

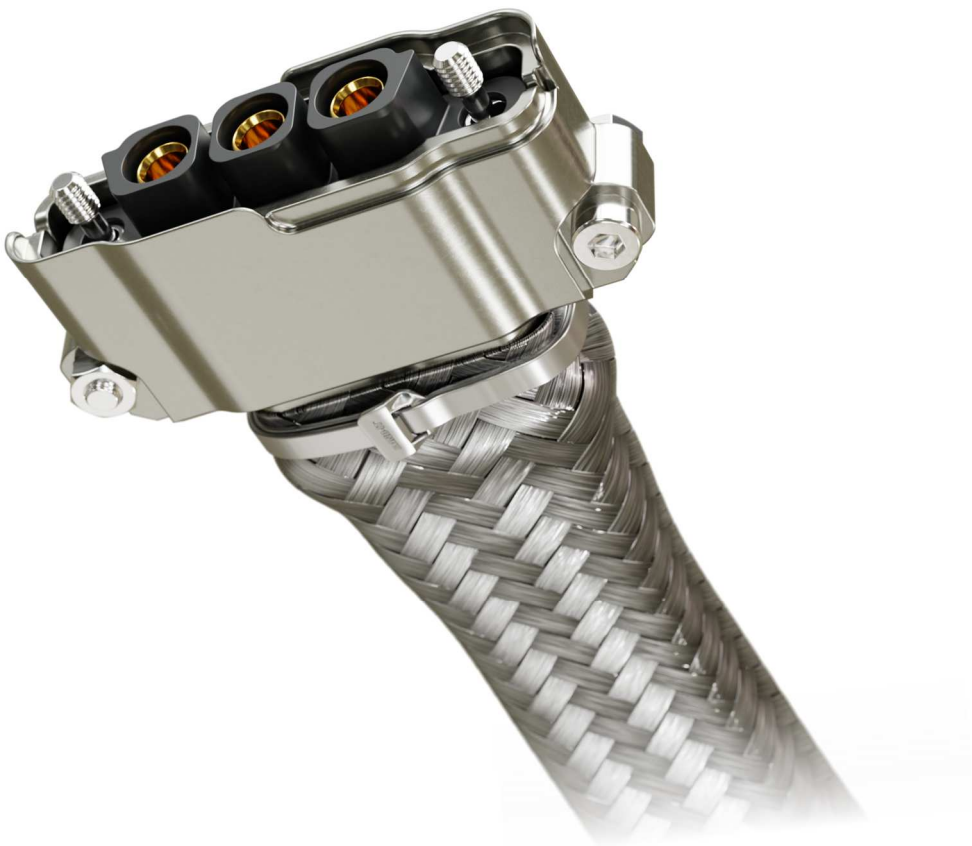


# HARWIN

## Instruction Sheet

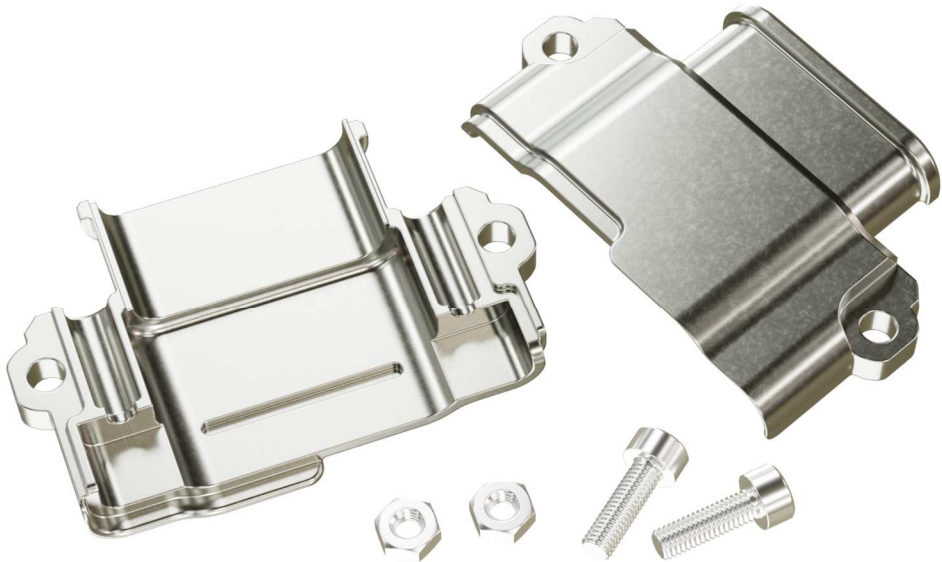
**IS-53**

Kona Metal Backshell  
KA1-970



INTRODUCTION

This instruction sheet will assist with assembly of the metal backshell hoods in the Kona range. These backshells are compatible with female and male connectors, and can be fitted to completed cable assemblies. The backshell includes a braid retention feature, for a fully shielded cable assembly.



PRODUCT INFORMATION

- KA1-970##00.....Metal backshell kit for Male & Female Connectors
- KA1-201##98M1 .....Female SIL Cable Housing, Thumbscrews
- KA1-301##98M5 .....Male SIL Cable Housing, Thumbscrews
- KA1-FSV1-#-XXXXALXX.....Female SIL Single Ended Cable Assembly, Thumbscrews
- KA1-FSVA1-#-XXXXA-FVA1 .....Female SIL Double Ended Cable Assembly, Thumbscrews
- KA1-MSV5-#-XXXXALXX .....Male SIL Single Ended Cable Assembly, Thumbscrews
- KA1-MSVA5-#-XXXXA-MVA5 .....Male SIL Double Ended Cable Assembly, Thumbscrews

## / # = Number of contacts in applicable housing

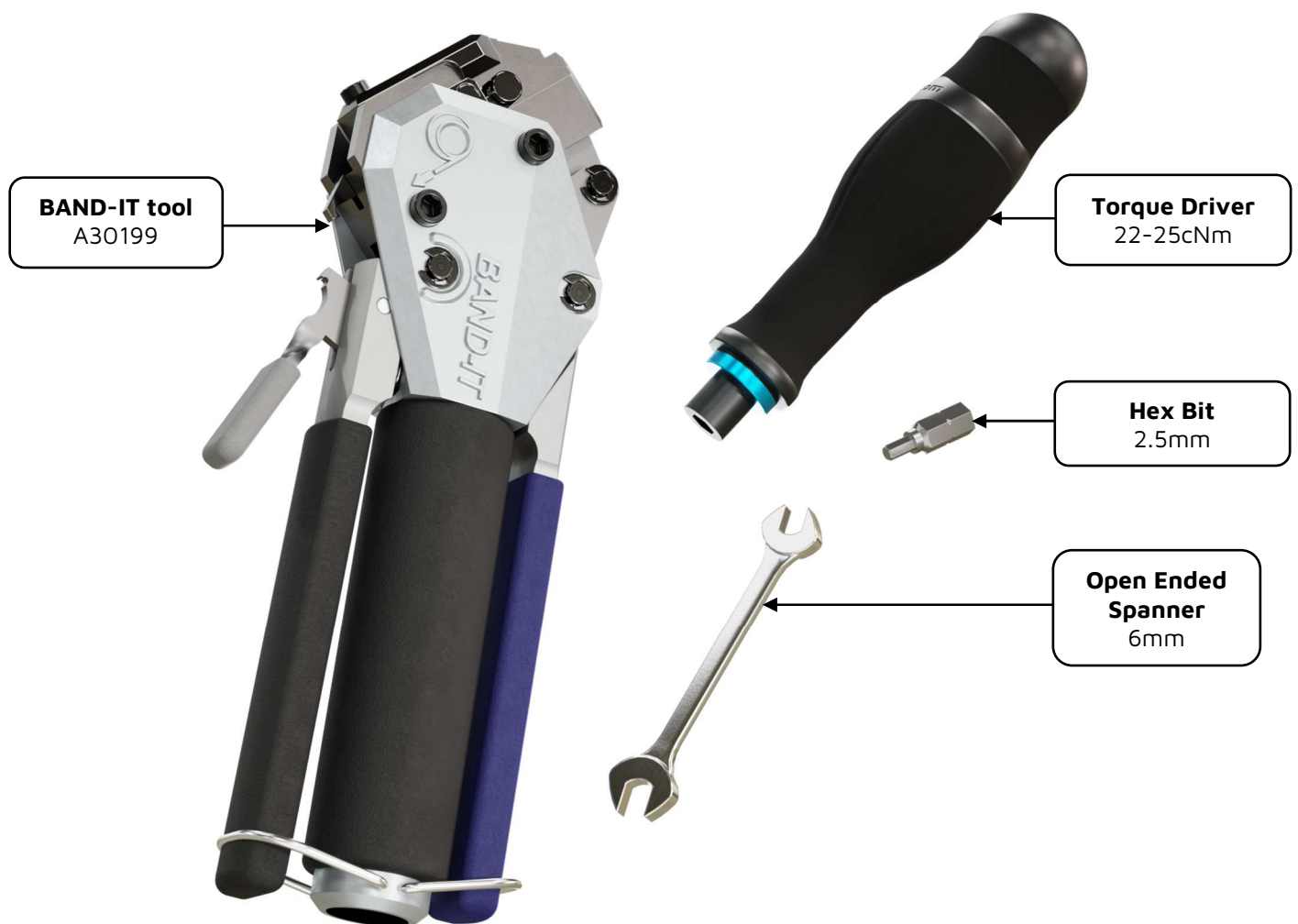
## PREPARATION

1. Confirm the backshell product is the correct kit for the connector housing.
2. If braid is being assembled, use Microband M80-9480000 or an equivalent size.
3. When adding a Kona backshell to your own cable assembly construction, complete the solder and assembly of the contacts into the connector housing first - see IS-49 for instructions on the Kona cable assembly process.

## Additional Tooling and Products

You will also need the following tools (not available from Harwin):

- Torque driver suitable for 22-25cNm Torque
- 2.5mm Hex bit compatible with the torque driver
- BAND-IT Tie-Dex II A30199 Micro Band tool (to fix the Microband tie)
- 6mm open-ended spanner



## **ASSEMBLY METHOD**

The assembly of backshell KA1-9700300 to cable assembly KA1-FSV1-3-0100AL20 is shown in these instructions, but the same process applies to other combinations.

1. Take one half of the Kona backshell and lay it flat as shown on a clean working surface. Pay attention to the slot highlighted in red, as this is important in step 2.



2. Place the cable assembly into the backshell. Ensure the rib on the connector housing sits into the slot highlighted in step 1. There is a rib on each side of the connector body.



3. Place the second side of the backshell over the assembly, making sure the second rib engages in the slot of the second side.



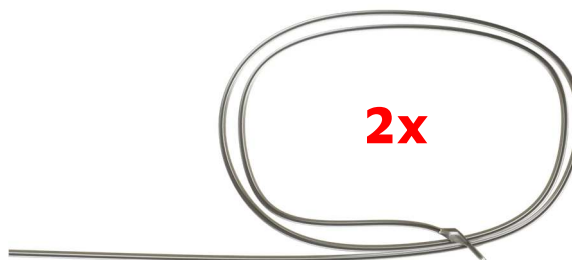
4. Assemble the M3 hex socket screws and the M3 hexagonal nuts to the two backshell halves, initially tightening by hand.



5. Hold the M3 hexagonal nuts with the 6mm open ended spanner and use the torque driver with 2.5mm hex bit to tighten the M3 hex socket screw to 22-25cNm.
6. Feed the braid over the wire and push it over the ridge on the cable exit of the backshell as shown.



7. The Microband tie is supplied straight. It must be coiled up around the cable assembly as shown. Note: the tie end must pass through the buckle two-times.



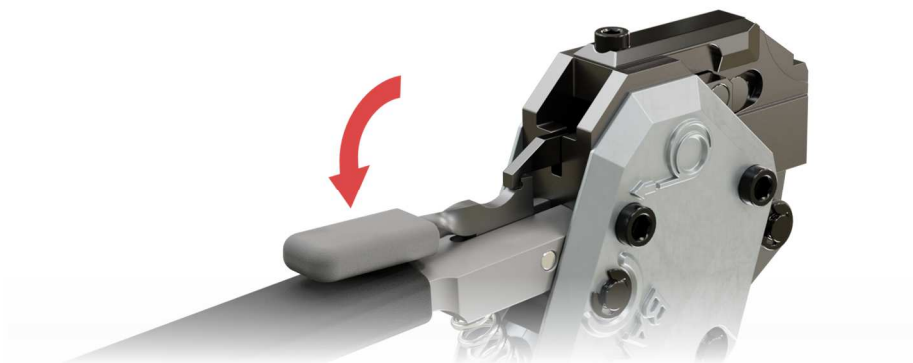
8. Pull the end of the tie through buckle and remove any slack.



9. Open the BAND-IT tool by flipping the retaining straps out of the way.

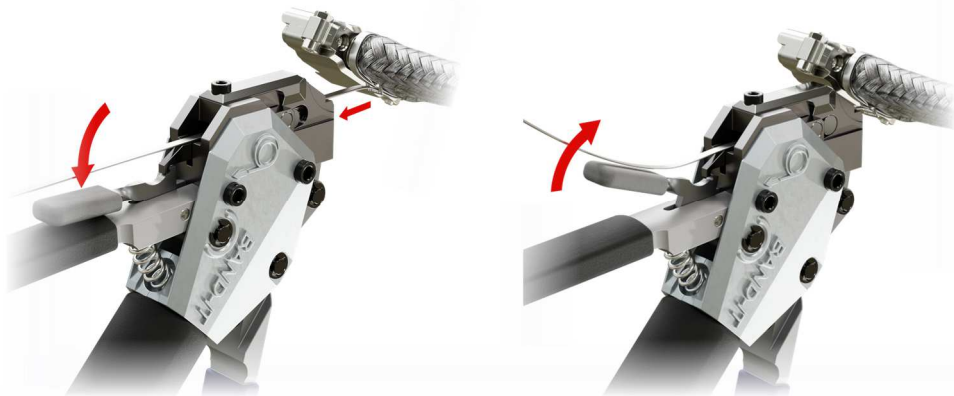


10. Depress the short finger toggle to allow the Microband tie tail to pass through the tool (note the direction of tie insertion marking on the tool).





11. Once inserted to the full depth (buckle touches tool) then release the short grey lever.



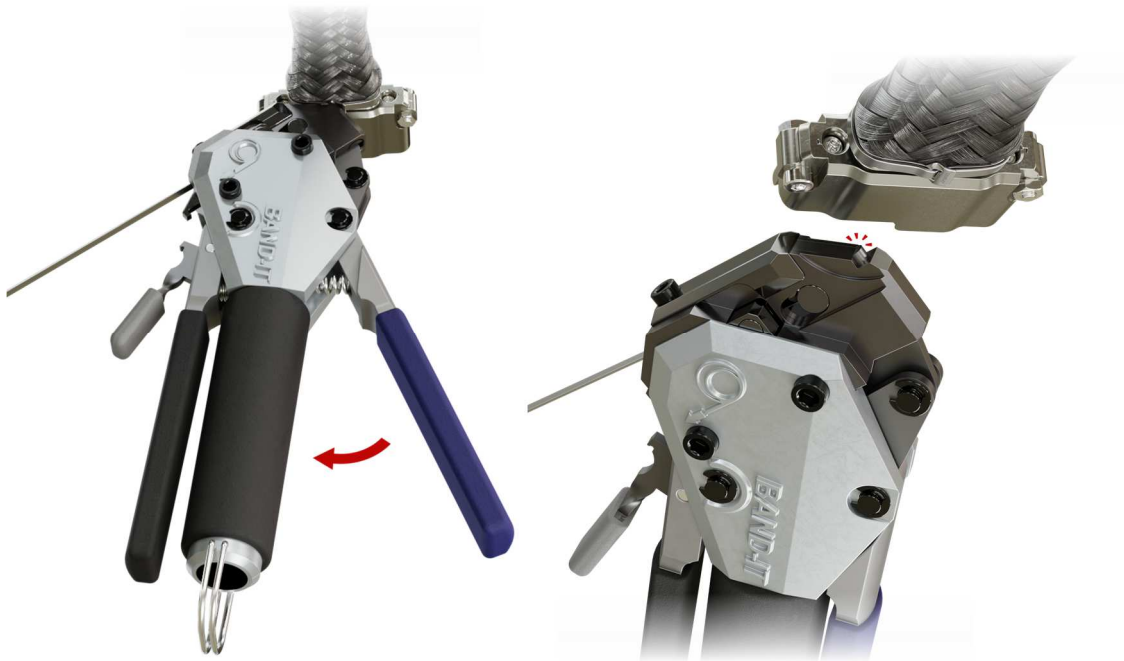
12. Position the buckle of the Microband tie behind the ridge on the backshell cable exit. Rotate the buckle to be centrally orientated on the longest side of the backshell. This is important to achieve uniform clamping of braid.



13. Once the Microband is correctly positioned, squeeze the two black handles together and release. Repeat until the smaller handle will not return and remains locked.



14. To trim off the Microband tie and complete the assembly process, squeeze the blue handle - the surplus tie will be trimmed off.



15. Remove the excess tie from the tool by pressing on the small grey handle and pull out the tail from the tool to the rear.

The completed assembly should resemble this:

