



Handling manual for **YAZAKI 1.2 WP CB (F) Connectors Family** **2P, 3P & 4P**



Prepared N.Jagodic	Sign	Checked T.Rebic	Sign	Approved G.Greguric	Sign		
Date 11.11.2024.		Date 11.11.2024.		Date 11.11.2024.		Doc. No. YPES-15-2066	Rev. 2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.							

1	Revision list	3
2	Product overview.....	4
2.1	Delivery condition	4
2.1.1	1.2 WP SYSTEM CB 2P CONNECTOR SUBASSEMBLY FEMALE WITH CPA.....	5
2.1.2	1.2 WP SYSTEM CB 2P CONNECTOR SUBASSEMBLY FEMALE WITHOUT CPA	7
2.1.3	1.2 WP SYSTEM CB 3P CONNECTOR SUBASSEMBLY FEMALE WITH CPA.....	9
2.1.4	1.2 WP SYSTEM CB 3P CONNECTOR SUBASSEMBLY FEMALE WITHOUT CPA	11
2.1.5	1.2 WP SYSTEM CB 4P CONNECTOR SUBASSEMBLY FEMALE WITH CPA.....	13
2.1.6	1.2 WP SYSTEM CB 4P CONNECTOR SUBASSEMBLY FEMALE WITHOUT CPA	15
2.2	Exploded view	18
2.2.1	Bill of material.....	18
2.2.2	Associated products and documents	19
	Associated products and documents (mating product, applicable terminals, etc.) can be found on the Yazaki product drawings.	19
2.3	Features and functions of components	20
2.3.1	Female connector features explanation	20
2.3.2	Female terminal features explanation	22
3	Handling of components	23
3.1	Inspection of received items.....	23
3.1.1	To be inspected upon receipt of terminals	23
3.1.2	To be inspected upon receipt of female connector subassembly	23
3.2	Storage conditions.....	23
3.3	Handling and storage for female housing	24
3.4	Handling and storage for female terminal	25
3.5	Handling and storage for wire harness	26
4	Wiring harness assembly	27
4.1	Crimp parameters.....	27
4.1.1	1.2 Female terminal	27
4.2	Connector assembly	28
4.2.1	Insertion of female terminals	28
4.2.2	Spacer secondary lock engagement.....	30
4.3	Electrical check of terminals.....	31
4.3.1	Electrical check of 1.2 mm CONTACT SYSTEM (YMT) CB FEMALE TERMINAL SEALED	31
4.4	Sealing test.....	32
5	Servicing	33
5.1	Tools.....	33
5.1.1	1.2 mm CONTACT SYSTEM CLEAN BODY FEMALE TERMINAL removal tool	33
5.1.2	CPA and connector disengagement	34
5.1.3	Spacer disengagement	35
5.1.4	1.2 mm (YMT) CB Terminal removal	36
5.2	Mating of the female connector to the male counterpart/interface.....	39
5.3	Unmating of the female connector from the interface/male connector	40
6	Appendix	41
6.1	Insertion of terminal 1.2 mm Contact System (YMT) CB Female Terminal Sealed	41
6.2	Connector mating	42
6.3	Connector unmating by hand	43
6.4	Connector unmating by tool	44
6.5	Female terminal removal.....	45

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

1 Revision list

REVISION	DESCRIPTION	NAME	DATE
0	Creation	M. Plavotic	10.05.2023.
1	Delivery condition and new part numbers added	N. Jagodic	21.11.2023.
2	Connector disengagement by tool and Yazaki terminal removal tool added	N. Jagodic	11.11.2024.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2 Product overview

This handling manual contains guidelines for the application of the YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P.

If there are any deviations between this document and the product drawings, the content of the product drawings takes priority (chapter 2.2.2.).

For a more detailed definition of codings and color markings, please see product drawings.

2.1 Delivery condition

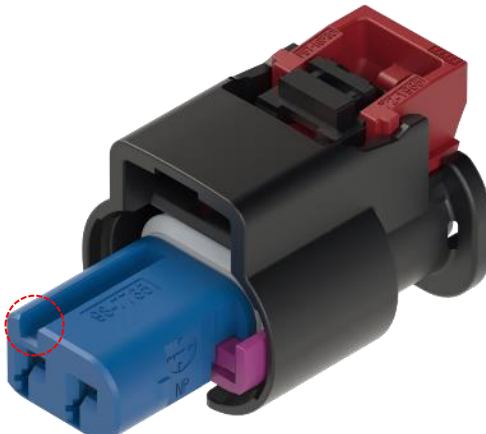
- The products are delivered in varieties of mechanical and color codes. There are 3 codes for 2P, and 4 codes for 3P and 4P connectors. In addition, all varieties can be delivered with or without CPA.
- △ 1 • Assembled YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P with spacer secondary lock in pre-set position and CPA in pre-set position. If the spacer is not in pre-set position, please refer to the 5.1.2. Spacer disengagement.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.1.1 1.2 WP SYSTEM CB 2P CONNECTOR SUBASSEMBLY FEMALE WITH CPA

 VIEW	CODE	COLOR	YAZAKI PART NUMBER
	A	Black	7298-7912-30
	B	Light gray	7298-7913-40
	B	 Natural	7298-7913

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

	C	Dark gray	7298-7911-10
	C	 Blue	7298-7911-90

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.1.2 1.2 WP SYSTEM CB 2P CONNECTOR SUBASSEMBLY FEMALE WITHOUT CPA

 VIEW	CODE	COLOR	YAZAKI PART NUMBER
	A	Black	7298-9654-30
	B	Light gray	7298-9655-40
	B	 Natural	7298-9657

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

	C	Dark gray	7298-9656-10
	C	 Blue	7298-9658-90

Title YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	Doc. No. YPES-15-2066	Rev. 2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.1.3 1.2 WP SYSTEM CB 3P CONNECTOR SUBASSEMBLY FEMALE WITH CPA

 VIEW	CODE	COLOR	YAZAKI PART NUMBER
	A	Black	7298-7917-30
	B	Light gray	7298-7918-40
	B	 Natural	7298-7918

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

	C	Dark gray	7298-7919-10
	C	 Blue	7298-7919-90
	D	Brown	7298-7916-80
	D	 Violet	7298-7916-20

Title YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	Doc. No. YPES-15-2066	Rev. 2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.1.4 1.2 WP SYSTEM CB 3P CONNECTOR SUBASSEMBLY FEMALE WITHOUT CPA

 VIEW	CODE	COLOR	YAZAKI PART NUMBER
	A	Black	7298-9660-30
	B	Light gray	7298-9661-40
	B	 Natural	7298-9664

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

	C	Dark gray	7298-9662-10
	C	 Blue	7298-9665-90
	D	Brown	7298-9663-80
	D	 Violet	7298-9659-20

Title YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	Doc. No. YPES-15-2066	Rev. 2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.1.5 1.2 WP SYSTEM CB 4P CONNECTOR SUBASSEMBLY FEMALE WITH CPA

 VIEW	CODE	COLOR	YAZAKI PART NUMBER
	A	Black	7298-7924-30
	B	Light gray	7298-7925-40
	B	 Natural	7298-7925

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

	C	Dark gray	7298-7926-10
	C	 Blue	7298-7926-90
	D	Brown	7298-7923-80
	D	 Violet	7298-7923-20

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.1.6 1.2 WP SYSTEM CB 4P CONNECTOR SUBASSEMBLY FEMALE WITHOUT CPA

 VIEW	CODE	COLOR	YAZAKI PART NUMBER
	A	Black	7298-9669-30
	B	Light gray	7298-9670-40
	B	 Natural	7298-9673

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

	C	Dark gray	7298-9671-10
	C	 Blue	7298-9674-90
	D	Brown	7298-9672-80
	D	 Violet	7298-9668-20

Title YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	Doc. No. YPES-15-2066	Rev. 2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

Mechanical properties for all groups

Temperature class	-40°C to +150°C (T4)
Vibration class	Class 3 (Ag) / Class 2 (Sn)* Class 2 (Ag/Sn)**
Sealing class	Sealed
Terminal insertion force	15 N max.
Terminal retention force	≥ 50 N for primary lock, >100 N for primary + secondary lock **
Spacer engage force / disengage force	15-30 N / 15-30 N
Connector mating force / unmating force	75 N max.

According to

 * USCAR2 Rev.8

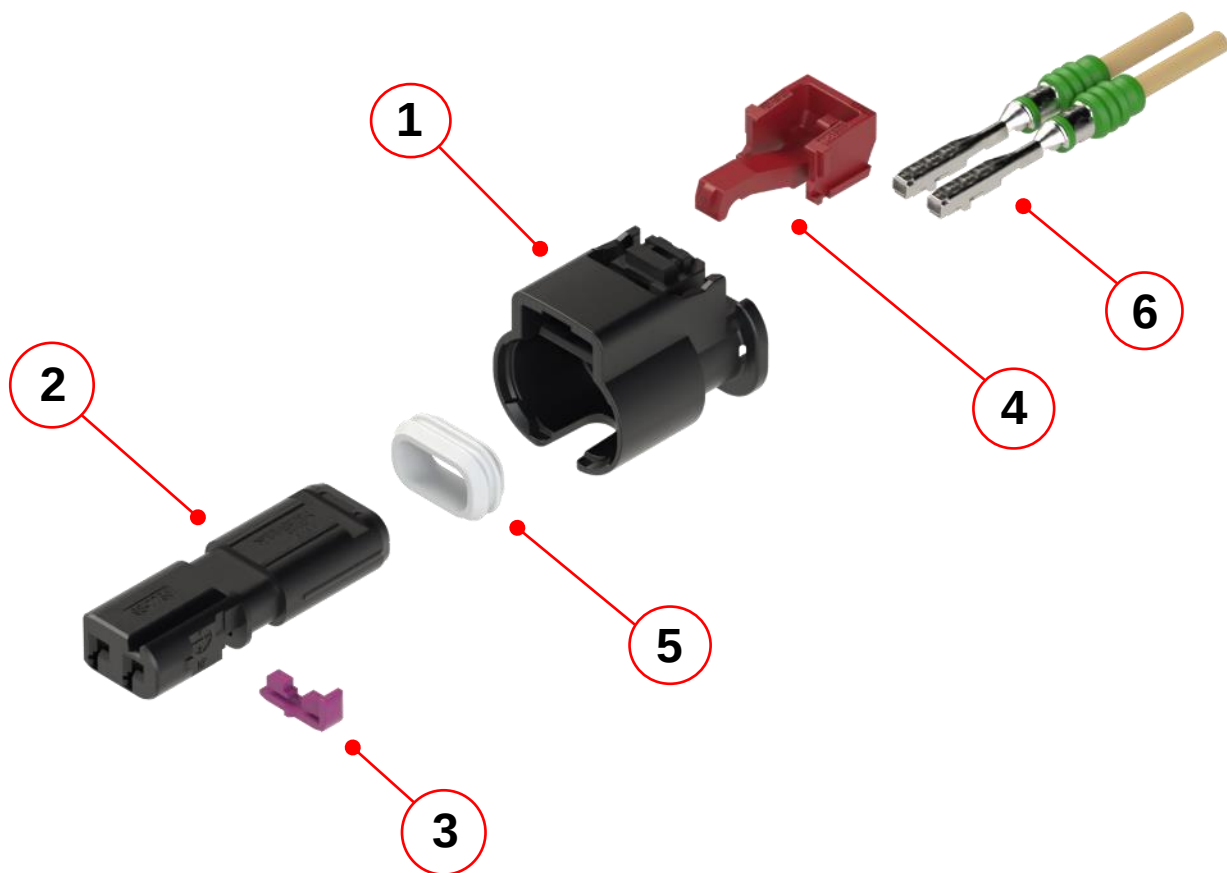
(Product standard: YPES-11-04-361-20; DVP&R: DPZ22-17-112-119, DPZ22-17-112-120, DPZ22-17-112-121)

**RND5-B-00029 v3.0 36-05-019 –M

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.2 Exploded view

*As example 2P subassembly PN 7298-7912-30



2.2.1 Bill of material

NUMBER	DESCRIPTION	YAZAKI PART NUMBER	MATERIAL	COLOR
1	1.2 WP SYSTEM 2P OUTER HOUSING FEMALE	7198-7920-30	PBT-IGF15	Black
2	1.2 WP SYSTEM CB 2P INNER HOUSING FEMALE - code A	7198-7736-30	PBT-IGF30	Black
3	1.2 WP SYSTEM CB 2P SPACER FEMALE	7172-1966-20	PBT-IGF30	Purple
4	1.2 WP SYSTEM CPA FEMALE	7172-1965-50	PBT-IGF30	Red
5	1.2 WP SYSTEM 2P INTERFACE SEAL FEMALE	7137-3428	SILICONE RUBBER	Natural
6	1.2 YMT terminal with SWS crimped on wire	N/A	Multi-component product	N/A

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.2.2 Associated products and documents

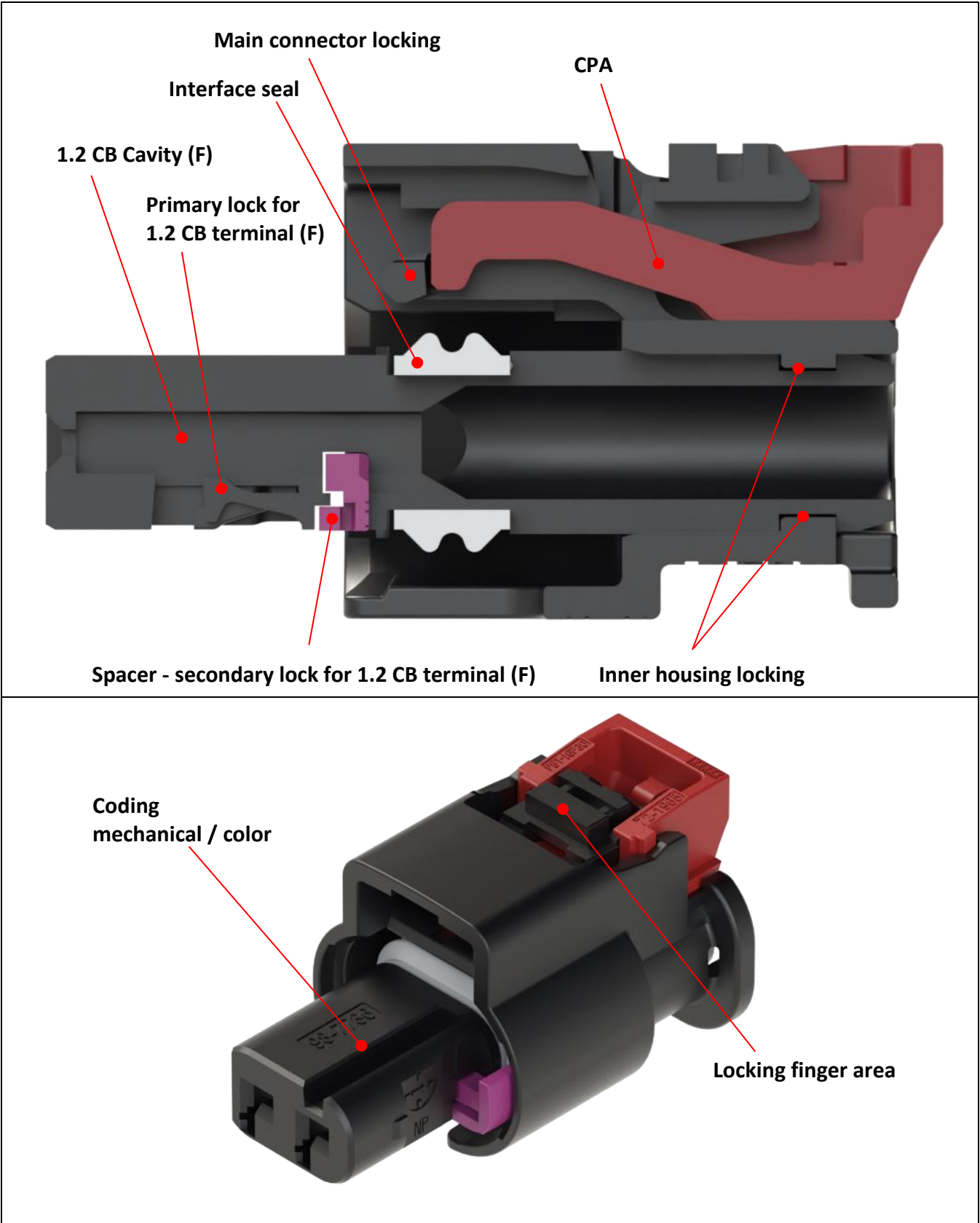
Associated products and documents (mating product, applicable terminals, etc.) can be found on the Yazaki product drawings.

DESCRIPTION	YAZAKI PART NUMBER
1.2 WP SYSTEM CB 2P CONN. SUBASSY FEMALE	7298-7912-30:R
1.2 WP SYSTEM CB 3P CONN. SUBASSY FEMALE	7298-7917-30:R
1.2 WP SYSTEM CB 4P CONN. SUBASSY FEMALE	7298-7924-30:R

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.3 Features and functions of components

2.3.1 Female connector features explanation



**As example 2P connector is shown*

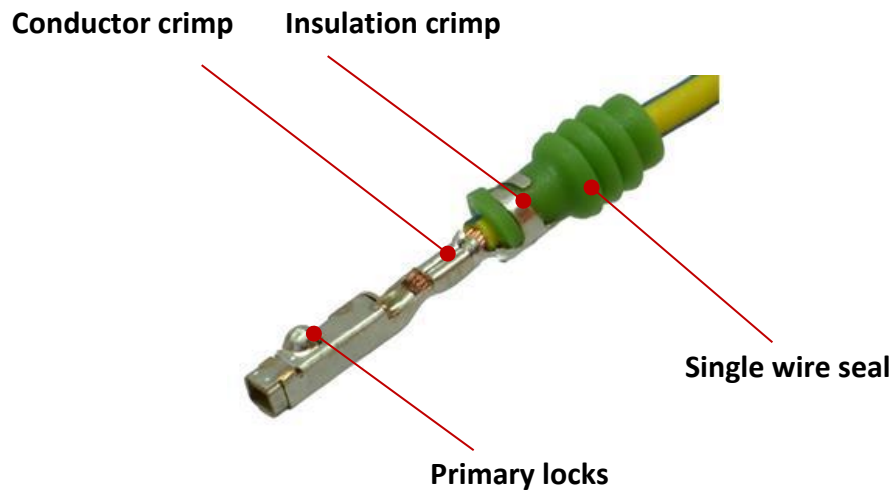
Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

FEATURE	DESCRIPTION / FUNCTION
Inner housing locking	Locking for connecting inner housing and outer housing
Cavity	Location for female terminal
Cavity primary lock	Locking for female terminal primary lock
Spacer - secondary lock	In set position locking for female terminal
CPA	Prevents the mated connectors from accidental unmating
Main connector locking	Assures female outer housing to stay locked with male connector
Interface seal	Preventing access of moisture to terminal connection
Coding	Code prevents mis-mating, ensures guiding
Locking finger area	Unlock female and male connectors for unmating

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

2.3.2 Female terminal features explanation

1.2 mm CONTACT SYSTEM CLEAN BODY FEMALE TERMINAL



FEATURE	DESCRIPTION / FUNCTION
Insulation crimp	Insulation is gripped during crimping process
Conductor crimp	Wire conductor gets bonded with terminal body during crimping process
Primary lock	Locking in the cavity
Single wire seal	Prevents access of moisture to terminal connection

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

3 Handling of components

3.1 Inspection of received items

3.1.1 To be inspected upon receipt of terminals

- 1) Appropriate part number (from packaging).
- 2) Parts must be free of foreign objects, cracks, deformation, burr, rust, unclean parts, peeling or any flaw and all other apparent abnormalities.
- 3) Parts display no apparent discoloration and / or oxidation.
- 4) No entangled or loosened terminals from reel.

3.1.2 To be inspected upon receipt of female connector subassembly

- 1) Appropriate part number (must be laser marked on outer housing).
- 2) Parts must be free of foreign objects or inappropriate products.
- 3) Parts must be free of cracks, deformation, or other apparent abnormalities (sink marks, short shots, etc.)

3.2 Storage conditions

STORAGE CONDITIONS	
Storage time	12 months max.
Storage temperature	+10° C to +35° C
Storage humidity	10 to 75%

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

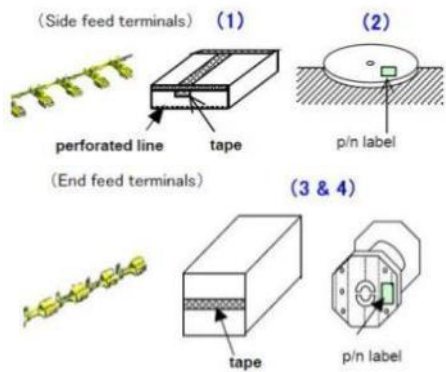
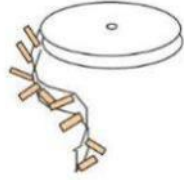
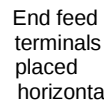
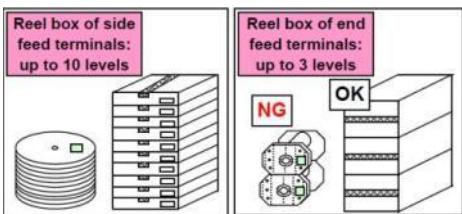
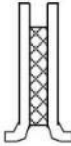
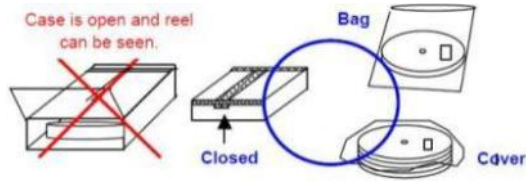
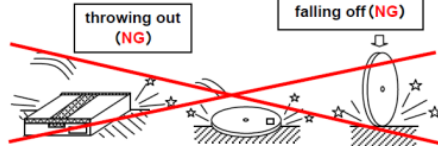
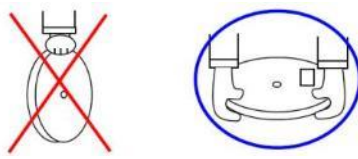
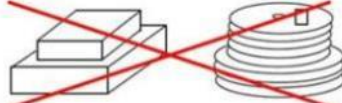
3.3 Handling and storage for female housing

No.	CONTROL PROCESS	ILLUSTRATION	INFLUENCE ON QUALITY
1	1) Please store plastic and carton cases used for housing storage at room temperature, avoiding moisture and direct sunlight. 2) Please equalize housing temperature with room temperature.		1) There are risks of breakage and discoloration due to housing material degradation. 2) There are risks of damage on lance, spacer and breakage of lock or other problems.
2	1) Please turn the label on packages upward during storage. 2) Please do not apply pressure to housings in bag packages during storage. Please do not replace plastic cases and carton boxes with storage boxes.		There are risks of incorrect position of child parts, deformation or other problems.
3	When carrying housings, please pay attention in order to avoid damage or impact to the products.		There are risks of deformation, breakage, incorrect position of child parts or loss of parts.
4	Please put a cover or close the bag to prevent dust accumulation.		There is a risk of contact defect due to adherence of dust. There is also a possibility of a sealing defect.
5	When carrying housings, please hold the underside of the container with both hands. Do not position the box vertically and not push the upper side of the box.		There are risks of deformation, damage or loss of parts.
6	Please store your products in a way that does not apply a load on housings.		There are risks of deformation due to the pressure from the weight and risks of breakage due to shock.

*Since the products have different handling methods, please refer to the instructions of each product for details.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

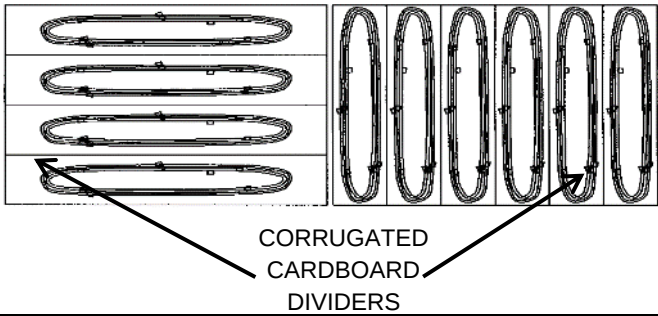
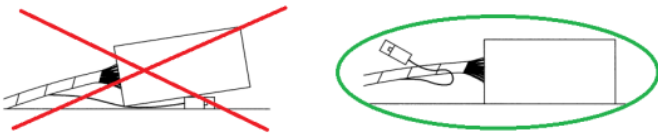
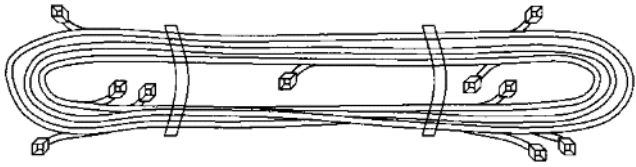
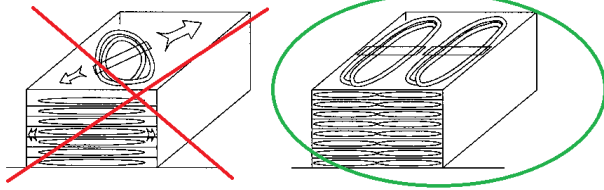
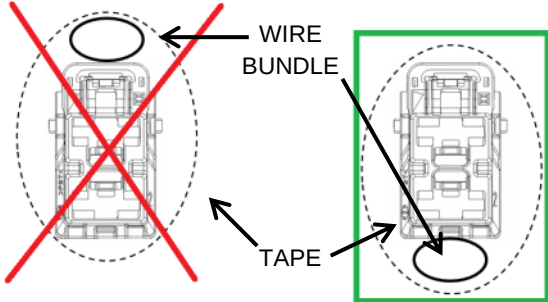
3.4 Handling and storage for female terminal

No.	CONTROL PROCESS	ILLUSTRATION	INFLUENCE ON QUALITY
1	Please store carton cases at room temperature, avoiding moisture and direct sunlight.		There are risks of deformation on reels, rust and discoloration.
2	1) For side feed terminals, please turn the taped surface of the cases upwards during transportation and storage. 2) For side feed terminals, please turn the p/n label of the cases upwards and position them horizontally during storage. 3) For end feed terminals, please position the cases with the taped surface positioned on the right side during transportation and storage. 4) For end feed terminals, please place the carton cases in the vertical direction, so that the p/n label can be seen on the right side during storage.		There are risks of deformation, entanglement and loose winding.  Side feed terminals placed vertically  End feed terminals placed horizontally
3	1) For reels of side feed terminals, please limit the height of reel packages piled-up up to 10 levels and turn the label side up during storage. 2) For reels of end feed terminals, please limit the height of reel packages piled-up up to 3 levels at storage. Please do not pile-up vertical chained reels without carton cases.		  There are risks of deformation of reels and terminals due to its own weight.
4	Please cover the containers or put them in a bag to prevent dust accumulation during storage.		There are risks of contact defect due to adherence of dirt or dust to the terminals.
5	When carrying terminals, please pay attention in order to avoid damage or impact to the products.		There are risks of deformation, entanglement and loose winding.
6	When carrying a reel of terminals, please hold the underside of reel with both hands to avoid deformation.		There are risks of deformation, entanglement and loose winding.
7	When storing reels currently in use, please fix the end of the chain to the reel with wires so that the terminals do not come loose.		There is a risk of loose winding.
8	Please do not pile up different sized reels or boxes.		There are risks of deformation of terminals and breakage of the reel due to the pressure from the weight.

*Since the products have different handling methods, please refer to the instructions of each product for details.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

3.5 Handling and storage for wire harness

No.	CONTROL PROCESS	ILLUSTRATION	INFLUENCE ON QUALITY
1	When layering an individual wire harnesses in the shipping carton, it is recommended that corrugated cardboard layer dividers, vertical dividers, internal supports, and/or partitions be used to assure the weight of the wire harnesses is equally distributed.		There are risks of deformation or damage to the parts.
2	Heavier harness components (such as junction blocks, power distribution centers, protectors, brackets, etc.) should be positioned on the bottom of the carton or divider to prevent the weight of these parts from being applied on the smaller sized components / connectors.		There are risks of deformation or damage to the parts.
3	The connectors should be positioned on the outside or in the center of the W/H bundle to prevent the weight of the harness from being transferred to the connector.		There are risks of deformation or damage to the parts.
4	The W/H bundle size should be compatible with the shipping carton to prevent shifting of the W/H during transportation and/or storage.		There are risks of deformation or damage to the parts.
5	If the connector housing is 'taped back' on the wire harness bundle, assure that the housing lock or other flexible members of the connector are positioned away from the wire harness bundle.		
6	Extra care must be taken to prevent tangling the wire harnesses.		There are risks of damage to the connector during vehicle assembly.

* Since the products have different handling methods, please refer to the instructions of each product for details.

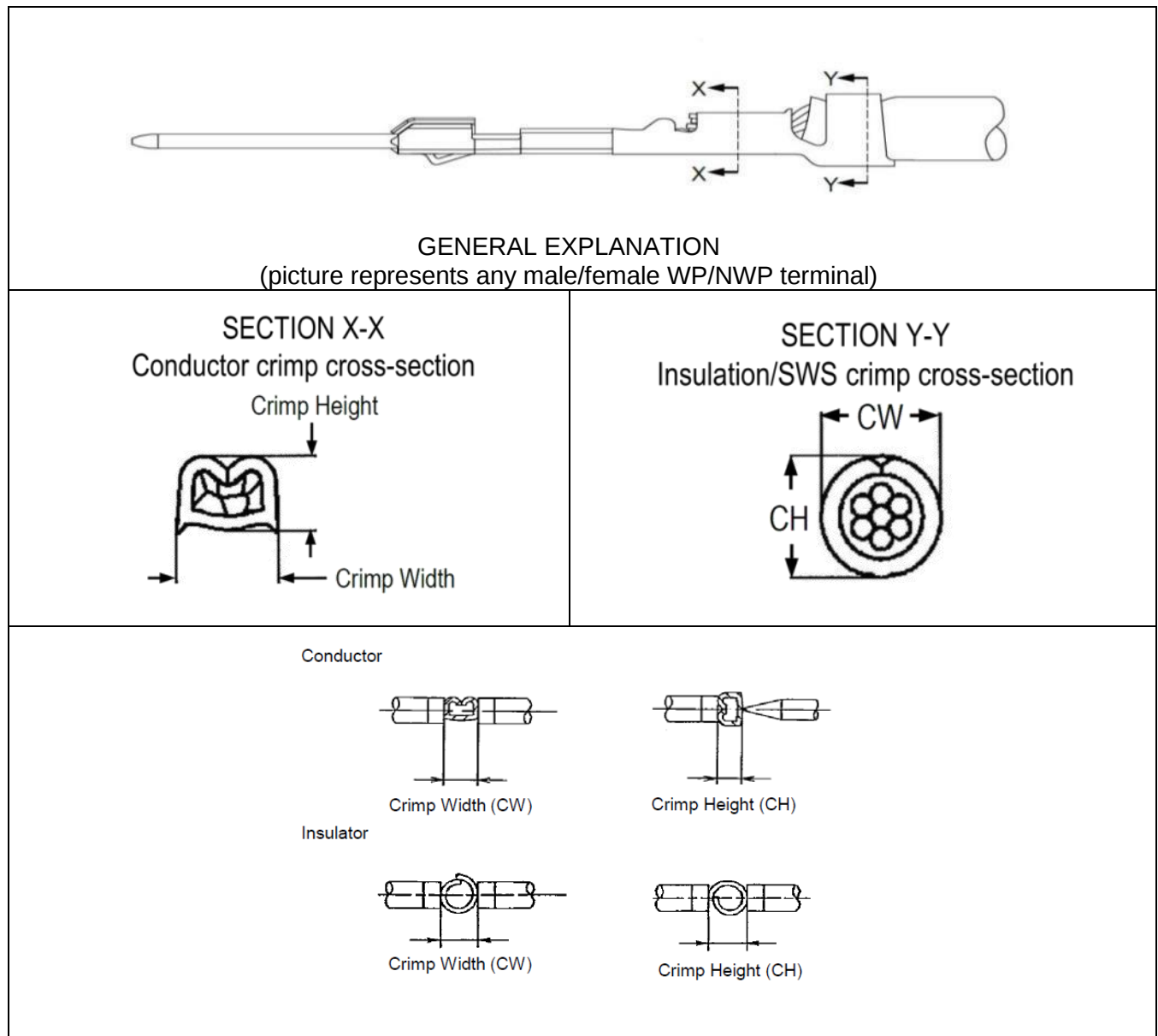
- After transportation or storage, the connector must be checked for damage.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

4 Wiring harness assembly

4.1 Crimp parameters

Crimp parameters presented are used for explanation purposes only.



4.1.1 1.2 Female terminal

Terminal crimp parameters according to Yazaki crimping standard or supplier application specification.

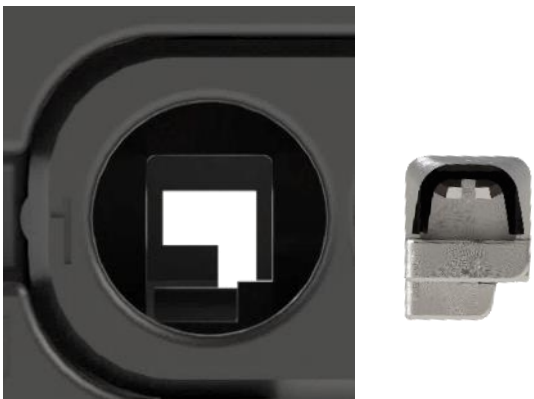
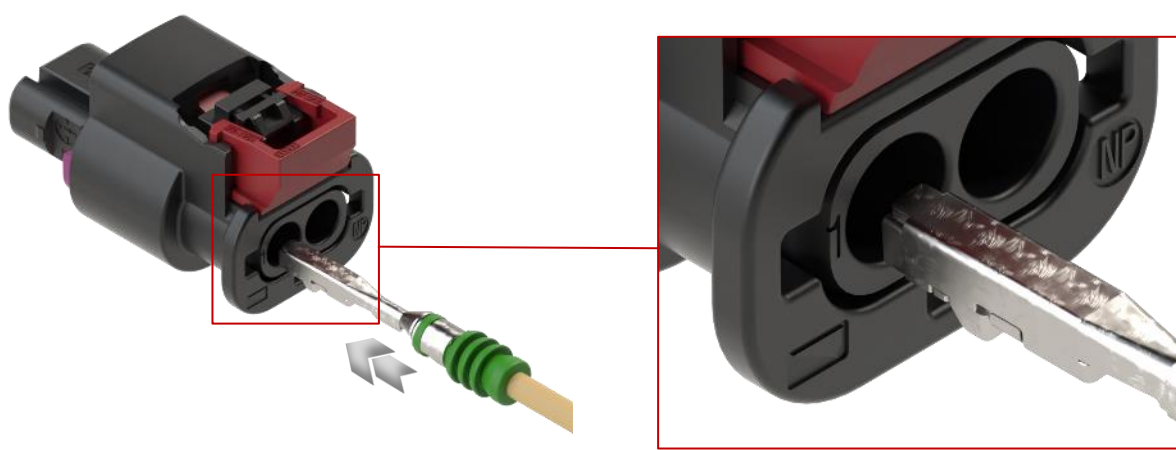
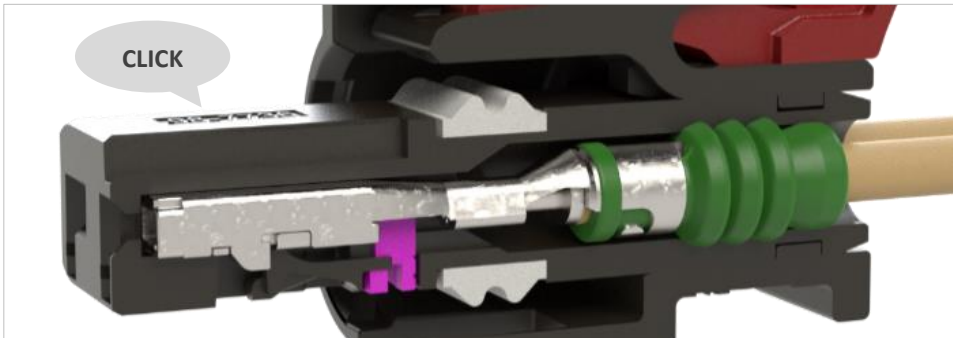
Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

4.2 Connector assembly

4.2.1 Insertion of female terminals

- ⚠ • Before the insertion of terminals, check if spacer is in pre-set position (delivery condition). If the spacer is not in pre-set position, please refer to the 5.1.2. Spacer disengagement.
- Check for any foreign object on terminals and in cavities.

1.2 mm Contact System (YMT) Female CB Terminal Sealed

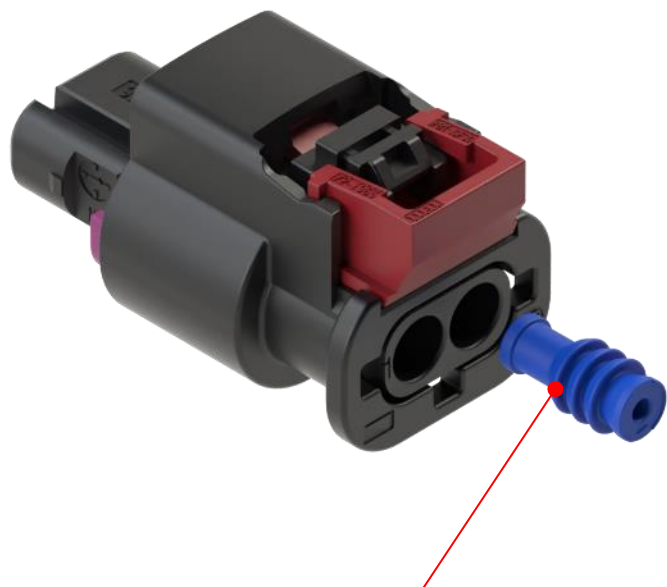
	Make sure that the orientation of the 1.2 CB terminal with respect to the housing is correct. The orientation of terminal is shown on the layout.
	
Terminal must slip in easily and lock with a “CLICK”.  After complete terminal insertion, pull it slightly on the wire to confirm full lock-up.	

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

Sealing plugs usage

In case one or more cavities are not used, to assure correct sealing function, blind plugs must be used.
Make sure to completely insert the blind plugs in the cavities.
The blind plugs must not peek out of the cavities.

BLIND PLUG FOR YMT 1.2 SYSTEM	YPN: 7172-5572-90
-------------------------------	-------------------



Blind plug for 1.2 cavity



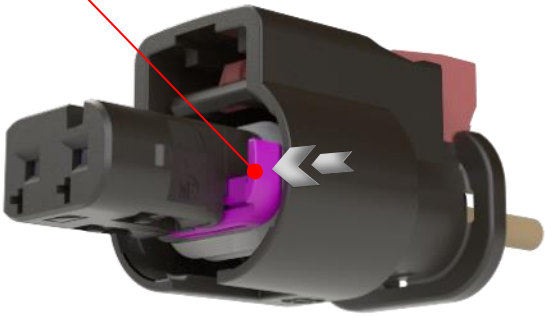
Blind plug inserted in 1.2 cavity

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

4.2.2 Spacer secondary lock engagement

In order to ensure the terminals are properly secured, spacer should be moved into set position.

After all terminals are fully inserted, push the spacer until it is aligned on the housing surface and locks according to pictures.

Preset position	Set position
Spacer secondary lock 	
 Functional cros-section	 Functional cros-section
 Detailed view	 Detailed view

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

Precautions:

- Confirm that the spacer is securely locked.
- If the spacer cannot be fully locked to the housing, one of the following conditions occurred:
 - The terminal is not fully inserted to the cavity
 - The terminal is improperly orientated

Important notice:

Same procedure for the spacer engagement needs to be done for all female connectors.

4.3 Electrical check of terminals

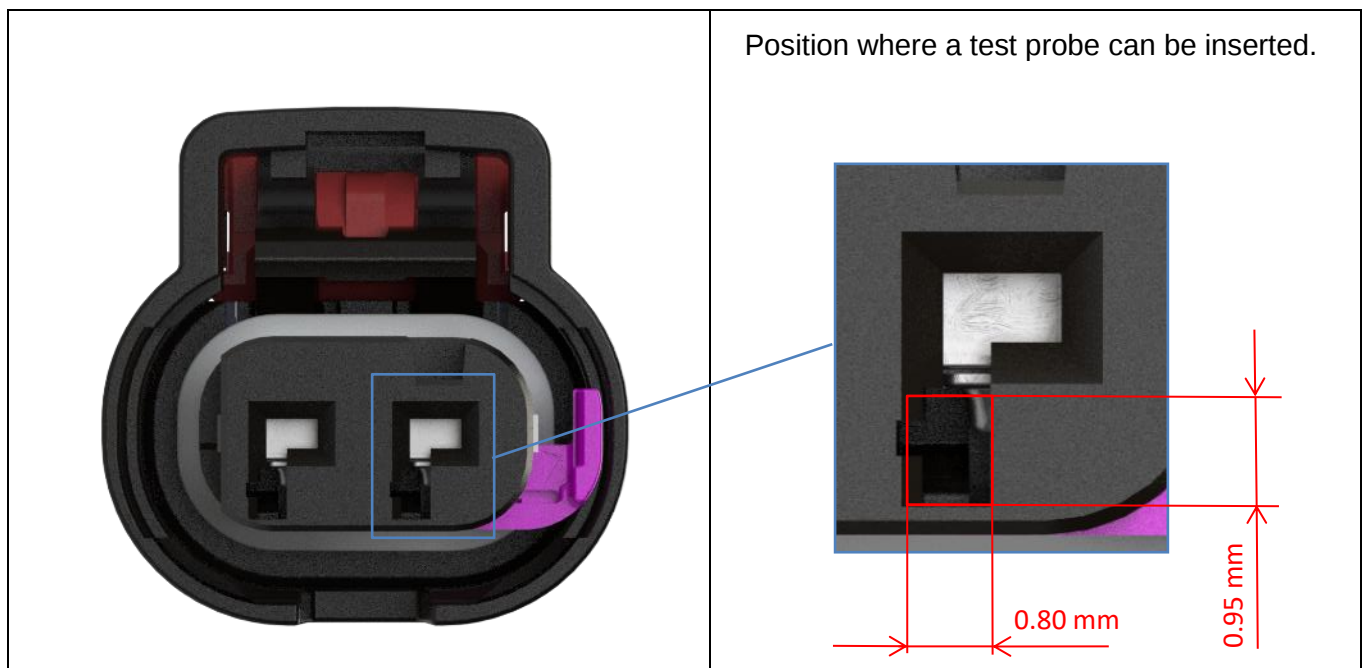
The wiring and continuity inspection shall be conducted by inserting the test probe at the specified position.

Recommended plating for the probe: Au (Gold)

Press-on force = $2\text{ N} \pm 20\%$

If available, terminals supplier guideline should be respected.

4.3.1 Electrical check of 1.2 mm CONTACT SYSTEM (YMT) CB FEMALE TERMINAL SEALED



Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

Precautions:

- Any tool used for wiring and continuity inspections shall have an accuracy equivalent to that of the mating connector to avoid deforming the housing and /or terminals.
- Care shall be taken not to deform the parts. Replace any damaged or deformed parts with new parts.
- Probes shall not touch the contact zone area.

4.4 Sealing test

In order to perform end of line sealing test female subassembly should have spacer operated from preset to set position as shown in chapter 4.2.2 Spacer secondary lock engagement.

End of line sealing test tool must be built in accordance with drawings mentioned in chapter 2.2.2.

During end of line sealing test recommended applied pressure profile is:

- 10 kPa, holding time 5 min.
- 50 kPa, holding time 5 min.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

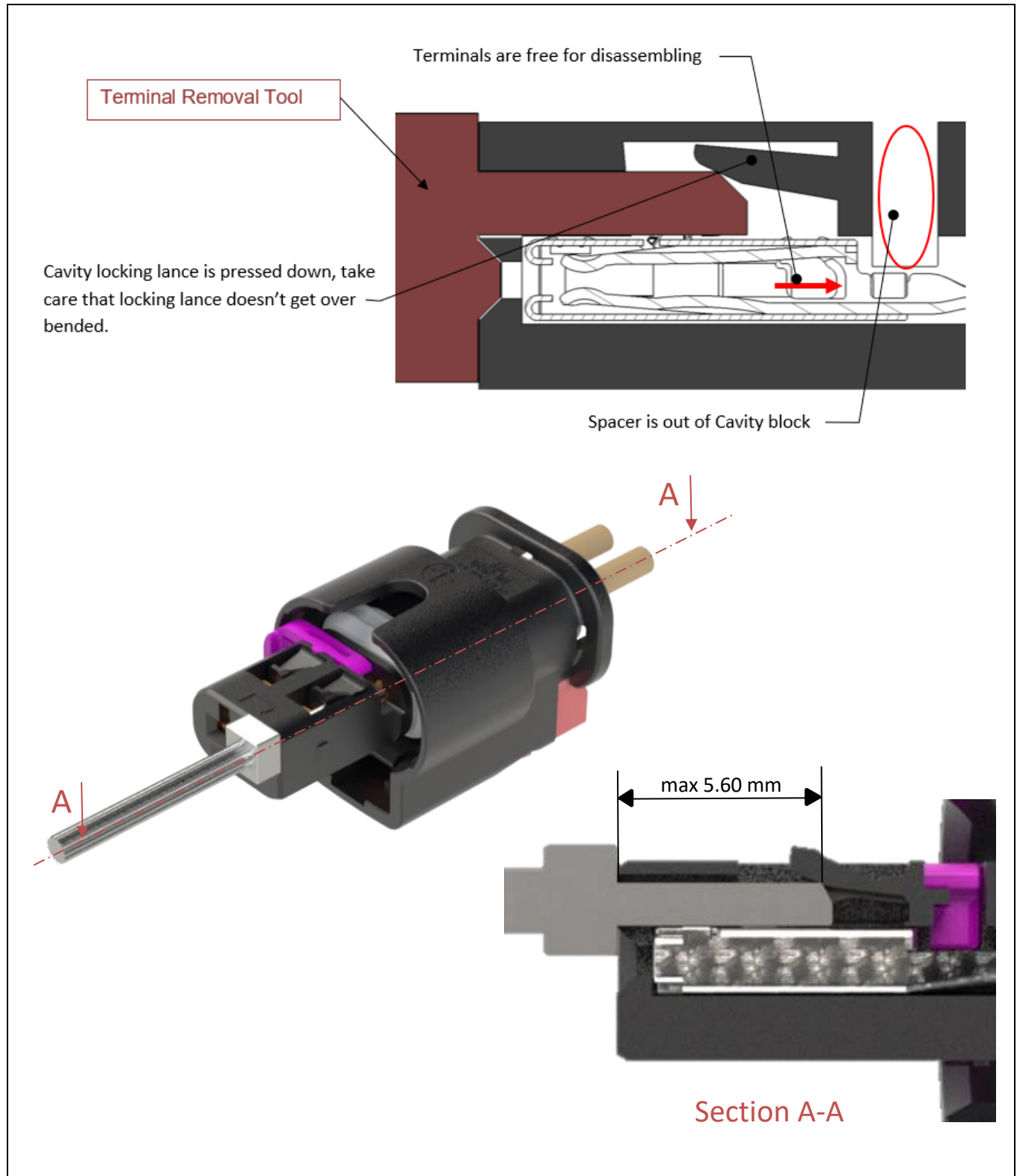
5 Servicing

5.1 Tools

5.1.1 1.2 mm CONTACT SYSTEM CLEAN BODY FEMALE TERMINAL removal tool

Use any applicable standard removal tool for 1.2 mm CONTACT SYSTEM (YMT) CB FEMALE TERMINAL SEALED;

Removal tool geometry to be in accordance with Handling Manual Doc. No YPES-15-1544E.

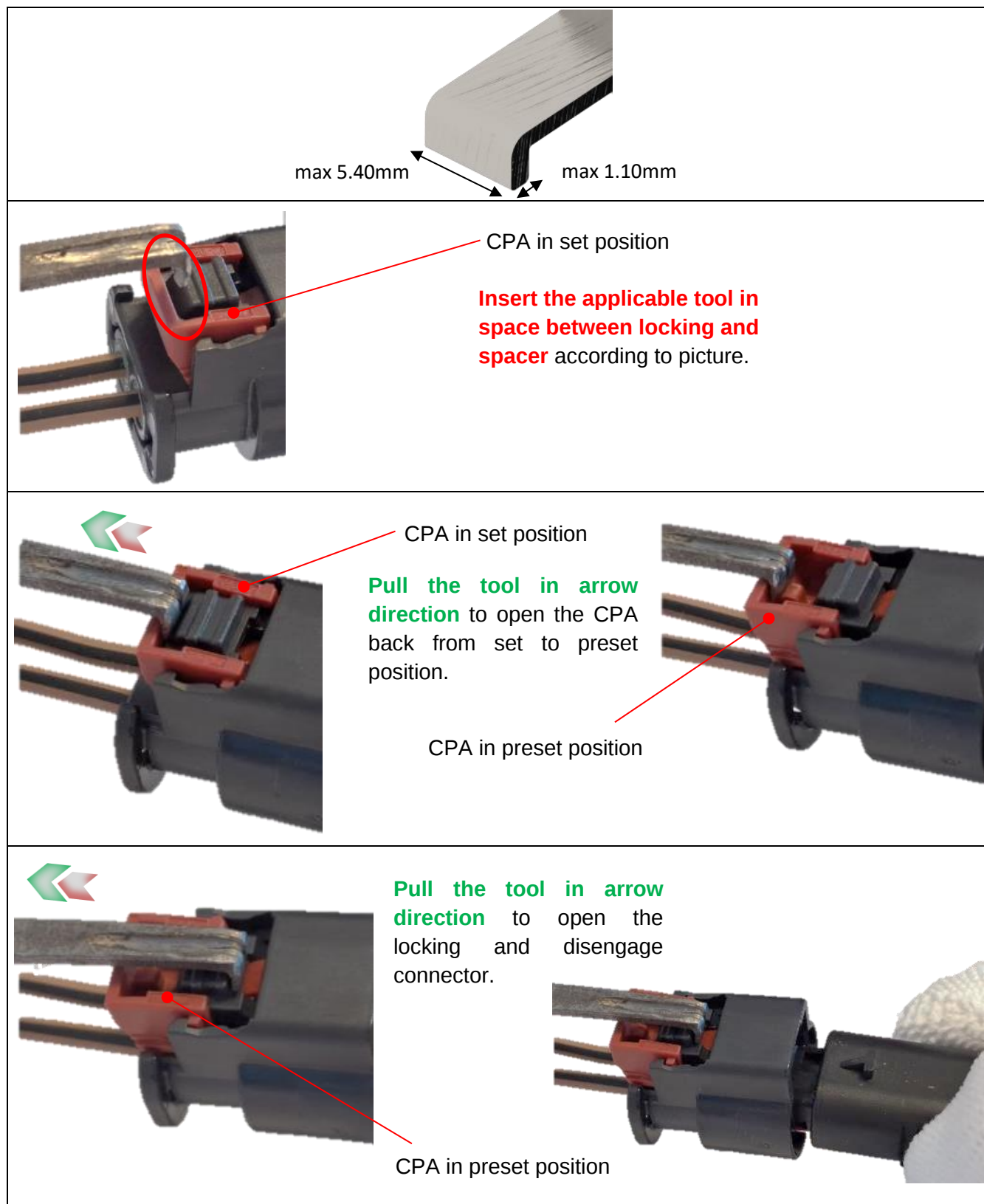


Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

Procedures

5.1.2 CPA and connector disengagement

CPA disengagement should be done primarily by hand or by using tool only in case connector is not accessible by hand. Any applicable tool can be used. In this chapter it is shown how to perform operation by using tool.



Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

5.1.3 Spacer disengagement

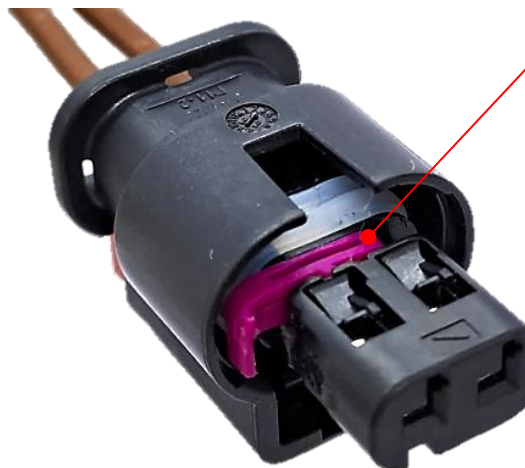
Spacer disengagement should be done only when removing and/or servicing the terminals.

Use flat screwdriver



Spacer in set position

First insert the tool according to picture and **push it in arrow direction** to open the spacer back from set to preset position.



Spacer in preset position

Precautions:

- Check if the spacer is securely in pre-set position (delivery condition).
- Only trained technicians should perform spacer disengagement operation.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

△5.1.4 1.2 mm (YMT) CB Terminal removal

In order to avoid damage to any of the parts, before the removal of terminals make sure the spacer is in pre-set position. Any adequate removal tool for 1.2 CB can be used.

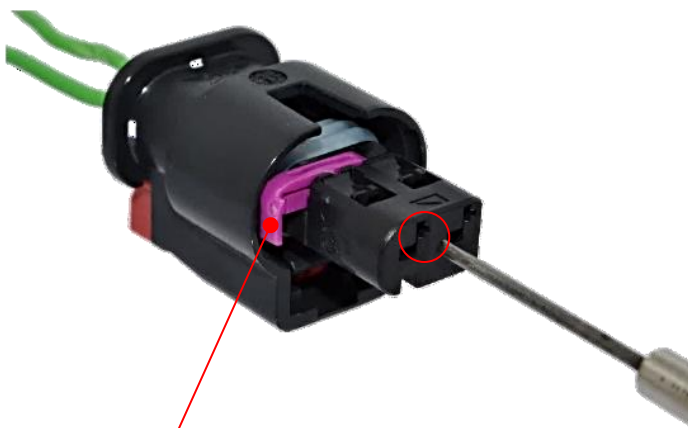
Removal tool (ENT-YAZ-11-0248-98 shown)



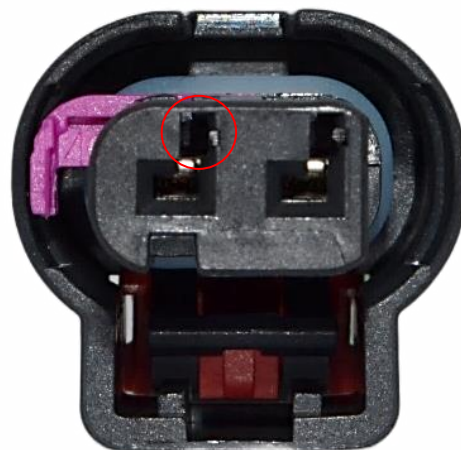
Precautions:

- Do not scoop with the tool, because deformation of the terminal may occur.
- If the tool is inserted into the contact area by mistake, replace any deformed terminal regardless of the degree of deformation.
- Do not remove the same terminal more than 3 times.
- Only trained technicians should perform the terminal removal operation; probing of the terminal / cavity by personnel not familiar with the removal process could result in damage to the terminal and / or connector.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

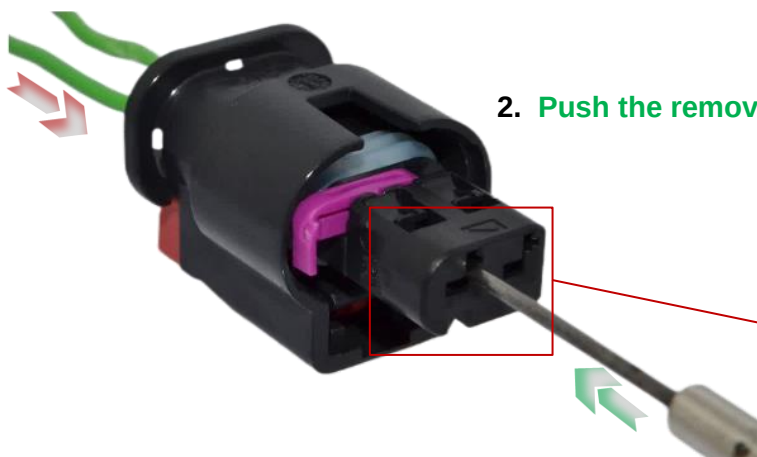


Spacer is in pre-set position.



Removal tool goes into the marked area.

1. **Push the wires** slightly to assure that the terminal is fully inserted into the terminal cavity.



2. **Push the removal tool** in the green arrow direction.

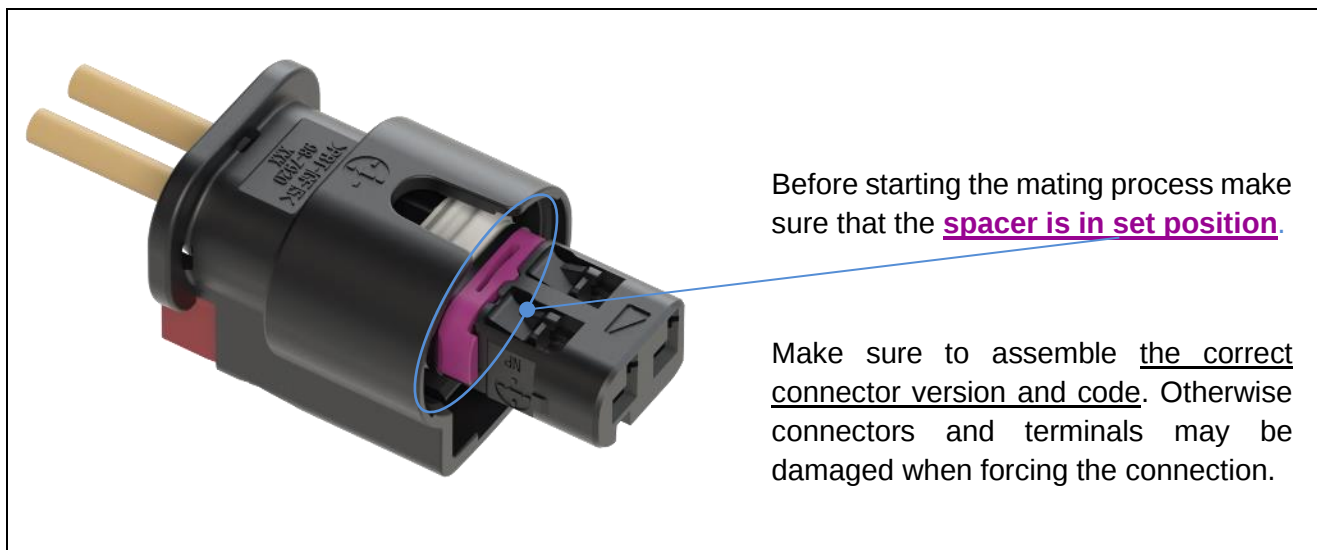


3. **Pull out terminal slowly**



Assembly on the car maker's line

Precautions:



Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

5.2 Mating of the female connector to the male counterpart/interface



Start mating the female connector subassembly on the male counterpart/interface **in the arrow direction**.



Push the female connector subassembly in the arrow direction until click sound is heard.



For varieties with CPA

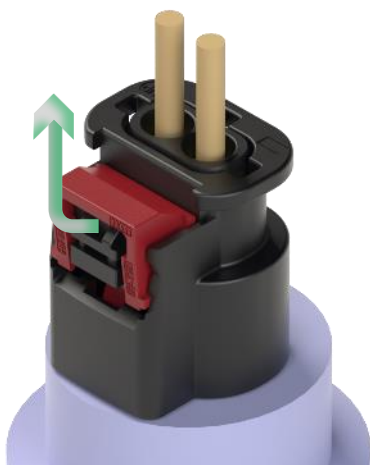
Push the CPA to finalize the matting of the female and male connector subassembly.

Precautions:

- Do not wrench when mating the connector

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

5.3 Unmating of the female connector from the interface/male connector



Start unmating the (F) connector subassembly from the (M) subassembly/interface in arrow direction, **first pull the CPA** from set to preset position.



When CPA is in preset position, connector locking is free to operate. **Press locking in arrow direction** in order to release connection between connectors.



Pull the female connector subassembly from the male subassembly/interface to complete unmating.

Precautions:

- Do not pull on the wires.

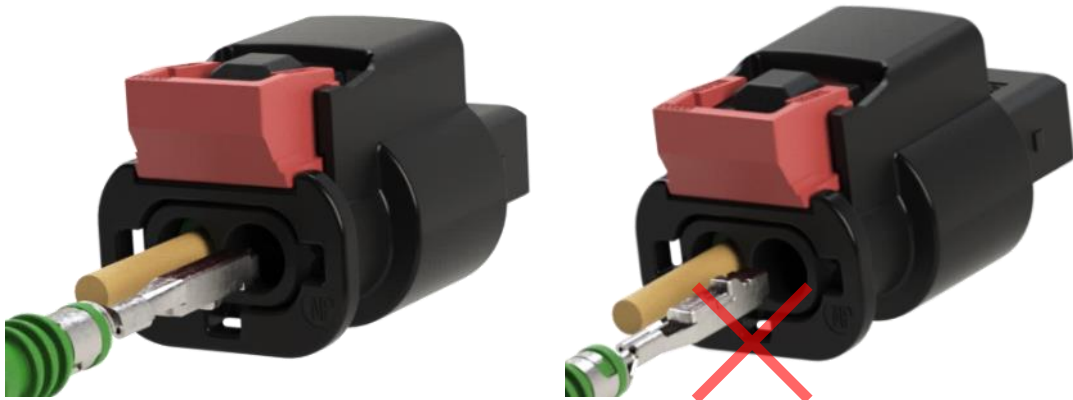
Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

6 Appendix

6.1 Insertion of terminal 1.2 mm Contact System (YMT) CB Female Terminal Sealed

Make sure the spacer is in preset position.

Take care to properly orient the terminals inside of the cavities.



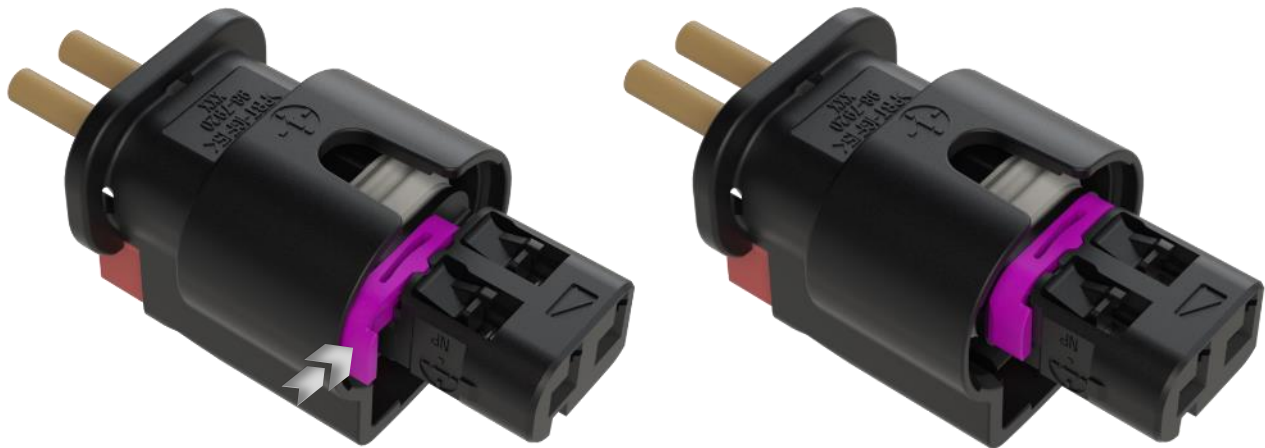
Proper 1.2 CB (F) terminal orientation.

Improper 1.2 CB (F) terminal orientation.

Insert first 1.2 (F) terminal, pull lightly to check proper locking. Repeat the procedure for remaining 1.2 CB (F) terminals.

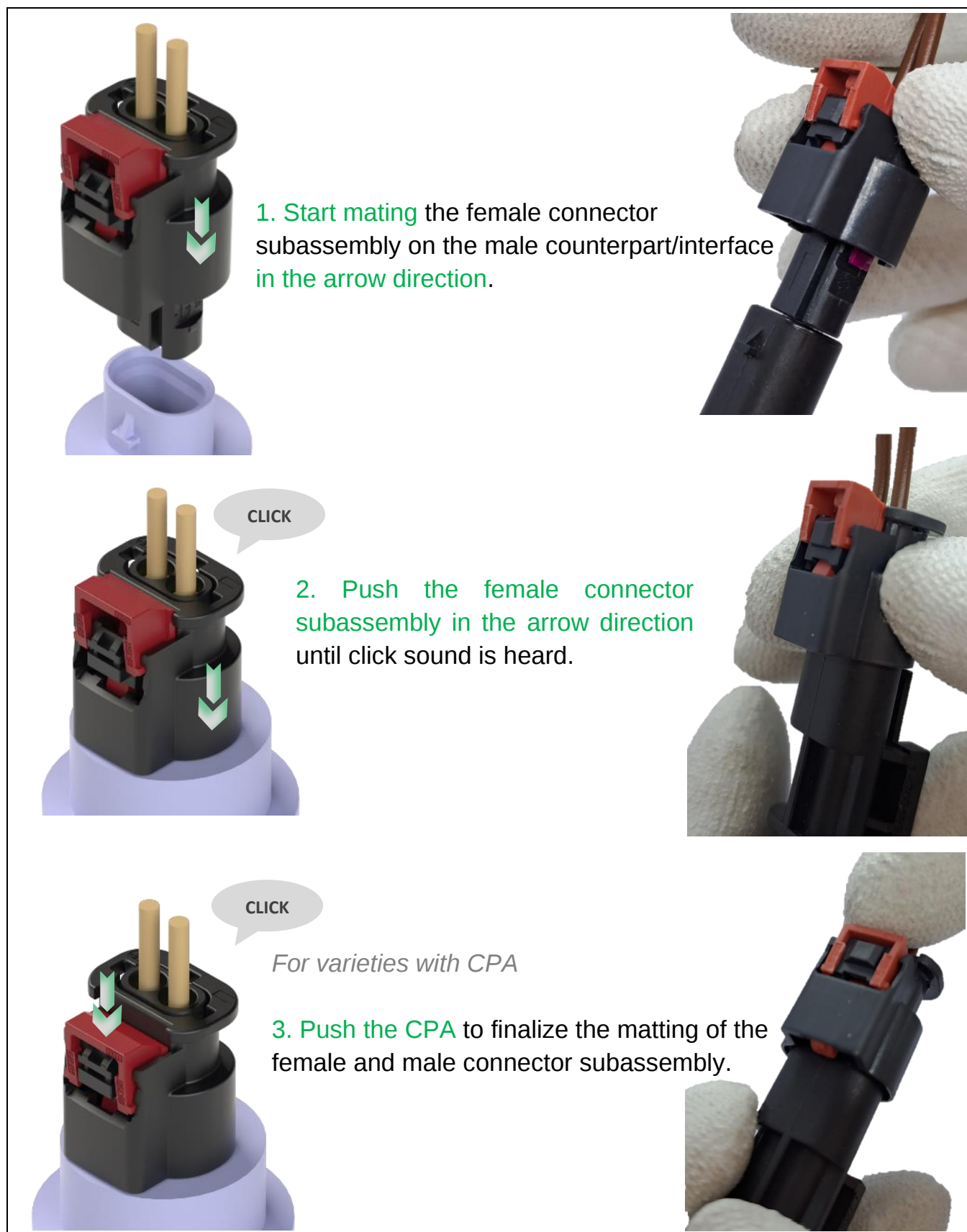


After all the terminals are inserted, **push the spacer** from preset into the set position according to picture.



Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

6.2 Connector mating

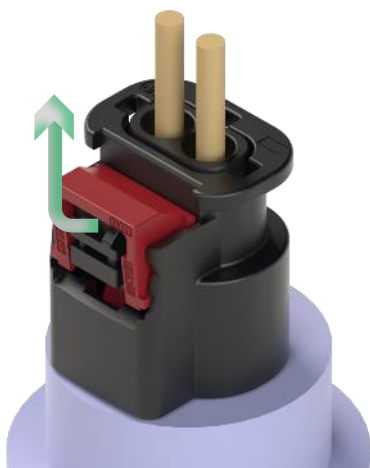


Precautions:

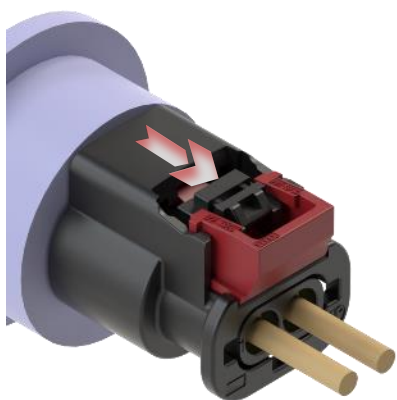
- Do not wrench when mating the connector

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

6.3 Connector unmating by hand



Start unmating the (F) connector subassembly from the (M) subassembly/interface in arrow direction, **pull the CPA** from set to preset position.



When CPA is in preset position, connector locking is free to operate.

Press locking in arrow direction in order to release connection between two connectors.



Pull the female connector subassembly from the male subassembly/interface to complete unmating.



Precautions:

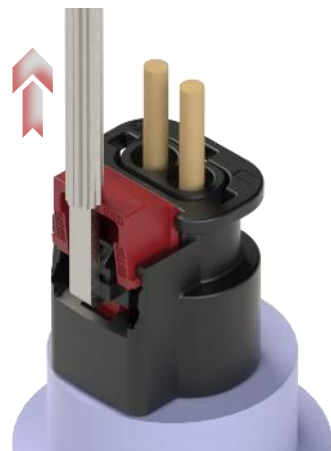
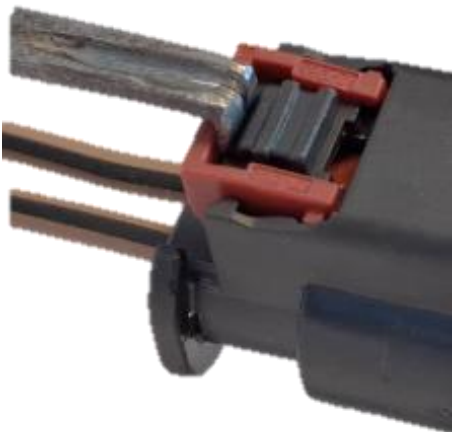
- Do not pull on the wires.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

△ 6.4 Connector unmating by tool



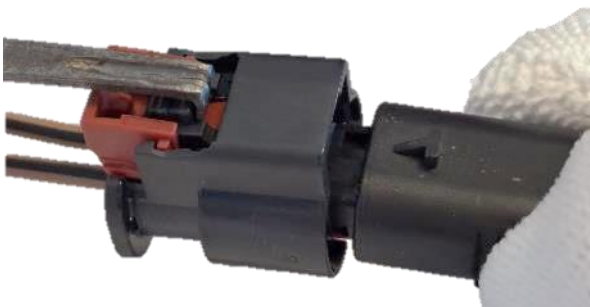
Start unmating the (F) connector subassembly from the (M) subassembly/interface in arrow direction, **pull the CPA** from set to preset position.



When CPA is in preset position, connector locking is free to operate.
Press locking in arrow direction in order to release connection between two connectors.



Pull the female connector subassembly from the male subassembly/interface to complete unmating.



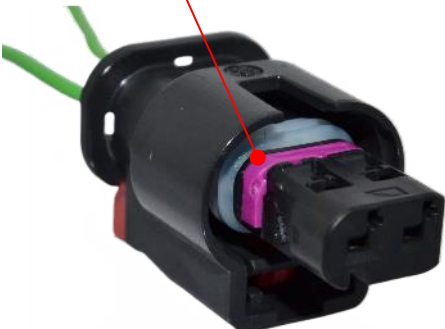
Precautions:

- Do not pull on the wires.

Title	Doc. No.	Rev.
YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	YPES-15-2066	2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		

6.5 Female terminal removal

Spacer is in set position.



Open spacer from set to preset position.

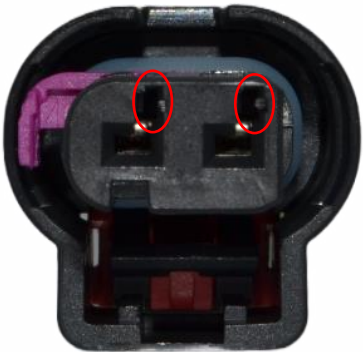
First position the tool according to picture and push it in arrow direction to open the spacer from set to preset position.



Spacer is in pre-set position.



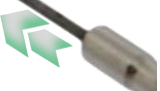
Removal tool goes into the marked area.



1. Push the wires slightly to assure that the terminal is fully inserted into the terminal cavity.



2. Push the removal tool in the green arrow direction.



3. Pull out terminal slowly.



*Applicable terminal removal tool is shown in chapter 5 Servicing

Title YAZAKI 1.2 WP CB (F) Connectors Family 2P, 3P & 4P	Doc. No. YPES-15-2066	Rev. 2
Any exploitation of this document which is not permitted by Copyright, in particular to copy this document to pass it to third parties, to adapt it or to store it on microfilm or in systems of electronic data processing is forbidden without express authorization. Offenders are liable to damages. The communication of the content of this document to third parties of this document is forbidden by contract.		