



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

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.

- 1) 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.
- 2) 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).
- 3) REMOVE THE JACKET 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.
- 4) REMOVE THE SHIELD 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.
- 5) REMOVE THE INSULATION FROM THE ENDS OF THE CONDUCTORS AS FOLLOWS: PHASE AND GROUND 1-7/8" [47.6mm], GROUND CHECK 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 KIT. FORM THE CAP BY ROLLING A PIECE OF THE COPPER TAPE AROUND THE CONDUCTOR 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.
- 6) THE CONTACTS MUST BE REMOVED FOR CONDUCTOR INSTALLATION. THE PHASE CONTACTS (914) CAN BE REMOVED BY UNSCREWING THE CONTACT NUTS (917) USING A TJB PART NO. 992 CONTACT NUT WRENCH (NOT PROVIDED). **DO NOT REMOVE THE TEFLON INSULATOR TUBES FROM THE INSULATOR PLATE**. REMOVE THE GROUND CONTACTS (915) AND THE GROUND CHECK CONTACT (916) BY REMOVING THE RETAINING RINGS. (87) FOR THE GROUND CONTACTS AND (911) FOR THE GROUND CHECK, WITH TJB PART NO. 22R SNAP RING PLIERS. BE CAREFUL TO AVOID OVER-BENDING THE RETAINING RINGS. INSERT THE CONDUCTORS INTO THE PHASE CONTACTS AND TIGHTEN THE SET SCREWS USING AN ALLEN WRENCH WITHOUT ADDITIONAL LEVERAGE.
- 7) INSERT THE GROUND CHECK LEAD INTO THE GROUND CHECK (916) AND TIGHTEN THE SET SCREW.
- 8) REMOVE THE SHELL GROUND STRAP (85) FROM THE SOCKET BELL ADAPTER. THE TWO GROUND CONTACTS (915) HAVE BEEN ISOLATED FROM THE SHELL OF THE COUPLER. INSTALL THE SHELL GROUND AND THE GROUND LEADS AS DESIRED AND TIGHTEN THE SET SCREWS.

- 9) 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 11/16") 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.
- 10) 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.
- 11) REINSTALL ALL OF THE CONTACTS INTO THE INSULATOR AND REPLACE THE CONTACT NUTS AND RETAINING RINGS.
- 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 (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
X	1	342	COPPER SHIELDING TAPE (NOT SHOWN)
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
84	10	314 -	BRONZE SET SCREW - SPECIFY SIZE
85	1	333	INTERNAL GROUND LEAD ASSEMBLY
87	2	329	GROUND CONTACT RETAINING RING
100	1	183	1/4-20 x 5/8 HC'S
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 3/8 HEX HEAD TAPP BOLT
111	4	168	3/8-16 LOCK NUT
112	2	120A-	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	139B	END CASTING
163	1	138A	CABLE SEAL - SPECIFY SIZE
164	1	187	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	971TF5-COMP	FEMALE INSULATOR ASSEMBLY - 5KV
914	3	975	FEMALE PHASE CONTACT
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	980S1	LVNT SOCKET COVER WAVE SPRING
935	1	194	1/4-20 LOCK NUT

NOTE: ALL HARDWARE IS STAINLESS STEEL UNLESS OTHERWISE SPECIFIED

