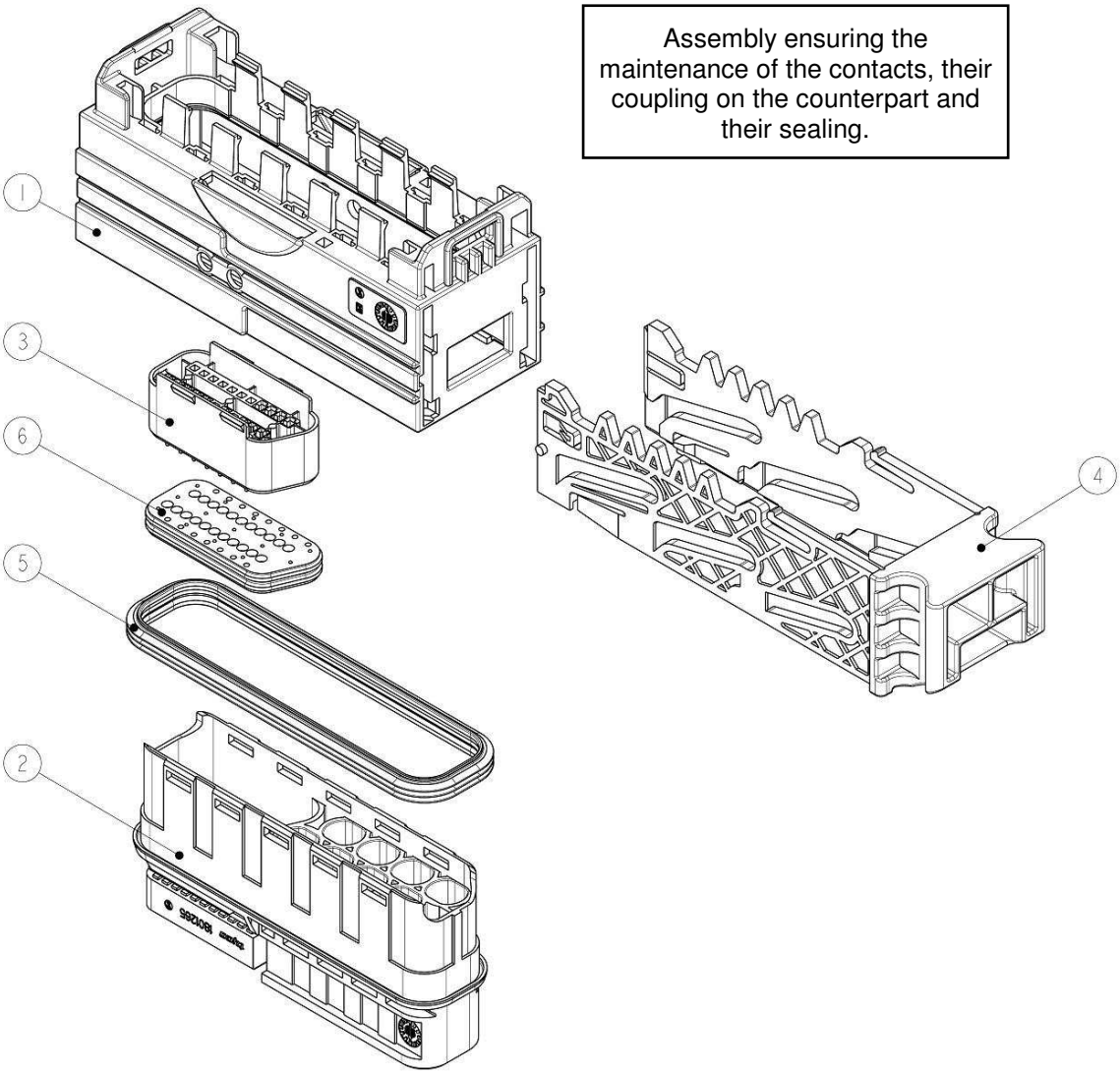
30 WAY HYBRID MQS CB/MCP CONNECTOR

1 - CONNECTOR PRESENTATION

1.1. RECEPTACLE HOUSING ASSEMBLY

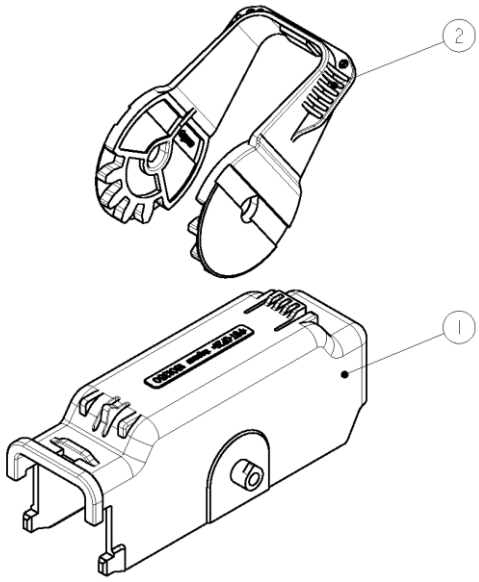


Picture 1

NUMBER	DESCRIPTION	MATERIAL
1	Main housing	PBT-ASA glass fiber reinforced
2	Receptacle housing	PBT glass fiber reinforced
3	MQS CB rear housing	PBT glass fiber reinforced
4	Slide	PBT glass fiber reinforced
5	Interfacial seal	Silicone rubber
6	MQS grommet	Silicone rubber

1.2. COVER AND LEVER

The cover and its lever are used as protection and assistance with the mating of receptacle housing. The use of the receptacle housing alone requires the agreement of the engineering department.

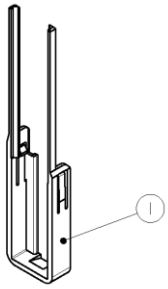


Picture 2

NUMBER	DESCRIPTION	MATERIAL
1	COVER	PBT glass fiber reinforced
2	LEVER	PBT glass fiber reinforced

1.3. SECONDARY LOCKING DEVICE

Complementary lock for contacts inserted in their receptacle housing after wiring.



Picture 3

NUMBER	DESCRIPTION	MATERIAL
1	VERROU SECONDAIRE	PBT glass fiber reinforced

2 - PART NUMBER OF PRODUCTS

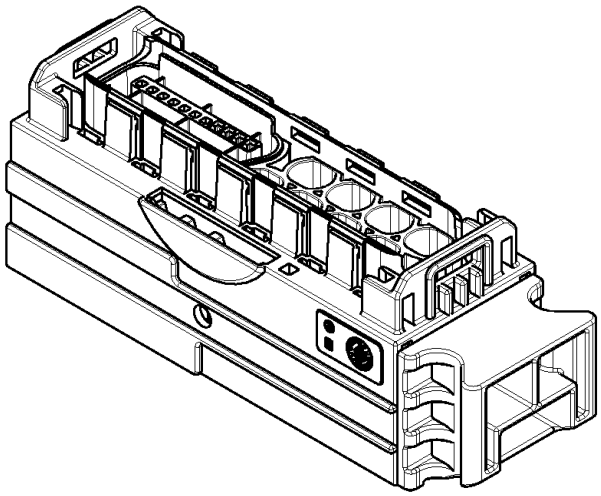
2.1. 30 WAY HYBRID MQS CB/MCP CONNECTION

DESCRIPTION	BLOCKED UP CAVITIES	COLOR	TYCO/Electronics PART NUMBER
30 WAY HYBRID MQS CB/MCP RECEPTACLE HOUSING ASSEMBLY	1,2,3,4,5,6,7,21,23	BLACK	1801263-1

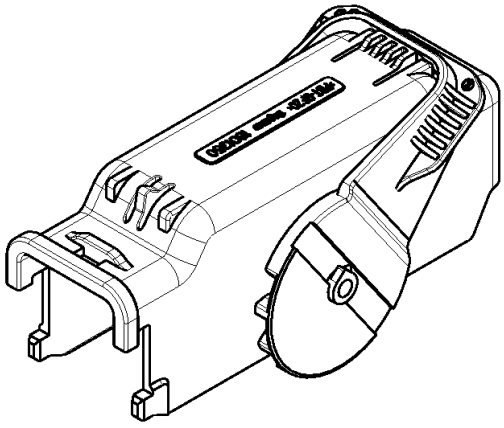
DESCRIPTION	RANGE	TYCO/Electronics PART NUMBER
MQS Clean Body contact	0.35 to 0.5 mm² tin plated	968220-1
MQS Clean Body contact	0.75 mm² tin plated	968221-1
MCP 4.8 contact	1 to 2.5 mm² tin plated	1241414-1
MCP 4.8 contact	2.5 to 4 mm² tin plated	1241416-1
MCP single wire seal	Ø 2.2 to 3mm (white)	963244-1
MCP single wire seal	Ø 3.4 to 7mm (yellow)	963245-1
MCP plug		100132-1
MQS CB plug		936054-1
SECONDARY LOCKING		1801268-1
30 WAY COVER		1801269-1
30 WAY COVER		1801269-2
CABLE CLAMP	CABLE CLAMP WITH WIDTH : ≤ 3 mm	
WIRE	FOLLOWING STANDARD RENAULT 36-05-009/--L	

3 - DELIVERY – PACKAGING

(Standard E73.03.150.G)



Picture 4



Picture 5

3.1. PACKAGING TYPE (for information only, in addition to packaging specification)

3.1.1. 30 WAY HYBRID MQS CB/MCP RECEPTACLE HOUSING ASSEMBLY (PART NUMBER : 1801263-X)

- GALIA A12 box (part number 973057-4) ; 168 parts per box (packaged per layer)
- Packaged as 6 layers of 28 parts
- Packaging weight : 11,5 kg
- Label with :
    - TYCO/Electronics part number
    - Quantity
    - Date Code
    - TYCO/Electronics FO number
    - Workshop number
    - Part revision code

3.1.2. 30 WAY COVER (PART NUMBER : 1801269-X)

- GALIA A12 box (part number 973057-4) ; 220 parts per box (in bulk)
- Packaging weight : 6 kg
- Label with :
    - TYCO/Electronics part number
    - Quantity
    - Date Code
    - TYCO/Electronics FO number
    - Workshop number
    - Part revision code

3.1.3. 30 WAY SECONDARY LOCKING (PART NUMBER : 1801268-X)

- GALIA A15 box (part number 973058-3) ; 800 parts per box (in bulk)
- Packaging weight : 1,8 kg
- Label with :
    - TYCO/Electronics part number
    - Quantity
    - Date Code
    - TYCO/Electronics FO number
    - Workshop number
    - Part revision code

3.2. STORAGE, HANDLING AND REPACKING INSTRUCTIONS

3.2.1. Store in well-ventilated areas where the temperature and relative humidity remain within the following limits : 5° to 50°C ; 30% to 70% HR.

3.2.2. Store without contact with the ground, on a pallet platform, on a dry and clean surface until the packages are fetched for release.

3.2.3. Store the packages sheltered from water precipitations and direct UV influence.

3.2.4. Store the packages sheltered from heat sources and areas subjected to high temperature variations.

3.2.5. Store sheltered from sudden temperature or hygrometry variations to avoid condensation inside the packages.

3.2.6. Store the packages sheltered from dust to keep the components clean.

3.2.7. Keep the packages as received, without removing the adhesive tape until use.

3.2.8. Repack after taking some parts.

3.2.9. Do not walk on the packages and do not place heavy objects on them.

3.2.10. The received packages must be handled on a first-in, first-out (FIFO) basis.

3.2.11. When the packages are stored in racks, place the heaviest boxes below, the lightest ones on top so that the parts are not damaged.

3.2.12. A thermal balancing period (⬆24 hours) is necessary before wiring the connector.

3.2.13. Do not store in bulk the connectors 1801263-X on production line.

4 - PRODUCT

4.1. CONTACT + HOUSING

The receptacle housing includes :
- 22 cavities for Micro Quadlock System Clean Body (MQS CB) contact
- 8 cavities Multiple Point Contact (MCP) contact

4.1.1. Contact connection instructions

NOTA Before its insertion, make sure that the contact is not damaged and that it fully complies with the requirements of the application specifications, and the secondary locking is not in position.

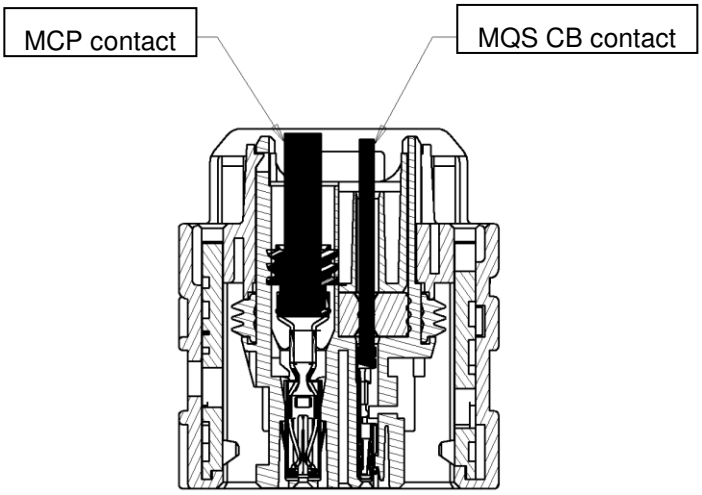
The contact is polarized ; therefore, it must be oriented correctly before inserting in the housing.

If the orientation of the MQS CB contact is incorrect, it will not be possible to insert it by an applied force less than 12N.

If the orientation of the MCP contact is incorrect, it will not be possible to insert it by an applied force less than 25N for a section of wire equal or less than 3mm².

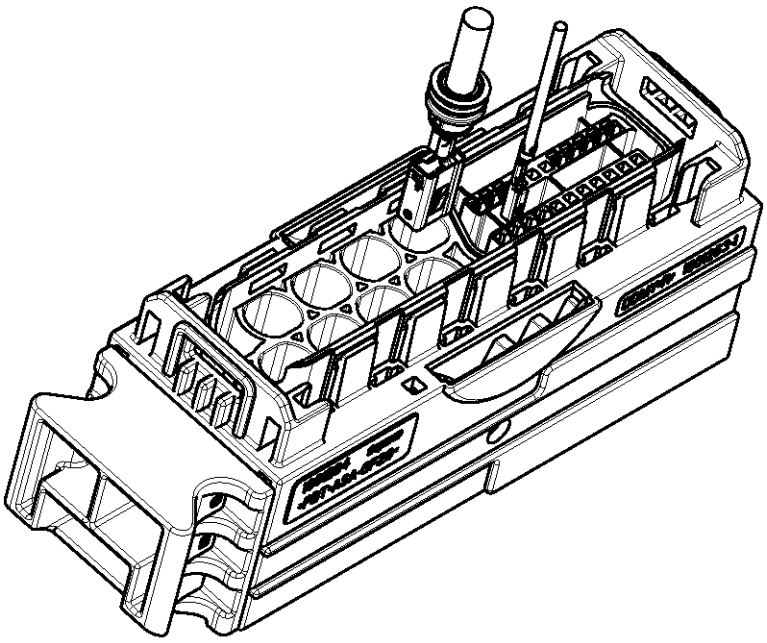
If the orientation of the MCP contact is incorrect, it will not be possible to insert it by an applied force less than 35N for a section of wire greater than 3mm² and equal or less than 5mm².

If the orientation of the MCP contact is incorrect, it will not be possible to insert it by an applied force less than 45N for a section of wire greater than 5mm² and equal or less than 6mm².



Picture 6

Receptacle housing with contacts



Picture 7

NOTA At the time of the insertion of the contacts, check that the secondary locking is not present.

Turn the MCP contact facing the assigned cavity by orienting the locking lances of the contact towards the locking slots of the receptacle housing. Insert the contact until the stop into the cavity.

When the contact locks, one or two slight « click » can be heard. Do not force to insert it in the cavity. If the insertion is difficult, remove the contact and correct its orientation.

When the contact is driven home in its cavity, make sure that it is locked by applying a slight traction (pay attention not to degrade the primary retention function).

Turn the MQS CB contact facing the assigned cavity by orienting the shape of contact in accordance with the rear of the receptacle housing. Insert the contact until the stop into the cavity.

When the contact locks, one slight « click » can be heard. Do not force to insert it in the cavity. If the insertion is difficult, remove the contact and correct its orientation.

When the contact is driven home in its cavity, make sure that it is locked by applying a slight traction (pay attention not to degrade the primary retention function).

NOTA Check the correct locking of the contacts just after its insertion.

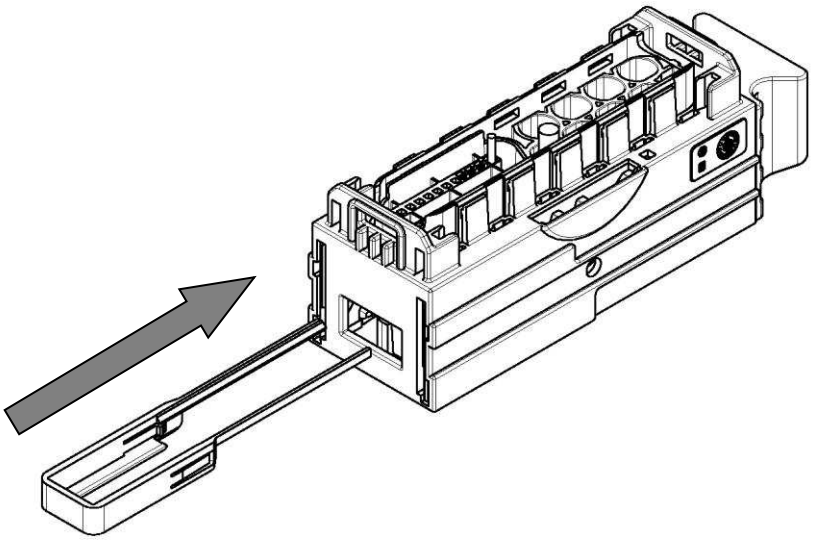
At the time of wiring the receptacle housing can be maintained on the table of wiring. The areas of fixing of the receptacle housing are defined on the sheet 22 (tightening force < 100N).

Wire the ways as recommended in the instruction sheet 411-15515. When taping the wires, do not start or finish with the housing, but leave a free distance of 40mm minimum.
In order to limit the constraints in wire during foldings of the strand at exit of the receptacle housing, it is recommended to make a half-turn of twist of wire before spiral wrapping (see picture 12).

4.1.2. Installation of the secondary locking

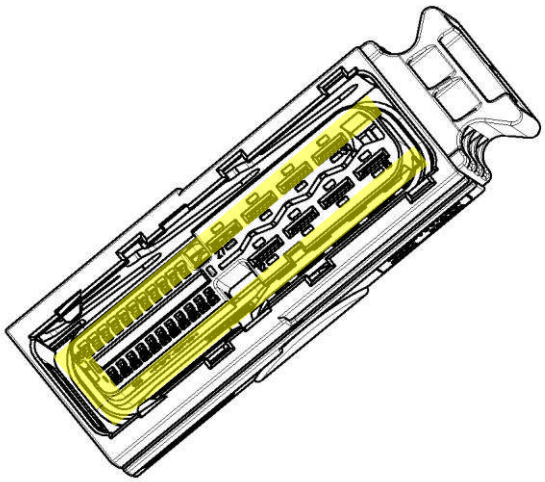
The installation of the secondary locking (delivered separately) into the receptacle housing is done manually or using a screwdriver.

Insert the secondary locking into the receptacle housing by the side of the MQS CB cavities.



Picture 8

Go until the stop to stabilize the position of the secondary locking (under a maximum force of 60N).



Picture 9

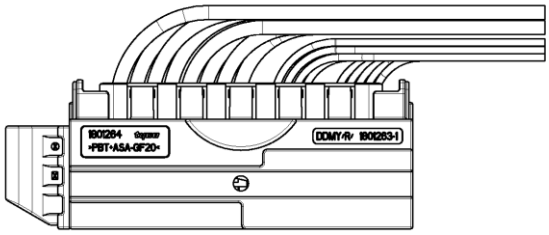
NOTA *A « click » can be heard when the secondary locking is locked.*

When a contact is incorrectly inserted, this operation cannot be done within the normal limits of the product.

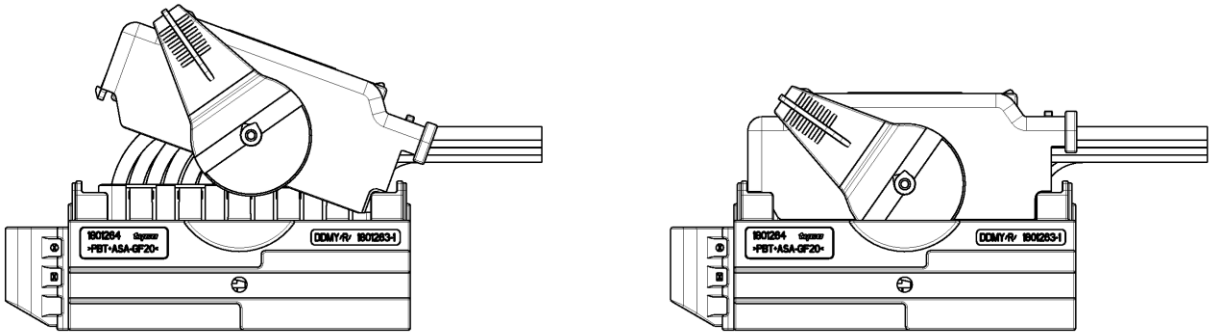
The mating with the counterpart is made impossible when the secondary locking is present but badly positioned (the secondary locking is not at the end of its travel).

4.2. HARNESS AND COVER PLACEMENT

Make the cable strand. Comb the cable strand on the side of the wire exit.



Install the cover (delivered separately) as indicated in the diagrams below :



Picture 10

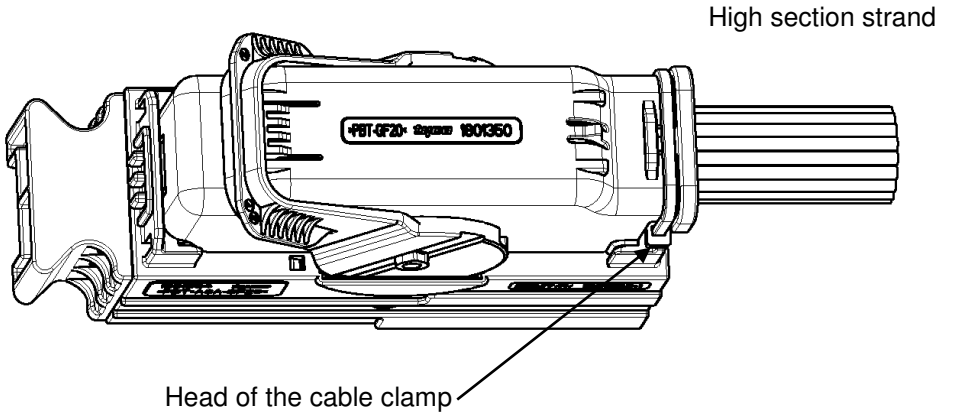
NOTA The receptacle housing and the cover can be coupled between them only in locked position.

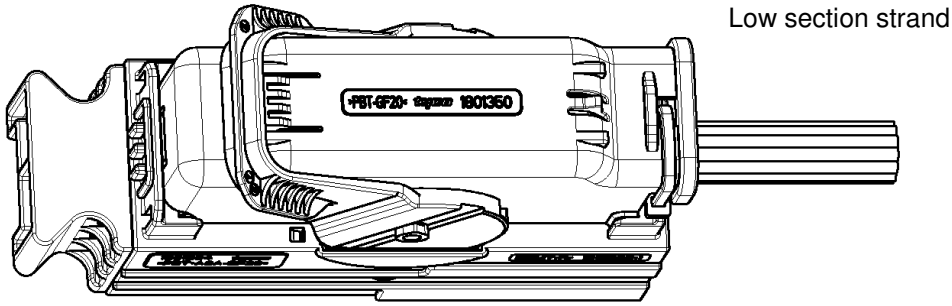
REMARK If the lever is in wrong position, it will be impossible to assemble the cover on the receptacle housing. In this case, withdraw the cover, put the lever in the right position and retry to assemble the cover on the receptacle housing.

Rotate the cover until hearing a « click » which will indicate its locking on the receptacle housing.

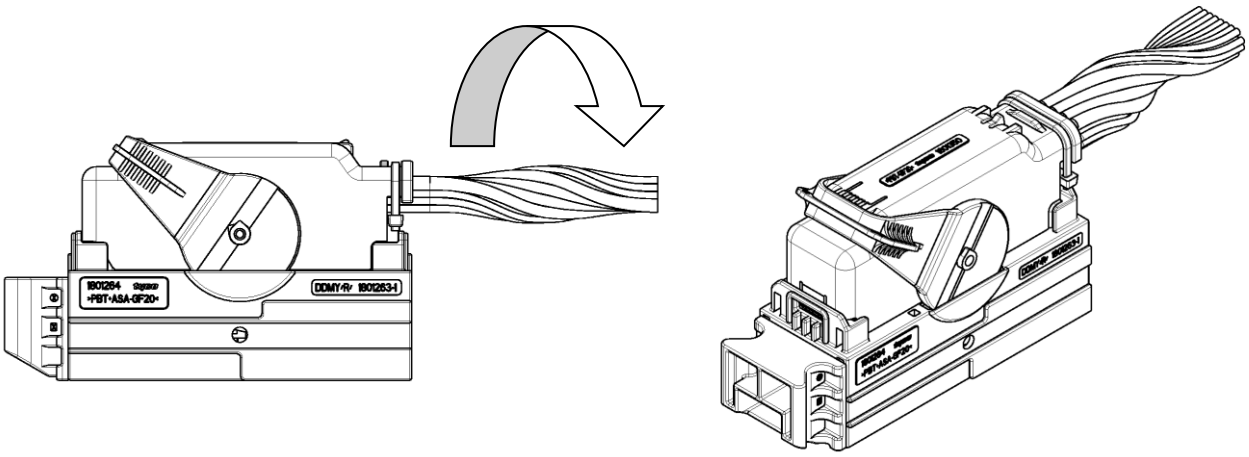
Be careful, not grip the wires with this operation.

Once the cover locked on the receptacle housing, position the cable strand and install a cable clamp (see diagram below). The head of the cable clamp must be positioned on one of the lateral sides of the cover in order not to block the movement of the lever.





Picture 11



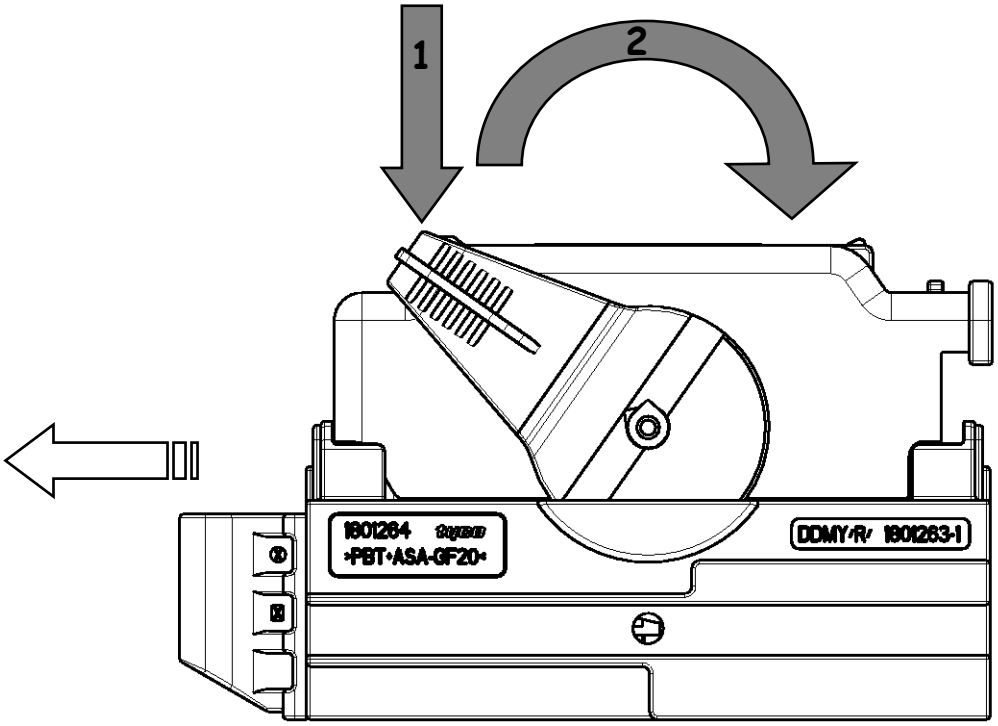
Picture 12

When taping the wires, do not start or finish near the housing, but leave a free distance of 40 mm minimum with the exit of the cover. In order to limit the constraints in wires during foldings of the strand at exit of the receptacle housing, it is recommended to make a half-turn of wires before spiral wrapping (see picture 12).

4.3. CONNECTOR MATING

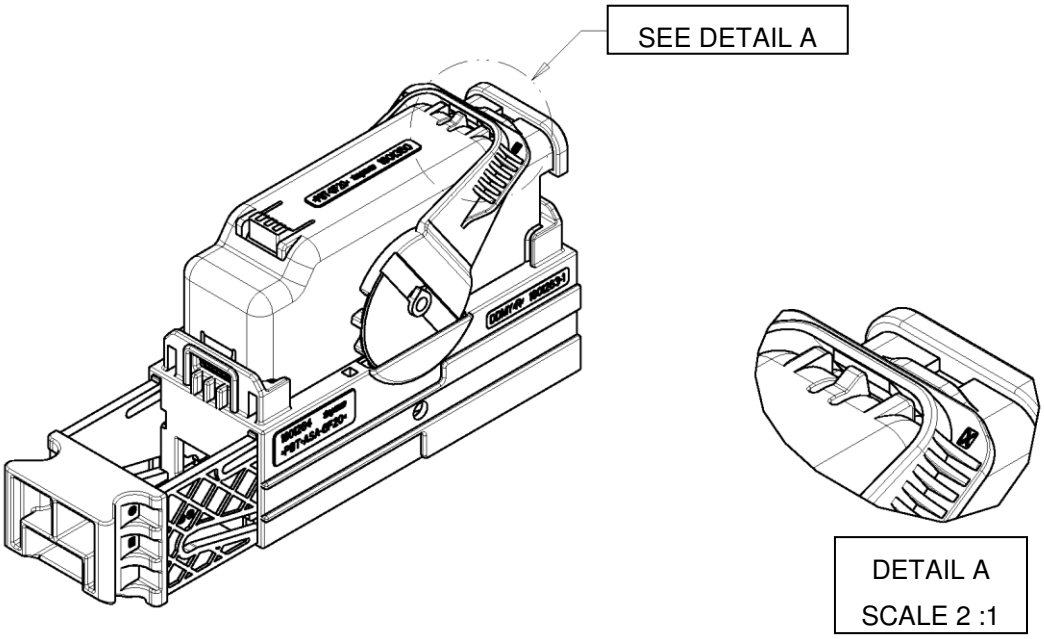
The mating of the 30 way MQS CB/MCP receptacle housing on its counterpart is carried out by the following operations :

1. Unlock the lever by pressing on the locking latch of the cover.
2. Rotate the lever on its axis, this causes the exit of the slide of the 30 way MQS CB/MCP receptacle housing (see picture 14).

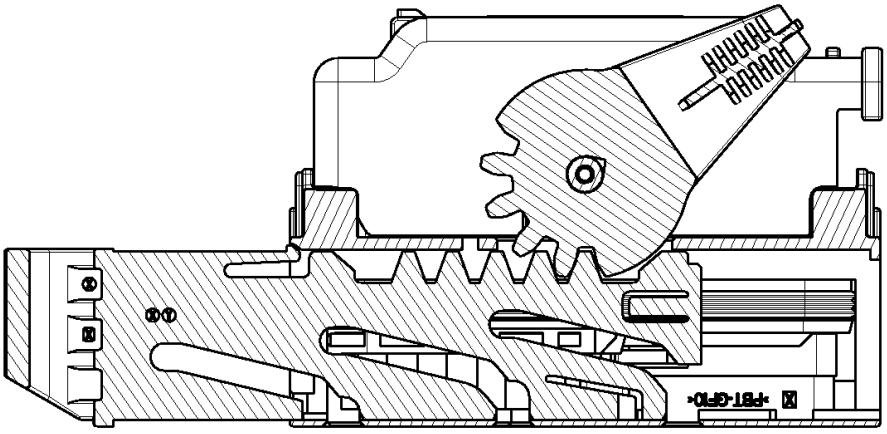


Picture 13

Continue this operation until exceeding the hard point on the cover.



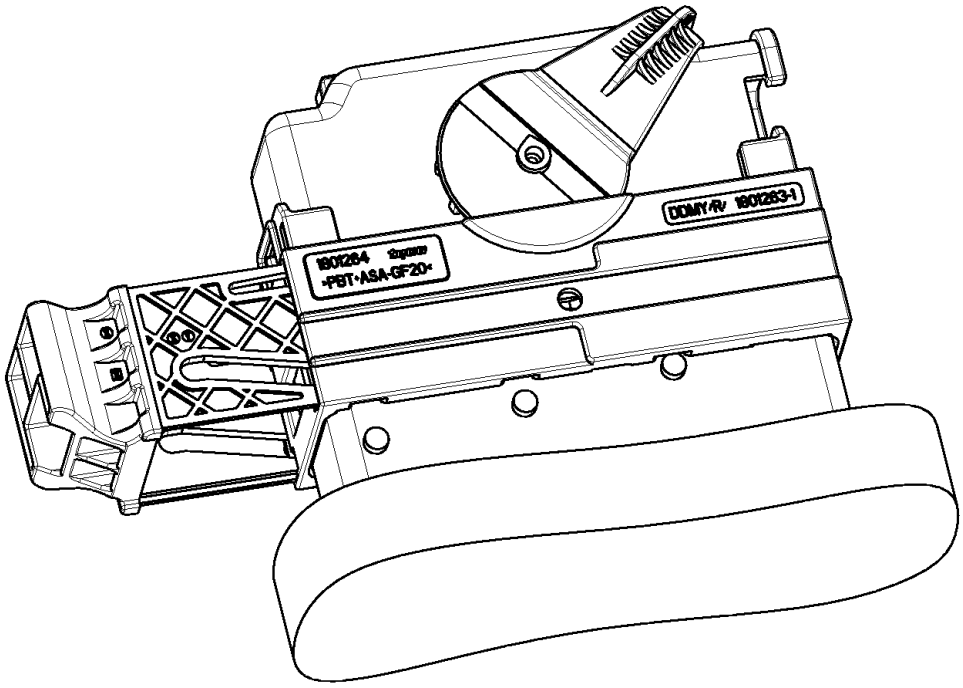
Picture 14



Picture 16

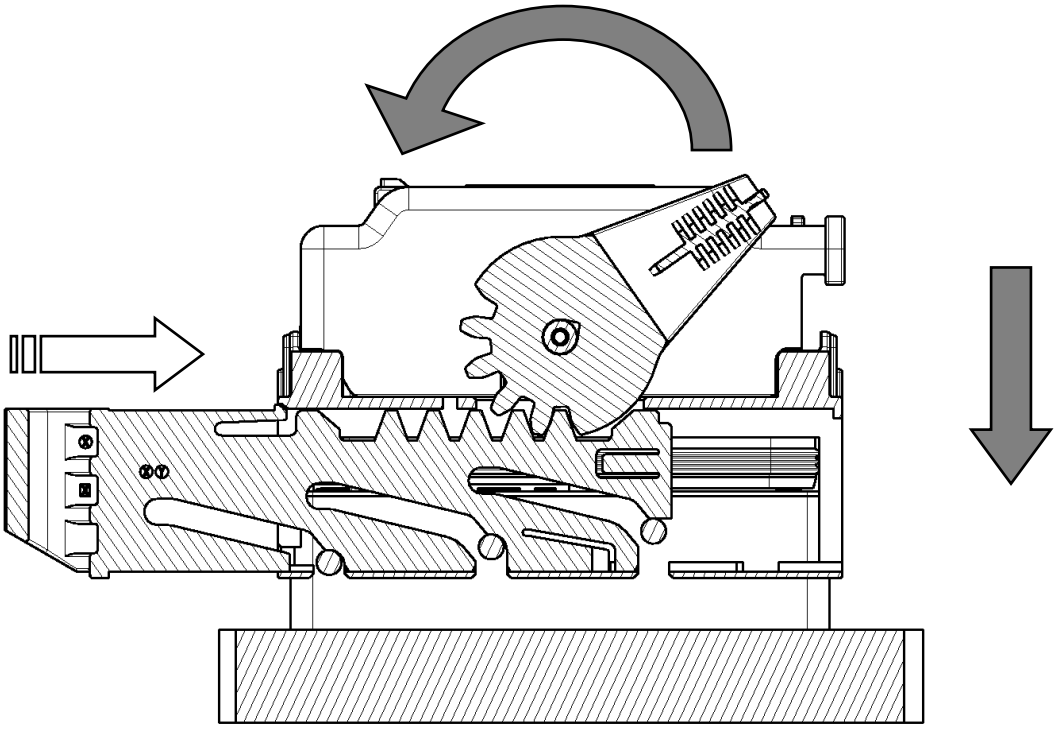
BE CAREFUL **Do not operate the lever without accosting on the counterpart.**

Position the receptacle housing on its counterpart (the six slots of the header must enter in the guide slots of the receptacle housing).



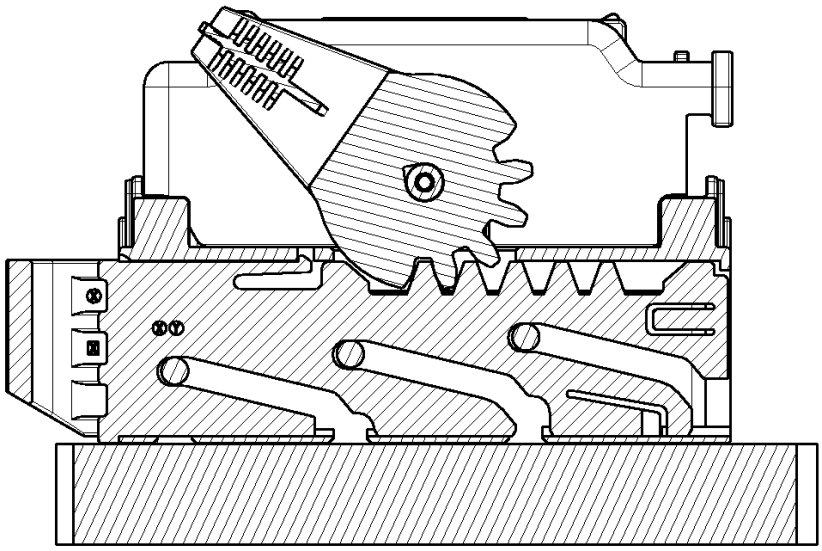
Picture 17

Rotate the lever (in the contrary direction of the preceding operation) until the locking on the cover.



Picture 18

→ The 30 way connector is mated and locked on its counterpart



Picture 19

If the mating force is too high, check the following points :

- correct position of the interfacial seal
- correct position of the secondary locking
- correct position of the contacts
- good condition of the counterpart contact
- the absence of foreign part in the volume of mating

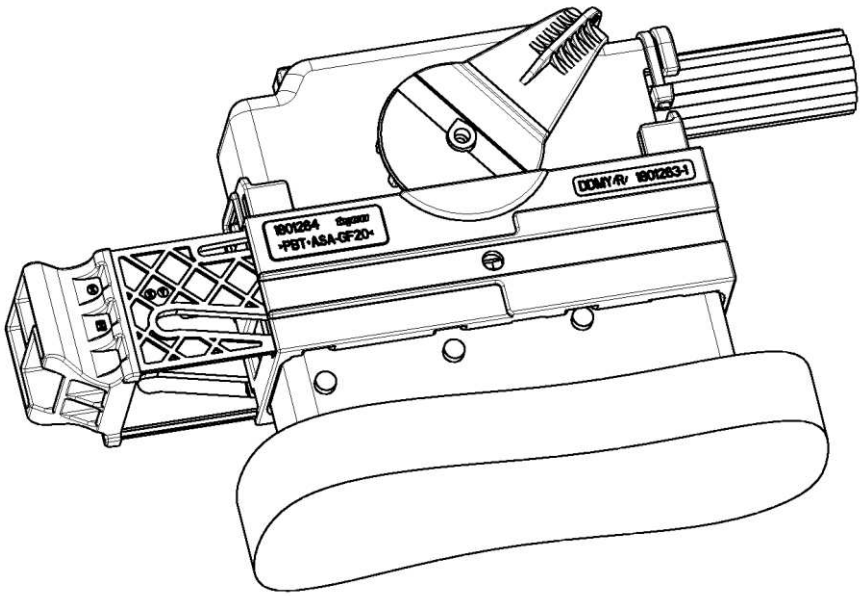
4.4. RECOMMENDATIONS FOR UNMATING

4.4.1. Connector unmating

The unmating of the 30 way MQS CB/MCP receptacle housing from its counterpart is carried out by the following operations :

1. Unlock the lever by pressing the locking latch of cover (see picture 21)
2. Rotate the lever
3. Disengage the connector

→ The 30 way connector is uncoupled from its counterpart

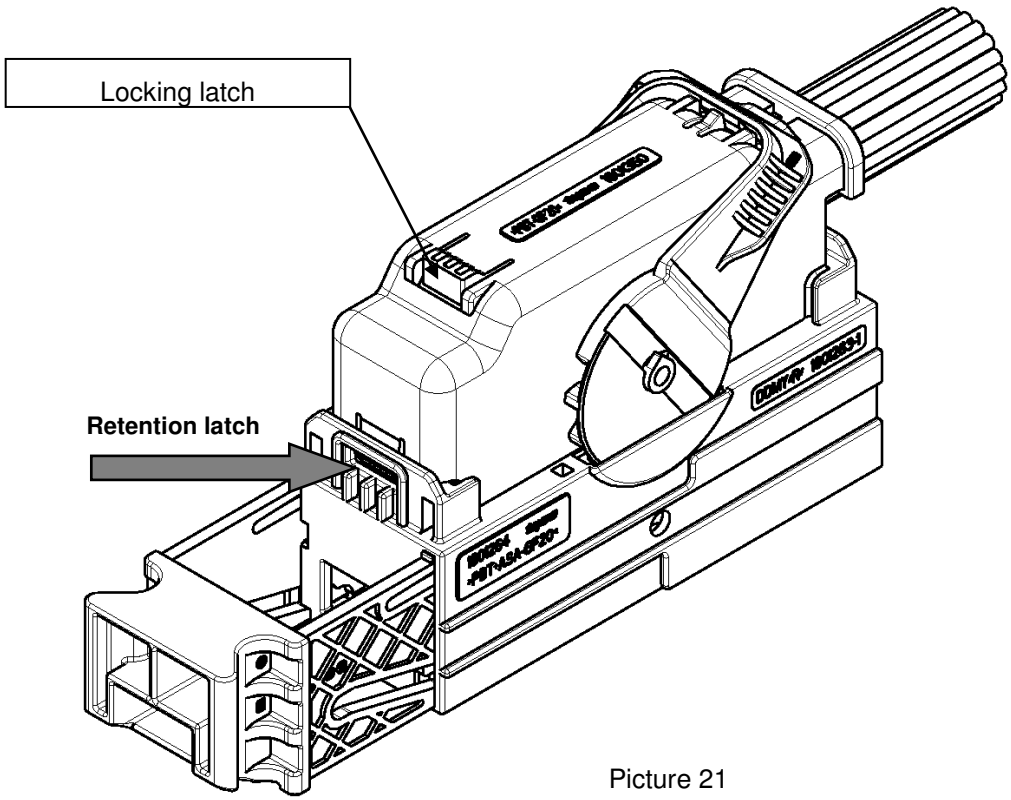


Picture 20

4.4.2. Cover unmating

1. Cut the cable clamp
2. Press on the retention latch of the cover
3. Rotate the cover on the opposite side of the retention latch.

⟶The cover is independent of the receptacle housing



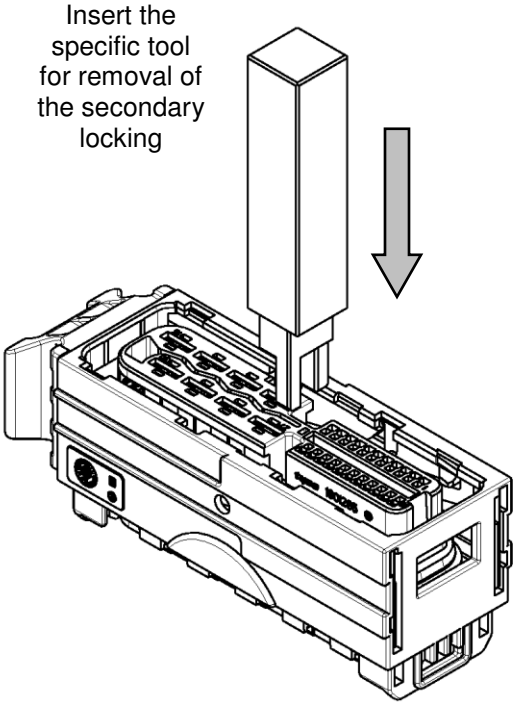
Picture 21

4.4.3. Special recommendations for removal

Secondary locking

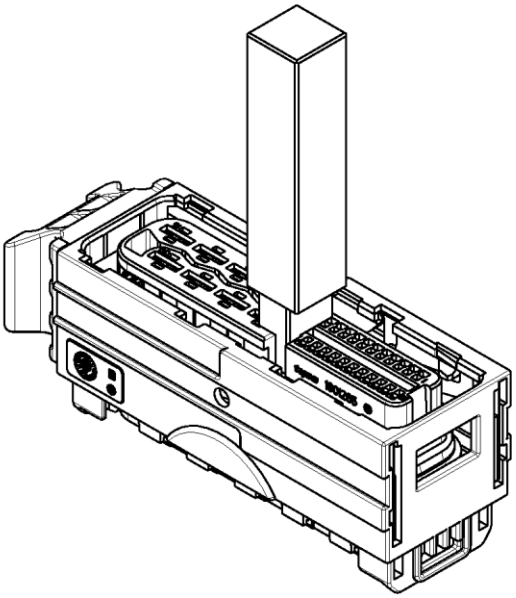
Step 1

Insert the specific tool for removal of the secondary locking



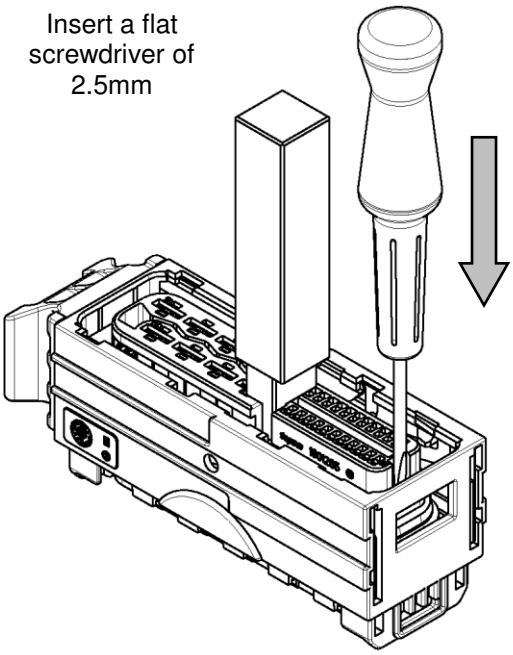
Step 2

Go until the stop



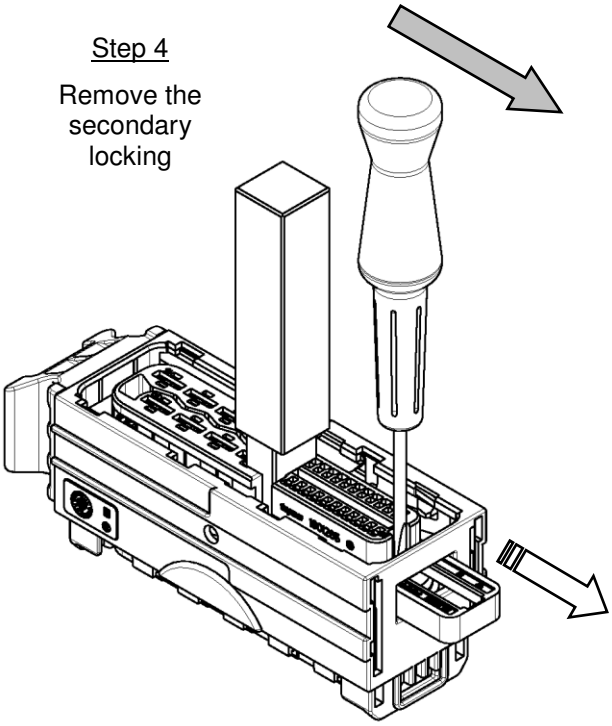
Step 3

Insert a flat screwdriver of 2.5mm



Step 4

Remove the secondary locking



Contacts

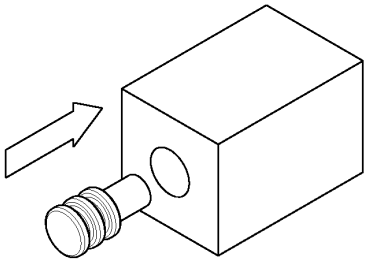
Remove the cover of the connector then proceed as recommended in the technical manual described in paragraph 10.1.

Interfacial seal

The seal must not be removed. If it is defective, replace the connector.

4.5. Plug installation for MCP cavity

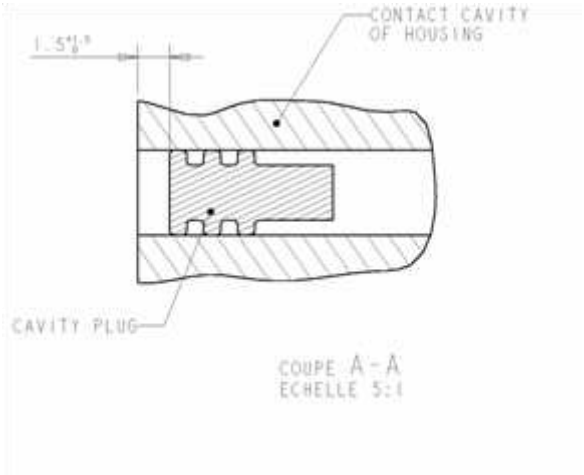
1. Make sure that the contacts are installed in the specified cavities.
2. Grab a plug and orientate it as indicated below :



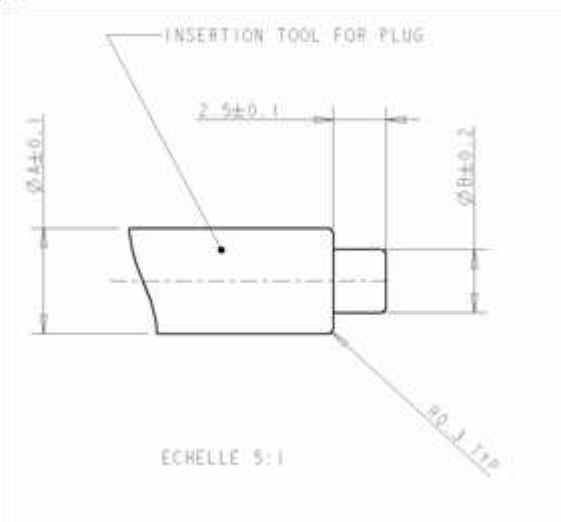
Picture 22

3. Insert the plug into one of the free cavities. The plug slides into the cavity with some force, this ensures that the plug will be maintened. Use a non-aggressive tool to push the plugs (see picture 24). Respect the assembly dimension of the plug definied in picture 23.
4. Repeat the step 2. for all free cavities to be sealed.

NOTA It is more convenient to install the plugs before the contacts.



Picture 23



Picture 24

	MCP
Dim 'A'	5,4
Dim 'B'	3,4

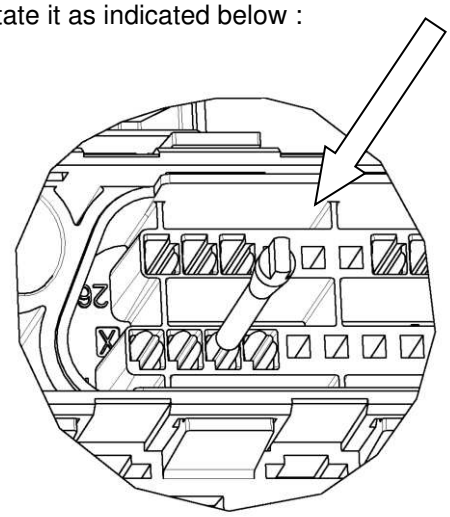
Exept particular case

4.6. Plug removal for MCP cavity

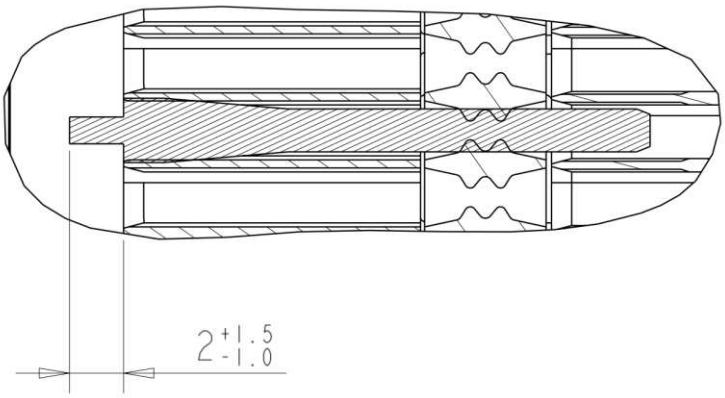
Push the plug using a non-aggressive tool inserted by the front face of the cavity.

4.7. Plug installation for MQS CB cavity

1. Make sure that the contacts are installed in the specified cavities.
2. Grab a plug and orientate it as indicated below :



3. Insert manually the plug into one of the free cavities. The plug slides into the cavity with some force. Respect the assembly dimension of the plug definied below :



4. Repeat the step 2. for all free cavities to be sealed.

4.8. Plug removal for MQS CB cavity

Extract the MQS CB plug by its rectangular shape using a small flat nosed pliers

5 - WIRE COMBING

Make sure that the wires are combed in the cover exit direction to the right or the left in order to avoid any damage to the wires.

6 - ELECTRICAL CONFORMITY TEST

6.1. General recommendations

The operator inserts the contact manually into the cavity. A « click » indicates that the contact is locked. For safety reason, the operator applies a slight traction on the wire to make sure that the contact is definitely locked. The contacts can be extracted from the connector using the extraction tools, part number 539970-1 (for MCP contact) and part number 2-1579008-1 (for MQS CB contact).

6.2. Definition of potential defect

6.2.1. Incorrect contact addressing in the housing(s)

The contact is correctly inserted and locked but in the wrong cavity.

6.2.2. Incorrect contact orientation

The contact orientation is 90° around the longitudinal contact insertion axis.

6.2.3. Association error

Attempt to insert a contact in a cavity of a different family (e.g.: MQS CB contact into MCP cavity).

6.2.4. No contact locking

The contact is not locked by its lance in the housing.

6.3. Check

6.3.1. Addressing

Check : electrical continuity (see specification § 6.4)

6.3.2. Orientation

6.3.2.1. Orientation at 90°

Cannot be inserted.

6.3.3. Association error

6.3.3.1. MQS CB contact into MCP cavity

- Addressing error.
- This defect is not controlled by the module.
- Check : electrical continuity.

6.3.3.2 MCP contact into MQS CB cavity

Cannot be inserted.

6.3.4. Locking

See specification in § 6.6.

6.3.5. Tightness

The product is defined for a vaccum of 500 hPa. Preferably use a vaccum checking equipment. The limit of vaccum test is 550 hPa/1min.

6.4. Simple electrical check specification

6.4.1. Implementation

For this operation, the assembly of the cover is not necessary. We recommended, however, that the cover is not assembled on the receptacle housing (the removal of the defective or incorrectly positionned contact is easier).

6.4.2. Shapes of the test pins

The shapes of the test pins are specified on the drawings below.

6.4.3. Force required for electrical contact

Some is the type of contact, for the electrical control, the recommended force to apply is 1.25N ±0.25N (minimum value : 1N).

6.5. Combined check methods (Electrical continuity + locking)

If the secondary locking is not activated and if a contact is not locked, the circuit of the test pins for the secondary locking remains open. This defect is processed by the control electronics associated with the wiring board.

6.6. Recommendations adapted to processes

The processes are divided into 3 groups :

6.6.1. pre-series assembly board

Manufacturing of prototypes or limited pre-series allowing to count on great vigilance of the operator.

6.6.2. Combined board

The harness is manufactured on a single board, integrating all checks.

6.6.3. Assembly board + check board

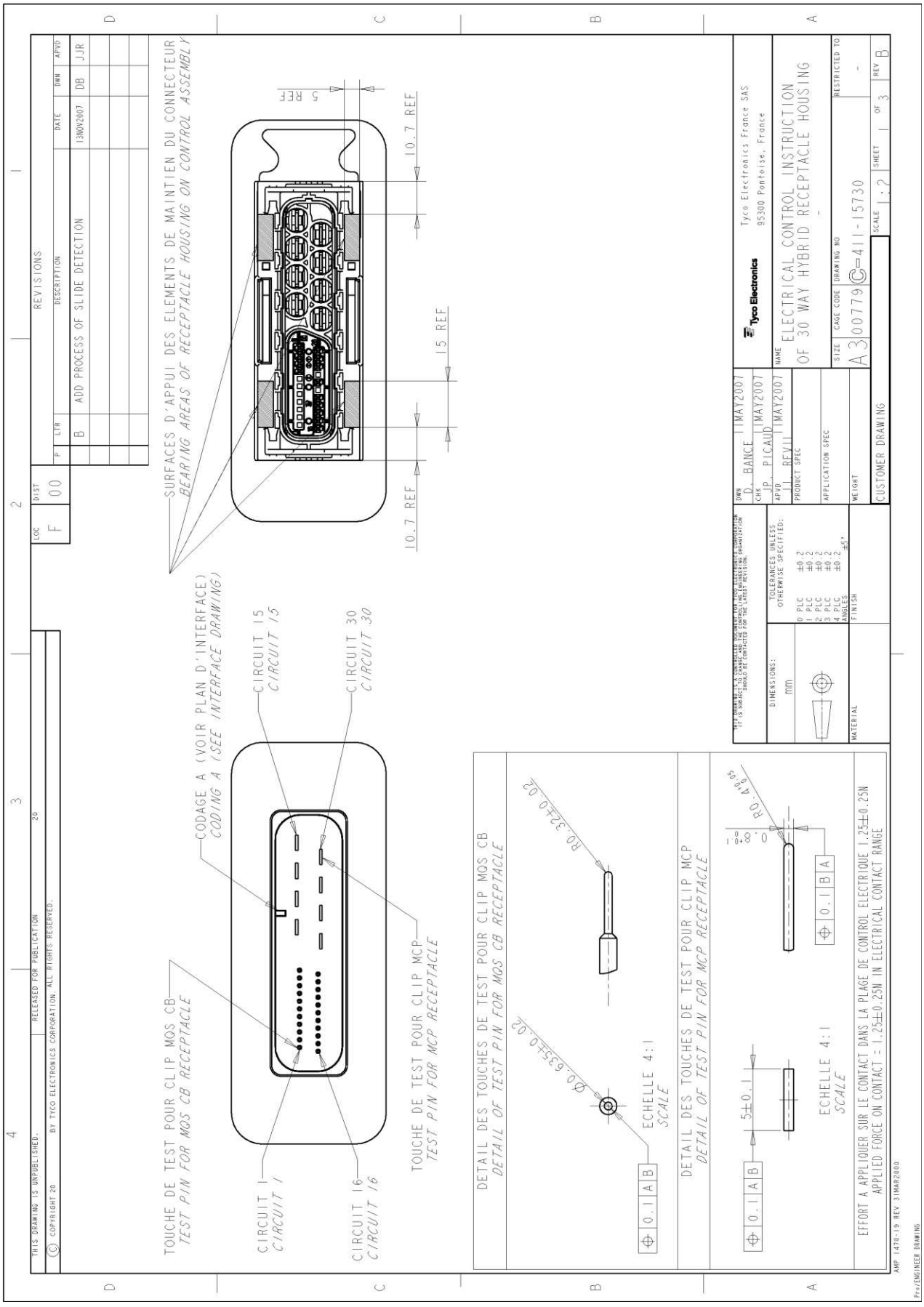
The harness is manufacturing on assembly boards (economical), then the harnesses are checked on check boards .

	1	2	3	
	Pre-sires assembly	**Combined board**	**Assembly board**	**Check board**
Addressing	visual	Electrical contact		Electrical contact
Orientation	visual	Integrated into electrical contact		Integrated into electrical contact
Association	visual			Electrical contact
Locking	manual and aural	Integrated into electrical contact	visual	Integrated into electrical contact
Tightness*	visual	Integrated into electrical contact		Integrated into electrical contact

Table 1 : Recommendations

*Manually = presence and condition of tightness components (seals, cavity pliugs).

On equipement = vaccum sensor


REVISIONS
ADD PROCESS OF SLIDE DETECTION
SURFACES D'APPUI DES ELEMENTS DE MAINTIEN DU CONNECTEUR
BEARING AREAS OF RECEPTACLE HOUSING ON CONTROL ASSEMBLY
CODAGE A (VOIR PLAN D'INTERFACE)
CODING A (SEE INTERFACE DRAWING)
CIRCUIT 15
CIRCUIT 30
CIRCUIT 1
CIRCUIT 16
TOUCHE DE TEST POUR CLIP MQS CB
TEST PIN FOR MQS CB RECEPTACLE
TOUCHE DE TEST POUR CLIP MCP
TEST PIN FOR MCP RECEPTACLE
10.7 REF
15 REF
DETAIL DES TOUCHES DE TEST POUR CLIP MQS CB
DETAIL OF TEST PIN FOR MQS CB RECEPTACLE
DETAIL DES TOUCHES DE TEST POUR CLIP MCP
DETAIL OF TEST PIN FOR MCP RECEPTACLE
ECHELLE 4:1
SCALE
EFFORT A APPLIQUER SUR LE CONTACT DANS LA PLAGE DE CONTROL ELECTRIQUE 1.25±0.25N
APPLIED FORCE ON CONTACT = 1.25±0.25N IN ELECTRICAL CONTACT RANGE
Tyco Electronics
Tyco Electronics France SAS
95300 Pontoise, France
ELECTRICAL CONTROL INSTRUCTION
OF 30 WAY HYBRID RECEPTACLE HOUSING
A3 00779 C-411-15730
CUSTOMER DRAWING
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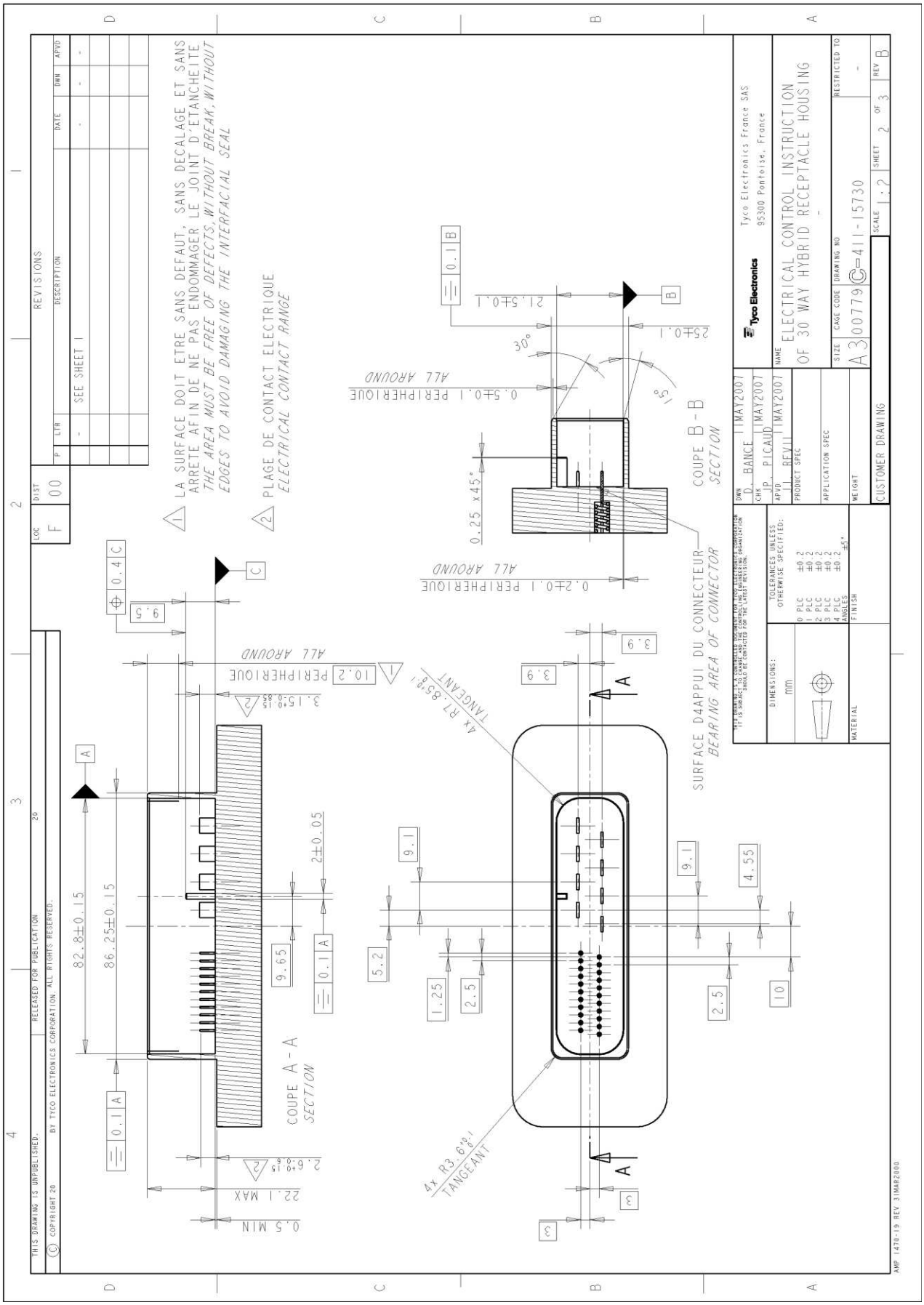
ELECTRICAL CONTROL INSTRUCTION
OF 30 WAY HYBRID RECEPTACLE HOUSING
Tyco Electronics
Tyco Electronics France SAS
95300 Pontoise, France
CUSTOMER DRAWING
REVISIONS
LA SURFACE DOIT ETRE SANS DEFAUT, SANS DECALAGE ET SANS ARRETE AFIN DE NE PAS ENDOMMAGER LE JOINT D'ETANCHEITE
THE AREA MUST BE FREE OF DEFECTS, WITHOUT BREAK, WITHOUT EDGES TO AVOID DAMAGING THE INTERFACIAL SEAL
PLAGE DE CONTACT ELECTRIQUE
ELECTRICAL CONTACT RANGE
COUPE A - A
SECTION
COUPE B - B
SECTION
SURFACE D4APPUI DU CONNECTEUR
BEARING AREA OF CONNECTOR
ALL AROUND
PERIPHERIQUE
TANGEANT
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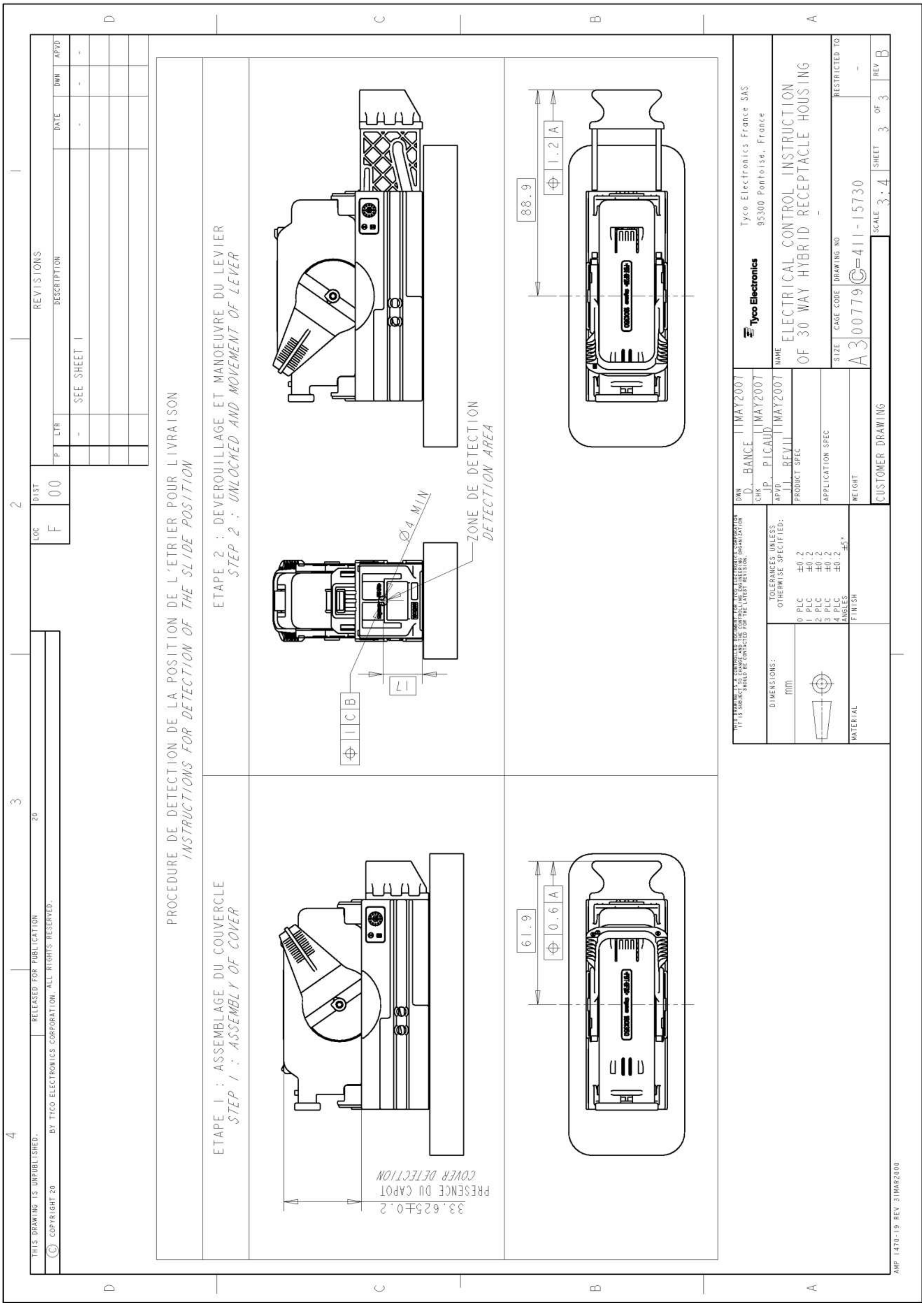
PROCEDURE DE DETECTION DE LA POSITION DE L'ETRIER POUR LIVRAISON
INSTRUCTIONS FOR DETECTION OF THE SLIDE POSITION
ETAPE 1 : ASSEMBLAGE DU COUVERCLE
STEP 1 : ASSEMBLY OF COVER
ETAPE 2 : DEVEROUILLAGE ET MANOEUVRE DU LEVIER
STEP 2 : UNLOCKED AND MOVEMENT OF LEVER
ZONE DE DETECTION
DETECTION AREA
Ø4 MIN
17
1 C B
33.625±0.2
PRESENCE DU CAPOT
COVER DETECTION
88.9
1.2 A
61.9
0.6 A
REVISIONS
SEE SHEET 1
Tyco Electronics France SAS
95300 Pontoise, France
ELECTRICAL CONTROL INSTRUCTION
OF 30 WAY HYBRID RECEPTACLE HOUSING
DWN D. BANCE 11MAY2007
CHK JP. PICAUD 11MAY2007
APVD JJ. REVIL 11MAY2007
A3 00779 C-411-15730
SCALE 3:4
SHEET 3 OF 3
REV B
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7 - PLUG PRESENCE CONFORMITY TEST

7.1. Connector thightness check

The product is qualified as tight for a differential of pressure of 300 hPa, the tightness of product must be systematically checked. This control will make it possible to check whether the plugs are present or not present. The control will be carried out preferably under vaccum conditions. The differential of pressure shall not exceed 500hPa.

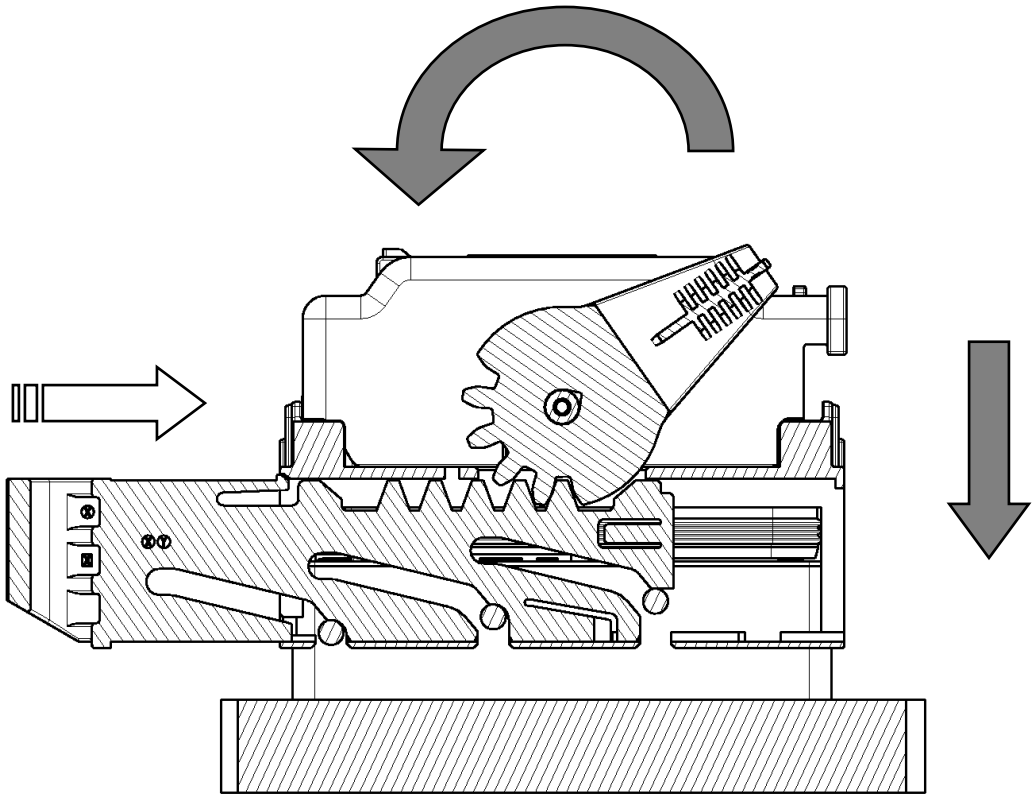
7.2. Plug presence and position checks

Tyco/Electronics recommends a control of the position of the MCP plug. The end of the plug must be between 1.5 and 3mm from the housing rear face (see § 4.5, 4.6, 4.7 and 4.8).

8 - CONNECTION (ASSEMBLY PROCESS ON ASSEMBLY LINE)

Position the connector and plug it on the header without great force, the six slots of the header must enter in the guide slots of the receptacle housing. Push the lever forward to proceed at the mating of the connector.

8.1. Kinematic of connector mating on header



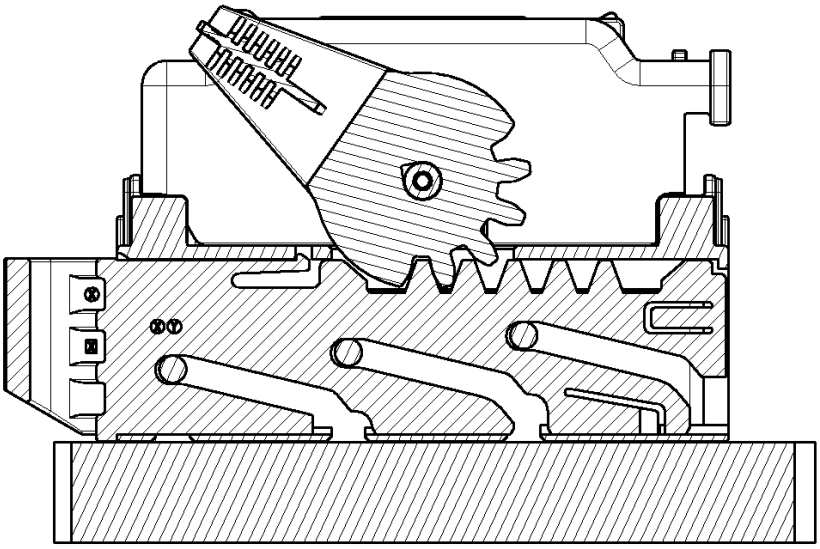
Picture 25

When the slide actuated by the lever blocks against the housing, the lever is then clipped on the cover and the connector is locked.

If the mating force is too high, unmate the connector and check that :

- correct position of the interfacial seal,
- correct position of the contacts and the secondary locking,
- the header pins are not damaged.

Mate again.



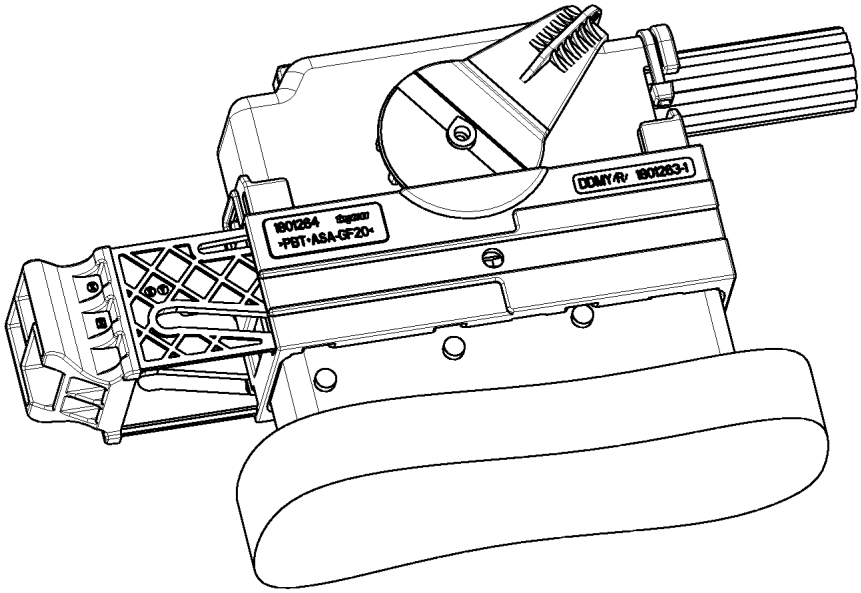
Picture 26

9 - DISCONNECTION (ASSEMBLY LINE RECTIFICATION AND CUSTOMER SERVICE)

9.1. Connector removal

Unlock the lever by pressing the locking latch of cover and rotate until the hard point.

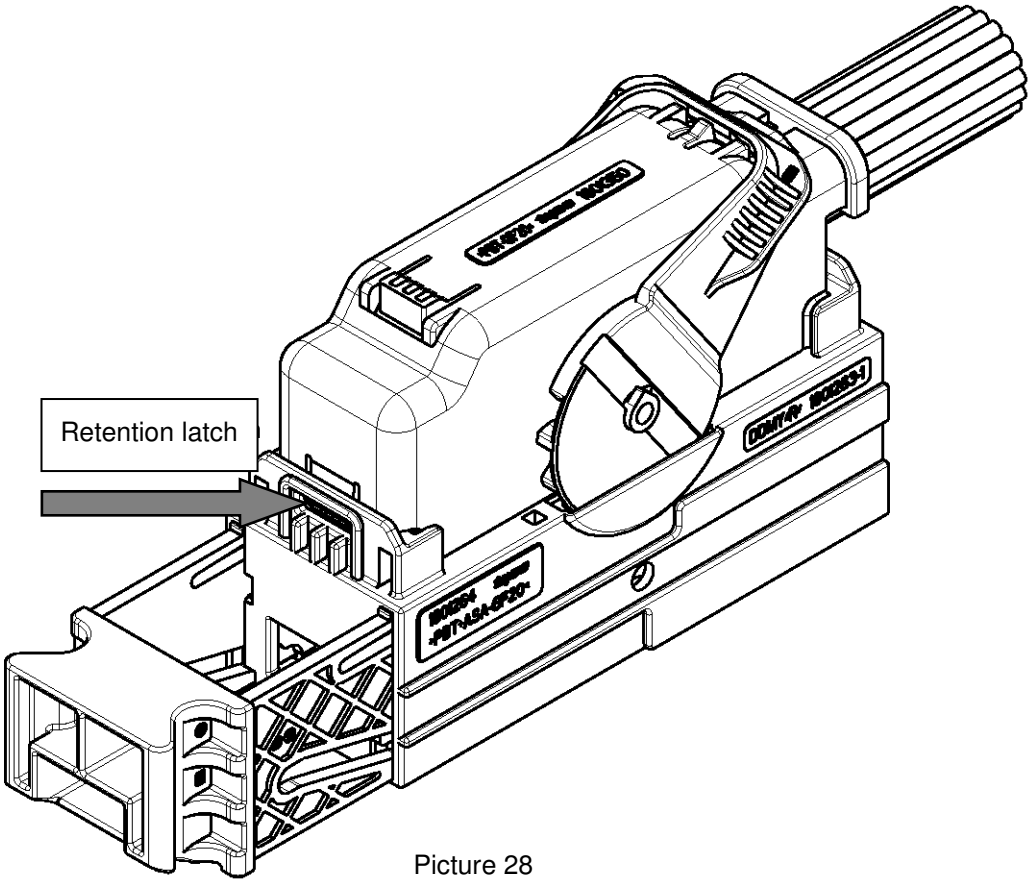
Disengage the connector.



Picture 27

9.2. Cover removal

Cut the cable clamp then, using a flat tool, press on the retention latch of the cover (see picture 27), then proceed in reverse order than § 4.4.2.



Picture 28

10 - TOOLS

10.1. Contact extraction

Before, the secondary locking must be removed.

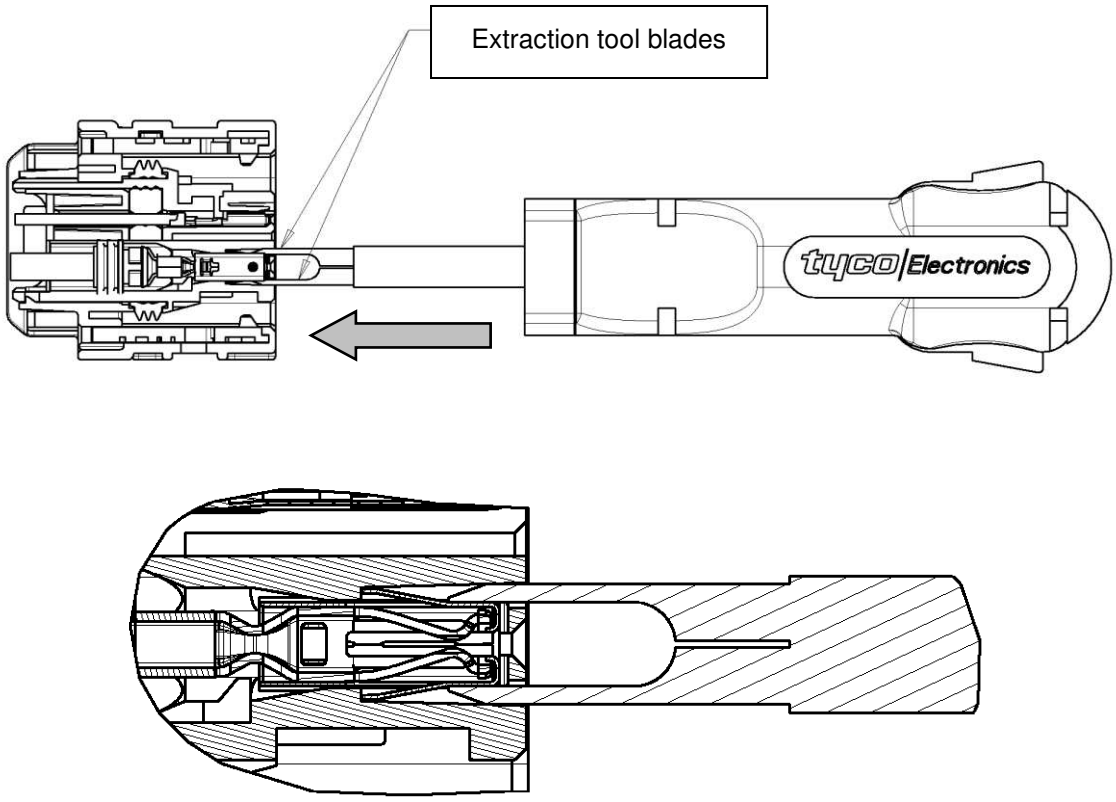
10.1.1. MCP contact extraction

To extract the MCP contact, it is necessary to:

- Determine which contact you have to remove.
- Push the contact to the maximum in its cavity (towards the front face of the connector).
- Insert the extraction tool part number 539970-1 in the cavity extraction slots (see picture 29).
- Holdind the contact at the bottom of the cavity, push the extraction tool at its maximum, then pull the contact to extract it from the connector.

Straighten the contact lance before reuse:

- When a contact has been removed from its cavity, the contact locking lances can be more or less folded down by the pressure of the extraction tool blades. To reuse a contact, check it carefully and, if necessary, straighten the contact locking lances with a small flat screwdriver.

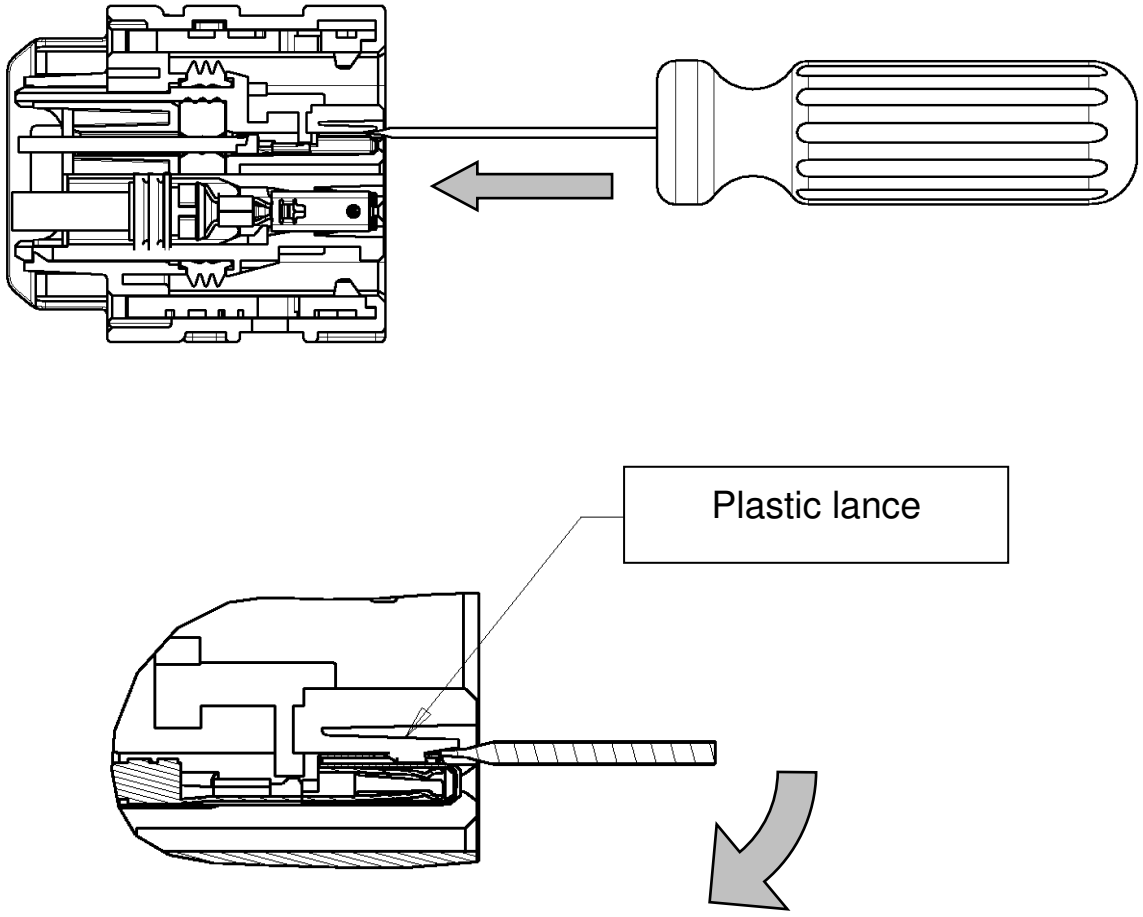


Picture 29

10.1.2. MQS CB contact extraction

To extract the MQS CB contact, it is necessary to:

- Determine which contact you have to remove.
- Push the contact to the maximum in its cavity (towards the front face of the connector).
- Insert the extraction tool part number 2-1579008-1 or a flat screwdriver of 1.5mm in the cavity extraction slot (see picture 30).
- Holdind the contact at the bottom of the cavity, rotate the tool in order to raise the plastic lance, then pull the contact to extract it from the connector.

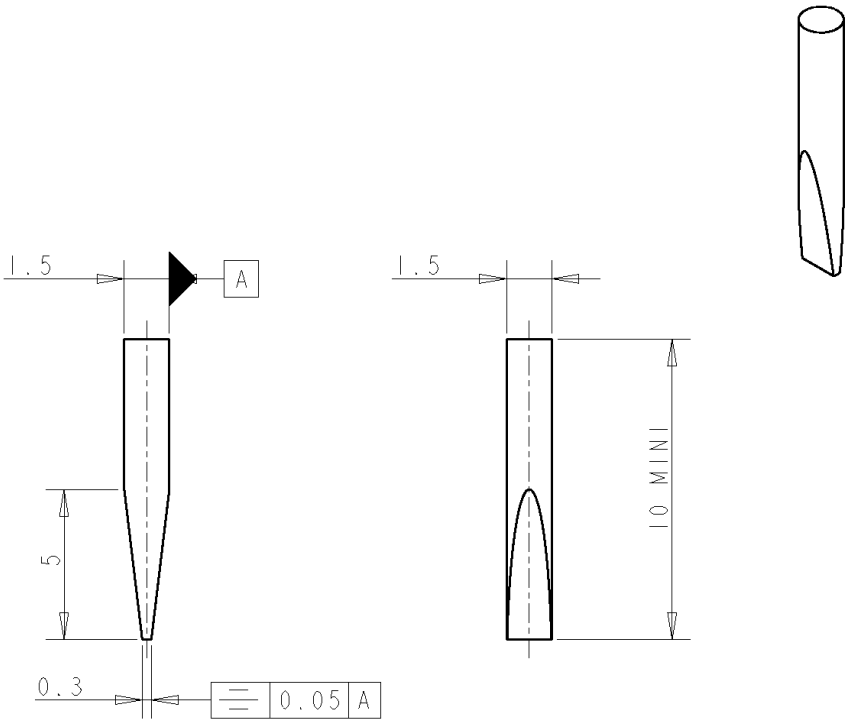


Picture 30

LOC	DIST
F	00

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD



DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC	±0.05
1 PLC	±0.05
2 PLC	±0.05
3 PLC	±0.05
4 PLC	±0.05
ANGLES	±1°

DWN	D. BANCE	12JUL2007
CHK	JP PICAUD	12JUL2007
APVD	JJ. REVIL	12JUL2007

PRODUCT SPEC

APPLICATION SPEC

WEIGHT

MATERIAL | FINISH

Tyco Electronics

Tyco Electronics France SAS
95300 Pontoise, France

NAME: PARTIE ACTIVE DE L'OUTIL DE DEMONTAGE DU CLIP MQS CB

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A4	00779	C-CCR07230	-

CUSTOMER DRAWING | SCALE 5:1 | SHEET 1 OF 1 | REV A

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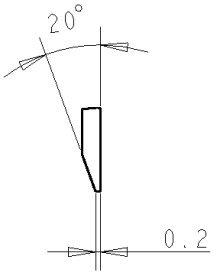
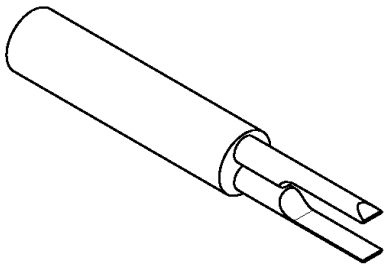
LOC	DIST
F	00

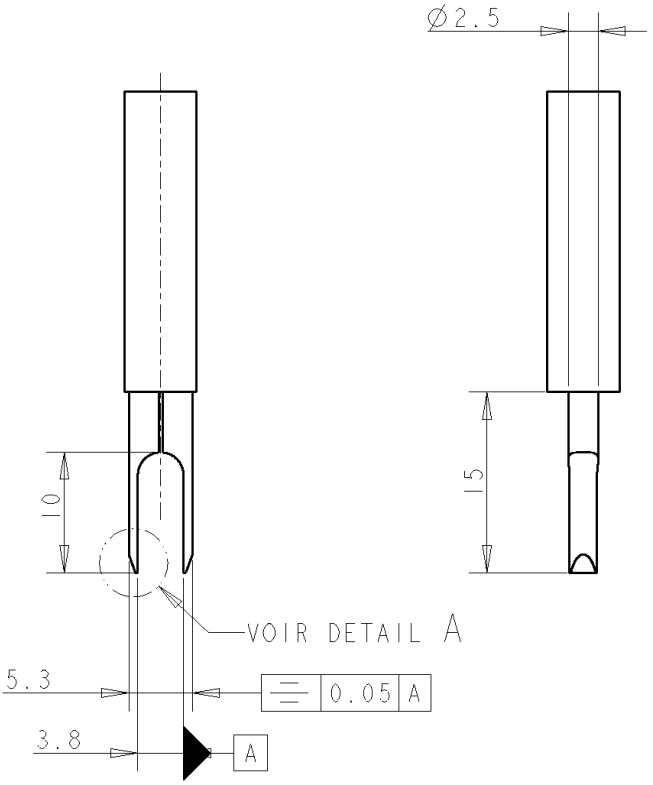
REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD



DETAIL A
ECHELLE 4:1





DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC	±0.05
1 PLC	±0.05
2 PLC	±0.05
3 PLC	±0.05
4 PLC	±0.05
ANGLES	±1°

DWN	D. BANCE	13JUL2007
CHK	JP. PICAUD	13JUL2007
APVD	JJ. REVIL	13JUL2007

PRODUCT SPEC

APPLICATION SPEC

WEIGHT

MATERIAL | FINISH

Tyco Electronics

Tyco Electronics France SAS
95300 Pontoise, France

NAME: PARTIE ACTIVE DE L'OUTIL DE DEMONTAGE DU CLIP MCP

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A4	00779	C-CCR07231	

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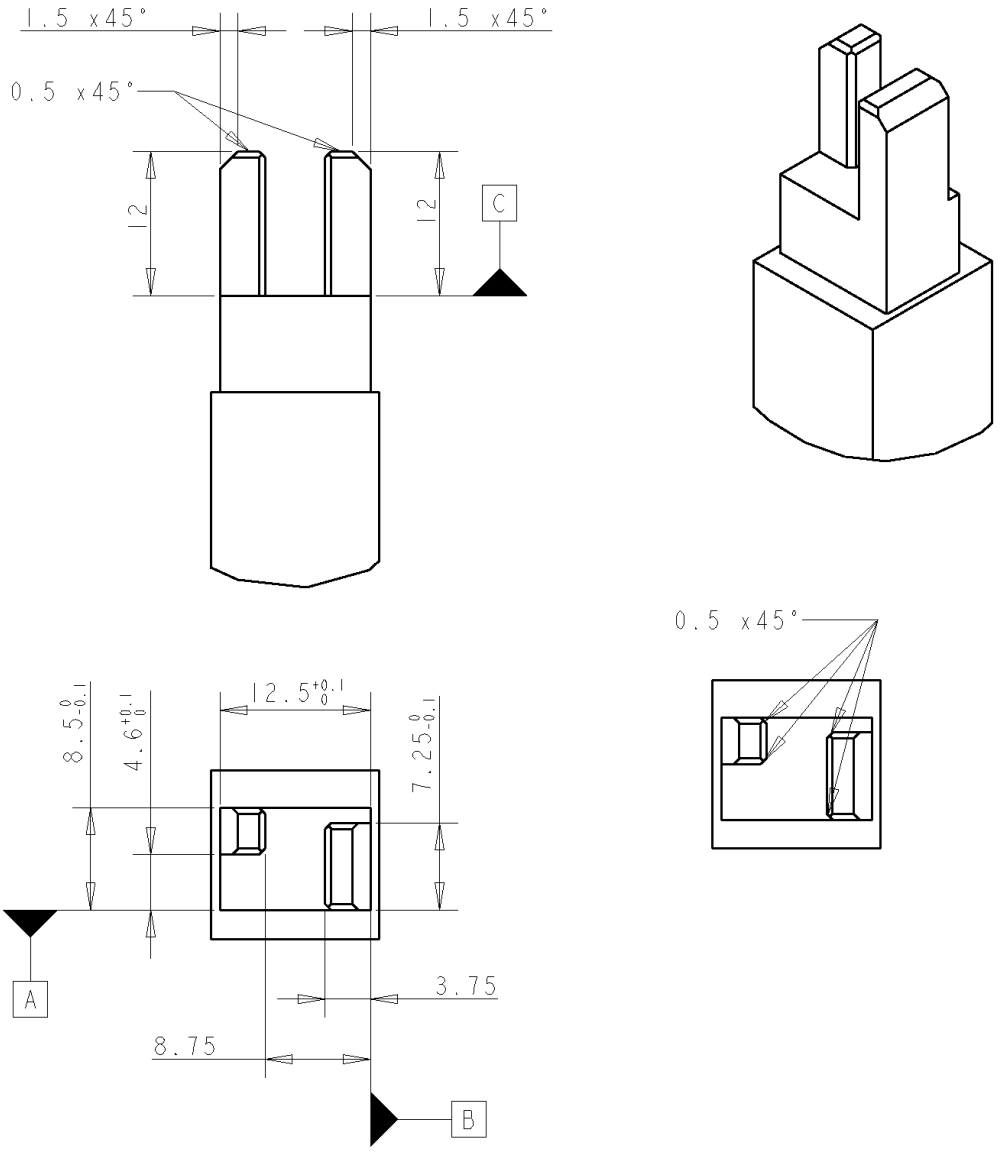
Pro/ENGINEER DRAWING

LOC	DIST
F	00

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD



DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC	±0.05
1 PLC	±0.05
2 PLC	±0.05
3 PLC	±0.05
4 PLC	±0.05
ANGLES	±1°

DWN	D. BANCE	13JUL2007
CHK	JP. PICAUD	13JUL2007
APVD	JJ. REVIL	13JUL2007

PRODUCT SPEC

APPLICATION SPEC

WEIGHT

MATERIAL | FINISH

Tyco Electronics

Tyco Electronics France SAS
95300 Pontoise, France

NAME PARTIE ACTIVE DE L'OUTIL DE DEMONTAGE DU VERROU SECONDAIRE

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A4	00779	C-CCR07232	-

CUSTOMER DRAWING | SCALE 2:1 | SHEET 1 OF 1 | REV A

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