



ASSEMBLY INSTRUCTIONS

- 1) REMOVE THE INSULATOR ASSEMBLY (913) FROM THE END BELL (900) BY REMOVING THE INSULATOR RETAINING RING (103). THIS IS A SPIRAL TYPE RETAINING RING AND CAN BE REMOVED BY PLACING A SCREWDRIVER UNDER THE THE END OF THE SPIRAL (A) AND LIFTING THE RING.
- 2) SLIDE THE FOLLOWING PARTS OVER THE CABLE IN THE FOLLOWING ORDER: END CASTING (162), COMPRESSION SLEEVE (906), THE FIRST AL. RING (904A), THE THREE NEOPRENE SEALS (905), THE SECOND AL. RING (904B) AND FINALLY THE END BELL (900).
- 3) REMOVE THE JACKET FROM THE CABLE FOR 7-1/2" [190.5mm]. **DO NOT CUT INTO THE UNDERLYING CONDUCTORS.** FOLD THE GROUND AND GROUND CHECK LEADS BACK AND OUT OF THE WAY. REMOVE THE SHIELD FOR 6" (152mm) AND THE SEMI-CON FOR 5-1/2" (140mm).
- 4) REMOVE THE INSULATION FROM THE ENDS OF THE CONDUCTORS AS FOLLOWS: PHASE AND GROUND LEADS 1-3/4" [45mm], GROUND CHECK LEAD 3/4" (19mm). IN ORDER TO PREVENT THE STRANDS FROM FRAYING, FORM A CAP OVER THE ENDS OF THE CONDUCTOR STRANDING WITH THE COPPER TAPE PROVIDED IN THE COUPLER KIT. THIS CAN BE DONE BY ROLLING A PIECE OF THE COPPER TAPE AROUND THE STRANDING TO FORM A CYLINDER, LEAVING 1/8" (3mm) TO 3/16" (5mm) OF THE CYLINDER EXTENDING OUT OVER THE STRANDING. FOLD OVER THE END OF THE CYLINDER AND TAP IT DOWN TIGHT TO FORM A THIMBLE-LIKE CAP.
- 5) THE PHASE CONTACTS MUST BE REMOVED FOR CONDUCTOR INSTALLATION. THE PHASE CONTACTS (914) ARE REMOVED BY UNSCREWING THE CONTACT NUT (917) USING A TJB PART NO. 992 CONTACT NUT WRENCH (NOT PROVIDED). **DO NOT REMOVE THE TEFLON INSULATOR TUBES FROM THE INSULATOR PLATE.** THE GROUND CONTACTS (915) AND THE GROUND CHECK CONTACT (916) DO NOT HAVE TO BE REMOVED FROM THE INSULATOR. INSERT THE CONDUCTORS INTO PHASE CONTACTS AND TIGHTEN THE SET SCREWS WITHOUT ADDITIONAL LEVERAGE.
- 6) INSERT THE GROUND CHECK CONDUCTOR INTO THE GROUND CHECK (916) AND TIGHTEN THE SET SCREW.
- 7) THE TWO GROUND CONTACTS (915) HAVE BEEN ISOLATED FROM THE SHELL OF THE COUPLER INSTALL THE GROUND CONDUCTORS INTO THE GROUND CONTACTS AS DESIRED AND TIGHTEN THE SET SCREWS.
- 8) WITH THE LINER SIDE OF THE TAPE TOWARD THE INSULATION, APPLY THE FIRST WRAP OF STRESS RELIEF TAPE (191) OVERLAPPING THE FACTORY APPLIED CABLE SHIELD BY 1/2" (1.3cm), THEN STRETCHING THE TAPE TO 15 PERCENT (THAT WOULD TAKE THE ORIGINAL 3/4" WIDTH TO 11/16") WRAP TOWARD THE CONTACT FOR A LENGTH OF 3" (7.6cm). THE LAST WRAP SHOULD BE PERPENDICULAR TO THE CONDUCTOR. REVERSE THE SLANT OF THE TAPING AND APPLY A SECOND HALF LAPPED LAYER BACK TO THE STARTING POINT. CUT OFF ANY EXCESS TAPE.

NOTE:
 IN ORDER TO MEET COMMONWEALTH OF PENNSYLVANIA REQUIREMENTS THERE MUST BE A SOLDERED CONNECTION ATTACHING THE SHIELD TO THE GROUND WIRES. WIRE FOR THIS CONNECTION IS PROVIDED IN THE COUPLER KIT.

- 9) STARTING ON THE CABLE SHIELD, WRAP THE INSULATING TAPE (149) TOWARD THE CONTACT USING HALF LAPPED WRAPS, PULLING THE TAPE TIGHTLY. TAPE TO 1/2" (1.3cm) PAST THE STRESS TAPE, THEN REVERSE THE SLANT AND TAPE UNTIL IT IS USED UP. THE LAST WRAP SHOULD BE APPLIED WITHOUT STRETCHING AND THEN PRESSED DOWN WITH YOUR THUMB.
- 10) INSTALL THE PHASE CONTACTS INTO THE INSULATOR ASSEMBLY AND TIGHTEN THE CONTACT NUTS (917) ONTO THE CONTACTS.
- 11) POSITION THE INSULATOR SO THAT THE TUBES ARE VERTICAL AND CENTER THE CONDUCTORS IN THE ACRYLIC TUBES BEFORE COMPOUNDING.
- 12) MIX THE 75-12 (3M #2123) COMPOUND (119) PER THE COMPOUND INSTRUCTIONS AND FILL THE THREE ACRYLIC TUBES (117). ALLOW THE COMPOUND TO SET. (SEE COMPOUND GEL TIME CHART)
- 13) INSTALL THE INSULATOR O-RING INTO THE GROOVE IN THE O.D. OF THE INSULATOR PLATE AND APPLY A SMALL AMOUNT OF SILICONE GREASE (PROVIDED) TO THE O-RING TO EASE INSERTION OF THE INSULATOR INTO THE END BELL. INSTALL THE INSULATOR. TAKE CARE TO ALIGN THE TWO LOCATING TABS (B) WITH THE NOTCHES PROVIDED IN THE END BELL. REPLACE THE INSULATOR RETAINING RING.
- 14) SLIDE THE ALUMINUM RINGS (904) AND THE NEOPRENE SEALS (905) INTO THE BACK OF THE END BELL (900) UNTIL THEY SEAT ON THE SHELF OF THE BELL. SEAT THE COMPRESSION SLEEVE (906) AGAINST THE ALUMINIUM RING (904A). MAKE SURE THE SET SCREW (903) IN THE END CASTING (162) IS BACKED OFF AND SCREW THE END CASTING ONE TURN PAST HAND-TIGHT USING A STRAP WRENCH. TIGHTEN THE SET SCREW (903) SO THAT IT LOCKS INTO THE END BELL TO SECURE THE END CASTING.
- 15) CENTER THE CABLE ON THE END CASTING AND POSITION THE CABLE CLAMPS (112) SO THAT THE CABLE IS CENTRALLY POSITIONED AND TIGHTEN THE NUTS (111) AND BOLTS (110).
- 16) ATTACH THE COVER CABLE (101) TO ONE CLAMP BOLT WITH A LOCK NUT (111).

COMPOUND GEL TIME CHART

NOTE: GEL TIMES WILL INCREASE AS TEMPERATURE DECREASES

TJB NO. 75-12 (3M NO. 2123)

TYP. MINIMUM GEL TIME

70° F (23° C) — 62 MINUTES

ITEM#	QTY.	PART NO.	DESCRIPTION
XX	1	342	COPPER SHIELDING TAPE (NOT SHOWN)
83	1	333	GROUND LEAD ASSEMBLY
84	10	314 -	BRONZE SET SCREW - SPECIFY SIZE
87	2	329	GROUND CONTACT RETAINING RING
100	1	181	1/4-20 x 5/8 HHCS
101	1	171XL	COVER CABLE ASSEMBLY
103	1	327	INSULATOR RETAINING RING
107	1	315	1/4-20 x 3/8 SET SCREW
110	4	167	3/8-16 X 3 HHCB
111	5	168	3/8-16 LOCK NUT
112	2	120-	CABLE CLAMP
117	3	417	ACRYLIC INSULATING TUBE
119	1	75-12	INSULATING COMPOUND (3M #2123)
149	1	216A	INSULATING TAPE
162	1	429B	LARGE END CASTING FOR SMALL CLAMPS
191	1	216B	STRESS TAPE
900	1	323-1T	LARGE SOCKET BELL
903	1	315	1/4-20 x 3/8 CUP POINT SET SCREW
904	2	325FT	ALUMINUM COMPRESSION RING
905	3	335F	NEOPRENE PACKING GLAND SEALS
906	1	384F	COMPRESSION SLEEVE
907	3	984	PHASE CONTACT O-RING
908	1	986	INSULATOR O-RING
909	2	987	GROUND CONTACT O-RING
910	1	988	GROUND CHECK CONTACT O-RING
911	1	989	GROUND CHECK CONTACT RETAINING RING
913	1	971XPF5-COMP	FEMALE INSULATOR ASSEMBLY - 5KV
914	3	975-COMP	FEMALE PHASE CONTACT ASSEMBLY
915	2	976A-COMP	FEMALE GROUND CONTACT ASSEMBLY
916	1	977A-COMP	FEMALE GROUND CHECK CONTACT ASSEMBLY
917	3	979-COMP	FEMALE PHASE CONTACT NUT ASSEMBLY
919	1	431	SOCKET DUST COVER
934	1	385-1	PDRON SEAL

NOTE: ALL HARDWARE IS STAINLESS STEEL UNLESS OTHERWISE SPECIFIED