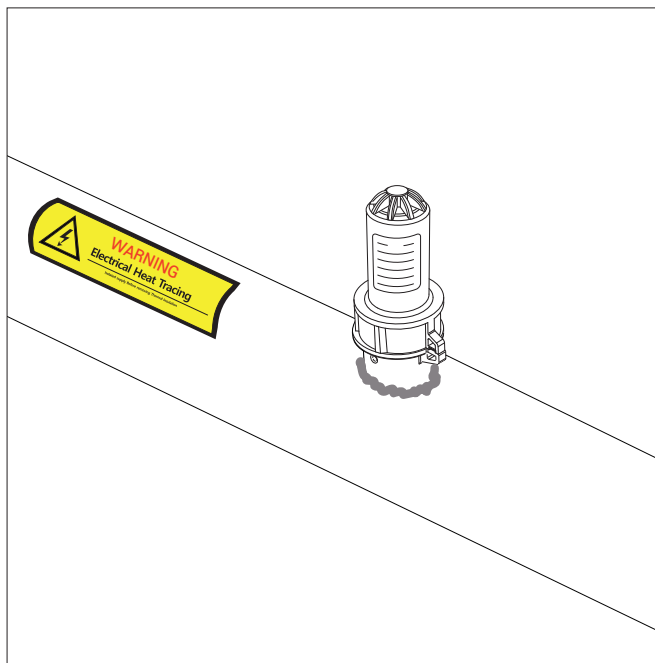


Gaumer Connection Kits

Installation Instructions

GB300

End Seal or In-Line Splice Connection Kit



Description

- GB300 is an above insulation end seal kit for use with GAUMER GHT-CR, GHT-CT, GHU-CT, and GHK-CT self-regulating heating cables.
- GB300 can be used either as an end seal for up to two heating cables or as an in-line splice connection. This kit contains parts for two heating cable end seals.
- For in-line splice connections, the separate “GB-SK” accessory pack is required and sold separately. For in-line splice, please go to page 21.

Approvals

「 GB300 」



FM24US0113X, FM24CA0042X

Hazardous (classified) locations, indoors and outdoors

Class I, Division 2, Groups A, B, C and D T*;

Class II/III, Division 2, Groups E, F and G T*;

Class I, Zone 1, AEx/Ex eb IIC T* Gb;

Zone 21, AEx/Ex tb IIIC T* °C Db;

Type 4X, IP66

Ta = -40°C to +55°C



FM24ATEX0018X C€2813

⊕ II 2 G Ex eb IIC T* Gb;

⊕ II 2 D Ex tb IIIC T* °C Db;

Ta = -40°C to +55°C IP66

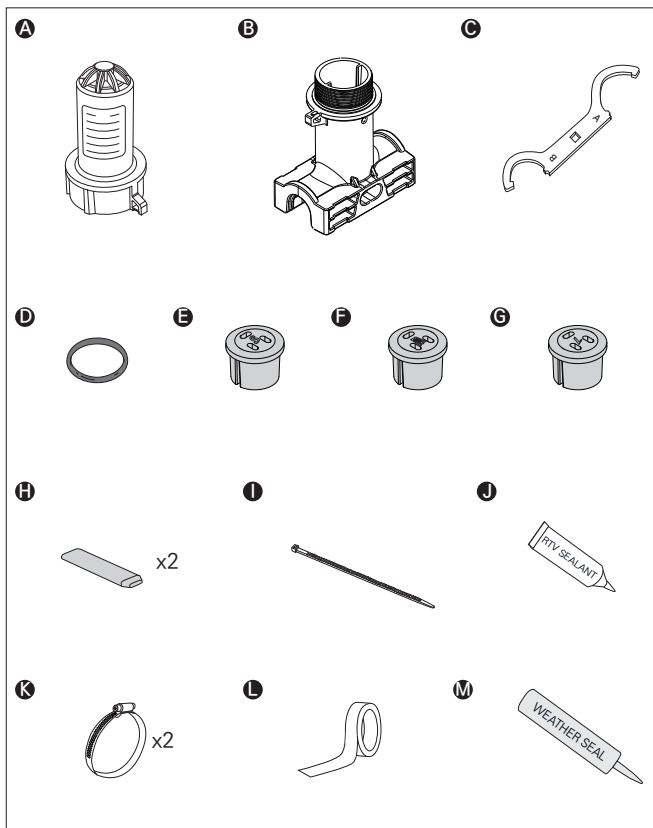
IECEX FMG 24.0017X

Ex eb IIC T* Gb;

Ex tb IIIC T* °C Db

- T* = For T-rating, please refer to cable documentation.

Kit Contents

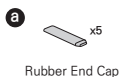


| Item | Description | Qty. |
|------|--------------------------------|------|
| A | End Cap | 1 |
| B | Pipe Stand | 1 |
| C | Wrench | 1 |
| D | Stand O-ring | 1 |
| E | S Grommet for GHU-CT, GHT-CT | 1 |
| F | M Grommet for GHT-CR | 1 |
| G | L Grommet for GHK-CT | 1 |
| H | Rubber End Cap | 2 |
| I | Cable Tie | 1 |
| J | RTV Sealant | 1 |
| K | Pipe Strap (Sold Separately) | 2 |
| L | Fixing Tape (Sold Separately) | 1 |
| M | Weather Seal (Sold Separately) | 1 |

Accessory Package

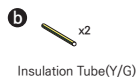
"GB-EK" for End Seal

<Included in GB300 kit>



"GB-SK" for Splice connection

<Sold separately>



Tools Required

- Wire cutters
- Marking pen
- Adjustable pliers
- Needle nose pliers
- Utility knife
- Large slotted screwdriver
- Molex RHT-7000 crimp tool or equivalent; 10-16AWG slot
(For in-line splice connection only)

Additional Materials Required

- Pipe Straps

| Model | Pipe Size | Unit Qty. |
|----------|---------------------------|-----------|
| GPS-SS02 | Up to 2" Outer Diameter | 2ea / bag |
| GPS-SS05 | 2" to 5" Outer Diameter | 2ea / bag |
| GPS-SS10 | 5" to 10" Outer Diameter | 2ea / bag |
| GPS-SS18 | 10" to 18" Outer Diameter | 2ea / bag |
| GPS-SS24 | 18" to 24" Outer Diameter | 2ea / bag |

- Small Pipe Adapter

For installation on small pipes ($\leq 1"$ or 25mm diameter), contact Gaumer Process for small pipe adapter, GSPA.

- Fixing Tapes

- GFT-L98 : Fiberglass Tape low temp; 1/2" * 98ft (30m)
- GFT-H98 : Fiberglass Tape high temp; 1/2" * 98ft (30m)
- GAT2/3-L164 : Aluminum tape low temp;
2" or 3" * 164ft (50m)

- Pipe Stand Extension

For installation with insulation thicker than 3" (76mm), or on very hot pipe, contact Gaumer Process for pipe stand extension, GPSE.

CAUTION

- The minimum installation temperature is -40°F (-40°C). For more convenient installation, we recommend performing the installation at a temperature above freezing. Store the kit at a temperature above freezing until installation.

WARNING

- Gaumer heat-tracing systems must be installed correctly to ensure proper operation and to prevent shocks and fires. Pay attention to warnings and carefully follow applicable installation instructions.
- For two or more heating cables powered by a single circuit, the total length of all heating cables should not exceed the maximum circuit length allowed in the chart published in the Gaumer self-regulating heating cables datasheets or design guide. Additionally, the total current of all heating cables should not surpass 80% of the circuit breaker rating.
- **Electrical Shock or Fire Hazard** : Follow Gaumer requirements and comply with NEC, CEC, and all relevant local codes. **Ground-fault equipment protection** set at 30 mA must be used on each heating cable branch circuit. Arcing may not be stopped by conventional circuit breakers.
- The approvals and performance of the heat tracing systems are based exclusively on the use of Gaumer specified parts. It is imperative that parts are not substituted and electrical tape is not used.
- Damaged bus wires have the potential to overheat or cause short circuits. When scoring the jacket or core, it is essential to avoid breaking the bus wire strands.
- Both components and cable ends must be kept dry before and throughout the installation process.
- The potential for bus wires to overheat or short circuit exists if the bus wire strands are broken while preparing the cable for connection. Reuse of grommets or use of the wrong

grommet can result in leaks, cracked components, shocks, or fires. Ensure the type or opening size of grommet is correct for the heating cable being installed. A new grommet is recommended whenever the cable has been pulled out of the component.

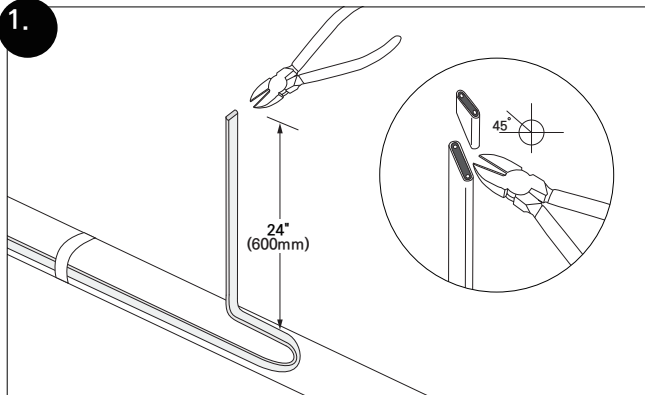
- Before and during installation or servicing, all power circuits must be de-energized.
- Read the MSDS for RTV and components carefully.
- Use thermal insulation and attachment tape suitable for the specific application and heat-tracing temperature. Do not secure heating cables with metal straps or wire, as this may damage the cables.

Specific Conditions of Use

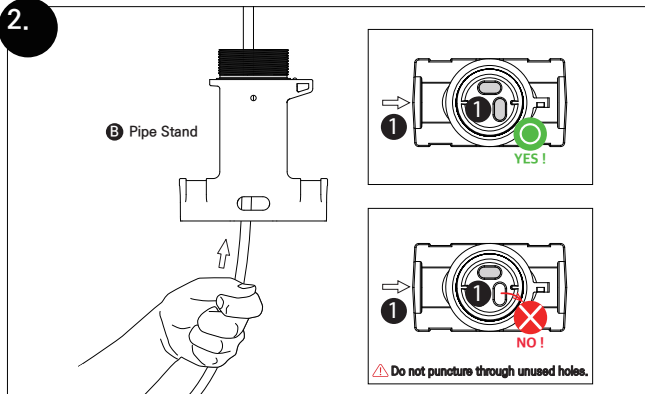
- Gaumer GB300 Series Connection Kits must be installed using Gaumer GHT, GHU, GHK Series Heating Cables.
- Refer to the installation instructions to reduce the potential of an electrostatic charging hazard on the enclosures of the connection kits.
- The end-user shall mount the equipment per Gaumer instructions.

End Seal

1.

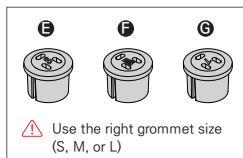
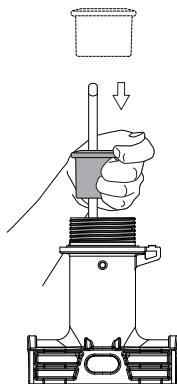


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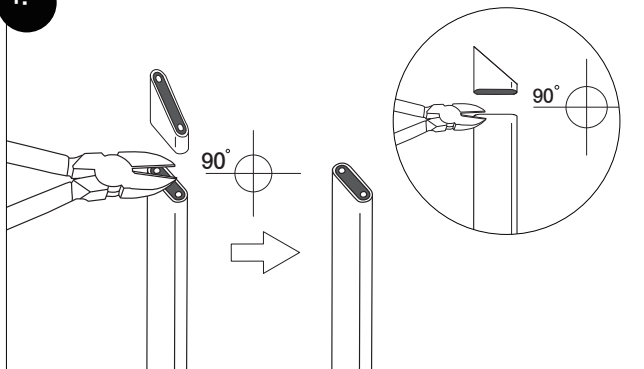


End Seal

3.

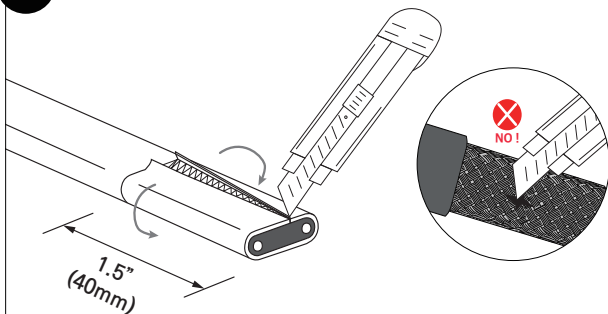


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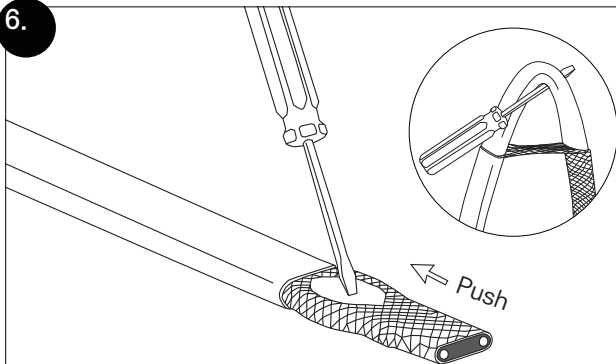


End Seal

5.

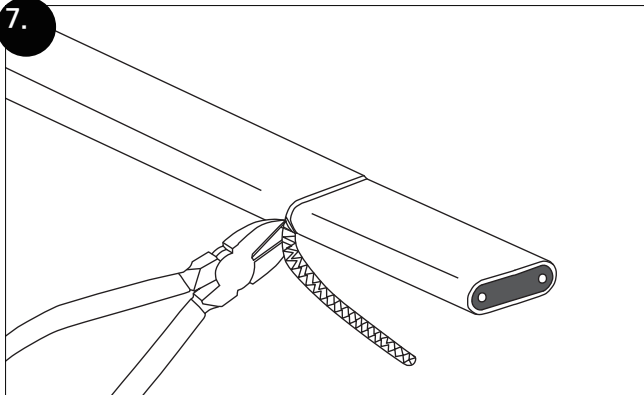


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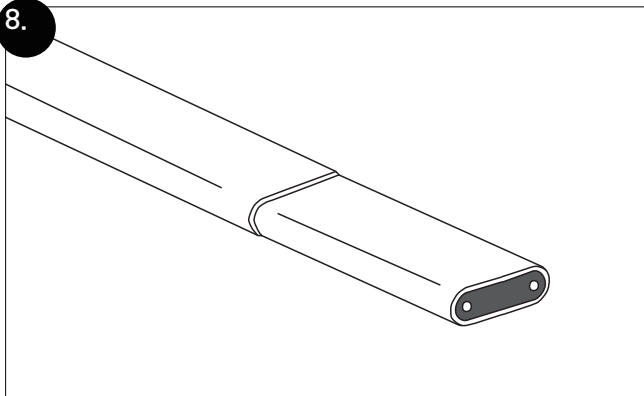


End Seal

7.



8.



End Seal

9.

J RTV Sealant

H Rubber End Cap

Apply extra RTV for GHU-CT due to its smaller dimensions to ensure proper sealing.

10.

H Rubber End Cap

Front view



Push



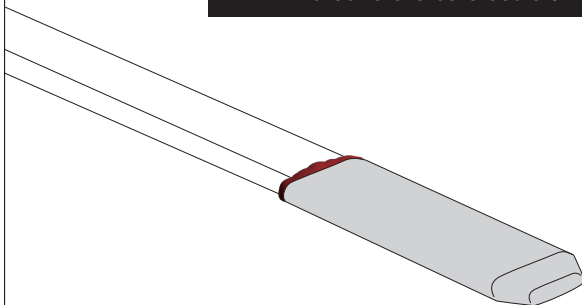
Push

"Push to open round and let RTV in"

End Seal

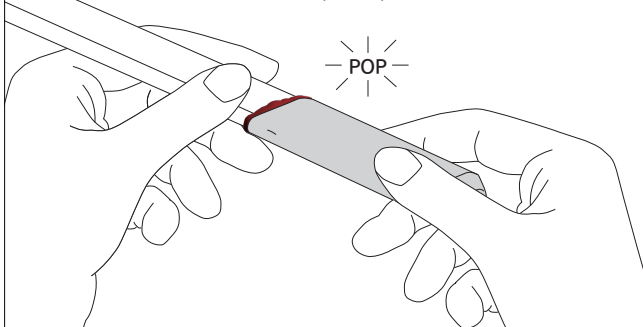
11.

NOTE : RTV Sealant should ooze out around the core sealer.



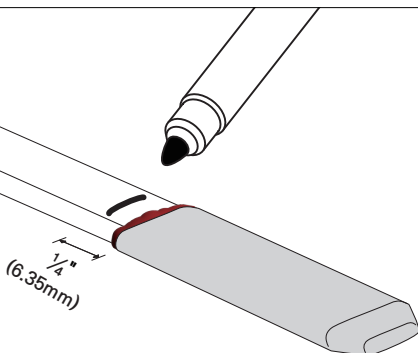
12.

Push Rubber End Cap finally ensure all air comes out.

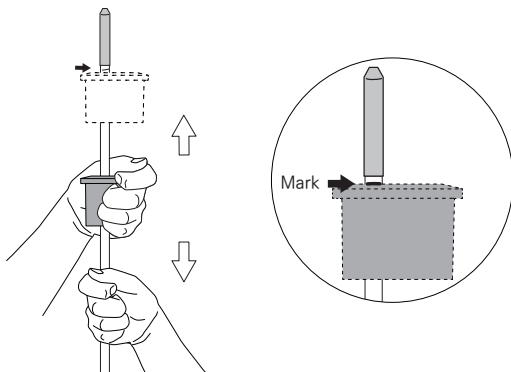


End Seal

13.



14.



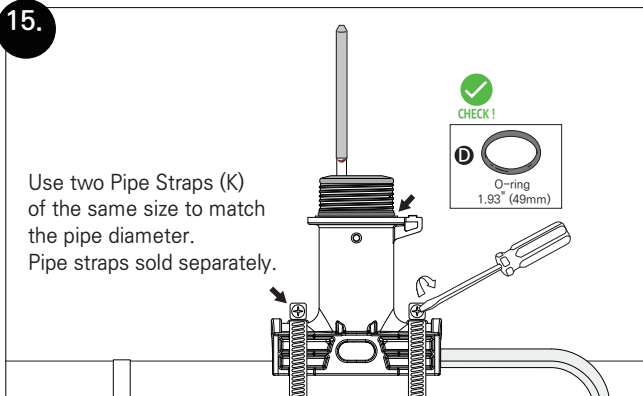
End Seal

15.

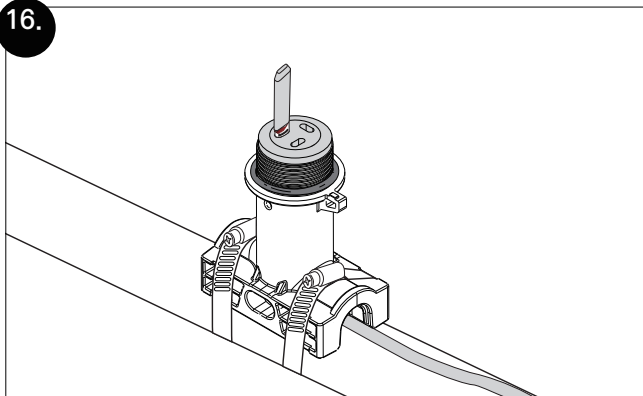
Use two Pipe Straps (K)
of the same size to match
the pipe diameter.
Pipe straps sold separately.



CHECK !

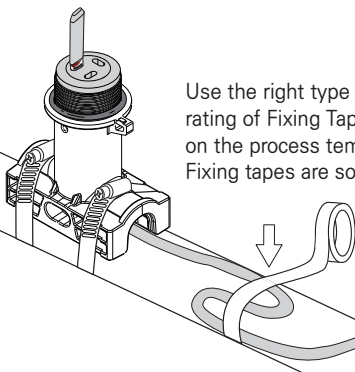


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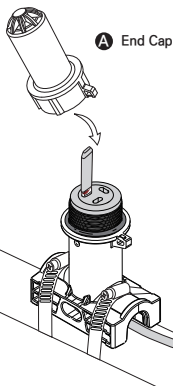
End Seal

17.



Use the right type or temperature rating of Fixing Tape (L) based on the process temperature. Fixing tapes are sold separately.

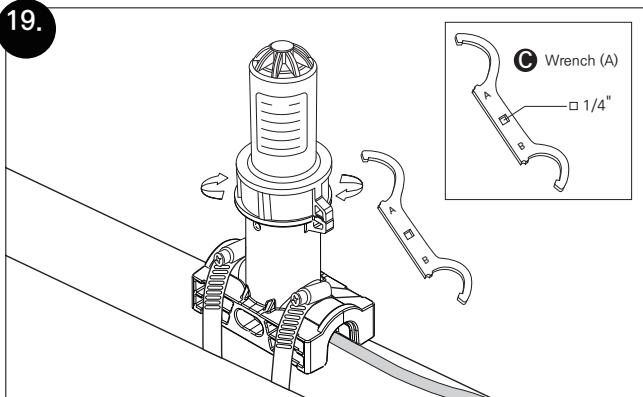
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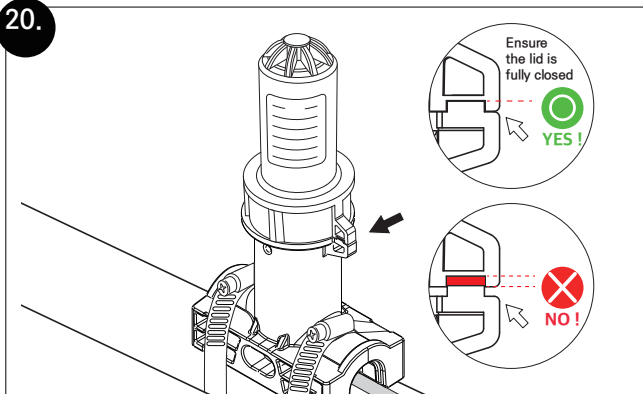
A End Cap

End Seal

19.

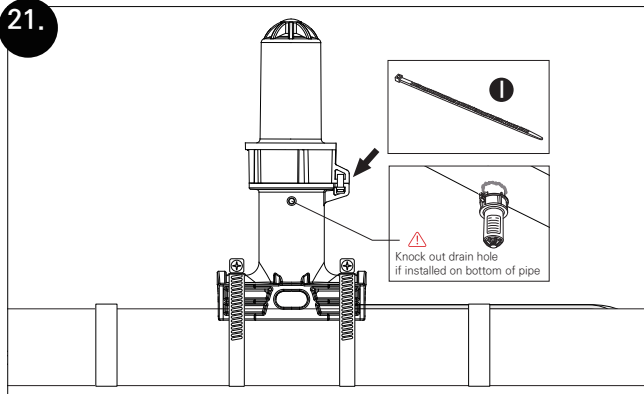


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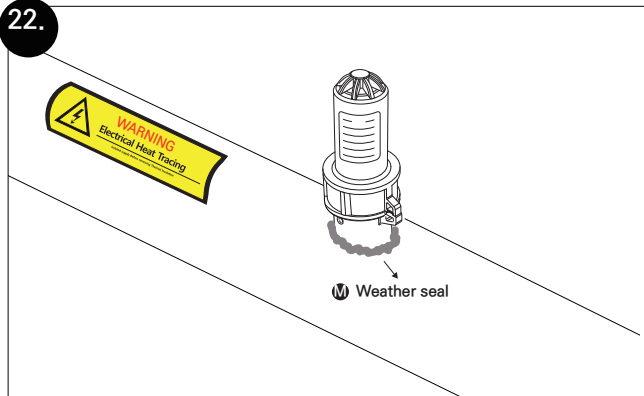


End Seal

21.

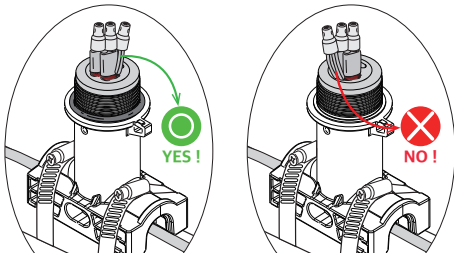


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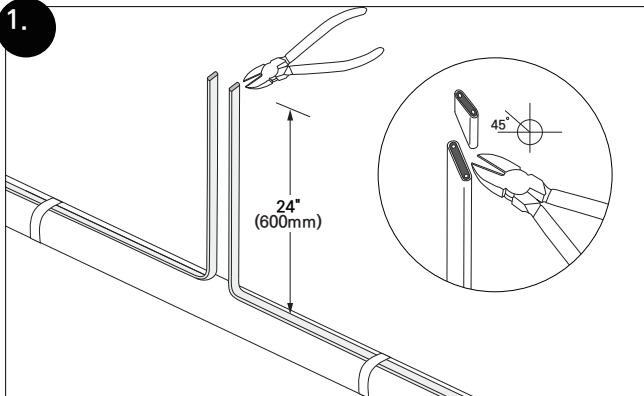
In-Line Splice Connection

Completed picture of splice wiring



Ensure the braidings are pigtailed toward the center of the grommet. If they face outward, the connectors may block the end cap from closing properly.

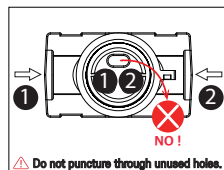
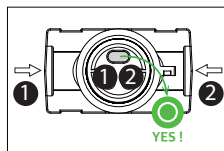
1.



In-Line Splice Connection

2.

B Pipe Stand



3.

E



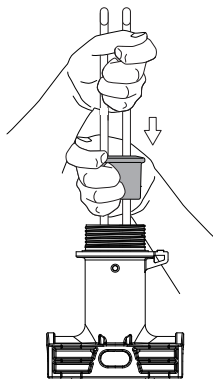
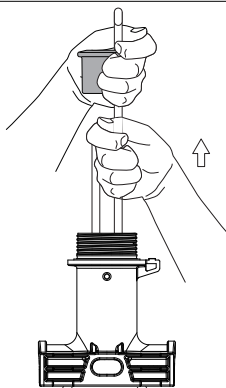
F



G

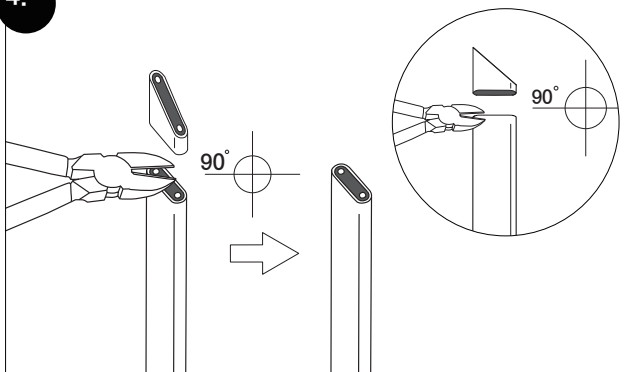


⚠ Use the right grommet size (S, M, or L)

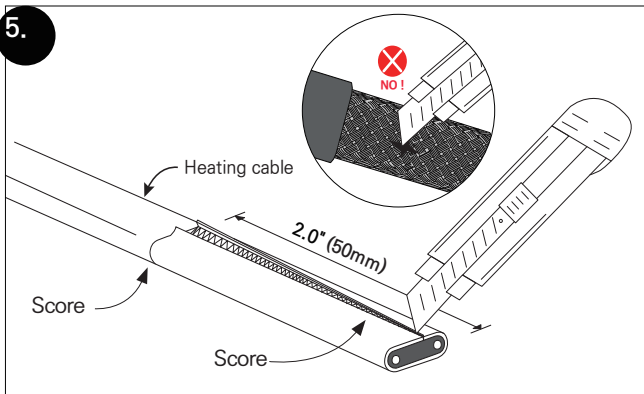


In-Line Splice Connection

4.

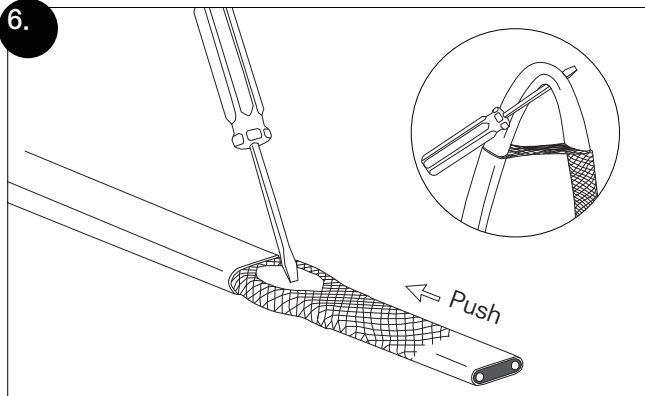


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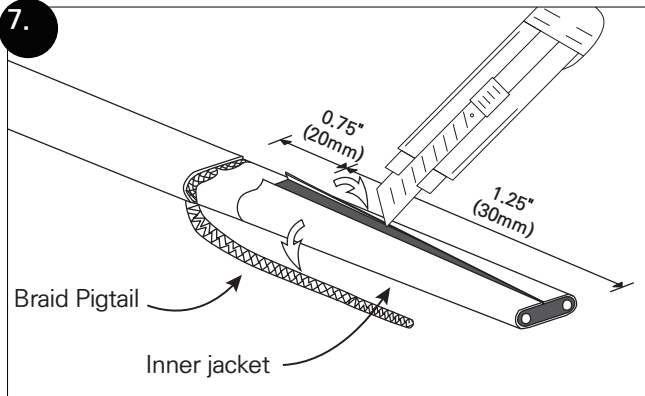


In-Line Splice Connection

6.

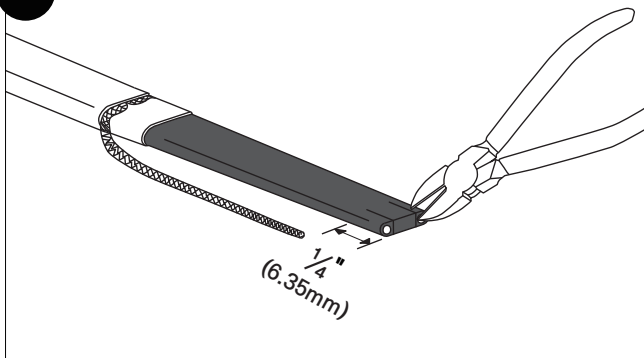


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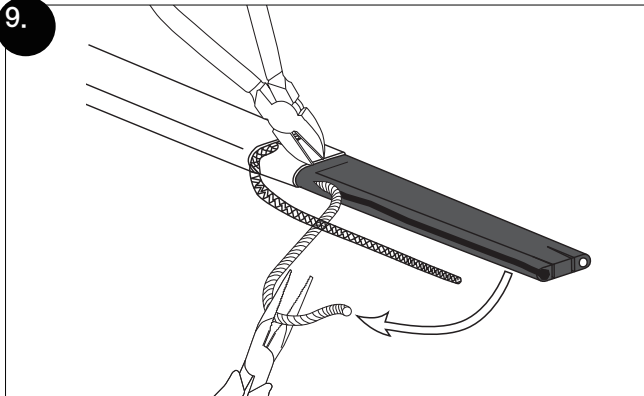


In-Line Splice Connection

8.

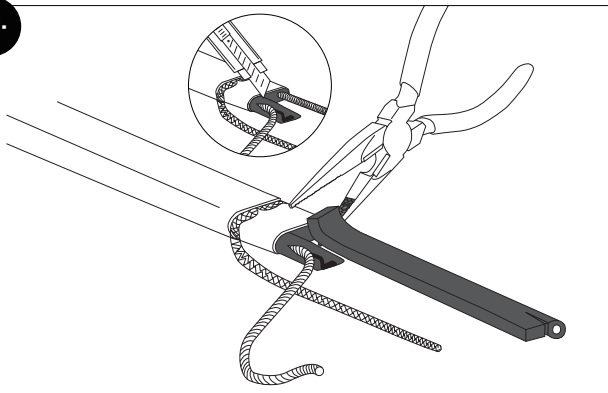


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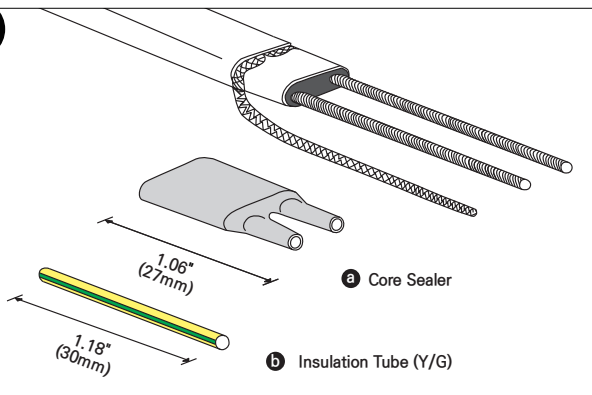


In-Line Splice Connection

10.

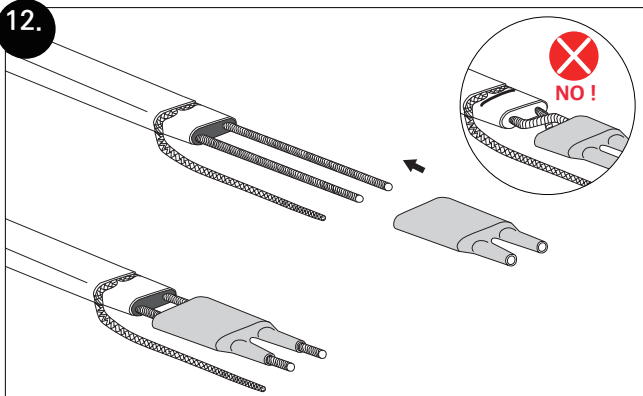


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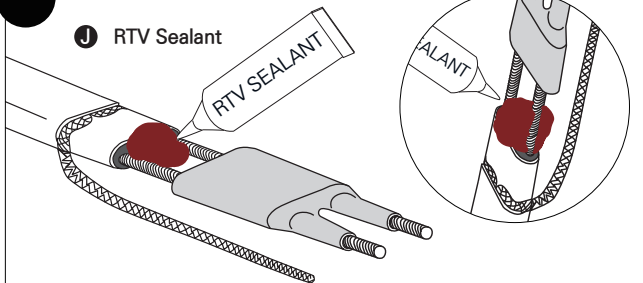
In-Line Splice Connection

12.



13.

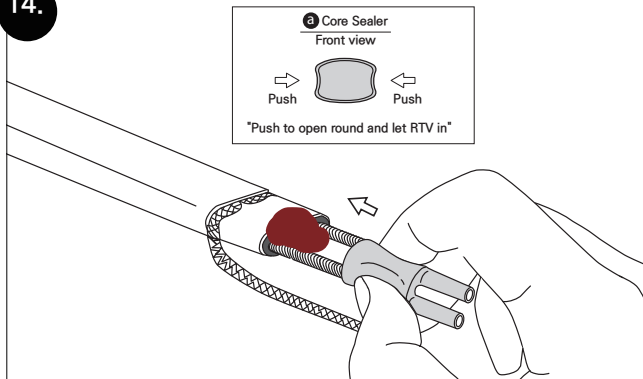
J RTV Sealant



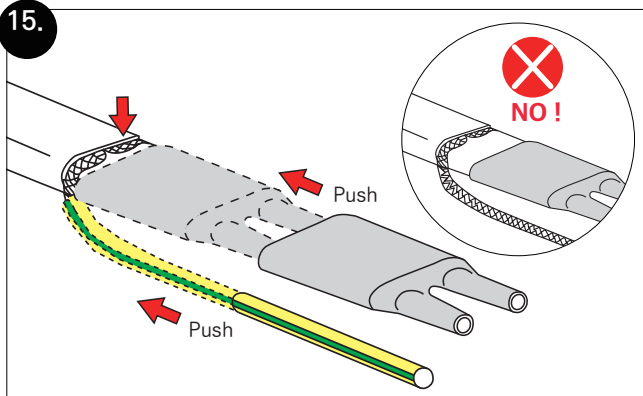
Apply extra RTV for GHU-CT due to its smaller dimensions to ensure proper sealing.

In-Line Splice Connection

14.



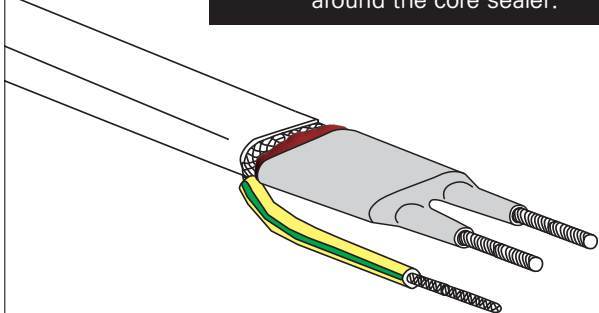
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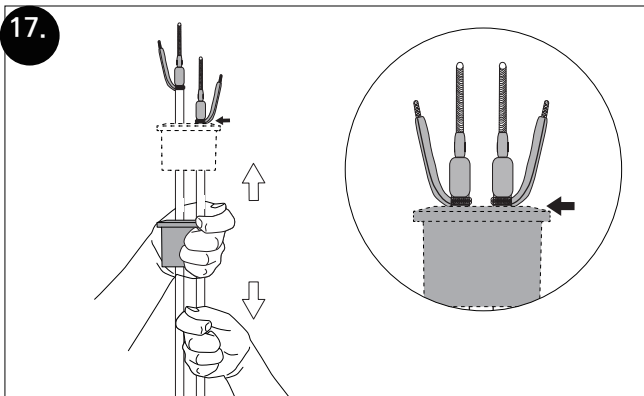
In-Line Splice Connection

16.

NOTE : RTV Sealant should ooze out around the core sealer.

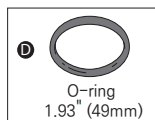
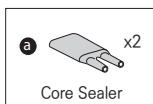


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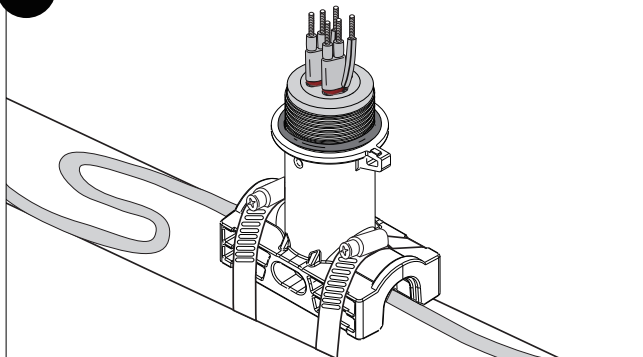
In-Line Splice Connection

18.



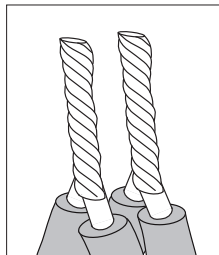
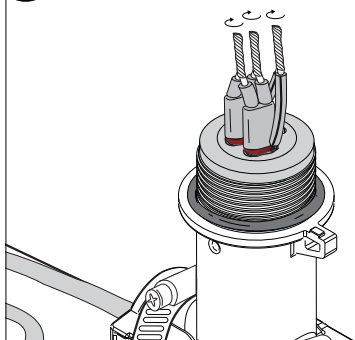
Use two Pipe Straps (K)
of the same size to match
the pipe diameter.
Pipe straps sold separately.

19.

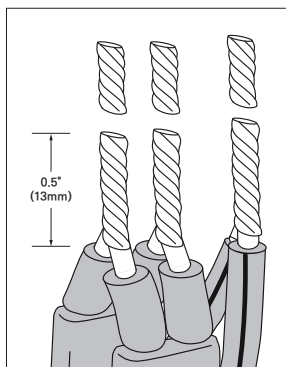
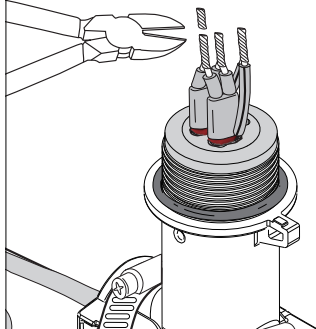


In-Line Splice Connection

20.

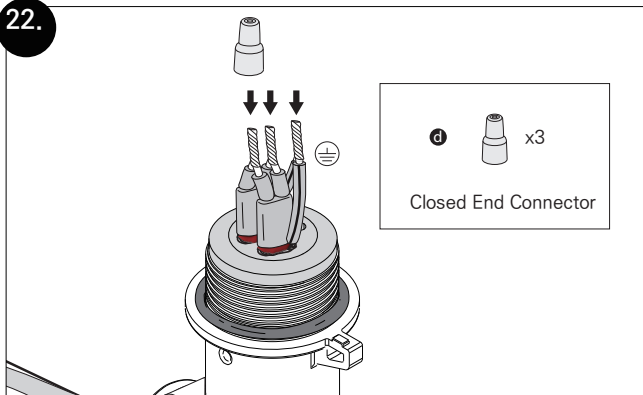


21.



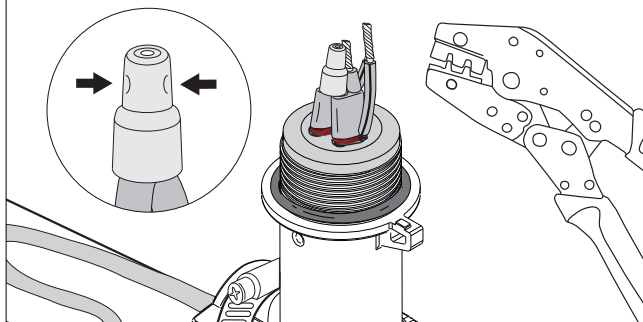
In-Line Splice Connection

22.



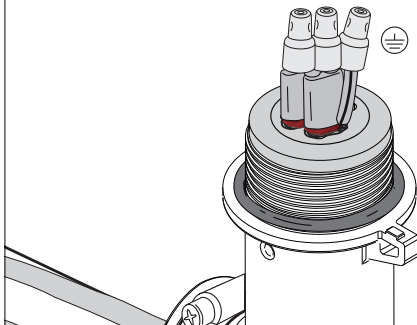
23.

Insert pre-twisted wires
into connector and crimp.

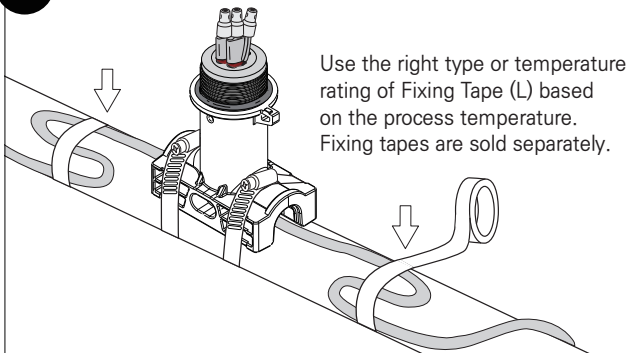


In-Line Splice Connection

24.

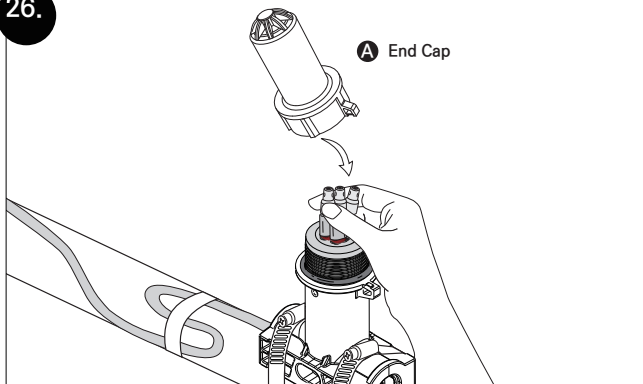


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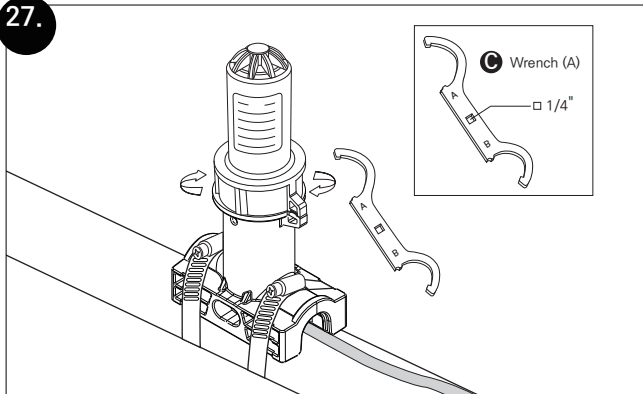


In-Line Splice Connection

26.

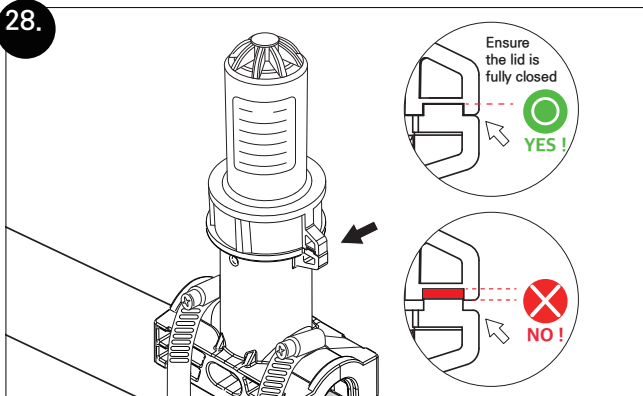


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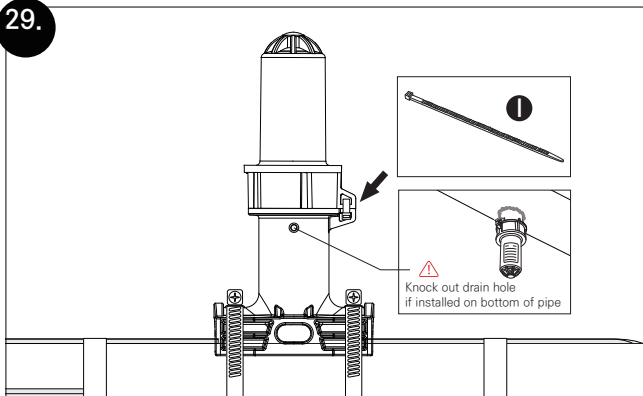


In-Line Splice Connection

28.

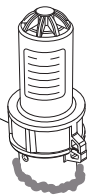


29.



In-Line Splice Connection

30.



Weather seal



Gaumer Process

ADDRESS 13616 Hempstead Road · Houston, TX, U.S.A., 77040

WEB www.gaumer.com **TEL** +1 (800) 460 5200 **E-MAIL** sales@gaumer.com