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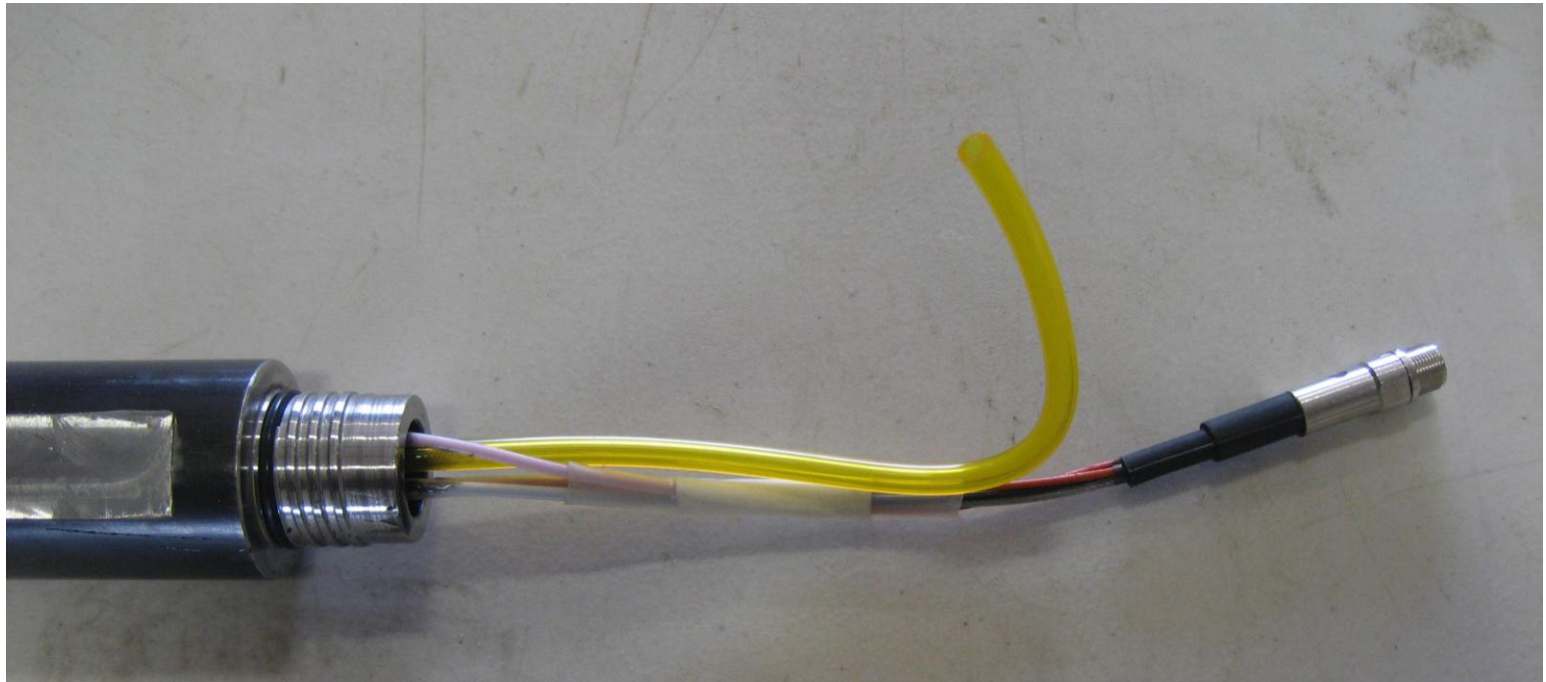


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HPT Probe Connections Field Connection Tutorial

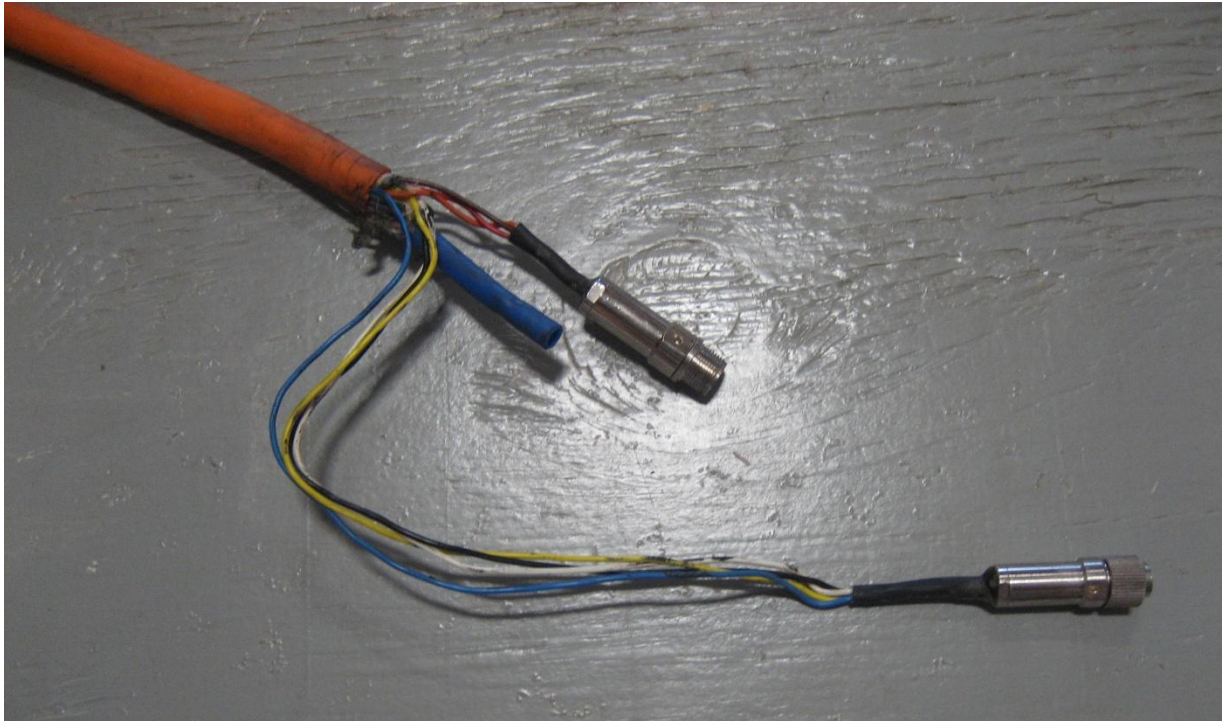
October 5, 2011



Part #: K6050 HPT Probe EC connection and water line



Part #: 43327 HPT Sensor Module and included small parts



Part #: K6415 HPT Trunkline 150 ft. (43 meter)

Optional:

Part #: K6420 HPT Trunkline 200 ft. (61 meter)



Basic hand tools and supplies needed when connecting HPT Probe:

Di-Electric Grease

Dikes

Electrical Tape

X-Acto knife

Part #: 37031 Water Seal (orange)

Part #: 36378 Water Seal Spacer set (gray)

Part #: 16172 Membrane Wrench





Example of HPT connections made to proper length

It is important to take care when assembling and bundling down hole HPT connections, time spent making these connections neat and secure will pay off with increased productivity when in the field.

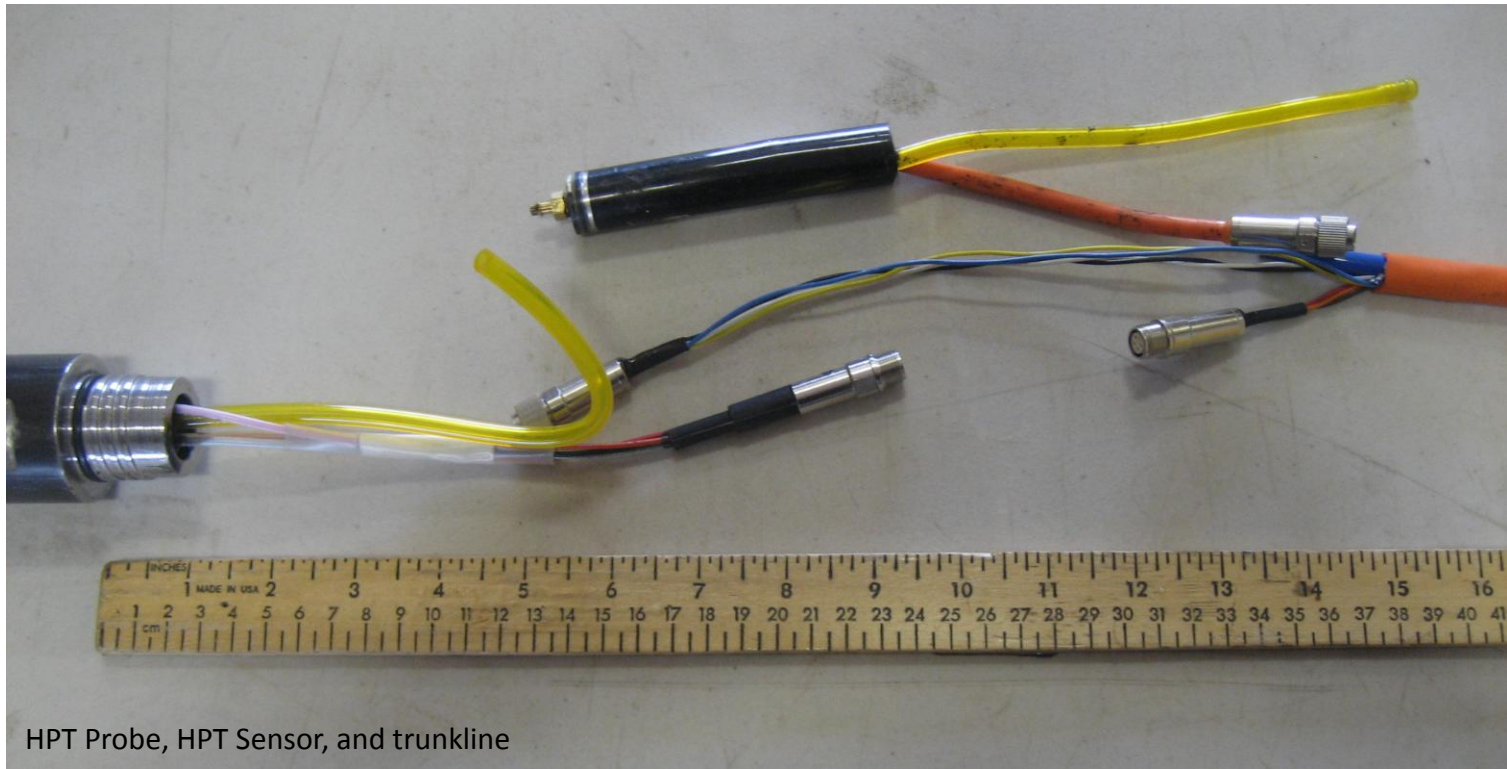
IMPORTANT NOTE:

Connections cannot have an overall length more than 40 cm (16 inches) to fit inside Connection Tube. Measured from end of HPT Trunkline outer jacket to shoulder of HPT Probe.



Part #: 31641 MIP/HPT Connection Tube

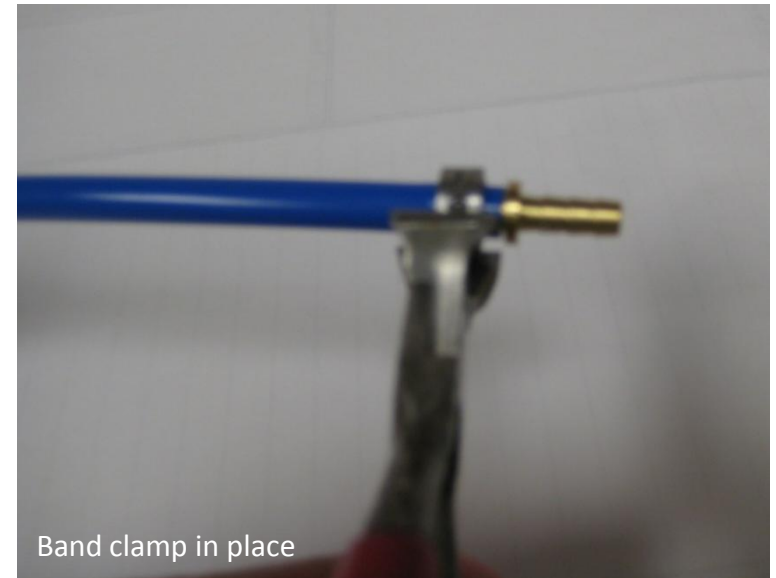




HPT Probe, HPT Sensor, and trunkline

Assembly Lay Out:

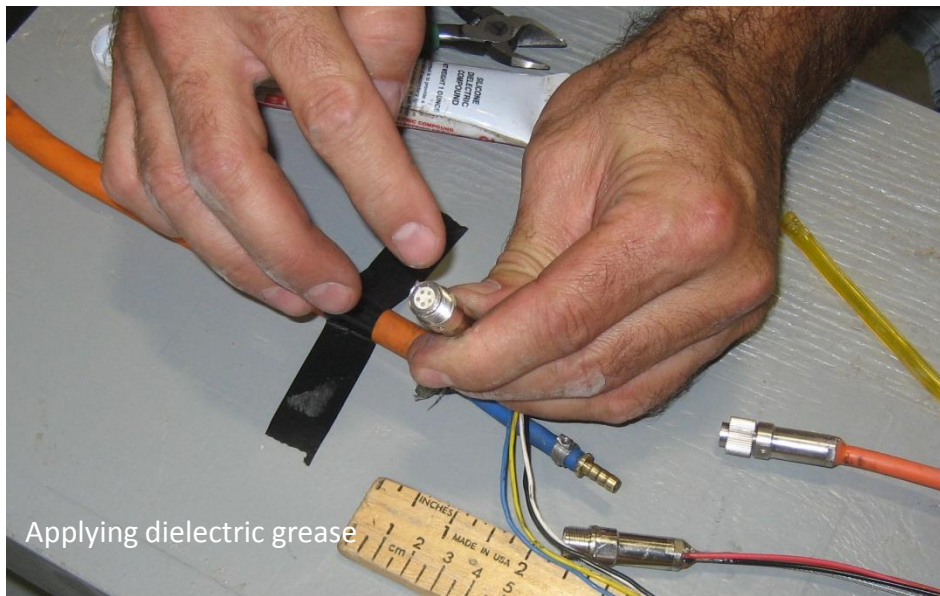
Begin by laying out components to determine tubing lengths.



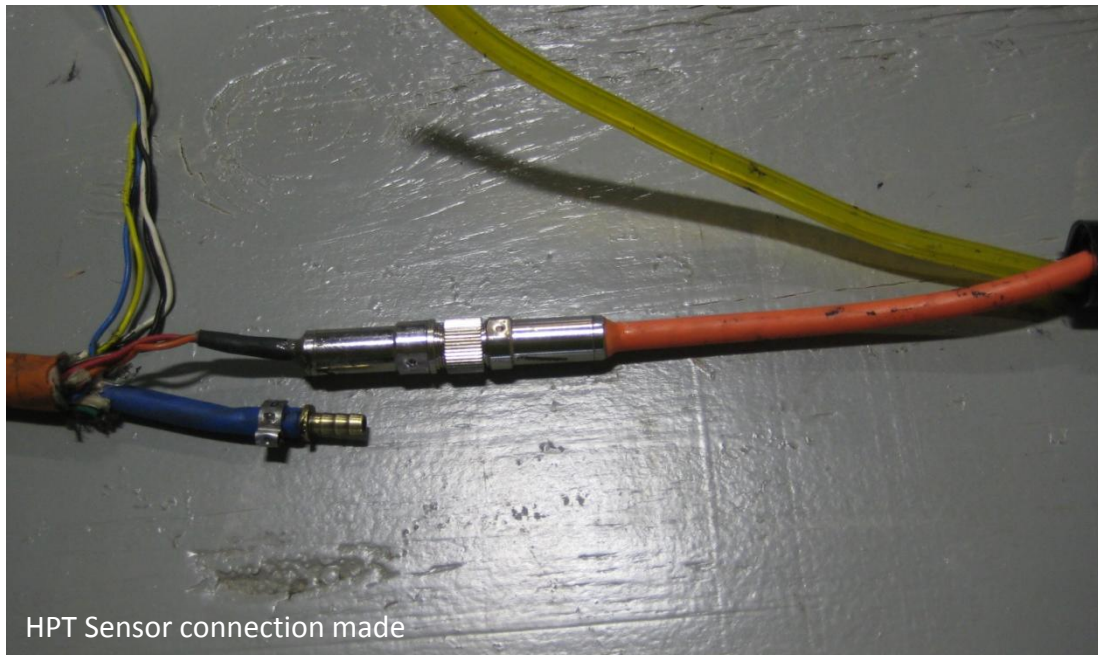
HPT Trunkline Preparation:

Begin by sliding band clamp on to blue water line in HPT Trunkline. Next install barbed union fully into blue water line in HPT trunkline and secure with band clamp . (Barbed union and band clamps are included with HPT Sensor Module)

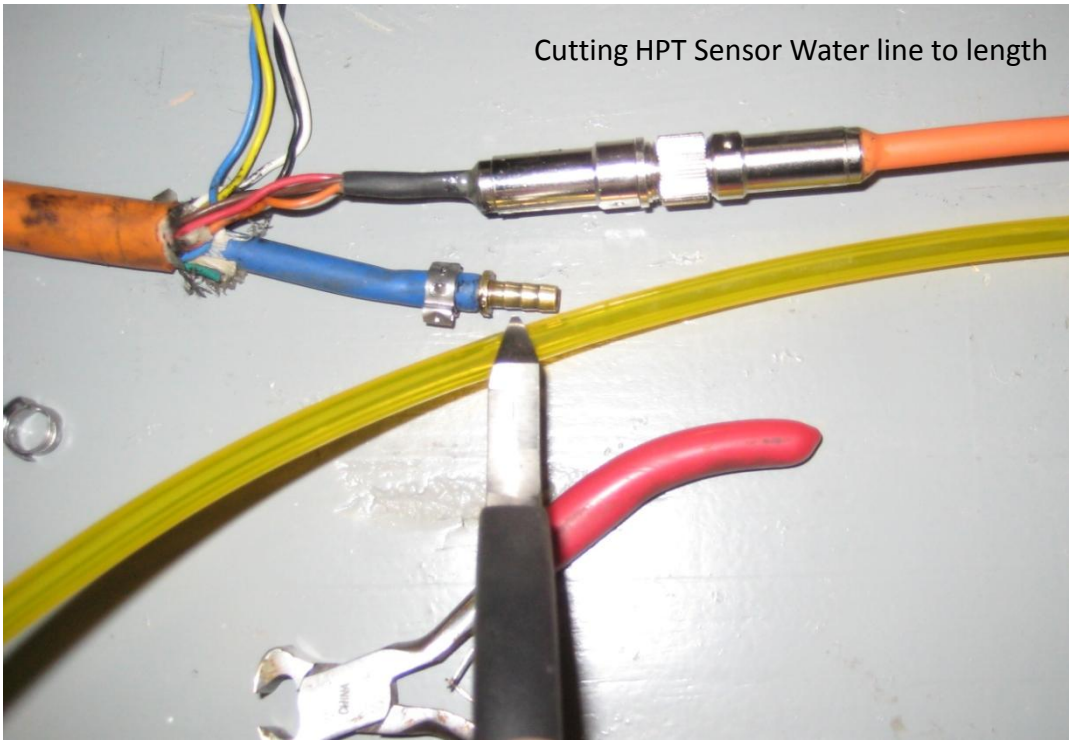




Connect HPT Sensor:
Apply small amount of dielectric grease to chrome to connector for HPT Sensor on HPT Trunkline and make up HPT Sensor connection.



Cutting HPT Sensor Water line to length

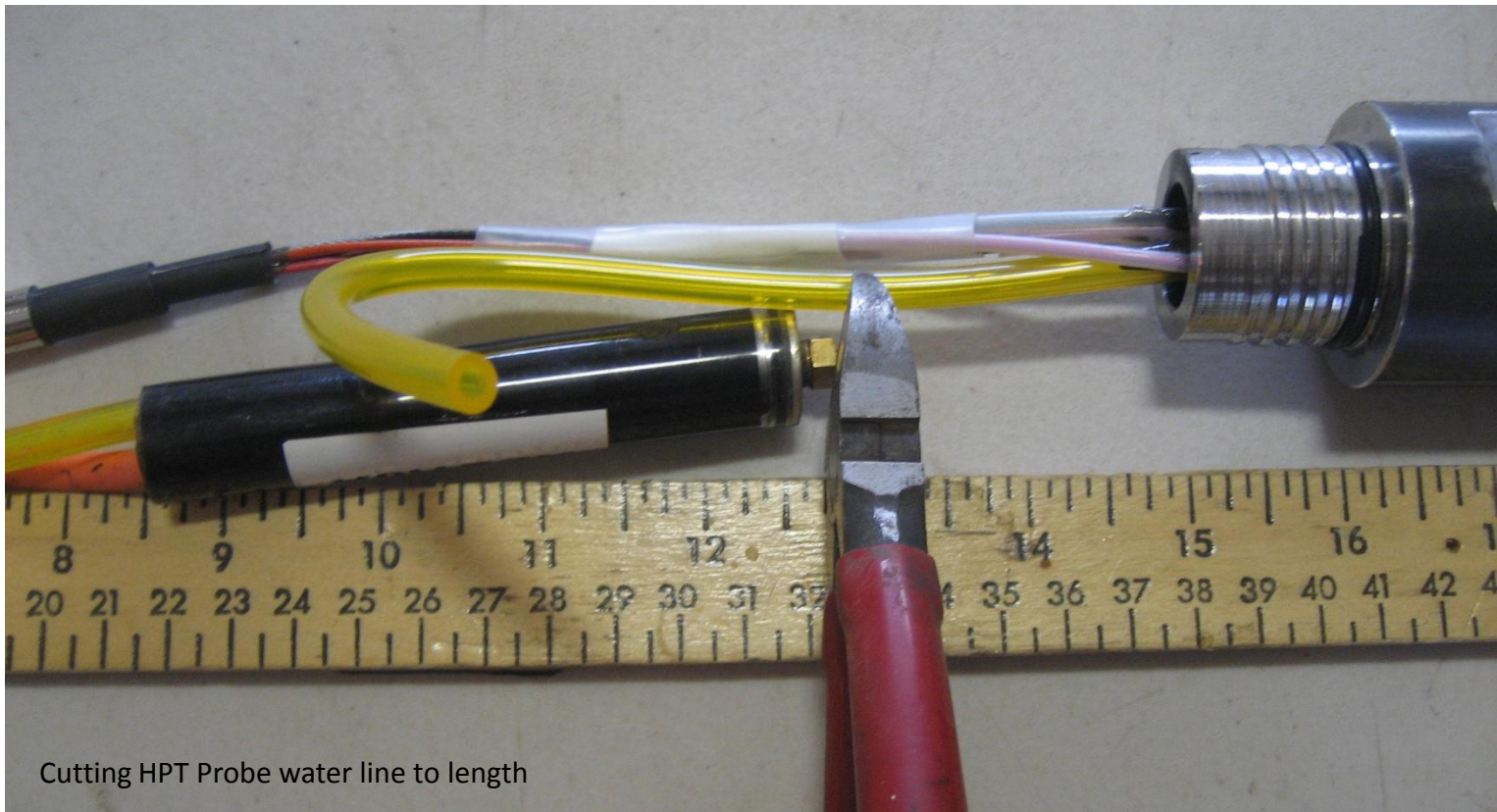


Cut Sensor Water Line:

Determine length of yellow water line of HPT Sensor and cut to length using dikes or sharp knife. Length of water line should be the same as the length of sensor electrical cable.

Cut to length and secured with band clamp



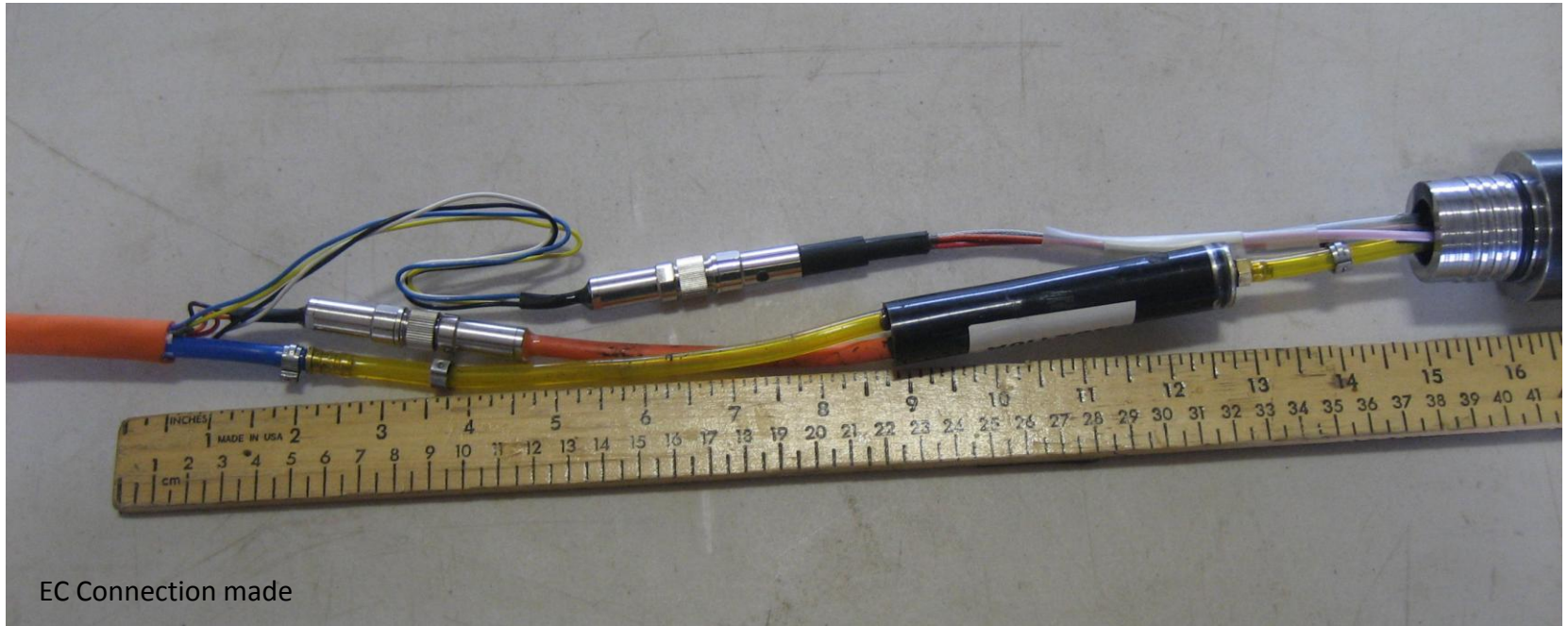


Cutting HPT Probe water line to length

Cut HPT Probe Water Line:

Determine length and trim yellow tube going into HPT Probe using dikes or sharp knife and secure with band clamp.

Use tape measure or ruler to be sure overall length of connections will not be longer than 40 cm (16 inches).



HPT Probe EC Connection:

Apply small amount of dielectric grease to chrome connector on HPT Probe and make up EC connection. Loop extra length of wire as shown in picture above. Make sure chrome connections are offset as shown, this keeps the overall diameter of connection bundle small so it will fit easily into the connection tube.



Neatly bundle connections

Bundle the Connections:
Using electrical tape neatly bundle and secure connections making the overall diameter as small as possible.



Connection bundle should look similar to this

Assembly Notes:

Electrical connectors are offset from one another.

None of the connectors should be positioned along the length of the sensor.



Connection tube must slide easily over connections

Connection Tube Installation:

Slide Connection Tube over connections and thread onto probe.

Connection tube must slide on easily so it will not twist connections when threading onto probe. Twisted connections will fail almost immediately!!!



10-12 wraps of electrical tape on trunkline

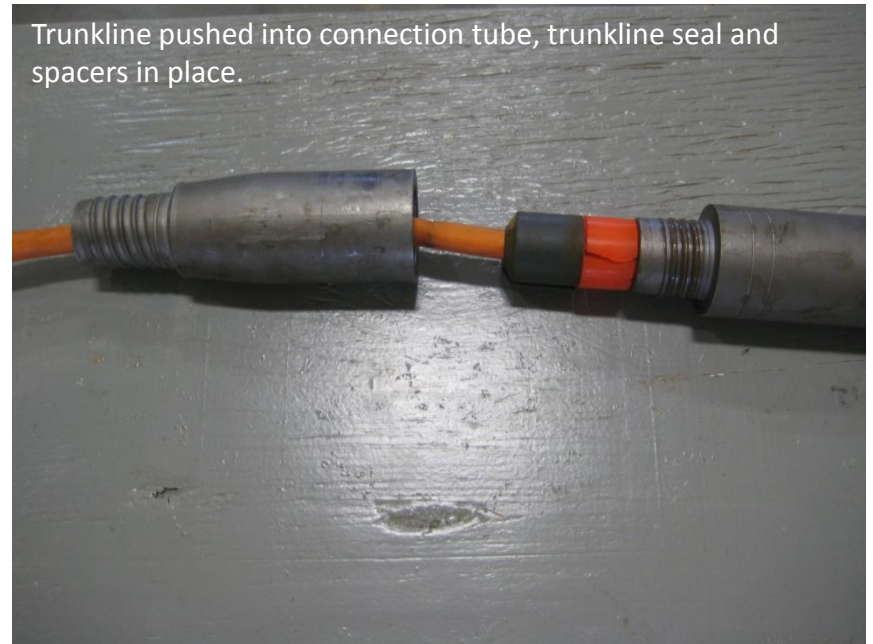
Connection Strain Relief:

Once Connection Tube is threaded onto probe put 10 - 12 wraps of electrical tape on the trunkline as close to the top of the connection tube as possible.

Water seal and Seal spacers on Trunkline.

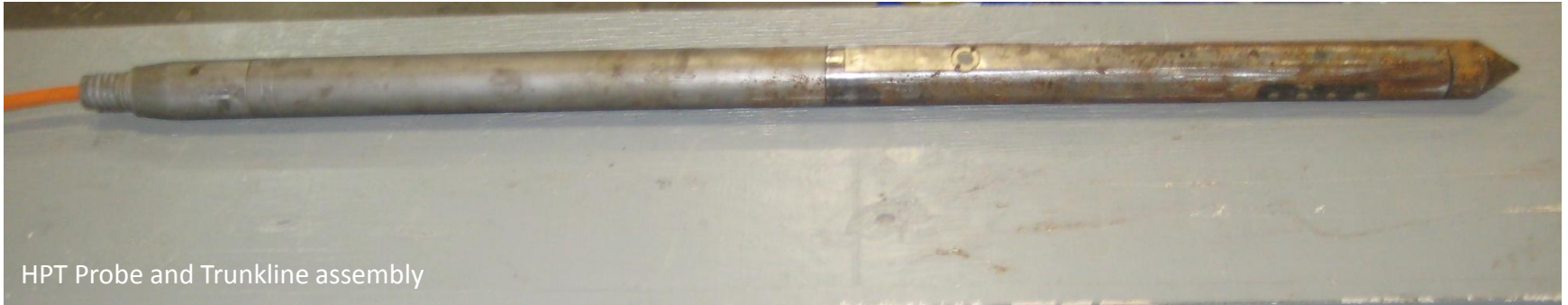


Trunkline pushed into connection tube, trunkline seal and spacers in place.



Water Seal and Drive Head Installation:

Install orange HPT Trunkline Seal and gray Seal Spacers onto trunkline above the wraps of electrical tape. Making sure the HPT Trunkline Seal does not slide over the top of the electrical tape, push the trunkline into the connection tube (approx. 2 cm) and thread on the Drive Head. This will relieve any tension on the connections and provide additional strain relief.



HPT Probe and Trunkline assembly

Completed Assembly:

Completed HPT Probe and Trunkline assembly.

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