

## 2-7 POSITIONS JUNIOR POWER TIMER SPLASH PROOF CONNECTORS

Tyco Electronics P/Ns:

2 pos. P/N 282189-..., 282680-1 to 685-1

2 pos. P/N 282190-..., 282648-1, 282788-...

3 pos. P/N 282191-..., 282545-1, 282651-1, 282246-1, 282686-1 to 689-1, 282800-1

3 pos. P/N 282729-...

4 pos. P/N 282192-..., 282342-1, 282996-1

5 pos. P/N 282193-...

6 pos. P/N 282236-1

7 pos. P/N 282194-...

### Introduction:

Scope: What follows intends to be a guide for the correct assembly of AMP Junior Power Timer Splash Proof connectors.

Reference for features and electrical and mechanical performances are to be found in AMP Prod. Spec. nr. 108-20091.

### Summary:

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C	Revised ET00-0284-98	M. PALMA / R. MARTINI	21- OCT - 1998
B	Revised ET00-0206-96	R. MARTINI / C.TARTARI	22 - APR - 1996
A	Active ET00-0154-95	R. MARTINI / C.TARTARI	27 - JUN - 1995
<b>REV.</b>	<b>DESCRIPTION</b>	<b>DR/CHK</b>	<b>DATE</b>

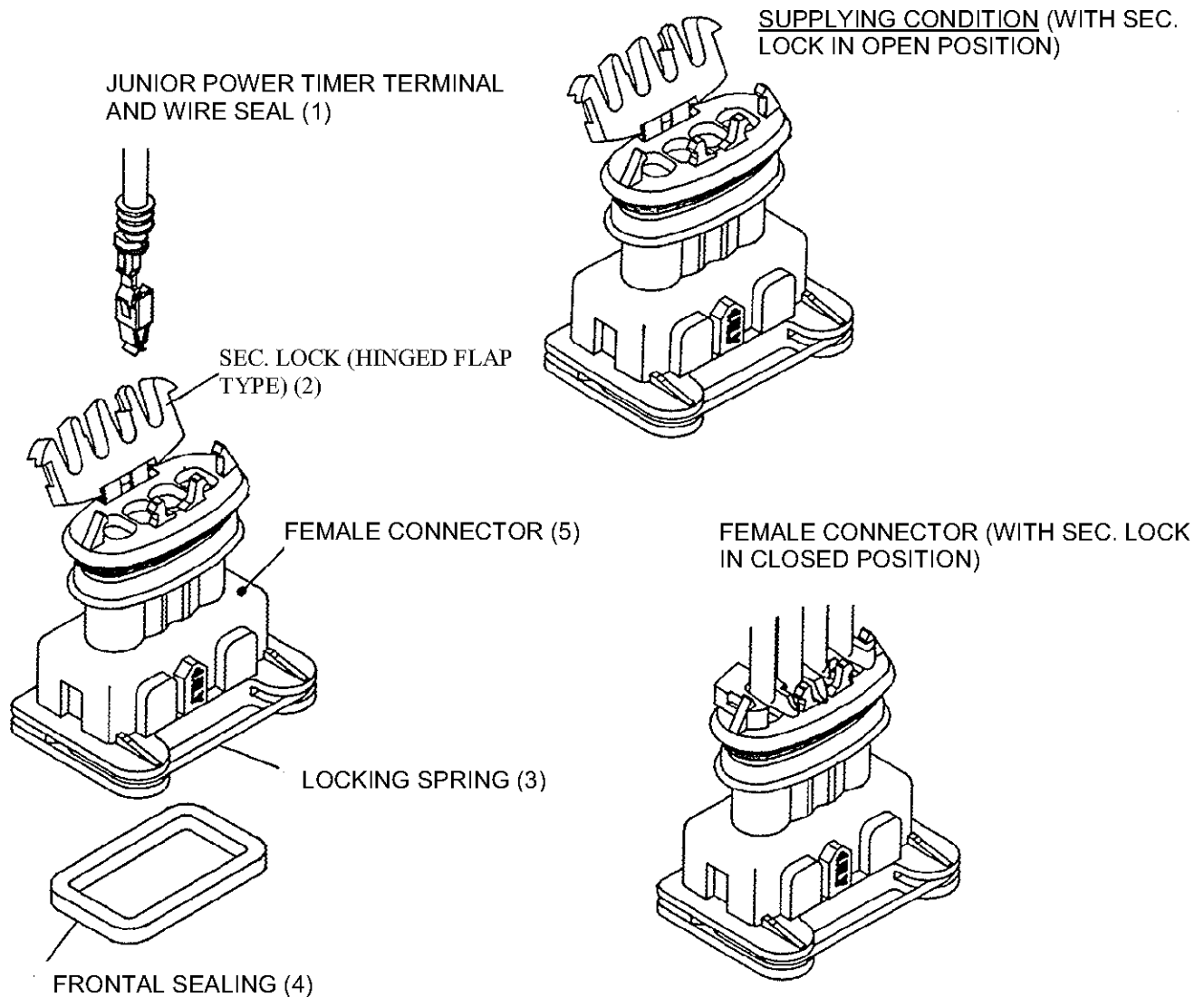
## Connector description (included terminal and counterpart)

Here below the connector subdivided into its components is represented.

Beside each component a number in brackets appears, in order to better identify that component in the various assembly operations.

**N.B.:** Such a number in brackets is meaningful only in relation to an assembly operation.

The connector is supplied with components (3) and (4) pre-assembled, thus corresponding mounting operation will be omitted.



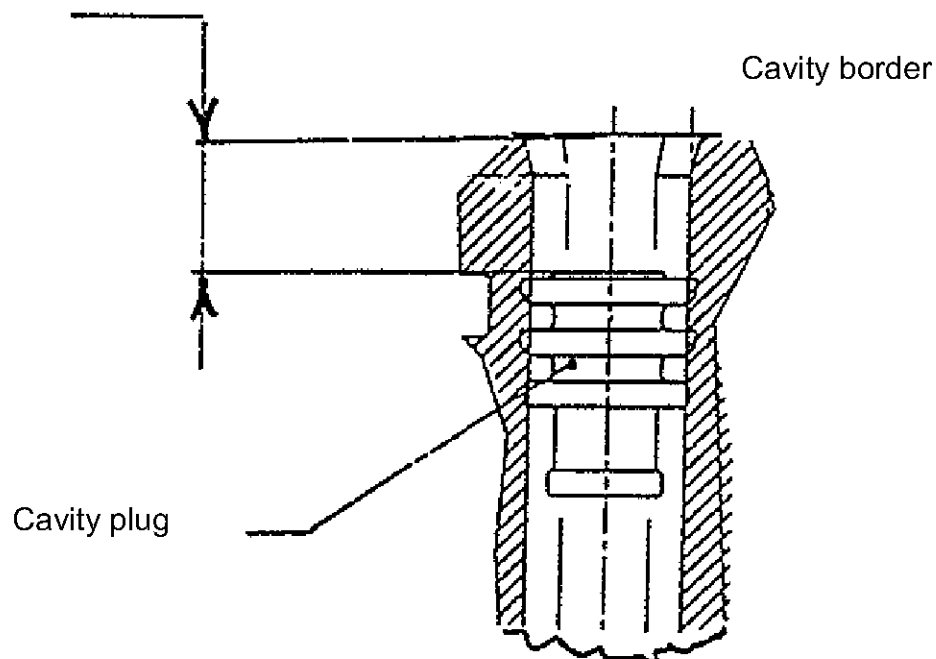
## List of assembly operations

Here follows the assembly operations sequence:

- 1) Insertion of the JPT terminals (1) into the corresponding female connector (5) cavities
- 2) Closing of the female connector secondary lock (2)
- 3) Extraction of the terminals (1) from the female connector (5), if necessary
- 4) Mating between female connector (5), loaded with wires, and counterpart (6)

### Note:

- The assembled connector is further provided with a “wire protection hood” (not supplied by Tyco Electronics AMP Italy and not included in the selling P/N). The mounting of this hood must be precedent to the 1) & 2) assembly operations.
- In case the application should require a fewer terminal number than the female connector number of ways , the “empty” cavities must be closed by means of the red cavity plug Tyco P/N 282081-1; its insertion in cavity is manually done and its positioning with respect to the cavity border must be 2~5mm.



### Insertion of Junior Power Timer terminals (1) in the corresponding ways of the female connector (5)

Crimp Tyco JPT terminals and wire seals in accordance with Tyco Specification 114-18050-1. Insert the crimped terminals as per picture shown in Fig.1, or rotated by 180°. Push the terminal deep in cavity until you hear a metallic sound: such a "sound", generated by the locking springs' release, indicates that the terminal has been correctly inserted (see Fig.2).

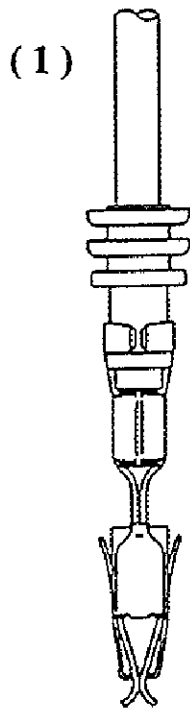


FIG. 1

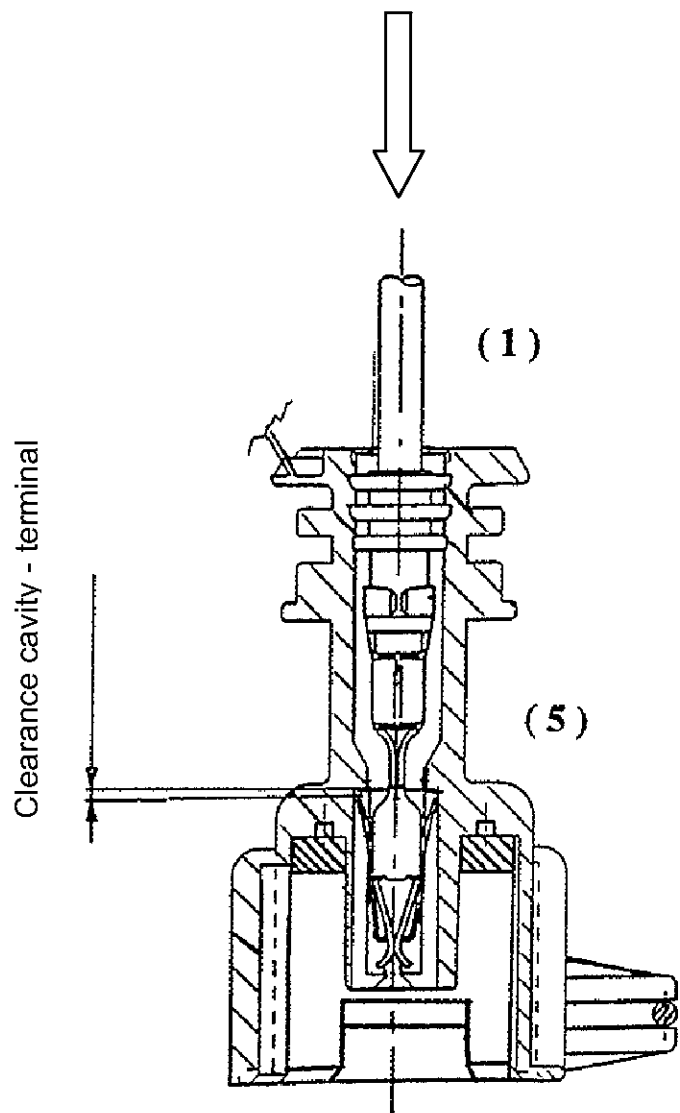


FIG. 2

## Closing and opening of the secondary lock (2) of the female housing (5)

Rotate the secondary lock until the locking with all the teeth present on the female connector (5) body; pay attention that during the rotation each single wire accommodates into the respective seats of the secondary lock (see fig.3).

The correctly closed secondary lock, apart from assuring to the connector an external geometry suitable for the mounting of the "wire protection hood" (not supplied by TE AMP Italy and not included in the selling P/N), keep the terminal in the right position to guarantee the electrical connection with the counterpart tab.

Once closed the secondary lock, it is necessary to fit the "wire protection hood" onto the female connector (5), taking care to obtain at the end the same situation as shown in Fig.4. Whenever it is necessary to unlock and open the secondary lock, it is sufficient to act on it by means of a small screwdriver or similar, unlocking it from the teeth placed on the female connector (5).

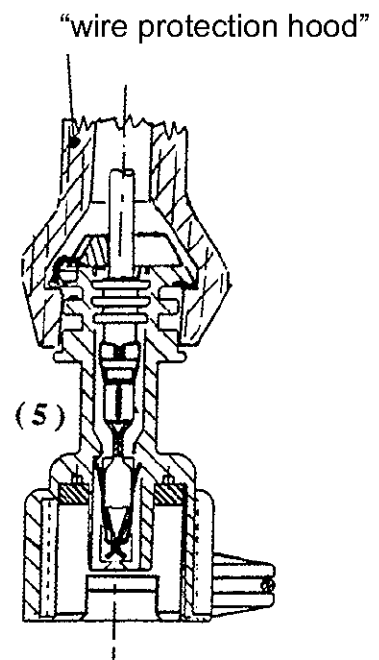
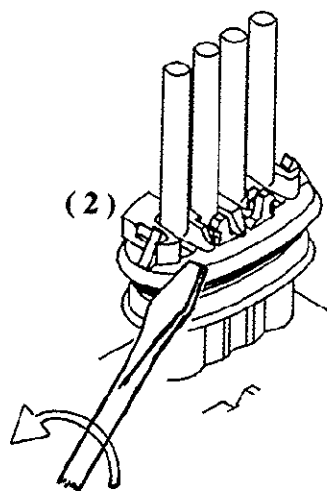
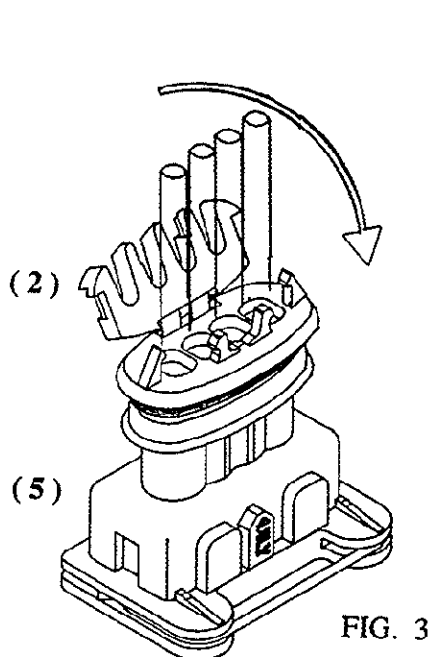


FIG. 4

### Extraction of the terminals (1) from the female connector (5)

The first operation to make is to “open” the secondary lock (2), whenever it had been already closed (see pag.5). This operation must be subsequent to the withdrawal of the “wire protection hood” from the female connector, manually feasible.

In case a JPT terminal (1) has to be extracted from the female connector (5) cavity, use the extraction tool Tyco P/N 785072-1.

Insert the extraction tool in the cavity from the opposite side with respect to the terminal insertion one: push the extraction tool in deep and at the same time pull back the terminal (see Fig.5).

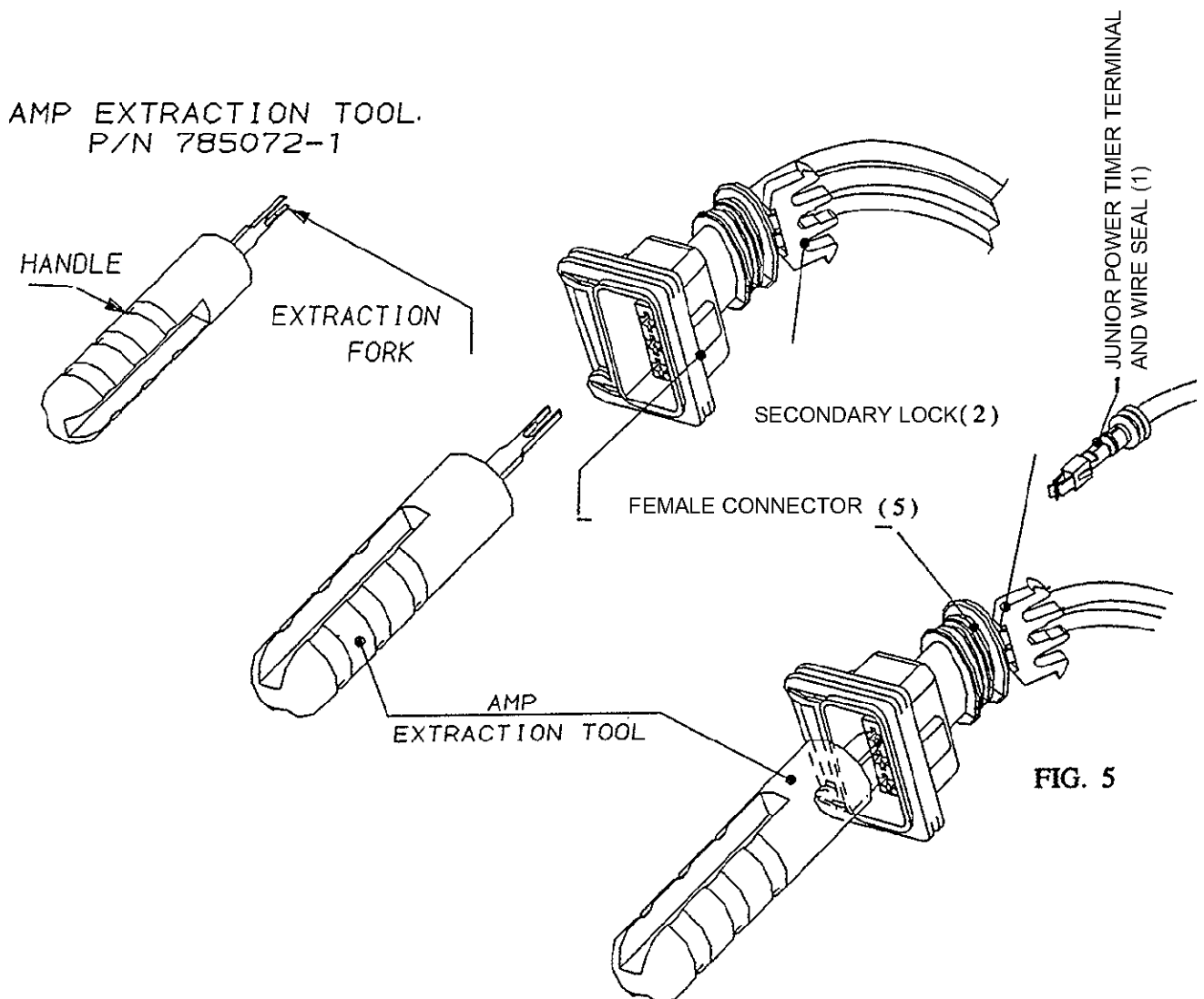


FIG. 5

**Mating between female connector (5) and counterpart (6) “sensor / injector / bulb / throttled body / front head lamp / ECU / etc.”**

Align the female connector (5) and the counterpart (6) before their mating; guide the female connector onto the counterpart keeping their alignment until the complete locking. Mate the female connector with its counterpart without touching the locking spring (3) until you hear a “click” that testifies the occurred connection.

**N.B.:** - during the coupling never act onto the locking spring (3).

- the not aligned entrance of the connector vs. its counterpart is always to be avoided.

The result of a correct mating is the locking spring (3) in a clearly symmetrical work position. Besides, it is a good practice to verify the female connector locking on its counterpart by pulling it in the opposite direction with respect to the mating one.

Once the connection is happened, the wire bundle should not appear under tension, nor in such a position that could cause the unmating between the two parts (5) & (6).

