

Figure 1

1. INTRODUCTION

This instruction sheet provides information on cable preparation and assembly procedures of the APT Connector System as shown in Figure 1.

Terminations may be made with Hand Tool Frame 9-1478240-0 SDE PEW-12 along with die set 1976691-1. Electric/Pneumatic tooling is available for high-volume applications. Contact the Tooling Assistance number at the bottom of this page.

2. COMPONENTS

The following table provides component part numbers, descriptions, and quantity of the APT connector system shown in Figure 2.

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	1587525-[]	Seal Retainer	2
2	1587530-[]	Cable Seal	2
3	1587834-1	Housing	1
4	1587837-1	O-ring	1
5	1587836-[]	Outer Ferrule	2
6	1587583-1	Inner Ferrule	2
7	---	Cable (As Required)	2

Figure 2 (Cont'd)

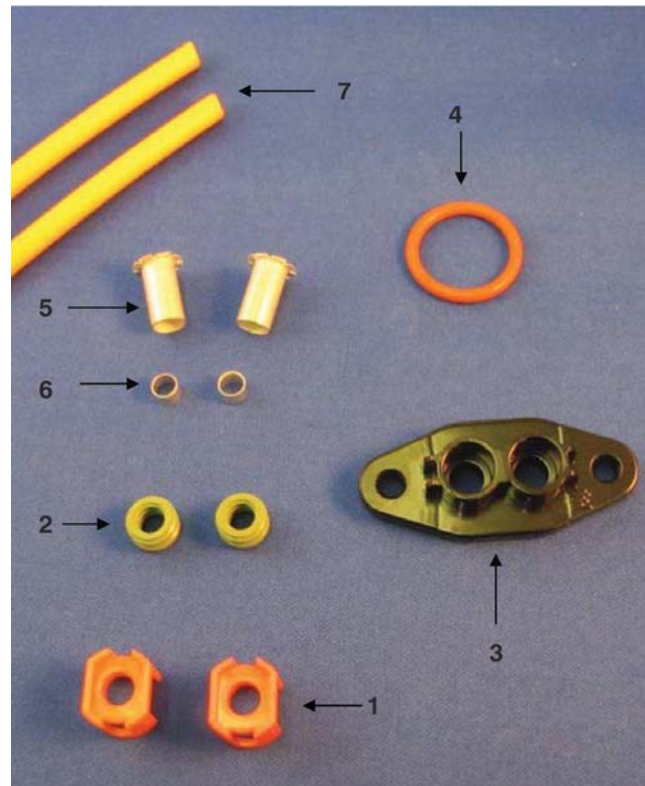


Figure 2 (End)

3. ASSEMBLY PROCESS

3.1. Installing the O-ring

Install the O-ring onto the APT housing. See Figures 3 and 4.



Figure 3



Figure 4

3.2. Applying Components onto the Cable

Apply the seal retainers, seals and housings onto the cables as shown in Figures 5, 6, 7, and 8. Insert the components far enough from the end of the cable to allow processing of the cable ends as shown in Figure 8.

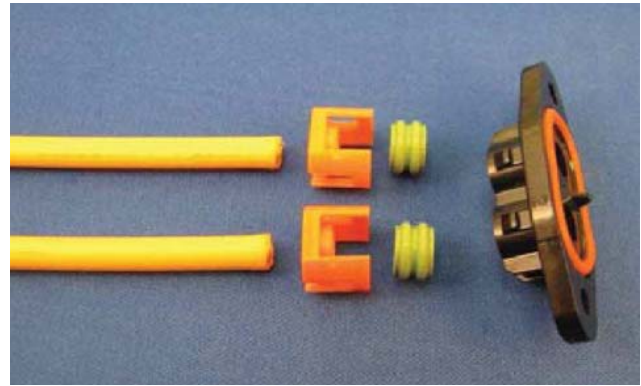


Figure 5



Figure 6

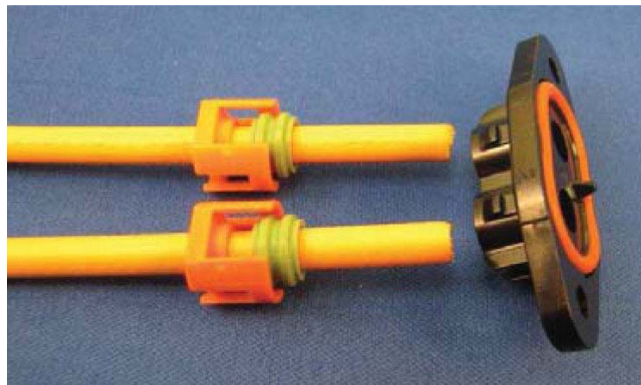


Figure 7

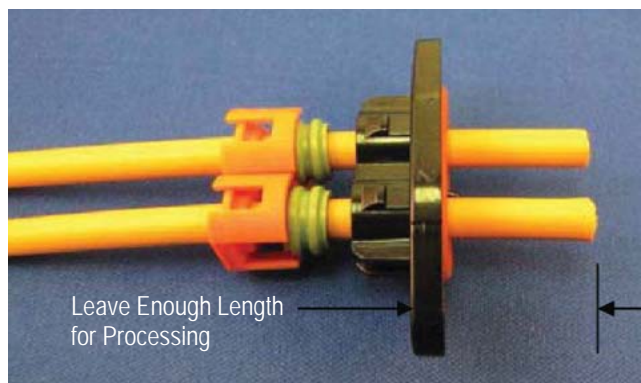


Figure 8

3.3. Establish Required "X" Dimension

Establish the "X" dimension. Each application will have a specific requirement for the length between the wire end and the mounting surface. This will be called dimension "X". See Figure 9. For our example, assembly dimension "X" will be 40 mm.

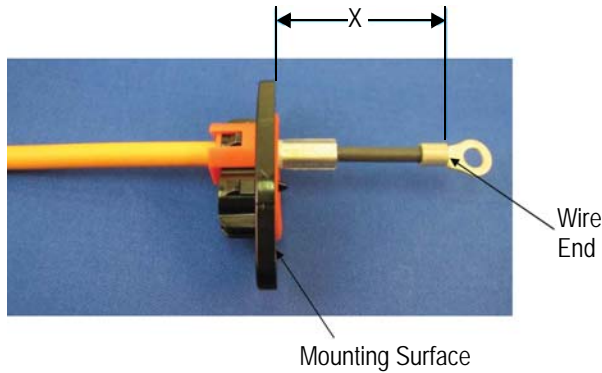


Figure 9

3.4. Marking and Stripping Cables (1st Strip)

Mark each cable at "X" -22.5 mm from the end of the cable. See Figure 10. For our example: 40 mm -22.5 mm = 17.5 mm. Strip the outer jacket AND braided shield at "X" -22.5 mm and remove jacket and shield. See Figure 11.



Figure 10



Figure 11

3.5. Marking and Stripping Cables (2nd Strip)

Mark each cable at "X" -9 mm from the end of the cable. See Figure 12. For our example: 40 mm -9 mm = 31 mm. Strip only the outer jacket at "X" -9 mm and remove outer jacket. See Figure 13.



Figure 12



Figure 13

3.6. Applying Inner Ferrule

Install the inner ferrule until it contacts the outer jacket. See Figure 14. Fold the braided shield back over the inner ferrule. See Figures 15 and 16.



Figure 14



Figure 15

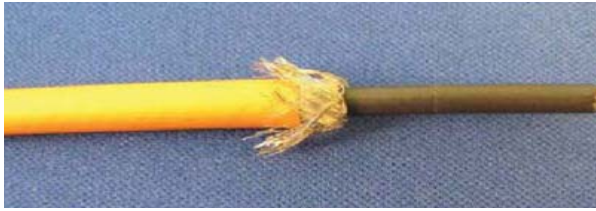


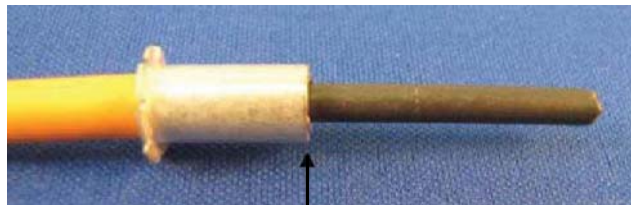
Figure 16

3.7. Applying the Outer Ferrule

Install the outer ferrule over the braided shield and cable until the front edge of the ferrule is flush with the braided shield. See Figures 17 and 18. Dimension "X" should be achieved. See Figure 19.



Figure 17



Install Ferrule Until this Edge is Flush with the Braided Shield

Figure 18

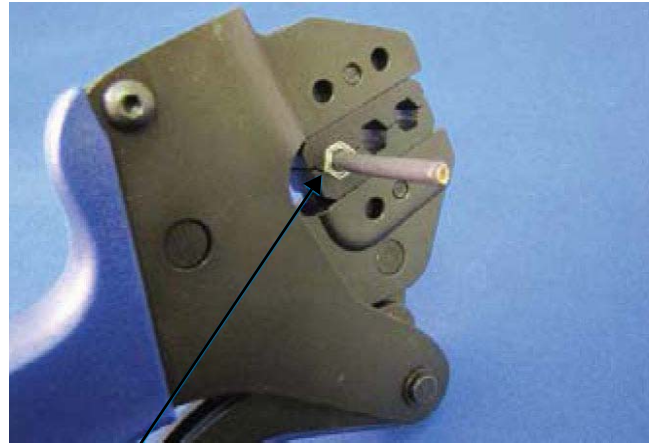
NOTE: In Our Example Part, the "X" Dimension is now 40 mm



Figure 19

3.8. Ferrule Crimping

Align the edge of the ferrule with the side of the crimp tooling. See Figure 20. Crimp the ferrule using the appropriate tooling. See Figures 20 and 21. Dimension "X" should be maintained. See Figure 22.



Position Crimp Tool so that the Edge of the Ferrule is Aligned with the Side of the Crimp Tooling. **NOTE:** Production Die Set May Appear Different than What is Shown.

Figure 20



Figure 21



Figure 22

3.9. Apply Desired Terminal

Strip the cable and apply the terminal of choice. See Figure 23.



Apply Desired Terminal

Figure 23

3.10. Positioning the APT Components

1. Slide the APT housing up against the ferrule flange.
2. Slide the APT cable seals into place inside the APT housing.
3. Snap the APT seal retainers onto the housing. See Figure 25.

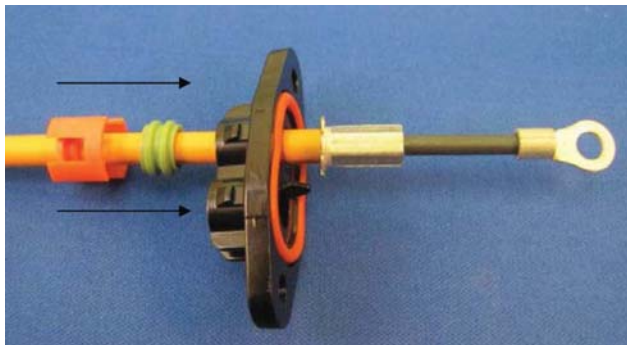


Figure 24

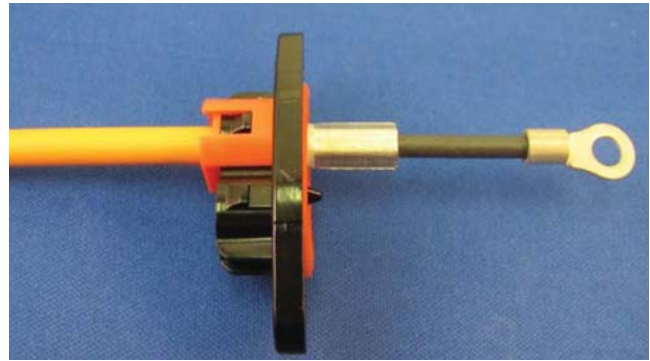
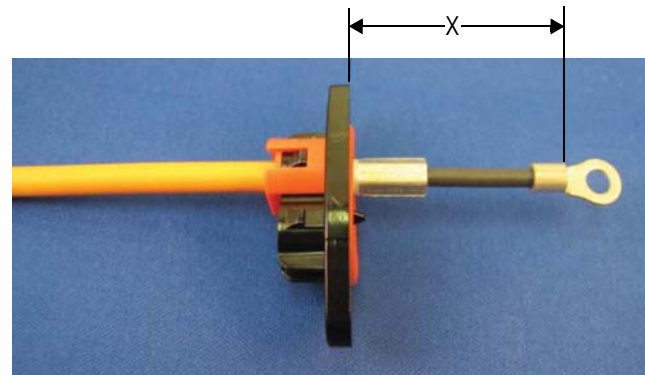


Figure 25

3.11. Verify Dimension "X"

Measure dimension "X" and ensure it meets your requirements. See Figure 26. The APT assembly is now complete.



Completed Assembly
(Only One Cable Shown for Clarity)

Figure 26

4. REVISION SUMMARY

- Supercedes 408-127008