



707, 727-787

STANDARD WIRING PRACTICES MANUAL

ASSEMBLY OF GLENAIR G2636-() AND G2918-() CONNECTOR CLAMPS

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ASSEMBLY OF GLENAIR G2636-() AND G2918-() CONNECTOR CLAMPS

1. PART NUMBERS AND DESCRIPTION

A. Connector Clamp Part Numbers

Table 1
CONNECTOR CLAMP PART NUMBERS

Part Number	Supplier
G2636-()	Glenair
G2918-()	Glenair

2. CONNECTOR CLAMP DISASSEMBLY

A. Clamp Removal

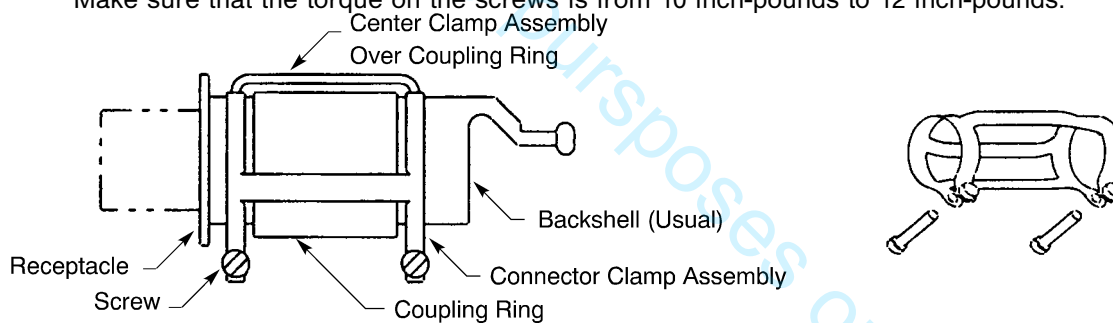
- (1) Remove the screws from the clamp assembly.
- (2) Spread the clamp assembly to remove it from the connector.

3. CONNECTOR CLAMP ASSEMBLY

A. Clamp Installation

- (1) Install the connector clamp assembly. Refer to Figure 1.
- (2) Tighten the clamp assembly.

Make sure that the torque on the screws is from 10 inch-pounds to 12 inch-pounds.



CONNECTOR CLAMP ASSEMBLY
Figure 1



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ASSEMBLY OF LANDING GEAR CABLES

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ASSEMBLY OF LANDING GEAR CABLES

This Subject gives the procedures to assemble the landing gear cables for these Model 747, Model 767, and Model 777 systems:

- Anti-Skid
- Brake Cooling
- Tire Pressure
- In-Axle.

1. PART NUMBERS AND DESCRIPTION

A. Necessary Parts and Materials

Table 1
CABLE ASSEMBLY COMPONENT PART NUMBERS

Component	Part Number	Supplier
Adapter	G1504-()	Glenair
Lanyard	G70259T77-()	Glenair

Table 2
NECESSARY MATERIALS

Material	Description	Part Number	Supplier
Heat Shrinkable Sleeve	Grade B, Class 1	-	Refer to Subject 20-00-11.
	Teflon	TFE 2X	Chemplast
			Zeus Industrial Products
SPIRAP, Teflon	-	500024	AMP
Thread Lock Compound	-	Vibratite	ND Industries

B. Configuration of Cable Assemblies

Table 3
CONFIGURATION OF LANDING GEAR CABLE ASSEMBLIES

System	Model	G1504-() Adapter	Lanyard	Length (inch)		Reference
				TFE 2X	SPIRAP	
Anti-Skid	747-100	Yes	-	-	55	Paragraph 2.A.
	747-200					
	747-300					
	747-400	No	-	58	-	Paragraph 3.A.
	767	No	-	39	-	Paragraph 4.A.

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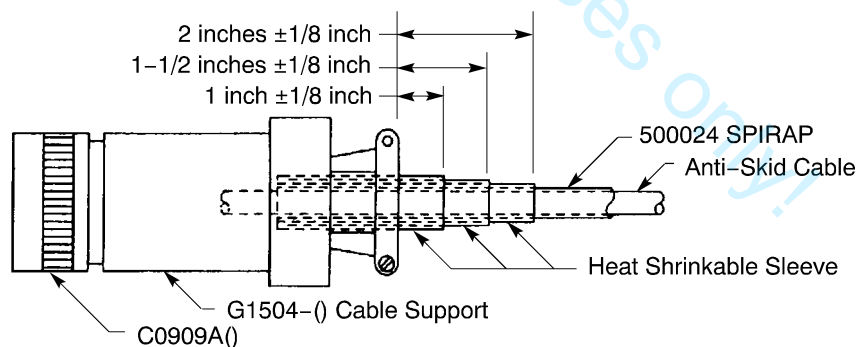
Table 3 (continued)

System	Model	G1504-() Adapter	Lanyard	Length (inch)		Reference
				TFE 2X	SPIRAP	
Anti-Skid With Brake Cooling	747-200	Yes	-	-	33	Paragraph 2.A.
	747-300					
	747-400	No	-	41	41	Paragraph 3.B.
Anti-Skid With Tire Pressure	747-400	No	-	58	-	Paragraph 3.A.
	767	No	-	39	-	Paragraph 4.A.
Brake Cooling	747-200	Yes	G70259T77-35	-	33	Paragraph 2.B.
	747-300					
	747-400	No	G70259T77-38	41	41	Paragraph 3.B.
	767	No	G70259T77-38	40	40	Paragraph 4.B.
Tire Pressure	747-400	No	-	58	-	Paragraph 3.C.
	767	No	-	39	-	Paragraph 4.B.
In-Axle	777	No	-	Refer to Table 4	-	Paragraph 5.

2. LANDING GEAR CABLE ASSEMBLY: 747-100, 747-200, 747-300

This Paragraph gives the procedures to install Glenair G1504-() cable adapters on landing gear cables for the anti-skid system.

A. Anti-Skid Cable Assembly



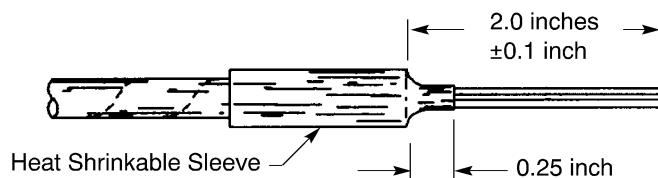
ANTI-SKID CABLE ASSEMBLY
Figure 1

- (1) Cut the length of SPIRAP. Refer to Table 3.
- (2) Put the SPIRAP on the cable.
- (3) Remove 2.0 inches \pm 0.1 inch of the outer jacket of the cable. Refer to Figure 2.

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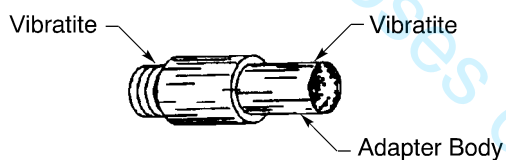


CABLE SHIELD TERMINATION

Figure 2

- (4) Terminate the shield so that it is a dead end. Refer to Figure 2 and Subject 20-10-15.
 - (a) Cut the shield so that the end of the shield is 0.25 inch \pm 0.06 inch from the end of the jacket.
 - (b) Fold the shield back over the jacket.
 - (c) Shrink a 3 inch length of heat shrinkable sleeve over the shield.
- (5) Put these sleeves in this sequence over the cable:
 - (a) A 1-3/4 inch length of 1/2 inch diameter yellow heat shrinkable sleeve
 - (b) A 2-1/4 inch length of 3/8 inch diameter yellow heat shrinkable sleeve
 - (c) A 2-3/4 inch length of 3/8 inch diameter yellow heat shrinkable sleeve.
- (6) Put the Glenair G1504-() cable adapter over the cable.
Make sure to put the clamp end first.
- (7) Remove the cable clamp from the G1504-() adapter.
- (8) Put one drop of Vibratite thread lock compound:
 - On a minimum of two threads of the internal threads of the adapter body
 - On a minimum of two threads of the external threads of the adapter body.

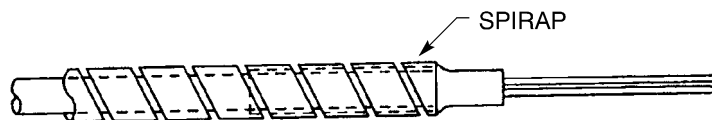
Refer to Table 2, and Figure 3.



LOCATION OF THE VIBRATITE

Figure 3

- (9) Put the edge of the SPIRAP so that it is approximately flush with the cable jacket. Refer to Figure 4.



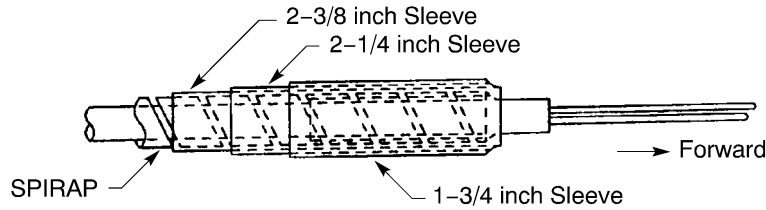
POSITION OF THE SPIRAP

Figure 4

- (10) Install the cable diameter buildup sleeves. Refer to Figure 5 and Subject 20-10-14.

STANDARD WIRING PRACTICES MANUAL

ASSEMBLY OF LANDING GEAR CABLES



CABLE DIAMETER BUILDUP SLEEVES

Figure 5

- (a) Slide the 2-3/4 length of 3/8 inch diameter sleeve to the end of the cable until it extends between 1/8 inch and 1/4 inch farther than the forward edge of the SPIRAP.
- (b) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (c) Put the 2-1/4 inch length of 3/8 inch diameter sleeve over the first sleeve.
- (d) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (e) Put the 1-3/4 inch length of 1/2 inch diameter sleeve over the second sleeve.
- (f) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (11) Assemble the connector. Refer to Subject 20-61-11.
- (12) Hold the two conductors immediately forward of the buildup sleeves and push them to the connector to make the wires bend.
The wires should remain bent after they are released.

CAUTION: DO NOT GRIP THE BUILDUP SLEEVES TO MAKE THE WIRES BEND. THE SLEEVES CAN MOVE OUT OF POSITION.

- (13) Move the adapter body forward.
- (14) Engage the threads of the adapter and the connector.
- (15) Torque the adapter hand tight plus 1/8 of a turn.
- (16) Hold the cable and put the forward edge of the buildup sleeves so that they are flush to 1/8 inch in the end of the adapter body.

Make sure that:

- The sleeve remains in position when the cable is released
- The wires have slack in the adapter.

- (17) Engage the threads of the cable clamp and the adapter.
- (18) Torque the cable clamp hand tight plus 1/8 of a turn.
- (19) Tighten the clamp saddle screws.
- (20) If the cable clamp does not hold the cable tightly:
 - (a) Remove the cable clamp from the adapter.
 - (b) Remove the adapter from the connector.
 - (c) Remove the contacts from the connector. Refer to Subject 20-61-11.
 - (d) Make a selection of a Grade B, Class 1 heat shrinkable sleeve from Table 2.
Make sure that the sleeve has the smallest diameter that can move easily on the cable.
 - (e) Put the necessary number of 1 inch lengths of the heat shrinkable sleeve on the cable.

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ASSEMBLY OF LANDING GEAR CABLES

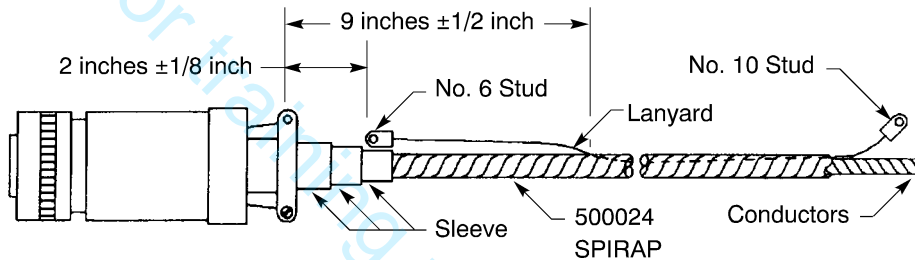
- (f) Align the forward edge of each sleeve with the forward edge of the 2-3/4 inch length of heat shrinkable sleeve.
- (g) Shrink each sleeve in position. Refer to Subject 20-10-14.
- (h) Do Step (11) thru Step (19) again.

Make sure that the clamp holds the cable tightly.

- (21) Install safety wires on the saddle screws.

B. Brake Cooling Cable Assembly

- (1) Assemble the brake cooling cable but do not tighten the saddle clamp screws. Refer to Paragraph 2.A.
- (2) Make a selection of a lanyard from Table 3.
- (3) Install the lanyard. Refer to Figure 6.



INSTALLATION OF THE LANYARD

Figure 6

- (4) Attach the forward lanyard fitting below one of the clamp saddle screws.
Make sure:
 - That the forward lanyard mounting hole is approximately centered over the rear sleeve
 - To keep the lanyard as straight as possible.

A bend in the cable results after the lanyard has been secured to the Glenair adapter.

- (5) Tighten the clamp saddle screws.
- (6) If the cable clamp does not hold the cable tightly:
 - (a) Remove the lanyard from the clamp.
 - (b) Remove the clamp from the connector.
 - (c) Remove the adapter from the connector.
 - (d) Remove the contacts from the connector. Refer to Subject 20-61-11.
 - (e) Make a selection of a Grade B, Class 1 heat shrinkable sleeve from Table 2.
Make sure that the sleeve has the smallest diameter that can move easily on the cable.
 - (f) Put the necessary number of 1 inch lengths of the sleeve on the cable.
 - (g) Align the forward edge of each sleeve with the forward edge of the 2-3/4 inch length of heat shrinkable sleeve.
 - (h) Shrink each sleeve in position. Refer to Subject 20-10-14.
 - (i) Do Step (1) thru Step (5) again.

STANDARD WIRING PRACTICES MANUAL

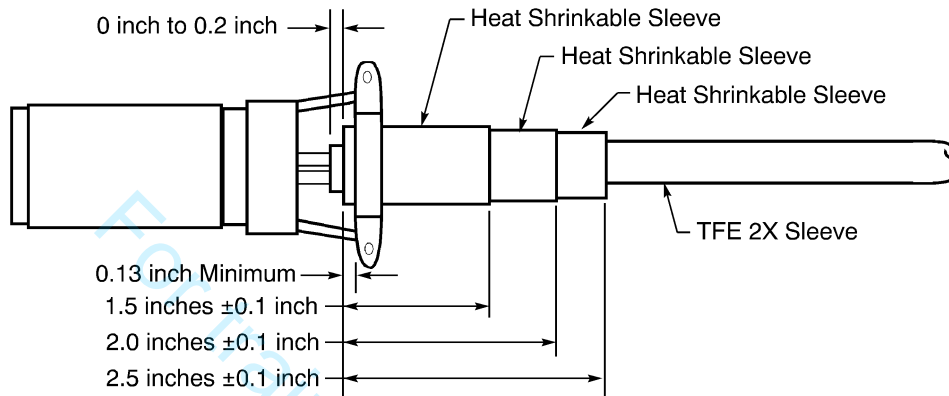
ASSEMBLY OF LANDING GEAR CABLES

Make sure that the clamp holds the cable tightly.

- (7) Install safety wires on the saddle screws.

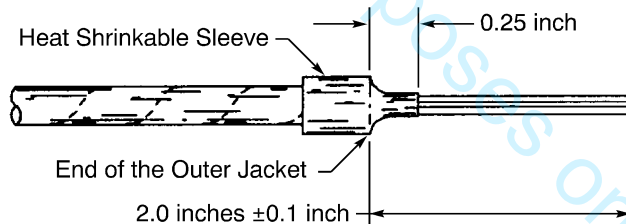
3. LANDING GEAR CABLE ASSEMBLY: 747-400

A. Anti-Skid Cable Assembly



ANTI-SKID CABLE ASSEMBLY
Figure 7

- (1) Make a selection of the necessary length of TFE 2X teflon sleeve. Refer to Table 2 and Table 3.
- (2) Put the sleeve on the cable.
- (3) Remove 2.0 inches ± 0.1 inch of the outer jacket of the cable. Refer to Figure 8.



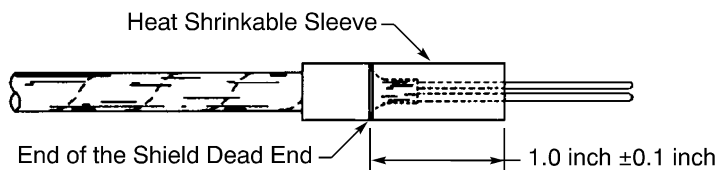
CABLE SHIELD TERMINATION
Figure 8

- (4) Assemble a shield dead end. Refer to Figure 8.
 - (a) Cut the shield so that the end of the shield is 0.25 inch ± 0.06 inch from the end of the jacket.
 - (b) Fold the shield back over the jacket.
 - (c) Shrink a 3 inch length of heat shrinkable sleeve over the shield.

Make sure the end of the sleeve extends 0.25 inch farther than the end of outer jacket.
- (5) Push a 1.0 inch ± 0.1 inch length of 3/16 inch diameter heat shrinkable sleeve on the cable until the rear end of the sleeve is against the shield dead end. Refer to Figure 9.

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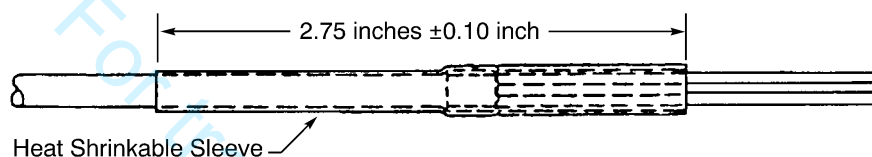
ASSEMBLY OF LANDING GEAR CABLES



POSITION OF THE FORWARD SLEEVE

Figure 9

- (6) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (7) Push a 2.75 inch ± 0.10 inch length of 3/16 inch diameter heat shrinkable sleeve on the cable until the forward end is aligned with the forward end of the 1 inch sleeve. Refer to Figure 10.



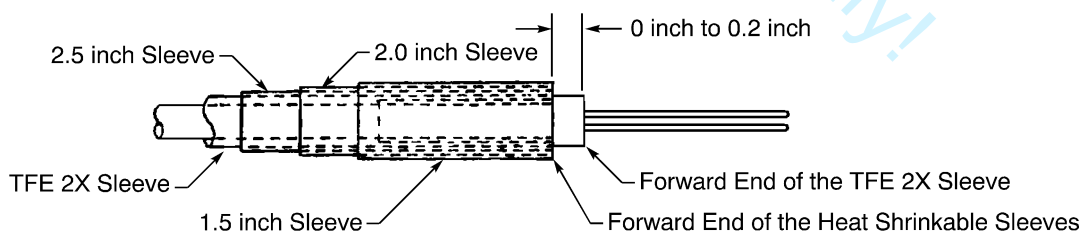
POSITION OF THE REAR SLEEVE

Figure 10

- (8) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (9) Push the TFE 2X sleeve on the wire end of the cable, over the forward and rear heat shrinkable sleeves until the forward end of the TFE 2X sleeve extends 0 inch to 0.2 inch farther than the end of the heat shrinkable sleeves.
- (10) Put these sleeves in this sequence over the cable:
 - (a) A 1.5 inch ± 0.1 inch length of 1/2 inch diameter yellow heat shrinkable sleeve

NOTE: This sleeve is optional to accommodate variation in the TFE 2X sleeve diameter.

 - (b) A 2.0 inch ± 0.1 inch length of 3/8 inch diameter yellow heat shrinkable sleeve
 - (c) A 2.5 inch ± 0.1 inch length of 3/8 inch diameter yellow heat shrinkable sleeve.
- (11) Install the cable diameter buildup sleeves. Refer to Figure 11.



CABLE DIAMETER BUILDUP SLEEVES

Figure 11

- (a) Push the 2.5 inch length of 3/8 inch diameter sleeve forward until the forward edge is 0 inch to 0.2 inch behind the forward edge of the TFE 2X sleeve.
- (b) Shrink the sleeve into position. Refer to Subject 20-10-14.

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- (c) Align the forward end of the 2.0 inch length of 3/8 inch diameter sleeve with the forward end of the 2.5 inch sleeve.
- (d) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (e) Align the forward end of the 1.5 inch length of 1/2 inch diameter sleeve with the forward end of the 2.0 inch sleeve.
- (f) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (12) Assemble the connector. Refer to Subject 20-61-11.
- (13) Put one drop of Vibratite thread lock compound on the internal threads of the saddle clamp.
Make sure that each drop of Vibratite covers a minimum of two threads.
- (14) Engage the threads of the cable clamp and the connector.
- (15) Torque the cable clamp hand tight plus 1/8 of a turn.
- (16) Tighten the clamp saddle screws.
Make sure that the distance from the forward edge of the clamp bar to the forward edge of the heat shrinkable sleeves is 0.13 inch minimum. Refer to Figure 7.
- (17) If the cable clamp does not hold the cable tightly:
 - (a) Remove the cable clamp from the connector.
 - (b) Remove the contacts from the connector. Refer to Subject 20-61-11.
 - (c) Make a selection of a Grade B, Class 1 heat shrinkable sleeve from Table 2.
Make sure that the sleeve has the smallest diameter that can move easily on the cable.
 - (d) Put the necessary number of 1 inch lengths of the sleeve on the cable.
 - (e) Align the forward edge of each sleeve with the forward edge of the 1.5 inch length of heat shrinkable sleeve.
 - (f) Shrink each sleeve into position. Refer to Subject 20-10-14.
 - (g) Do Step (12) thru Step (16) again for each sleeve.
Make sure that the clamp holds the cable tightly.
- (18) Install safety wires the saddle screws.

B. Brake Cooling Cable Assembly

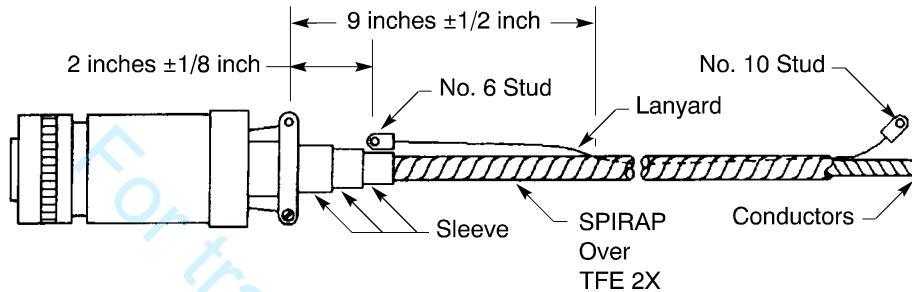
- (1) Cut the length of the TFE 2X sleeve. Refer to Table 3.
- (2) Put the TFE 2X sleeve on the cable so that it is 0.9 inch from the cable end.
- (3) Put a 2-1/2 inch length of 3/8 inch diameter heat shrinkable sleeve over the TFE 2X sleeve.
- (4) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (5) Cut the length of SPIRAP. Refer to Table 3.
- (6) Put the SPIRAP on the cable over the TFE 2X sleeve.
- (7) Put a 2 inch length of 1/2 inch diameter heat shrinkable sleeve over the SPIRAP.
- (8) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (9) Put a 1-1/2 inch length of 1/2 inch diameter heat shrinkable sleeve over the SPIRAP and the first sleeve.
- (10) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (11) Assemble the connector. Refer to Subject 20-61-11.

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- (12) Put one drop of Vibratite thread lock compound on the internal threads of the saddle clamp.
Make sure that each drop of Vibratite covers a minimum of two threads.
- (13) Engage the threads of the cable clamp and the connector.
- (14) Torque the cable clamp hand tight plus 1/8 of a turn.
- (15) Make a selection of a lanyard from Table 3.
- (16) Install the lanyard. Refer to Figure 12.



INSTALLATION OF THE LANYARD

Figure 12

- (17) Attach the forward lanyard fitting below one of the clamp saddle screws.
Make sure:
 - That the forward lanyard mounting hole is approximately centered over the rear sleeve
 - To keep the lanyard as straight as possible.
 A bend in the cable will result after the lanyard has been secured to the Glenair adapter.
- (18) Tighten the clamp saddle screws.
- (19) If the cable clamp does not hold the cable tightly:
 - (a) Remove the lanyard from the clamp.
 - (b) Remove the clamp from the connector.
 - (c) Remove the contacts from the connector. Refer to Subject 20-61-11.
 - (d) Make a selection of a Grade B, Class 1 heat shrinkable sleeve from Table 2.
Make sure that the sleeve has the smallest diameter that can move easily on the cable.
 - (e) Put the necessary number of 1 inch lengths of the sleeve on the cable.
 - (f) Align the forward edge of each sleeve with the forward edge of the 1-1/2 inch length of heat shrinkable sleeve.
 - (g) Shrink each sleeve in position. Refer to Subject 20-10-14.
 - (h) Do Step (11) thru Step (18) again.
Make sure that the clamp holds the cable tightly.
- (20) Install safety wires the on the saddle screws.

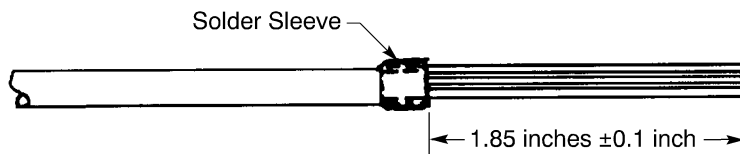
C. Tire Pressure Cable Assembly

- (1) Cut the length of the TFE 2X sleeve. Refer to Table 3.
- (2) Put the TFE 2X on the cable.

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ASSEMBLY OF LANDING GEAR CABLES

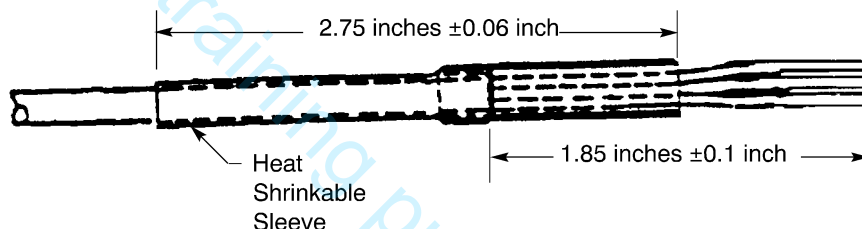
- (3) Remove 1.85 inches ± 0.1 inch of cable outer jacket.
- (4) Make a shield ground wire with the solder sleeve procedure. Refer to Figure 13 and Subject 20-10-15.



CABLE SHIELD TERMINATION

Figure 13

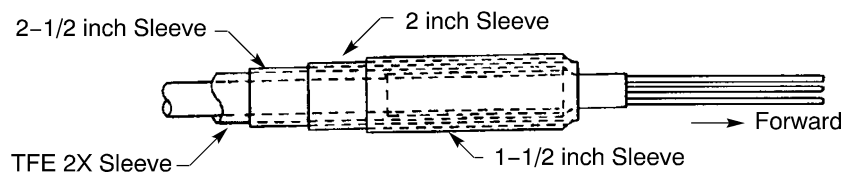
- (5) Put a 1 inch ± 0.06 inch length of 3/16 inch diameter heat shrinkable sleeve against the shield termination.
- (6) Put a 2.75 inch ± 0.06 inch length of 3/16 inch diameter heat shrinkable sleeve over the 1 inch sleeve. Refer to Figure 14.



POSITION OF THE SLEEVE

Figure 14

- (7) Put the TFE 2X sleeve over the cable and heat shrinkable sleeves so that it is flush with the end of the sleeves.
- (8) Put these sleeves in this sequence over the cable:
 - (a) A 1-1/2 inch length of 1/2 inch diameter yellow heat shrinkable sleeve
 - (b) A 2 inch length of 3/8 inch diameter yellow heat shrinkable sleeve
 - (c) A 2-1/2 inch length of 3/8 inch diameter yellow heat shrinkable sleeve.
- (9) Install the cable diameter buildup sleeves. Refer to Figure 15 and Subject 20-10-14.



CABLE DIAMETER BUILDUP SLEEVES

Figure 15

- (a) Put the 2-1/2 length of 3/8 inch diameter sleeve forward until it is flush with the forward edge of the TFE 2X sleeve.
- (b) Shrink the sleeve into position. Subject 20-10-14.

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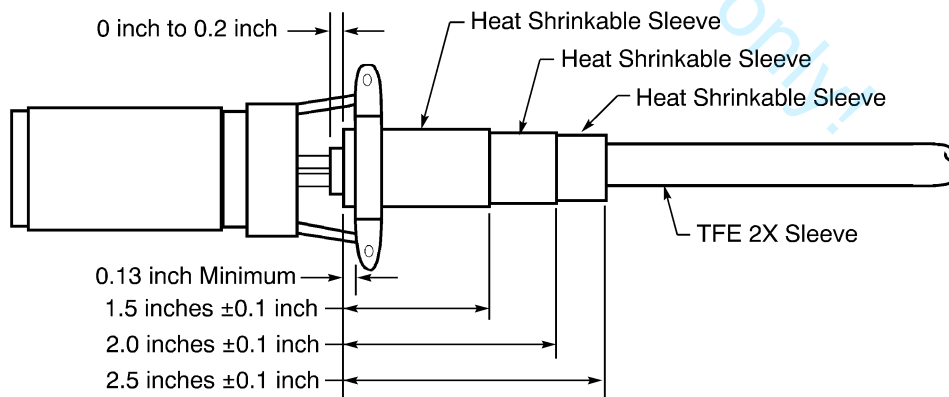
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ASSEMBLY OF LANDING GEAR CABLES

- (c) Put the 2 inch length of 3/8 inch diameter sleeve over the first sleeve.
- (d) Shrink the sleeve into position. Subject 20-10-14.
- (e) Put the 1-1/2 inch length of 1/2 inch diameter sleeve over the second sleeve.
- (f) Shrink the sleeve into position. Subject 20-10-14.
- (10) Assemble the connector. Refer to Subject 20-61-11.
- (11) Put one drop of Vibratite thread lock compound on the internal threads of the saddle clamp.
Make sure that each drop of Vibratite covers a minimum of two threads.
- (12) Engage the threads of the cable clamp and the connector.
- (13) Torque the cable clamp hand tight plus 1/8 of a turn.
- (14) Tighten the clamp saddle screws.
- (15) If the cable clamp does not hold the cable tightly:
 - (a) Remove the cable clamp from the connector.
 - (b) Remove the contacts from the connector. Refer to Subject 20-61-11.
 - (c) Make a selection of a Grade B, Class 1 heat shrinkable sleeve from Table 2.
Make sure that the sleeve has the smallest diameter that can move easily on the cable.
 - (d) Put the necessary number of 1 inch lengths of the sleeve on the cable.
 - (e) Align the forward edge of each sleeve with the forward edge of the 1-1/2 inch length of heat shrinkable sleeve.
 - (f) Shrink each sleeve in position. Refer to Subject 20-10-14.
 - (g) Do Step (10) thru Step (14) again.
Make sure that the clamp holds the cable tightly.
- (16) Install safety wires the on the saddle screws.

4. LANDING GEAR CABLE ASSEMBLY: 767

A. Anti-Skid Cable Assembly



ANTI-SKID CABLE ASSEMBLY

Figure 16

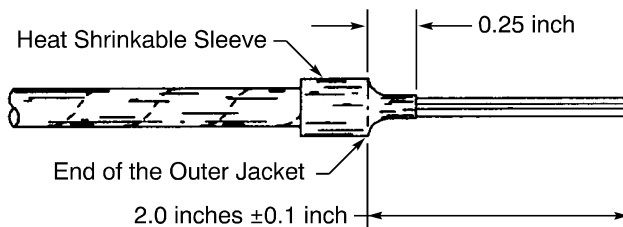
- (1) Make a selection of the necessary length of TFE 2X teflon sleeve. Refer to Table 2 and Table 3.

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ASSEMBLY OF LANDING GEAR CABLES

- (2) Put the sleeve on the cable.
- (3) Remove 2.0 inches ± 0.1 inch of the outer jacket of the cable. Refer to Figure 17.



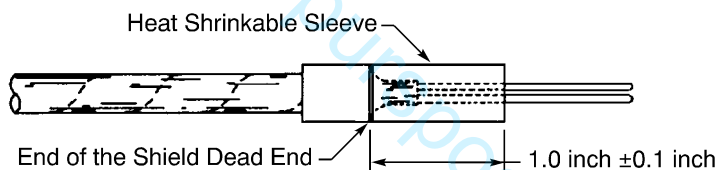
CABLE SHIELD TERMINATION

Figure 17

- (4) Assemble a shield dead end. Refer to Figure 17.
 - (a) Cut the shield so that the end of the shield is 0.25 inch ± 0.06 inch from the end of the jacket.
 - (b) Fold the shield back over the jacket.
 - (c) Shrink a 3 inch length of heat shrinkable sleeve over the shield.

Make sure the end of the sleeve extends 0.25 inch farther than the end of outer jacket.

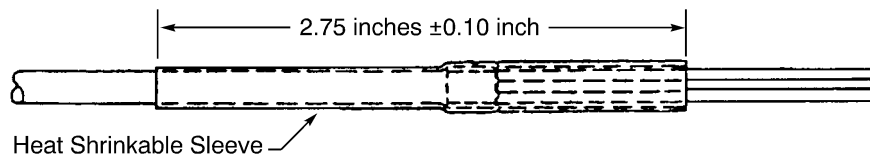
- (5) Push a 1.0 inch ± 0.1 inch length of 3/16 inch diameter heat shrinkable sleeve on the cable until the rear end of the sleeve is against the shield dead end. Refer to Figure 18.



POSITION OF THE FORWARD SLEEVE

Figure 18

- (6) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (7) Push a 2.75 inch ± 0.10 inch length of 3/16 inch diameter heat shrinkable sleeve on the cable until the forward end is aligned with the forward end of the 1 inch sleeve. Refer to Figure 19.



POSITION OF THE REAR SLEEVE

Figure 19

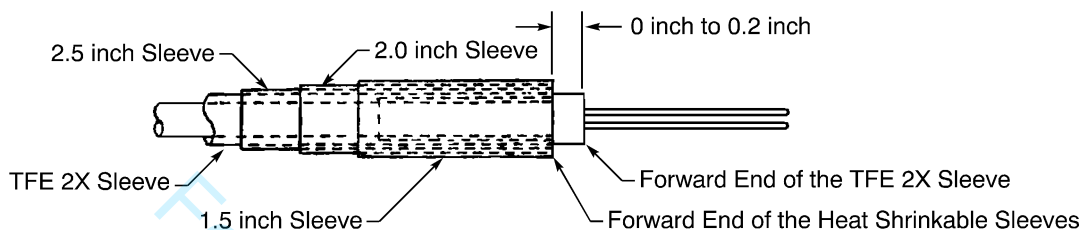
- (8) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (9) Push the TFE 2X sleeve on the wire end of the cable, over the forward and rear heat shrinkable sleeves until the forward end of the TFE 2X sleeve extends 0 inch to 0.2 inch farther than the end of the heat shrinkable sleeves.

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ASSEMBLY OF LANDING GEAR CABLES

- (10) Put these sleeves in this sequence over the cable:
 - (a) A 1.5 inch ± 0.1 inch length of 1/2 inch diameter yellow heat shrinkable sleeve
 - (b) A 2.0 inch ± 0.1 inch length of 3/8 inch diameter yellow heat shrinkable sleeve
 - (c) A 2.5 inch ± 0.1 inch length of 3/8 inch diameter yellow heat shrinkable sleeve.
- (11) Install the cable diameter buildup sleeves. Refer to Figure 20 and Subject 20-10-14.



CABLE DIAMETER BUILDUP SLEEVES

Figure 20

- (a) Push the 2.5 inch length of 3/8 inch diameter sleeve forward until the forward edge is 0 inch to 0.2 inch behind the forward edge of the TFE 2X sleeve.
 - (b) Shrink the sleeve into position. Refer to Subject 20-10-14.
 - (c) Align the forward end of the 2.0 inch length of 3/8 inch diameter sleeve with the forward end of the 2.5 inch sleeve.
 - (d) Shrink the sleeve into position. Refer to Subject 20-10-14.
 - (e) Align the forward end of the 1.5 inch length of 1/2 inch diameter sleeve with the forward end of the 2.0 inch sleeve.
 - (f) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (12) Assemble the connector. Refer to Subject 20-61-11.
- (13) Put one drop of Vibratite thread lock compound on the internal threads of the saddle clamp. Make sure that each drop of Vibratite covers a minimum of two threads.
- (14) Engage the threads of the cable clamp and the connector.
- (15) Torque the cable clamp hand tight plus 1/8 of a turn.
- (16) Tighten the clamp saddle screws.

Make sure that the distance from the forward edge of the clamp bar to the forward edge of the heat shrinkable sleeves is 0.13 inch minimum. Refer to Figure 16.
- (17) If the cable clamp does not hold the cable tightly:
 - (a) Remove the cable clamp from the connector.
 - (b) Remove the contacts from the connector. Refer to Subject 20-61-11.
 - (c) Make a selection of a Grade B, Class 1 heat shrinkable sleeve from Table 2.

Make sure that the sleeve has the smallest diameter that can move easily on the cable.
 - (d) Put the necessary number of 1 inch lengths of the sleeve on the cable.
 - (e) Align the forward edge of each sleeve with the forward edge of the 1.5 inch length of heat shrinkable sleeve.
 - (f) Shrink each sleeve into position. Refer to Subject 20-10-14.

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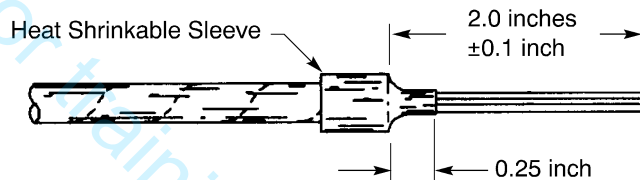
STANDARD WIRING PRACTICES MANUAL

ASSEMBLY OF LANDING GEAR CABLES

- (g) Do Step (12) thru Step (16) again for each sleeve.
 Make sure that the clamp holds the cable tightly.
- (18) Install safety wires the on the saddle screws.

B. Brake Cooling and Tire Pressure Cable Assembly

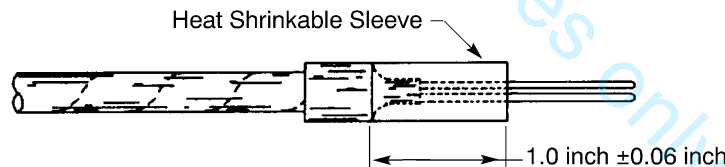
- (1) Cut the length of the TFE 2X sleeve. Refer to Table 3.
- (2) Put the TFE 2X on the cable.
- (3) Cut the length of SPIRAP. Refer to Table 3.
- (4) Put the SPIRAP on the cable over the TFE 2X sleeve.
- (5) Remove 2.0 inches ± 0.1 inches of the outer jacket of the cable.
- (6) Terminate the shield so that it is a dead end. Refer to Figure 21 and Subject 20-10-15.



CABLE SHIELD TERMINATION

Figure 21

- (a) Cut the shield so that the end of the shield is 0.25 inch ± 0.06 inch from the end of the jacket.
 - (b) Fold the shield back over the jacket.
 - (c) Shrink a 3 inch length of heat shrinkable sleeve over the shield.
- (7) Put a 1 inch ± 0.06 inch length of 3/16 inch diameter heat shrinkable sleeve against the shield dead end. Refer to Figure 22.



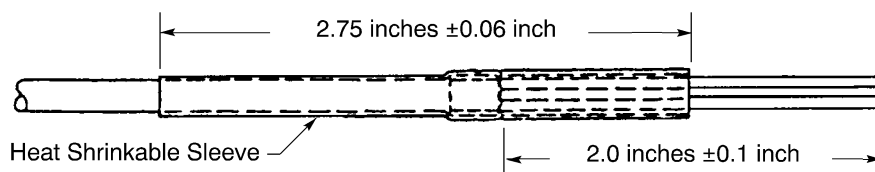
POSITION OF THE FORWARD SLEEVE

Figure 22

- (8) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (9) Put a 2.75 inch ± 0.06 inch length of 3/16 inch diameter heat shrinkable sleeve over the 1 inch sleeve. Refer to Figure 23.

STANDARD WIRING PRACTICES MANUAL

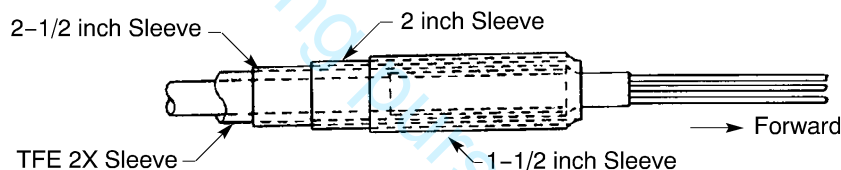
ASSEMBLY OF LANDING GEAR CABLES



POSITION OF THE REAR SLEEVE

Figure 23

- (10) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (11) Put the TFE 2X sleeve on the wire end of the cable, over the forward and rear heat shrinkable sleeves.
Make sure that the sleeve extends 0.125 inch farther than the end of the heat shrinkable sleeves.
- (12) Put these sleeves in this sequence over the cable:
 - (a) A 1-1/2 inch length of 1/2 inch diameter yellow heat shrinkable sleeve
 - (b) A 2 inch length of 3/8 inch diameter yellow heat shrinkable sleeve
 - (c) A 2-1/2 inch length of 3/8 inch diameter yellow heat shrinkable sleeve.
- (13) Install the cable diameter buildup sleeves. Refer to Figure 24 and Subject 20-10-14.



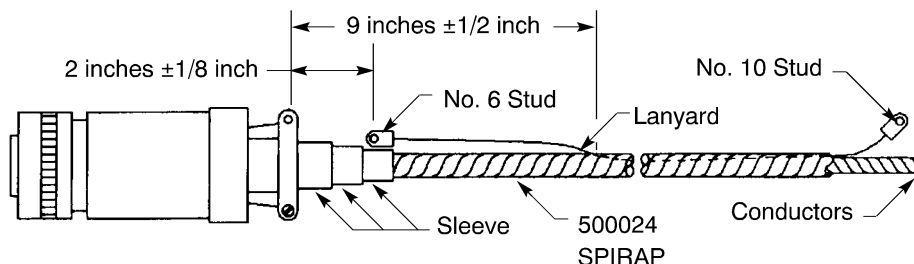
CABLE DIAMETER BUILDUP SLEEVES

Figure 24

- (a) Put the 2-1/2 length of 3/8 inch diameter sleeve forward until it is flush with the forward edge of the TFE 2X sleeve.
 - (b) Shrink the sleeve into position. Refer to Subject 20-10-14.
 - (c) Put the 2 inch length of 3/8 inch diameter sleeve over the first sleeve.
 - (d) Shrink the sleeve into position. Refer to Subject 20-10-14.
 - (e) Put the 1-1/2 inch length of 1/2 inch diameter sleeve over the second sleeve.
 - (f) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (14) Assemble the connector. Refer to Subject 20-61-11.
- (15) Put one drop of Vibratite thread lock compound on the internal threads of the saddle clamp.
Make sure that each drop of Vibratite covers a minimum of two threads.
- (16) Engage the threads of the cable clamp and the connector.
- (17) Torque the cable clamp hand tight plus 1/8 of a turn.
- (18) Make a selection of a lanyard from Table 3.
- (19) Install the lanyard. Refer to Figure 25.

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ASSEMBLY OF LANDING GEAR CABLES



INSTALLATION OF THE LANYARD

Figure 25

- (20) Attach the forward lanyard fitting below one of the clamp saddle screws.

Make sure:

- That the forward lanyard mounting hole is approximately centered over the rear sleeve
- To keep the lanyard as straight as possible.

A bend in the cable will result after the lanyard has been secured to the Glenair adapter.

- (21) If the cable clamp does not hold the cable tightly:

- Remove the lanyard from the cable clamp.
- Remove the cable clamp from the connector.
- Remove the contacts from the connector. Refer to Subject 20-61-11.
- Make a selection of a Grade B, Class 1 heat shrinkable sleeve from Table 2.

Make sure that the sleeve has the smallest diameter that can move easily on the cable.

- Put the necessary number of 1 inch lengths of the sleeve on the cable.
- Align the forward edge of each sleeve with the forward edge of the 1-1/2 inch length of heat shrinkable sleeve.
- Shrink each sleeve in position. Refer to Subject 20-10-14.
- Do Step (14) thru Step (20) again.

Make sure that the clamp holds the cable tightly.

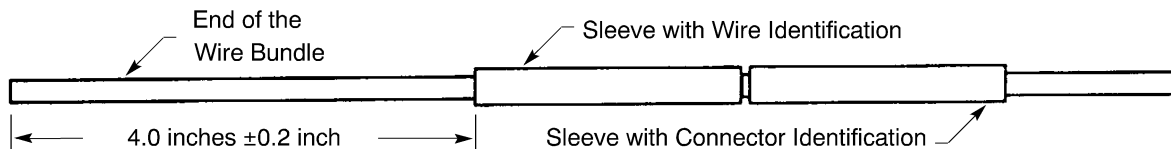
- (22) If the cable clamp does not hold the cable tightly, install the necessary number of 1 inch heat shrinkable sleeves.

- (23) Install safety wires on the saddle screws.

5. LANDING GEAR IN-AXLE CABLE ASSEMBLY: 777

A. Wire Preparation

- (1) Put the sleeves with connector and wire identification on the cable. Refer to Figure 26.



LOCATION OF THE CONNECTOR AND WIRE IDENTIFICATION SLEEVES

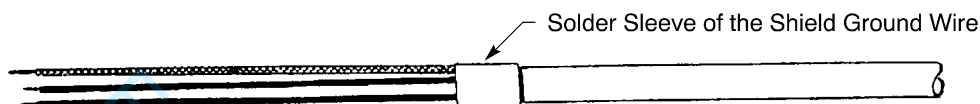
Figure 26

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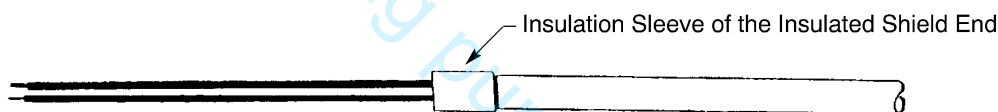
ASSEMBLY OF LANDING GEAR CABLES

- (a) Put the sleeve with the connector identification on the wire harness.
 - (b) Put the sleeve with the wire identification on the cable so that it is 4.0 inches ± 0.2 inches from the end of the cable.
 - (c) Shrink the wire identification sleeve into position. Refer to Subject 20-10-14.
 - (2) Remove 2.0 inches ± 0.13 inch of the outer jacket of the cable.
 - (3) If the wiring diagram shows that the end of the shield has a shield ground wire, install the shield ground wire with a solder sleeve.
- Refer to Figure 27 and Subject 20-10-15.



SHIELD TERMINATION WITH A SHIELD GROUND WIRE
Figure 27

- (4) If the wiring diagram shows that the end of the shield is not terminated, terminate the shield so that it is a dead end.
- Refer to Figure 28 and Subject 20-10-15.

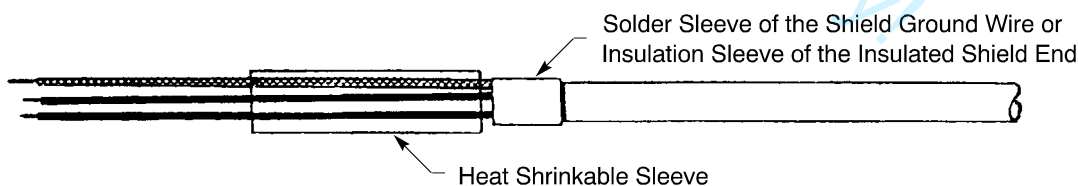


SHIELD DEAD END
Figure 28

- (5) Put a 1.0 inch ± 0.1 inch length of heat shrinkable sleeve on the cable so that it is adjacent to the solder sleeve of the shield ground wire or against the insulation sleeve of the insulated shield.

NOTE: Use a sleeve with the smallest diameter that can move easily on the wires.

Refer to Figure 29.



POSITION OF THE FORWARD SLEEVE
Figure 29

- (6) Put a 2.75 inch ± 0.1 inch length of heat shrinkable sleeve over the shield end and the first sleeve so that the edge is aligned with the edge of the first sleeve.

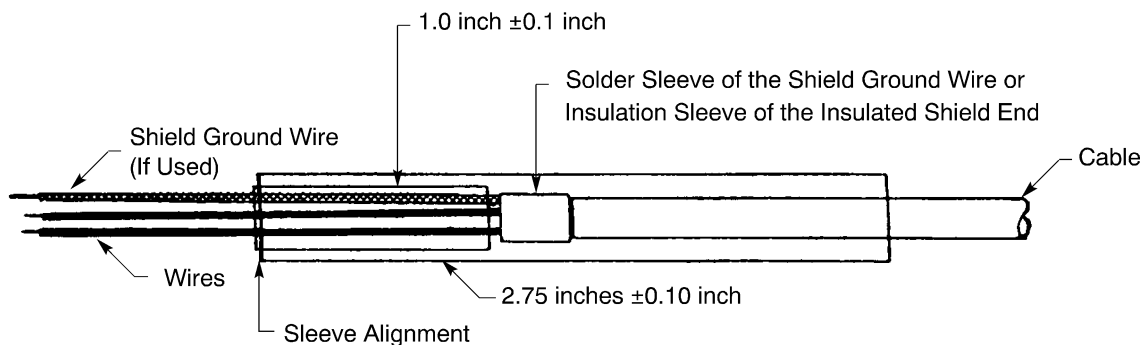
NOTE: Use a sleeve with the smallest diameter that can move easily on the wires.

Refer to Figure 30.

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STANDARD WIRING PRACTICES MANUAL

ASSEMBLY OF LANDING GEAR CABLES



OUTER CABLE END SLEEVE POSITION

Figure 30

(7) Shrink the sleeve into position. Refer to Subject 20-10-14.

(8) Cut a length of TFE 2X sleeve. Refer to Table 4.

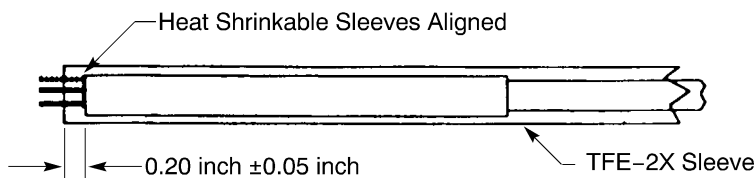
This sleeve goes on the sleeves 1.0 inch and 2.75 inch lengths of sleeve.

**Table 4
TFE 2X SLEEVE LENGTH**

Landing Gear		Sleeve Length (inch)
Axle	Truck Location	
Nose	-	46
Left Main	Front	82
	Center	88
	Rear	73
Right Main	Front	82
	Center	88
	Rear	73

(9) Put the TFE 2X sleeve on the cable so that the end of the sleeve extends 0.20 inch \pm 0.05 inch farther than the aligned end of the other sleeves.

Refer to Figure 31.



POSITION OF THE TFE 2X SLEEVE

Figure 31

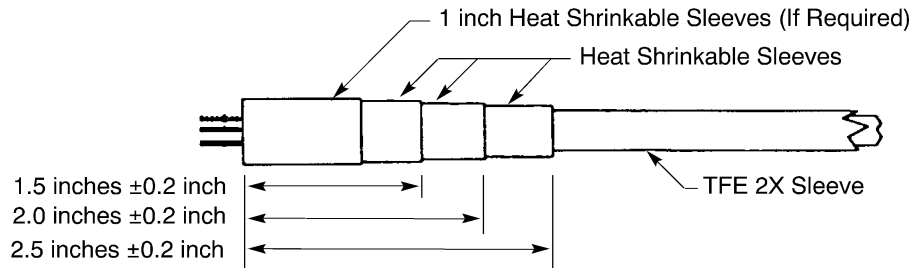
(10) Install the cable diameter buildup sleeves. Refer to Figure 32 and Subject 20-10-14.

These sleeves are installed so that the backshell cable clamps hold the cable tightly.

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ASSEMBLY OF LANDING GEAR CABLES



CABLE DIAMETER BUILDUP SLEEVES

Figure 32

- (a) Put a 2.5 inch ± 0.2 inch length of heat shrinkable sleeve on the cable so that the edge of the sleeve aligns with the end of the TFE 2X sleeve.
Make sure that each sleeve has the smallest diameter that can move easily on the cable.
 - (b) Shrink the sleeve into position. Refer to Subject 20-10-14.
 - (c) Put a 2.0 inch ± 0.2 inch length of heat shrinkable sleeve on the cable so that the edge of the sleeve aligns with the end of the TFE 2X sleeve.
Make sure that each sleeve has the smallest diameter that can move easily on the cable.
 - (d) Shrink the sleeve into position. Refer to Subject 20-10-14.
 - (e) Put a 1.5 inch ± 0.2 inch length of heat shrinkable sleeve on the cable so that the edge of the sleeve aligns with the end of the TFE 2X sleeve.
Make sure that each sleeve has the smallest diameter that can move easily on the cable.
 - (f) Shrink the sleeve into position. Refer to Subject 20-10-14.
- (11) Install more sleeves for cable diameter buildup so that the cable assembly cannot move when the screws of the strain relief clamp are tightened.
Refer to Figure 32 and Subject 20-10-14.
- (a) Put a 1.0 inch ± 0.2 inch length of heat shrinkable sleeve on the cable so that the edge of the sleeve aligns with the end of the TFE 2X sleeve.
Make sure that each sleeve has the smallest diameter that can move easily on the cable.
 - (b) Shrink the sleeve into position. Refer to Subject 20-10-14.

B. Connector Assembly

- (1) Put the strain relief backshell on the cable.
- (2) Remove the wire insulation. Refer to Subject 20-61-11.
- (3) Assemble the contacts. Refer to Subject 20-61-11.
- (4) Insert the contacts. Refer to Subject 20-61-11.
- (5) Use the procedures in the Subject 20-25-12 to do these three tasks:
- (6) Attach the strain relief backshell to the connector. Refer to Subject 20-25-12.
- (7) Attach the shield ground wire terminals to the strain relief backshell.
- (8) Tighten the cable clamps on the cable. Refer to Subject 20-25-12.