

### 1. SEALING PLUGS AND KEYING PINS

Sealing plugs and locking sealing plugs are used in all DEUTSCH connectors. They maintain seal integrity when inserted into unused rear grommet cavities. Keying pins are solid, cylindrical plastic rods designed to be inserted into an empty socket cavity in a DEUTSCH connector to prevent mis-mating. Figure 1.



Part Number	Contact Size	Material	Color	Description	Sealing Plug
114019	4	VMQ	Red-Orange	Standard	
114018	8	PBT	White	Standard	
114017	12,16	PBT	White	Standard	
0413-003-1605	16	PBT	Blue	Standard	
0413-204-2005	20	PBT	Red	Standard	
0413-214-1205	12	PBT	Yellow	Keying Pin	
0413-215-1605	16	PBT	White	Keying Pin	
0413-216-2005	20	PBT	Red	Keying Pin	
0413-217-1605	16	PBT	White	Locking	

Figure 1




Part Number	Contact Size	Material	Color	Description	Sealing Plug
7G7917-16	16	PBT	Blue	CE	
7G7918-12	12	PBT	Yellow	CE	
7G7919-10	8-10	PBT	White	CE	
7G7920-6	4-6	PBT	Blue	CE	

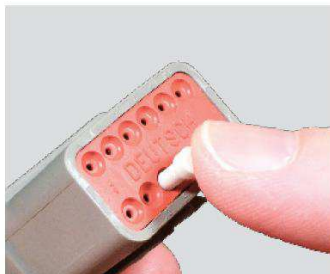
Figure 1 (end)

## 2. SEALING PLUG INSTALLATION (DT SERIES SHOWN AS EXAMPLE)



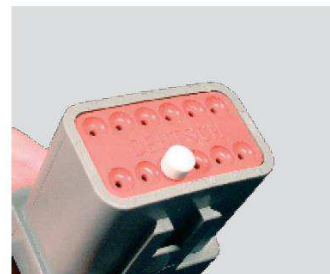
**Step 1:**

Holding the sealing plug with large diameter end away from the connector, gently apply downward pressure to force the sealing plug into the cavity.



**Step 2:**

With perpendicular motion, apply downward pressure to the large diameter end of the sealing plug.

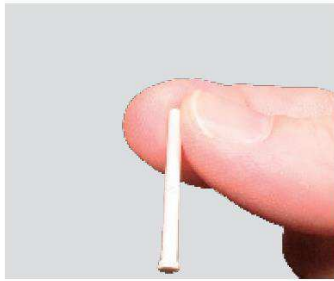


**Step 3:**

Apply pressure until sealing plug is forced to stop by contact with rear grommet. Visually inspect the sealing plug to confirm it is flush with cavity opening.

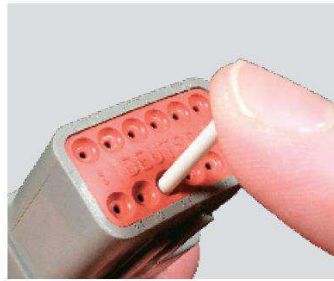
Figure 2

### 3. LOCKING SEALING PLUG INSTALLATION (DT SERIES SHOWN AS EXAMPLE)



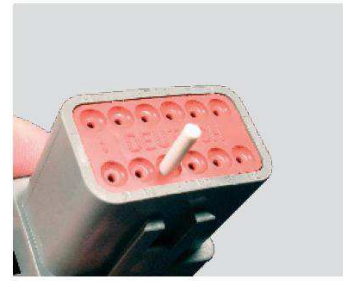
**Step 1:**

Holding the sealing plug with large diameter end towards the connector, gently apply downward pressure to force the sealing plug into the cavity.



**Step 2:**

With perpendicular motion, apply downward pressure to the small diameter end of the sealing plug.



**Step 3:**

Apply pressure until sealing plug locks into place. A slight tug on the sealing plug will confirm it is locked into place.

Figure 3

**i** NOTES

- 1) Remove standard sealing plug using either fingers or needle nose pliers. Do not damage grommet.
- 2) Remove locking sealing plug using DEUTSCH terminal extraction tool. See 408-151007.
- 3) See individual connector 114 application specification for more information.

### 4. KEYING PINS INSTALLATION (HD30 SERIES SHOWN AS EXAMPLE)

- 1) Keying pins are inserted only into empty socket side cavities. Insertion begins just like a wired contact through the rear seal and continues until the pin is seated and locked by the retention fingers, (same as a contact). Figure 4.
- 2) Once installed, the keying pin blocks a mating contact pin from being inserted from the interface side. The contact pin will be blocked before the coupling device mates the connectors, preventing the mismatching of like connectors in close proximity. Proper usage requires that the corresponding mating pin be omitted and a sealing pin is inserted in the rear cavity of the mating connector.



Figure 4

- 3) Keying pins have a dual role. First, keying pins are flush with the interface side of the socket connector and block the insertion of a pin contact. Secondly, they stick out the back of the rear grommet and provide an environmental seal. Figure 5.



Figure 5

- 4) Filling several empty cavities with keying pins (in a pattern) functions as an inexpensive keying device in various DEUTSCH connectors. Individual applications will vary, and testing should be done to determine the best pattern arrangement to prevent improper connector mating. Figure 6.



Figure 6

**i** NOTES

- 1) Remove keying pin using DEUTSCH terminal extraction tool. See 408-151007.
- 2) See individual connector 114 application specification for more information.
- 3) Multiple keying pins may be required to help prevent unintentional forced mating.

**5. REVISION SUMMARY**

<b>Revision</b>	<b>Brief Description of Change</b>	<b>Date</b>	<b>Approver</b>
A	Initial Release	2019-09-20	D. Meyer