SWITCH PLATE (RIGHT SIDE FOR RIGHT HAND TURNOUT)	GTS-0612	SP652L	1	1	-	-
	SWITCH PLATE (LEFT SIDE FOR LEFT HAND TURNOUT)	GTS-0613	SP651L	-	-	1	1
19	SWITCH PLATE (RIGHT HAND)	GTS-0616	SP653R	2	2	-	-
	SWITCH PLATE (LEFT HAND)	GTS-0616	SP653L	-	-	2	2
20	SWITCH PLATE (RIGHT HAND)	GTS-0616	SP654R	2	2	-	-
	SWITCH PLATE (LEFT HAND)	GTS-0616	SP654L	-	-	2	2
21	SWITCH PLATE (RIGHT HAND)	GTS-0616	SP655R	2	2	-	-
	SWITCH PLATE (LEFT HAND)	GTS-0616	SP655L	-	-	2	2
22	SWITCH PLATE (RIGHT HAND)	GTS-0616	SP656R	2	2	-	-
	SWITCH PLATE (LEFT HAND)	GTS-0616	SP656L	-	-	2	2
23	SWITCH PLATE (RIGHT HAND)	GTS-0616	SP657R	2	2	-	-
	SWITCH PLATE (LEFT HAND)	GTS-0616	SP657L	-	-	2	2
24	SWITCH PLATE	GTS-0617	SP608F	70	70	70	70
25	HEEL BLOCK - SYMMETRICAL	GTS-0384	CN383	2	2	2	2
26	1 - 1/8" DIA. - 7 UNC SQ. HD. BOLT X 4-1/2" LG. C/W SQ. NUT	GTS-1309/31	-	4	4	4	4
27	HEADWASHER FPR 1-3/16" DIA. BOLT (NOT BEVELLED)	GTS-0837Q	837Q	4	4	4	4
28	SPRING WASHER for 1 - 1/8" DIA. BOLT	GTS-1301	-	4	4	4	4
29	LOCKNUT FOR 1 - 1/8" DIA. - 7 UNC BOLT	GTS-1302	-	4	4	4	4
30	ADJUSTABLE RAIL BRACE	GTS-0354	115M-12	14	14	14	14
31	7/8" DIA. 9 UNC SQ. HD. BOLT X 3-3/4" LG.	GTS-1308/5	-	28	28	28	28
32	SPRING WASHER for 7/8" DIA. BOLT	GTS-1301	-	28	28	28	28
33	DOUBLE WASHER	GTS-0354	M-10	14	14	14	14
34	DOUBLE NUT	GTS-0354	M-9	14	14	14	14
35	UNDERCUT STOCK RAIL - LEFT HAND - 115 LB. R.E. 39' - 0" LG.	GTS-1105J	1105J	1	1	-	-
	UNDERCUT STOCK RAIL - RIGHT HAND - 115 LB. R.E. 39' - 0" LG.	GTS-1105N	1105N	-	-	1	1
36	BENT UNDERCUT STOCK RAIL - R/H - 115 LB. R.E. 39' - 0" LG.	GTS-1109BB	1109BB	-	-	-	-
	BENT UNDERCUT STOCK RAIL - L/H - 115 LB. R.E. 39' - 0" LG.	GTS-1109CC	1109CC	-	-	1	1
FROG							
37	#10-115 LB. RAIL BOUND MANGANESE STEEL FROG	D-10948 NOR	-	1	1	1	1
FROG PAK							
38	FROG PLATE (RIGHT HAND)	GTS-0619	FP591R	1	1	-	-
	FROG PLATE (LEFT HAND)	GTS-0619	FP591L	-	-	1	1
39	FROG PLATE (RIGHT HAND)	GTS-0619	FP592R	1	1	-	-
	FROG PLATE (LEFT HAND)	GTS-0619	FP592L	-	-	1	1
40	FROG PLATE (RIGHT HAND)	GTS-0619	FP593R	1	1	-	-
	FROG PLATE (LEFT HAND)	GTS-0619	FP593L	-	-	1	1
41	FROG BASE PLATE (RIGHT HAND)	GTS-0631	FP594R	1	1	-	-
	FROG BASE PLATE (LEFT HAND)	GTS-0631	FP594L	-	-	1	1
42	FROG BASE PLATE (RIGHT HAND)	GTS-0632	FP595R	1	1	-	-
	FROG BASE PLATE (LEFT HAND)	GTS-0632	FP595L	-	-	1	1
43	FROG PLATE (RIGHT HAND)	GTS-0619	FP596R	1	1	-	-
	FROG PLATE (LEFT HAND)	GTS-0619	FP596L	-	-	1	1
44	FROG PLATE (RIGHT HAND)	GTS-0619	FP597R	1	1	-	-
	FROG PLATE (LEFT HAND)	GTS-0619	FP597L	-	-	1	1
45	FROG PLATE (RIGHT HAND)	GTS-0619	FP598R	1	1	-	-
	FROG PLATE (LEFT HAND)	GTS-0619	FP598L	-	-	1	1
46	SWITCH PLATE	GTS-0617	SP608F	22	22	22	22
GUARD RAIL PAK							
47	FROG GUARD RAIL 11' - 0" LONG	GTS-1106	-	2	2	2	2
48	FROG PLATE (RIGHT HAND)	GTS-0618	FP599R	2	2	2	2
	FROG PLATE (LEFT HAND)	GTS-0618	FP599L	2	2	2	2
49	FROG PLATE (RIGHT HAND)	GTS-0618	FP572R	2	2	2	2
	FROG PLATE (LEFT HAND)	GTS-0618	FP572L	2	2	2	2
50	FROG PLATE	GTS-0622	FP573	6	6	6	6
51	SWITCH PLATE	GTS-0617	SP608F	38	38	38	38
52	SPRING WASHER for 1 - 3/8" DIA BOLT	GTS-1301	-	10	10	10	10
53	1 - 3/8" DIA. 6 UNC SQ. HD. BOLT X 9-1/2" LG. C/W SQ. NUT	GTS-1309/100	-	2	2	2	2
54	1 - 3/8" DIA. 6 UNC SQ. HD. BOLT X 10" LG. C/W SQ. NUT	GTS-1309/101	-	4	4	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	4	4
56	HEAD WASHER	GTS-0837G	837G	10	10	10	10
57	END CASTING LEFT HAND 115 LB. R.E.	GTS-00847	FG2-S	2	2	2	2
58	END CASTING RIGHT HAND 115 LB. R.E.	GTS-0847	FG3-S	2	2	2	2
59	TAIL WASHER (BEVELLED)	GTS-0837B	837B	8	8	8	8
60	TAIL WASHER (NOT BEVELLED)	GTS-0837H	837H	2	2	2	2
61	ADJUSTABLE BLOCK 115 LB. R.E.	GTS-0847	FG1-S	4	4	4	4
* CRANK ASSIST MECHANISM SHOWN IS REQUIRED ON THIS T/O AND MUST BE ORDERED THROUGH THE SIGNAL & COMMUNICATION FUNCTION **							
TURNOUT PACKAGES							
TURNOUT NUMBER	DESCRIPTION	QUANTITY PER TURNOUT					
GTS- 282A	FROG RBM 10 - 115	1					
	SW-PK INS SAMSON PO NO. 10A - 115 LBS.	1					
	GR-PK 115 11-0	1					
	FR-PK RBM 10 - 115	1					
GTS- 282B	FROG RBM 10 - 115	1					
	SW-PK INS SAMSON PO NO. 10B - 115 LBS.	1					
	GR-PK 115 11-0	1					
	FR-PK RBM 10 - 115	1					
GTS- 282C	FROG RBM 10 - 115	1					
	SW-PK INS SAMSON PO NO. 10C - 115 LBS.	1					
	GR-PK 115 11-0	1					
	FR-PK RBM 10 - 115	1					
GTS- 282D	FROG RBM 10 - 115	1					
	SW-PK INS SAMSON PO NO. 10D - 115 LBS.	1					
	GR-PK 115 11-0	1					
	FR-PK RBM 10 - 115	1					
ABBREAVATIONS							
SW - PK - SWITCH PAK		SAM - SAMSON		SGM - SELF GUARD MANGANESE			
FR - PK - FROG PAK		HO - HAND OPERATED		RBM - RAIL BOUND MANGANESE			
GR - PK - GUARD RAIL PAK		SO - SPRING OPERATED					
INS - INSULATED		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							
BILL OF SWITCH TIES FOR HAND AND SPRING OPERATION							
TIES 180 X 230 mm (7" X 9")							
LENGTH				LENGTH			
METRES	FEET/INCHES	NO. OF PIECES	METRES	FEET/IN	NO. OF PIECES	METRES	FEET/IN
2.8	9' - 0"	12	2.8	9' - 0"	12	2.8	9' - 0"
3.1	10' - 0"	15	3.1	10' - 0"	15	3.1	10' - 0"
3.4	11' - 0"	9	3.4	11' - 0"	9	3.4	11' - 0"
3.7	12' - 0"	6	3.7	12' - 0"	6	3.7	12' - 0"
4.0	13' - 0"	6	4.0	13' - 0"	6	4.0	13' - 0"
4.3	14' - 0"	6	4.3	14' - 0"	8	4.3	14' - 0"
4.6	15' - 0"	6	4.6	15' - 0"	6	4.6	15' - 0"
4.9	16' - 0"	6	4.9	16' - 0"	6	4.9	16' - 0"
5.5	18' - 0"	2					
TOTAL NUMBER OF TIES - 68				TOTAL NUMBER OF TIES - 68			