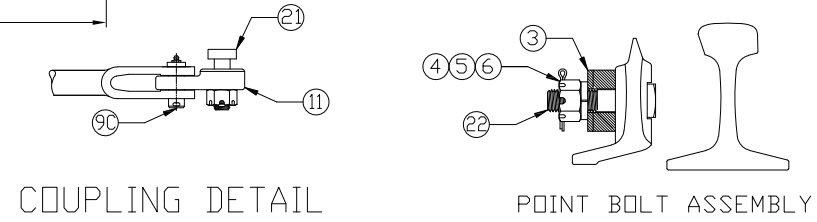


ITEM	PART NUMBER	DESCRIPTION	GT899183X QUANTITY	GT899183-001X QUANTITY	GT899183-002X QUANTITY	GT899183-003X QUANTITY
1	802007X	ROD ASSEMBLY, SWIVEL FRONT	1	1	-	-
2	820571-020	LUG, SWIVEL POINT	1	1	-	-
3	960100-001	PLATE, STEEL WASHER	2	2	-	-
4	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4	-	-
5	990403-100-02	WASHER, 1 LOCK	4	4	-	-
6	990511-200-02	COTTER PIN, 1/4 X 2	4	4	-	-
7	830208-091-01	ROD ASSEMBLY, POINT DETECTOR	1	-	1	1
A	830208-091	ROD, POINT DETECTOR	(1)	-	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	-	(1)	(1)
C	833755-000-03	JAW SCREW ASSEMBLY	(1)	-	(1)	(1)
8	810884-086-01	ROD ASSEMBLY, LOCK ROD CONN.	1	-	1	1
A	810884-086	ROD, LOCK ROD CONN.	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)	-	(2)	(2)
9	840153-120-01	ROD ASSEMBLY, OPERATING	1	-	1	1
A	840153-120	ROD, OPERATING	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	-	(1)	(1)
10	950125-001-10	SWITCH POINT ADJUSTER	1	1	-	-
11	841153	COUPLING, THROW BAR	1	-	1	1
12	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	-	1	1
13	898193	M23 CONDUIT OUTLET THREADED	1	-	1	-
14	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	-	2	-
15	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36' Lg.	1	-	1	-
16	860003-011	TIE STRAP, 6 HOLE-3 TIE	1	1	-	-
17	860010-066	TIE STRAP, 4 HOLE-2 TIE OFFSET	1	1	-	-
18	995000-008	SCREW SPIKE, 24 X 165 MM	18	18	-	-
19	960501-003	LATCH STAND SHIM	2	2	-	-
20	820671-016	LUG, SWIVEL POINT BALL	1	1	-	-
21	990235-007X	BOLT ASSY, COUPLING	1	-	1	1
22	990243-525-102	BOLT, 1 X 5 1/4 SQUARE	4	4	-	-
23	998693-003	LOCK NUT, 2" NICKEL/BRASS	1	-	1	-
24	998532-001	CLIP, 2" CONDUIT (NOT SHOWN)	1	-	1	-
25	995000-010	SCREW, 3/4" X 6-3/4" SPIKE	4	4	-	-
26	995000-011	SCREW, 7/8" X 6-3/4" SPIKE	4	4	-	-
27	830110-001X	ROD, INTERNAL POINT DETECTOR	REFERENCE ONLY			
28	816010-003X	ROD, INTERNAL LOCK ROD	REFERENCE ONLY			
29	SM-100	SWITCH MACHINE PLATE	REFERENCE ONLY			
30	850997X	M23 LATCH STAND	REFERENCE ONLY			

GT899183X = ENTIRE KIT
 GT899183-001X = PANELIZATION KIT
 GT899183-002X = FIELD SWITCH MACHINE KIT (NEW CONSTRUCTION)
 GT899183-003X = FIELD SWITCH MACHINE KIT (MAINTENANCE)

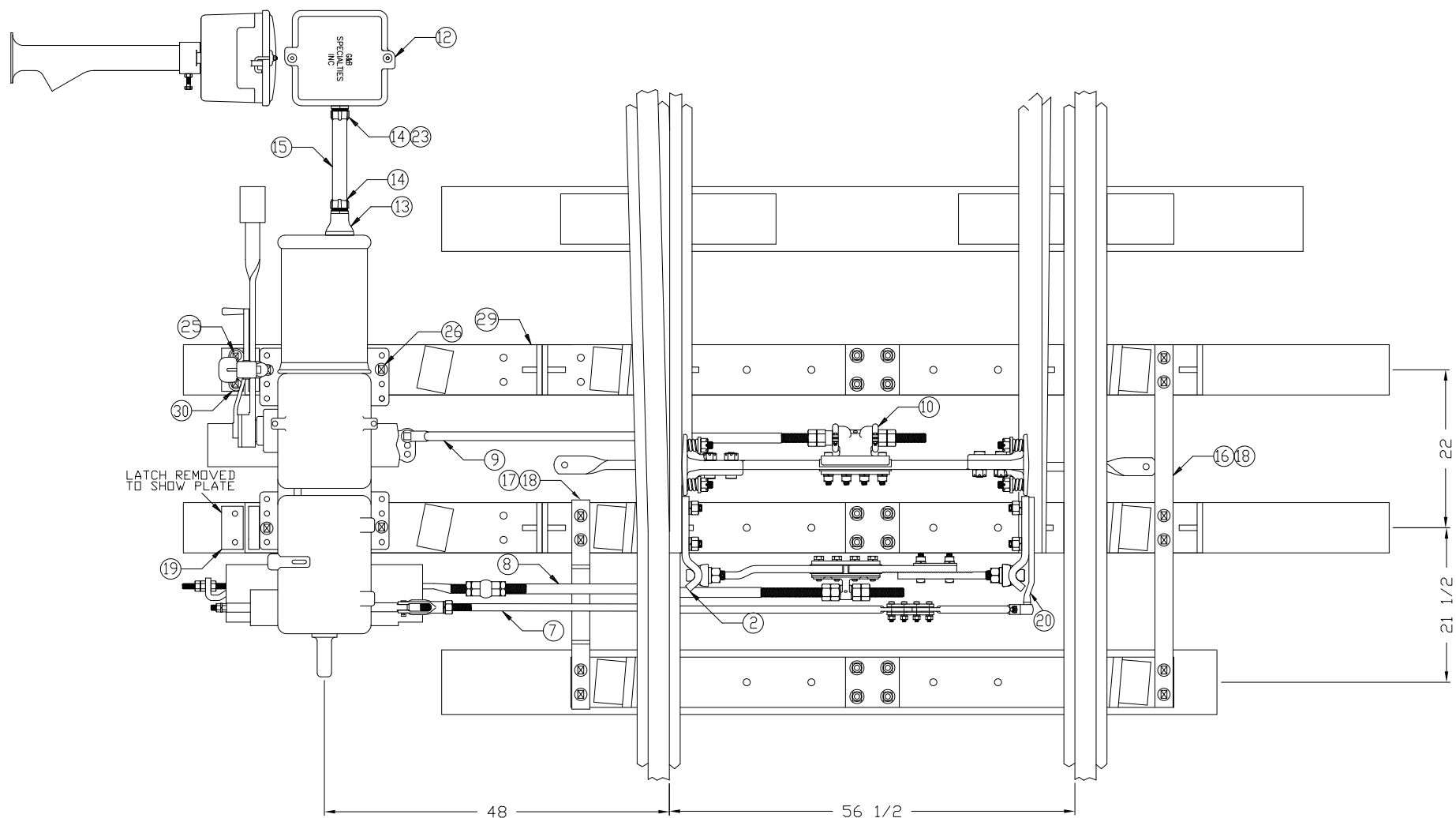
N0.20	WELDED	58'-10"	136LB RE	GTS-278	N0.16	BOLTED	26'-0"	136LB RE	GTS-251
N0.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	N0.12	BOLTED	22'-0"	136LB RE	GTS-013
N0.16	WELDED	38'-9"	136LB RE	GTS-274	N0.12	BOLTED	22'-0"	115LB RE	GTS-012
N0.12	WELDED	36'-7"	136LB RE	GTS-271	N0.10	BOLTED	16'-6"	136LB RE	GTS-011
N0.10	WELDED	31'-6"	136LB RE	GTS-284	N0.10	BOLTED	16'-6"	115LB RE	GTS-010
N0.10	WELDED	31'-6"	115LB RE	GTS-282	N0.8	BOLTED	16'-6"	136LB RE	GTS-009
N0.20	BOLTED	39'-0"	136LB RE	GTS-263	N0.8	BOLTED	16'-6"	115LB RE	GTS-008
N0.20	BOLTED	39'-0"	132LB RE	GTS-261					
N0.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.



MODEL M-23
 NONDAPPED TIE LAYOUT
 USING SWITCH PLATES

TRANSIT SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899183X
0	1 OF 1	TC	10/15/20	PAGE 1	GT899183-001X GT899183-002X GT899183-003X

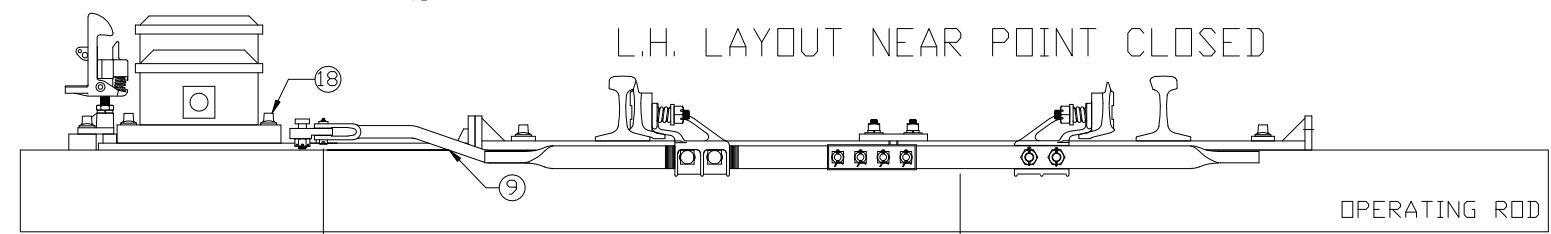


ITEM	PART NUMBER	DESCRIPTION	GT899183-005X QUANTITY	GT899183-001-01 QUANTITY	GT899183-002-02 QUANTITY	GT899183-003-03 QUANTITY
1	802007X	ROD ASSEMBLY, SWIVEL FRONT	1	1	-	-
2	820571-020	LUG, SWIVEL POINT	2	2	-	-
3	960100-001	PLATE, STEEL WASHER	2	2	-	-
4	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4	-	-
5	990403-100-02	WASHER, 1 LOCK	4	4	-	-
6	990511-200-02	COTTER PIN, 1/4 X 2	4	4	-	-
7	830216-022-01	ROD ASSEMBLY, POINT DETECTOR	1	-	1	1
A	830200-000-01	POINT SOCKET ASSEMBLY	(1)	-	(1)	(1)
B	833755-000-03	JAW SCREW ASSEMBLY	(1)	-	(1)	(1)
8	810884-086-01	ROD ASSEMBLY, LOCK ROD CONN.	1	-	1	1
A	810884-086	ROD, LOCK ROD CONN.	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)	-	(2)	(2)
9	840153-120-01	ROD ASSEMBLY, OPERATING	1	-	1	1
A	840153-120	ROD, OPERATING	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	-	(1)	(1)
10	950125-001-10	SWITCH POINT ADJUSTER	1	1	-	-
11	841153	COUPLING, THROW BAR	1	-	1	1
12	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	-	1	-
13	898193	M23 CONDUIT OUTLET THREADED	1	-	1	-
14	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	-	2	-
15	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36' Lg.	1	-	1	-
16	860003-011	TIE STRAP, 6 HOLE-3 TIE	1	1	-	-
17	860010-066	TIE STRAP, 4 HOLE-2 TIE OFFSET	1	1	-	-
18	995000-008	SCREW SPIKE, 24 X 165 MM	10	10	-	-
19	960501-003	LATCH STAND SHIM	2	2	-	-
20	820681-006	LUG, BALL END POINT	1	1	-	-
21	990235-007X	BOLT ASSY, COUPLING	1	-	1	1
22	990243-525-102	BOLT, 1 X 5 1/4 SQUARE	4	4	-	-
23	998693-003	LOCK NUT, 2" NICKEL/BRASS	1	-	1	-
24	998532-001	CLIP, 2" CONDUIT (NOT SHOWN)	1	-	1	-
25	995000-010	SCREW, 3/4" X 6-3/4" SPIKE	4	4	-	-
26	995000-011	SCREW, 7/8" X 6-3/4" SPIKE	4	4	-	-
27	830110-001X	ROD, INTERNAL POINT DETECTOR	REFERENCE ONLY			
28	816010-003X	ROD, INTERNAL LOCK ROD	REFERENCE ONLY			
29	SM-100	SWITCH MACHINE PLATE	REFERENCE ONLY			
30	850997X	M23 LATCH STAND	REFERENCE ONLY			

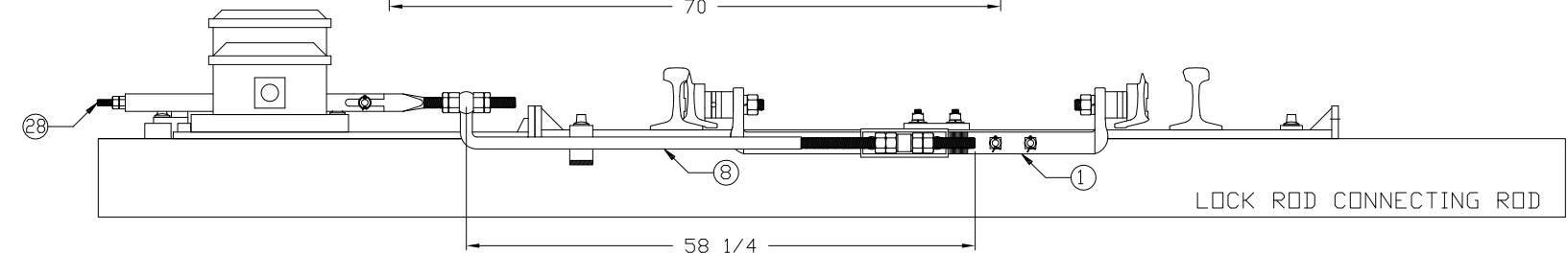
L.H. LAYOUT NEAR POINT CLOSED

GT899183-005X = ENTIRE KIT
 GT899183-001-01 = PANELIZATION KIT
 GT899183-002-02 = FIELD SWITCH MACHINE KIT (NEW CONSTRUCTION)
 GT899183-003-03 = FIELD SWITCH MACHINE KIT (MAINTENANCE)

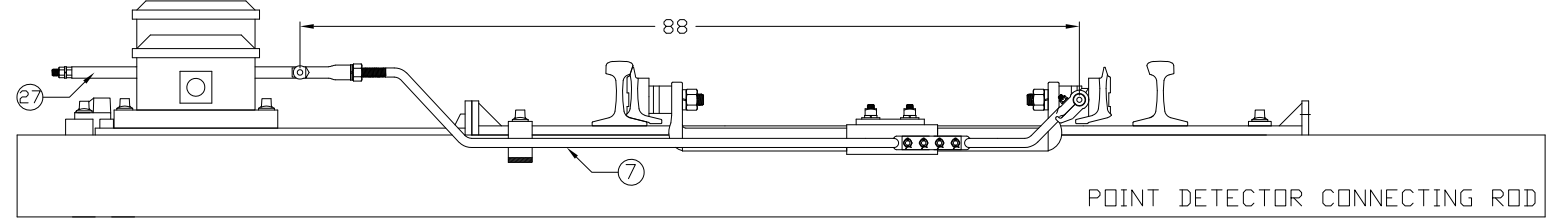
N0.20	WELDED	58'-10"	136LB RE	GTS-278	N0.16	BOLTED	26'-0"	136LB RE	GTS-251
N0.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	N0.12	BOLTED	22'-0"	136LB RE	GTS-013
N0.16	WELDED	38'-9"	136LB RE	GTS-274	N0.12	BOLTED	22'-0"	115LB RE	GTS-012
N0.12	WELDED	36'-7"	136LB RE	GTS-271	N0.10	BOLTED	16'-6"	136LB RE	GTS-011
N0.12	WELDED	36'-5"	115LB RE	GTS-284	N0.10	BOLTED	16'-6"	115LB RE	GTS-010
N0.10	WELDED	31'-6"	136LB RE	GTS-267	N0.8	BOLTED	16'-6"	136LB RE	GTS-009
N0.10	WELDED	31'-6"	115LB RE	GTS-282	N0.8	BOLTED	16'-6"	115LB RE	GTS-008
N0.20	BOLTED	39'-0"	136LB RE	GTS-263					
N0.20	BOLTED	39'-0"	132LB RE	GTS-261					
N0.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.



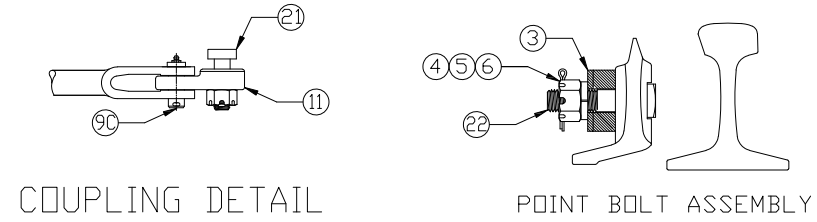
OPERATING ROD



LOCK ROD CONNECTING ROD



POINT DETECTOR CONNECTING ROD



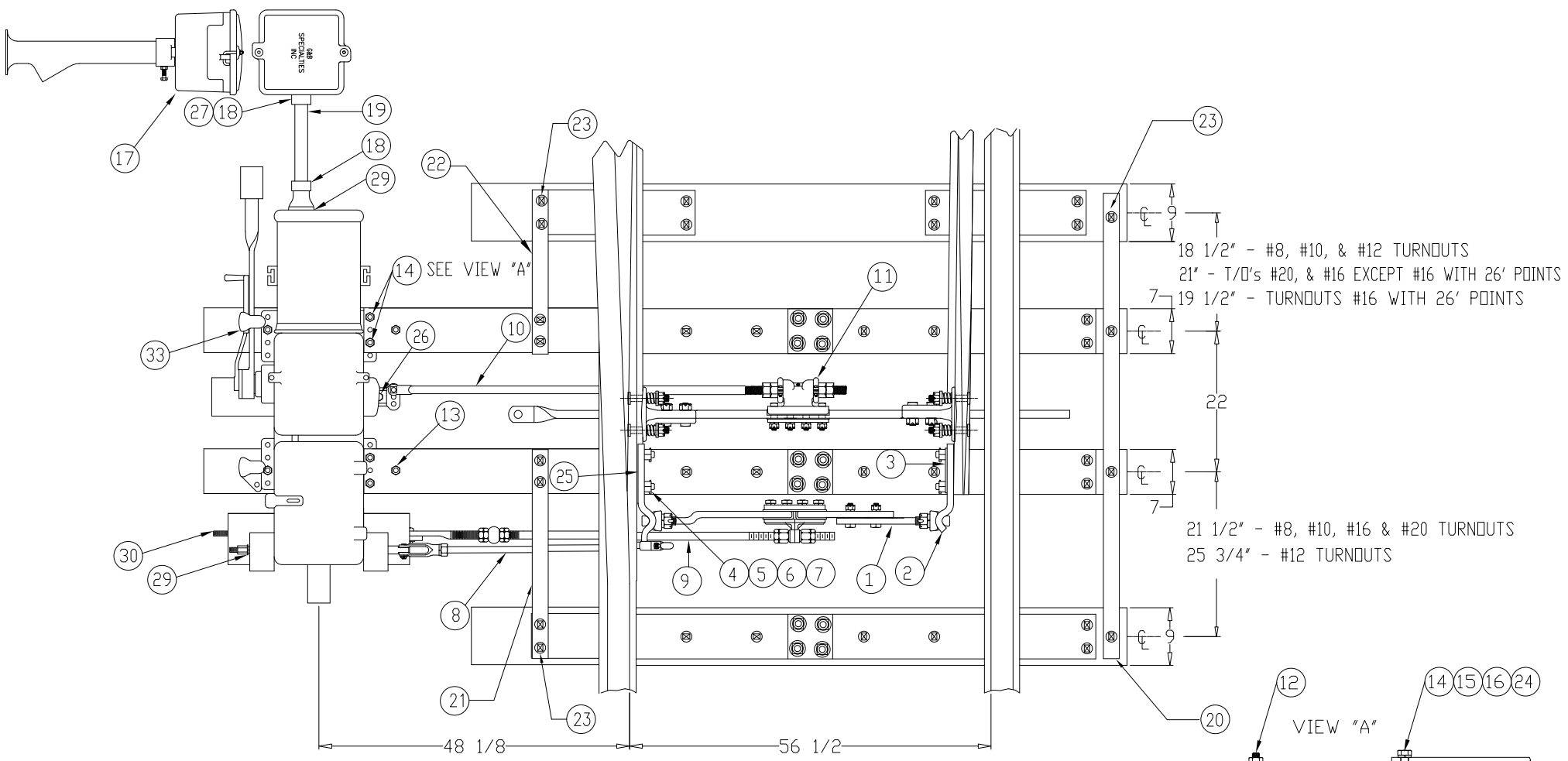
COUPLING DETAIL

POINT BOLT ASSEMBLY

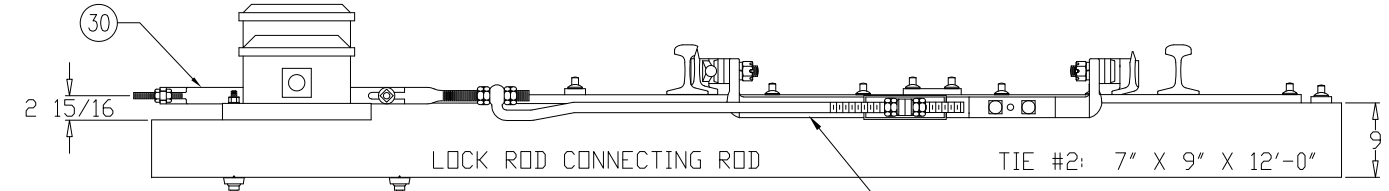
MODEL M-23
 FAR POINT
 NONDAPPED TIE LAYOUT
 USING SWITCH PLATES

TRANSIT SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899183-005X
0	1 OF 1	TC	10/15/20	PAGE 2	GT899183-001-01 GT899183-002-02 GT899183-003-03

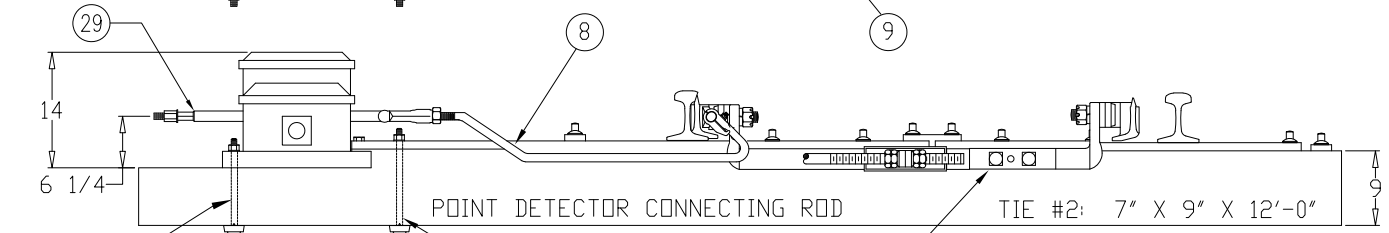


L.H. LAYOUT NEAR POINT CLOSED



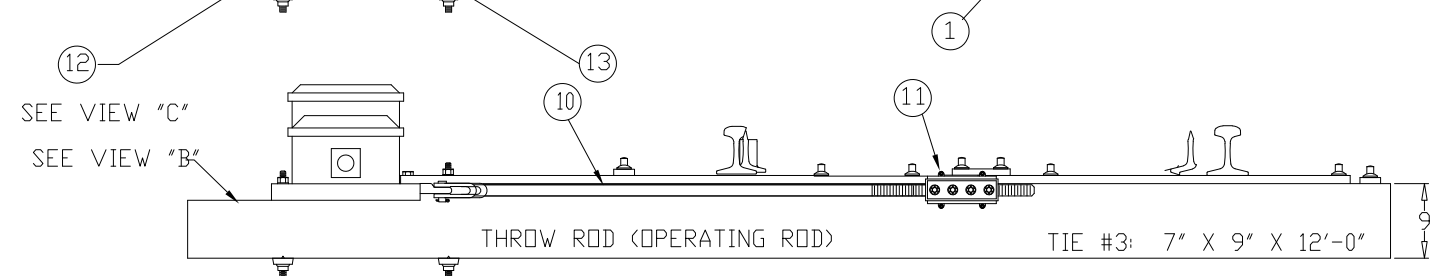
LOCK ROD CONNECTING ROD

TIE #2: 7" X 9" X 12'-0"



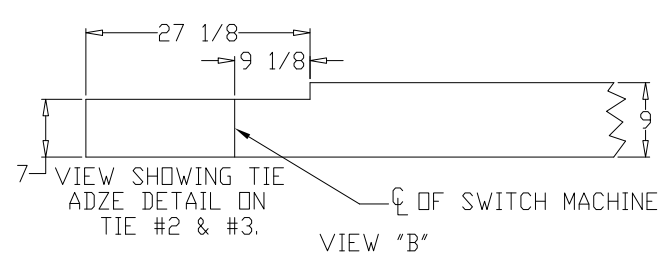
POINT DETECTOR CONNECTING ROD

TIE #2: 7" X 9" X 12'-0"

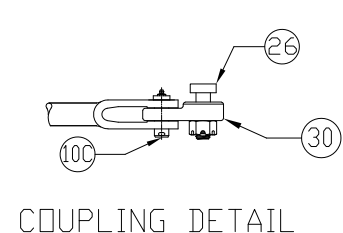


THROW ROD (OPERATING ROD)

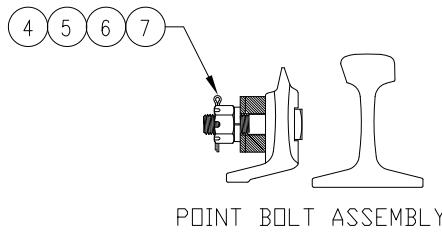
TIE #3: 7" X 9" X 12'-0"



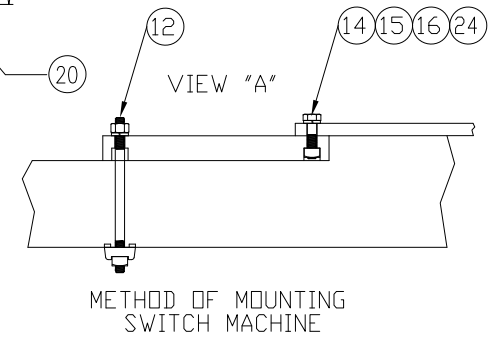
VIEW "B"



COUPLING DETAIL



POINT BOLT ASSEMBLY



METHOD OF MOUNTING SWITCH MACHINE

18 1/2" - #8, #10, & #12 TURNOUTS
 21" - T/O's #20, & #16 EXCEPT #16 WITH 26' POINTS
 19 1/2" - TURNOUTS #16 WITH 26' POINTS
 21 1/2" - #8, #10, #16 & #20 TURNOUTS
 25 3/4" - #12 TURNOUTS

ITEM	PART NUMBER	DESCRIPTION	GT899052X QUANTITY	GT899052-001X QUANTITY	GT899052-002X QUANTITY
1	802007-001-03	ROD ASSEMBLY, SWIVEL FRONT	1	1	1
2	820571-020	LUG, SWIVEL POINT	1	1	1
3	960100-001	PLATE, STEEL WASHER	2	2	2
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4	4	4
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4	4
6	990403-100-02	WASHER, 1 LOCK	4	4	4
7	990511-200-02	COTTER PIN, 1/4 X 2	4	4	4
8	830208-041CX	ROD ASSEMBLY, POINT DETECTOR	1	1	1
A	830208-041	ROD, POINT DETECTOR	(1)	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	(1)	(1)
C	833755-000-03	JAW SCREW ASSEMBLY	(1)	(1)	(1)
9	810884-026X	ROD ASSEMBLY, LOCK ROD CONN.	1	1	1
A	810884-026	ROD, LOCK ROD CONN.	(1)	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX	(2)	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP	(2)	(2)	(2)
10	840120-002X	ROD ASSEMBLY, OPERATING	1	1	1
A	840120-002	ROD, OPERATING	(1)	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX	(2)	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	(1)	(1)
11	950125-001-10	SWITCH POINT ADJUSTER	1	1	1
12	910875-005X	STUD ASSEMBLY, 7/8 X 13	2	2	2
A	910875-005	STUD, 7/8 X 13	(1)	(1)	(1)
B	990331-087-02	NUT, 7/8 HEAVY HEX	(1)	(1)	(1)
C	990403-087-02	WASHER, 7/8 LOCK	(1)	(1)	(1)
D	894404	WASHER, GRIP	(1)	(1)	(1)
E	990302-087-12	NUT, 7/8 HEAVY SQUARE	(1)	(1)	(1)
13	910922-020-01	STUD ASSEMBLY, 3/4 X 13	2	2	2
A	910922-020	STUD, 3/4 X 13	(1)	(1)	(1)
B	990331-075-02	NUT, 3/4 HEAVY HEX	(1)	(1)	(1)
C	990403-075-02	WASHER, 3/4 LOCK	(1)	(1)	(1)
D	894406	WASHER, THREADED GRIP	(1)	(1)	(1)
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	(1)	(1)	(1)
14	990763-300-12	BOLT, 0.750 X 3.000 HEAVY HEX	4	4	4
15	990302-075-12	NUT, 3/4 HEAVY SQUARE	4	4	4
16	990403-075-02	WASHER, 3/4 LOCK	4	4	4
17	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	1	0
18	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	2	0
19	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36' Lg	1	1	0
20	960004-001	TIE STRAP, 4 HOLE-4 TIE	1	0	0
21	960002-003	TIE STRAP, 4 HOLE-2 TIE	1	0	0
22	960002-004	TIE STRAP, 4 HOLE-2 TIE	1	0	0
23	995000-008	SCREW SPIKE, 24 x 165 MM	12	0	0
24	976100-102	BUSHING, STEEL	4	4	4
25	820671-016	LUG, SWIVEL POINT BALL	1	1	1
26	990235-007X	BOLT ASSY, COUPLING	1	1	1
27	998693-003	LOCK NUT, 2" NICKEL/BRASS	1	1	0
28	998532-001	CLIP, 2" HD CONDUIT (NOT SHOWN)	1	1	0
29	898193	M-23 CONDUIT OUTLET THREADED	1	1	0
30	841153	COUPLING, THROW BAR	1	1	1
31	830110-001X	ROD, INTERNAL POINT DETECTOR	REFERENCE ONLY		
32	816010-003X	ROD, INTERNAL LOCK ROD	REFERENCE ONLY		
33	850997X	M-23 LATCH STAND	REFERENCE ONLY		

GT899052X = ENTIRE KIT
 GT899052-001X = ENTIRE KIT WITHOUT TIE STRAPS
 GT899052-002X = ENTIRE KIT WITHOUT TIE STRAPS & JUNCTION BOX

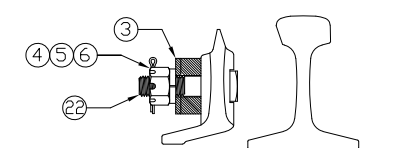
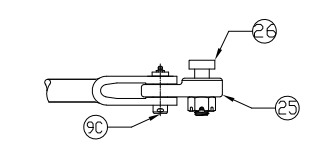
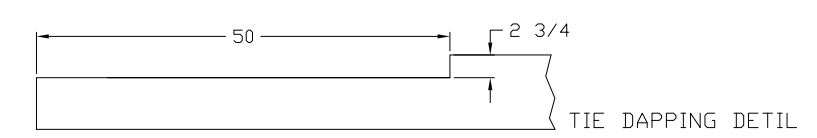
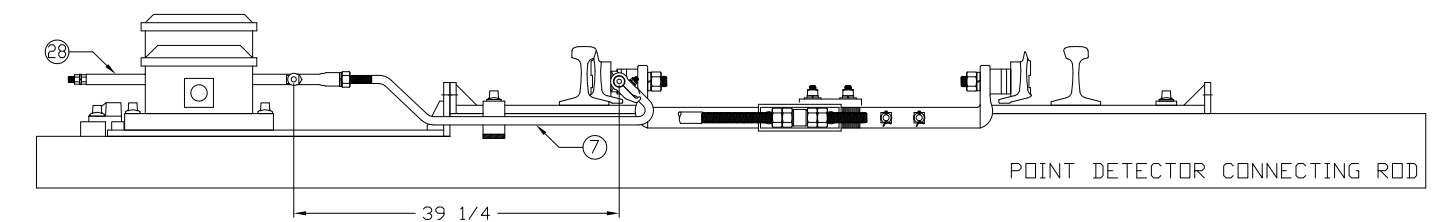
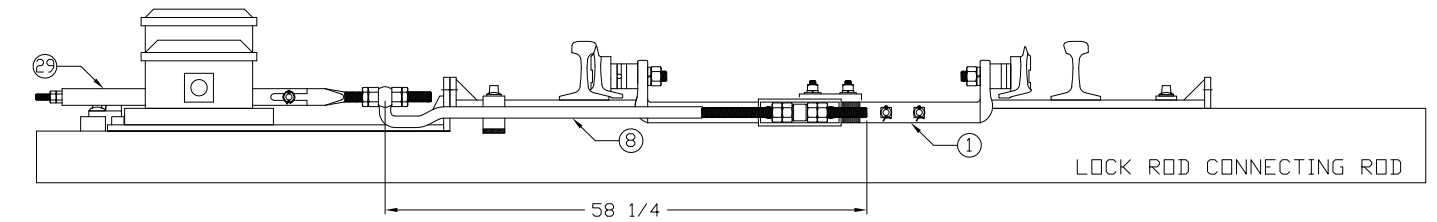
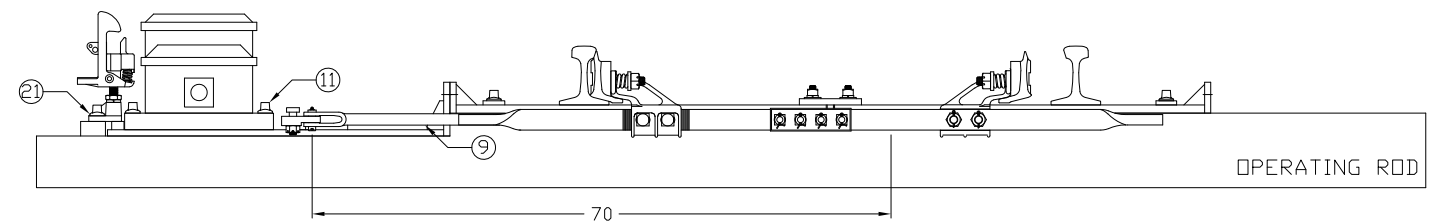
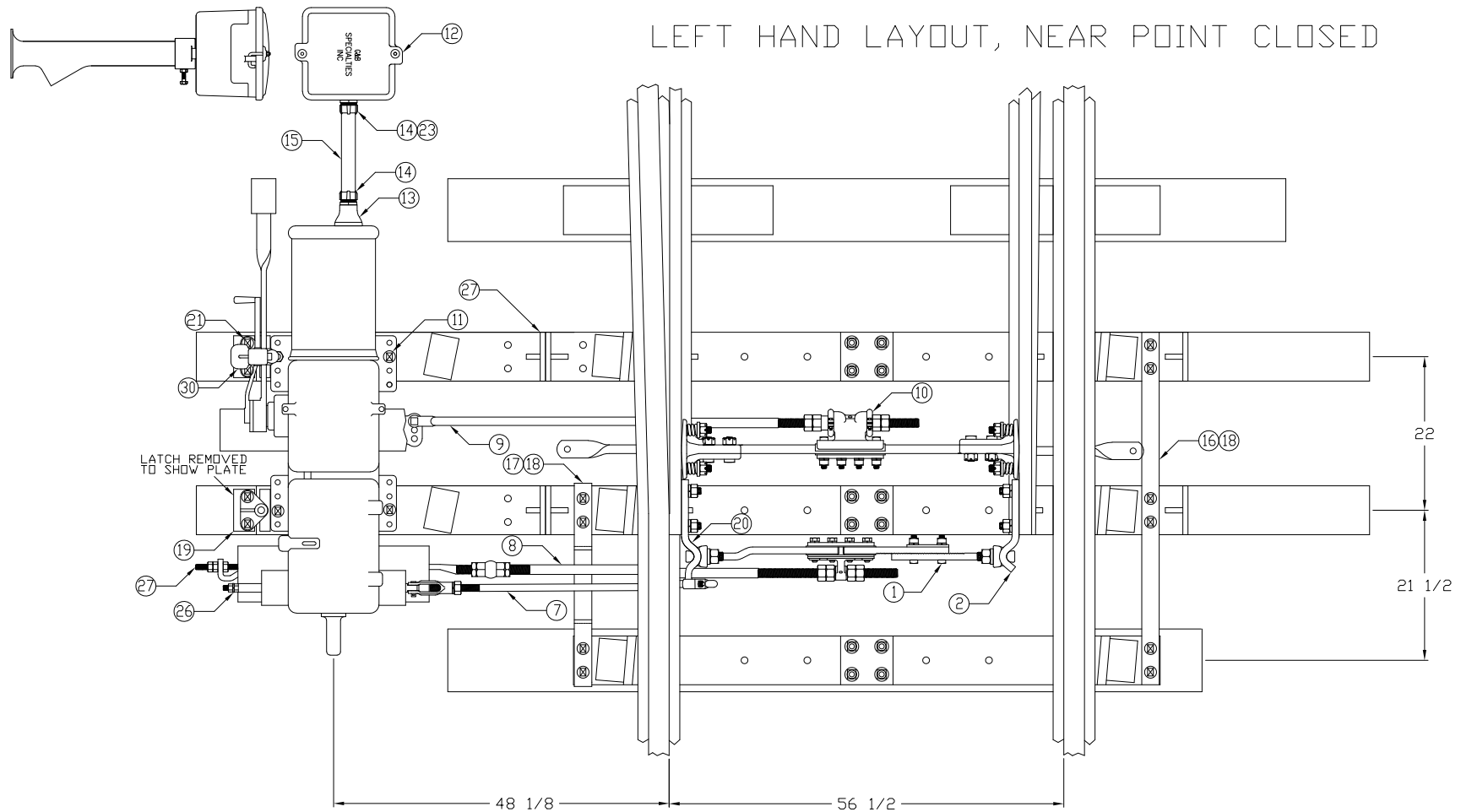
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.
N0.20	WELDED	58'-10"	136LB RE	GTS-278	N0.16	BOLTED	26'-0"	136LB RE	GTS-251
N0.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	N0.12	BOLTED	22'-0"	136LB RE	GTS-013
N0.16	WELDED	38'-9"	136LB RE	GTS-274	N0.12	BOLTED	22'-0"	115LB RE	GTS-012
N0.12	WELDED	36'-7"	136LB RE	GTS-271	N0.10	BOLTED	16'-6"	136LB RE	GTS-011
N0.12	WELDED	36'-5"	115LB RE	GTS-284	N0.10	BOLTED	16'-6"	115LB RE	GTS-010
N0.10	WELDED	31'-6"	136LB RE	GTS-267	N0.8	BOLTED	16'-6"	136LB RE	GTS-009
N0.10	WELDED	31'-6"	115LB RE	GTS-282	N0.8	BOLTED	16'-6"	115LB RE	GTS-008
N0.20	BOLTED	39'-0"	136LB RE	GTS-263					
N0.20	BOLTED	39'-0"	132LB RE	GTS-261					
N0.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					



MODEL M-23
 DAPPED TIE LAYOUT

SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899052X
0	1 OF 1	TC	10/15/20	PAGE 3	GT899052-001X GT899052-002X



LEFT HAND LAYOUT, NEAR POINT CLOSED

ITEM	PART NUMBER	DESCRIPTION	GT899154X QUANTITY	GT899154-001X QUANTITY	GT899154-002X QUANTITY	GT899154-003X QUANTITY
1	802007X	ROD ASSEMBLY, SWIVEL FRONT	1	1	-	-
2	820571-020	LUG, SWIVEL POINT	1	1	-	-
3	960100-001	PLATE, STEEL WASHER	2	2	-	-
4	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4	-	-
5	990403-100-02	WASHER, 1 LOCK	4	4	-	-
6	990511-200-02	COTTER PIN, 1/4 X 2	4	4	-	-
7	830208-041CX	ROD ASSEMBLY, POINT DETECTOR	1	-	1	1
A	830208-041	ROD, POINT DETECTOR	(1)	-	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	-	(1)	(1)
C	833755-000-03	JAW SCREW ASSEMBLY	(1)	-	(1)	(1)
8	810884-026X	ROD ASSEMBLY, LOCK ROD CONN.	1	-	1	1
A	810884-026	ROD, LOCK ROD CONN.	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)	-	(2)	(2)
9	840120-002X	ROD ASSEMBLY, OPERATING	1	-	1	1
A	840120-002	ROD, OPERATING	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	-	(1)	(1)
10	950125-001-10	SWITCH POINT ADJUSTER	1	1	-	-
11	995000-011	SCREW, 7/8" X 6-3/4" SPIKE	4	4	-	-
12	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	-	1	-
13	898192	SLEEVE	1	-	1	-
14	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	-	2	-
15	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36' Lg	1	-	1	-
16	860003-011	TIE STRAP, 6 HOLE-3 TIE	1	1	-	-
17	860010-066	TIE STRAP, 4 HOLE-2 TIE OFFSET	1	1	-	-
18	995000-008	SCREW SPIKE, 24 X 165 MM	10	10	-	-
19	960501-003	LATCH STAND SHIM	2	2	-	-
20	820671-016	LUG, SWIVEL POINT BALL	1	1	-	-
21	995000-010	SCREW, 3/4" X 6-3/4" SPIKE	4	4	-	-
22	990243-525-102	BOLT, 1 X 5 1/4 SQUARE	4	4	-	-
23	998693-001	LOCK NUT, 2" NICKEL/BRASS	1	-	1	-
24	998532-001	CLIP, 2" HD CONDUIT (NOT SHOWN)	1	-	1	-
25	841153	COUPLING, THROW BAR	1	-	1	1
26	990235-007X	BOLT ASSY, COUPLING	1	-	1	-
27	SM-100	SWITCH MACHINE PLATE	REFERENCE ONLY	-	-	-
28	830110-001X	ROD, INTERNAL POINT DETECTOR	REFERENCE ONLY	-	-	-
29	816010-003X	ROD, INTERNAL LOCK ROD	REFERENCE ONLY	-	-	-
30	850997X	M-23 LATCH STAND	REFERENCE ONLY	-	-	-

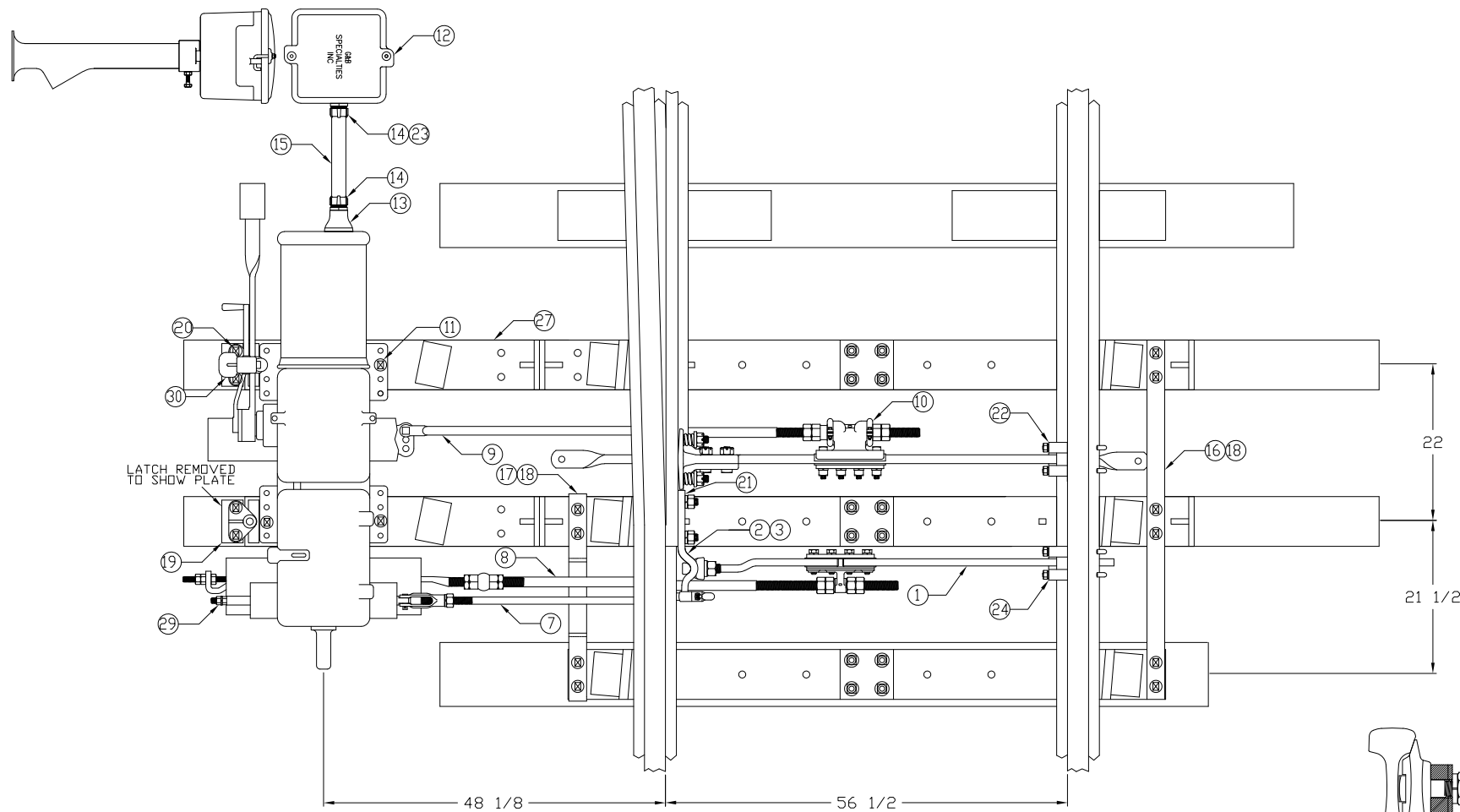
GT899154X = ENTIRE KIT
 GT899154-001X = PANELIZATION KIT
 GT899154-002X = FIELD SWITCH MACHINE KIT (NEW CONSTRUCTION)
 GT899154-003X = FIELD SWITCH MACHINE KIT (MAINTENANCE)

N0.20	WELDED	58'-10"	136LB RE	GTS-278	N0.16	BOLTED	26'-0"	136LB RE	GTS-251
N0.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	N0.12	BOLTED	22'-0"	136LB RE	GTS-013
N0.16	WELDED	38'-9"	136LB RE	GTS-274	N0.12	BOLTED	22'-0"	115LB RE	GTS-012
N0.12	WELDED	36'-7"	136LB RE	GTS-271	N0.10	BOLTED	16'-6"	136LB RE	GTS-011
N0.12	WELDED	36'-5"	115LB RE	GTS-284	N0.10	BOLTED	16'-6"	115LB RE	GTS-010
N0.10	WELDED	31'-6"	136LB RE	GTS-267	N0.8	BOLTED	16'-6"	136LB RE	GTS-009
N0.10	WELDED	31'-6"	115LB RE	GTS-282	N0.8	BOLTED	16'-6"	115LB RE	GTS-008
N0.20	BOLTED	39'-0"	136LB RE	GTS-263					
N0.20	BOLTED	39'-0"	132LB RE	GTS-261					
N0.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.



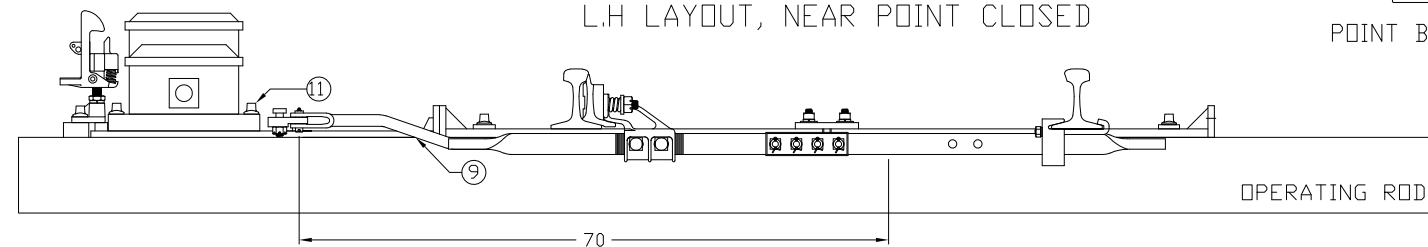
MODEL M-23
 DAPPED TIE LAYOUT
 USING SWITCH PLATES
 SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899154X
0	1 OF 1	TC	10/15/20	PAGE 4	GT899154-001X GT899154-002X GT899154-003X

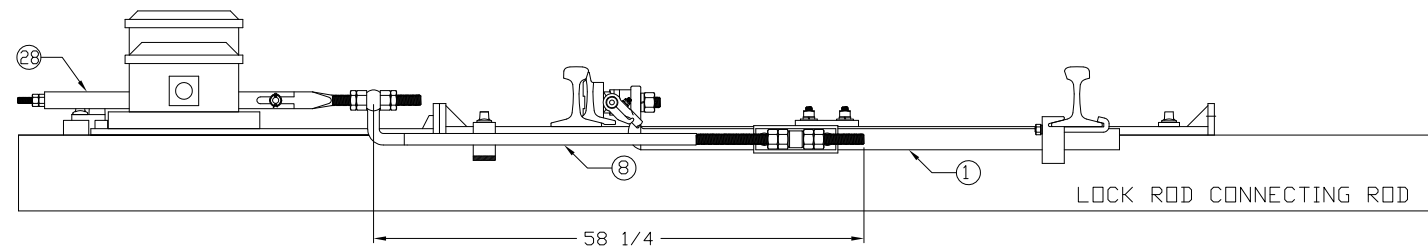


L.H. LAYOUT, NEAR POINT CLOSED

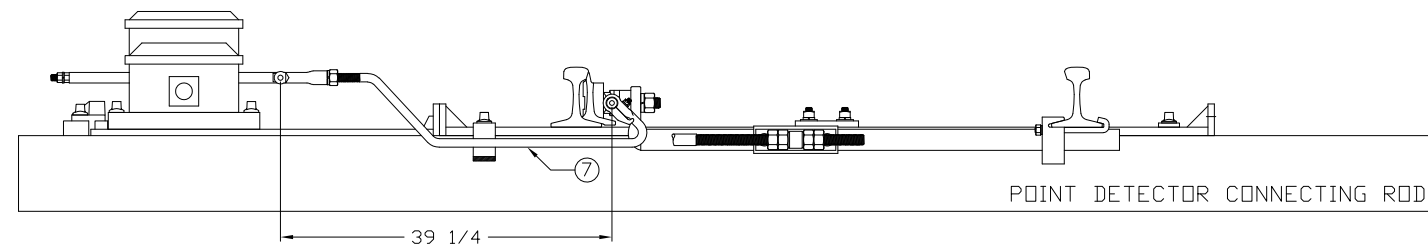
POINT BOLT ASSEMBLY



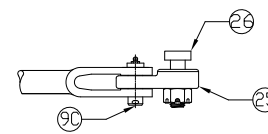
OPERATING ROD



LOCK ROD CONNECTING ROD



POINT DETECTOR CONNECTING ROD



COUPLING DETAIL

ITEM	PART NUMBER	DESCRIPTION	GT899335 QUANTITY	GT899335-001X QUANTITY	GT899335-002X QUANTITY	GT899335-003X QUANTITY
1	802007-001-02	ROD ASSEMBLY, SWIVEL FRONT	1	1	-	-
2	820671-016	LUG, SWIVEL POINT BALL	1	1	-	-
3	960100-001	PLATE, STEEL WASHER	1	1	-	-
4	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	2	2	-	-
5	990403-100-02	WASHER, 1 LOCK	2	2	-	-
6	990511-200-02	COTTER PIN, 1/4 X 2	2	2	-	-
7	830208-091-01	ROD ASSEMBLY, POINT DETECTOR	1	-	1	1
A	830208-091	ROD, POINT DETECTOR	(1)	-	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	-	(1)	(1)
C	833755-000-03	JAW SCREW ASSEMBLY	(1)	-	(1)	(1)
8	810884-086-01	ROD ASSEMBLY, LOCK ROD CONN.	1	-	1	1
A	810884-086	ROD, LOCK ROD CONN.	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)	-	(2)	(2)
9	840153-120-01	ROD ASSEMBLY, OPERATING	1	-	1	1
A	840153-120	ROD, OPERATING	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	-	(1)	(1)
10	950125-001-10	SWITCH POINT ADJUSTER	1	1	-	-
11	995000-011	SCREW, 7/8" X 6-3/4" SPIKE	4	4	-	-
12	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	-	1	-
13	898193	M-23 CONDUIT OUTLET THREADED	1	-	1	-
14	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	-	2	-
15	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36' Lg	1	-	1	-
16	860003-011	TIE STRAP, 6 HOLE-3 TIE	1	1	-	-
17	860010-066	TIE STRAP, 4 HOLE-2 TIE OFFSET	1	1	-	-
18	995000-008	SCREW SPIKE, 24 X 165 MM	10	10	-	-
19	960501-003	LATCH STAND SHIM	2	2	-	-
20	995000-010	SCREW, 3/4" X 6-3/4" SPIKE	4	4	-	-
21	990243-525-102	BOLT, 1 X 5 1/4 SQUARE	2	2	-	-
22	9001014-001-01	GUIDE ASSEMBLY, RAIL	2	2	-	-
23	998693-003	LOCKNUT, 2" NICKEL/BRASS	1	-	1	-
24	998532-001	CLIP, 2" CONDUIT	1	-	1	-
25	841153	COUPLING, THROW BAR	1	-	1	1
26	990235-007X	BOLT ASSY, COUPLING	1	-	1	-
27	SM-100	SWITCH MACHINE PLATE				REFERENCE ONLY
28	816010-003X	ROD, INTERNAL LOCK ROD				REFERENCE ONLY
29	830110-001X	ROD, INTERNAL POINT DETECTOR				REFERENCE ONLY
30	850997X	M23 LATCH STAND				REFERENCE ONLY

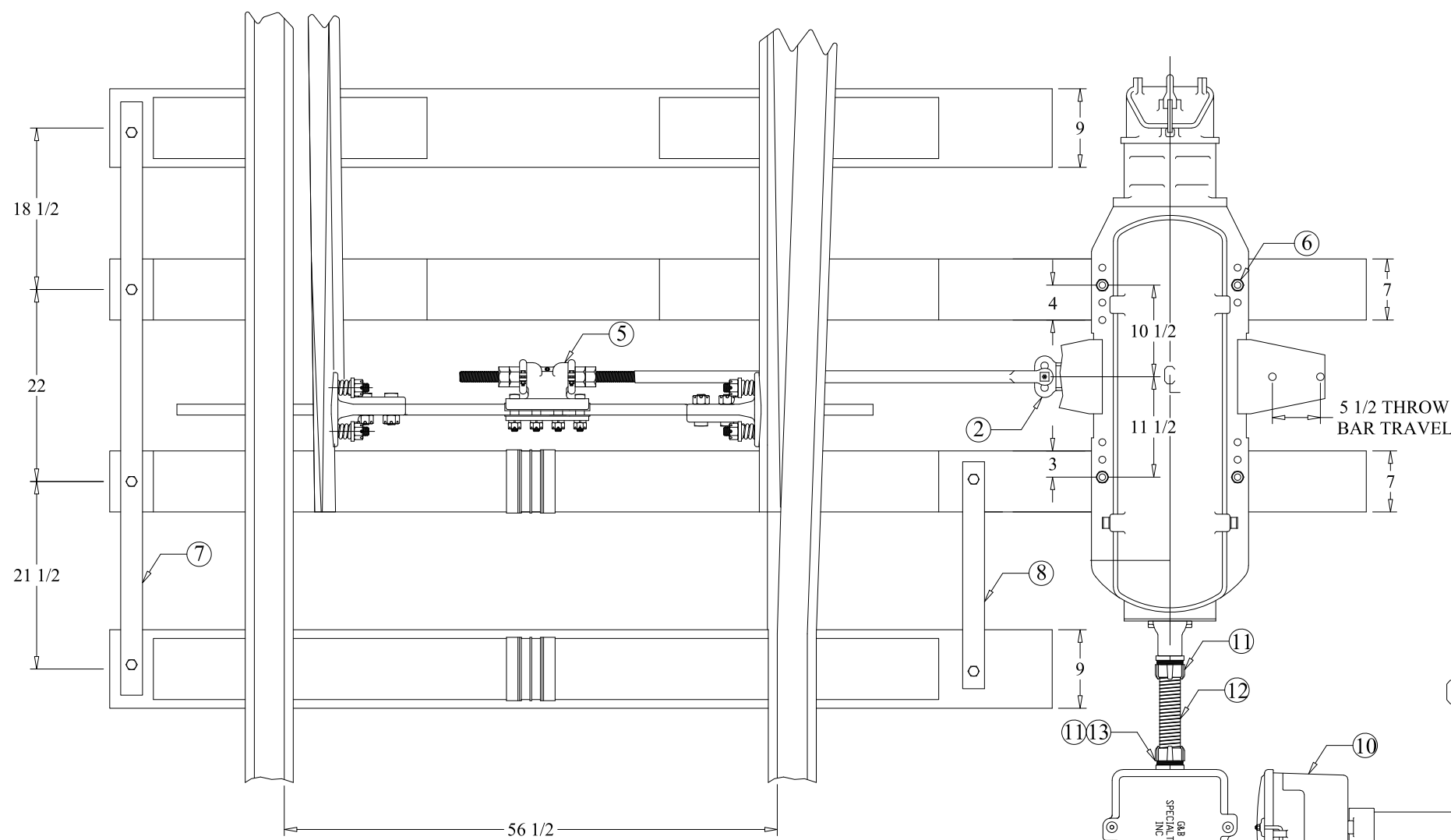
GT899335X = ENTIRE KIT
 GT899335-001X = PANELIZATION KIT
 GT899335-002X = FIELD SWITCH MACHINE KIT (NEW CONSTRUCTION)
 GT899335-003X = FIELD SWITCH MACHINE KIT (MAINTENANCE)

NO.	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.
NO.20	WELDED	58'-10"	136LB RE	GTS-278	NO.16	BOLTED	26'-0"	136LB RE	GTS-251
NO.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	NO.12	BOLTED	22'-0"	136LB RE	GTS-013
NO.16	WELDED	38'-9"	136LB RE	GTS-274	NO.12	BOLTED	22'-0"	115LB RE	GTS-012
NO.12	WELDED	36'-7"	136LB RE	GTS-271	NO.10	BOLTED	16'-6"	136LB RE	GTS-011
NO.12	WELDED	36'-5"	115LB RE	GTS-284	NO.10	BOLTED	16'-6"	115LB RE	GTS-010
NO.10	WELDED	31'-6"	136LB RE	GTS-267	NO.8	BOLTED	16'-6"	136LB RE	GTS-009
NO.10	WELDED	31'-6"	115LB RE	GTS-282	NO.8	BOLTED	16'-6"	115LB RE	GTS-008
NO.20	BOLTED	39'-0"	136LB RE	GTS-263					
NO.20	BOLTED	39'-0"	132LB RE	GTS-261					
NO.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					

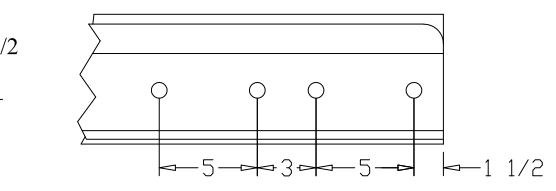
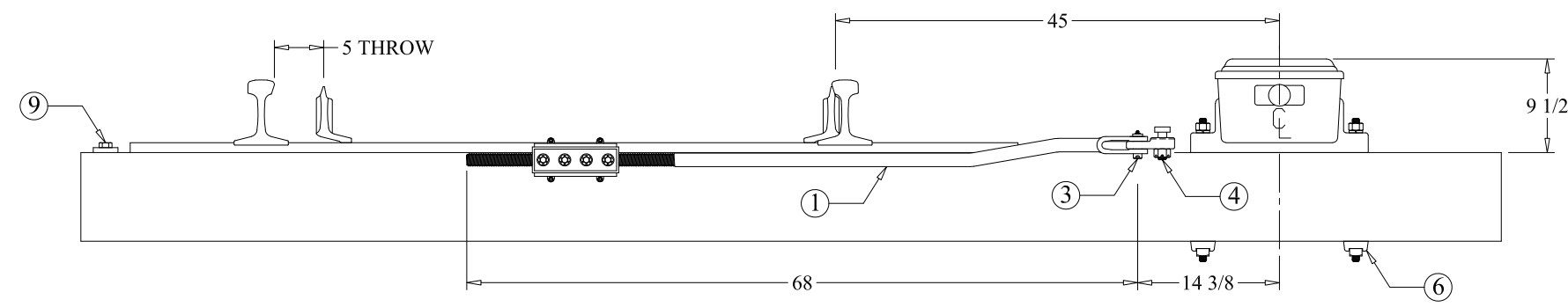
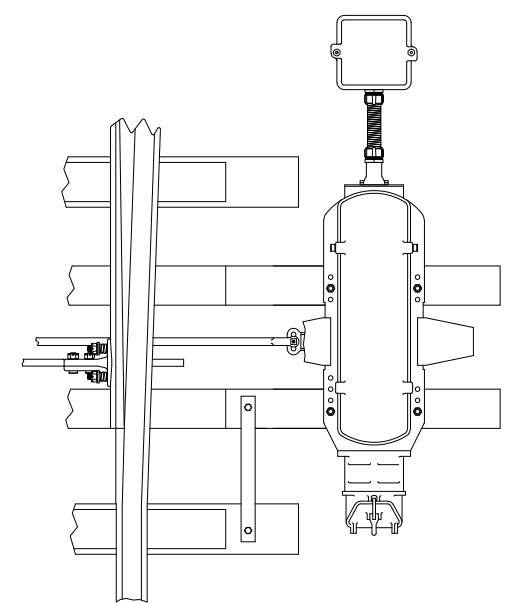
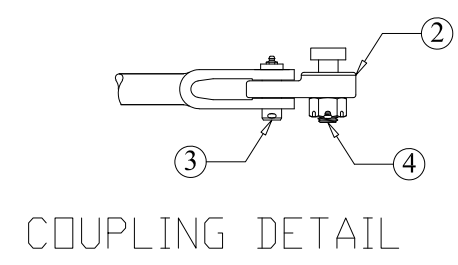


M-23 NON DAPPED
 SPLIT POINT DERAIL
 USING SWITCH PLATES
 SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899335
0	1 OF 1	TC	10/15/20	PAGE 5	GT899335-001X GT899335-002X GT899335-003X



ITEM NUMBER	PART NUMBER	DESCRIPTION	GT999336X QUANTITY	GT999336-001X QUANTITY
1	940153-127-01	ROD ASSEMBLY, OPERATING	1	1
A	940153-127	ROD, OPERATING	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX	(2)	(2)
2	941154	COUPLING, THROW BAR	1	1
3	890590-005X	PIN ASSEMBLY, THROW ROD	1	1
4	990235-025X	BOLT ASSEMBLY, THROW ROD	1	1
A	990235-025	BOLT, 7/8 X 3 1/4	(1)	(1)
B	990332-087-02	NUT, 7/8 HEAVY HEX SLOTTED	(1)	(1)
C	990509-200-02	COTTER PIN, 3/16 X 2	(1)	(1)
D	990403-087-02	WASHER, 7/8 LOCK	(1)	(1)
5	950125-001-10	SWITCH POINT ADJUSTER	1	1
6	910922-020-01	STUD ASSEMBLY, 3/4 X 13	4	4
A	910922-020	STUD, 3/4 X 13	(1)	(1)
B	990331-075-02	NUT, 3/4 HEAVY HEX	(1)	(1)
C	990403-075-02	WASHER, 3/4 LOCK	(1)	(1)
D	894406	WASHER, THREADED GRIP	(1)	(1)
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	(1)	(1)
7	960004-028	TIE STRAP, 4 HOLE	1	1
8	960002-001	TIE STRAP, 2 HOLE	1	1
9	990130-600-02	SCREW, 3/4 X 6 LAG	6	6
10	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	--
11	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	--
12	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36" Lg	1	--
13	998693-003	LOCKNUT, 2" NICKEL/BRASS	1	--
14	998532-001	CLIP, 2" CONDUIT (NOT SHOWN)	1	--



R.H. LAYOUT NEAR POINT CLOSED

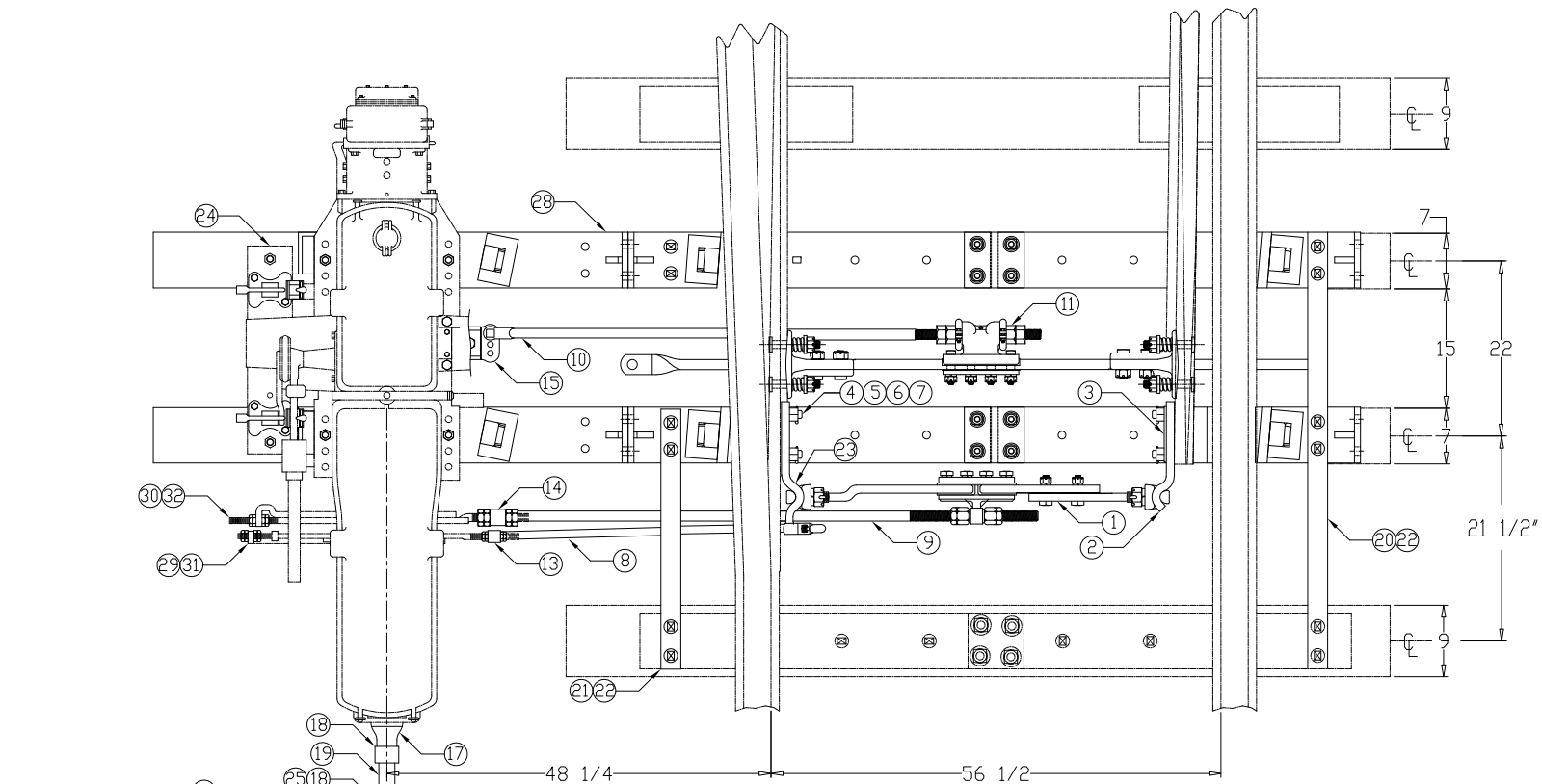
POINT DRILLING DETAIL

ALTERNATE MACHINE MOUNTING

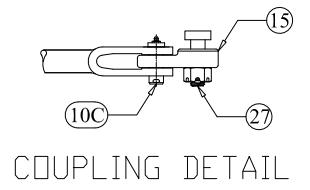


MODEL 6 ELECTRIC SWITCH MACHINE
NON DAPPED LAYOUT
SIGNALS AND COMMUNICATIONS

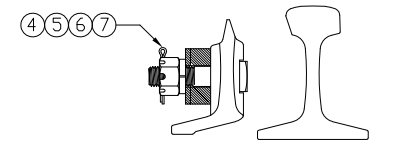
REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT999336X
0	1 OF 1	TC	10/26/20	PAGE 6	GT999336-001X



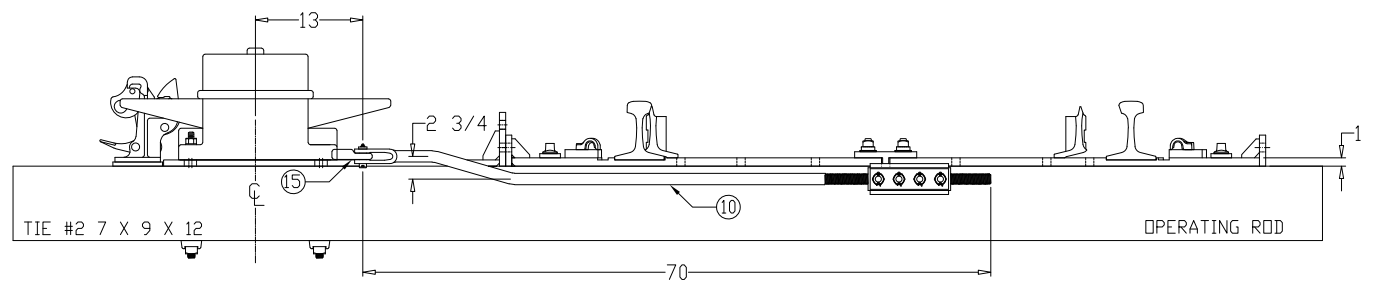
L.H. LAYOUT NEAR POINT CLOSED



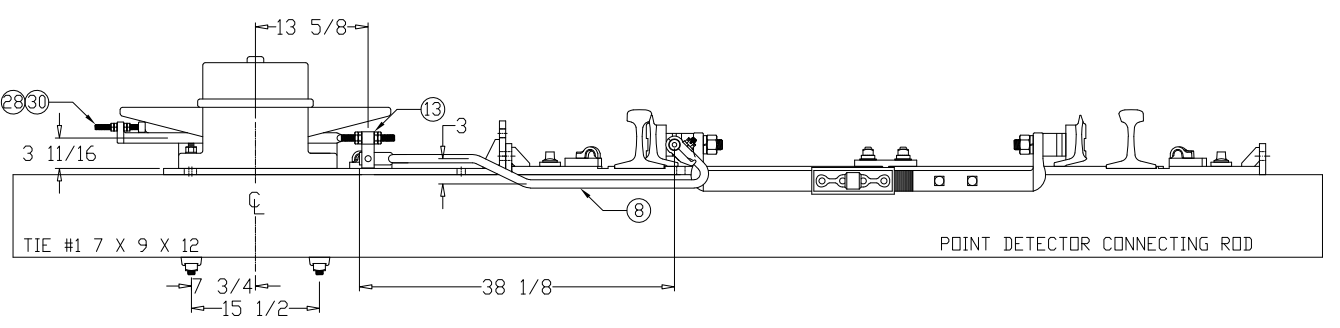
COUPLING DETAIL



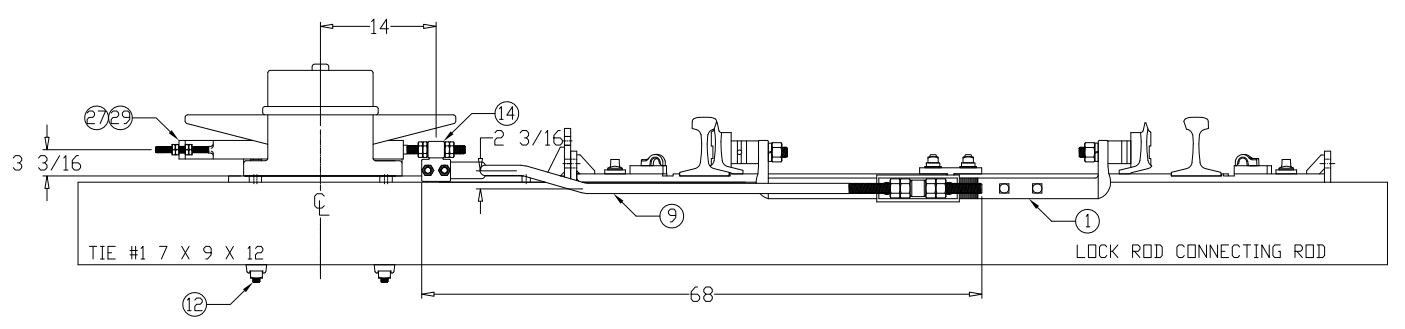
POINT BOLT ASSEMBLY



OPERATING ROD



POINT DETECTOR CONNECTING ROD



LOCK ROD CONNECTING ROD

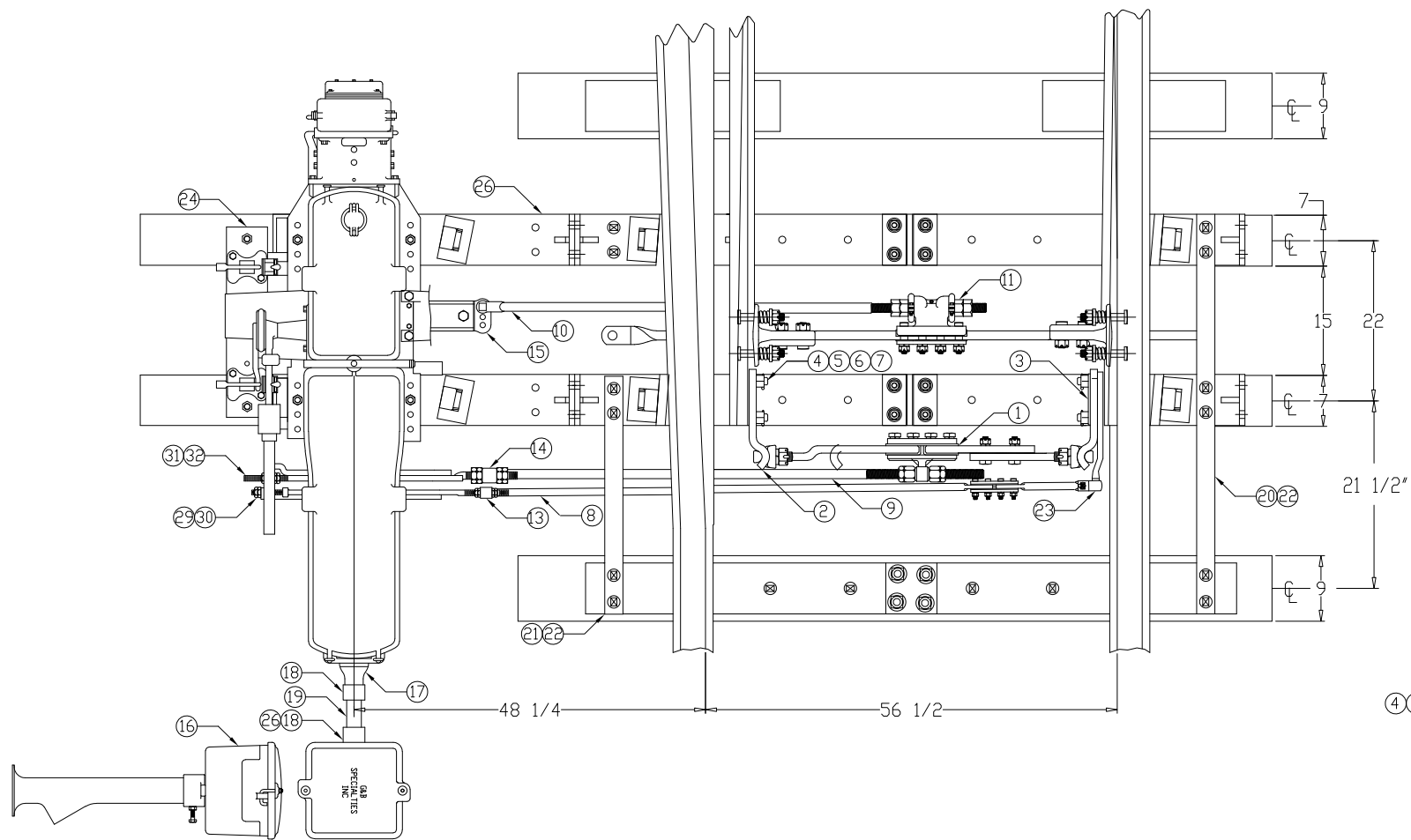
ITEM	PART NUMBER	DESCRIPTION	GT999146X QUANTITY	GT999146-001X QUANTITY	GT999146-002X QUANTITY	GT999146-003X QUANTITY
1	802007X	ROD ASSEMBLY, SWIVEL FRONT	1	1	-	-
2	820571-020	LUG, SWIVEL POINT	1	1	-	-
3	960100-001	PLATE, STEEL WASHER	2	2	-	-
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4	4	-	-
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4	-	-
6	990403-100-02	WASHER, 1 LOCK	4	4	-	-
7	990511-200-02	COTTER PIN, 1/4 X 2	4	4	-	-
8	830209-105-02	ROD ASSEMBLY, POINT DETECTOR	1	-	1	1
A	830209-105	ROD, POINT DETECTOR	(1)	-	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	-	(1)	(1)
9	910109-092-01	ROD ASSEMBLY, LOCK ROD CONN.	1	-	1	1
A	910109-092	ROD, LOCK ROD CONN.	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)	-	(2)	(2)
10	840153-120-01	ROD ASSEMBLY, OPERATING	1	-	1	1
A	840153-120	ROD, OPERATING	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	-	(1)	(1)
11	950125-001-10	SWITCH POINT ADJUSTER	1	1	-	-
12	910922-024-02	STUD ASSEMBLY, 3/4 X 15 1/2	4	4	-	-
A	910922-024	STUD, 3/4 X 15 1/2	(1)	(1)	-	-
B	990331-075-02	NUT, 3/4 HEAVY HEX	(1)	(1)	-	-
C	990403-075-02	WASHER, 3/4 LOCK	(1)	(1)	-	-
D	894406	WASHER, THREADED GRIP	(1)	(1)	-	-
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	(1)	(1)	-	-
13	920430-002-01	LUG ASSEMBLY, POINT DETECTOR	1	-	1	1
14	920530-001-01	LUG ASSEMBLY, LOCK ROD	1	-	1	1
15	941153	COUPLING, THROW BAR	1	-	1	1
16	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	-	1	-
17	998192-001	COUPLING, 2"	1	-	1	-
18	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	-	2	-
19	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36" Lg.	1	-	1	-
20	860003-011	TIE STRAP, 6 HOLE-3 TIE	1	1	-	-
21	960002-003	TIE STRAP, 4 HOLE	1	1	-	-
22	995000-008	SCREW SPIKE, 24 x 165 MM	10	10	-	-
23	820671-016	LUG, SWIVEL POINT BALL	1	1	-	-
24	960501-002	SHIM, LATCH PLATE	2	2	-	-
25	998693-003	LOCK NUT, 2" NICKEL/BRASS	1	-	1	-
26	998532-001	CLIP, 2" CONDUIT (NOT SHOWN)	1	-	1	-
27	990235-005X	BOLT ASSY, COUPLING DR. 2.94	1	-	1	-
28	SM-100	SWITCH MACHINE PLATE	REFERENCE ONLY			
29	930327-003X	BAR, INTERNAL POINT DETECTOR, LH	REFERENCE ONLY			
30	916005-004X	ROD, INTERNAL LOCK ROD, LH	REFERENCE ONLY			
31	930327-012X	BAR, INTERNAL POINT DETECTOR, RH	REFERENCE ONLY			
32	916005-002X	ROD, INTERNAL LOCK ROD, RH	REFERENCE ONLY			

GT999146X = ENTIRE KIT
 GT999146-001X = PANELIZATION KIT
 GT999146-002X = FIELD SWITCH MACHINE KIT (NEW CONSTRUCTION)
 GT999146-003X = FIELD SWITCH MACHINE KIT (MAINTENANCE)

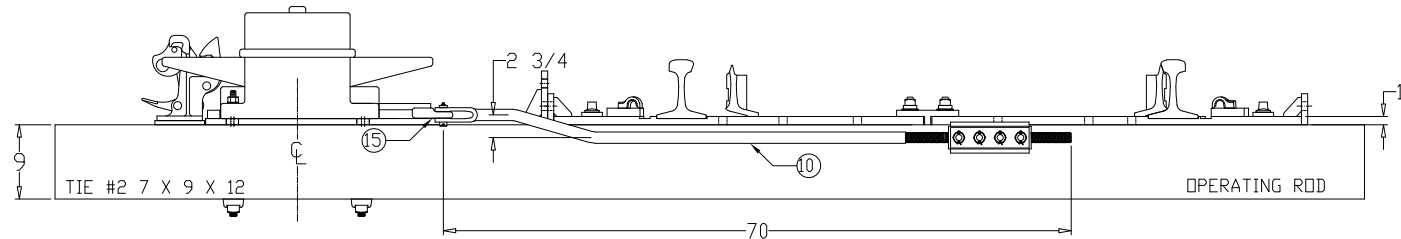
NO.	TYPE	LENGTH	RAIL WEIGHT	GO DWG.	NO.	TYPE	LENGTH	RAIL WEIGHT	GO DWG.	
NO.20	WELDED	58'-10"	136LB RE	GTS-278						
NO.20	EQL	WELDED	63'-3"	136LB RE	GTS-277	NO.12	BOLTED	22'-0"	136LB RE	GTS-012
NO.16	WELDED	38'-9"	136LB RE	GTS-274	NO.12	BOLTED	22'-0"	115LB RE	GTS-012	
NO.12	WELDED	36'-7"	136LB RE	GTS-271	NO.10	BOLTED	16'-6"	136LB RE	GTS-011	
NO.12	WELDED	36'-5"	115LB RE	GTS-284	NO.10	BOLTED	16'-6"	115LB RE	GTS-010	
NO.10	WELDED	31'-6"	136LB RE	GTS-267	NO.8	BOLTED	16'-6"	136LB RE	GTS-009	
NO.10	WELDED	31'-6"	115LB RE	GTS-282	NO.8	BOLTED	16'-6"	115LB RE	GTS-008	
NO.20	BOLTED	39'-0"	136LB RE	GTS-263						
NO.20	BOLTED	39'-0"	132LB RE	GTS-261						
NO.16	EQL	BOLTED	39'-0"	136LB RE	GTS-252					
NO.16	BOLTED	26'-0"	136LB RE	GTS-251						
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	

MODEL 5
NON DAPPED LAYOUT
TRANSIT USING SWITCH PLATES
SIGNALS AND COMMUNICATIONS

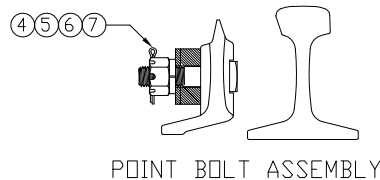
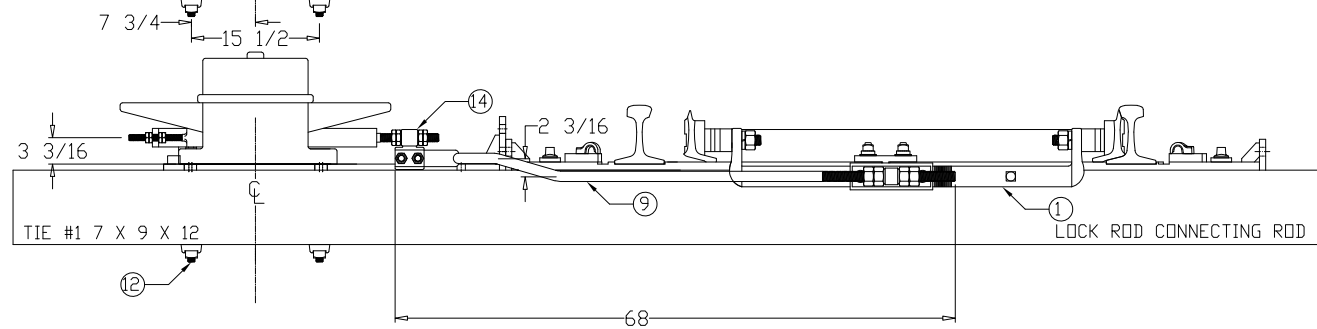
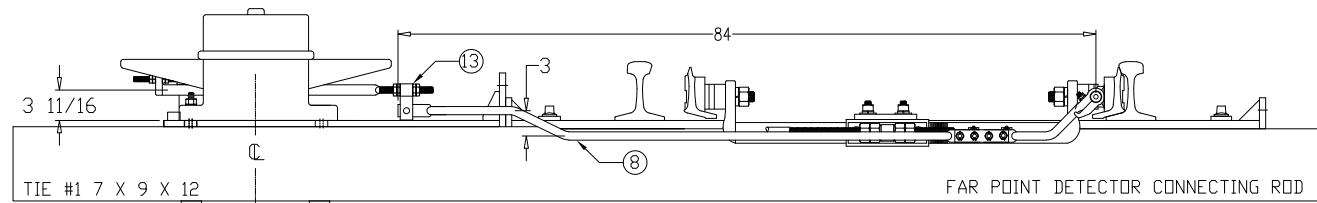
REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT999146X
0	1 OF 1	TC	10/15/20	PAGE 8	GT999146-001X GT999146-002X GT999146-003X



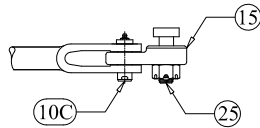
L.H. LAYOUT FAR POINT CLOSED



COUPLING DETAIL



POINT BOLT ASSEMBLY



ITEM	PART NUMBER	DESCRIPTION	GT999146-005X QUANTITY
1	802007X	ROD ASSEMBLY, SWIVEL FRONT	1
2	820571-020	LUG, SWIVEL POINT	2
3	960100-001	PLATE, STEEL WASHER	2
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4
6	990403-100-02	WASHER, 1 LOCK	4
7	990511-200-02	COTTER PIN, 1/4 X 2	4
8	830216-016-01	ROD ASSEMBLY, FAR POINT DET	1
9	910109-092-01	ROD ASSEMBLY, LOCK ROD CONN.	1
A	910109-092	ROD, LOCK ROD CONN.	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)
10	840153-120-01	ROD ASSEMBLY, OPERATING	1
A	840153-120	ROD, OPERATING	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)
11	950125-001-10	SWITCH POINT ADJUSTER	1
12	910922-024-02	STUD ASSEMBLY, 3/4 X 15 1/2	4
A	910922-024	STUD, 3/4 X 15 1/2	(1)
B	990331-075-02	NUT, 3/4 HEAVY HEX	(1)
C	990403-075-02	WASHER, 3/4 LOCK	(1)
D	894406	WASHER, THREADED GRIP	(1)
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	(1)
13	920430-002-01	LUG ASSEMBLY, POINT DETECTOR	1
14	920530-001-01	LUG ASSEMBLY, LOCK ROD	1
15	941153	COUPLING, THROW BAR	1
16	998918-003-01	JUNCTION BOX, 36 TERMINAL	1
17	998192-001	COUPLING, 2"	1
18	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2
19	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36' Lg.	1
20	860003-011	TIE STRAP, 6 HOLE-3 TIE	1
21	960002-003	TIE STRAP, 4 HOLE	1
22	995000-008	SCREW SPIKE, 24 x 165 MM	10
23	820681-006	LUG, BALL END POINT	1
24	960501-002	SHIM, LATCH PLATE	2
25	990235-005X	BOLT ASSY, COUPLING DR. 2.94	1
26	998693-003	LOCKNUT, 2" NICKEL/BRASS	1
27	998532-001	CLIP, 2" CONDUIT (NOT SHOWN)	1
28	SM-100	SWITCH MACHINE PLATE	REF
29	930327-012X	ROD, POINT DETECTOR, RH	REF
30	930327-003X	ROD, POINT DETECTOR, LH	REF
31	916005-004X	ROD, NARROW NOTCH LOCK, LH	REF
32	916005-002X	ROD, NARROW NOTCH LOCK, RH	REF

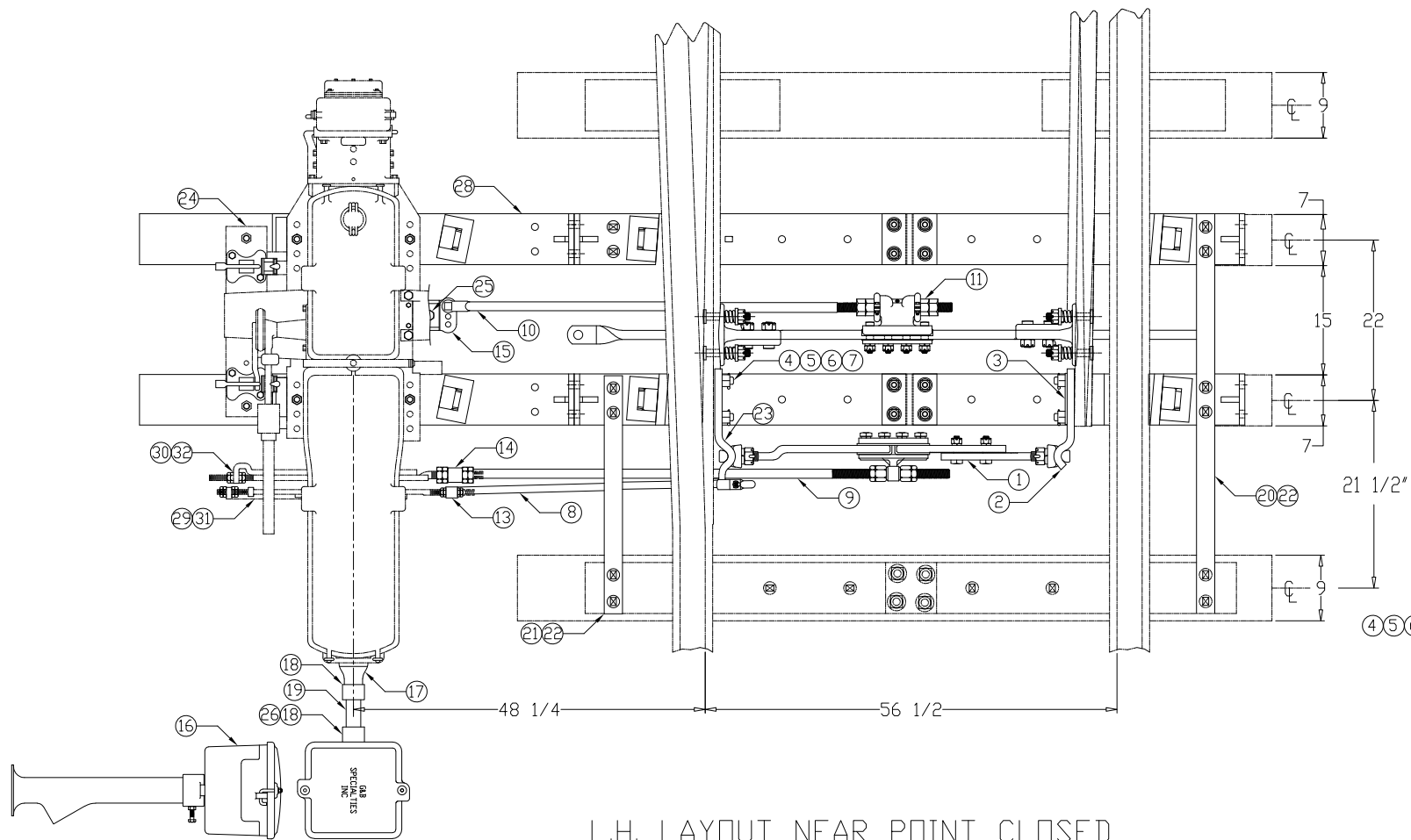
GT999146-005X = ENTIRE KIT

NO.20	WELDED	58'-10"	136LB RE	GTS-278					
NO.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	NO.12	BOLTED	22'-0"	136LB RE	GTS-013
NO.16	WELDED	38'-9"	136LB RE	GTS-274	NO.12	BOLTED	22'-0"	115LB RE	GTS-012
NO.12	WELDED	36'-7"	136LB RE	GTS-271	NO.10	BOLTED	16'-6"	136LB RE	GTS-011
NO.12	WELDED	36'-5"	115LB RE	GTS-284	NO.10	BOLTED	16'-6"	115LB RE	GTS-010
NO.10	WELDED	31'-6"	136LB RE	GTS-267	NO.8	BOLTED	16'-6"	136LB RE	GTS-009
NO.10	WELDED	31'-6"	115LB RE	GTS-282	NO.8	BOLTED	16'-6"	115LB RE	GTS-008
NO.20	BOLTED	39'-0"	136LB RE	GTS-263					
NO.20	BOLTED	39'-0"	132LB RE	GTS-261					
NO.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
NO.16	BOLTED	26'-0"	136LB RE	GTS-251					
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.

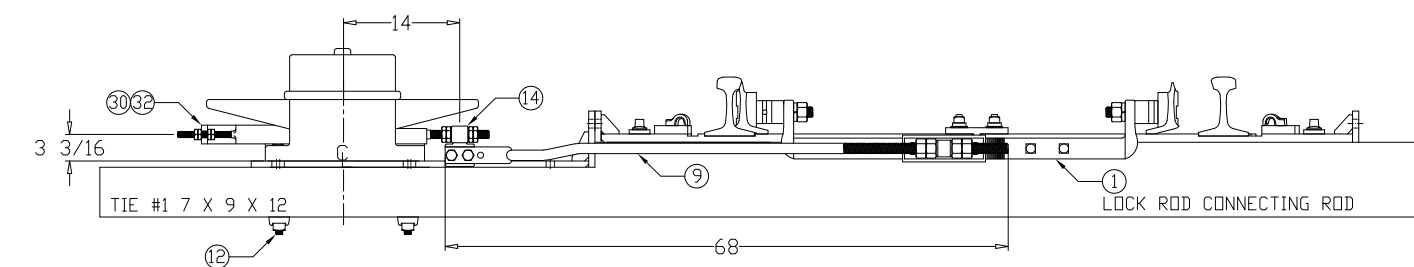
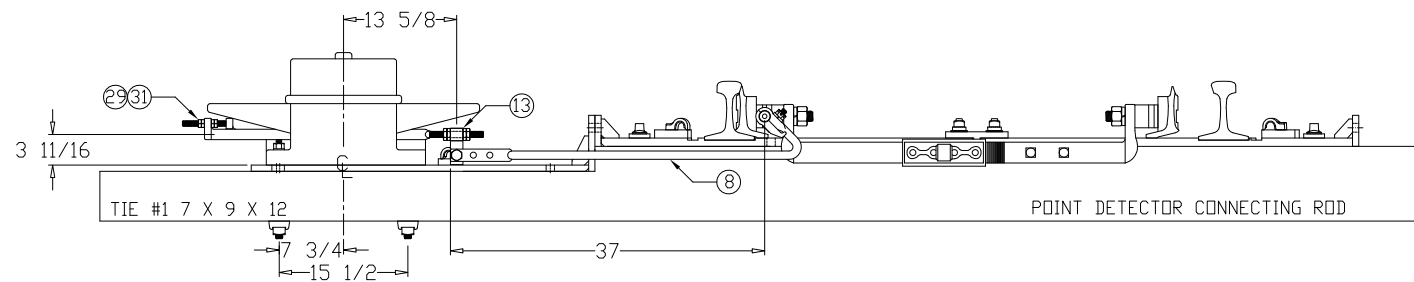
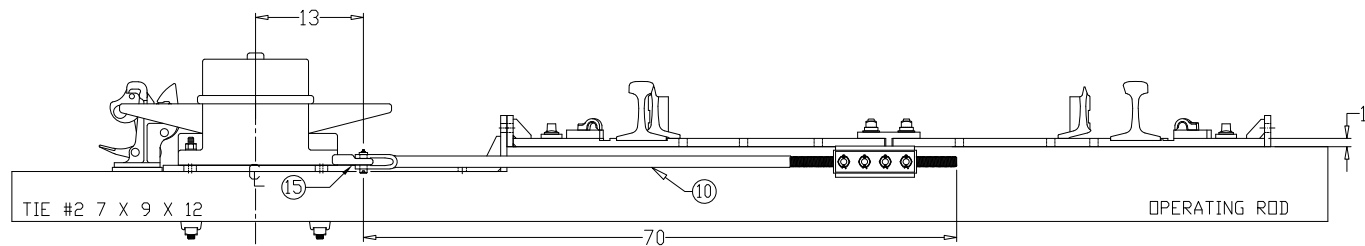
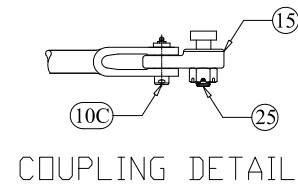
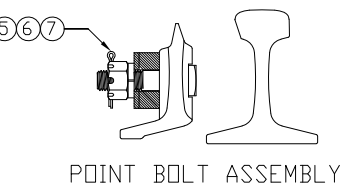


MODEL 5
NON DAPPED FAR
POINT LAYOUT
SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT999146-005X
0	1 OF 1	TC	10/26/20	PAGE 9	



L.H. LAYOUT NEAR POINT CLOSED



ITEM	PART NUMBER	DESCRIPTION	GT999109X QUANTITY	GT999109-001X QUANTITY	GT999109-002X QUANTITY	GT999109-003X QUANTITY
1	802007X	ROD ASSEMBLY, SWIVEL FRONT	1	1	-	-
2	820571-020	LUG, SWIVEL POINT	1	1	-	-
3	960100-001	PLATE, STEEL WASHER	2	2	-	-
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4	4	-	-
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4	-	-
6	990403-100-02	WASHER, 1 LOCK	4	4	-	-
7	990511-200-02	COTTER PIN, 1/4 X 2	4	4	-	-
8	830209-011X	ROD ASSEMBLY, POINT DETECTOR	1	-	1	1
A	830209-011	ROD, POINT DETECTOR	(1)	-	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	-	(1)	(1)
9	910109-040X	ROD ASSEMBLY, LOCK ROD CONN.	1	-	1	1
A	910109-040	ROD, LOCK ROD CONN.	(1)	-	(1)	(1)
B	990331-125-10	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)	-	(2)	(2)
10	840120-002X	ROD ASSEMBLY, OPERATING	1	-	1	1
A	840120-002	ROD, OPERATING	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	-	(1)	(1)
11	950125-001-02	SWITCH POINT ADJUSTER	1	1	-	-
12	910922-020-01	STUD ASSEMBLY, 3/4 X 15 1/2	4	4	-	-
A	910922-020	STUD, 3/4 X 15 1/2	(1)	(1)	-	-
B	990331-075-02	NUT, 3/4 HEAVY HEX	(1)	(1)	-	-
C	990403-075-02	WASHER, 3/4 LOCK	(1)	(1)	-	-
D	894406	WASHER, THREADED GRIP	(1)	(1)	-	-
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	(1)	(1)	-	-
13	920430-002-01	LUG ASSEMBLY, POINT DETECTOR	1	-	1	1
14	920530-001-01	LUG ASSEMBLY, LOCK ROD	1	-	1	1
15	941153	COUPLING, THROW BAR	1	-	1	1
16	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	-	1	-
17	998192-001	COUPLING, 2"	1	-	1	-
18	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	-	2	-
19	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36' Lg	1	-	1	-
20	860003-011	TIE STRAP, 6 HOLE-3 TIE	1	1	-	-
21	960002-003	TIE STRAP, 4 HOLE	1	1	-	-
22	995000-008	SCREW SPIKE, 24 x 165 MM	10	10	-	-
23	820671-016	LUG, SWIVEL POINT BALL	1	1	-	-
24	960501-002	SHIM, LATCH PLATE	2	2	-	-
25	990235-005X	BOLT ASSY, COUPLING DR. 2.94	1	-	1	1
26	998693-003	LOCK NUT, 2" NICKEL/BRASS	1	-	1	-
27	998532-001	CLIP, 2" HD CONDUIT (NOT SHOWN)	1	-	1	-
28	SM-100	SWITCH MACHINE PLATE	REFERENCE ONLY-SUPPLIED BY CN			
29	930327-003X	BAR, INTERNAL POINT DETECTOR, LH	REFERENCE ONLY			
30	916005-004X	ROD, INTERNAL LOCK ROD, LH	REFERENCE ONLY			
31	930327-012X	BAR, INTERNAL POINT DETECTOR, RH	REFERENCE ONLY			
32	916005-002X	ROD, INTERNAL LOCK ROD, RH	REFERENCE ONLY			

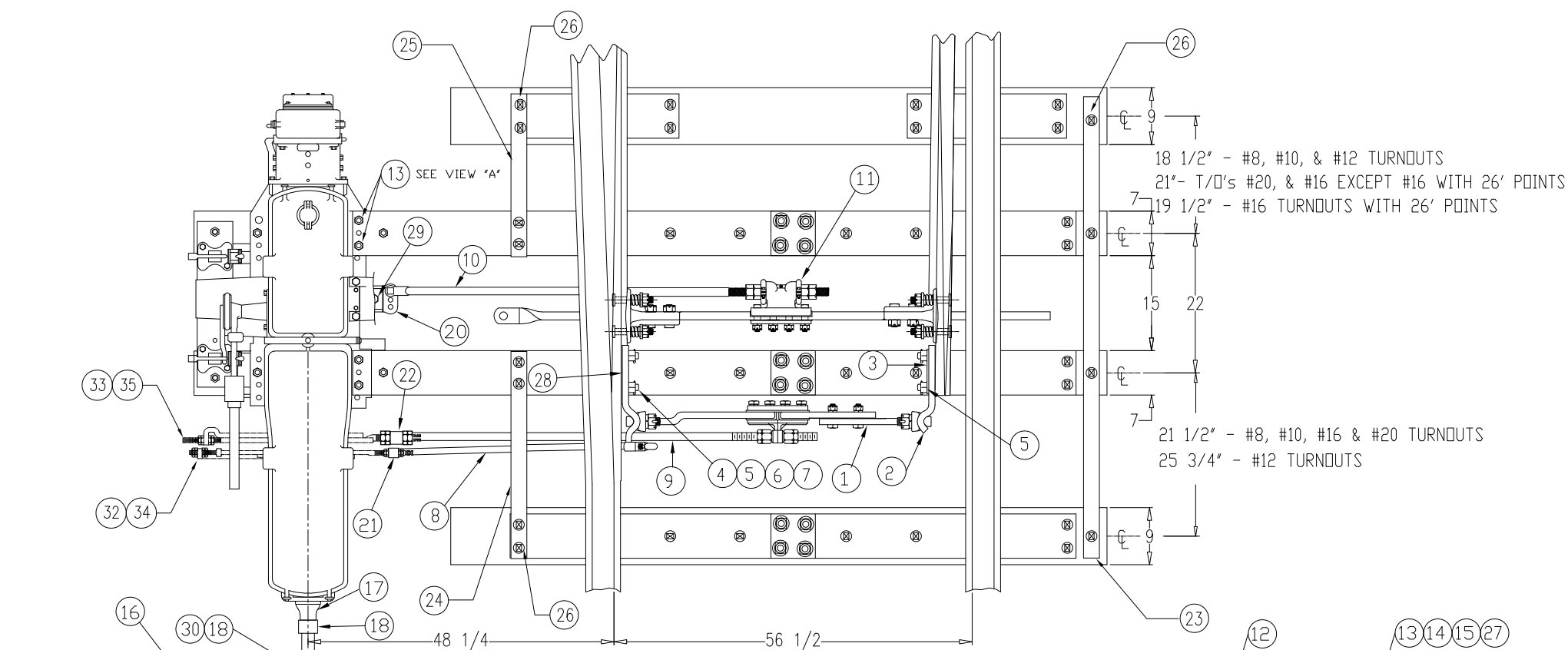
GT999109X = ENTIRE KIT
 GT999109-001X = PANELIZATION KIT
 GT999109-002X = FIELD SWITCH MACHINE KIT (NEW CONSTRUCTION)
 GT999109-003X = FIELD SWITCH MACHINE KIT (MAINTENANCE)

NO.	WELDED	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.
N0.20	WELDED	58'-10"	136LB RE	GTS-278					
N0.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	N0.12	BOLTED	22'-0"	136LB RE	GTS-013
N0.16	WELDED	38'-9"	136LB RE	GTS-274	N0.12	BOLTED	22'-0"	115LB RE	GTS-012
N0.12	WELDED	36'-7"	136LB RE	GTS-271	N0.10	BOLTED	16'-6"	136LB RE	GTS-011
N0.12	WELDED	36'-5"	115LB RE	GTS-284	N0.10	BOLTED	16'-6"	115LB RE	GTS-010
N0.10	WELDED	31'-6"	136LB RE	GTS-267	N0.8	BOLTED	16'-6"	136LB RE	GTS-009
N0.10	WELDED	31'-6"	115LB RE	GTS-282	N0.8	BOLTED	16'-6"	115LB RE	GTS-008
N0.20	BOLTED	39'-0"	136LB RE	GTS-263					
N0.20	BOLTED	39'-0"	132LB RE	GTS-261					
N0.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
N0.16	BOLTED	26'-0"	136LB RE	GTS-251					

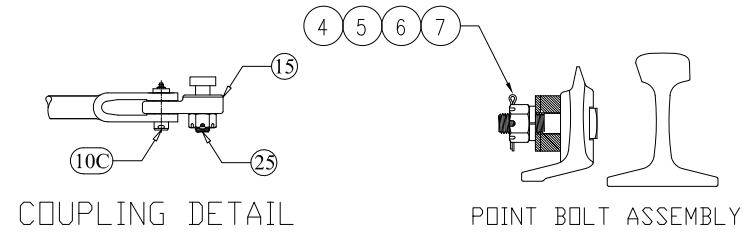
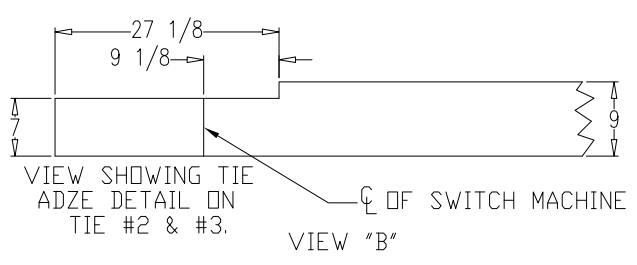
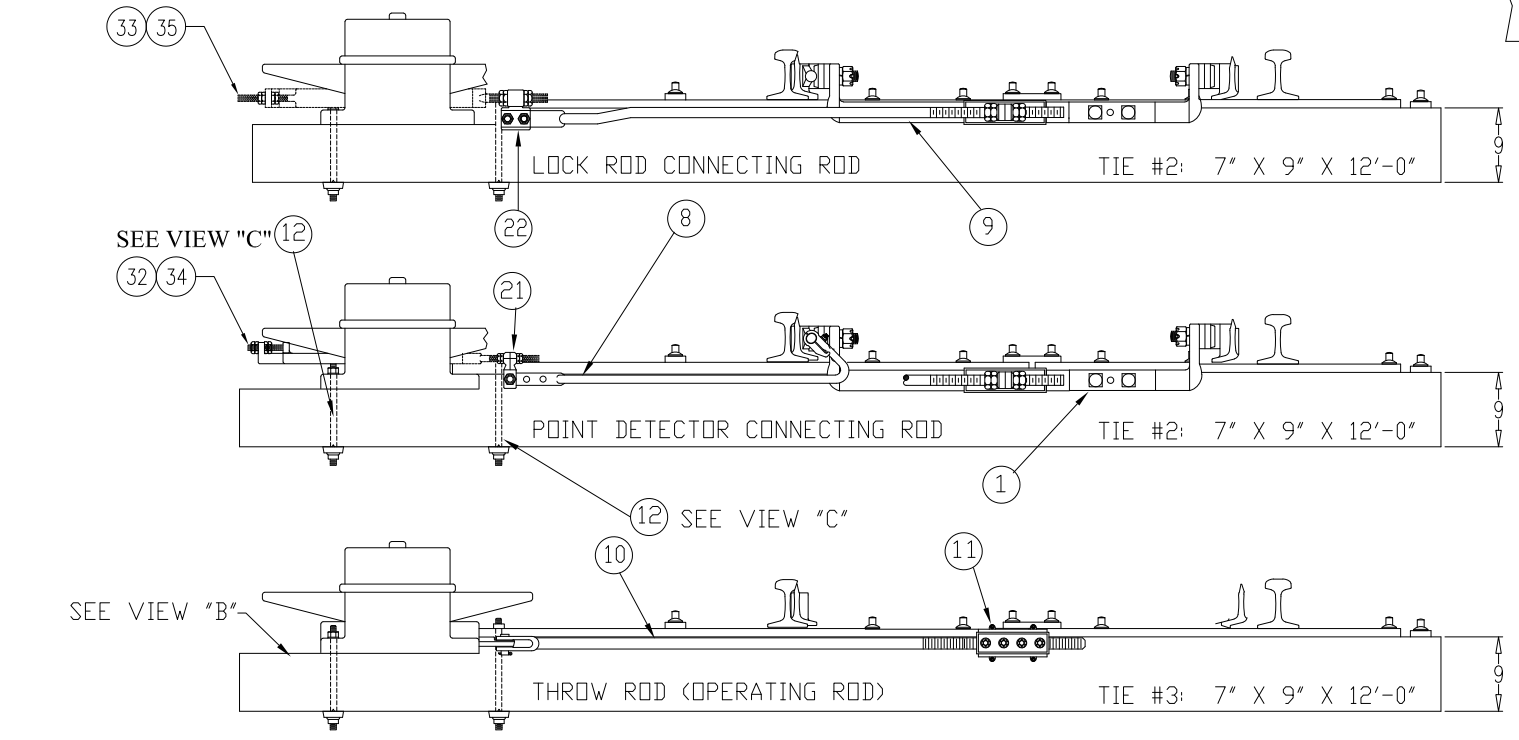
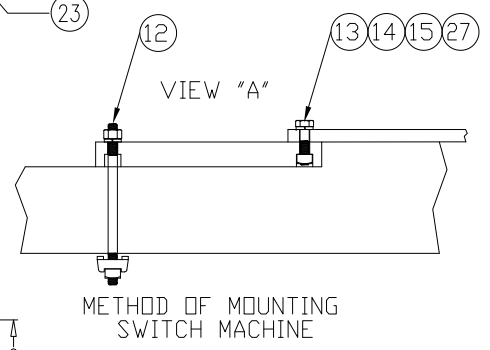


MODEL 5
 DAPPED LAYOUT
 TRANSIT USING SWITCH PLATES
 SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT999109X
0	1 OF 1	TC	10/26/20	PAGE 10	GT999109-001X GT999109-002X GT999109-003X



L.H. LAYOUT NEAR POINT CLOSED



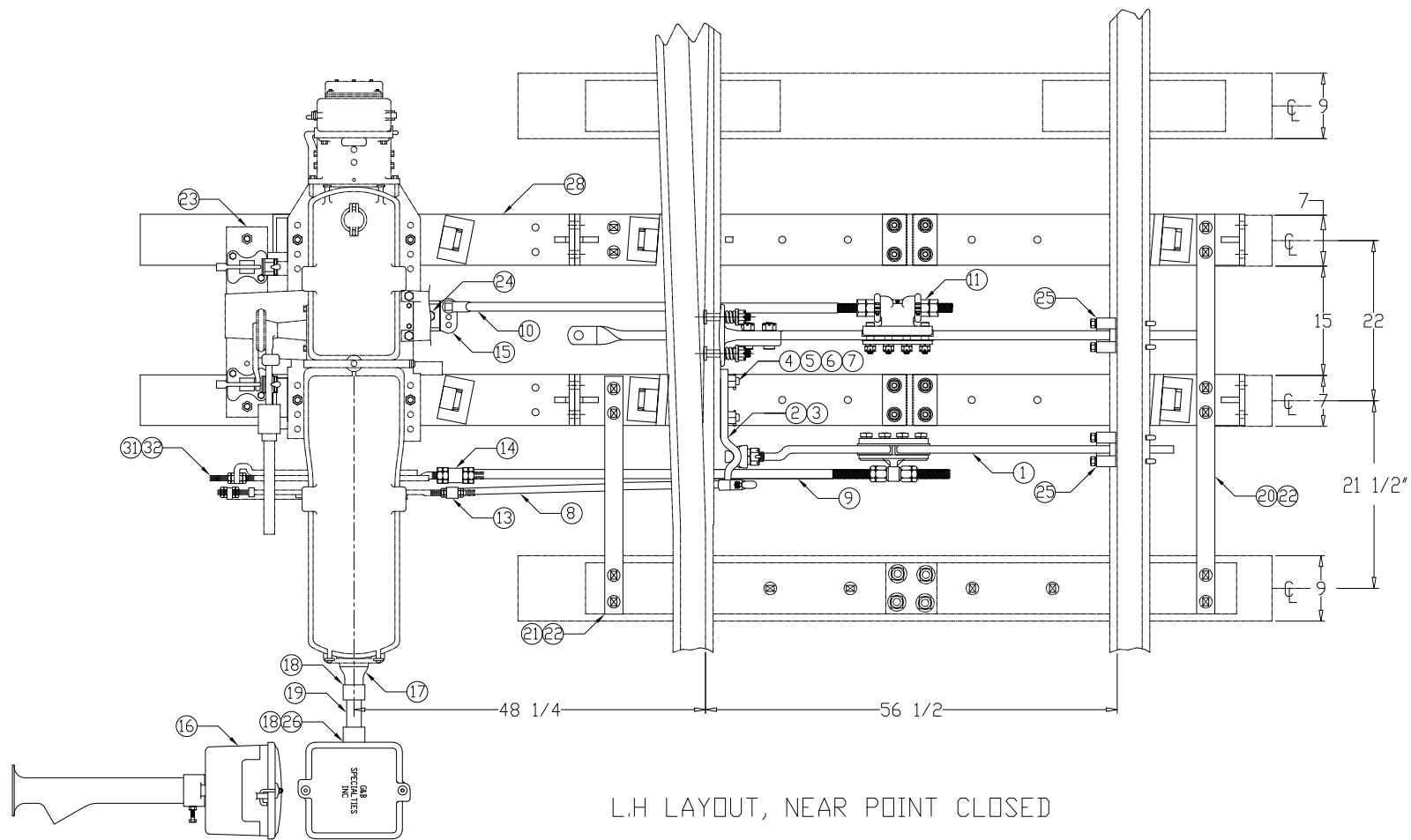
ITEM	PART NUMBER	DESCRIPTION	GT999025X QUANTITY	GT999025-001X QUANTITY	GT999025-002X QUANTITY
1	802007X	ROD ASSEMBLY, SWIVEL FRONT	1	1	1
2	820571-020	LUG, SWIVEL POINT	1	1	1
3	960100-001	PLATE, STEEL WASHER	2	2	2
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4	4	4
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4	4
6	990403-100-02	WASHER, 1 LOCK	4	4	4
7	990511-200-02	COTTER PIN, 1/4 X 2	4	4	4
8	830209-011X	ROD ASSEMBLY, POINT DETECTOR	1	1	1
A	830209-011	ROD, POINT DETECTOR	(1)	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	(1)	(1)
9	910109-040X	ROD ASSEMBLY, LOCK ROD CONN.	1	1	1
A	910109-040	ROD, LOCK ROD CONN.	(1)	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX	(2)	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP	(2)	(2)	(2)
10	840120-002X	ROD ASSEMBLY, OPERATING	1	1	1
A	840120-002	ROD, OPERATING	(1)	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX	(2)	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	(1)	(1)
11	950125-001-10	SWITCH POINT ADJUSTER			
12	910922-020-01	STUD ASSEMBLY, 3/4 X 13	2	2	2
A	910922-020	STUD, 3/4 X 13	(1)	(1)	(1)
B	990331-075-02	NUT, 3/4 HEAVY HEX	(1)	(1)	(1)
C	990403-075-02	WASHER, 3/4 LOCK	(1)	(1)	(1)
D	894406	WASHER, THREADED GRIP	(1)	(1)	(1)
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	(1)	(1)	(1)
13	990763-300-12	BOLT, 0.750 X 3.000 HEAVY HEX	4	4	4
14	990302-075-12	NUT, 3/4 HEAVY SQUARE	4	4	4
15	990403-075-02	WASHER, 3/4 LOCK	4	4	4
16	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	1	0
17	998192-001	COUPLING, 2"	1	1	0
18	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	2	0
19	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36" Lg	1	1	0
20	941153	COUPLING, THROW BAR	1	1	1
21	920430-002-01	LUG ASSEMBLY, POINT DETECTOR	1	1	1
22	920530-001-01	LUG ASSEMBLY, LOCK ROD	1	1	1
23	960004-001	TIE STRAP, 4 HOLE-4 TIE	1	0	0
24	960002-003	TIE STRAP, 4 HOLE-2 TIE	1	0	0
25	960002-004	TIE STRAP, 4 HOLE-2 TIE	1	0	0
26	995000-008	SCREW SPIKE, 24 x 165 MM	12	0	0
27	976100-102	BUSHING, STEEL	4	4	4
28	820671-016	LUG, SWIVEL POINT BALL	1	1	1
29	990235-005X	BOLT ASSY, COUPLING DR. 2.94	1	1	1
30	998693-003	LOCK NUT, 2" NICKEL/BRASS	1	1	0
31	998532-001	CLIP, 2" HD CONDUIT (NOT SHOWN)	1	1	0
32	930327-003X	BAR, INTERNAL POINT DETECTOR, LH	REFERENCE ONLY		
33	916005-004X	ROD, INTERNAL LOCK ROD, LH	REFERENCE ONLY		
34	930327-012X	BAR, INTERNAL POINT DETECTOR, RH	REFERENCE ONLY		
35	916005-002X	ROD, INTERNAL LOCK ROD, RH	REFERENCE ONLY		

GT999025X = ENTIRE KIT
 GT999025-001X = ENTIRE KIT WITHOUT TIE STRAPS
 GT999025-002X = ENTIRE KIT WITHOUT TIE STRAPS AND JUNCTION BOX

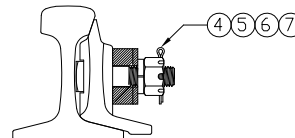
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.
N0.20	WELDED	58'-10"	136LB RE	GTS-278					
N0.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	N0.12	BOLTED	22'-0"	136LB RE	GTS-013
N0.16	WELDED	38'-9"	136LB RE	GTS-274	N0.12	BOLTED	22'-0"	115LB RE	GTS-012
N0.12	WELDED	36'-7"	136LB RE	GTS-271	N0.10	BOLTED	16'-6"	136LB RE	GTS-011
N0.12	WELDED	36'-5"	115LB RE	GTS-284	N0.10	BOLTED	16'-6"	115LB RE	GTS-010
N0.10	WELDED	31'-6"	136LB RE	GTS-267	N0.8	BOLTED	16'-6"	136LB RE	GTS-009
N0.10	WELDED	31'-6"	115LB RE	GTS-282	N0.8	BOLTED	16'-6"	115LB RE	GTS-008
N0.20	BOLTED	39'-0"	136LB RE	GTS-263					
N0.20	BOLTED	39'-0"	132LB RE	GTS-261					
N0.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
N0.16	BOLTED	26'-0"	136LB RE	GTS-251					

TRANSIT MODEL 5 DAPPED LAYOUT SIGNALS AND COMMUNICATIONS

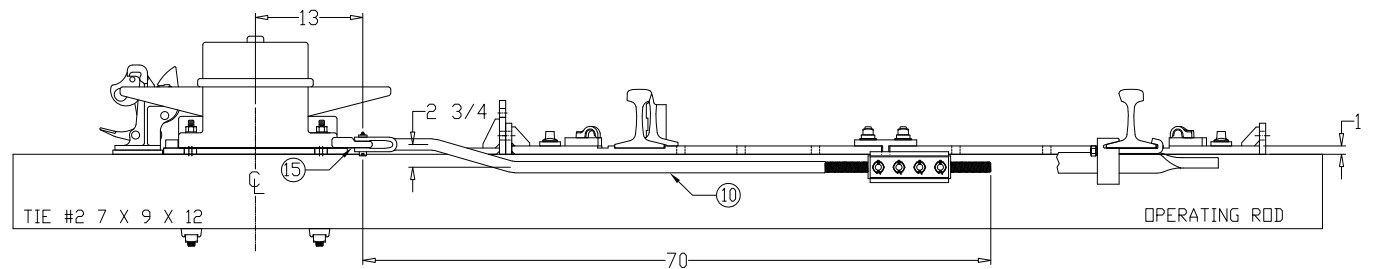
REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT999025X
0	1 OF 1	TC	10/26/20	PAGE 11	GT999025-001X GT999025-002X



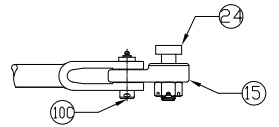
L.H. LAYOUT, NEAR POINT CLOSED



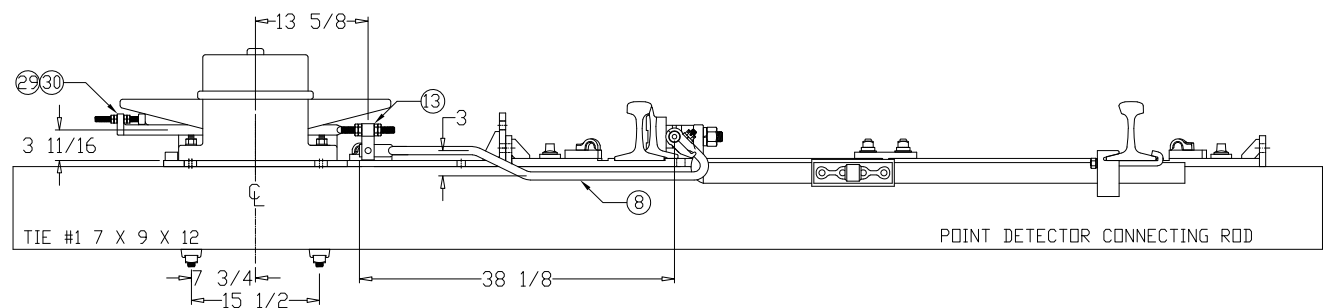
POINT BOLT ASSEMBLY



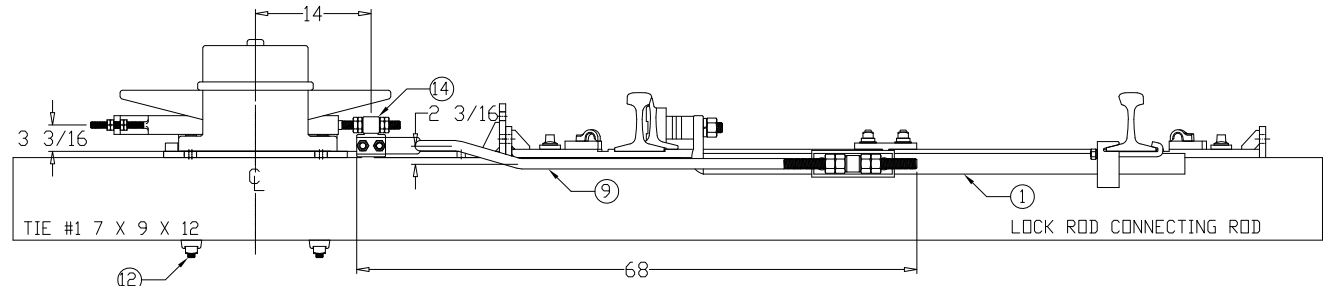
OPERATING ROD



COUPLING DETAIL



POINT DETECTOR CONNECTING ROD



LOCK ROD CONNECTING ROD

ITEM	PART NUMBER	DESCRIPTION	GT999335 QUANTITY	GT999335-001X QUANTITY	GT999335-002X QUANTITY	GT999335-003X QUANTITY
1	802007-001-02	ROD ASSEMBLY, SWIVEL FRONT	1	1	-	-
2	820671-016	LUG, SWIVEL POINT BALL	1	1	-	-
3	960100-001	PLATE, STEEL WASHER	1	1	-	-
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	2	2	-	-
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	2	2	-	-
6	990403-100-02	WASHER, 1 LOCK	2	2	-	-
7	990511-200-02	COTTER PIN, 1/4 X 2	2	2	-	-
8	830209-105-02	ROD ASSEMBLY, POINT DETECTOR	1	-	1	1
A	830209-105	ROD, POINT DETECTOR	(1)	-	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	-	(1)	(1)
9	910109-092-01	ROD ASSEMBLY, LOCK ROD CONN.	1	-	1	1
A	910109-092	ROD, LOCK ROD CONN.	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)	-	(2)	(2)
10	840153-120-01	ROD ASSEMBLY, OPERATING	1	-	1	1
A	840153-120	ROD, OPERATING	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	-	(1)	(1)
11	950125-001-10	SWITCH POINT ADJUSTER	1	1	-	-
12	910922-024-02	STUD ASSEMBLY, 3/4 X 15 1/2	4	4	-	-
A	910922-024	STUD, 3/4 X 15 1/2	(1)	(1)	-	-
B	990331-075-02	NUT, 3/4 HEAVY HEX	(1)	(1)	-	-
C	990403-075-02	WASHER, 3/4 LOCK	(1)	(1)	-	-
D	894406	WASHER, THREADED GRIP	(1)	(1)	-	-
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	(1)	(1)	-	-
13	920430-002-01	LUG ASSEMBLY, POINT DETECTOR	1	-	1	1
14	920530-001-01	LUG ASSEMBLY, LOCK ROD	1	-	1	1
15	941153	COUPLING, THROW BAR	1	-	1	1
16	998918-003-01	JUNCTION BOX, 36 TERMINAL	1	-	1	-
17	998192-001	COUPLING, 2"	1	-	1	-
18	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	-	2	-
19	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36' Lg	1	-	1	-
20	860003-011	TIE STRAP, 6 HOLE-3 TIE	1	1	-	-
21	960002-003	TIE STRAP, 4 HOLE	1	1	-	-
22	995000-008	SCREW SPIKE, 24 x 165 MM	10	10	-	-
23	960501-002	SHIM, LATCH PLATE	2	2	-	-
24	990235-005X	BOLT ASSY, COUPLING	1	-	1	1
25	9001014-001-01	GUIDE ASSEMBLY, RAIL	2	2	-	-
26	998693-003	LOCKNUT, 2" NICKEL/BRASS	1	-	1	-
27	998532-001	CLIP, 2" CONDUIT (NOT SHOWN)	1	-	1	-
28	SM-100	SWITCH MACHINE PLATE	REFERENCE ONLY-SUPPLIED BY CN			
29	930327-012X	ROD, POINT DETECTOR RH	REFERENCE ONLY			
30	930327-003X	ROD, POINT DETECTOR LH	REFERENCE ONLY			
31	916005-004X	ROD, NARROW NOTCH LOCK, LH	REFERENCE ONLY			
32	916005-002X	ROD, NARROW NOTCH LOCK, RH	REFERENCE ONLY			

GT999335 = ENTIRE KIT
 GT999335-001X = PANELIZATION KIT
 GT999335-002X = FIELD SWITCH MACHINE KIT (NEW CONSTRUCTION)
 GT999335-003X = FIELD SWITCH MACHINE KIT (MAINTENANCE)

NO.	TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.
NO.20	WELDED	58'-10"	136LB RE	GTS-278					
NO.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	NO.12	BOLTED	22'-0"	136LB RE	GTS-013
NO.16	WELDED	38'-9"	136LB RE	GTS-274	NO.12	BOLTED	22'-0"	115LB RE	GTS-012
NO.12	WELDED	36'-7"	136LB RE	GTS-271	NO.10	BOLTED	16'-6"	136LB RE	GTS-011
NO.12	WELDED	36'-5"	115LB RE	GTS-284	NO.10	BOLTED	16'-6"	115LB RE	GTS-010
NO.10	WELDED	31'-6"	136LB RE	GTS-267	NO.8	BOLTED	16'-6"	136LB RE	GTS-009
NO.10	WELDED	31'-6"	115LB RE	GTS-282	NO.8	BOLTED	16'-6"	115LB RE	GTS-008
NO.20	BOLTED	39'-0"	136LB RE	GTS-263					
NO.20	BOLTED	39'-0"	132LB RE	GTS-261					
NO.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
NO.16	BOLTED	26'-0"	136LB RE	GTS-251					

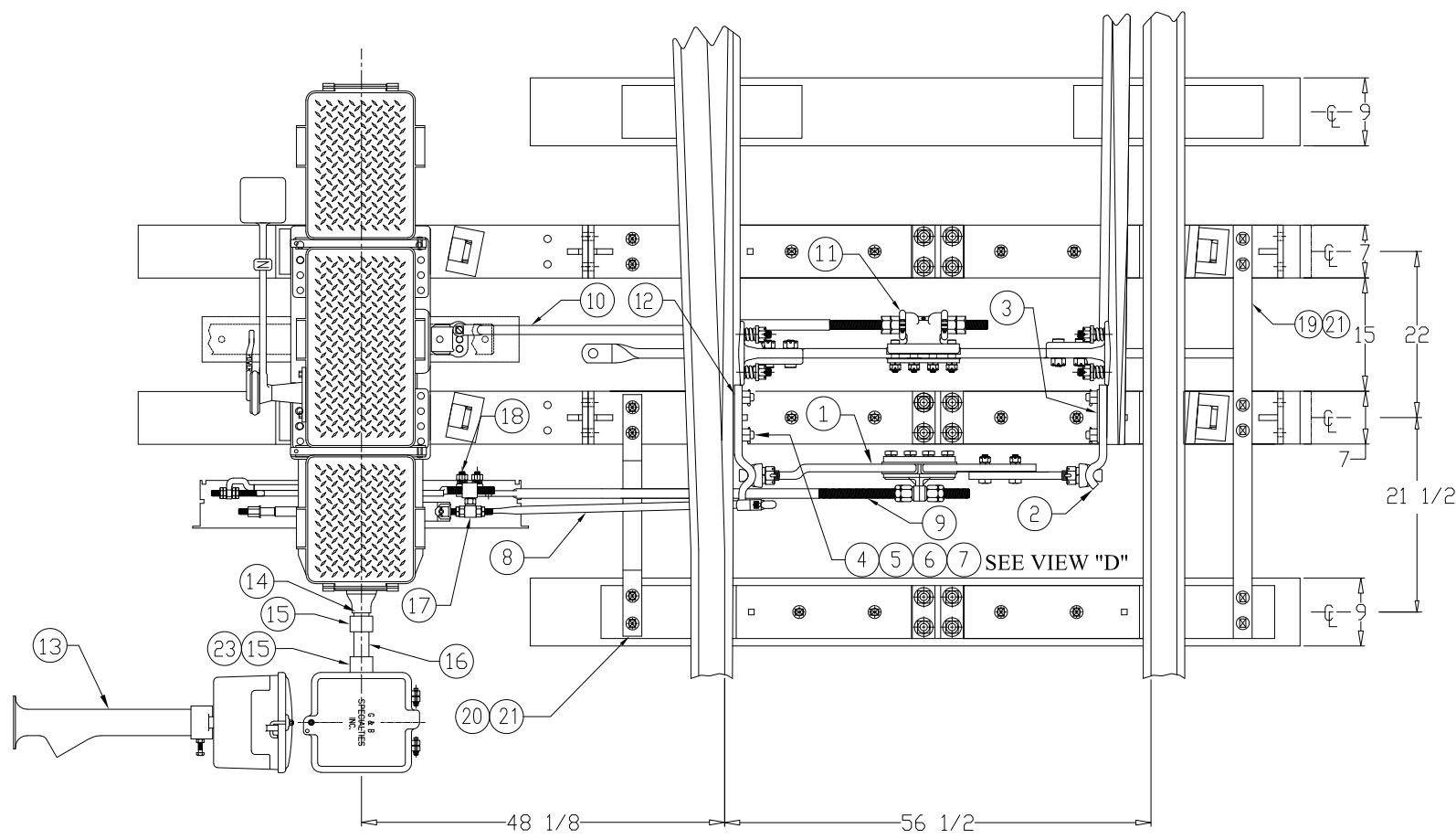
MODEL 5

NON DAPPED LAYOUT

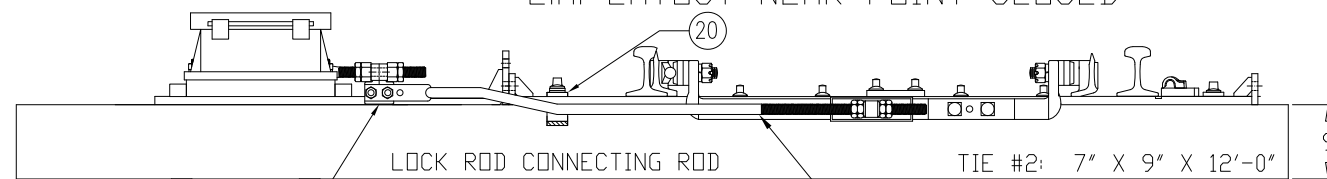
TRANSIT USING SWITCH PLATES

SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT999335X
0	1 OF 1	TC	10/26/20	PAGE 12	GT999335-001X GT999335-002X GT999335-003X

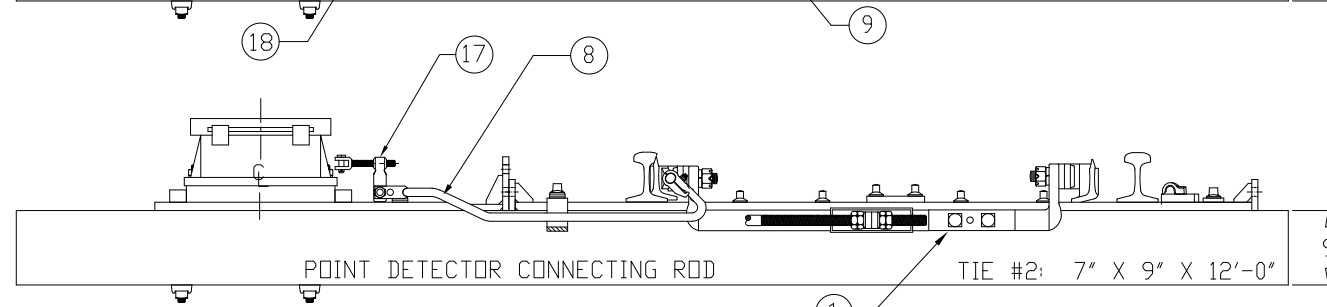


L.H. LAYOUT NEAR POINT CLOSED



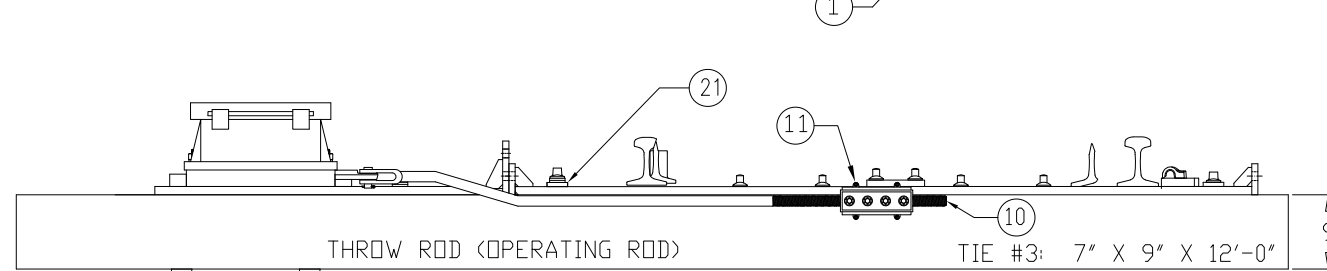
LOCK ROD CONNECTING ROD

TIE #2: 7' X 9' X 12'-0"



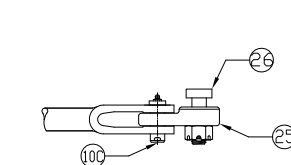
POINT DETECTOR CONNECTING ROD

TIE #2: 7' X 9' X 12'-0"

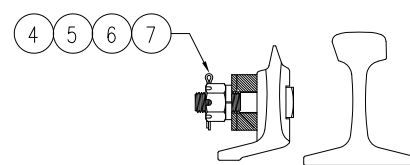


THROW ROD (OPERATING ROD)

TIE #3: 7' X 9' X 12'-0"



COUPLING DETAIL



POINT BOLT ASSEMBLY VIEW "D"

ITEM NUMBER	PART NUMBER	DESCRIPTION	GT999148X QUANTITY	GT999148-001X QUANTITY	GT999148-002X QUANTITY	GT999148-003X QUANTITY
1	802007X	ROD ASSEMBLY, SWIVEL FRONT	1	1	-	-
2	820571-020	LUG, SWIVEL POINT	1	1	-	-
3	960100-001	PLATE, STEEL WASHER	2	2	-	-
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4	4	-	-
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4	-	-
6	990403-100-02	WASHER, 1" LOCK	8	8	-	-
7	990511-200-02	COTTER PIN, 1/4 X 2	4	4	-	-
8	830209-105-02	ROD ASSEMBLY, POINT DETECTOR	1	-	1	1
A	830209-105	ROD, POINT DETECTOR	(1)	-	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	-	(1)	(1)
9	910109-140-01	ROD ASSEMBLY, LOCK ROD CONN.	1	-	1	1
A	910109-140	ROD, LOCK ROD CONN.	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)	-	(2)	(2)
10	840153-102-01	ROD ASSEMBLY, OPERATING	1	-	1	1
A	840153-102	ROD, OPERATING	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	-	(1)	(1)
11	950125-001-10	SWITCH POINT ADJUSTER	1	1	-	-
12	820671-016	LUG, SWIVEL POINT BALL	1	1	-	-
13	998918-003-01	JUNCTION BDX, 36 TERMINAL, ALUM.	1	-	1	-
14	998192-001	COUPLING, 2"	1	-	1	-
15	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2	-	2	-
16	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36" Lg	1	-	1	-
17	920430-008-01	LUG ASSEMBLY, POINT DETECTOR	1	-	1	1
18	920530-001-01	LUG ASSEMBLY, LOCK ROD	1	-	1	1
19	860003-011	TIE STRAP, 6 HOLE-3 TIE	1	1	-	-
20	960006-001	TIE STRAP, 4 HOLE-2 TIE 3-3/4" DROP	1	1	-	-
21	995000-008	SCREW SPIKE, 24 x 165 MM	10	10	-	-
22	910922-024-02	STUD ASSEMBLY, 3/4 X 15 1/2	4	4	-	-
A	910922-024	STUD, 3/4 X 15 1/2	(1)	(1)	-	-
B	990331-075-02	NUT, 3/4 HEAVY HEX	(1)	(1)	-	-
C	990403-075-02	WASHER, 3/4 LOCK	(1)	(1)	-	-
D	894406	WASHER, THREADED GRIP	(1)	(1)	-	-
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	(1)	(1)	-	-
23	998693-003	LOCK NUT, 2" NICKEL/BRASS	1	-	1	-
24	998532-001	CLIP, 2" HD CONDUIT (NOT SHOWN)	1	-	1	-
25	941161	COUPLING, THROW BAR	1	-	1	1
26	990235-005X	BOLT ASSY, COUPLING DR 2.94	1	-	1	-

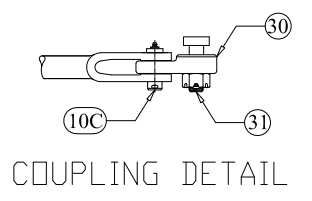
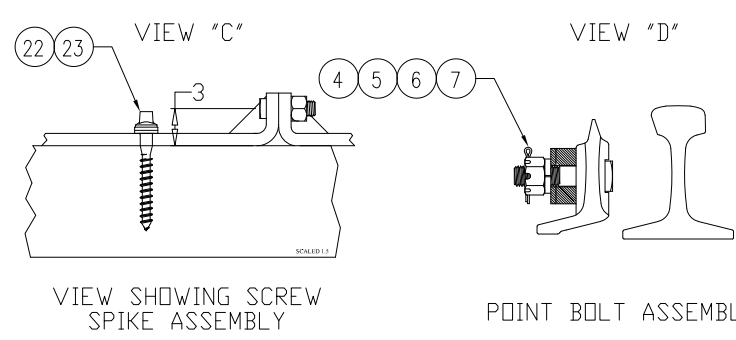
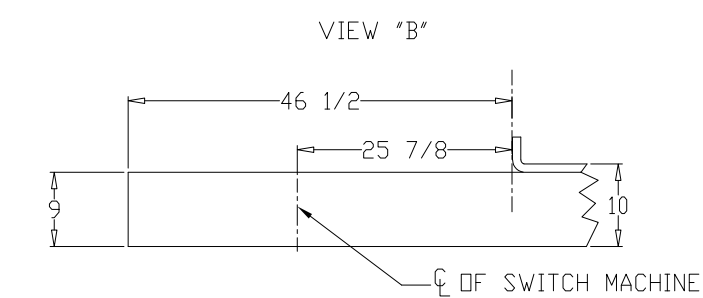
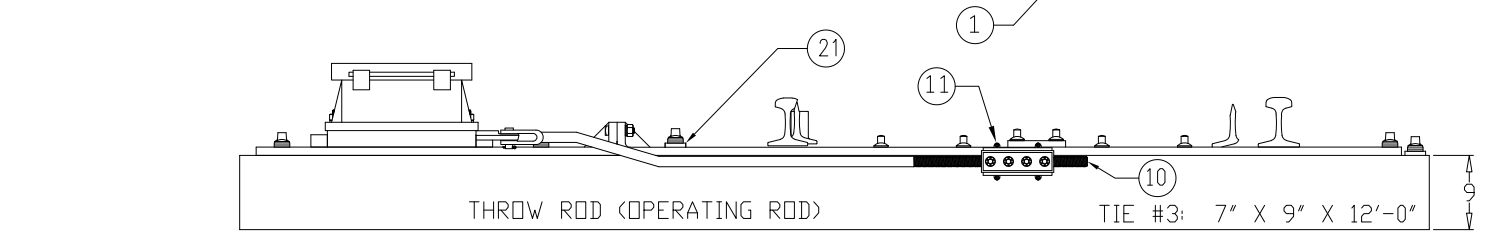
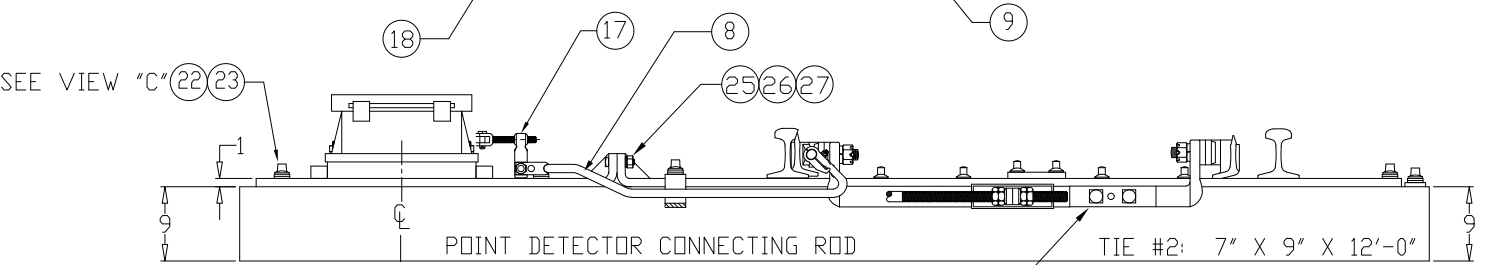
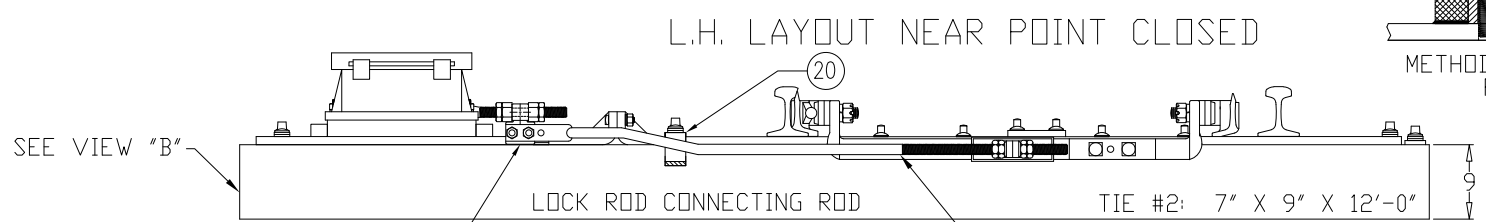
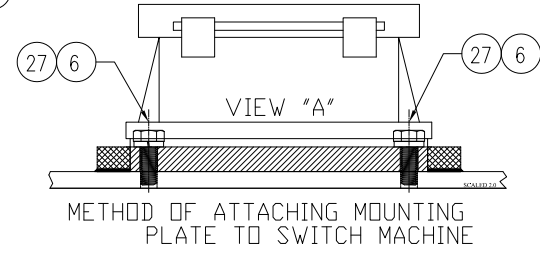
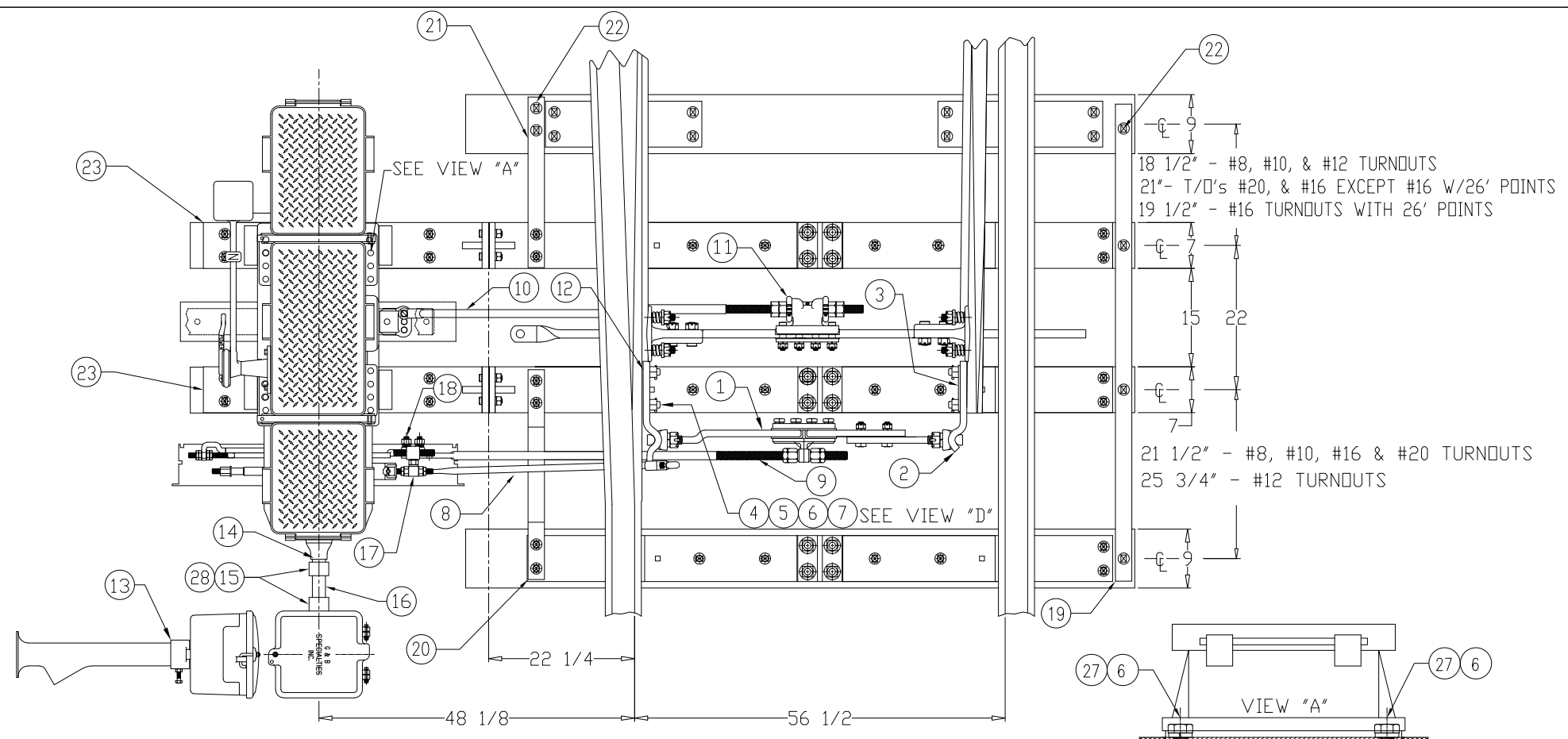
GT999148X = ENTIRE KIT
 GT999148-001X = PANELIZATION KIT
 GT999148-002X = FIELD SWITCH MACHINE KIT (NEW CONSTRUCTION)
 GT999148-003X = FIELD SWITCH MACHINE KIT (MAINTENANCE)

NO.	WELDED	POINT LENGTH	RAIL WEIGHT	GO DWG.	NO.	BOLTED	POINT LENGTH	RAIL WEIGHT	GO DWG.
NO.20	WELDED	58'-10"	136LB RE	GTS-278					
NO.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	NO.12	BOLTED	22'-0"	136LB RE	GTS-013
NO.16	WELDED	38'-9"	136LB RE	GTS-274	NO.12	BOLTED	22'-0"	115LB RE	GTS-012
NO.12	WELDED	36'-7"	136LB RE	GTS-271	NO.10	BOLTED	16'-6"	136LB RE	GTS-011
NO.12	WELDED	36'-5"	115LB RE	GTS-284	NO.10	BOLTED	16'-6"	115LB RE	GTS-010
NO.10	WELDED	31'-6"	136LB RE	GTS-267	NO.8	BOLTED	16'-6"	136LB RE	GTS-009
NO.10	WELDED	31'-6"	115LB RE	GTS-282	NO.8	BOLTED	16'-6"	115LB RE	GTS-008
NO.20	BOLTED	39'-0"	136LB RE	GTS-263					
NO.20	BOLTED	39'-0"	132LB RE	GTS-261					
NO.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
NO.16	BOLTED	26'-0"	136LB RE	GTS-251					
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.



GRANDMASTER
 NON DAPPED LAYOUT
 TRANSIT USING SWITCH PLATES
 SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT999148X
0	1 OF 1	TC	10/26/20	PAGE 13	GT999148-001X GT999148-002X GT999148-003X



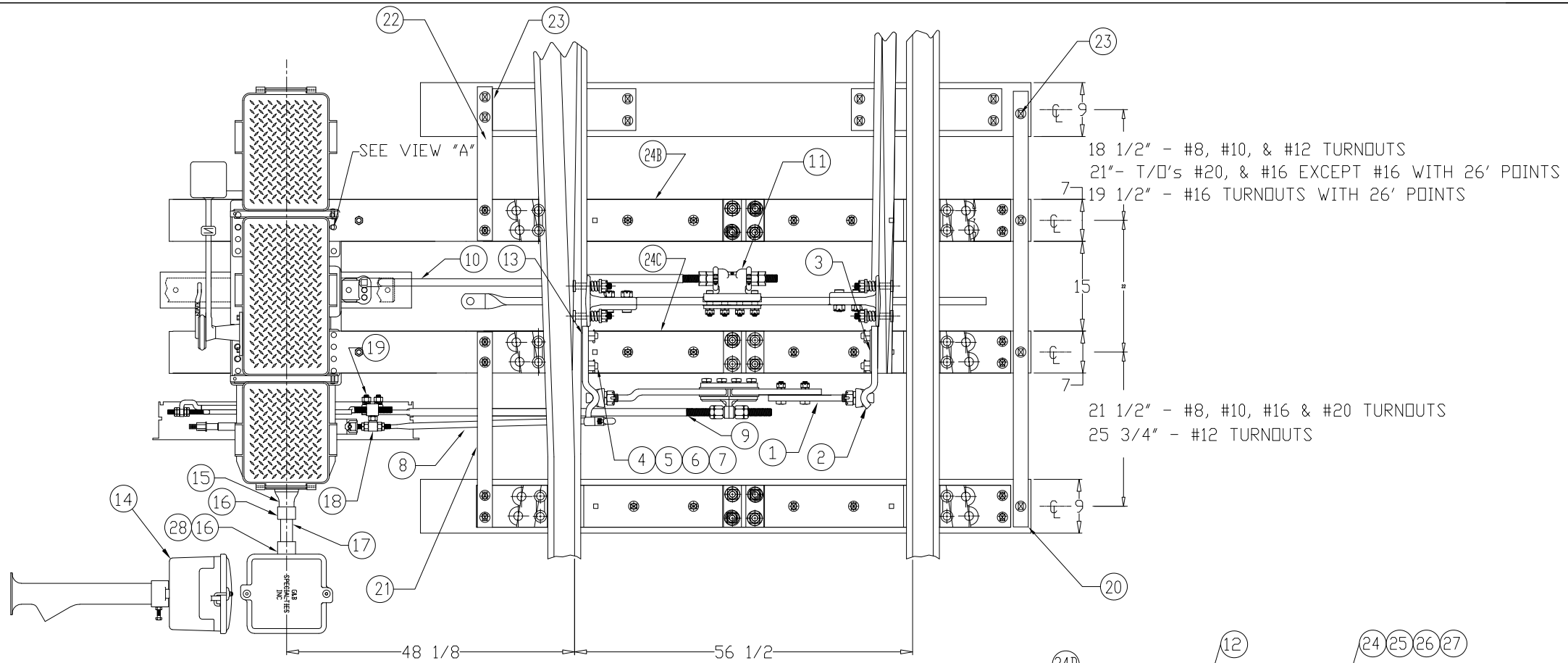
ITEM NUMBER	PART NUMBER	DESCRIPTION	GT999108X QUANTITY	GT999108-001X QUANTITY	GT999108-002X QUANTITY	GT999108-003X QUANTITY
1	802007-001-03	ROD ASSEMBLY, SWIVEL FRONT	1	1	-	-
2	820571-020	LUG, SWIVEL POINT	1	1	-	-
3	960100-001	PLATE, STEEL WASHER	2	2	-	-
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4	4	-	-
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4	-	-
6	990403-100-02	WASHER, 1" LOCK	8	8	-	-
7	990511-200-02	COTTER PIN, 1/4 X 2	4	4	-	-
8	830209-105-02	ROD ASSEMBLY, POINT DETECTOR	1	-	1	1
A	830209-105	ROD, POINT DETECTOR	(1)	-	(1)	(1)
B	830200-000-01	POINT SOCKET ASSEMBLY	(1)	-	(1)	(1)
9	910109-140-01	ROD ASSEMBLY, LOCK ROD CONN.	1	-	1	1
A	910109-140	ROD, LOCK ROD CONN.	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	(2)	-	(2)	(2)
10	840153-102-01	ROD ASSEMBLY, OPERATING	1	-	1	1
A	840153-102	ROD, OPERATING	(1)	-	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	(2)	-	(2)	(2)
C	890590-005X	JAW PIN ASSEMBLY	(1)	-	(1)	(1)
11	950125-001-10	SWITCH POINT ADJUSTER	1	1	-	-
12	820671-016	LUG, SWIVEL POINT BALL	1	1	-	-
13	998918-003-01	JUNCTION BOX, 36 TERMINAL, ALUM.	1	-	1	-
14	998192-001	COUPLING, 2"	1	-	1	-
15	998693-001	CONNECTOR, 2" NPT ADAPTER	2	-	2	-
16	998238-036	CONDUIT, 2" GRAY HEAVY WALL	1	-	1	-
17	920430-008-01	LUG ASSEMBLY, POINT DETECTOR	1	-	1	1
18	920530-001-01	LUG ASSEMBLY, LOCK ROD	1	-	1	1
19	960004-001	TIE STRAP, 4 HOLE-4 TIE	1	1	-	-
20	960006-001	TIE STRAP, 4 HOLE-4 TIE 3-3/4" DROP	1	1	-	-
21	960002-004	TIE STRAP, 4 HOLE-2 TIE	1	1	-	-
22	995000-008	SCREW SPIKE, 24 x 165 MM	20	20	-	-
23	R961495-008	SADDLE PLATE, SWITCH MACHINE	2	2	-	-
24	990031-300-02	BOLT, 0.750 X 3" SQUARE	4	4	-	-
25	990403-075-02	WASHER, 3/4 LOCK	4	4	-	-
26	990331-075-02	NUT, 3/4 HEAVY HEX	4	4	-	-
27	990763-300-12	BOLT, 1"-8 X 3" HEAVY HEX	4	4	-	-
28	998693-003	LOCK NUT, 2" NICKEL/BRASS	1	-	1	-
29	998532-001	CLIP, 2" HD CONDUIT (NOT SHOWN)	1	-	1	-
30	941161	COUPLING, THROW BAR	1	1	1	1
31	990235-005X	BOLT ASSY, THROW BAR	1	1	1	1

GT999108X = ENTIRE KIT
 GT999108-001X = PANELIZATION KIT
 GT999108-002X = FIELD SWITCH MACHINE KIT (NEW CONSTRUCTION)
 GT999108-003X = FIELD SWITCH MACHINE KIT (MAINTENANCE)

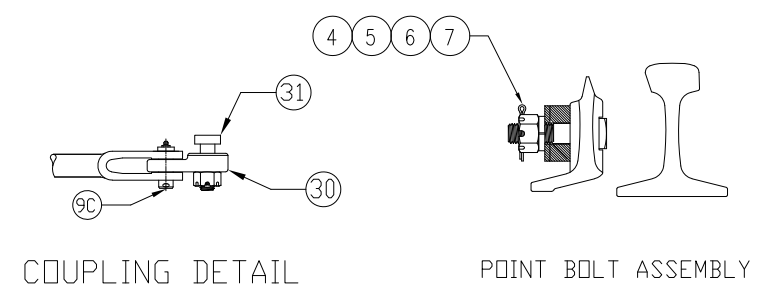
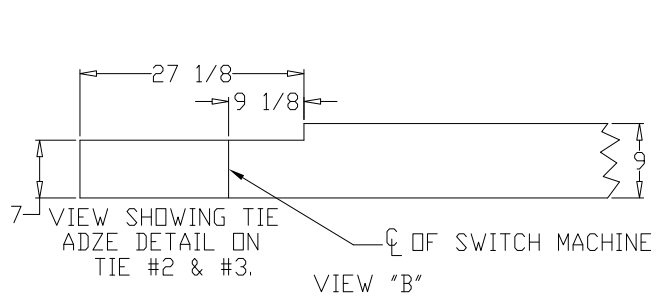
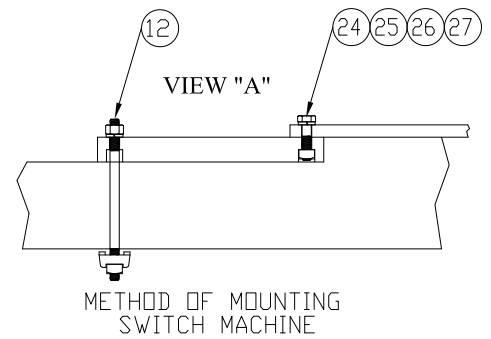
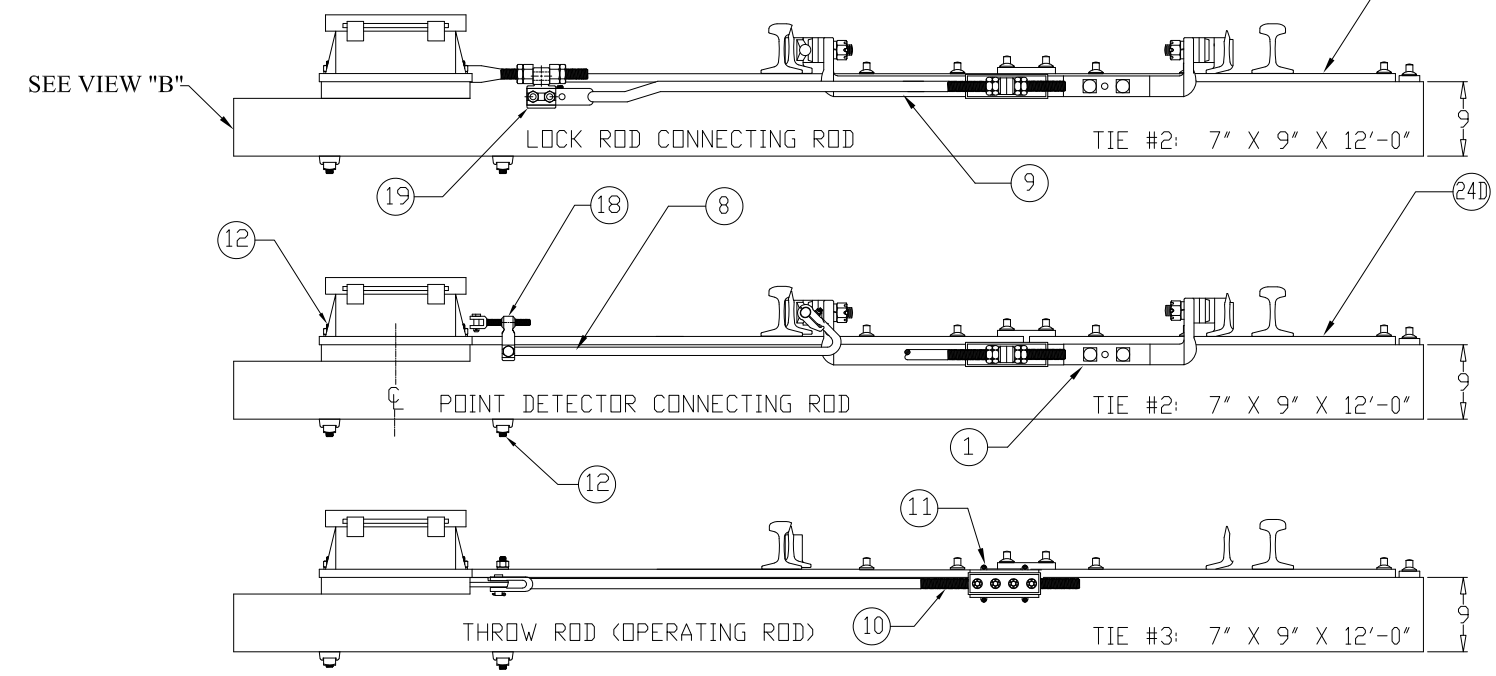
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.
NO.20	WELDED	58'-10"	136LB RE	GTS-278					
NO.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	NO.12	BOLTED	22'-0"	136LB RE	GTS-013
NO.16	WELDED	38'-9"	136LB RE	GTS-274	NO.12	BOLTED	22'-0"	115LB RE	GTS-012
NO.12	WELDED	36'-7"	136LB RE	GTS-271	NO.10	BOLTED	16'-6"	136LB RE	GTS-011
NO.12	WELDED	36'-5"	115LB RE	GTS-284	NO.10	BOLTED	16'-6"	115LB RE	GTS-010
NO.10	WELDED	31'-6"	136LB RE	GTS-267	NO.8	BOLTED	16'-6"	136LB RE	GTS-009
NO.10	WELDED	31'-6"	115LB RE	GTS-282	NO.8	BOLTED	16'-6"	115LB RE	GTS-008
NO.20	BOLTED	39'-0"	136LB RE	GTS-263					
NO.20	BOLTED	39'-0"	132LB RE	GTS-261					
NO.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
NO.16	BOLTED	26'-0"	136LB RE	GTS-251					

GRANDMASTER
 NON DAPPED LAYOUT
 TRANSIT USING SWITCH PLATES
 SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT999108X
0	1 OF 1	TC	10/26/20	PAGE 14	GT999108-001X GT999108-002X GT999108-003X



L.H. LAYOUT NEAR POINT CLOSED



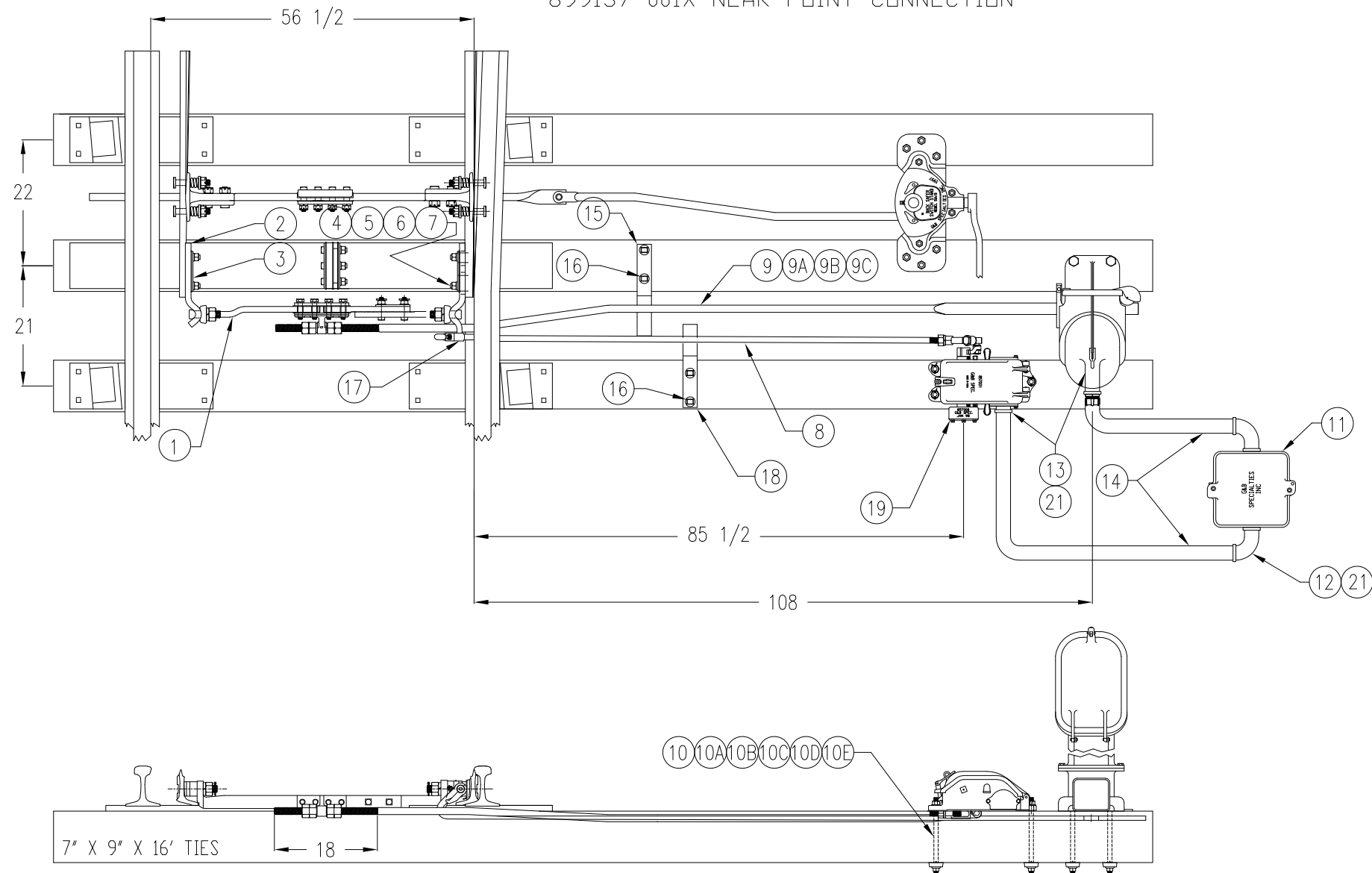
ITEM NUMBER	PART NUMBER	DESCRIPTION	GT999071X QUANTITY
1	802007X	ROD ASSEMBLY, SWIVEL FRONT	1
2	820571-020	LUG, SWIVEL POINT	2
3	960100-001	PLATE, STEEL WASHER	4
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4
6	990403-100-02	WASHER, 1 LOCK	4
7	990511-200-02	COTTER PIN, 1/4 X 2	4
8	830209-101-01	ROD ASSEMBLY, POINT DETECTOR	1
A	830209-101	ROD, POINT DETECTOR	<1>
B	830200-000-01	POINT SOCKET ASSEMBLY	<1>
9	910109-040X	ROD ASSEMBLY, LOCK ROD CONN.	1
A	910109-040	ROD, LOCK ROD CONN.	<1>
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	<2>
C	810522	NUT, 1 1/4 HEAVY HEX CUP NUT	<2>
10	840120-002X	ROD ASSEMBLY, OPERATING	1
A	840120-002	ROD, OPERATING	<1>
B	990331-125-02	NUT, 1 1/4 HEAVY HEX NUT	<2>
C	890590-005X	JAW PIN ASSEMBLY	<1>
11	950125-001-10	SWITCH POINT ADJUSTER	1
12	910922-020-01	STUD ASSEMBLY, 3/4 X 13	4
A	910922-020	STUD, 3/4 X 13	<1>
B	990331-075-02	NUT, 3/4 HEAVY HEX	<1>
C	990403-075-02	WASHER, 3/4 LOCK	<1>
D	894406	WASHER, THREADED GRIP	<1>
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	<1>
13	820671-016	LUG, SWIVEL POINT BALL	1
14	998918-003-01	JUNCTION BOX, 36 TERMINAL	1
15	998192-001	COUPLING, 2"	1
16	998693-001	STRAIGHT FITTING, 2" NPT ADAPTER	2
17	998238-036	CONDUIT, 2" GRAY HEAVY WALL 36' Lg	1
18	920430-008-01	LUG ASSEMBLY, POINT DETECTOR	1
19	920530-001-01	LUG ASSEMBLY, LOCK ROD	1
20	960004-001	TIE STRAP, 4 HOLE-4 TIE	1
21	960002-003	TIE STRAP, 4 HOLE-2 TIE	1
22	960002-004	TIE STRAP, 4 HOLE-2 TIE	1
23	995000-008	SCREW SPIKE, 24 x 165 MM	12
24	990763-300-12	BOLT, 0.750 X 3.000 HEAVY HEX	4
25	990302-075-12	NUT, 3/4 HEAVY SQUARE	4
26	990403-075-02	WASHER, 3/4 LOCK	4
27	976100-102	BUSHING, STEEL	4
28	998693-003	LOCK NUT, 2" NICKEL/BRASS	1
29	998532-001	CLIP, 2" HD CONDUIT (NOT SHOWN)	1
30	941161	COUPLING, THROW BAR	1
31	990235-005X	BOLT ASSY, COUPLING DR. 2.94	1

NO.20	WELDED	58'-10"	136LB RE	GTS-278					
NO.20 EQL	WELDED	63'-3"	136LB RE	GTS-277	NO.12	BOLTED	22'-0"	136LB RE	GTS-013
NO.16	WELDED	38'-9"	136LB RE	GTS-274	NO.12	BOLTED	22'-0"	115LB RE	GTS-012
NO.12	WELDED	36'-7"	136LB RE	GTS-271	NO.10	BOLTED	16'-6"	136LB RE	GTS-011
NO.12	WELDED	36'-5"	115LB RE	GTS-284	NO.10	BOLTED	16'-6"	115LB RE	GTS-010
NO.10	WELDED	31'-6"	136LB RE	GTS-267	NO.8	BOLTED	16'-6"	136LB RE	GTS-009
NO.10	WELDED	31'-6"	115LB RE	GTS-282	NO.8	BOLTED	16'-6"	115LB RE	GTS-008
NO.20	BOLTED	39'-0"	136LB RE	GTS-263					
NO.20	BOLTED	39'-0"	132LB RE	GTS-261					
NO.16 EQL	BOLTED	39'-0"	136LB RE	GTS-252					
NO.16	BOLTED	26'-0"	136LB RE	GTS-251					
TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.	TURNOUT SIZE	RAIL TYPE	POINT LENGTH	RAIL WEIGHT	GO DWG.

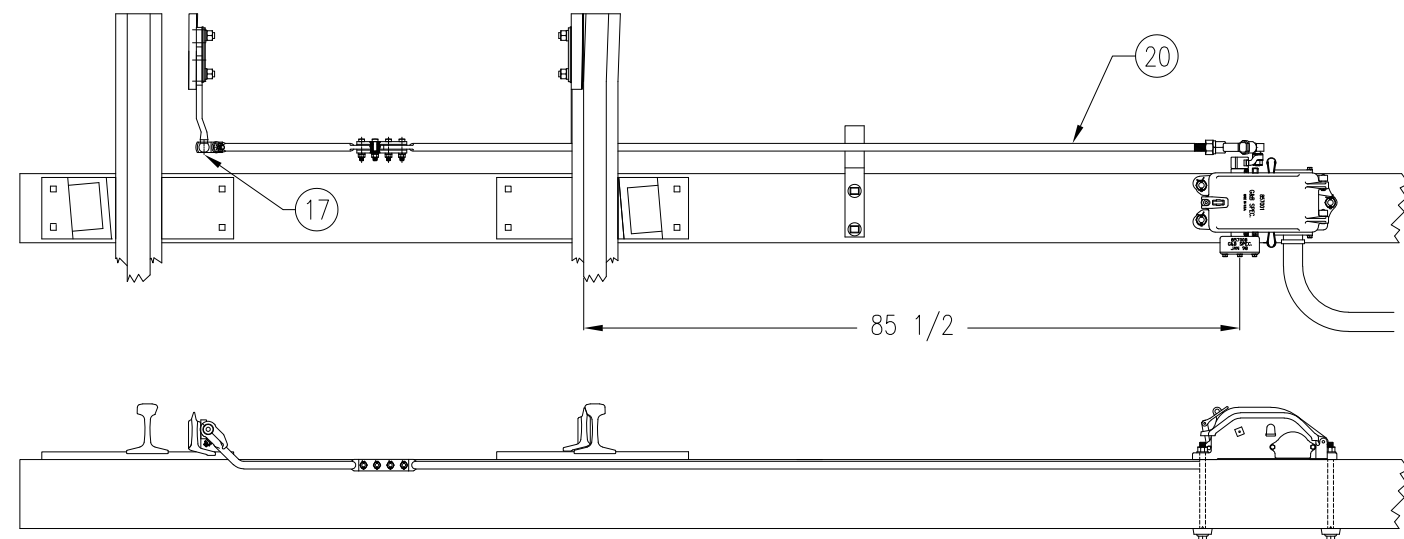
GRANDMASTER
 DAPPED LAYOUT
 TRANSIT USING SWITCH PLATES
 SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT999071X
0	1 OF 1	TC	10/26/20	PAGE 15	

899137-001X NEAR POINT CONNECTION



899137-002X FAR POINT CONNECTION



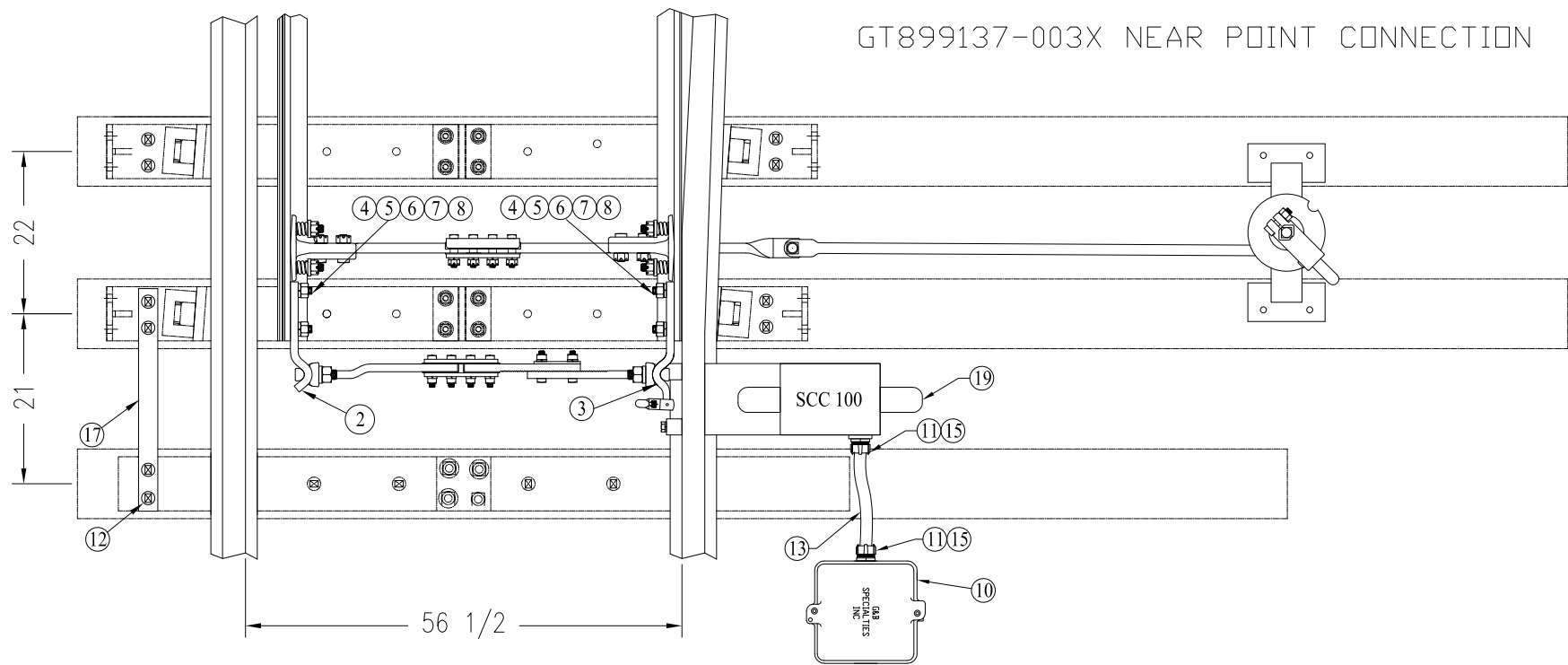
ITEM	PART NUMBER	DESCRIPTION	QUANTITY NEAR POINT GT899137-001X	QUANTITY FAR POINT GT8991370-002X
1	802007X	FRONT ROD ASSEMBLY	1	1
2	820571-020	LUG, SWIVEL POINT	2	2
3	960100-001	WASHER PLATE	4	4
4A	990243-425-101	BOLT, 1"-8 X 4 1/4" SQ	2	2
4B	990243-525-102	BOLT, 1"-8 X 5 1/4" SQ	2	2
4C	990243-600-102	BOLT, 1"-8 X 6" SQ	2	2
5	990332-100-02	NUT, 1 HEAVY HEX SLOTTED	4	4
6	990403-100-02	WASHER, 1 LOCK	4	4
7	990511-200-02	COTTER PIN, 1/4" X 2"	4	4
8	830577-004-01	ROD ASSY, SWITCH CIR CONT (Near Point)	1	-
9	816439-001X	ROD ASSY, LOCK ROD CONNECTING	1	1
A	816439-001	ROD, LOCK ROD CONNECTING	(1)	(1)
B	990331-125-02	NUT, 1 1/4 HEAVY HEX	(2)	(2)
C	810522	NUT, 12 1/4 HEAVY HEX CUPPED	(2)	(2)
10	910922-020-01	STUD ASSY, 3/4 X 13	3	3
A	910922-020	STUD, 3/4 X 13	(1)	(1)
B	990331-075-02	NUT, 3/4 HEAVY HEX	(1)	(1)
C	990403-075-02	WASHER, 3/4 LOCK	(1)	(1)
D	894403	WASHER, GRIP	(1)	(1)
E	990302-075-12	NUT, 3/4 HEAVY SQUARE	(1)	(1)
11	998918-001-25	JUNCTION BOX, 36 TERMINAL	1	1
12	998693-002	CONNECTOR, 2" 90° NPT ADAPTER	2	2
13	998693-001	CONNECTOR, 2" NPT ADAPTER	2	2
14	998238-036	CONDUIT, 2" GRAY HEAVY WALL	2	2
15	860201	TIE STRAP	1	1
16	995000-008	SCREW SPIKE, 24 X 165 MM	4	4
17	820671-016	LUG, SWIVEL POINT BALL	1	1
18	860202	TIE STRAP	1	1
19	856401-005-03	CIRCUIT CONTROLLER	1	1
20	830578-004-01	ROD ASSY, SWITCH CIR CONT (Far Point)	-	1
21	998693-003	LOCK NUT, 2" NICKEL BRASS	4	4
22	998532-001	CLIP, 2" HD CONDUIT (NOT SHOWN)	2	2



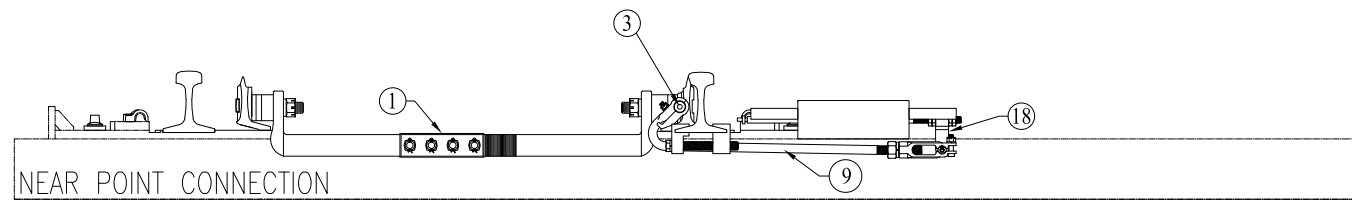
ALSTOM SWITCH LAYOUT
APPLIED TO 9B
ELECTRIC LOCK

SIGNALS AND COMMUNICATIONS

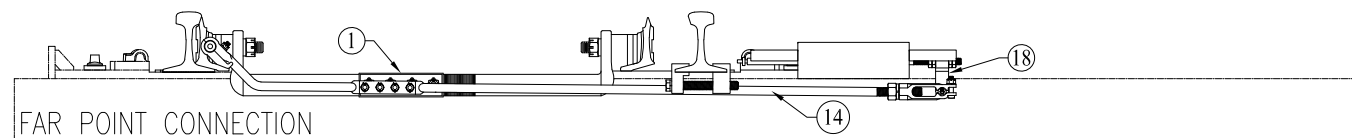
REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899137-001X
0	1 OF 1	TC	10/26/20	PAGE 16	GT899137-002X



GT899137-003X NEAR POINT CONNECTION



NEAR POINT CONNECTION



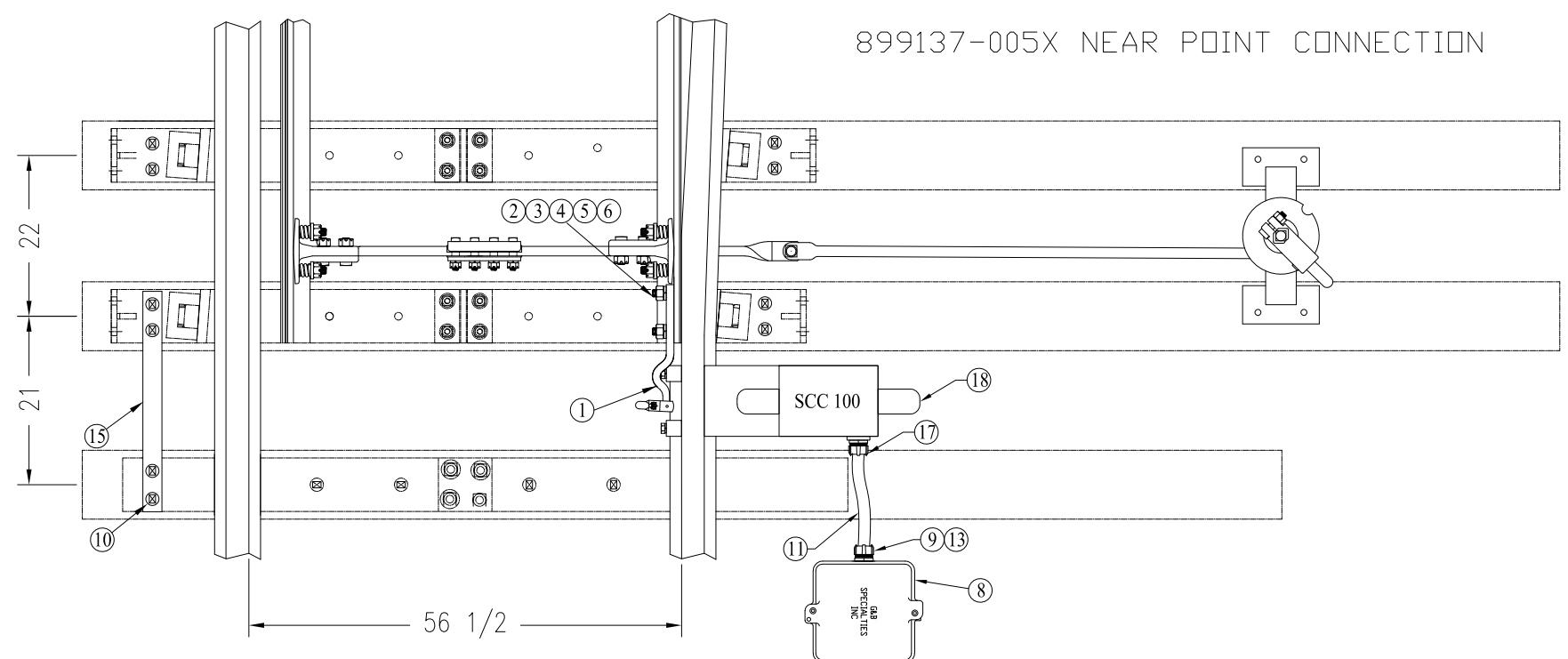
GT899137-004X FAR POINT CONNECTION

ITEM NUMBER	PART NUMBER	DESCRIPTION	NEAR POINT QTY	FAR POINT QTY
			GT899137-003X	GT899137-004X
1	801001-001X	FRONT ROD ASSEMBLY	1	1
2	820571-020	LUG, SWIVEL	1	1
3	820671-016	LUG, SWIVEL POINT BALL	1	1
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4	4
5	990332-100-02	NUT, HEAVY HEX SLOTTED	4	4
6	990403-100-02	WASHER, 1.000 LOCK	4	4
7	990511-200-02	COTTER PIN, 0.250 X 2.000	4	4
8	960100-001	PLATE, STEEL SHIM	2	2
9	830574-004-01X	ROD ASSY, CC CONNECTING (NEAR)	1	-
10	998918-003-01	JUNCTION BOX ASSY	1	1
11	998693-001	CONNECTOR, 2" STRAIGHT	1	1
12	995000-008	SCREW SPIKE, 24 X 165 mm	4	4
13	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36" LG	2	2
14	830578-004-03	ROD ASSY, CC CONNECTING (FAR)	-	1
15	998693-003	LOCK NUT, 2" NICKEL/BRASS	1	1
16	998532-001	CLIP, 2" CONDUIT (NOT SHOWN)	2	2
17	860002-037	TIE STRAP 4 HOLE-2 TIE	1	1
18	920400-004X	LUG ASSY, POINT DETECTOR	1	1
19	N/A	SCC-100	REF	REF

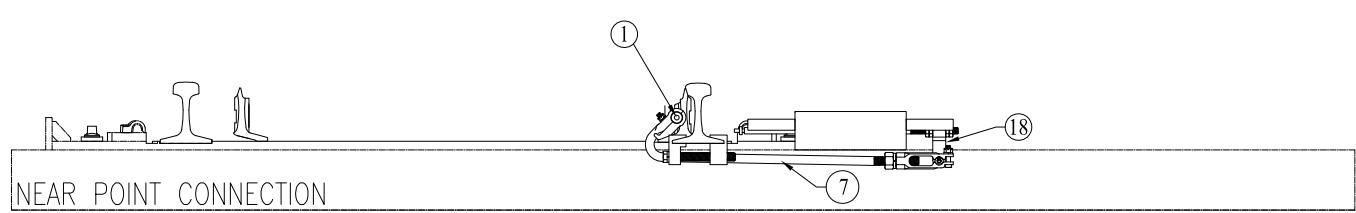
GT899137-003X = COMPLETE LAYOUT - NEAR POINT CONNECTION
 GT899137-004X = COMPLETE LAYOUT - FAR POINT CONNECTION

 TRANSIT	RAIL MOUNTED CIRCUIT CONTROLLER LAYOUT WITH FRONT ROD ASSMBLY
	SIGNALS AND COMMUNICATIONS

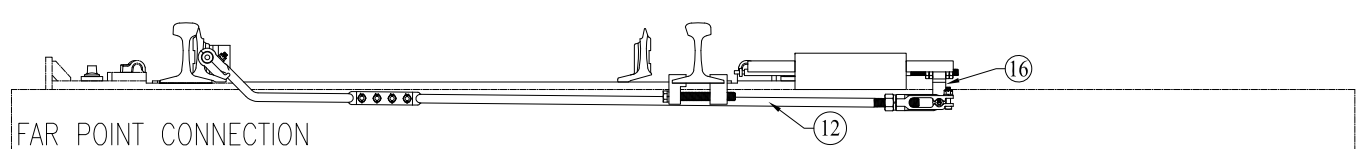
REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899137-003X	GT899137-004X
0	1 OF 1	TC	10/26/20	PAGE 17		



899137-005X NEAR POINT CONNECTION



NEAR POINT CONNECTION



899137-006X FAR POINT CONNECTION

ITEM NUMBER	PART NUMBER	CN NUMBER	DESCRIPTION	NEAR POINT QTY	FAR POINT QTY
				GT899137-005X	GT899137-006X
1	820671-016	02-00-601	LUG, SWIVEL POINT BALL	1	1
2	990243-525-102	02-46-541	BOLT, 1.000 X 5.250 SQ HD	2	2
3	990332-100-02	02-44-884	NUT, HEAVY HEX SLOTTED	2	2
4	990403-100-02	02-44-883	WASHER, 1.000 LOCK	2	2
5	990511-200-02	02-46-467	COTTER PIN, 0.250 X 2.000	2	2
6	960100-001	02-44-844	PLATE, STEEL SHIM	1	1
7	830574-004-01X	02-01-678	ROD ASSY, CC CONNECTING (NEAR)	1	-
8	998918-003-01	02-34-227	JUNCTION BOX ASSY	1	1
9	998693-001	02-44-651	CONNECTOR, 2" STRAIGHT	2	2
10	995000-008	01-29-009	SCREW SPIKE, 24 X 165 MM	4	4
11	998238-036	02-44-650	CONDUIT, 2" GRAY HEAVY WALL, 36" LG	2	2
12	830578-004-03	02-01-679	ROD ASSY, CC CONNECTING (FAR)	-	1
13	998693-003	02-00-064	LOCK NUT, 2" NICKEL/BRASS	1	1
14	998532-001	02-00-063	CLIP, 2" CONDUIT (NOT SHOWN)	2	2
15	860002-037	02-01-525	TIE STRAP 4 HOLE-2 TIE	1	1
16	920400-004X	02-01-680	LUG ASSY, POINT DETECTOR	1	1
17	998688-034	02-00-292	CONNECTOR, 1-1/2" STRAIGHT	1	1
18		02-00-727	SCC-100	REF	REF

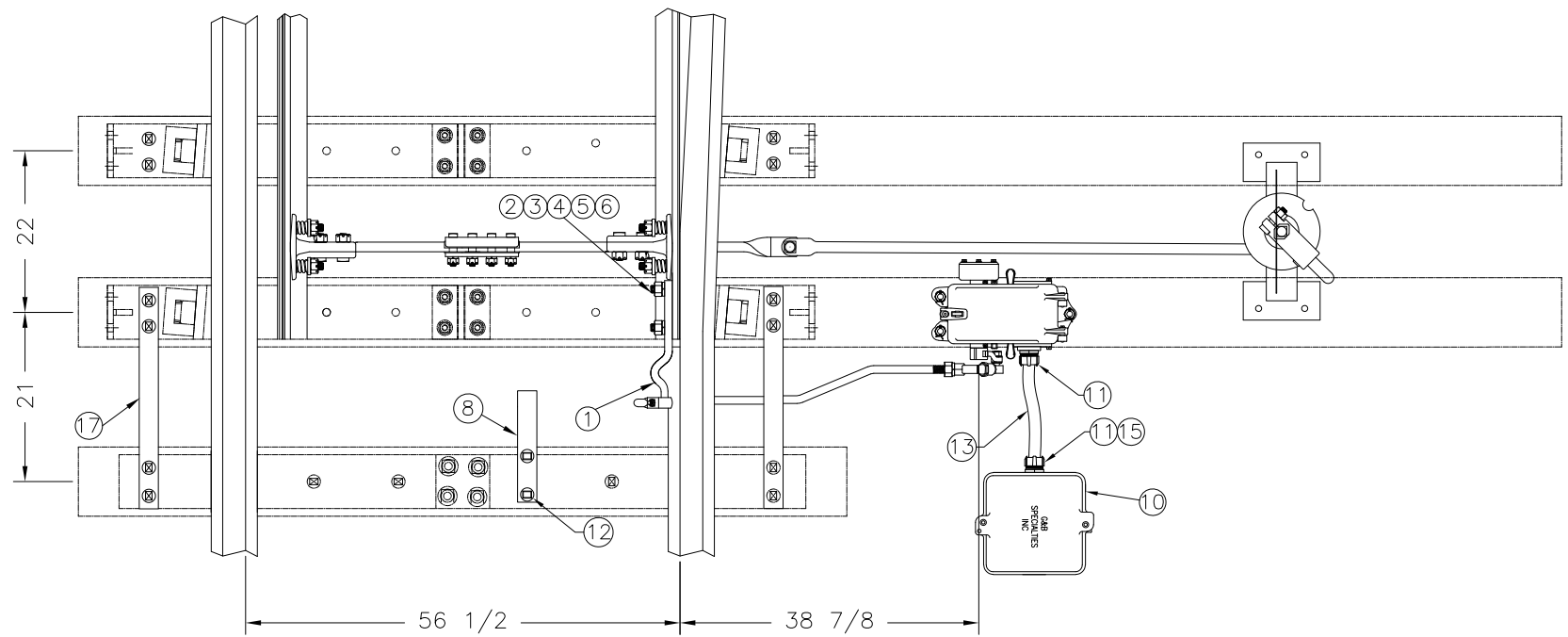
899137-005X = COMPLETE LAYOUT - NEAR POINT CONNECTION
 899137-006X = COMPLETE LAYOUT - FAR POINT CONNECTION

TRANSIT

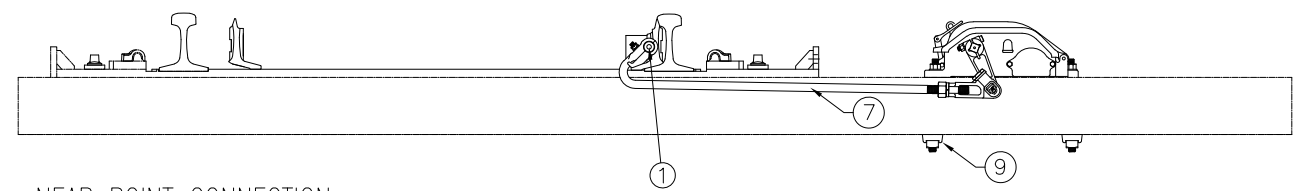
SIGNALS AND COMMUNICATIONS

RAIL MOUNTED CIRCUIT
 CONTROLLER LAYOUT
 WITHOUT FRONT ROD ASSMBLY

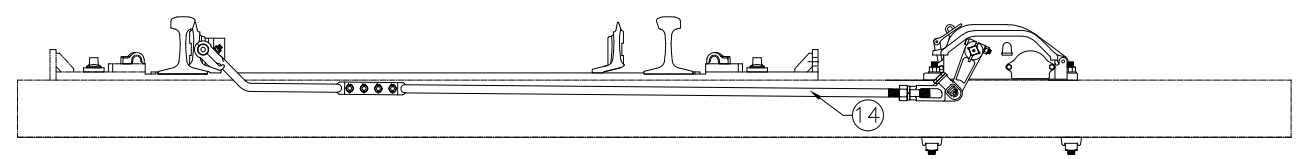
REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899137-005X
0	1 OF 1	TC	10/26/20	PAGE 18	GT899137-006X



ITEM NUMBER	PART NUMBER	DESCRIPTION	NEAR POINT	FAR POINT
			GT899138-003X QTY.	GT899138-004X QTY.
1	820671-016	LUG, SWIVEL POINT BALL	1	1
2	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	2	2
3	990332-100-02	NUT, HEAVY HEX SLOTTED	2	2
4	990403-100-02	WASHER, 1.000 LOCK	2	2
5	990511-200-02	COTTER PIN, 0.250 X 2.000	2	2
6	960100-001	PLATE, STEEL SHIM	1	1
7	830574-006-03	ROD ASSY, CC CONNECTING (NEAR)	1	-
8	860202	SUPPORT TIE STRAP	-	1
9	910922-020-01	STUD ASSY, 0.750 X 12.000	3	3
10	998918-003-01	JUNCTION BOX ASSY	1	1
11	998693-001	CONNECTOR, 2" STRAIGHT	2	2
12	995000-008	SCREW SPIKE, 24 X 165 MM	4	6
13	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36" Lg	2	2
14	830578-004-02	ROD ASSY, CC CONNECTING (FAR)	-	1
15	998693-003	LOCK NUT, 2" NICKEL/BRASS	2	2
16	998532-001	CLIP, 2" CONDUIT (NOT SHOWN)	2	2
17	860002-037	TIE STRAP 4 HOLE-2 TIE	2	2

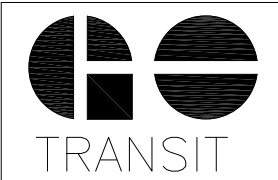


NEAR POINT CONNECTION



FAR POINT CONNECTION

GT899138-003X = COMPLETE LAYOUT - NEAR POINT CONNECTION
 GT899138-004X = COMPLETE LAYOUT - FAR POINT CONNECTION

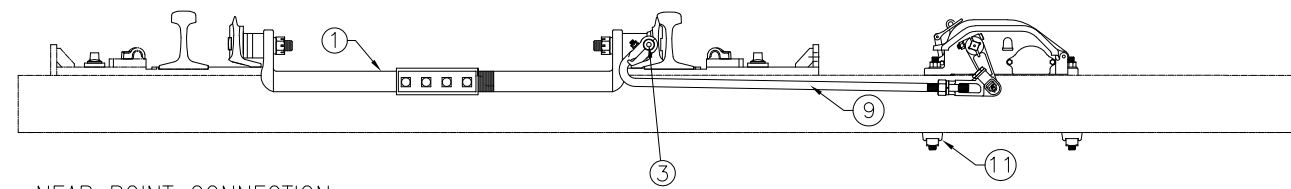
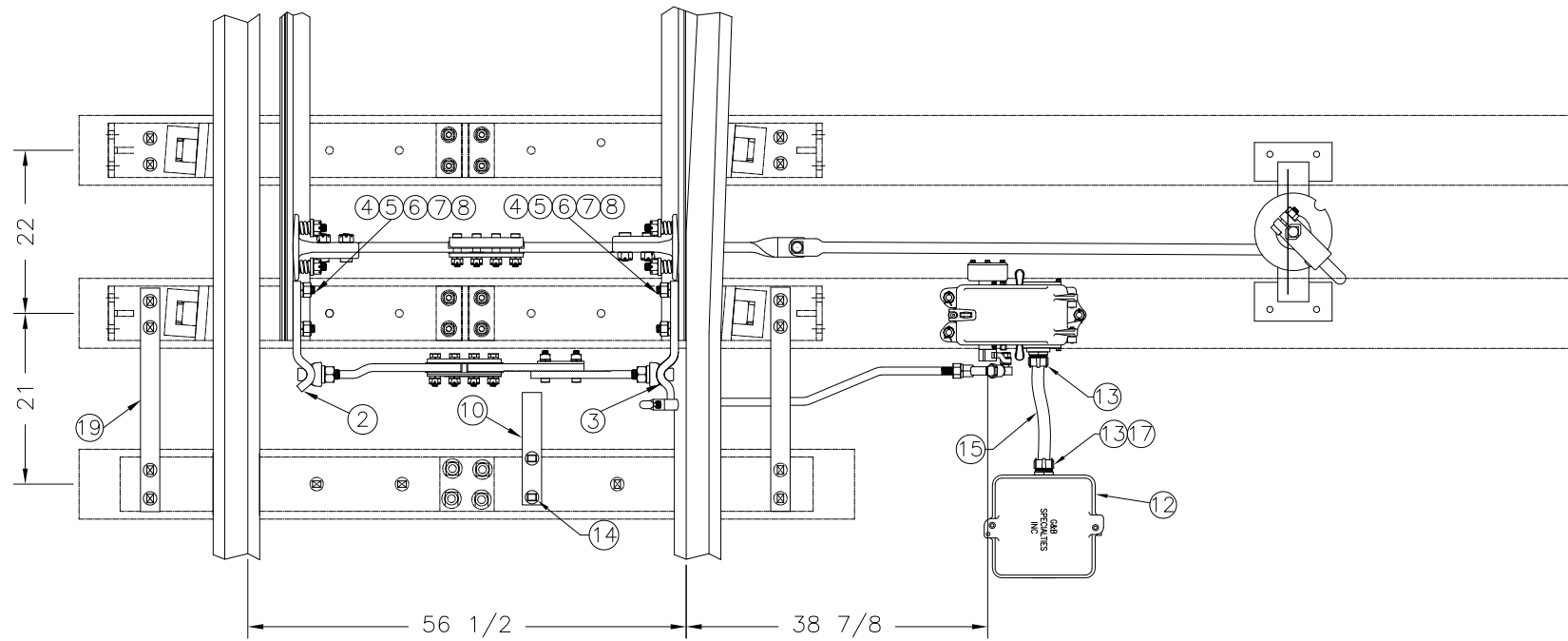


TRANSIT

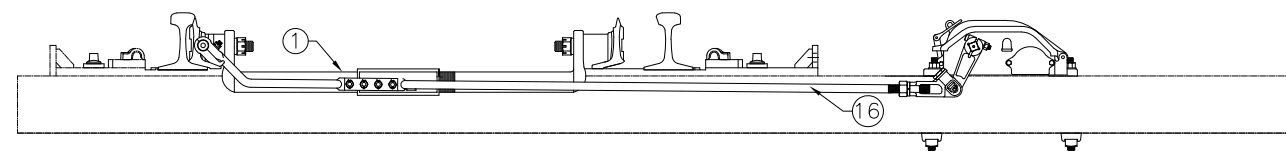
TIE MOUNTED
 SWITCH CIRCUIT
 CONTROLLER LAYOUT
 DOES NOT INCLUDE FRONT ROD

SIGNALS AND COMMUNICATIONS

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899138-003X
0	1 OF 1	TC	10/26/20	PAGE 19	GT899138-004X



NEAR POINT CONNECTION



FAR POINT CONNECTION

ITEM NUMBER	PART NUMBER	DESCRIPTION	NEAR POINT	FAR POINT
			GT899138-001X QTY.	GT899138-002X QTY.
1	802007X	FRONT ROD ASSEMBLY	1	1
2	820571-020	LUG, SWIVEL	1	1
3	820671-016	LUG, SWIVEL POINT BALL	1	1
4	990243-525-102	BOLT, 1.000 X 5.250 SQ HD	4	4
5	990332-100-02	NUT, HEAVY HEX SLOTTED	4	4
6	990403-100-02	WASHER, 1.000 LOCK	4	4
7	990511-200-02	COTTER PIN, 0.250 X 2.000	4	4
8	960100-001	PLATE, STEEL SHIM	2	2
9	830574-006-03	ROD ASSY, CC CONNECTING (NEAR)	1	-
10	860202	SUPPORT TIE STRAP	-	1
11	910922-020-01	STUD ASSY, 0.750 X 12.000	3	3
12	998918-003-01	JUNCTION BOX ASSY	1	1
13	998693-001	CONNECTOR, 2" STRAIGHT	2	2
14	995000-008	SCREW SPIKE, 24 X 165 MM	4	6
15	998238-036	CONDUIT, 2" GRAY HEAVY WALL, 36" Lg	2	2
16	830578-004-02	ROD ASSY, CC CONNECTING (FAR)	-	1
17	998693-003	LOCK NUT, 2" NICKEL/BRASS	2	2
18	998532-001	CLIP, 2" CONDUIT (NOT SHOWN)	2	2
19	860002-037	TIE STRAP 4 HOLE-2 TIE	2	2

GT899138-001X = COMPLETE LAYOUT - NEAR POINT CONNECTION
 GT899138-002X = COMPLETE LAYOUT - FAR POINT CONNECTION

 TRANSIT	TIE MOUNTED SWITCH CIRCUIT CONTROLLER LAYOUT WITH FRONT ROD ASSEMBLY	
	SIGNALS AND COMMUNICATIONS	

REVISION	SHEET	APPROVED BY	DATE	SCP-9	GT899138-001X
0	1 OF 1	TC	10/26/20	PAGE 20	GT899138-002X