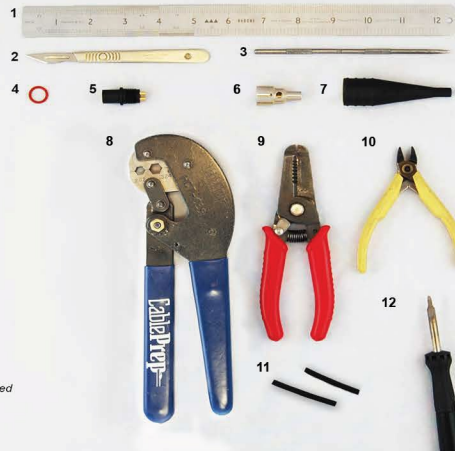


Assembly Instructions For Protective Rubber Boot Kit HS-AA054 With Shielded Cable Connected to Shell or Isolated

You will require the following to assemble HS-AA054

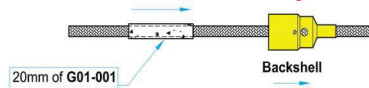
1. Ruler
2. Knife
3. Debraider
4. Rubber Washer (HS-AA053)
5. Connector Insert Body (HS-AA053)
6. Backshell (HS-AA053)
7. Rubber Boot (HS-AA053)
8. Crimp Tool
9. Wire Stripper
10. Wire Cutter
11. Heat Shrink (x2)
12. Soldering Iron
13. Solder
14. Quick set epoxy with mixing nozzle
15. Heat Gun (not shown)

Parts 1,2,3,9,10,11,12,13,15, are not included

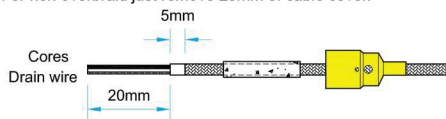


1. Prepare one end of the cable for HS-AA054
Slide the rubber boot over the cable end and insert black shell over the cable end.
prepare the other end of the cable, remove 20mm of the cable cover.

DO NOT cut the drain wire when removing the shield.



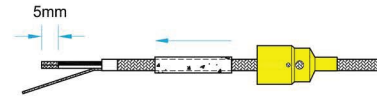
2. Remove 20mm of cable cover.
Remove 5mm of overbraid from the cable.
For non overbraid just remove 20mm of cable cover.



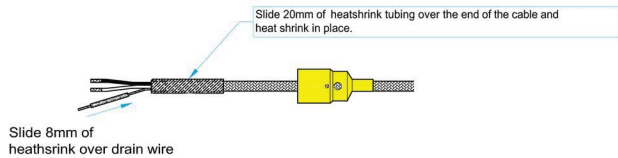
3. Cut the black and white core lengths down to 13mm.
Keep the drain wire length at 20mm.



4. Remove 5mm of core cover from the cores to expose the wires.
Tin the exposed wire ends.



5. Slide 20mm of heatshrink tubing over the end of the cable and heat shrink in place.
Slide 8mm of heatshrink tubing over drain wire and heat shrink it in place.



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.

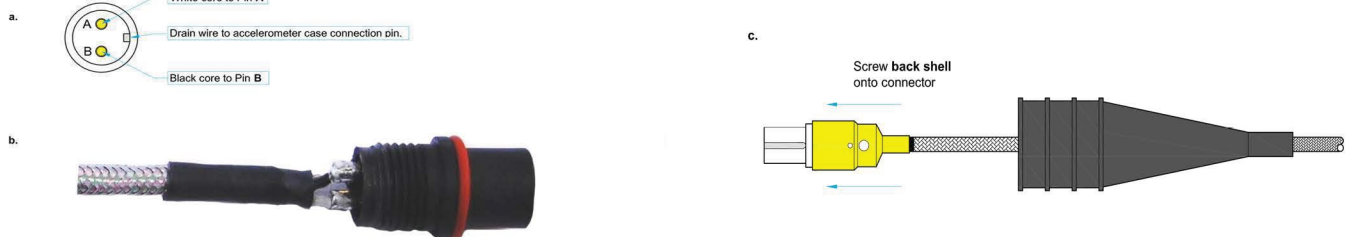
Insert rubber washer over connector end, see figure 1b.

For shield ground at the sensor, connect drain wire to accelerometer case connection pin

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



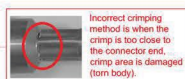
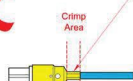
8. Crimp back shell onto crimp sleeve, use **Cable Prep HTC-760** Crimp tool and .213 size on crimp jaw. see figure 2.

Figure 2

Use CablePrep HTC-760 Crimp tool

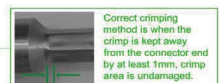
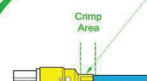
Use .213 size on crimp jaw

Incorrect crimp method



Incorrect crimping method is when the crimp is too close to the connector end, crimp area is damaged (torn body).

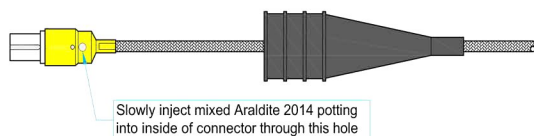
Correct crimp method



Correct crimping method is when the crimp is kept away from the connector end and by at least 1mm, crimp area is undamaged.

9. Two part epoxy adhesive with mixing nozzle and gun. Recommended RS 236-7795, 512-825 and 503-379. Position hole facing upwards so the epoxy does not leak out of the hole, see figure 5a.
Insert the epoxy adhesive nozzle into the hole in the back shell and fill till it is level, wipe any excess off and allow to cure.

Figure 5

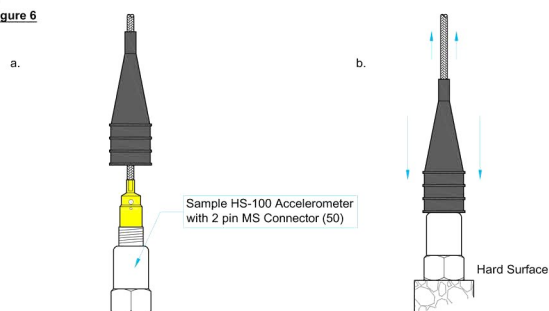


13. Remove the Sample HS-100 Accelerometer from the connector.
Check the depth of the connector housing inside the rubber boot, see figure 3.
Check that the connector is seated properly inside the rubber boot (connector end is to be flush with rubber boot).

Figure 3



Figure 6



11. Insert a sample HS-100 series 2 pin MS connector 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

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 Ω 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 20M Ω range.

Whilst the red wire from the 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.

Do 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.

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

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

Figure 4

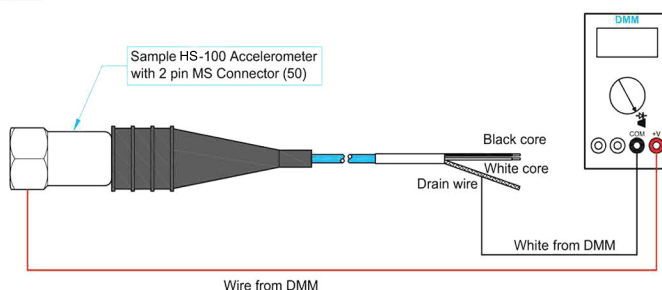


Figure 5

