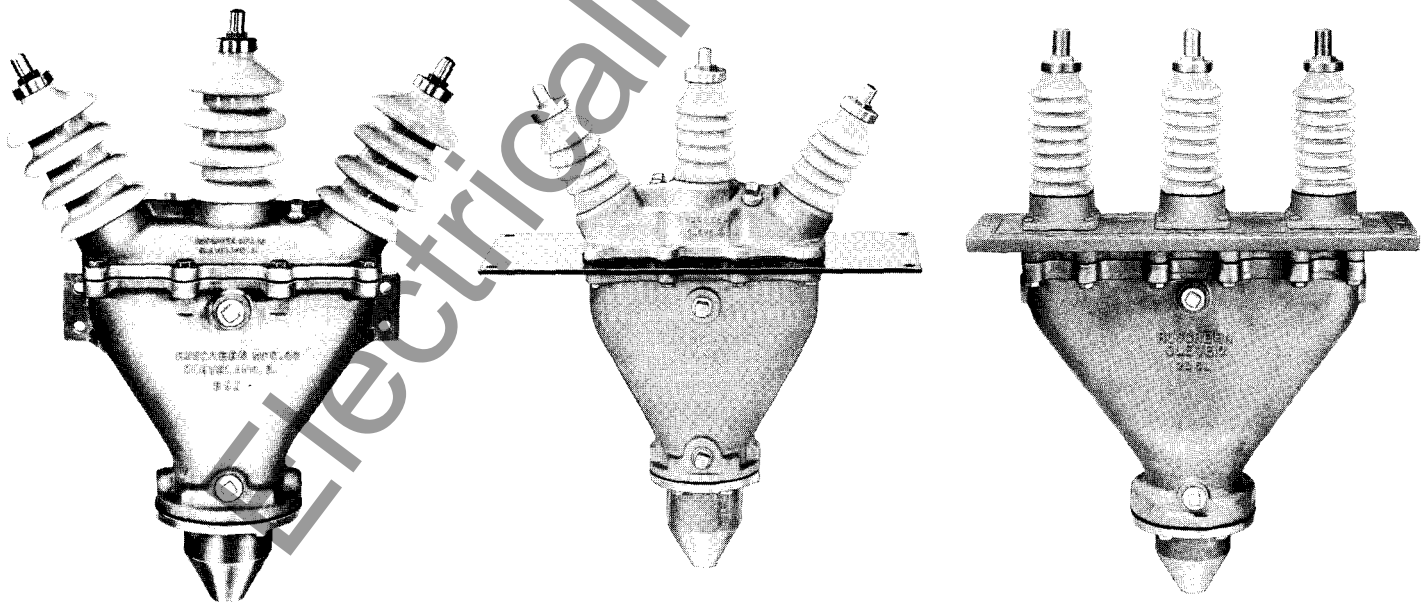


INSTALLATION INSTRUCTIONS FOR PLM POTHEADS

Three Conductor Bracket-Plate- Flange Mounted

NOTES:

1. These instructions assume that the installer has acquired the appropriate compound to suit the cable insulation material and that the stress cone is installed in accordance with the manufacturer's recommendation. The stress cone procedure should deal with the precise positioning of insulation build up and shielding braid.
2. It is vital that the installer uses clean and dry tools and makes sure that all pothead materials are dry and ready at hand so that installation can proceed without interruptions. The installer should familiarize himself with these instructions by reading them completely prior to starting the pothead installation.
3. Pothead should be mounted temporarily in its final position to determine sufficient clearances are available. The cable should be trained into final location and cut so that the end extends 2" beyond the top of the pothead.



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The information in this bulletin is compiled on information and data which we believe is reliable and is given in good faith. Since the methods of application and conditions under which our products are put to use are beyond our control, we are not able to guarantee the application and/or use of same. The user assumes all risks and liability in connection with the application and use of our products.

PLM Products

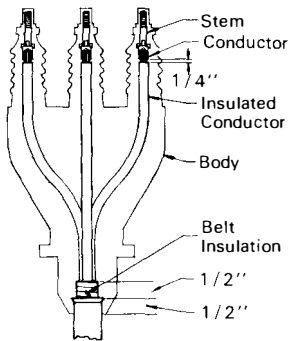
Division Of The Scott & Fetzer Company
4799 W. 150th St., • Cleveland, Ohio 44135
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INSTALLATION INSTRUCTIONS-THREE CONDUCTOR POTHEAD

(FOR USE WITH LEAD SHEATHED CABLES)

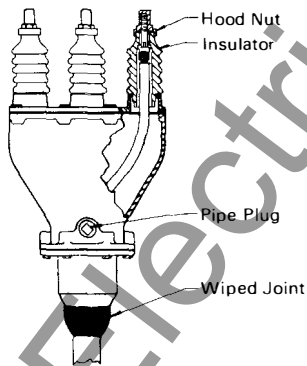
NOTE: THE ILLUSTRATION SHOWS AN INDOOR TYPE. THE OUTDOOR TYPE HAS MORE DISTANCE BETWEEN SKIRTS FOR RAIN DISSIPATION.



1. PREPARATION OF CABLE

- Cut wiping nipple to fit over cable then mark a point on the Lead Sheath about 1/2" above the wiping nipple having first allowed sufficient cable to spread the individual conductors into their final position.
- Remove the Lead Sheath from the end of the cable to the point marked using a chipping knife care being taken not to damage the insulation.
- Remove the wiping nipple from the pothead body and slide it over the cable and bell out the Lead Sheath with a blunt tool.
- For Belted Cable, remove the Belt Insulation from the cable to a point 1/2" above the Lead Sheath. For Shielded Cables, remove the shield to within 1/2" of the Lead Sheath.
- Fan out the insulated conductors into their final positions taking care to avoid sharp bends.
- Using a stiff wire bend it and measure the exact length from the bottom of the wiping nipple to the bottom of the hole in the stem and cut individual conductors to the appropriate length.
- Remove the cable insulation from the end of the conductors a distance 1/4" more than the depth of the hole in the stems.
- Thoroughly tin the exposed conductors.
- Remove the stems from the pothead and thoroughly solder to the conductors.

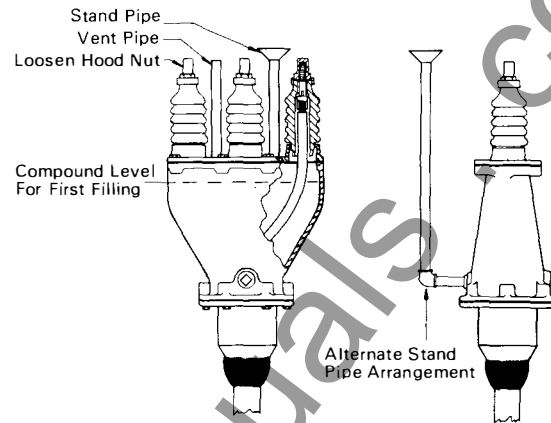
BUILD STRESS CONES ON THE INSULATED CONDUCTORS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.



2. INSERTION OF CABLE

- Place the body over the cable and bolt it into its final position.
- Bring the wiping nipple and gasket into position and bolt to the body.
- Slip the lid and porcelains in place over the individual cables, adjust the stems to obtain proper seating and then bolt the lid and gaskets tightly to the body.
- Slip the hood nut gaskets over the stems and screw the hood nuts tightly in place insuring they fit square and tight on the top shoulder of the porcelains.
- Make a plumbers wiped joint between the wiping nipple and the Lead Sheath after the sheath has been scraped clean with a shave hook or rasp for a distance of about 3" then cleaned with stearine flux.

NOTE: WHEN STRESS CONES HAVE BEEN INSTALLED INSURE AT LEAST 3/16" CLEARANCE BETWEEN THE CONES AND THE PORCELAINS TO FACILITATE COMPOUND POURING.

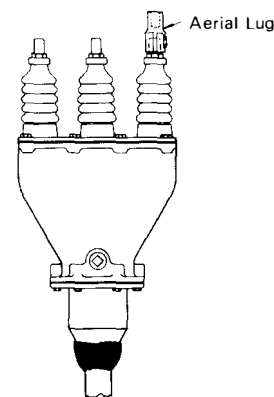


3. FILLING WITH COMPOUND

- Remove the pipe plugs from the lid and insert a standpipe with filling funnel of sufficient length to extend beyond the top of the insulators.
- Loosen the hood nuts to allow escape of air.
Note: When filling, air should naturally egress as the compound rises.
- Fill with compound heated in accordance with manufacturer's instructions to the level indicated above and allow to cool.
- Place vent pipe in the lid and fill the pothead with compound up to the neck of the porcelains.
- Screw the hood nuts tightly in place and plug vent pipe tightly.
- Leave the standpipe in place maintaining heat on to it until the pothead body cools.

NOTE: THE CORRECT GRADE OF COMPOUND MUST BE SELECTED CONSISTENT WITH THE CHARACTERISTICS OF THE CABLE. THE POTHEAD SHOULD BE PREHEATED TO INSURE COMPOUND DOES NOT CONGEAL UPON CONTACT WITH COLD SURFACES. USE CARE WHEN HEATING TO INSURE FLAME NOT DIRECTLY APPLIED TO PORCELAINS.

The alternate method of filling with the standpipe connected at the lower pipe plug requires the pothead to be filled to the neck of the porcelains at the first filling venting as above and then maintaining heat on fill pipe until pothead cools.



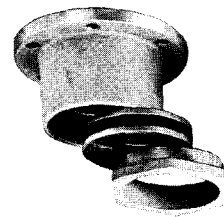
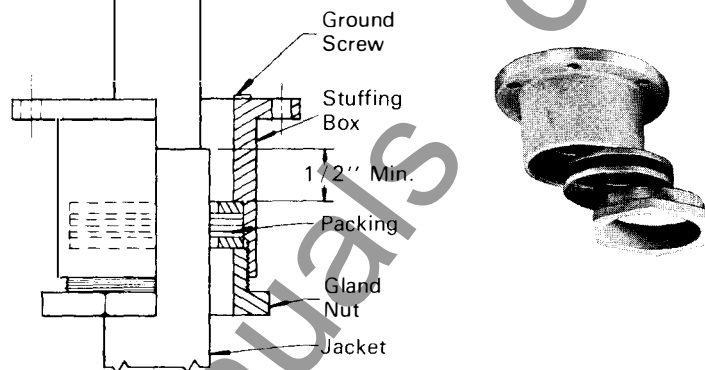
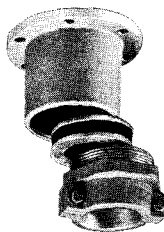
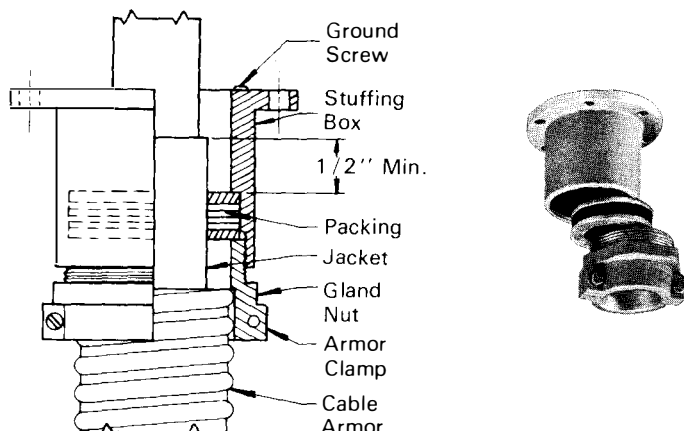
4. FINAL CONNECTION

- When the compound has cooled sufficiently as evidenced by the pothead body temperature being cool to the touch i.e., below body temperature, remove the stand and vent pipes and replace pipe plugs.
- Re-tighten the hood nuts, the lid and entrance bolts.
- Bolt the aerial lugs with the aerial leads attached on to the hood nut posts and tighten securely.
- The installation is complete.

It is considered good practice to tape over the aerial lugs and hood nuts to present a rounded surface to the aerial conductors thus minimizing external corona effects.

INSTALLATION INSTRUCTIONS FOR POTHEADS WITH ENTRANCE FITTINGS OTHER THAN LEAD WIPING SLEEVES 3

NOTE: STEPS 3 AND 4 OVERLEAF ARE IDENTICAL FOR POTHEADS WITH ANY ENTRANCE FITTING. THE FOLLOWING INSTRUCTIONS THEREFORE COVER STEPS 1 AND 2 ONLY.

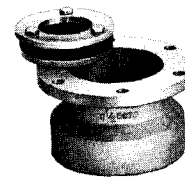
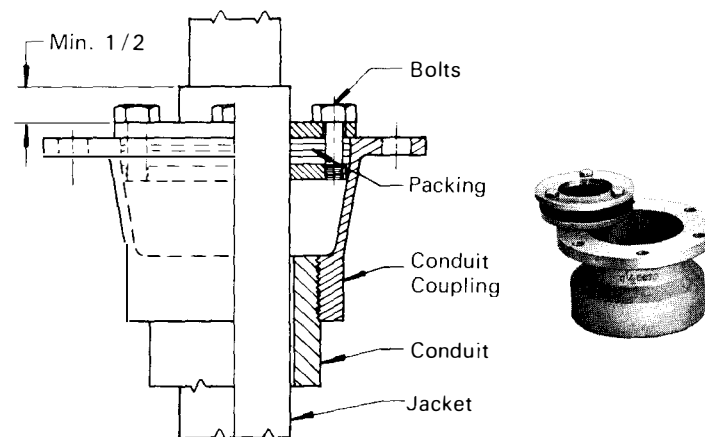
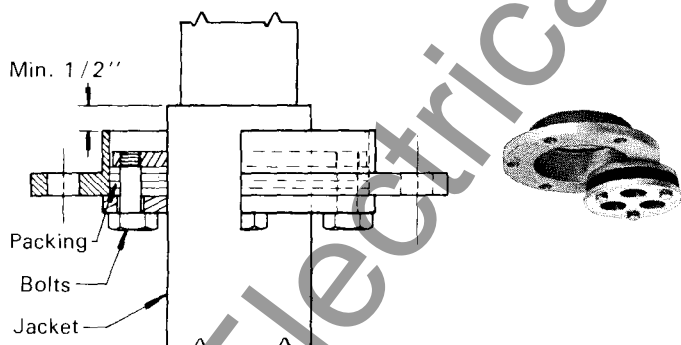


TYPE "RSO" ENTRANCE FITTING FOR ARMORED CABLES

1. A. Allowing 2" spare cable above top of the porcelain mark a point on the armor corresponding to the shoulder within the armor clamp and remove the armor to this point.
- B. Mark a point on the jacket which will enable correct location of the stress cone and remove the jacket to this point. Remove any shielding material from the cable insulation to a point 1/2" above the cut jacket.
- C. Slip the armor clamp, packing and entrance fitting over the cable.
- D. Screw the stuffing gland in place compressing the packing around the cable to form a tight seal.
- E. Secure the armor clamp on to the armor.
- F. Measure the distance from the lower flange of the pothead body to the bottom of the hole in the stem for each conductor and cut cables to these lengths.
- G. Remove the cable insulation from the end of the conductor 1/4" more than the depth of the hole.
- H. Thoroughly tin the exposed conductor.
- I. Remove the pothead stem and solder on to the conductor.
- J. Install stress cones or proceed to Step 2 if not required.

TYPE "RSQ" ENTRANCE FITTING FOR NON ARMORED CABLES

1. A. Allowing 2" spare cable above top of the porcelain mark a point on the jacket which will enable correct location of the stress cone and remove jacket to this point.
- B. Remove any shielding material from the cable insulation to a point 1/2" above the cut jacket.
- C. Remove the stuffing box from the pothead and assemble it over the cable by screwing the stuffing gland nut tightly into the stuffing box.
- D. Measure the distance from the lower flange of the pothead body to the bottom of the hole in the stem for each conductor and cut cables to these lengths.
- E. Remove the cable insulation from the end of the conductor a distance 1/4" more than the depth of the hole in the stem.
- F. Thoroughly tin the exposed conductor.
- G. Remove the pothead stem and solder to conductor.
- H. Install stress cones or proceed to Step 2 if not required.



TYPE "RSL" ENTRANCE FITTING FOR NON ARMORED CABLES

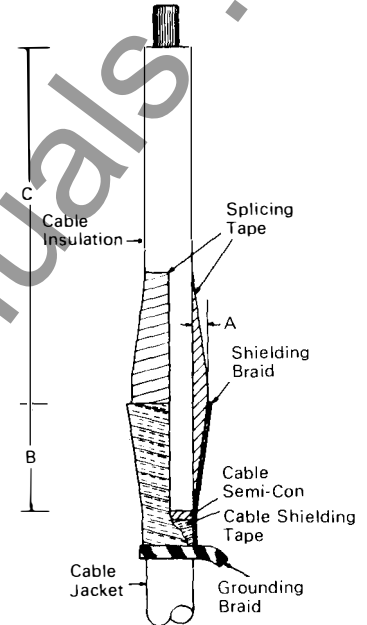
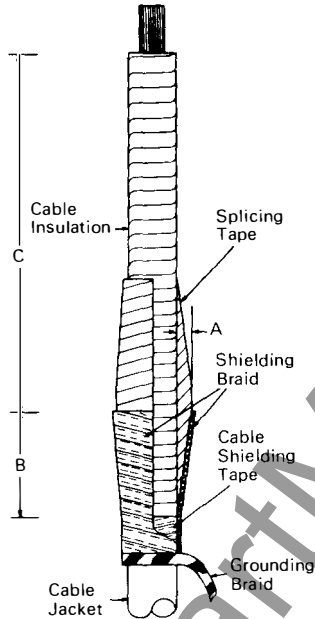
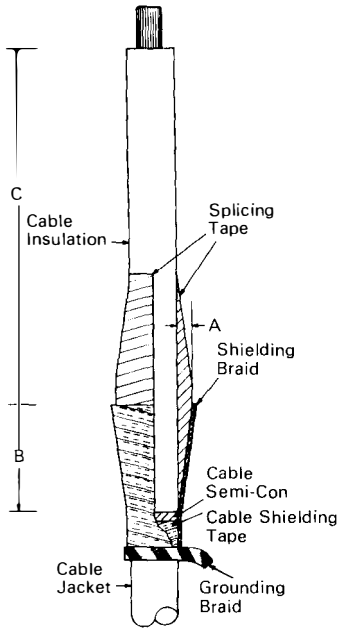
1. A. Allowing 2" spare cable above top of the porcelain mark a point on the jacket which will enable correct location of the stress cone and remove jacket to this point.
- B. Remove any shielding material from the cable insulation to a point 1/2" above the cut jacket.
- C. Remove the stuffing box from the pothead and assemble it over the cable by tightening the bolts to compress the "sandwich".
- D. Measure the distance from the lower flange of the pothead body to the bottom of the hole in the stem for each conductor and cut cables to these lengths.
- E. Remove the cable insulation from the end of the conductor a distance 1/4" more than the depth of the hole in the stem.
- F. Thoroughly tin the exposed conductor.
- G. Remove the pothead stem and solder on to the conductor.
- H. Install stress cones or proceed to Step 2 if not required.

TYPE "RSN" ENTRANCE FITTING FOR CONDUIT COUPLING

1. A. Allowing 2" spare cable above top of the porcelain mark a point on the jacket which will enable correct location of the stress cone and remove jacket to this point.
- B. Remove any shielding material from the cable insulation to a point 1/2" above the cut jacket.
- C. Remove the pipe connection and the packing sandwich from the pothead and screw the pipe connector on to the pipe to allow cable jacket to protrude.
- D. Place the packing sandwich over the top and compress it down into the pipe connector by means of the flange bolts.
- E. Measure the distance from the bottom of the pothead body flange to the bottom of the hole in the stem for each conductor and cut cables to length.
- F. Remove the insulation from the end of the conductor a distance 1/4" more than the depth of the hole in the stem.
- G. Thoroughly tin the exposed conductor.
- H. Remove the pothead stem and solder on to conductor.
- I. Install stress cones or proceed to Step 2 if not required.

NOTE: THE OPERATION OF INSERTING THE PREPARED CABLE END PLUS STEMS INTO THE POTHEAD IS SIMILAR TO THE POTHEAD WITH WIPING NIPPLE EXCEPT FOR STEP 2-B WHICH WILL READ "BOLT ENTRANCE FITTING INTO POSITION" AND STEP 2-E WHICH DOES NOT APPLY.

TYPICAL STRESS RELIEF CONES FOR POTHEADS



EXTRUDED INSULATED CABLES — DACRON GLASS CONES			
Voltage	A	B	C Min.
5,000	1/8	1 3/4	3
8,000	3/16	2 1/2	4
15,000	1/4	3 1/2	5
25,000	5/16	4	8
35,000	3/8	4 3/4	12
46,000	1/2	5 1/2	18

VARNISHED CAMBRIC OR PAPER INSULATED CABLES — DACRON GLASS CONES			
Voltage	A	B	C Min.
5,000	1/8	1 1/2	3
8,000	3/16	1 3/4	4
15,000	1/4	2 1/4	5
25,000	5/16	3	8
35,000	3/8	3 1/2	12
46,000	1/2	4 1/2	18

EXTRUDED INSULATED CABLES — RUBBER TAPE CONES			
Voltage	A	B	C Min.
5,000	3/16	1 1/4	3
8,000	1/4	2 1/4	4
15,000	3/8	3 1/2	5
25,000	1/2	4 1/2	8
35,000	3/4	6 1/2	12

DIMENSIONS:

- "A" Thickness of applied insulation
- "B" Length of cone
- "C" Minimum creepage from live conductor to end of shielding.

NOTE: Distance for "C" in these tables are minimum creepage distances. Locating of the stress cone is very important (see dimensions). Sufficient clearance between the porcelain wall of the pothead, cable insulation, and/or stress cone should be 3/16" minimum to allow free passage of the insulating compound.

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