



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.

ASSEMBLY INSTRUCTIONS

NOTE: THE END BELL (900) DOES NOT HAVE TO BE UNBOLTED FROM THE SOCKET BELL ADAPTER (920) IN ORDER TO INSTALL THE COUPLER ONTO THE CABLE

- REMOVE THE SOCKET FLANGE (918) FROM THE SOCKET END BELL ADAPTER (920) BY REMOVING THE TWO 3/8-16 SOCKET HEAD SCREWS (166). REMOVE THE INSULATOR ASSEMBLY (913) FROM THE SOCKET FLANGE BY REMOVING THE INSULATOR RETAINING RING (103). REMOVE THE RETAINING RING BY PLACING A SCREWDRIVER IN THE NOTCH AT THE END OF THE RING AND LIFTING IT OUT OF THE GROOVE.
 - SLIDE THE FOLLOWING PARTS OVER THE CABLE IN THE FOLLOWING ORDER: END CASTING (162), HOSE CLAMP (164), CABLE SEAL (163), END BELL - SOCKET BELL ADAPTER ASSEMBLY (900-920), END BELL O-RING (926) AND THEN THE INSULATOR RETAINING RING (130).
 - REMOVE THE JACKET FROM THE CABLE FOR 7-1/2" [190.5mm]. **DO NOT CUT INTO THE UNDERLYING CONDUCTOR INSULATION**. FOLD THE GROUND AND GROUND CHECK LEADS BACK AND OUT OF THE WAY.
 - REMOVE THE SHIELD ON THE CABLE FOR 6" [152.5mm] AND THE SEMI-CON FOR 5-1/2" [140mm]. COVER THE ENDS OF THE BRAID AND THE SEMI-CON WITH 2 LAYERS OF INSULATING TAPE.
 - REMOVE THE INSULATION FROM THE ENDS OF THE CONDUCTORS AS FOLLOWS: PHASE AND GROUND 1-7/8" [48mm], GROUND CHECK 3/4" (19mm).
 - THE PHASE CONTACTS (914) AND GROUND CONTACTS (915) MUST BE REMOVED FROM THE INSULATOR TO INSTALL THE CONDUCTORS. THE GROUND CHECK (916) CONTACTS CAN BE LEFT IN THE INSULATOR ASSEMBLY. REMOVE THE PHASE CONTACTS BY UNSCREWING THE THREE CONTACT NUTS (917) AND THE GROUND CONTACTS BY REMOVING THE RETAINING RINGS (87).
- IMPORTANT:**
 REMOVE THE O-RINGS FROM THE PHASE AND GROUND CONTACTS BEFORE SOLDERING.
- SOLDER ATTACH THE PHASE AND GROUND CONDUCTORS INTO THE CONTACTS USING PREFERABLY 50-50 SOLDER. **DO NOT COOL THE CONTACTS WITH WATER.** QUENCHING THE CONTACTS CAN CAUSE A COLD SOLDER JOINT AND INCREASE RESISTANCE.

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" (1.3 cm), THEN, STRETCHING THE TAPE 10 TO 15 PERCENT (THAT WOULD TAKE THE ORIGINAL 3/4" WIDTH TO 1 1/16") WRAP TOWARD THE CONTACT FOR A LENGTH OF 3" (7.6 cm). 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.

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" (1.3mm) PAST THE STRESS TAPE, THEN REVERSE THE SLANT AND CONTINUE WRAPPING UNTIL THE TAPE IS USED UP. THE LAST WRAP SHOULD BE APPLIED WITHOUT STRETCHING AND THEN PRESSED DOWN WITH YOUR THUMB.

10) AFTER THE CONTACTS HAVE COOLED, REPLACE THE O-RINGS AND REINSTALL THE CONTACTS INTO THE INSULATOR. REPLACE THE CONTACT NUTS AND RETAINING RINGS.

11) INSERT THE GROUND CHECK LEAD INTO THE GROUND CHECK (916) AND TIGHTEN THE SET SCREW.

12) POSITION THE INSULATOR SO THAT THE TUBES ARE VERTICAL AND CENTER THE PHASE CONDUCTORS IN THE ACRYLIC COMPOUNDING TUBES (117). MIX THE COMPOUND (119) AS INSTRUCTED AND FILL THE COMPOUNDING TUBES.

13) AFTER THE COMPOUND HAS COMPLETELY CURED, MAKE CERTAIN THE GROUND CONTACT ISOLATION BUSHING (921) IS PROPERLY INSTALLED ON THE BOTTOM GROUND CONTACT, WITH THE LARGE DIAMETER OF THE BUSHING AGAINST THE GROUND RETAINING RING, THEN APPLY A SMALL AMOUNT OF SILICONE GREASE (PROVIDED) TO THE INSULATOR O-RING (908) AND REINSTALL THE INSULATOR INTO THE SOCKET FLANGE TAKING CARE TO ALIGN THE ISOLATION BUSHING WITH THE SEAT ON THE FLANGE. REPLACE THE INSULATOR RETAINING RING. RE-ATTACH THE GROUND STRAP TO THE SOCKET BELL ADAPTER.

14) INSERT THE O-RING (926) INTO THE GROOVE ON THE FACE OF THE SOCKET BELL ADAPTER AND SECURE THE END BELL - ADAPTER ASSEMBLY TO THE SOCKET FLANGE USING THE 3/8-16 BOLTS (166) AND LOCK WASHERS (130).

15) SEAT THE CABLE SEAL (163) ON THE REAR OF THE END BELL. MAKE CERTAIN THE SET SCREW IN THE END CASTING (107) IS BACKED OUT AND SCREW THE END CASTING (162) ONTO THE END BELL. **HAND TIGHTEN ONLY.** TIGHTEN THE SET SCREW.

16) POSITION THE HOSE CLAMP (164) SO THAT THE SCREW IS ACCESSIBLE FROM THE RECESS IN THE CABLE CLAMP (112) AND TIGHTEN THE CLAMP ONTO THE CABLE SEAL.

17) 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).

ITEM#	QTY.	PART NO.	DESCRIPTION
XX	1	489	WIRE WRAP (NOT SHOWN)
9	6	182	1/4-20 X 1" HEX HEAD BOLT
80	1	316	1/4-20 X 1/2 BRASS SCREW
81	7	202	1/4 LOCK WASHER
85	1	333	INTERNAL GROUND LEAD ASSEMBLY
87	2	329	GROUND CONTACT RETAINING RING
100	1	183	1/4-20 x 5/8 HEX HEAD BOLT
101	1	171D	COVER CABLE ASSEMBLY
103	1	327	INSULATOR RETAINING RING
106	3	185R-COMP	ROLLER PIN AND SLEEVE
107	2	315	1/4-20 x 3/8 SET SCREW
110	4	167	3/8-16 x 3 HEX HEAD TAPP BOLT
111	4	168	3/8-16 LOCK NUT
112	2	121A-	CABLE CLAMP - SPECIFY SIZE
117	3	417	ACRYLIC TUBE
119	1	75-12	INSULATING COMPOUND (3M #2123)
130	6	940	LOCK WASHER
149	1	216A	INSULATING TAPE
162	1	139A	END CASTING
163	1	138A	CABLE SEAL - SPECIFY SIZE
164	1	187A	STAINLESS STEEL HOSE CLAMP
166	6	424	3/8-16 x 1" SHCS
191	1	216B	STRESS TAPE
900	1	912-1	LVNT LARGE END BELL
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	971TFS-COMP	FEMALE INSULATOR ASSEMBLY - 5KV
914	3	938	FEMALE PHASE CONTACT - WITH 1-1/2" END
915	2	976A	FEMALE GROUND CONTACT
916	1	977A	FEMALE GROUND CHECK CONTACT
917	3	979-COMP	FEMALE PHASE CONTACT NUT ASSEMBLY
918	1	965C-COMP	LVNT SOCKET FLANGE ASSEMBLY - 5KV
919	1	980S3	LVNT SOCKET COVER - 480V-5KV
920	1	902	SOCKET BELL ADAPTER
921	1	993	FEMALE GROUND CONTACT ISOLATION BUSHING
926	2	9101	ADAPTER FLANGE O-RING
934	1	980S.1	LVNT SOCKET COVER WAVE SPRING
935	1	194	1/4-20 LOCK NUT

NOTE: ALL HARDWARE IS STAINLESS STEEL UNLESS OTHERWISE SPECIFIED

