

## KONA CONTACT ASSEMBLY AND REMOVAL

### CABLE ASSEMBLY TO CONTACT

1. Ensure that the wire to be crimped is within the specified size for the contact. Failure to use the specified wire size will result in a poor-quality solder joint.

Contact	Wire Gauge (AWG)	Max Conductor Diameter	Max Insulation Diameter
KA1-0400005	8	4.25mm	7.5mm

2. Cut the end of the cable to be terminated so that there is a clean-cut end (Figure A). Strip the cable to the correct length (Figure B) using a wire stripper, preferably with an adjustable rotating cutter. This should result in all the strands lying together neatly. If the lay of the strands is disturbed, it may be re-imposed with a slight twist.

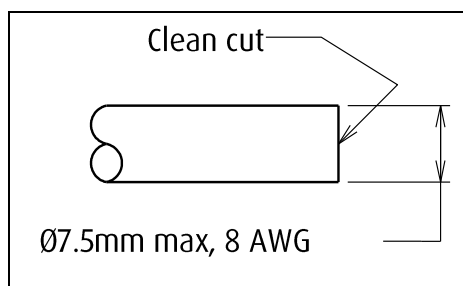


Figure A: Wire cut

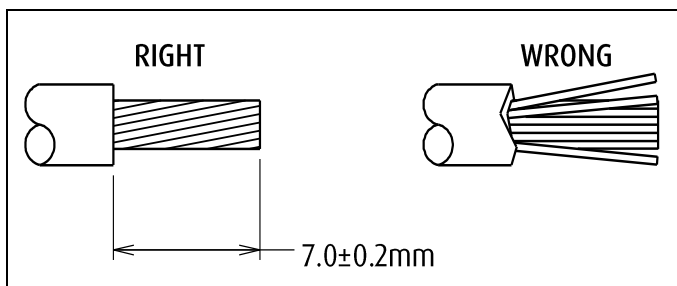


Figure B: Wire strip

3. Coat the stripped portion of the wire and solder cup area in flux and apply a small amount of solder to pre-tin the wire. Ensure that the pre-tinned wire does not exceed a diameter of  $\text{Ø}4.50\text{mm}$ .
4. Secure the contact at a  $45^\circ$  angle and insert the wire into the solder cup ensuring the conductor is bottomed out at the base of the solder cup.

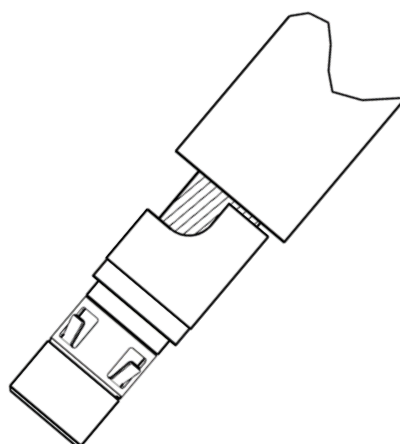
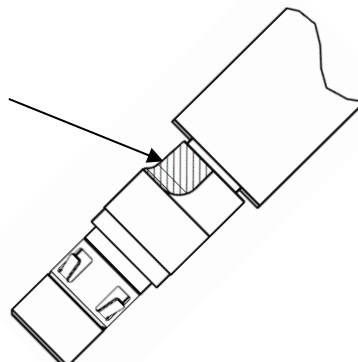


Figure C: Contact and wire assembly

- Using a soldering iron, heat the wire and solder cup and feed solder into the open areas, allow the solder to flow into the cup until it is filled, but not overfilled.

Solder cup filled but not overfilled.  
No solder on the outside edges of  
the contact.



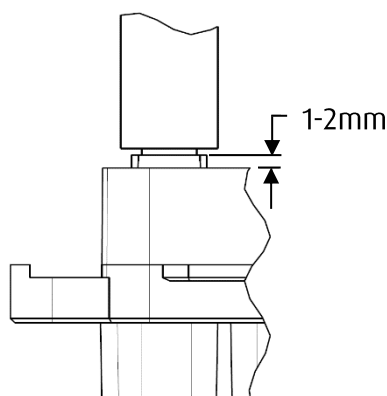
**Figure D: Properly filled solder cup**

- Clean the soldered contacts with a suitable alcohol and water wash to remove solder and flux residue.

## CONTACT ASSEMBLY INTO HOUSING

- Take the wire and contact assembly and insert into the back end of the housing, ensuring that the contact square is lined up with the housing. The contact should move freely into the housing until the back of the solder cup is around 1-2mm from the back of the housing, where resistance will be felt.

If there is resistance prior to this, withdraw the contact, and ensure the contact and collar assembly is clean and free of debris before inserting again.



**Figure E: Contact prior to proper assembly**

- Gently push on the wire until you can feel / hear that the contact collar has engaged within the housing. The back of the solder cup should sit flush with the lower inner walls of the housing once fully inserted.

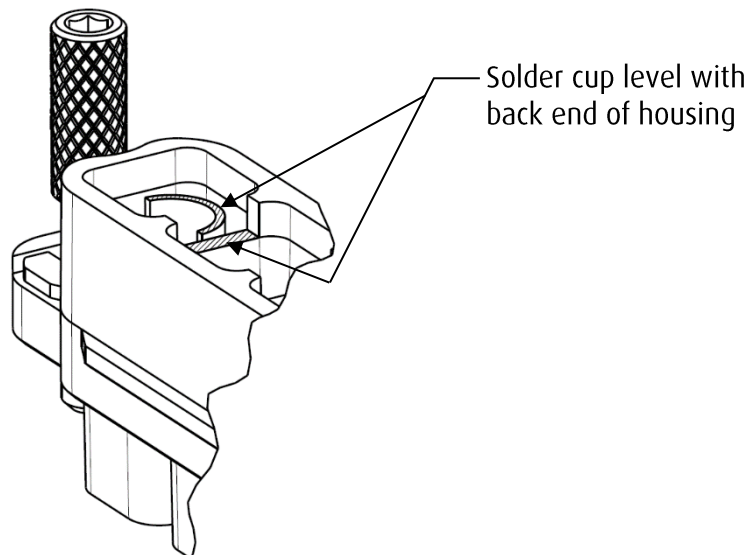


Figure F: Contact fully assembled into housing (*wire hidden for clarity*)

## CONTACT REMOVAL FROM HOUSING

1. Insert ZA1-9040000 contact removal tool into the mating end of the cable housing, making sure the end of the tool goes over the female contact without pushing on the front edge. Push slightly on the rear of the contact while inserting the tool (this helps properly engage over the retention tabs internally).
2. Keep going until the score mark on the tool is in line with the front edge of the housing. At this point, you have disengaged the inner retention tabs, and the tool should not be pushed in any further.
3. Gently pull back on the contact – allow the tool to move slightly if required, to center itself within the housing as the contact is removed.
4. Completely remove the contact and wire from the assembly.

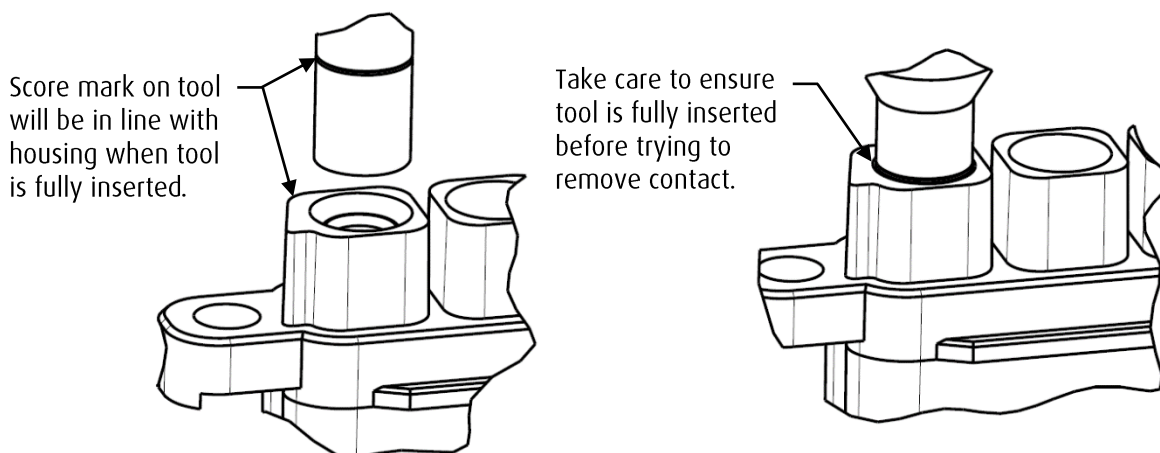


Figure G: Contact Removal