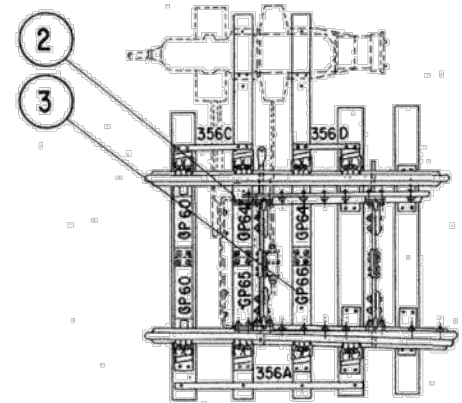
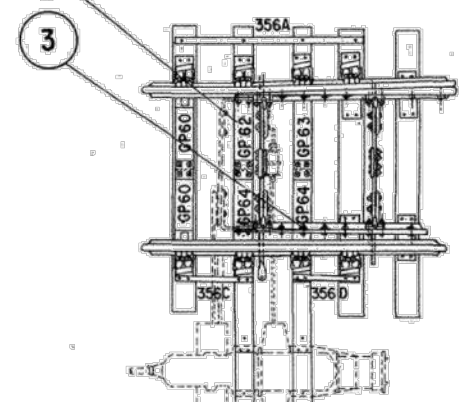


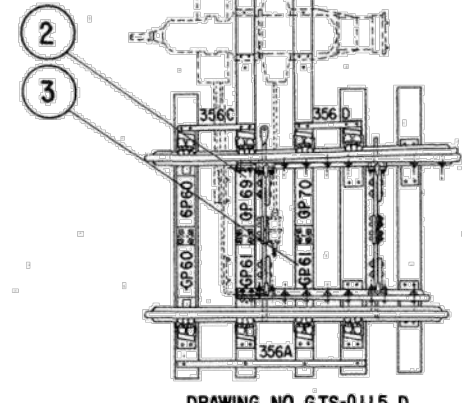
TIE ADZE DETAIL FOR (DUAL & NON DUAL) MACHINES



DRAWING NO. GTS-0115 B  
RIGHT HAND TURNOUT  
MACHINE MOUNTED ON LEFT

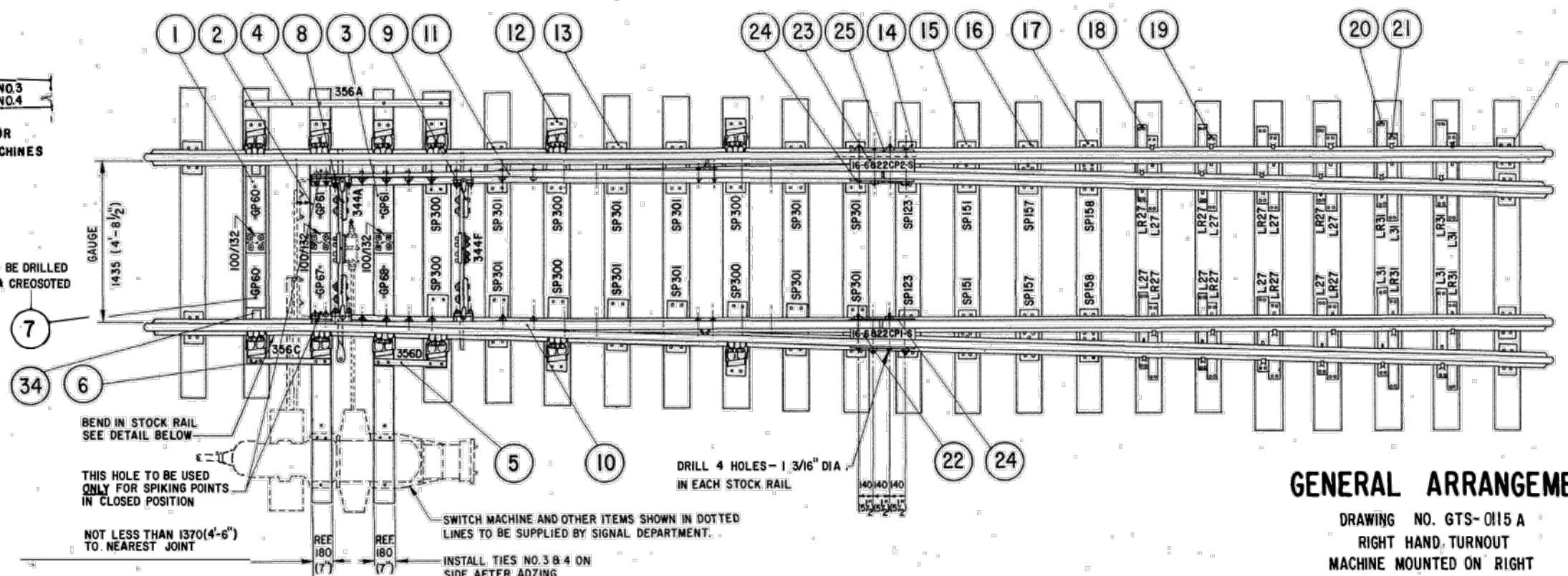


DRAWING NO. GTS-0115 C  
LEFT HAND TURNOUT  
MACHINE MOUNTED ON RIGHT



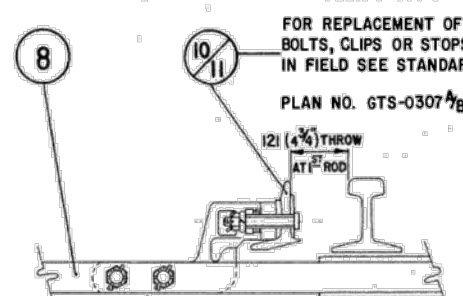
DRAWING NO. GTS-0115 D  
LEFT HAND TURNOUT  
MACHINE MOUNTED ON LEFT

ALL LAG BOLT HOLES TO BE DRILLED 5/16" DIA. THROUGH TIE & CREOSOTED

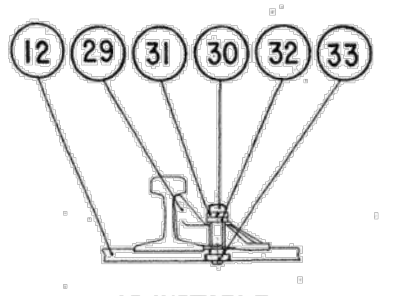


**GENERAL ARRANGEMENT**

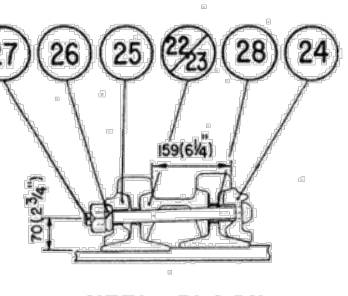
DRAWING NO. GTS-0115 A  
RIGHT HAND TURNOUT  
MACHINE MOUNTED ON RIGHT



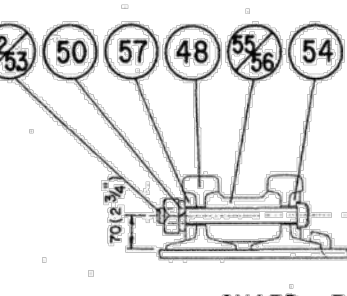
**"MJ" CLIP ASSEMBLY**



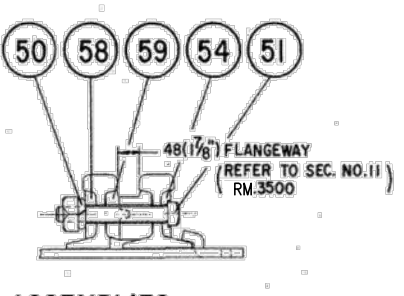
**ADJUSTABLE  
RAIL BRACE ASSEMBLY**



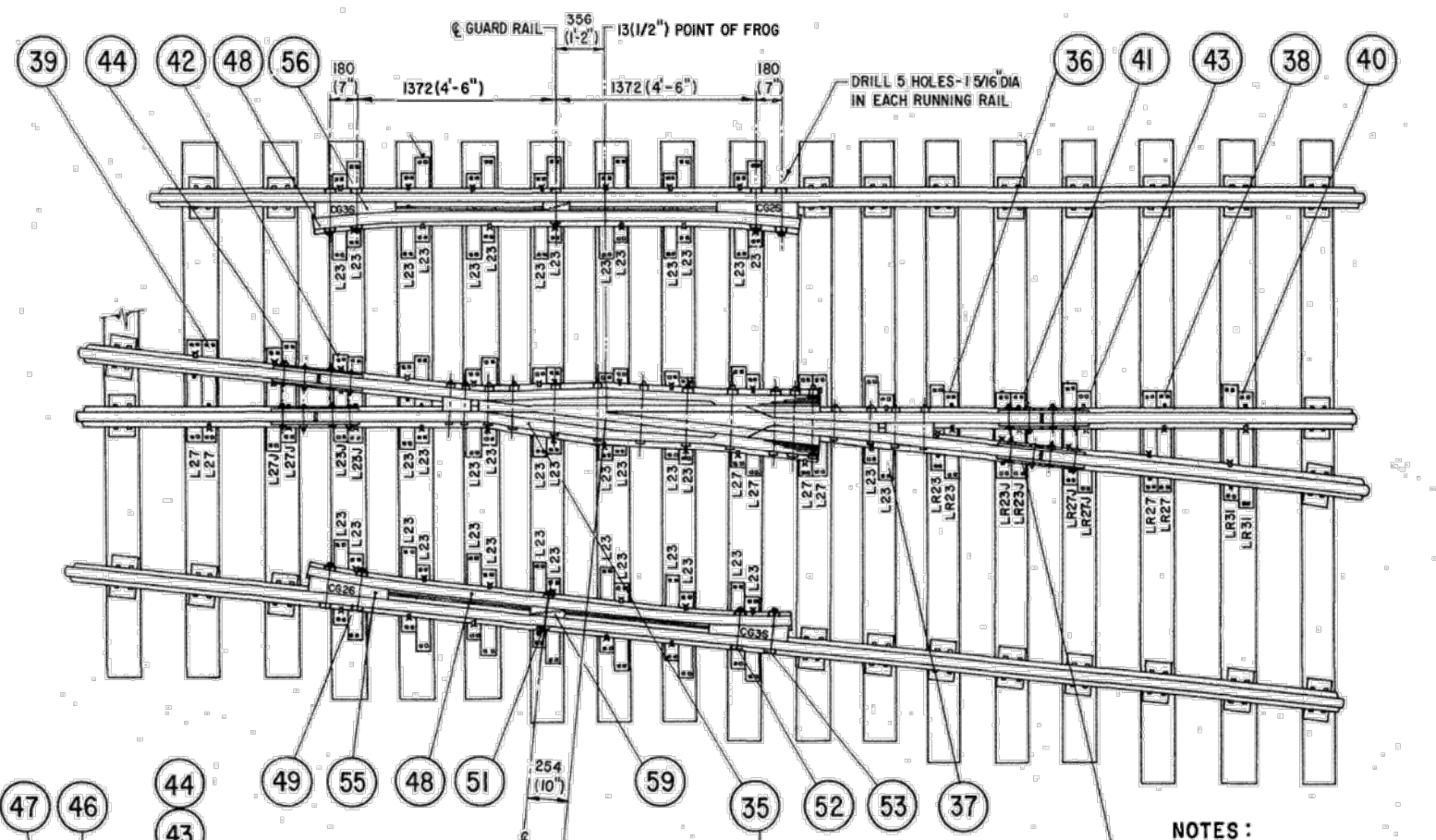
**HEEL BLOCK  
ASSEMBLY**



**GUARD RAIL ASSEMBLIES**

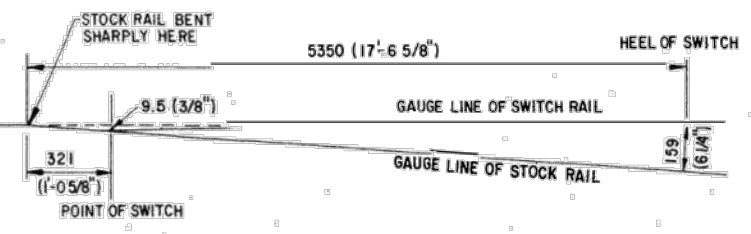


**SPLICE BAR  
ASSEMBLY**

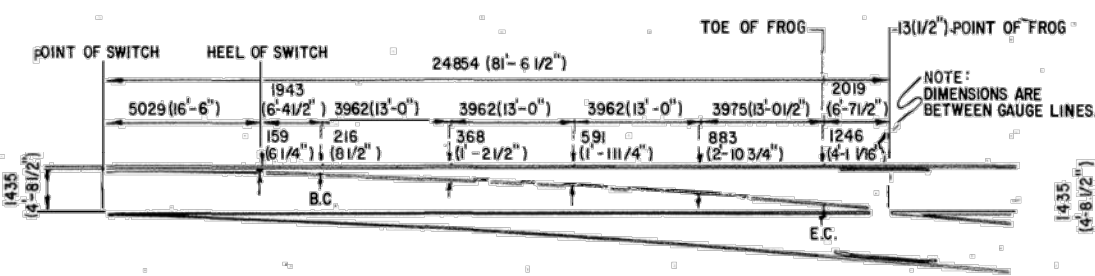


**NOTES:**

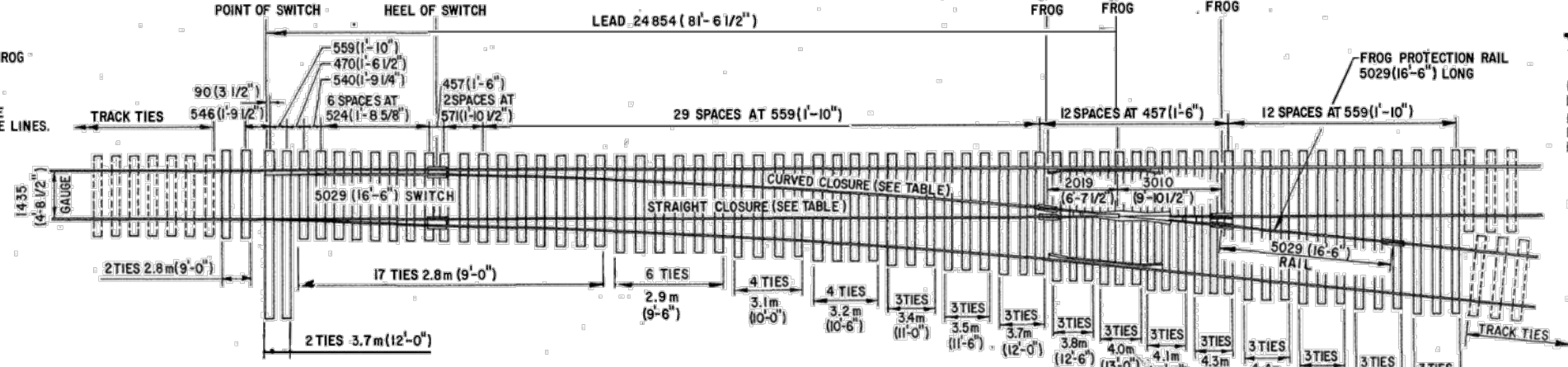
- TURNOUT TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE LATEST ISSUE OF:  
RM. 3500 TURNOUTS  
RM. 3502 POWER, SPRING AND INSULATED SWITCHES  
RM. 3506 SWITCH STANDS, SWITCH LAMPS AND TARGETS, WHERE APPLICABLE
- WHEN REFERRING TO POWER OPERATED TURNOUTS, DRAWING NUMBER MUST BE STATED AS A, B, C OR D TO INDICATE:  
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 SHEET GTS-0000
- TURNOUT GEOMETRY, FOR TABLES OF DIMENSIONS AND OFFSETS SEE GTS-0002



**STOCK RAIL BENDING DETAIL**



**OFFSET DIAGRAM**



**TIE ARRANGEMENT & SPACING**

**TURNOUT DATA**

FROG NO.	-10
LENGTH OF SW. PT.	5029 (16'-6)
HEEL SPREAD	159 (6'-1/4)
LEAD	24 854 (81'-6 1/2)
PS. TO H.F.	27 864 (91'-5)

17805 (58'-5) STRAIGHT CLOSURE LENGTH MADE UP BY A 17805 (58'-5) RAIL OR:  
A11 887 (39) & 5918 (19'-5) RAIL  
A10973 (36) & 6832 (22'-5) RAIL  
A10058 (33) & 7747 (25'-5) RAIL  
A9144 (30) & 8661 (28'-5) RAIL

17856 (58'-7) CURVED CLOSURE LENGTH MADE UP BY A 17856 (58'-7) RAIL OR:  
A11 887 (39) & 5969 (19'-7) RAIL  
A10973 (36) & 6883 (22'-7) RAIL  
A10058 (33) & 7798 (25'-7) RAIL  
A9144 (30) & 8712 (28'-7) RAIL

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

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

Standard / **NO. 10 TURNOUT-16'-6" POINTS  
POWER OPERATED  
R.B.M. FROG-100LB. A.R.A.-A. RAIL**

Drawn MG Checked GGS Approved VP Engineering & Asset Management



Date DEC 15, 2017 Plan Number GTS-0115 Rev 1

**BILL OF MATERIALS FOR GTS-0115**

ITEM	DESCRIPTION	STANDARD DRAWING	MARK NO.	QUANTITY			
				A	B	C	D
	<b>SWITCH PAK</b>						
1	1st. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP60/GP60	1	1	1	1
2	2nd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP67/GP61	1	-	-	-
	2nd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP65/GP64	-	1	-	-
	2nd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP64/GP62	-	-	1	-
	2nd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP61/GP69	-	-	-	1
3	3rd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP68/GP61	1	-	-	-
	3rd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP66/GP64	-	1	-	-
	3rd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP64/GP63	-	-	1	-
	3rd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	GP61/GP70	-	-	-	1
4	MILD STEEL STRAP	GTS-0356A	356A	1	1	1	1
5	MILD STEEL STRAP	GTS-0356D	356D	1	1	1	1
6	MILD STEEL STRAP	GTS-0356C	356C	1	1	1	1
7	DOUBLE SPRING WASHER - TYPE FE6	GTS-1310	-	30	30	30	30
8	SWITCH ROD	GTS-0344A	344A	1	1	1	1
9	SWITCH ROD	GTS-0344F	344F	1	1	1	1
10	RIGHT POINT RAIL	GTS-0307A	307A	1	1	1	1
11	LEFT POINT RAIL	GTS-0307B	307B	1	1	1	1
12	SWITCH PLATE	GTS-0508	SP300	6	6	6	6
13	SWITCH PLATE	GTS-0509	SP301	10	10	10	10
14	SWITCH PLATE	GTS-0504	SP123	2	2	2	2
15	SWITCH PLATE	GTS-0507	SP151	2	2	2	2
16	SWITCH PLATE	GTS-0507	SP157	2	2	2	2
17	SWITCH PLATE	GTS-0506	SP158	2	2	2	2
18	HOOK TWIN TIE PLATE	GTS-0503	LR27	8	8	8	8
19	HOOK TWIN TIE PLATE	GTS-0503	L27	8	8	8	8
20	HOOK TWIN TIE PLATE	GTS-0503	LR31	4	4	4	4
21	HOOK TWIN TIE PLATE	GTS-0503	L31	4	4	4	4
22	HEEL BLOCK (RIGHT HAND)	GTS-0358	16-6&22CP1-S	1	1	1	1
23	HEEL BLOCK (LEFT HAND)	GTS-0358	16-6&22CP2-S	1	1	1	1
24	BENT SPLICE BAR (4 HOLE) - 100 LB A.R.A.-A.	GTS-1204B	1204B	2	2	2	2
25	STRAIGHT SPLICE BAR (4 HOLE) - 100 LB A.R.A.-A.	GTS-1201	-	1	1	1	1
26	SPRING WASHER for 1" DIA. BOLT	GTS-1301	-	8	8	8	8
27	1" DIA. 8 NC OVAL NECK TRACK BOLT X 12" LG. C/W SQ. NUT	GTS-1319/9	-	8	8	8	8
28	PIPE THIMBLE - 1" DIA. X 2-1/32" LONG	GTS-0345B	B	2	2	2	2
29	ADJUSTABLE RAIL BRACE	GTS-0354	100M-7	12	12	12	12
30	7/8" DIA. - 9 UNC SQ. HD. BOLT X 3-3/4" LG.	GTS-1308/5	-	24	24	24	24
31	SPRING WASHER for 7/8" DIA. BOLT	GTS-1301	-	24	24	24	24
32	DOUBLE WASHER	GTS-0354	M-10	12	12	12	12
33	DOUBLE NUT	GTS-0354	M-9	12	12	12	12
34	PANDROL CLIP - PR 631A	GTS-1322	-	2	2	2	2
	<b>FROG</b>						
35	#10 - 100 LB. RAIL BOUND MANGANESE STEEL FROG	R11C-170.1	-	1	1	1	1
	<b>FROG PAK</b>						
36	HOOK TWIN TIE PLATE	GTS-0503	LR23	2	2	2	2
37	HOOK TWIN TIE PLATE	GTS-0503	L23	12	12	12	12
38	HOOK TWIN TIE PLATE	GTS-0503	LR27J	2	2	2	2
39	HOOK TWIN TIE PLATE	GTS-0503	L27	6	6	6	6
40	HOOK TWIN TIE PLATE	GTS-0503	LR31	2	2	2	2
41	HOOK TWIN TIE PLATE	GTS-0503	LR23J	2	2	2	2
42	HOOK TWIN TIE PLATE	GTS-0503	L23J	2	2	2	2
43	HOOK TWIN TIE PLATE	GTS-0503	LR27J	2	2	2	2
44	HOOK TWIN TIE PLATE	GTS-0503	L27J	2	2	2	2
45	STRAIGHT SPLICE BAR (4 HOLE) - 100 LB A.R.A.-A.	GTS-1201	-	4	4	4	4
46	SPRING WASHER for 1" DIA. BOLT	GTS-1301	-	16	16	16	16
47	1" DIA. 8 NC OVAL NECK TRACK BOLT X 5-5/8" LG. C/W SQ. NUT	GTS-1319/1	-	16	16	16	16
	<b>GUARD RAIL PAK</b>						
48	FROG GUARD RAIL 11' - 0" LONG	GTS-1106	-	2	2	2	2
49	HOOK TWIN TIE PLATE	GTS-0503	L23	28	28	28	28
50	SPRING WASHER for 1 - 1/4" DIA BOLT	GTS-1301	-	10	10	10	10
51	1-1/4" DIA. 7 UNC SQ. HD. BOLT X 9" LG. C/W SQ. NUT	GTS-1309/67	-	2	2	2	2
52	1-1/4" DIA. 7 UNC SQ. HD. BOLT X 9-1/2" LG. C/W SQ. NUT	GTS-1309/68	-	4	4	4	4
53	1-1/4" DIA. 7 UNC SQ. HD. BOLT X 10-1/2" LG. C/W SQ. NUT	GTS-1309/71	-	4	4	4	4
54	HEAD WASHER	GTS-0836L	836L	10	10	10	10
55	END CASTING RIGHT HAND 100 LB. A.R.A.-A.	GTS-0846	CG2-S	2	2	2	2
56	END CASTING LEFT HAND 100 LB. A.R.A.-A.	GTS-0846	CG3-S	2	2	2	2
57	TAIL WASHER (BEVELLED)	GTS-0836H	836H	8	8	8	8
58	TAIL WASHER (NOT BEVELLED)	GTS-0836M	836M	2	2	2	2
59	ADJUSTABLE BLOCK 100 LB. A.R.A.-A.	GTS-0846	CG1-S	4	4	4	4
	<b>TURNOUT PACKAGES</b>						
	<b>DESCRIPTION</b>		<b>QUANTITY PER TURNOUT</b>				
TURNOUT NUMBER GTS-115A	FROG RBM 10-100		1				
	SW-PK INS PO NO. 10A-100 LBS.		1				
	GR-PK 100 11-0		1				
	FR-PK RBM 10-100		1				
GTS-115B	FROG RBM 10-100		1				
	SW-PK INS PO NO. 10B-100 LBS.		1				
	GR-PK 100 11-0		1				
	FR-PK RBM 10-100		1				
GTS-115C	FROG RBM 10-100		1				
	SW-PK INS PO NO. 10C-100 LBS.		1				
	GR-PK 100 11-0		1				
	FR-PK RBM 10-100		1				
GTS-115D	FROG RBM 10-100		1				
	SW-PK INS PO NO. 10D-100 LBS.		1				
	GR-PK 100 11-0		1				
	FR-PK RBM 10-100		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")				BILL OF SWITCH FOR POWER OPERATION TIES 180 X 230 mm (7" X 9")			
LENGTH				LENGTH			
METRES	FEET/INCHES		NO. OF PIECES	METRES	FEET/INCH		NO. OF PIECES
2.8	9' - 0"		19	2.8	9' - 0"		24
3.1	10' - 0"		10	3.1	10' - 0"		22
3.4	11' - 0"		7	3.4	11' - 0"		15
3.7	12' - 0"		8	3.7	12' - 0"		11
4	13' - 0"		6	4	13' - 0"		9
4.3	14' - 0"		6	4.3	14' - 0"		10
4.6	15' - 0"		6	4.6	15' - 0"		9
4.9	16' - 0"		6	4.9	16' - 0"		8
				5.5	18' - 0"		2
TOTAL NUMBER OF TIES - 68				TOTAL NUMBER OF TIES - 110			