



ASSEMBLY INSTRUCTIONS

- 1) REMOVE THE END BELL (948) FROM THE PLUG BODY (947) BY REMOVING THE TWO 1/4" BY 1" BOLTS (9) AND LOCK WASHERS (81). REMOVE THE INSULATOR FROM THE PLUG BODY BY PLACING A SHARP SCREWDRIVER IN THE NOTCH ON THE END OF THE RETAINING RING (103) 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 (948), PLUG BODY O-RING (949) AND THE PLUG BODY (947).
- 3) REMOVE 7-1/2" [190.5mm] OF THE JACKET FROM THE CABLE. **DO NOT CUT INTO THE UNDERLYING CONDUCTORS**. FOLD THE GROUND AND GROUND CHECK WIRES BACK AND OUT OF THE WAY.
- 4) REMOVE 6" [152mm] OF THE SHIELD AND 5-1/2" [140mm] OF THE SEMI-CON FROM THE PHASE CONDUCTORS. 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 CONDUCTORS 1-7/8" [48mm], GROUND CHECK CONDUCTOR 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 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.
- 6) REMOVE THE THREE ACRYLIC TUBES (117) FROM THE BACK OF THE THREE TEFLON INSULATOR TUBES AND SET THEM ASIDE.
- 7) THE PHASE CONTACTS MUST BE REMOVED FROM THE INSULATOR TO INSTALL THE CONDUCTORS. THE PHASE CONTACTS (903) CAN BE REMOVED BY UN-SCREWING THE CONTACT NUTS (906) USING A TJB PART NO. 992 CONTACT NUT WRENCH (NOT PROVIDED). **DO NOT REMOVE THE INSULATOR TUBES FROM THE INSULATOR PLATE**. THE GROUND CONTACTS (904) AND GROUND CHECK CONTACT (905) DO NOT HAVE TO BE REMOVED.
- 8) INSERT THE PHASE CONDUCTORS INTO THE PHASE CONTACTS AND TIGHTEN THE SET SCREWS USING AN ALLEN WRENCH WITHOUT ANY ADDITIONAL LEVERAGE.
- 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" (1.3mm), 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) SLIDE THE ACRYLIC TUBES (117) OVER THE PHASE CONDUCTORS AND INSERT THE CONTACTS INTO THE INSULATOR ASSEMBLY. REPLACE THE CONTACT NUTS (906).
- 12) INSERT THE GROUND CHECK LEAD INTO THE GROUND CHECK (905) AND TIGHTEN THE SET SCREW.
- 13) THE TWO GROUND CONTACTS (904) HAVE BEEN ISOLATED FROM THE SHELL OF THE COUPLER. INSTALL THE GROUND LEADS AS DESIRED AND TIGHTEN THE SET SCREWS.
- 14) REPLACE THE ACRYLIC TUBES AND POSITION THE INSULATOR SO THAT THE TUBES ARE VERTICAL, THEN CENTER THE CONDUCTORS IN THE ACRYLIC TUBES BEFORE COMPOUNDING.
- 15) MIX THE COMPOUND (119) PER THE COMPOUND INSTRUCTIONS AND FILL THE 3 COMPOUNDING TUBES (117). ALLOW THE COMPOUND TO SET.
- 16) INSTALL THE O-RING (908) INTO THE GROOVE ON THE O.D. OF THE INSULATOR AND APPLY A SMALL AMOUNT OF SILICONE GREASE (PROVIDED) TO THE O-RING. ALIGN THE LOCATING TABS (B) WITH THE INDENTS IN THE PLUG BODY AND INSERT THE INSULATOR ASSEMBLY INTO THE PLUG BODY. INSTALL THE INSULATOR RETAINING RING.
- 17) MAKE SURE THE PLUG BODY O-RING IS PROPERLY SEATED IN THE GROOVE IN THE FACE OF THE PLUG BODY. ALIGN THE ROLL PIN IN THE BELL WITH THE UNTHREADED HOLE IN THE PLUG BODY AND BOLT THE END BELL ONTO THE PLUG BODY USING THE SIX 1/4" X 1" BOLTS AND LOCK WASHERS.
- 18) 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.
- 19) 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.
- 20) 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).

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.

ITEM#	QTY.	PART NO.	DESCRIPTION
X	1	342	COPPER SHIELDING TAPE (NOT SHOWN)
XX	1	721	END BELL ALIGNMENT PIN (NOT SHOWN)
XXX	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" PLATED BRASS SCREW
81	7	202	1/4" LOCK WASHER
82	1	184-40	NYLON BALL BEARING - SET OF 40
83	1	151	DUST SEAL
84	10	314-	BRONZE SET SCREW - SPECIFY SIZE
85	1	333	INTERNAL GROUND LEAD ASSEMBLY
87	2	942M	GROUND CONTACT RETAINING RING
100	1	181	1/4-20 X 5/8 HHCS
101	1	171D	COVER CABLE ASSEMBLY
103	1	327	INSULATOR RETAINING RING
106	3	185J	NUT PIN
107	2	315	1/4-20 X 3/8 SET SCREW
110	4	167	3/8-16 X 3 HEX HEAD BOLT
111	4	168	3/8-16 LOCK NUT
112	2	120A-	CABLE CLAMP
117	3	417	ACRYLIC COMPOUNDING TUBE
119	1	75-12	INSULATING COMPOUND (3M #2123)
149	1	216A	INSULATING TAPE
162	1	939	END CASTING
163	1	123	CABLE SEAL
164	1	187	HOSE CLAMP
191	1	216B	STRESS TAPE
901	1	964C-COMP	LVNT PLUG NUT - 5KV, 3 SLOT
903	3	972-COMP	MALE PHASE CONTACT ASSEMBLY
904	2	973A-COMP	MALE GROUND CONTACT ASSEMBLY
905	1	974A-COMP	MALE GROUND CHECK CONTACT ASSEMBLY
906	3	978-COMP	MALE PHASE CONTACT NUT ASSEMBLY
907	3	984	PHASE CONTACT O-RING
908	1	986	INSULATOR O-RING
909	2	987	MALE GROUND CONTACT O-RING
910	1	988	MALE GROUND CHECK CONTACT O-RING
911	1	989	MALE GROUND CHECK RETAINING RING
912	1	926	COUPLING O-RING
923	1	823	LVNT PLUG DUST COVER - 480V AND 5KV
929	1	971TMS-COMP	MALE INSULATOR ASSEMBLY - 5KV
931	1	996	1/4-20 X 3/8 HHCS
932	1	981	BALL BEARING ACCESS PLUG
947	1	825	LVNT PLUG BODY
948	1	912	LVNT END BELL
949	1	9101	PLUG BODY O-RING

NOTE: ALL HARDWARE IS STAINLESS STEEL UNLESS OTHERWISE SPECIFIED