

# Helios H4 Assembly Instructions

### H4 connectors come pre-assembled as below with loose turned crimp contacts



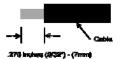
PV-10050X-F (FEMALE COUPLER)



PV-10050X-M (MALE COUPLER)

## **H4 Connector cable preparation and stripping**

1.1 Strip cable 0.276 inches – 7,0mm and be careful NOT to nick conductors.



Amphenol specified strip tool (PV-670509-000) can be used in this step. Adjust the striper stopper and put the cable in corresponding notch to strip the length of 7mm. See below pictures 1 and 2





## **H4 Connector contact crimping**

1.2 Insert striped cable into contact barrel and insure all conductor strands are captured in the contact barrel and the conductors are visible in the inspection hole. See below pictures 3 and 4



Crimp contact barrel by using the hex or 4-ident crimping die. 1.3 See below pictures 5 and 6 for crimp result for hex crimp.



Picture 5



Amphenol specified crimp tool (PV-670508-000) can be used in this step.

Put the contact barrel with striped cable in the corresponding crimping notch and crimp the contact. See below picture 7, 8 and 9.





Picture 8



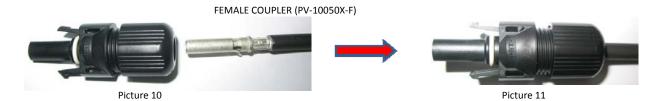
Picture 9

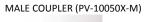
The pull-out forces requirements will have to be as following:

Cable size	Cable pull –out force requirement
2.5 mm <sup>2</sup>	Min. 310 N (70 Lbs)
4.0 mm <sup>2</sup>	Min. 400 N (90 Lbs)
6.0 mm <sup>2</sup>	Min. 450 N (100 Lbs)

### **H4 Connector contact insertion**

1.4 Insert contact cable assembly into back of male and female connector. A "click" should be heard or felt when the contact cable assembly is seated in correct position. Contacts cannot be removed once seated. See below pictures 10-14











Picture 13

## H4 Connector final wrench of back cap

1.5 Wrest the cap by using the torque to 23 to 25 inch pounds - 2.6 - 2.9 NM. Amphenol specified wrench tool (PV-670803-000) can be used in this step as per below picture 14 and 15.







Picture 15

#### H4 Connector mating and un-mating

After wrest the cap tightly, align the 2 half connectors and mate them together by hand until a "click" is heard or felt. See pictures 16 and 17 below. 1.6



Picture 16



Picture 17

When the separation of connector is necessary, use the Amphenol specified ring tool (PV-670803-000) or wrench tool (PV-670804-000) to separate. 1.7 And while using the ring tool or wrench tool, please make sure the wedge side of the fingers faces the female connector and push the tool down. Then separate the connector by hand. See below pictures 18 and 19.



Picture 18



Picture 19