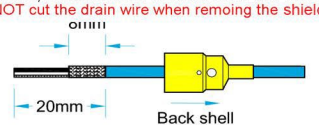
Installation Instructions For Protective Rubber Boot Kit HS-AA053/A-B

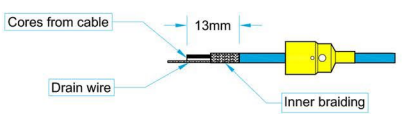
For Building Shielded Cable Connected to Shell or Isolated

You will need the following parts to assemble HS-AA053/A-B

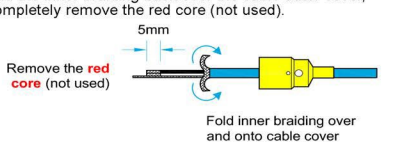
1. Prepare one end of the cable for HS-AA053/A-B
Apply a thin layer of silicone grease or sleeve lubricant onto the other end of the cable.
Slide the rubber boot over the cable end and insert black shell over the cable end.
Prepare the other end of the cable, remove 20mm of cable cover and trim the inner braiding to 8mm
DO NOT cut the drain wire when remoing the shield.



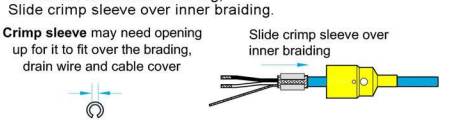
2. Trim the length of the white and black core to 13mm length.



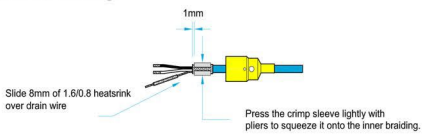
3. Strip off 5mm of cable covering from the cores to expose wire ends and solder the ends of the cable.
Fold the inner braiding back over the cable outer cover,
Completely remove the red core (not used).



4. Open the crimp sleeve slightly so it fits over the cable and folded back inner braiding.
Slide crimp sleeve over inner braiding.



5. Press the crimp sleeve lightly with pliers to squeeze it onto the braiding.



6. Solder core ends to connector pins, see figure 1a.
Solder white core from cable to pin A on connector.
Solder black core from cable to pin B on connector.
Shield grounding - choose one(1):
a) cable shield grounding at the sensor, solder the drainwire to the accelerometer case connection pin,
OR
b) cable shield grounding remote to the sensor, snip the drain wire flush with the cable end.

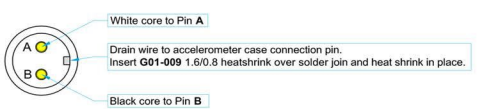
Insert rubber washer over connector end, see figure 1b.

For shield ground at the sensor, connect drain wire to accelerometer case connection pin; Insert G01-009 1.6/0.8 heatshrink over solder join and heat skrink in place.
For shield grounding remotely (receiving instrument etc), snip the drain wire flush with the cable end.

7. Screw **back shell** onto connector, see figure 1c.
Check the **crimp sleeve** is flush with the end of the **back shell** and has not moved away, see figure 1c.
If it was moved out of it's position during the insertion of the **back shell** then unscrew **back shell** and start again.

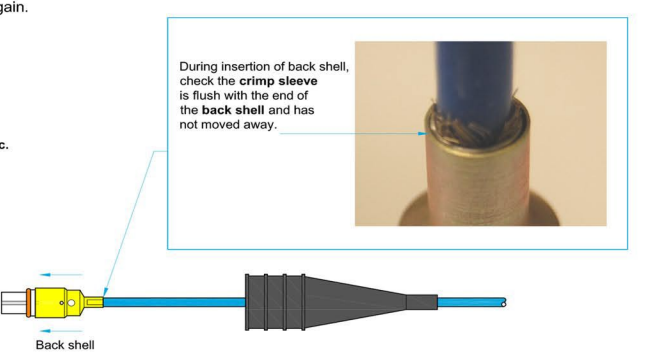
Figure 1

a.



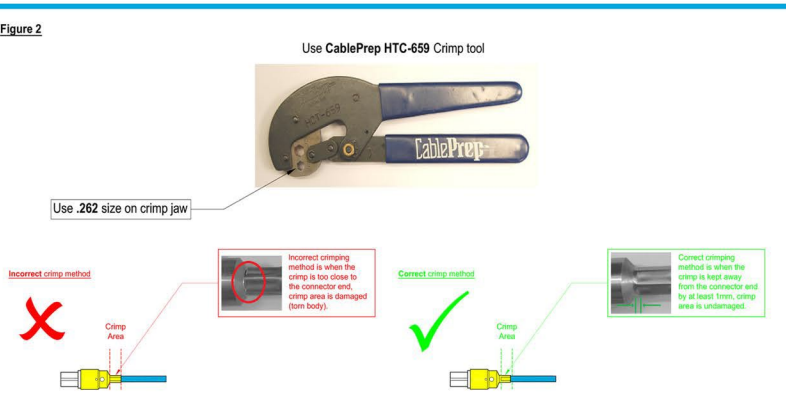
b.

c.



8. Crimp back shell onto crimp sleeve, use **Cable Prep HTC-659** Crimp tool and **.262** size on crimp jaw, see figure 2.

Figure 2



9. Two part epoxy adhesive with mixing nozzel.
   Position hole facing upwards so the epoxy does not leak out of the hole, see figure 5a.
   Insert the epoxy adhesive nozzel into the hole in the back shell and fill till it is level, wipe any access off and allow to cure.

10. Apply a layer of silicone grease or sleeve lubricant onto cable, see figure 5b.
    Slide the rubber boot towards the connector end.
    As the rubber boot slides over the lubricant it should slide easier.
    Pull the rubber boot back and apple more lubricant if the boot does not slide easily.

Figure 5

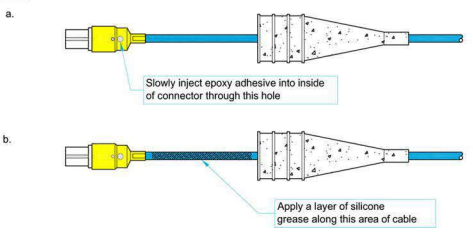
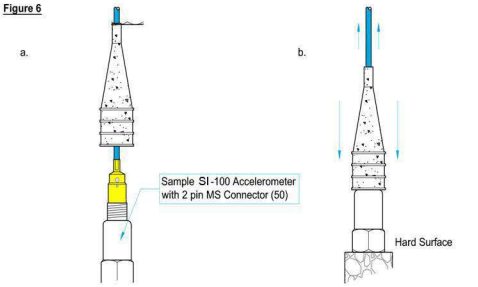


Figure 6

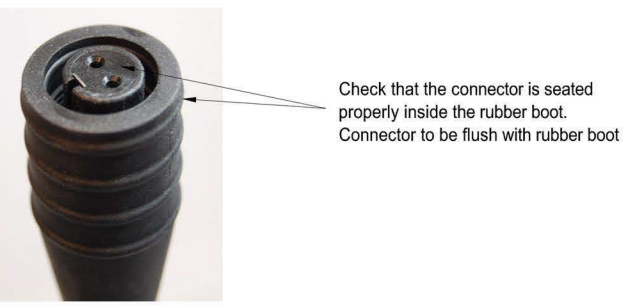


11. Insert a sample HS-100 series 2 pin MS connect version (50) onto the connector end, see figure 6a.

12. Stand the base of the HS-100 onto a hard surface,
    Push down on the rubber boot so it slides over the connector end, see figure 6b

13. Remove the Sample HS-100 Accelerometer from the connector.
    Check the depth of the connector housing inside the rubber boot, see figure 3.
    Check that the connector is seated properly inside the rubber boot (connector end is to be flush with rubber boot).

Figure 3



14. Test the connector drain wire connection, insert a HS-100 2 pin MS connector (50) onto the connector end.
    Set up a DMM set to the ⊣◁ range.

15. Place one end of the DMM to the drain wire on the free end and the other onto the case connection strip (inside the groove in the connector end), the meter will “Beep” for continuity.

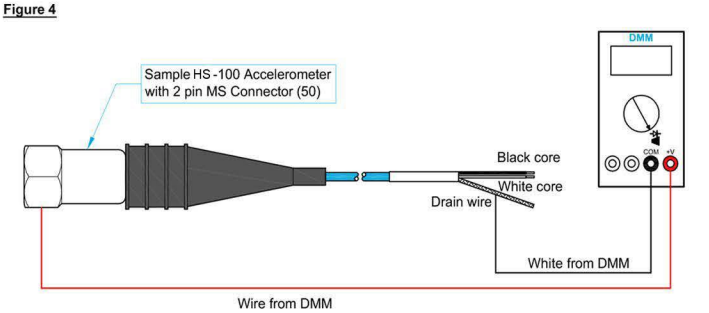
16. Test that the drain wire is isolated from the cores, see figure 4.
    Turn the meter range to 20MΩ range.

    Whilst the red wire drom th DMM is still attached to the Sample Accelerometer body, place the white wire from the DMM to the following core
    on the free end:-
    The white core and then the Black core.

    Not not hold the metal probe ends from the DMM with your fingers as this will cause false readings.
    The meter display should read “.1” (no short or resistance between the cores).

    If the readings on the DMM display read “0.00” or higher then the isolation test has failed and the unit must be re-worked.

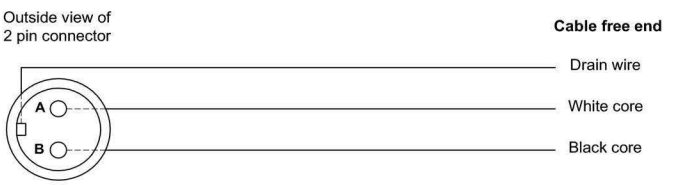
Figure 4



17. Test the connections on the cable assembly are correct, see figure 5.
    Set up a DMM set to the ⊣◁ range.

Test between the connection pins and the core ends on the free end of the cable for continuity.

Figure 5



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