

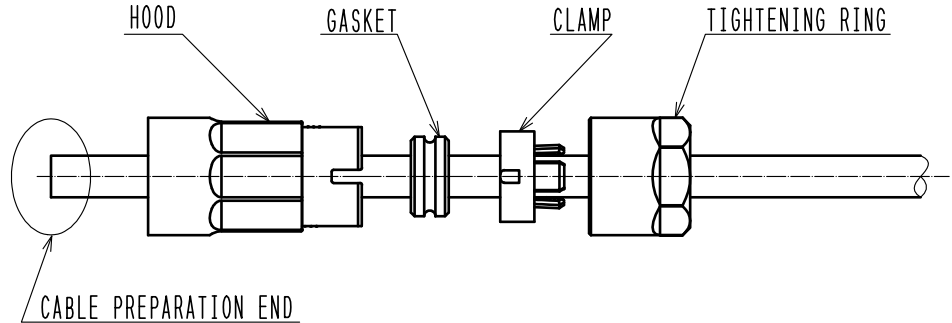


JACK ASSEMBLY INSTRUCTIONS

ILLUSTRATION (OPERATION)

1

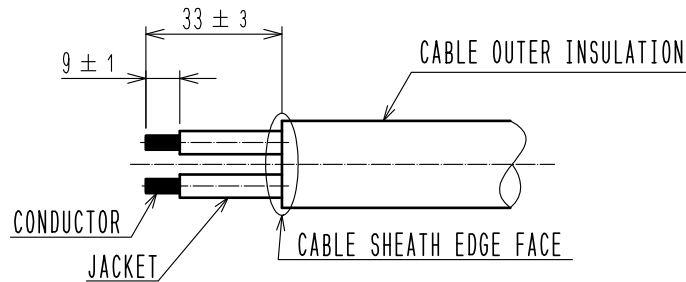
PUT THE CABLE THROUGH THE COMPONENTS.



2

CABLE JACKET AND WIRE JACKET STRIP.

NOTES :
・ EXERCISE CAUTION NOT TO DAMAGE THE JACKET OR THE CONDUCTOR TO PREVENT BREAKDOWN AND CONDUCTIVITY ISSUES.
・ PRIOR PROCESS EVALUATION IS NECESSARY AS CABLE CHARACTERISTICS VARY DEPENDING ON CABLE CONSTRUCTION.



3

CONTACT CRIMP FOR WIRES

① PLACE THE SLEEVE OF THE CONTACT IN THE FEMALE DIE OF THE CRIMP TOOL AND THEN USE THE TOOL TO HOLD THE CONTACT. AT THIS TIME, ALIGN THE SLEEVE SO THAT THE CONTACT PRESS JOINT IS AT THE OPPOSITE SIDE OF THE SLEEVE TO THE MALE DIE OF THE TOOL.
ALSO, THE LONGITUDINAL CENTER OF THE SLEEVE SHOULD LINE UP WITH THE CENTER OF THE MALE DIE OF THE TOOL.

USE OUR RECOMMENDED CRIMP TOOLS. THE TOOLS ARE SHOWN IN TABLE 1.
APPLICABLE DIE SIZES FOR THE CRIMP TOOL FOR EACH CONTACT ARE SHOWN IN TABLE 2.

NOTES:

- ・ THERE MIGHT BE A DIFFERENCE IN THE CRIMP PERFORMANCE DEPENDING ON THE TOOL, PLEASE USE OUR RECOMMENDED TOOLS.
- ・ CRIMP PERFORMANCE WILL NOT BE SATISFIED IF AN INCORRECT DIE SIZE IS USED. PLEASE USE THE CORRECT DIE SIZE.
- ・ CRIMP PERFORMANCE WILL NOT BE SATISFIED IF THE DIE POSITION IS INCORRECT , PLEASE USE THE CORRECT POSITION.
- ・ MAINTAIN THE CRIMP TOOL ACCORDING TO THE INSTRUCTIONS OF THE TOOL MANUFACTURER.

COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△ 3	DIS-C-00002672	TY. SUZUKI	HY. KOBAYASHI	20181001
名称 TITLE		HRS ヒロセ電機株式会社 HIROSE ELECTRIC CO., LTD.		
HR41 JACK ASSEMBLY PROCEDURE		APPROVED	YH. YAMADA	20170222
		CHECKED	YH. YAMADA	20170222
		CHARGED	HY. KISHI	20170222
		WRITTEN	THOMAS FORAN	20170222
技術指定書 TECHNICAL SPECIFICATION		ETAD-C0298		△ 1 / 6

ILLUSTRATION (OPERATION)

②INSERT THE CONDUCTOR OF THE WIRE INTO THE CONTACT FROM THE SLEEVE SIDE AS SHOWN IN FIG. A ON THE NEXT PAGE.

NOTES : ・THE SPACE BETWEEN THE CONTACT AND THE CABLE SHOULD BE LESS THAN 1mm. A LARGER GAP COULD CAUSE A SHORT CIRCUIT OR OTHER MALFUNCTION.
・MAKE SURE THAT ALL THE CONDUCTOR IS ENCLOSED WITHIN THE CONTACT OR IT COULD CAUSE A SHORT CIRCUIT OR OTHER MALFUNCTION.

③CRIMP UNTIL THE CRIMP TOOL OPENS AUTOMATICALLY.

IT'S POSSIBLE THAT THE TOOL WON'T FULLY CLOSE AND THAT A GAP WILL APPEAR.
THEREFORE, MAKE SURE THAT THE HANDLE OF THE TOOL IS CLOSED TO THE END.

④WHEN THE TOOL OPENS, REMOVE THE CONTACT.

TABLE. 1 RECOMMENDED CRIMP TOOL.

(JIS C9711 WIRE TERMINATION TOOL FOR INTERIOR WIRING)

◆MANUAL CRIMPING TOOL

MANUFACTURER	PART No.
HOZAN TOOL INDUSTRIAL CO., LTD	P-75
LOBTEX CO., LTD	AK15A
NICHIFU CO., LTD	NH1

◆AIR CRIMPING TOOL

MANUFACTURER	PART No.
IZUMI PRODUCTS COMPANY	AC-5N.D DIE : No. 1 HEAD

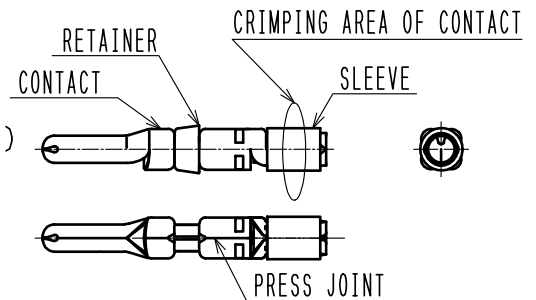


TABLE. 2 CONTACTS AND APPLICABLE CABLE AND DIE SIZES.

APPLICABLE CONNECTOR	APPLICABLE CONTACT		TOOL	APPLICABLE CABLE
PART No.	HRS No.	PART No.	APPLICABLE DIE SIZE	CONDUCTING CROSS-SECTION AREA
HR41-25WBJx-3PC	CL141-0002-0	HR41-PC-111	5.5	3.3 to 5.5mm ² (10 to 12 AWG)
	CL141-0004-5	HR41-PC-121	2	1.3 to 2.5mm ² (14 to 16 AWG)
HR41-25WBJx-5PC	CL141-0012-3	HR41-PC-151	5.5	0.75 to 2.5mm ² (14 to 18 AWG)

※DIFFERENT SPECIFICATIONS, SUCH AS DIFFERENT PLATING MATERIAL, ARE DESCRIBED WITH A (**) FOLLOWING THE PART No. (NUMBERS ARE USED IN PLACE OF **)

※IN THE x PART, ANY ALPHABET (OR NO CHARACTER) ENTERED FOR EACH CABLE DIAMETER DIFFERENCE.

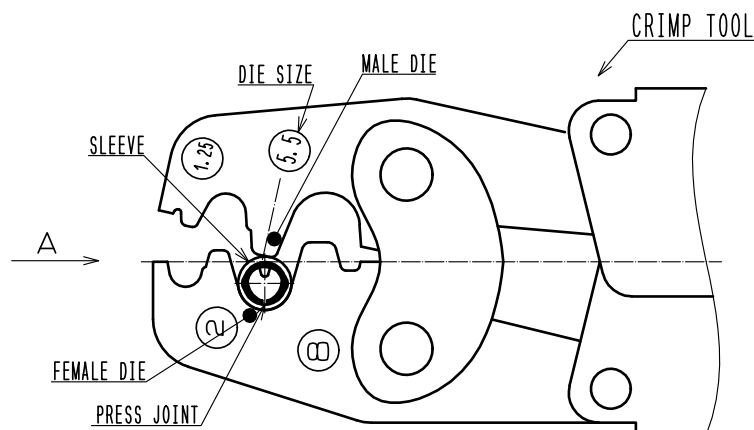


ILLUSTRATION (OPERATION)

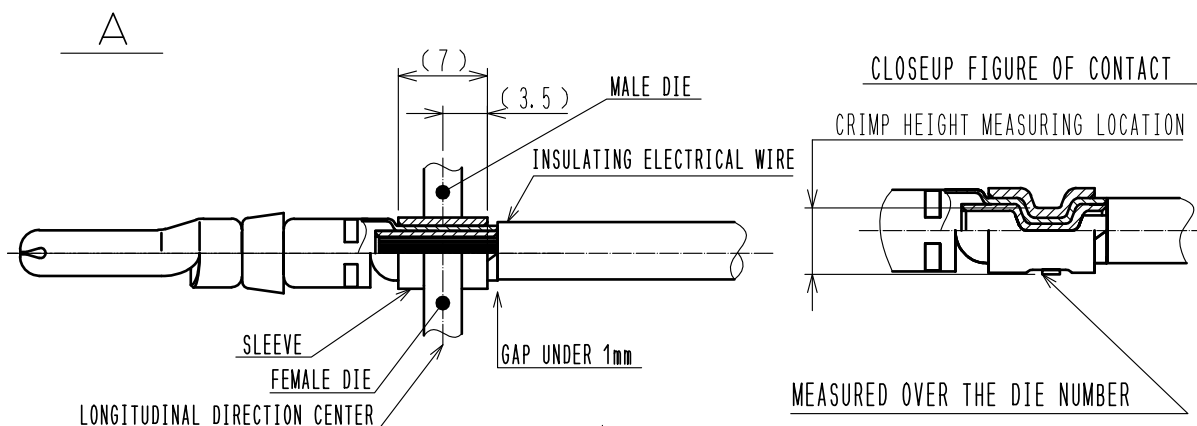


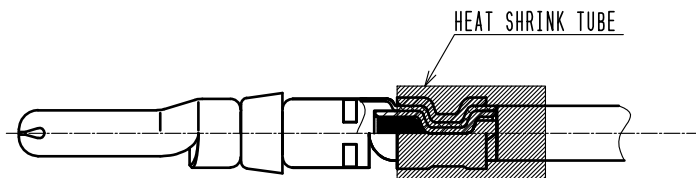
TABLE. 3 CRIMP STRENGTH (WITH RECOMMENDED TOOL)
THERE SHOULD BE NO REMOVAL OR LOOSENING
OF THE CABLE WHEN THE CABLE IS PULLED
WITH A FORCE LESS THAN THOSE SHOWN BELOW.

ELECTRICAL WIRE'S DIAMETER	ANCHORAGE STRENGTH (N)
0.75 sq	100
1.25 sq	150
2.0 sq	230
3.5 sq	450
5.5 sq	500

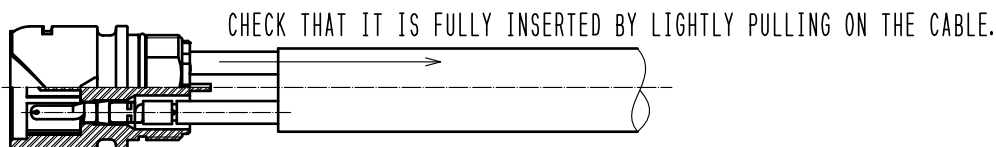
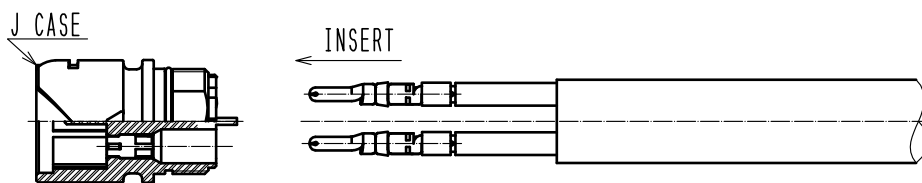
TABLE. 4 CRIMP HEIGHT (REFERENCE)
THE HEIGHT OF THE CRIMP AREA AFTER CRIMPING
IS SHOWN IN THE FOLLOWING TABLE.
IF THE HEIGHT IS WRONG, PLEASE CHECK THE TOOL.

CONTACT \ TOOL	P-75	AK15A	NH1	AC-5N.D
HR41-PC-111	2.6 ± 0.2	2.85 ± 0.2	3.3 ± 0.2	2.85 ± 0.2
HR41-PC-121	1.85 ± 0.2	1.9 ± 0.2	2.35 ± 0.2	1.75 ± 0.2
HR41-PC-151	2.6 ± 0.2	2.95 ± 0.2	3.35 ± 0.2	2.85 ± 0.2

• COVERING WITH A HEAT SHRINK TUBE IS RECOMMENDED TO PREVENT A SHORT CIRCUIT.



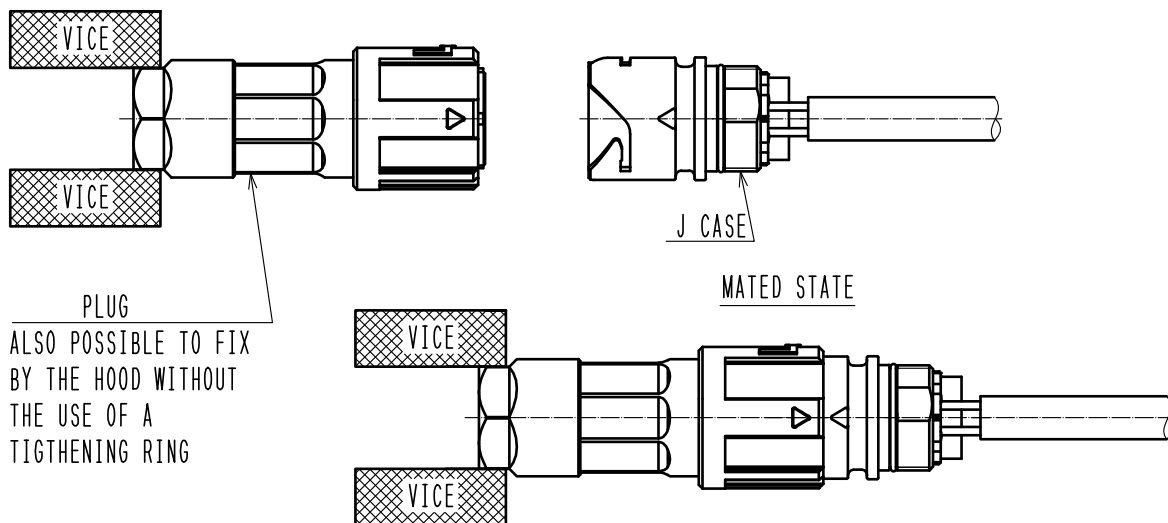
INSERT THE CRIMPED CONTACTS IN THE J CASE. FULL INSERTION WILL BE CONFIRMED WITH AN AUDIBLE
CLICK AND TACTILE FEEL.
THIN AND/OR SOFT CABLES ARE SO FLEXIBLE THAT THEY COULD BE BENT DURING CONTACT INSERTION,
THEREFORE, USE A THIN ROD TO INSERT THE CONTACT.
CHECK THAT THE CONTACT IS FIXED TO THE CORRECT POSITION IN THE J CASE UNIT BY LIGHTLY PULLING
THE INSULATED WIRE AFTER CONTACT INSTALLATION.



CHECK THE WIRING AFTER INSERTING THE CONTACTS.
IN CASE OF A MISWIRING, PLEASE REMOVE THE CONTACTS WITH A REMOVAL TOOL AND THEN FIX.
APPLICABLE CONTACT REMOVAL TOOL: HR41-TP

ILLUSTRATION (OPERATION)

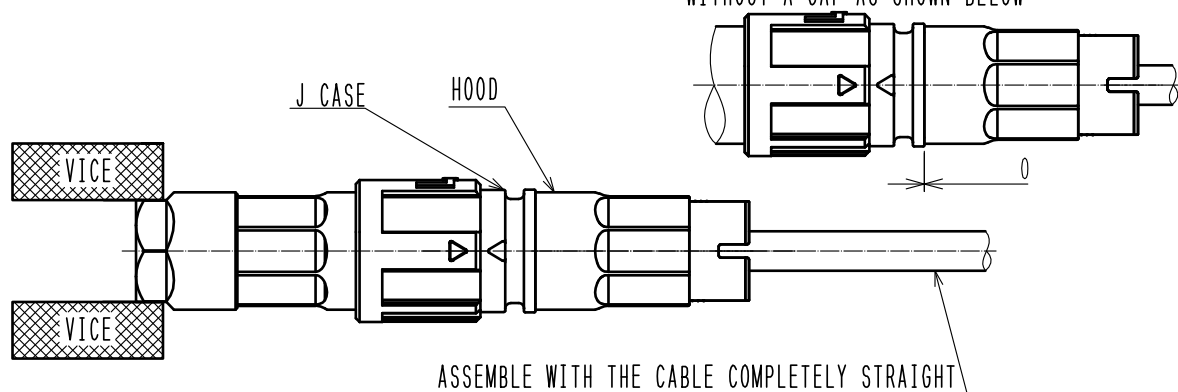
- ① MATE THE J CASE TO A PLUG FIXED IN POSITION WITH A VICE, etc.
WHEN NOT USING A PLUG, BE CAREFUL NOT TO DAMAGE OR DEFORM THE J CASE WITH EXCESSIVE FORCE FROM THE VICE, etc.



- ② TIGHTEN THE HOOD TO THE J CASE UNIT.
THE HOOD MUST NOT BE ATTACHED ASLANT TO THE J CASE.
TIGHTEN THE HOOD WITH A TIGHTENING TORQUE OF 5 TO 5.5N · m.

⚠ CAUTION: PLEASE ASSEMBLE WITH THE CABLE IN LINE WITH THE CONNECTOR.
IF THE CABLE IS NOT STRAIGHT, THE HOOD COULD BECOME ASLANT AND DIFFICULT TO ASSEMBLE.

IF NOT MEASURING THE TORQUE,
TIGHTEN THE HOOD AND THE TIGHTENING RING UNTIL THEY ARE CLOSELY FIT TOGETHER WITHOUT A GAP AS SHOWN BELOW



- ③ ATTACH THE GASKET AND CLAMP.
ALIGN THE GROOVE OF THE HOOD AND THE PROTRUSION OF THE CLAMP.

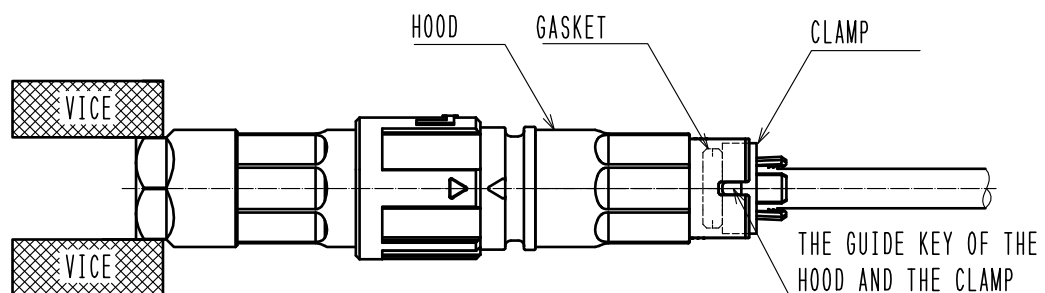
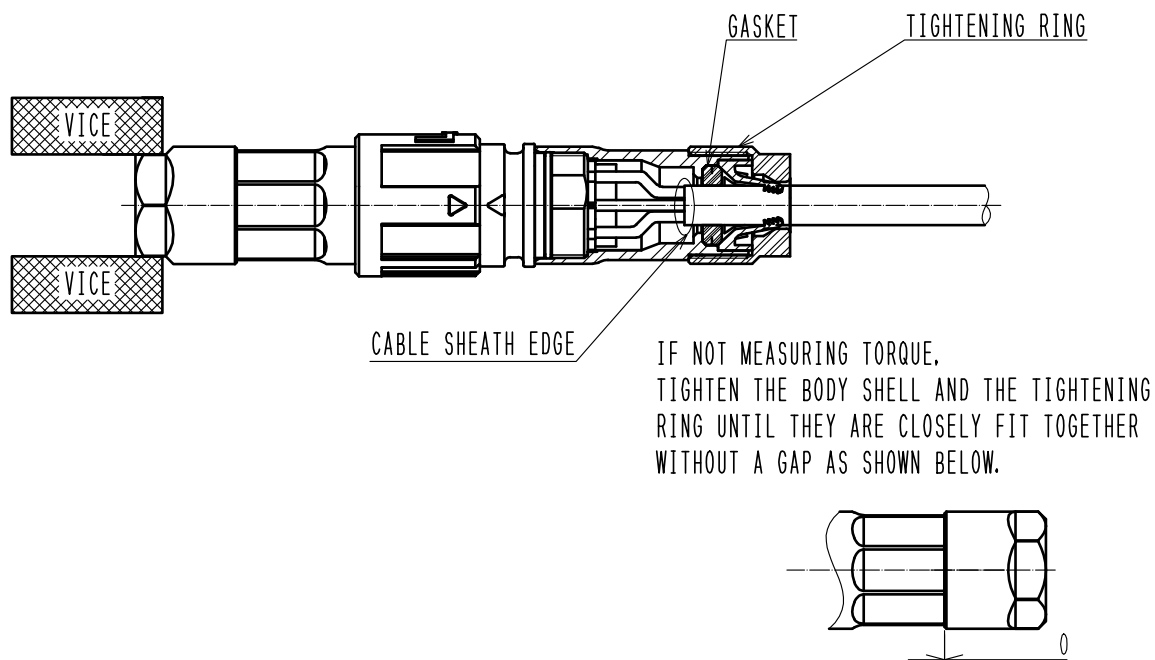


ILLUSTRATION (OPERATION)

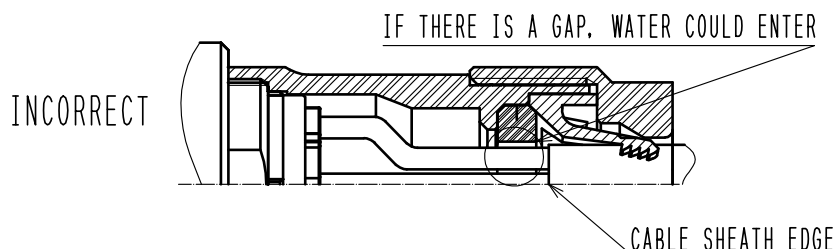
④ WHILE HOLDING THE CABLE SO THAT THE TIGHTENING RING DOESN'T ROTATE, TIGHTEN WITH 5 TO 5.5N・m OF TORQUE OR UNTIL THERE IS NO GAP BETWEEN THE HOOD AND THE TIGHTENING RING. PLEASE MAKE SURE AT THIS TIME THAT THE CABLE SHEATH EDGE IS KEPT FURTHER INSIDE THAN THE GASKET.

5

FURTHERMORE, WATER RESISTANCE, CABLE STRENGTH AND ROTATION STRENGTH MAY DIFFER DEPENDING ON THE CABLE STRUCTURE. THEREFORE, PLEASE EVALUATE BEFORE USE.



NOTE :
WATER RESISTANCE MAY NOT BE MAINTAINED IF THE END OF CABLE SHEATH IS NOT KEPT INSIDE THE GASKET.



ANTI-LOOSENING SOLVENT IS UNNECESSARY FOR THE INITIAL ASSEMBLY. FOR REASSEMBLY, TO TREAT POSSIBLE MISWIRING, IT IS RECOMMENDED THAT HENKEL JAPAN Ltd., LOCTITE 263 AND LOCTITE PRIMER 7649 BE APPLIED TO THE MALE THREADS OF BOTH THE J HOUSING AND THE HOOD.

6

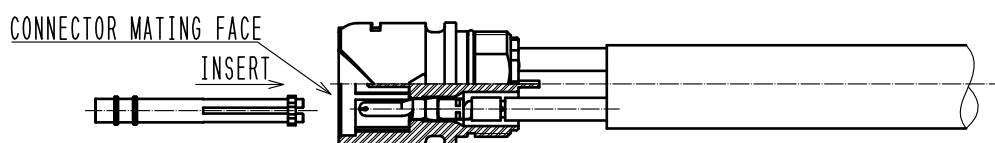
ASSEMBLY PROCESS COMPLETE.
WE RECOMMEND TESTING WATERPROOF AND ELECTRICAL PERFORMANCE BY ANY METHOD AFTER ASSEMBLY.

◆CONTACT REMOVAL TOOL INSTRUCTIONS (MALE CONTACT, FEMALE CONTACT)

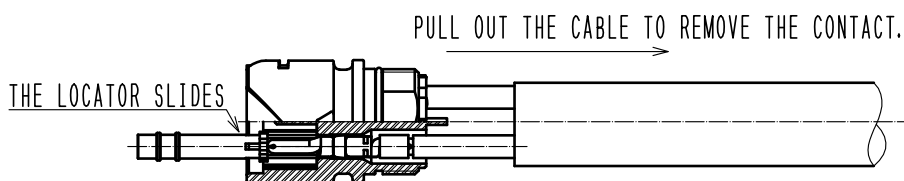
ILLUSTRATION (OPERATION)

①INSERT THE REMOVAL TOOL INTO THE CONTACT CAVITY FROM THE MATING FACE UNTIL IT REACHES THE END, THIS CAUSES THE LOACTOR TO SLIDE. THE RETAINER OF THE CONTACT TUCKS INWARDS AND THE LOCK IS RELEASED.

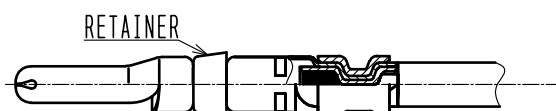
REMOVAL TOOL (HR41-TP)



② WITH THE TOOL INSERTED, PULL OUT THE CABLE TO REMOVE THE CONTACT.

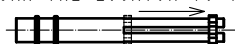


THE REMOVED CONTACT CAN BE REUSED ONLY ONCE. MAKE SURE THAT NO DEFORMATION IS FOUND ON THE RETAINER OF THE CONTACT REMOVED WITH THE TOOL. DO NOT REUSE THE CONTACT WHEN ANY DEFORMATION IS FOUND.



③WHEN NOT IN USE, RETURN THE LOCATOR TO 1mm FROM THE TIP OF THE TOOL.

RETURN THE LOCATOR TO THE END



THIS TOOL CAN BE USED 50 TIMES MAX.

ATTENTION: MAKE SURE THAT THE RETAINER IS TUCKED INWARD BEFORE PULLING THE CABLE. OTHERWISE, THERE COULD BE DAMAGE TO THE CABLE OR RETAINER WHEN PULLED.

