ASSEMBLY OF 10-60450 FRONT RELEASE PLUG-IN RELAY SOCKETS

TABLE OF CONTENTS

ASSEMBLY OF 10-60450 FRONT RELEASE PLUG-IN RELAY SOCKETS

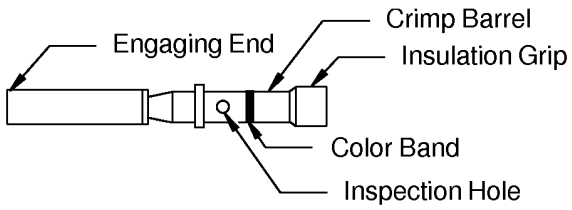
1. PART NUMBERS AND DESCRIPTION

A. Relay Socket Part Numbers

Table 1
RELAY SOCKET PART NUMBERS

Boeing Standard	Part Number	Supplier
10-60450	82164-1F	Clover
	105-100-02	Methode
	000300-0445	Viking

B. Contact Part Numbers



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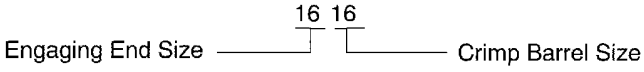
FRONT RELEASE SOCKET CONTACTS
Figure 1



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EXAMPLE OF CONTACT SIZE
Figure 2

ASSEMBLY OF 10-60450 FRONT RELEASE PLUG-IN RELAY SOCKETS

Table 2
CONTACT PART NUMBERS

Contact Size	Part Number	Supplier
1616	BACC47CP2T Relay Socket Contact	Boeing
	MS24255-16S Relay Socket Contact	QPL
1614	248-136-1614S-02 Relay Socket Contact	Amphenol

Table 3
ALTERNATIVE CONTACT PART NUMBERS

Specified Contact		Alternative Contact	
Part Number	**Supplier**	**Part Number**	**Supplier**
BACC47CP2T	Boeing	248-136-1600S-02	Tri-Star
		418-1616-902	Burndy
		ZZL-4116-36LT	Pyle-National
		248-136-1614S-02	Amphenol
248-136-1614S-02	Amphenol	P-208575-S	Pyle-National

2. RELAY SOCKET DISASSEMBLY

A. Contact Removal

Table 4
CONTACT REMOVAL TOOLS

Contact Engaging End Size	Removal Tool
16	AT 2016
	ATML 1908
	M81969/19-08
	MS24256R16
	DRK16

(1) Make a selection of a contact removal tool from Table 4.

(2) At the front of the relay socket, axially align the contact removal tool and the contact cavity.

(3) Put the tip of the removal tool on the engaging end of the contact.

(4) Carefully push the removal tool into the contact cavity until it stops.

(5) Push the removal tool, and at the same time, push the internal plunger of the removal tool. Make sure that the contact moves out of the rear of the relay socket.

CAUTION: DO NOT USE MORE FORCE THAN THE FORCE THAT IS NECESSARY TO PUSH THE REMOVAL TOOL INTO THE CONTACT CAVITY. DAMAGE TO THE CONTACT RETENTION CLIPS CAN OCCUR.

(6) Carefully pull the removal tool out of the contact cavity.

(7) Pull the wire and contact out of the contact cavity at the rear of the relay socket.

3. RELAY SOCKET ASSEMBLY

A. Contact Assembly

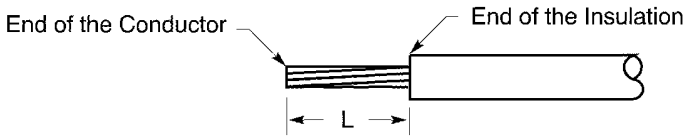
Table 5
CONTACT CRIMP TOOLS

Wire Size (AWG)	Contact Size	Crimp Tool			
		Basic Unit		Locator	
		Part Number	Setting	Part Number	Color
24	1616	M22520/1-01	2	M22520/1-02	Blue
22	1616	M22520/1-01	3	M22520/1-02	Blue
20	1616	M22520/1-01	4	M22520/1-02	Blue
		MS3191-1	-	MS3191-16	-
18	1616	M22520/1-01	5	M22520/1-02	Blue
		MS3191-1	-	MS3191-16	-
16	1616	M22520/1-01	6	M22520/1-02	Blue
		MS3191-1	-	MS3191-16	-
14	1614	M22520/1-01	7	M22520/1-02	Blue

(1) Make a selection of a crimp tool from Table 5.

(2) Remove 0.28 inch ±0.03 inch of the wire insulation from the end of the wire.
Refer to:

- Figure 3
- Subject 20-00-15 for the insulation removal procedures.



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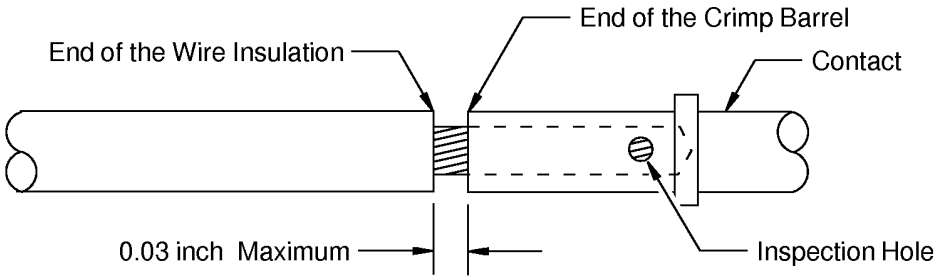
WIRE PREPARATION
Figure 3

(3) Put the end of the wire into the crimp barrel of the contact. Refer to Figure 4.
Make sure that:

- The conductor can be seen in the inspection hole of the contact
- All of the strands of the conductor are in the crimp barrel

- The distance between the rear end of the contact and the wire insulation is 0.03 inch maximum.



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POSITION OF THE WIRE IN THE CRIMP BARREL
Figure 4

(4) Crimp the contact.

Make sure that:

- Make sure the conductor can be seen in the inspection hole of the contact.
- The distance between the rear end of the contact and the wire insulation is 0.03 inch maximum
- The contact does not have a bend larger than 3.5 degrees from the longitudinal axis of the contact.

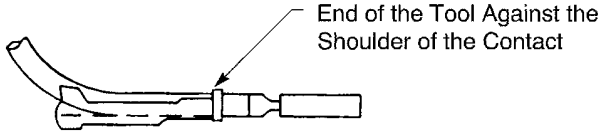
B. Contact Insertion

Table 6
CONTACT INSERTION TOOLS

Contact Size	Insertion Tool	Supplier
1616	M81969/17-04	QPL
1614	M81969/17-04	QPL

(1) Make a selection of an insertion tool from Table 6.

(2) Put the end of the insertion tool tip against the contact shoulder. Refer to Figure 5.

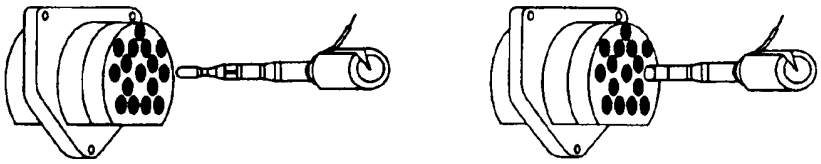


2446728 S00061548718_V1

INSERTION TOOL POSITION ON THE CONTACT
Figure 5

(3) At the rear of the connector, carefully push the tool and the contact into the contact cavity until it stops. Refer to Figure 6.

Make sure that the insertion tool stays aligned with the contact cavity.



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CONTACT INSERTION
Figure 6

NOTE: The 10-60450-4 relay socket does not have a rubber grommet.

(4) Carefully remove the insertion tool.

(5) Lightly pull on the wire to make sure that the contact is locked in the contact cavity.

CAUTION: DO NOT MAKE A DENT IN THE INSULATION OF WIRE WITH THE FINGERNAILS. DAMAGE TO THE INSULATION CAN OCCUR.

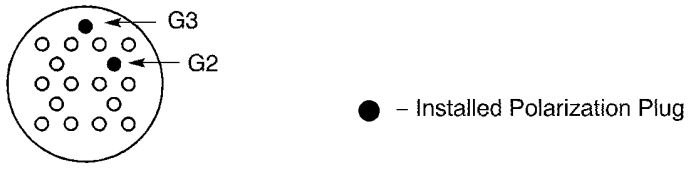
C. Spare Contact Installation

(1) Install a spare contact in each unused contact cavity.

Refer to Subject 20-60-08.

D. Polarization Plug Installation

Polarization plugs come with the relay socket.



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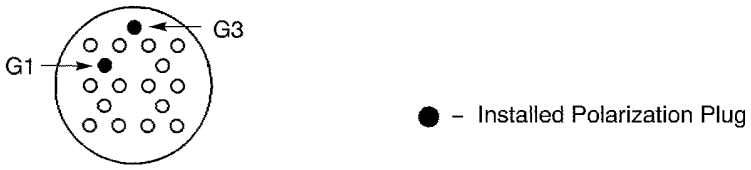
10-60540-1 AND 10-60540-6 RELAY SOCKET POLARIZATION - KEY G1
Figure 7



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10-60540-2 RELAY SOCKET POLARIZATION - KEY G2
Figure 8

2446731 S00061548723_V1

10-60540-3 RELAY SOCKET POLARIZATION - KEY G3
Figure 9

(1) Install polarization plugs in the socket. Refer to Figure 7, Figure 8, and Figure 9 for the correct key.

(a) Make a selection of an insertion tool from Table 6.

(b) Put the end of the insertion tool tip against the plug shoulder.

(c) Carefully push the plug straight through the grommet hole until the plug is completely inserted.

4. APPROVED TOOL SUPPLIERS

A. Contact Insertion Tools

Table 7
INSERTION TOOL SUPPLIERS

Insertion Tool	Supplier
M81969/17-04	QPL

ASSEMBLY OF 10-60450 FRONT RELEASE PLUG-IN RELAY SOCKETS

B. Contact Crimp Tools

Table 8
CRIMP TOOL SUPPLIERS

Crimp Tool	Supplier
M22520/1-01	QPL
M22520/1-02	QPL
MS3191-1	QPL
MS3191-16	QPL

C. Contact Removal Tools

Table 9
REMOVAL TOOL SUPPLIERS

Removal Tool	Supplier
AT 2016	Astro
ATML 1908	Astro
DRK16	Daniels
M81969/19-08	QPL
MS24256R16	QPL

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

TABLE OF CONTENTS

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

This Subject gives the procedures to assemble BACS16W and BASC16X relay sockets.

These relay sockets have front release contacts.

Refer to Subject 20-81-22 for the installation of these relay sockets.

1. PART NUMBERS AND DESCRIPTION

A. Relay Socket Part Numbers

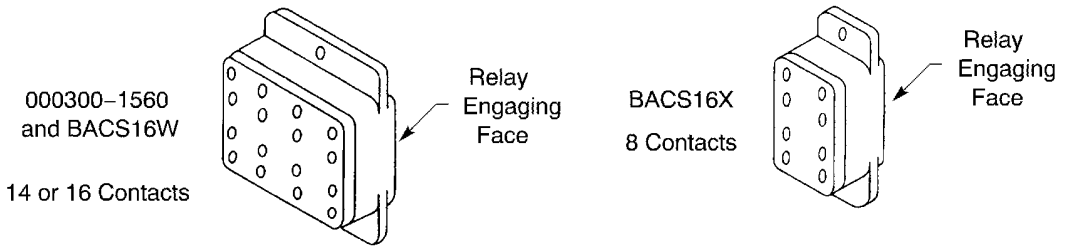
Table 1
RELAY SOCKET PART NUMBERS

Boeing Standard	Part Number	Supplier
-	000300-1560	Viking
BACS16W1A	000300-1539	Viking
	102 009-1	Burndy
BACS16W2A	000300-1542	Viking
	102 011-1	Burndy
BACS16W3A	000300-1543	Viking
	102 012-1	Burndy
BACS16W4A	000300-1544	Viking
	102 013-1	Burndy
BACS16W5A	000300-1545	Viking
	102 010-1	Burndy
BACS16X1A	000300-1538	Viking
	102 006-1	Burndy
	RSF116200	Amphenol PCD
BACS16X2A	000300-1540	Viking
	102 007-1	Burndy
	RSF116204	Amphenol PCD
BACS16X3A	000300-1541	Viking
	102 005-1	Burndy
	RSF116208	Amphenol PCD
BACS16X4A	000300-1648	Viking
	102 006-2	Burndy
	RSF116202	Amphenol PCD
BACS16X5A	000300-1650	Viking
	102 007-2	Burndy
	RSF116206	Amphenol PCD

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

Table 1 RELAY SOCKET PART NUMBERS (Continued)

Boeing Standard	Part Number	Supplier
BACS16X6A	000300-1652	Viking
	102 005-2	Burndy
	RSF116210	Amphenol PCD



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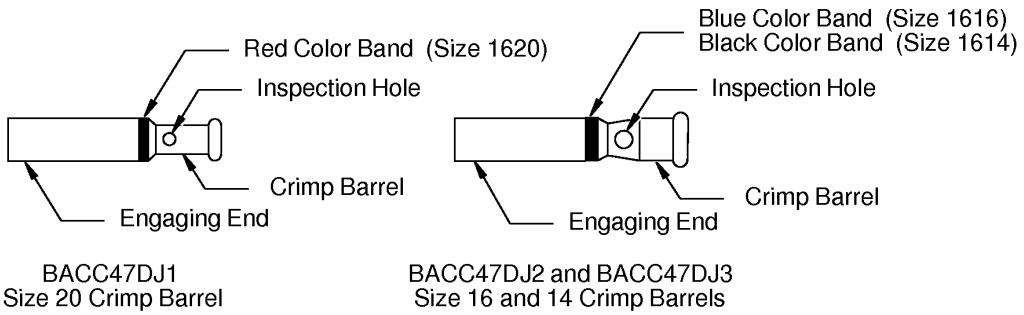
BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS
Figure 1

B. Contact Part Numbers



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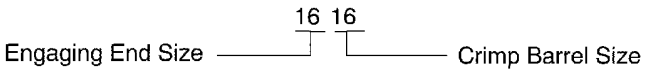
BACC47DJ CONTACTS
Figure 2

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS



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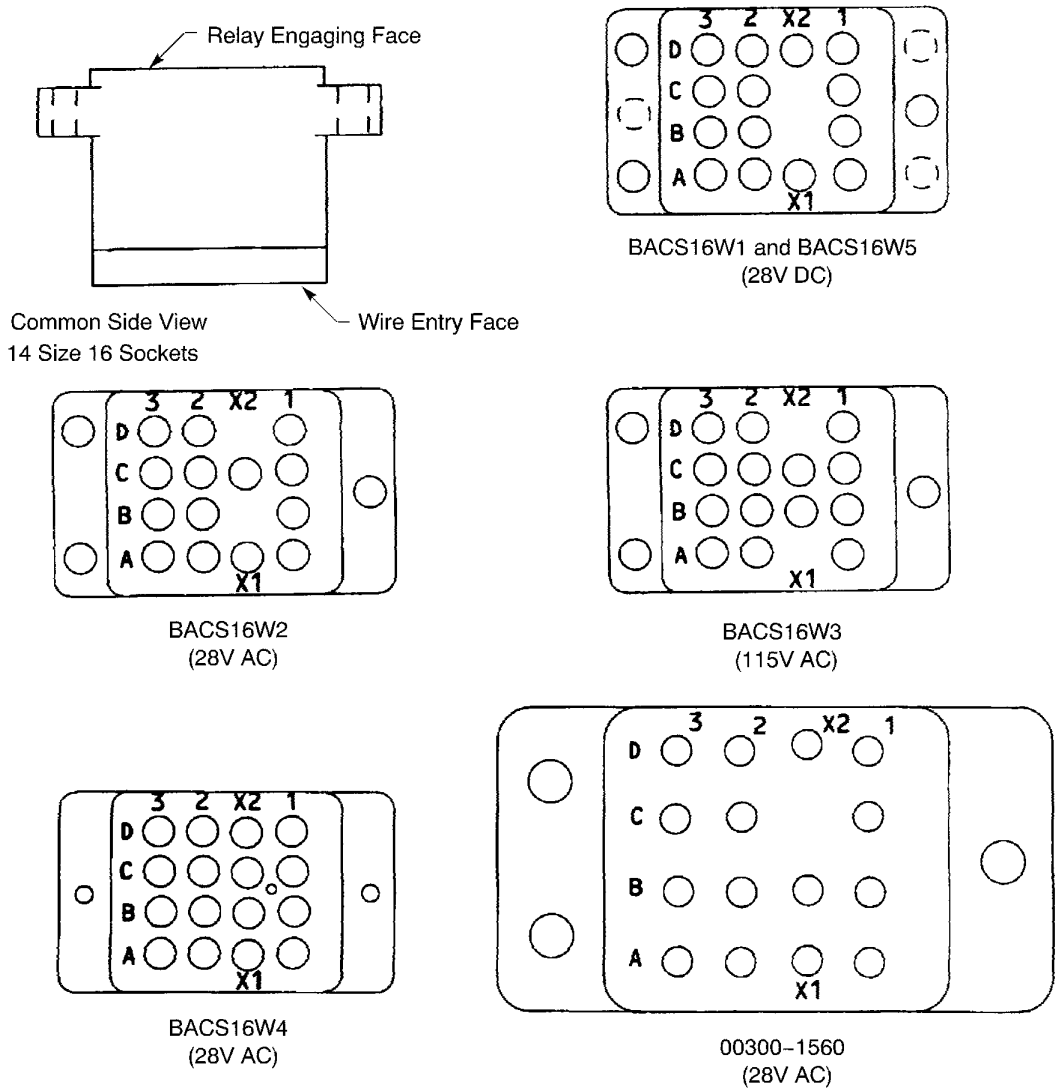
EXAMPLE OF CONTACT SIZE
Figure 3

Table 2
CONTACT PART NUMBERS

Contact Size	Color Code	Boeing Standard	Part Number	Supplier
1620	Red	BACC47DJ1	101-016-1DJ5	Burndy
			318-1620-802	PCD
			019-0249-000	Viking
1616	Blue	BACC47DJ2	101-015-1DJ5	Burndy
			318-1616-802	PCD
			019-0248-000	Viking
1614	Black	BACC47DJ3	101-034-1DJ5	Burndy
			019-0273-000	Viking

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

C. Contact Configurations



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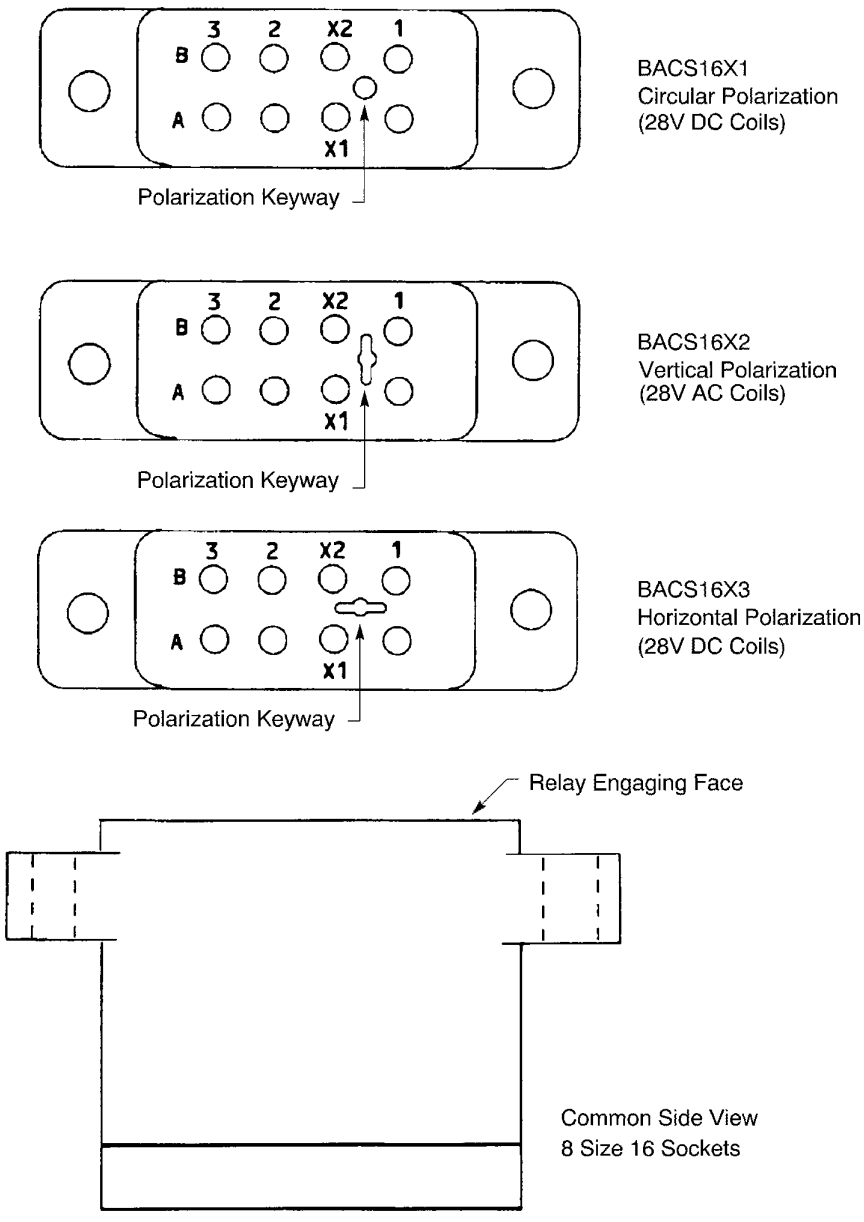
VIKING 00300-1560 AND BACS16W CONTACT CONFIGURATION
Figure 4

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS



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BACS16X CONTACT CONFIGURATION
Figure 5

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

2. RELAY SOCKET DISASSEMBLY

A. Contact Removal

Table 3
CONTACT REMOVAL TOOLS

Contact Engaging End Size	Removal Tool
16	294-97
	AT 2016
	DRK16
	M81969/19-01
	M81969/19-08
	MS24256R16
	RRBX-16S
	RX16-8
	ZZL-R-9511-16

(1) Make a selection of a removal tool from Table 3.

(2) At the front of the relay socket, axially align the contact removal tool and the contact cavity.

(3) Put the tip of the removal tool on the engaging end of the contact.

(4) Carefully push the removal tool into the contact cavity until it stops.

(5) Push the removal tool, and at the same time, push the internal plunger of the removal tool. Make sure that the contact moves out of the rear of the relay socket.

CAUTION: DO NOT USE MORE FORCE THAN THE FORCE THAT IS NECESSARY TO PUSH THE REMOVAL TOOL INTO THE CONTACT CAVITY. DAMAGE TO THE CONTACT RETENTION CLIPS CAN OCCUR.

(6) Carefully pull the removal tool out of the contact cavity.

(7) Pull the wire and contact out of the rear of the relay socket.

3. RELAY SOCKET ASSEMBLY

A. Contact Assembly

Table 4
INSULATION REMOVAL LENGTH

Wire Size (AWG)	Contact Size	Removal Length (L) (inch)		Special Instructions
		Target	Tolerance	
26	1620	0.44	±0.03	Fold back the conductor
24	1620	0.19	±0.03	-

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

Table 4 INSULATION REMOVAL LENGTH (Continued)

Wire Size (AWG)	Contact Size	Removal Length (L) (inch)		Special Instructions
		Target	Tolerance	
22	1620	0.19	±0.03	-
20	1620	0.19	±0.03	-
	1616	0.19	±0.03	-
18	1616	0.19	±0.03	-
16	1616	0.19	±0.03	-
14	1614	0.19	±0.03	-

Table 5
CONTACT CRIMP TOOLS FOR A CONTACT THAT HAS ONE WIRE IN THE CRIMP BARREL

Wire Size (AWG)	Contact		Crimp Tool		
	Part Number	Size	Basic Unit		Locator
			Part Number	Setting	
26	BACC47DJ1	1620	M22520/1-01	5	TP502
			M22520/2-01	7	640003
				7	K866
			MS3191-1	-	038-0003-000
				-	612314
				-	ST2220-1-49
			ST2220-1-Y	-	038-0003-000
				-	612314
				-	ST2220-1-49
			WA22	7	640003
			WA22LC	7	640003
24	BACC47DJ1	1620	M22520/1-01	5	TP502
			M22520/2-01	8	K866
				7	K892
			MS3191-1	-	038-0003-000
				-	612314
				-	ST2220-1-49
			ST2220-1-Y	-	038-0003-000
				-	612314
				-	ST2220-1-49
			WA22	7	K892
			WA22LC	7	K892

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

Table 5 CONTACT CRIMP TOOLS FOR A CONTACT THAT HAS ONE WIRE IN THE CRIMP BARREL (Continued)

Wire Size (AWG)	Contact		Crimp Tool		
	Part Number	Size	Basic Unit		Locator
			Part Number	Setting	
22	BACC47DJ1	1620	M22520/1-01	5	TP502
			M22520/2-01	8	K866
				7	K892
			MS3191-1	-	038-0003-000
				-	612314
				-	ST2220-1-49
			ST2220-1-Y	-	038-0003-000
				-	612314
				-	ST2220-1-49
			WA22	7	K892
			WA22LC	7	K892
20	BACC47DJ1	1620	M22520/1-01	5	TP502
			M22520/2-01	8	K866
				7	K892
			MS3191-1	-	038-0003-000
				-	612314
				-	ST2220-1-49
			ST2220-1-Y	-	038-0003-000
				-	612314
				-	ST2220-1-49
			WA22	7	K892
			WA22LC	7	K892
20	BACC47DJ2	1616	M22520/1-01	5	TP502
			M22520/2-01	7	K866
				7	K892
			ST2220-1-Y	-	038-0003-000
				-	612314
				-	ST2220-1-49
				-	ST2220-1-65
			WA22	7	K892
			WA22LC	7	K892

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

Table 5 CONTACT CRIMP TOOLS FOR A CONTACT THAT HAS ONE WIRE IN THE CRIMP BARREL (Continued)

Wire Size (AWG)	Contact		Crimp Tool		
	Part Number	Size	Basic Unit		Locator
			Part Number	Setting	
20	BACC47DJ3	1614	ST2220-1-Y	-	ST2220-1-65
			MS3191-1	-	ST2220-1-65
			M22520/2-01	6	K866
				6	K892
18	BACC47DJ2	1616	M22520/1-01	5	TP502
			M22520/2-01	7	K866
				7	K892
			MS3191-1	-	ST2220-1-65
			ST2220-1-Y	-	038-0003-000
				-	612314
				-	ST2220-1-49
				-	ST2220-1-65
			WA22	7	K892
			WA22LC	7	K892
18	BACC47DJ3	1614	M22520/2-01	7	K892
			ST2220-1-Y	-	ST2220-1-65
16	BACC47DJ2	1616	M22520/1-01	5	TP502
			M22520/2-01	8	K866
				7	K892
			MS3191-1	-	ST2220-1-65
			ST2220-1-Y	-	038-0003-000
				-	612314
				-	ST2220-1-49
				-	ST2220-1-65
			WA22	7	K892
			WA22LC	7	K892
16	BACC47DJ3	1614	M22520/2-01	7	K892
14	BACC47DJ3	1614	M22520/2-01	7	K892

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

Table 6
CONTACT CRIMP TOOLS FOR A CONTACT THAT HAS MORE THAN ONE WIRE IN THE CRIMP BARREL

Total Number of Wires	First Wire Size		Second Wire Size		Contact		Crimp Tool		
	Count	Size (AWG)	Count	Size (AWG)	Size	Part Number	Basic Unit		Locator
							Part Number	Setting	
2	2	24	-	-	1620	BACC47DJ1	M22520/2-01	7	640003
							WA22	7	640003
							WA22LC	7	640003
3	3	24	-	-	1616	BACC47DJ2	MS3191-1	-	ST2220-1-65
							M22520/1-01	5	TP502
							M22520/2-01	7	K892
							ST2220-1-Y	-	038-0003-000
								-	612314
								-	ST2220-1-49
								-	ST2220-1-65
							WA22	7	K892
							WA22LC	7	K892
3	3	22	-	-	1616	BACC47DJ2	MS3191-1	-	ST2220-1-65
							M22520/1-01	5	TP502
							M22520/2-01	7	K892
							ST2220-1-Y	-	038-0003-000
								-	612314
								-	ST2220-1-49
								-	ST2220-1-65
							WA22	7	K892
							WA22LC	7	K892
2	2	22	-	-	1616	BACC47DJ2	MS3191-1	-	ST2220-1-65
							M22520/1-01	5	TP502
							M22520/2-01	7	K892
							ST2220-1-Y	-	038-0003-000
								-	612314
								-	ST2220-1-49
								-	ST2220-1-65
							WA22	7	K892
							WA22LC	7	K892

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

Table 6 CONTACT CRIMP TOOLS FOR A CONTACT THAT HAS MORE THAN ONE WIRE IN THE CRIMP BARREL (Continued)

Total Number of Wires	First Wire Size		Second Wire Size		Contact		Crimp Tool		
	Count	Size (AWG)	Count	Size (AWG)	Size	Part Number	Basic Unit		Locator
							Part Number	Setting	
2	1	24	1	22	1616	BACC47DJ2	MS3191-1	-	ST2220-1-65
							M22520/1-01	5	TP502
							M22520/2-01	7	K892
							ST2220-1-Y	-	038-0003-000
								-	612314
								-	ST2220-1-49
								-	ST2220-1-65
							WA22	7	K892
							WA22LC	7	K892
2	1	24	1	20	1616	BACC47DJ2	MS3191-1	-	ST2220-1-65
							M22520/1-01	5	TP502
							M22520/2-01	7	K892
							ST2220-1-Y	-	038-0003-000
								-	612314
								-	ST2220-1-49
								-	ST2220-1-65
							WA22	7	K892
							WA22LC	7	K892
2	1	24	1	18	1616	BACC47DJ2	MS3191-1	-	ST2220-1-65
							M22520/1-01	5	TP502
							M22520/2-01	7	K892
							ST2220-1-Y	-	038-0003-000
								-	612314
								-	ST2220-1-49
								-	ST2220-1-65
							WA22	7	K892
							WA22LC	7	K892

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

Table 6 CONTACT CRIMP TOOLS FOR A CONTACT THAT HAS MORE THAN ONE WIRE IN THE CRIMP BARREL (Continued)

Total Number of Wires	First Wire Size		Second Wire Size		Contact		Crimp Tool		
	Count	Size (AWG)	Count	Size (AWG)	Size	Part Number	Basic Unit		Locator
							Part Number	Setting	
2	1	22	1	20	1616	BACC47DJ2	MS3191-1	-	ST2220-1-65
							M22520/1-01	5	TP502
							M22520/2-01	7	K892
							ST2220-1-Y	-	038-0003-000
								-	612314
								-	ST2220-1-49
								-	ST2220-1-65
							WA22	7	K892
							WA22LC	7	K892
2	1	22	1	18	1616	BACC47DJ2	MS3191-1	-	ST2220-1-65
							M22520/1-01	5	TP502
							M22520/2-01	7	K892
							ST2220-1-Y	-	038-0003-000
								-	612314
								-	ST2220-1-49
								-	ST2220-1-65
							WA22	7	K892
							WA22LC	7	K892
2	2	20	-	-	1616	BACC47DJ2	M22520/2-01	8	K892
							WA22	8	K892
							WA22LC	8	K892
3	3	20	-	-	1614	BACC47DJ3	M22520/2-01	8	640003
							WA22	8	640003
							WA22LC	8	640003
2	2	18	-	-	1614	BACC47DJ3	M22520/2-01	8	640003
							WA22	8	640003
							WA22LC	8	640003
2	1	18	1	20	1614	BACC47DJ3	M22520/2-01	7	640003
							WA22	7	640003
							WA22LC	7	640003

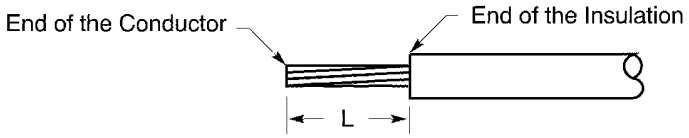
(1) Make a selection of a crimp tool from:

- Table 5 for contacts that have one wire
- Table 6 for contacts that have more than one wire.

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

(2) Remove the necessary length of the wire insulation from the end of the wire or wires.
Refer to:

- Figure 6
- Table 4 for the insulation removal length
- Subject 20-00-15 for the insulation removal procedures.



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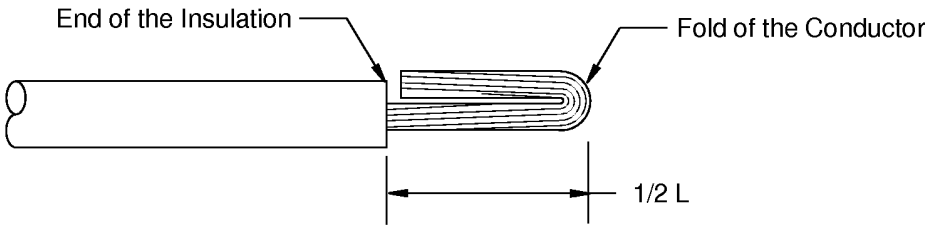
WIRE PREPARATION
Figure 6

(3) If it is specified, fold the conductor back. Refer to Figure 7.



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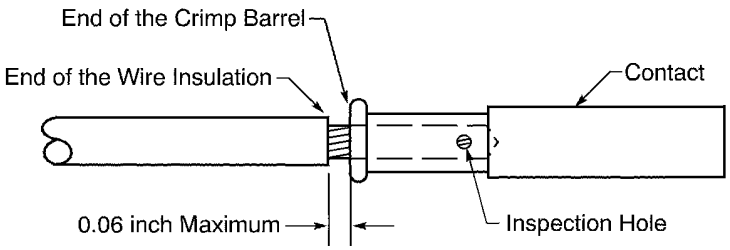
CONDUCTOR FOLDED BACK
Figure 7

(4) Put the contact in the locator of the crimp tool.

(5) Put the end of the wire into the crimp barrel of the contact. Refer to Figure 8.
Make sure that:

- The conductor can be seen in the inspection hole of the contact
- All of the strands of the conductor are in the crimp barrel
- The distance between the rear end of the contact and the wire insulation is 0.06 inch maximum.



POSITION OF THE WIRE IN THE CRIMP BARREL OF THE BACC47DJ CONTACT
Figure 8

(6) Crimp the contact.

Make sure that:

- Make sure the conductor can be seen in the inspection hole of the contact.
- The distance between the rear end of the contact and the wire insulation is 0.06 inch maximum
- The contact does not have a bend larger than 3.5 degrees from the longitudinal axis of the contact.

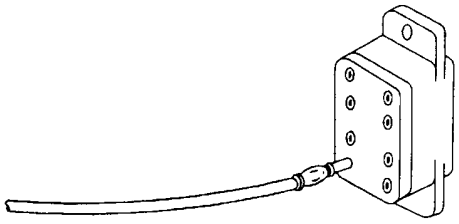
B. Contact Insertion

Table 7
CONTACT INSERTION TOOLS

Contact Size	Insertion Tool
1620	294-88
	M81969/17-09
	ZZL-R-9510-20
1616	294-88
	M81969/17-09
	ZZL-R-9510-20
1614	294-88
	M81969/17-09
	ZZL-R-9510-20

(1) Make a selection of an insertion tool from Table 7.

(2) At the rear of the relay socket, put each wired contact in the contact cavities with the hand. Refer to Figure 9.



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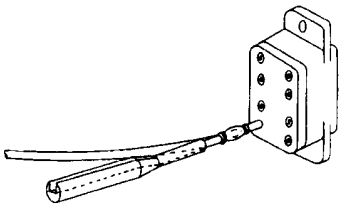
POSITION OF THE CONTACT IN THE CONTACT CAVITY
Figure 9

(3) Put the end of the insertion tool tip against end of contact. Refer to Figure 10.



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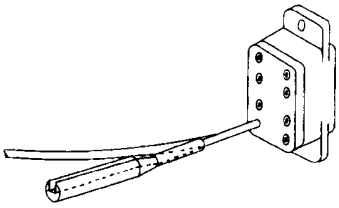
POSITION OF THE INSERTION TOOL ON THE CONTACT
Figure 10

(4) Carefully push the tool and the contact into the contact cavity until it stops. Refer to Figure 11. Make sure that the insertion tool stays aligned with the contact cavity.



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FULLY INSERTED CONTACT
Figure 11

(5) Carefully remove the insertion tool.

(6) Lightly pull on the wire to make sure that the contact is locked in the contact cavity.

CAUTION: DO NOT MAKE A DENT IN THE INSULATION OF WIRE WITH THE FINGERNAILS.

(7) Do Step 3.B.(3) through Step 3.B.(6) again for each contact in the relay socket.

C. Spare Contact or Seal Plug Installation

(1) Install spare contacts or seal plugs in all unused contact cavities. Refer to Subject 20-60-08.

4. APPROVED TOOL SUPPLIERS

A. Contact Crimp Tools

Table 8
CONTACT CRIMP TOOL SUPPLIERS

Crimp Tool	Supplier
038-0003-000	Viking
640003	Astro
612314	Buchanan
K866	Daniels
K892	Daniels
M22520/1-01	QPL
M22520/2-01	QPL
MS3191-1	QPL
ST2220-1-49	Boeing
ST2220-1-65	Boeing
ST2220-1-Y	Boeing
TP502	Daniels
WA22	Daniels
WA22LC	Daniels

B. Contact Insertion Tool Suppliers

Table 9
CONTACT INSERTION TOOL SUPPLIERS

Insertion Tool	Supplier
294-88	Amphenol
M81969/17-09	QPL
ZZL-R-9510-20	Pyle-National

ASSEMBLY OF BACS16W AND BACS16X FRONT RELEASE RELAY SOCKETS

C. Contact Removal Tool Suppliers

Table 10
CONTACT REMOVAL TOOL SUPPLIERS

Removal Tool	Supplier
294-97	Amphenol
AT 2016	Astro
DRK16	Daniels
M81969/19-01	QPL
M81969/19-08	QPL
MS24256R16	QPL
RRBX-16S	Russtech
RX16-8	Burndy
ZZL-R-9511-16	Pyle-National

ASSEMBLY OF METHODE FRONT RELEASE RELAY SOCKETS

TABLE OF CONTENTS

ASSEMBLY OF METHODE FRONT RELEASE RELAY SOCKETS

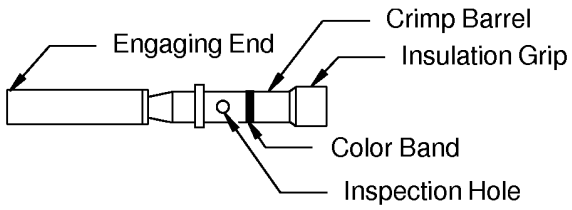
1. PART NUMBERS AND DESCRIPTION

A. Relay Socket Part Numbers

Table 1
RELAY SOCKET PART NUMBERS

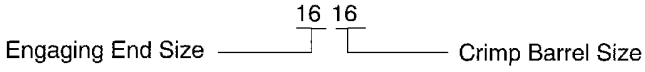
Part Number	Supplier
133-158-02	Methode
133-158-03	Methode
133-179-03	Methode

B. Contact Part Numbers



2449036 S00061548717_V1

FRONT RELEASE CONTACTS
Figure 1



2446183 S00061544383_V1

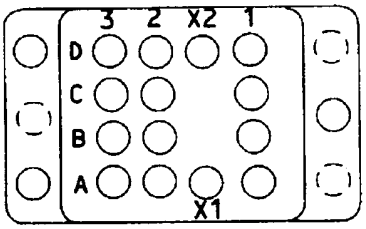
EXAMPLE OF A CONTACT SIZE
Figure 2

ASSEMBLY OF METHODE FRONT RELEASE RELAY SOCKETS

Table 2
CONTACT PART NUMBERS

Contact Size	Part Number	Supplier
1616	BACC47CP2T	Boeing
	MS3193-16A	QPL

C. Contact Configuration



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METHODE RELAY SOCKET CONTACT CONFIGURATION
Figure 3

2. RELAY SOCKET DISASSEMBLY

A. Contact Removal

Table 3
CONTACT REMOVAL TOOLS

Contact Engaging End Size	Removal Tool	Supplier
16	MS24256-R16	QPL

(1) Make a selection of a contact removal tool from Table 3.

(2) At the front of the relay socket, axially align the contact removal tool and the contact cavity.

(3) Put the tip of the removal tool on the engaging end of the contact.

(4) Carefully push the removal tool into the contact cavity until it stops.

(5) Push the removal tool, and at the same time, push the internal plunger of the removal tool. Make sure that the contact moves out of the rear of the relay socket.

CAUTION: DO NOT USE MORE FORCE THAN THE FORCE THAT IS NECESSARY TO PUSH THE REMOVAL TOOL INTO THE CONTACT CAVITY. DAMAGE TO THE CONTACT RETENTION CLIPS CAN OCCUR.

(6) Carefully pull the removal tool out of the contact cavity.

(7) Pull the wire and contact out of the rear of the relay socket.

ASSEMBLY OF METHODE FRONT RELEASE RELAY SOCKETS

3. RELAY SOCKET ASSEMBLY

A. Contact Assembly

Table 4
INSULATION REMOVAL LENGTH

Wire Size (AWG)	Wire Count	Removal Length (inch)		Special Instructions
		Target	Tolerance	
24	1	0.50	0.03	Fold the conductor back
	2	0.25	0.03	-
22	1	0.50	0.03	Fold the conductor back
	2	0.25	0.03	-
20	1	0.25	0.03	-
18	1	0.25	0.03	-
16	1	0.25	0.03	-

Table 5
CONTACT CRIMP TOOLS

Wire Size (AWG)	Contact Size	Crimp Tool					
		Basic Unit			Locator		
		Part Number	Setting	Supplier	Part Number	Color	Supplier
24	1616	M22520/1-01	4	QPL	M22520/1-02	Blue	QPL
22	1616	M22520/1-01	5	QPL	M22520/1-02	Blue	QPL
20	1616	M22520/1-01	4	QPL	M22520/1-02	Blue	QPL
18	1616	M22520/1-01	5	QPL	M22520/1-02	Blue	QPL
16	1616	M22520/1-01	6	QPL	M22520/1-02	Blue	QPL

(1) Remove the wire insulation.
Refer to Table 4 and Subject 20-00-15.

(2) Make a selection of the crimp tool from Table 5.

(3) Put the wire or wires in the crimp barrel.

(4) Crimp the contact.

ASSEMBLY OF METHODE FRONT RELEASE RELAY SOCKETS

B. Contact Insertion

Table 6
CONTACT INSERTION TOOLS

Contact Size	Insertion Tool	Supplier
1616	MS24256-A16	QPL

(1) Make a selection of an insertion tool from Table 6.

(2) Put the end of the insertion tool tip against the contact shoulder.

(3) At the rear of the relay socket, align the insertion tool and the contact with the contact cavity.

(4) Carefully guide the contact into the contact cavity until the contact is completely inserted.

ASSEMBLY OF VIKING 000300-118() REAR RELEASE RELAY SOCKETS

TABLE OF CONTENTS

ASSEMBLY OF VIKING 000300-118() REAR RELEASE RELAY SOCKETS

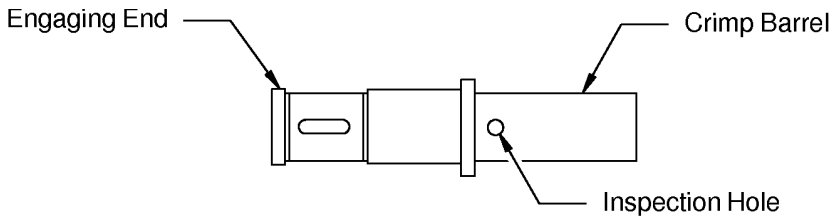
1. PART NUMBERS AND DESCRIPTION

A. Relay Socket Part Numbers

Table 1
RELAY SOCKET PART NUMBERS

Part Number	Supplier
000300-1180	Viking
000300-1181	Viking
000300-1182	Viking

B. Contact Part Numbers



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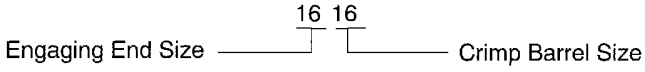
VIKING 019-0215-000 REAR RELEASE SOCKET CONTACT
Figure 1



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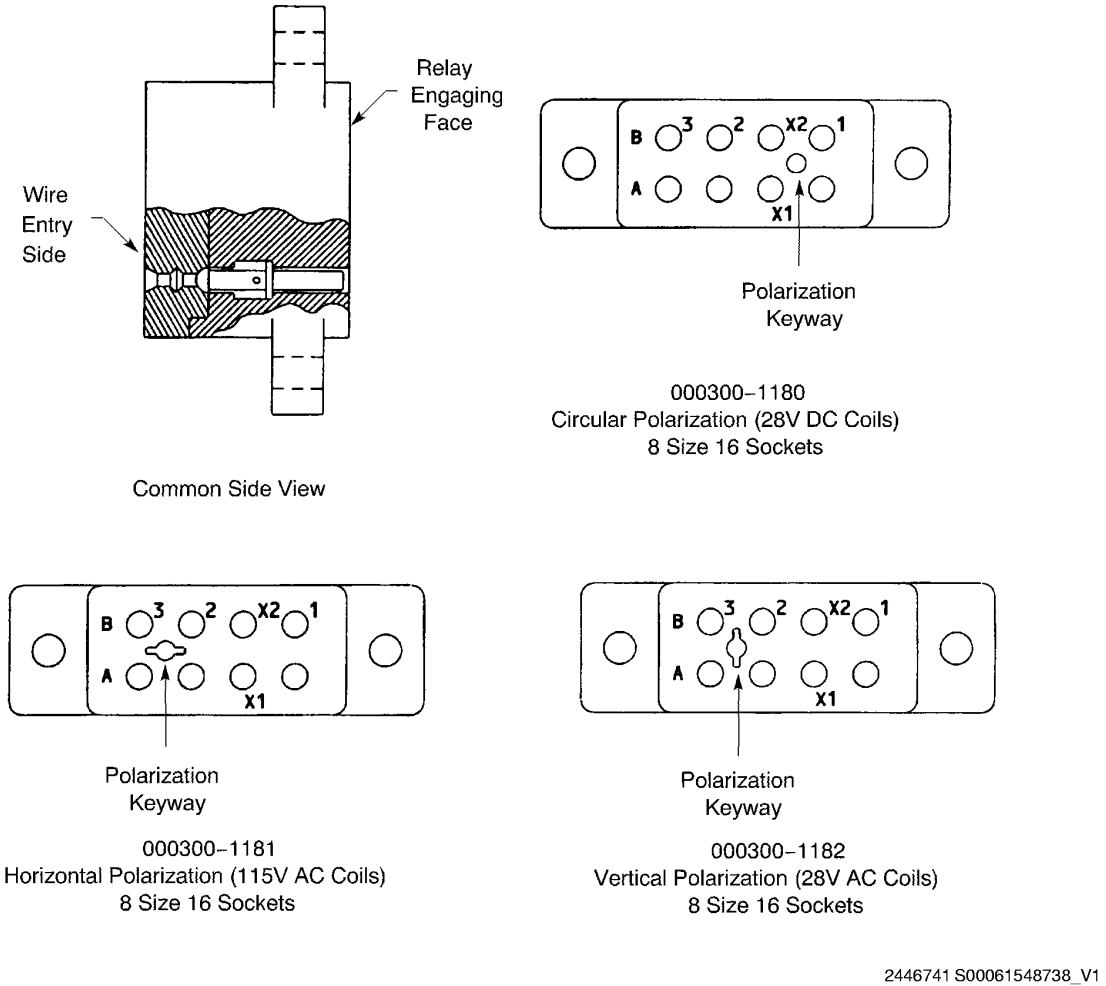
EXAMPLE OF A CONTACT SIZE
Figure 2

ASSEMBLY OF VIKING 000300-118() REAR RELEASE RELAY SOCKETS

Table 2
CONTACT PART NUMBERS

Contact Size	Part Number	Supplier
1616	019-0215-000	Viking

C. Contact Configurations



VIKING 000300-118() RELAY SOCKET CONTACT CONFIGURATIONS
Figure 3

ASSEMBLY OF VIKING 000300-118() REAR RELEASE RELAY SOCKETS

2. RELAY SOCKET DISASSEMBLY

A. Contact Removal

Table 3
CONTACT REMOVAL TOOLS

Contact Size	Removal Tool	Supplier
1616	NAS1664-16	QPL

(1) Make a selection of a contact removal tool from Table 3.

(2) At the rear of the relay socket, put the white end of the tool on the wire.

(3) Axially align the removal tool and the contact cavity.

(4) Push the tool into the contact cavity until it stops.

(5) Hold the tool against the relay socket and, at the same time, hold the wire against the handle of the tool.

(6) Pull the tool and the wire out of the contact cavity at the same time.

3. RELAY SOCKET ASSEMBLY

A. Contact Assembly

Table 4
CONTACT CRIMP TOOLS

Wire Size (AWG)	Wire Count	Contact Crimp Barrel Size	Crimp Tool				
			Basic Unit		Locator		
			Part Number	Supplier	Part Number	Color	Supplier
24	1	16	MS3191A	QPL	MS3191-16	Blue	QPL
	2		MS3191A	QPL	MS3191-16	Blue	QPL
22	1	16	MS3191A	QPL	MS3191-16	Blue	QPL
	2		MS3191A	QPL	MS3191-16	Blue	QPL
20	1	16	MS3191A	QPL	MS3191-16	Blue	QPL
18	1	16	MS3191A	QPL	MS3191-16	Blue	QPL
16	1	16	MS3191A	QPL	MS3191-16	Blue	QPL

(1) Remove 9/32 inch ±1/32 inch of wire insulation.

Refer to Subject 20-00-15.

(2) Make a selection of a contact crimp tool from Table 4.

(3) Put the wire in the crimp barrel.

Make sure that:

- All the conductor strands are in the crimp barrel
- The wire is visible in the inspection hole.

(4) Crimp the contact.

B. Contact Insertion

Table 5
CONTACT INSERTION TOOLS

Insertion Tool	Supplier
NAS1664-16	QPL

(1) Examine the contact to make sure that the contact does not have a bend.

NOTE: As an option for contact installation, wired contacts assembled with AWG 22 or larger wire can be inserted by hand, without an insertion tool.

(2) To insert the contact with an insertion tool:

(a) Make a selection of a contact insertion tool from Table 5.

(b) Put the colored end of the tool on the wire.

(c) Put the tip of the tool against the contact.

(d) At the rear of the relay socket, axially align the tool, the contact, and the contact cavity.

(e) Push the contact into the contact cavity until it stops.

(f) Carefully remove the tool from the contact cavity.

(3) Lightly pull on the wire to make sure that contact is locked in the contact cavity.

CAUTION: DO NOT PULL THE WIRE WITH A STRONG OR A SUDDEN FORCE. THE FORCE CAN CAUSE DAMAGE TO THE CONTACT.

CAUTION: DO NOT MAKE A DENT IN THE WIRE INSULATION WITH THE FINGERNAILS. DAMAGE TO THE WIRE INSULATION CAN CAUSE UNSATISFACTORY PERFORMANCE AND RELIABILITY OF THE WIRE.

C. Spare Contact Installation

(1) Install a spare contact in each unused contact cavity.
Refer to Subject 20-60-08.

ASSEMBLY OF LEACH SO SERIES, PCD RSE SERIES, AND OTHER REAR RELEASE RELAY SOCKETS

TABLE OF CONTENTS

ASSEMBLY OF LEACH SO SERIES, PCD RSE SERIES, AND OTHER REAR RELEASE RELAY SOCKETS

Refer to Subject 20-81-22 for the installation of these relay sockets.

1. PART NUMBERS AND DESCRIPTION

A. Relay Socket Part Numbers

Table 1
RELAY SOCKET PART NUMBERS

Part Number	Supplier	Attachment of the Mounting Studs to the Relay Socket as Supplied	Contacts are Supplied with the Relay Socket	Mounting Hardware is Supplied with the Relay Socket
RSE112305	Amphenol/PCD	fixed	no	no
RSE112310	Amphenol/PCD	fixed	no	no
RSE112315	Amphenol/PCD	fixed	no	no
RSE112320	Amphenol/PCD	fixed	no	no
RSE116135	Amphenol/PCD	fixed	no	no
RSE116332	Amphenol/PCD	loose	yes	no
RSE116521	Amphenol/PCD	fixed	no	no
RSE116755	Amphenol/PCD	loose	yes	yes
RSE120172	Amphenol/PCD	fixed	no	no
RSE120180	Amphenol/PCD	fixed	no	no
RSE120185	Amphenol/PCD	fixed	no	no
RSE120190	Amphenol/PCD	fixed	no	no
SO-1048-8308	Leach	loose	yes	yes
SO-1055-8690	Leach	fixed	yes	yes
SO-1056-8691	Leach	loose	yes	yes
SO-1057-8912	Leach	fixed	yes	yes
SO-1059-8914	Leach	fixed	yes	yes
SO-1061-8916	Leach	fixed	yes	yes
SO-1062-8917	Leach	fixed	yes	yes
SO-1064-001	Leach	fixed	yes	yes
SO-1064-003	Leach	fixed	yes	yes
SO-1064-007	Leach	fixed	no	yes
SO-1066-001	Leach	fixed	yes	yes
SO-1066-003	Leach	fixed	yes	yes
SO-1066-10197	Leach	fixed	no	yes
003017-0001	Viking	fixed	no	no

ASSEMBLY OF LEACH SO SERIES, PCD RSE SERIES, AND OTHER REAR RELEASE RELAY SOCKETS

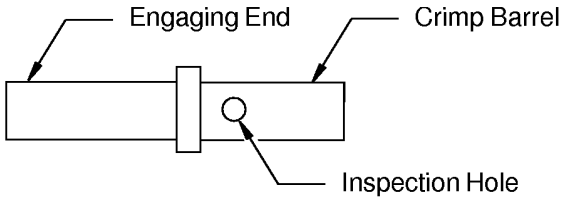
Table 2
ALTERNATIVE RELAY SOCKET PART NUMBERS

Specified Relay Socket		Alternative Relay Socket	
Part Number	**Supplier**	**Part Number**	**Supplier**
RSE112305	Amphenol/PCD	SO-1057-8912	Leach
		003014-0001	Viking
RSE112310	Amphenol/PCD	SO-1059-8914	Leach
RSE112315	Amphenol/PCD	SO-1061-8916	Leach
RSE112320	Amphenol/PCD	SO-1062-8917	Leach
		003015-0001	Viking
RSE116135	Amphenol/PCD	SO-1048-8308	Leach
		003019-0001	Viking
RSE116332	Amphenol/PCD	SO-1056-8691	Leach
RSE116521	Amphenol/PCD	SO-1055-8690	Leach
		003005-0001	Viking
RSE120172	Amphenol/PCD	SO-1064-003	Leach
		003016-0001	Viking
RSE120180	Amphenol/PCD	SO-1064-007	Leach
		003017-0001	Viking
RSE120185	Amphenol/PCD	SO-1066-003	Leach
RSE120190	Amphenol/PCD	SO-1066-10197	Leach
SO-1048-8308	Leach	RSE116135	Amphenol/PCD
		003019-001	Viking
SO-1055-8690	Leach	RSE116521	Amphenol/PCD
		003005-0001	Viking
SO-1056-8691	Leach	RSE116332	Amphenol/PCD
SO-1057-8912	Leach	RSE112305	Amphenol/PCD
		003014-0001	Viking
SO-1059-8914	Leach	RSE112310	Amphenol/PCD
SO-1061-8916	Leach	RSE112315	Amphenol/PCD
SO-1062-8917	Leach	003015-0001	Viking
		RSE112320	Amphenol/PCD
SO-1064-001	Leach	SO-1064-007	Leach
		003017-0001	Viking
		RSE120180	Amphenol/PCD
SO-1064-003	Leach	003016-0001	Viking
		RSE120172	Amphenol/PCD

Table 2 ALTERNATIVE RELAY SOCKET PART NUMBERS (Continued)

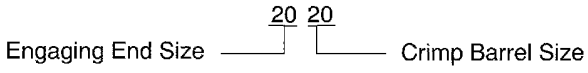
Specified Relay Socket		Alternative Relay Socket	
Part Number	**Supplier**	**Part Number**	**Supplier**
SO-1064-007	Leach	003017-0001	Viking
		RSE120180	Amphenol/PCD
		SO-1064-001	Leach
SO-1066-001	Leach	SO-1066-10197	Leach
SO-1066-003	Leach	RSE120185	Amphenol/PCD
		003021-0001	Viking
SO-1066-10197	Leach	003022-0001	Viking
		RSE120190	Amphenol/PCD
		SO-1066-001	Leach

B. Contact Part Numbers



2449037 S00061546961_V1

REAR RELEASE SOCKET CONTACTS
Figure 1



2446651 S00061545900_V1

EXAMPLE OF A CONTACT SIZE
Figure 2

ASSEMBLY OF LEACH SO SERIES, PCD RSE SERIES, AND OTHER REAR RELEASE RELAY SOCKETS

Table 3
CONTACT PART NUMBERS

Relay Socket Part Number	Contact		
	Contact Size	Part Number	Supplier
RSE112305	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
	1212	001-9007-001	Leach
		316-1212-634	Tri-Star
RSE112310	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
	1212	001-9007-001	Leach
		316-1212-634	Tri-Star
RSE112315	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
	1212	001-9007-001	Leach
		316-1212-634	Tri-Star
RSE112320	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
	1212	001-9007-001	Leach
		316-1212-634	Tri-Star
RSE116135	1616	001-5490-000	Leach
	1212	M39029/5-116	QPL
RSE116332	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
RSE116521	2222L	001-7431-000	Leach
		316-2222-634	Tri-Star
		M39029/92-531	QPL
	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
RSE116755	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL

Table 3 CONTACT PART NUMBERS (Continued)

Relay Socket Part Number	Contact		
	Contact Size	Part Number	Supplier
RSE120172	2222	002-6746-000	Leach
		M39029-22-191	QPL
	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL
RSE120180	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL
RSE120185	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL
RSE120190	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL
SO-1048-8308	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
SO-1055-8690	2222L	001-7431-000	Leach
		316-2222-634	Tri-Star
		M39029/92-531	QPL
	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
SO-1056-8691	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL

Table 3 CONTACT PART NUMBERS (Continued)

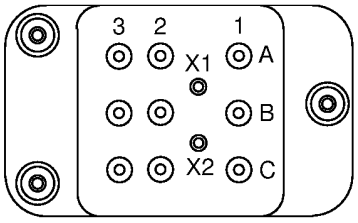
Relay Socket Part Number	Contact		
	Contact Size	Part Number	Supplier
SO-1057-8912	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
	1212	001-9007-001	Leach
		316-1212-634	Tri-Star
SO-1059-8914	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
	1212	001-9007-001	Leach
		316-1212-634	Tri-Star
SO-1061-8916	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
	1212	001-9007-001	Leach
		316-1212-634	Tri-Star
SO-1062-8917	1616	001-9007-000	Leach
		316-1616-634	Tri-Star
		M39029/92-533	QPL
	1212	001-9007-001	Leach
		316-1212-634	Tri-Star
SO-1064-001	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL
SO-1064-003	2222	002-6746-000	Leach
		M39029-22-191	QPL
	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL
SO-1064-007	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL

Table 3 CONTACT PART NUMBERS (Continued)

Relay Socket Part Number	Contact		
	Contact Size	Part Number	Supplier
SO-1066-001	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL
SO-1066-003	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL
SO-1066-10197	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL
003017-0001	2020	002-3261-000	Leach
		280-30001-31	Boeing
		316-2020-192	Tri-Star
		M39029/22-192	QPL

C. Contact Configurations

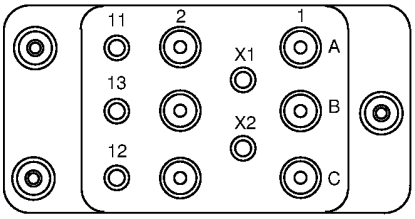
The contact configurations of the relay sockets are shown in Figure 3 thru Figure 14.



SO-1057-9812, RSE112305, and 003014-0001

2450290 S00061548740_V1

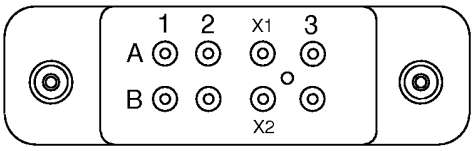
LEACH SO-1057-9812, PCD RSE112305, AND VIKING 003014-0001 CONTACT CONFIGURATION
Figure 3



SO-1059-8914 and RSE112310

2449454 S00061548741_V1

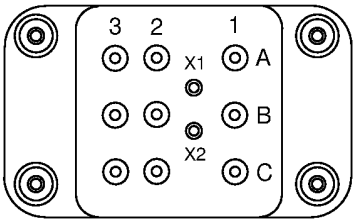
LEACH SO-1059-8914 AND PCD RSE112310 CONTACT CONFIGURATION
Figure 4



SO-1064-001, SO-1064-007, RSE120180, and 003017-000

2450291 S00061548742_V1

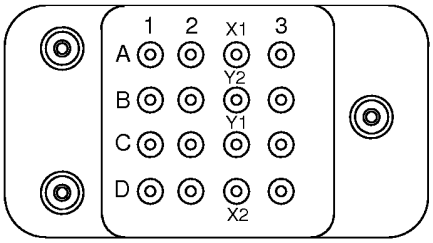
LEACH SO-1064-001, SO-1064-007, PCD RSE120180, AND VIKING 003017-000 CONTACT CONFIGURATION
Figure 5



SO-1062-8917, RSE112320, and 003015-0001

2450292 S00061548743_V1

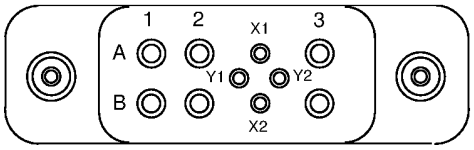
LEACH SO-1062-8917, PCD RSE112320, AND VIKING 003015-0001 CONTACT CONFIGURATION
Figure 6



SO-1066-003, RSE120185, and 003021-0001

2450293 S00061548744_V1

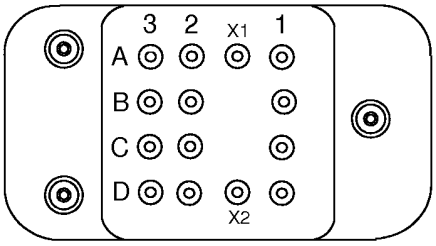
LEACH SO-1066-003, PCD RSE120185, AND VIKING 003021-0001 CONTACT CONFIGURATION
Figure 7



SO-1064-003, RSE120172, and 003016-0001

2450294 S00061548745_V1

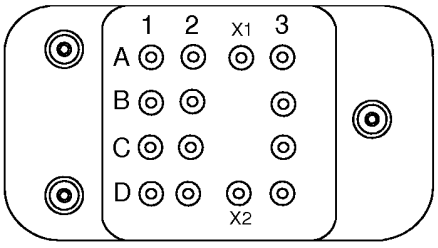
LEACH SO-1064-003, PCD RSE120172, AND VIKING 003016-0001 CONTACT CONFIGURATION
Figure 8



SO-1048-8308, RSE116135, and 003019-0001

2450295 S00061548746_V1

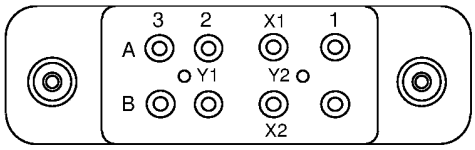
LEACH SO-1048-8308, PCD RSE116135, AND VIKING 003019-0001 CONTACT CONFIGURATION
Figure 9



SO-1066-001, SO-1066-10197, RSE120190, and 003022-0001

2450296 S00061548747_V1

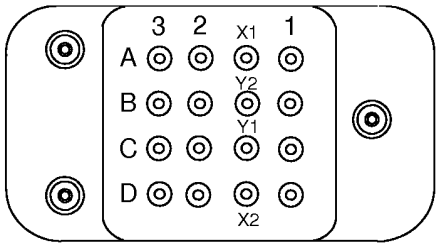
LEACH SO-1066-001,SO-1066-10197, PCD RSE120190, AND VIKING 003022-0001 CONTACT CONFIGURATION
Figure 10



SO-1055-8690, RSE116521, and 003005-0001

2450297 S00061548748_V1

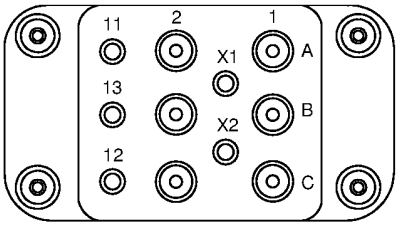
LEACH SO-1055-8690, PCD RSE116521, AND VIKING 003005-0001 CONTACT CONFIGURATION
Figure 11



SO-1056-8691 and RSE116332

2453134 S00061548749_V1

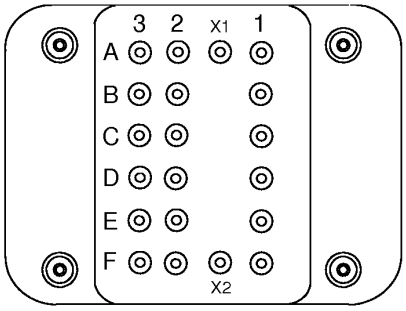
LEACH SO-1056-8691, AND PCD RSE116332 CONTACT CONFIGURATION
Figure 12



SO-1061-8916 and RSE112315

2449456 S00061548750_V1

LEACH SO-1061-8916, AND PCD RSE112315 CONTACT CONFIGURATION
Figure 13



RSE116755

2449457 S00061548751_V1

PCD RSE116755 CONTACT CONFIGURATION
Figure 14

D. Eyelet Part Numbers

NOTE: Eyelets are used when these wires are crimped in size 1212 contacts:

- AWG 24
- AWG 22
- AWG 20
- AWG 18.

And when these wires are crimped in size 1616 contacts:

- AWG 24
- AWG 22.

Table 4
EYELET PART NUMBERS

Contact Size	Eyelet	
	Part Number	Supplier
1616	CE46FC	Circon
	Y6015-C	International Eyelets Inc.
	S-6049CUAU	Global Supply
1212	CE66FC	Circon
	Y9015-C	International Eyelets Inc.
	S-5934CUAU	Global Supply

2. RELAY SOCKET DISASSEMBLY

A. Contact Removal

Table 5
CONTACT REMOVAL TOOLS

Contact Size	Removal Tool		
	Part Number	Color	Supplier
2222L	M81969/14-10	Orange	QPL
	M81969/16-01	White	QPL
	NAS1664-20	White	QPL
2222	M81969/14-01	White	QPL
	MS27534-22D	White	QPL
2020	M81969/14-10	Orange	QPL
	M81969/16-01	White	QPL
	NAS1664-20	White	QPL
	CIET20-1	White	ITT Cannon
1620	M81969/14-03	White	QPL
1616	ATR 2112	-	Astro
	M81969/14-03	White	QPL
	NAC1664-16	White	QPL
	CIET16-3	White	ITT Cannon
1212	ATR 2160	-	Astro
	M81969/14-04	White	QPL
	NAS1664-12	White	QPL

(1) Make a selection of a contact removal tool from Table 5.

(2) At the rear of the relay socket, put the end of the tool on the wire.

Make sure that you use the end of the tool that has the correct color for contact removal. Refer to Table 5.

(3) Axially align the removal tool and the contact cavity.

(4) Push the tool into the contact cavity until it stops.

(5) Hold the tool against the relay socket and, at the same time, hold the wire against the handle of the tool.

(6) Pull the tool and the wire out of the contact cavity at the same time.

3. RELAY SOCKET ASSEMBLY

A. Contact Assembly

Table 6
INSULATION REMOVAL AND WIRE PREPARATION

Contact Size	Wire Size (AWG)	Length (inch)		Wire Fold Back	Eyelet Part Number
		Target	Tolerance		
2222L	22	0.14	±0.03	-	-
2222	20	0.18	±0.03	-	-
	22	0.18	±0.03	-	-
	24	0.18	±0.03	-	-
2020	20	0.18	±0.03	-	-
	22	0.18	±0.03	-	-
	24	0.18	±0.03	-	-
	26	0.39	±0.03	Fold	-
1616	16	0.25	±0.03	-	-
	18	0.25	±0.03	-	-
	20	0.25	±0.03	-	-
	22	0.25	±0.03	-	CE46F
	24	0.25	±0.03	-	CE46F
1212	12	0.25	±0.03	-	-
	14	0.25	±0.03	-	-
	16	0.25	±0.03	-	-
	18	0.25	±0.03	-	CE66F
	20	0.25	±0.03	-	CE66F
	22	0.53	±0.03	Fold	CE66F
	24	0.53	±0.03	Fold	CE66F

ASSEMBLY OF LEACH SO SERIES, PCD RSE SERIES, AND OTHER REAR RELEASE RELAY SOCKETS

Table 7
CONTACT CRIMP TOOLS

Wire Size (AWG)	Contact Size	Crimp Tool				
		Basic Unit			Locator	
		Part Number	Setting	Supplier	Part Number	Supplier
26	2020	M22520/7-01	4	QPL	M22520/7-12	QPL
		ST2220-1-Y	-	Boeing	ST2220-1-48	Boeing
24	2222	M22520/7-01	4	QPL	M22520/7-11	QPL
	2020	M22520/7-01	3	QPL	M22520/7-12	QPL
		ST2220-1-Y	-	Boeing	ST2220-1-48	Boeing
	1616	M22520/1-01	4	QPL	M22520/1-02	QPL
		WA27F1	4	Daniels	M22520/1-02	QPL
	1212	M22520/1-01	7	QPL	M22520/1-02	QPL
		WA27F1	7	Daniels	M22520/1-01	QPL
22	2222	M22520/7-01	5	QPL	M22520/7-11	QPL
	2222L	M22520/02-01	4	QPL	M22520/2-14	QPL
		MS3191-A	-	QPL	MS3191-22D	QPL
		ST2220-1-Y	-	Boeing	ST2220-1-60	Boeing
	2020	M22520/7-01	4	QPL	M22520/7-12	QPL
		ST2220-1-Y	-	QPL	ST2220-1-48	Boeing
	1616	M22520/1-01	6	QPL	M22520/1-02	QPL
		MS3191-1	-	QPL	MS3191-16A	QPL
		ST2220-1-Y	-	Boeing	ST2220-1-2	Boeing
		WA27F	6	Daniels	M22520/1-02	QPL
20	2020	M22520/7-01	5	QPL	M22520/7-12	QPL
		ST2220-1-Y	-	Boeing	ST2220-1-48	Boeing
	1616	M22520/1-01	4	QPL	M22520/1-02	QPL
		WA27F	4	Daniels	M22520/1-02	QPL
	1212	M22520/1-01	7	QPL	M22520/1-02	QPL
		WA27F	7	Daniels	M22520/1-02	QPL
18	1616	M22520/1-01	5	QPL	M22520/1-02	QPL
		WA27F	5	Daniels	M22520/1-02	QPL
	1212	M22520/1-01	7	QPL	M22520/1-02	QPL
		WA27F	7	Daniels	M22520/1-02	QPL

Table 7 CONTACT CRIMP TOOLS (Continued)

Wire Size (AWG)	Contact Size	Crimp Tool				
		Basic Unit			Locator	
		Part Number	Setting	Supplier	Part Number	Supplier
16	1616	M22520/1-01	6	QPL	M22520/1-02	QPL
		MS3191-1	-	QPL	MS3191-16A	QPL
		ST2220-1-Y	-	Boeing	ST2220-1-2	Boeing
		WA27F	6	Daniels	M22520/1-02	QPL
	1212	M22520/1-01	6	QPL	M22520/1-02	QPL
		WA27F	6	Daniels	M22520/1-02	QPL
14	1212	M225 20/1-01	7	QPL	M22520/1-02	QPL
		WA27F	7	Daniels	M22520/1-02	QPL
12	1212	M22520/1-01	8	QPL	M22520/1-02	QPL
		MS3191-1	-	QPL	MS3191-12A	QPL
		ST2220-1-Y	-	Boeing	ST2220-1-3	Boeing
		WA27F	8	Daniels	M22520/1-02	QPL

(1) Remove the wire insulation.

Refer to Table 6 and Subject 20-00-15.

(2) Make a selection of the crimp tool from Table 7.

(3) For AWG 24, AWG 22, AWG 20, and AWG 18 wire in a size 12 contact, insert an eyelet into the contact. Refer to Table 4.

(4) Put the wire in the contact crimp barrel.

Make sure that:

- All the conductor strands are in the barrel
- The conductor is visible in the contact inspection hole.

(5) Put the contact in the crimp tool.

(6) Crimp the contact.

Make sure that the gap between the contact and wire insulation is not more than 1/32 inch.

B. Contact Insertion

Table 8
CONTACT INSERTION TOOLS

Contact Size	Insertion Tool		
	Part Number	Color	Supplier
2222L	M81969/14-10	Red	QPL
	M81969/16-01	Red	QPL
	NAS1664-20	Red	QPL

Table 8 CONTACT INSERTION TOOLS (Continued)

Contact Size	Insertion Tool		
	Part Number	Color	Supplier
2222	M81969/14-01	Green	QPL
	MS27534-22D	-	QPL
2020	M81969/14-10	Red	QPL
	M81969/16-01	Red	QPL
	NAS1664-20	Red	QPL
	CIET20-1	Red	ITT Cannon
1620	M81969/14-03	Blue	QPL
1616	ATR 1105	-	Astro
	ATR 2112	-	Astro
	M81969/14-03	Blue	QPL
	NAC1664-16	Blue	QPL
	CIET16-3	Blue	ITT Cannon
1212	ATR 2160	-	Astro
	M81969/14-04	Yellow	QPL
	NAS1664-12	Yellow	QPL

(1) Examine the contact to make sure that the contact does not have a bend.

NOTE: As an option for contact installation, wired contacts assembled with AWG 22 or larger wire can be inserted by hand, without an insertion tool.

(2) To insert the contact with an insertion tool:

(a) Make a selection of a contact insertion tool from Table 8.

(b) Put the colored end of the tool on the wire.

(c) Put the tip of the tool against the contact.

Make sure that the tip of the tool is against the shoulder of the contact.

(d) At the rear of the relay socket, axially align the tool, the contact, and the contact cavity.

(e) Push the contact into the contact cavity until it stops.

(f) Carefully remove the tool from the contact cavity.

(3) Lightly pull on the wire to make sure that contact is locked in the contact cavity.

CAUTION: DO NOT PULL THE WIRE WITH A STRONG OR A SUDDEN FORCE. THE FORCE CAN CAUSE DAMAGE TO THE CONTACT.

CAUTION: DO NOT MAKE A DENT IN THE WIRE INSULATION WITH THE FINGERNAILS. DAMAGE TO THE WIRE INSULATION CAN CAUSE UNSATISFACTORY PERFORMANCE AND RELIABILITY OF THE WIRE.

C. Spare Contact or Seal Plug Installation

(1) Install a seal plug in all unused contact cavities.
Refer to Subject 20-60-08.

ASSEMBLY OF LEACH SO-1057-8912 REAR RELEASE RELAY SOCKETS

TABLE OF CONTENTS

ASSEMBLY OF LEACH SO-1057-8912 REAR RELEASE RELAY SOCKETS

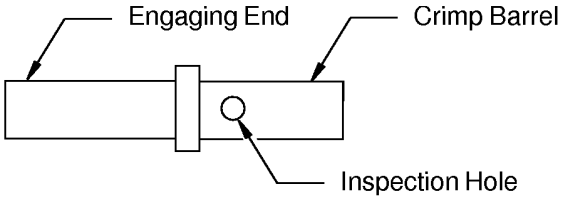
1. PART NUMBERS DESCRIPTION

A. Relay Socket Part Numbers

Table 1
RELAY SOCKET PART NUMBERS

Part Number	Supplier
SO-1057-8912	Leach

B. Contact Part Numbers



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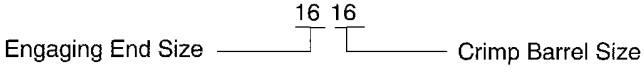
REAR RELEASE SOCKET CONTACTS
Figure 1



2446183 S00061544383_V1

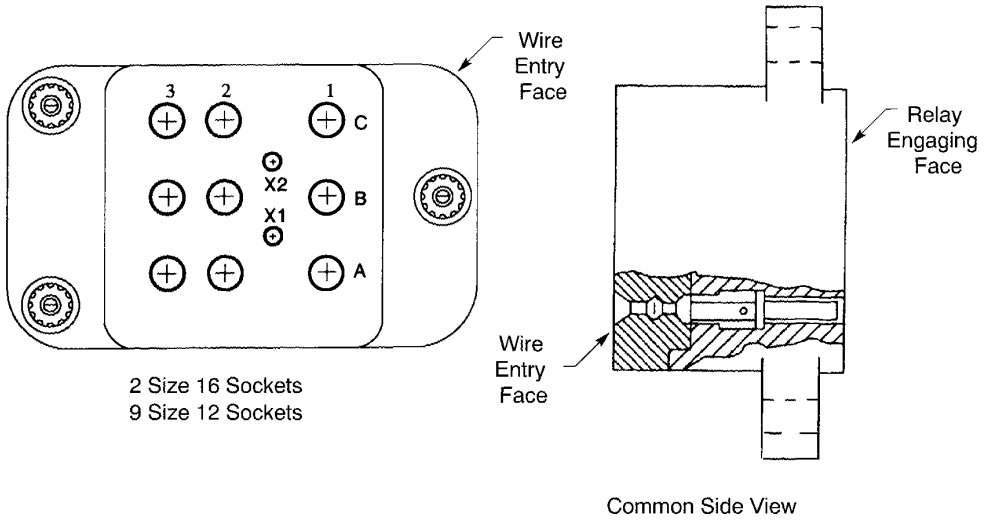
EXAMPLE OF A CONTACT SIZE
Figure 2

Table 2
CONTACT PART NUMBERS

Contact Size	Part Number	Supplier
1616	001-9007-000	Leach
1212	001-9007-001	Leach

ASSEMBLY OF LEACH SO-1057-8912 REAR RELEASE RELAY SOCKETS

C. Contact Configuration



LEACH SO-1057-8912 RELAY SOCKET CONTACT CONFIGURATION
Figure 3

2. RELAY SOCKET DISASSEMBLY

A. Contact Removal

Table 3
CONTACT REMOVAL TOOLS

Contact Crimp Barrel Size	Removal Tool	Supplier
16	NAS1664-16	QPL
12	NAS1664-12	QPL

(1) Make a selection of the removal tool from Table 3.

(2) At the rear of the relay socket, put the end of the tool on the wire.

(3) Axially align the removal tool and the contact cavity.

(4) Push the tool into the contact cavity until it stops.

(5) Hold the tool against the relay socket and, at the same time, hold the wire against the handle of the tool.

(6) Pull the tool and the wire out of the contact cavity at the same time.

ASSEMBLY OF LEACH SO-1057-8912 REAR RELEASE RELAY SOCKETS

3. RELAY SOCKET ASSEMBLY

A. Contact Assembly

Table 4
CONTACT CRIMP TOOLS

Contact	Crimp Tool				
	Basic Unit		Locator		
	Part Number	Supplier	Part Number	Color	Supplier
001-9007-000	MS3191-1	QPL	MS3191-16A	Blue	QPL
	M22520/1-01	QPL	M22520/1-02	Blue	QPL
001-9007-001	MS3191-1	QPL	M3191-12A	Yellow	QPL
	M22520/1-01	QPL	M22520/1-02	Yellow	QPL

(1) Remove 1/4 inch ±1/64 inch of wire insulation. Refer to Subject 20-00-15.

(2) Make a selection of a crimp tool from Table 4.

(3) Put the wire or wires in the contact crimp barrel.

Make sure that the conductor can be seen in the contact inspection hole.

(4) Put the contact in the crimp tool.

(5) Crimp the contact.

Make sure that the distance from the end of the crimp barrel to the end of the wire insulation is 0.03 inch maximum.

CAUTION: THE INDEX POINT AND THE INDENTERS WILL NOT BE IN THE CORRECT POSITION IF THERE IS TOO MUCH PRESSURE ON THE CONTACT.

B. Contact Insertion

Table 5
CONTACT INSERTION TOOLS

Contact Crimp Barrel Size	Insertion Tool	Supplier
16	NAS1664-16	QPL
12	NAS1664-12	QPL

(1) Examine the contact to make sure that the contact does not have a bend.

NOTE: As an option for contact installation, wired contacts assembled with AWG 22 or larger wire can be inserted by hand, without an insertion tool.

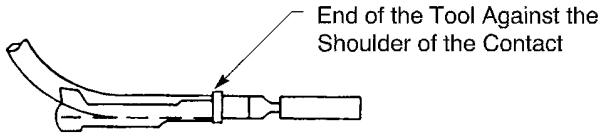
(2) To insert the contact with an insertion tool:

(a) Make a selection of a contact insertion tool from Table 5.

(b) Put the colored end of the tool on the wire.

(c) Put the tip of the tool against the contact.

Make sure that the tip of the tool is against the shoulder of the contact. Refer to Figure 4.



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POSITION OF THE INSERTION TOOL ON THE CONTACT
Figure 4

(d) At the rear of the relay socket, axially align the tool, the contact, and the contact cavity.

(e) Push the contact into the contact cavity until it stops.

(f) Carefully remove the tool from the contact cavity.

(3) Lightly pull on the wire to make sure that contact is locked in the contact cavity.

CAUTION: DO NOT PULL THE WIRE WITH A STRONG OR A SUDDEN FORCE. THE FORCE CAN CAUSE DAMAGE TO THE CONTACT.

CAUTION: DO NOT MAKE A DENT IN THE WIRE INSULATION WITH THE FINGERNAILS. DAMAGE TO THE WIRE INSULATION CAN CAUSE UNSATISFACTORY PERFORMANCE AND RELIABILITY OF THE WIRE.

C. Installation of Spare Contacts

Refer to Subject 20-60-08.

If it is necessary to install a spare contact in the contact cavities that are not used:

(1) Make a selection of a contact insertion tool from Table 5.

(2) Put the contact in the contact cavity.

(3) Axially align the tool and the contact.

(4) Push the tool straight into the contact cavity until the tool stops.

(5) Carefully remove the tool from the contact cavity.

D. Installation of Seal Plugs or Seal Rods

Refer to Subject 20-60-08.

If it is necessary to install a seal plug or a seal rod in the contact cavities that are not used:

(1) Make a selection of a seal plug or a seal rod.

(2) Push the plug or the rod into the contact cavity.

Make sure that the distance from the end of the plug or the rod to the grommet is less than 0.1 inch.

ASSEMBLY OF LEACH SO-1048-8308 REAR RELEASE RELAY SOCKETS

TABLE OF CONTENTS

ASSEMBLY OF LEACH SO-1048-8308 REAR RELEASE RELAY SOCKETS

1. PART NUMBERS AND DESCRIPTION

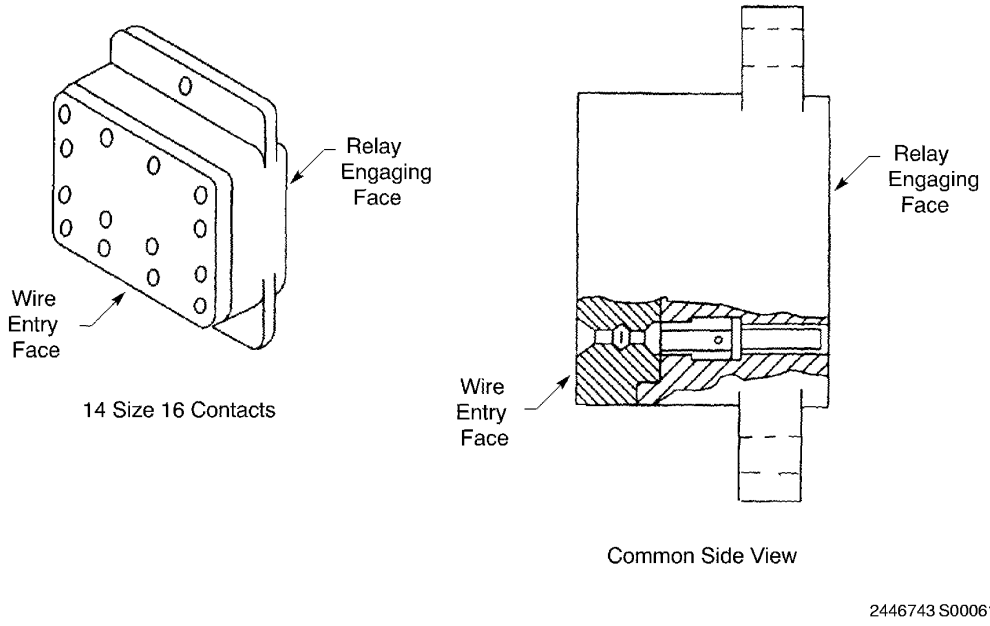
A. Relay Socket Part Numbers

Table 1
RELAY SOCKET PART NUMBERS

Part Number	Supplier
SO-1048-8308	Leach
003019-0001	Viking
RSE116135	PCD

Table 2
ALTERNATIVE PART NUMBERS

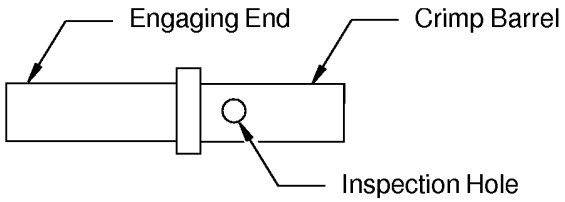
Specified Relay Sockets		Alternative Relay Sockets	
Part Number	**Supplier**	**Part Number**	**Supplier**
SO-1048-8308	Leach	003019-0001	Viking
SO-1048-8308	Leach	RSE116135	PCD



LEACH SO-1048-8308 REAR RELEASE RELAY SOCKET
Figure 1

ASSEMBLY OF LEACH SO-1048-8308 REAR RELEASE RELAY SOCKETS

B. Contact Part Numbers



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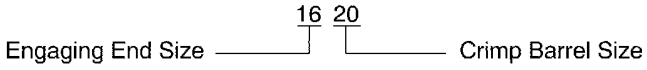
REAR RELEASE SOCKET CONTACTS
Figure 2



2443666 S00061548268_V1

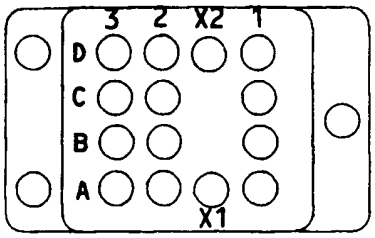
EXAMPLE OF A CONTACT SIZE
Figure 3

Table 3
CONTACT PART NUMBERS

Contact		Part Number	Supplier
Engaging End Size	Crimp Barrel Size		
16	20	001-5490-001	Leach
	16	001-5490-000	Leach

ASSEMBLY OF LEACH SO-1048-8308 REAR RELEASE RELAY SOCKETS

C. Contact Configuration



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LEACH SO-1048-8308 RELAY SOCKET CONTACT CONFIGURATION
Figure 4

2. RELAY SOCKET DISASSEMBLY

A. Contact Removal

Table 4
CONTACT REMOVAL TOOLS

Crimp Barrel Size	Removal Tool	Supplier
20	NAS1664-16	QPL
16	NAS1664-16	QPL

(1) Make a selection of the removal tool from Table 4.

(2) At the rear of the relay socket, put the end of the tool on the wire.

(3) Axially align the removal tool and the contact cavity.

(4) Push the tool into the contact cavity until it stops.

(5) Hold the tool against the relay socket and, at the same time, hold the wire against the handle of the tool.

(6) Pull the tool and the wire out of the contact cavity at the same time.

3. RELAY SOCKET ASSEMBLY

A. Contact Assembly

Table 5
SIZE 16 CONTACT FILLER WIRES

Wire Size (AWG)	Filler Wire	
	Size (AWG)	Number of Filler Wires Necessary
24	18	1
22	18	1

Table 5 SIZE 16 CONTACT FILLER WIRES (Continued)

Wire Size (AWG)	Filler Wire	
	Size (AWG)	Number of Filler Wires Necessary
20	20	1

Table 6
CONTACT CRIMP TOOLS

Contact	Crimp Tool				
	Basic Unit		Locator		
	Part Number	Supplier	Part Number	Color	Supplier
001-5490-001	MS3191-1	QPL	MS3191-16	Blue	QPL
	M22520/1-01	QPL	M22520/1-02	Blue	QPL
001-5490-000	MS3191-1	QPL	M3191-20	Red	QPL
	M22520/1-01	QPL	M22520/1-02	Red	QPL

(1) Make a selection of the contact from Table 3.

(2) Remove 1/4 inch ±1/64 inch of insulation from wire end.

(3) For AWG 20, AWG 22, or AWG 24 wire in a size 16 contact:

(a) Make a selection of a filler wire from Table 5.

(4) Make a selection of the crimp tool from Table 6.

(5) Put the wire or wires in the contact crimp barrel.

Make sure that the conductor is visible in the contact inspection hole.

(6) Put the contact in the crimp tool.

(7) Crimp the contact.

CAUTION: THE INDEX POINT AND THE INDENTORS WILL NOT BE IN THE CORRECT POSITION IF THERE IS TOO MUCH PRESSURE ON THE CONTACT.

Make sure that the maximum gap between the contact and wire insulation is 1/32 inch.

B. Contact Insertion

Table 7
CONTACT INSERTION TOOLS

Contact Crimp Barrel Size	Insertion Tool	Supplier
20	NAS1664-16	QPL
16	NAS1664-16	QPL

(1) Examine the contact to make sure that the contact does not have a bend.

NOTE: As an option for contact installation, wired contacts assembled with AWG 22 or larger wire can be inserted by hand, without an insertion tool.

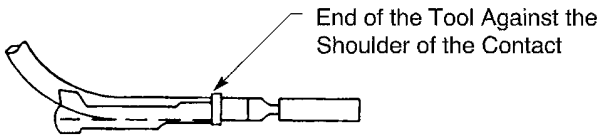
(2) To insert the contact with an insertion tool:

(a) Make a selection of a contact insertion tool from Table 7.

(b) Put the colored end of the tool on the wire.

(c) Put the tip of the tool against the contact.

Make sure that the tip of the tool is against the shoulder of the contact. Refer to Figure 5.



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POSITION OF THE INSERTION TOOL ON THE CONTACT
Figure 5

(d) At the rear of the relay socket, axially align the tool, the contact, and the contact cavity.

(e) Push the contact into the contact cavity until it stops.

(f) Carefully remove the tool from the contact cavity.

(3) Lightly pull on the wire to make sure that contact is locked in the contact cavity.

CAUTION: DO NOT PULL THE WIRE WITH A STRONG OR A SUDDEN FORCE. THE FORCE CAN CAUSE DAMAGE TO THE CONTACT.

CAUTION: DO NOT MAKE A DENT IN THE WIRE INSULATION WITH THE FINGERNAILS. DAMAGE TO THE WIRE INSULATION CAN CAUSE UNSATISFACTORY PERFORMANCE AND RELIABILITY OF THE WIRE.

C. Spare Contact or Seal Plug Installation

(1) Install a spare contact or a seal plug in all unused contact cavities.
Refer to Subject 20-60-08.

ASSEMBLY OF BACS16AF1, BACS16AG1, AND BACS16AH1 REAR RELEASE RELAY SOCKETS

TABLE OF CONTENTS

ASSEMBLY OF BACS16AF1, BACS16AG1, AND BACS16AH1 REAR RELEASE RELAY SOCKETS

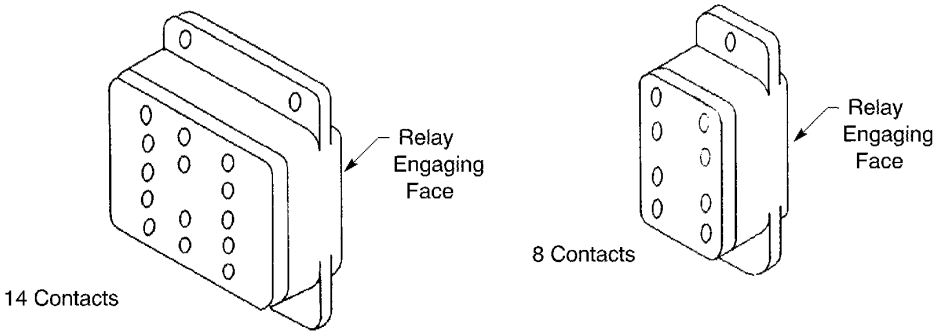
1. PART NUMBERS AND DESCRIPTION

A. Relay Socket Part Numbers

The relay socket is designed as a base that the relay plugs into.

Table 1
RELAY SOCKET PART NUMBERS

Boeing Standard	Part Number	Supplier
BACS16AF1	451120-027	Amphenol/ PCD
	RSE120027	
BACS16AG1	451120-026	Amphenol/ PCD
	RSE120026	
BACS16AH1	451120-028	Amphenol/ PCD
	RSE120028	



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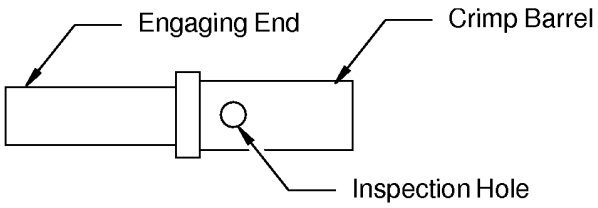
BACS16AF1, BACS16AG1, AND BAC16AH1 REAR RELEASE RELAY SOCKETS
Figure 1

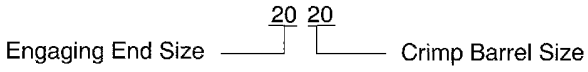
ASSEMBLY OF BACS16AF1, BACS16AG1, AND BACS16AH1 REAR RELEASE RELAY SOCKETS

B. Contact Part Numbers



2449038 S00061548761_V1

REAR RELEASE CRIMP TYPE SOCKET CONTACTS
Figure 2



2446651 S00061545900_V1

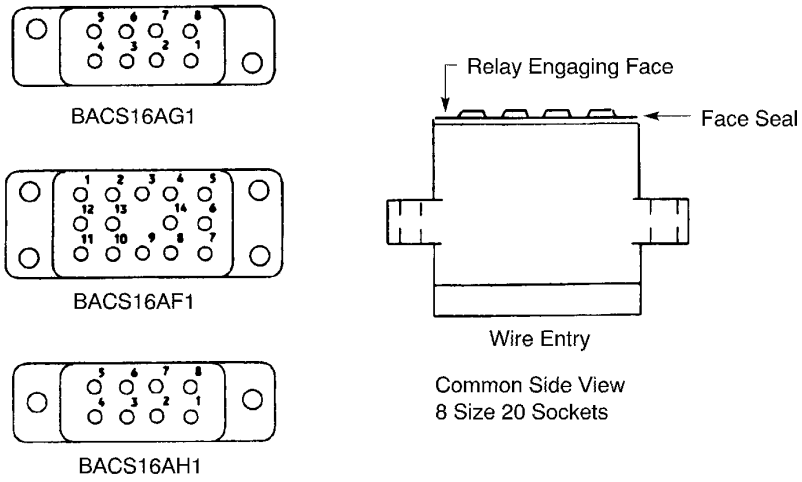
EXAMPLE OF A CONTACT SIZE
Figure 3

Table 2
CONTACT PART NUMBERS

Contact Size	Boeing Standard	Part Number	Supplier
2220	BACC47ER1	422109-900	Precision Connector Design

ASSEMBLY OF BACS16AF1, BACS16AG1, AND BACS16AH1 REAR RELEASE RELAY SOCKETS

C. Contact Configurations



CONTACT ARRANGEMENTS
Figure 4

D. Seal Plug Part Numbers

Table 3
SEAL PLUG PART NUMBERS

Part Number	Supplier
M83723/28-20	QPL
NAS1668-1	QPL

ASSEMBLY OF BACS16AF1, BACS16AG1, AND BACS16AH1 REAR RELEASE RELAY SOCKETS

2. RELAY SOCKET DISASSEMBLY

A. Contact Removal

Table 4
CONTACT REMOVAL TOOLS

Contact Size	Removal Tool	Supplier
2220	6500-001-20	Matrix
	ATR 2080	Astro
	CIET-20	ITT Cannon
	M81969/14-02	QPL
	M81969/14-11	QPL
	M83723/31-20	QPL

(1) Make a selection of a removal tool from Table 4.

(2) At the rear of the relay socket, put the white end of the removal tool on the wire.

(3) Axially align the removal tool and the contact cavity.

(4) Push the tool into the contact cavity until it stops.

Make sure that the tool stays aligned with the contact cavity.

(5) HHold the tool against the relay socket and, at the same time, hold the wire against the handle of the tool.

(6) Pull the tool and the wire out of the contact cavity at the same time.

3. RELAY SOCKET ASSEMBLY

A. Contact Assembly

Table 5
CONTACT CRIMP TOOLS FOR ONE WIRE IN THE CRIMP BARREL

Wire Size (AWG)	Contact		Crimp Tool			
	Size	Boeing Standard	Basic Unit		Locator	
			Part Number	Setting	Part Number	Color
24	2220	BACC47ER1	M22520/2-01	4	M22520/2-11	-
			M22520/1-01	1	M22520/1-04	Red
			ST2220-1-Y	-	ST2220-1-48	-
22	2220	BACC47ER1	M22520/2-01	6	M22520/2-11	-
			M22520/1-01	3	M22520/1-04	Red
			ST2220-1-Y	-	ST2220-1-48	-
20	2220	BACC47ER1	M22520/2-01	7	M22520/2-11	-
			M22520/1-01	4	M22520/1-04	Red
			ST2220-1-Y	-	ST2220-1-48	-

ASSEMBLY OF BACS16AF1, BACS16AG1, AND BACS16AH1 REAR RELEASE RELAY SOCKETS

Table 6
CONTACT CRIMP TOOLS FOR TWO WIRES IN THE CRIMP BARREL

Two Wires in the Crimp Barrel		Contact		Crimp Tool			
First Wire Size (AWG)	Second Wire Size (AWG)	Size	Boeing Standard	Basic Unit		Locator	
				Part Number	Setting	Part Number	Color
24	24	2220	BACC47ER1	M22520/2-01	6	M22520/2-11	-
				M22520/1-01	3	M22520/1-04	Red
				ST2220-1-Y	-	ST2220-1-48	-

Table 7
CRIMP TOOL SUPPLIERS

Crimp Tool	Supplier
M22520/1-01	QPL
M22520/1-04	QPL
M22520/2-01	QPL
M22520/2-11	QPL
ST2220-1-Y	Boeing
ST2220-1-48	Boeing

(1) Remove 0.14 inch ±0.02 inch of wire insulation from the end of the wire.

(2) Make a selection of a crimp tool from:
- Table 5 if one wire is to be installed in the crimp barrel
- Table 6 if two wires are to be installed in the crimp barrel.

(3) Put wire or wires in the contact barrel.
Make sure that:
- All of the conductor strands are in the crimp barrel
- The conductor is visible in the contact inspection hole.

(4) Put the contact in the crimp tool.

NOTE: As an option, the wire can be put in the contact before the contact is put in the crimp tool.

(5) Crimp the contact.
Make sure the distance between the end of the contact and the wire insulation is a maximum of:
- 0.03 inch if one wire is to be installed in the crimp barrel
- 0.05 inch if two wires are to be installed in the crimp barrel.

ASSEMBLY OF BACS16AF1, BACS16AG1, AND BACS16AH1 REAR RELEASE RELAY SOCKETS

B. Contact Insertion

Table 8
CONTACT INSERTION TOOLS

Contact Size	Insertion Tool	Supplier
2020	6500-001-20	Matrix
	ATR 1078	Astro
	CIET-20	ITT Cannon
	M81969/14-02	QPL
	M81969/14-11	QPL
	M83723/31-20	QPL

CAUTION: DO NOT INSTALL AN UNWIRED CONTACT.

(1) Examine the contact to make sure that the contact does not have a bend.

NOTE: As an option for contact installation, wired contacts assembled with AWG 22 or larger wire can be inserted by hand, without an insertion tool.

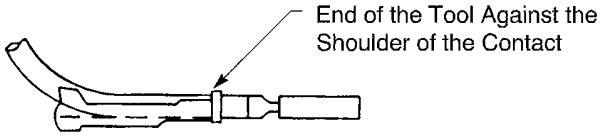
(2) To insert the contact with an insertion tool:

(a) Make a selection of a contact insertion tool from Table 8.

(b) Put the colored end of the insertion tool on the wire.

(c) Put the tip of the tool against the contact.

Make sure that the tip of the tool is against the shoulder of the contact. Refer to Figure 5.



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POSITION OF THE INSERTION TOOL ON THE CONTACT
Figure 5

(d) At the rear of the relay socket, axially align the tool, the contact, and the contact cavity.

(e) Push the contact into the contact cavity until it stops.

(f) Carefully remove the tool from the contact cavity.

(3) Lightly pull on the wire to make sure that contact is locked in the contact cavity.

CAUTION: DO NOT PULL THE WIRE WITH A STRONG OR A SUDDEN FORCE. THE FORCE CAN CAUSE DAMAGE TO THE CONTACT.

ASSEMBLY OF BACS16AF1, BACS16AG1, AND BACS16AH1 REAR RELEASE RELAY SOCKETS

CAUTION: DO NOT MAKE A DENT IN THE WIRE INSULATION WITH THE FINGERNAILS. DAMAGE TO THE WIRE INSULATION CAN CAUSE UNSATISFACTORY PERFORMANCE AND RELIABILITY OF THE WIRE.

C. Seal Plug Installation

(1) Make a selection of a seal plug from Table 3.

(2) Install seal plugs in all unwired grommet holes.
Refer to Subject 20-60-08.

ASSEMBLY OF LEACH SO-1055-8690 REAR RELEASE RELAY SOCKETS

TABLE OF CONTENTS

ASSEMBLY OF LEACH SO-1055-8690 REAR RELEASE RELAY SOCKETS

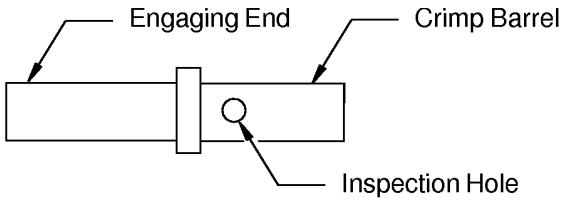
1. PART NUMBERS AND DESCRIPTION

A. Relay Socket Part Numbers

Table 1
RELAY SOCKET PART NUMBERS

Part Number	Supplier
SO-1055-8690	Leach

B. Contact Part Numbers



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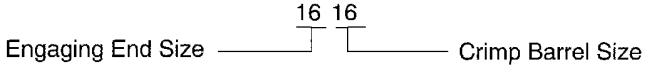
REAR RELEASE CRIMP TYPE CONTACTS
Figure 1



2446183 S00061544383_V1

EXAMPLE OF A CONTACT SIZE
Figure 2

Table 2
CONTACT PART NUMBERS

Contact Size	Part Number	Supplier
2222	001-7931-000	Leach
1616	001-9007-000	Leach

ASSEMBLY OF LEACH SO-1055-8690 REAR RELEASE RELAY SOCKETS

2. RELAY SOCKET DISASSEMBLY

A. Contact Removal

Table 3
CONTACT REMOVAL TOOLS

Crimp Barrel Size	Removal Tool	Supplier
22	NAS1664-20	QPL
16	NAS1664-1-16	QPL

(1) Make a selection of the removal tool from Table 3.

(2) At the rear of the relay socket, put the end of the tool on the wire.

(3) Axially align the removal tool and the contact cavity.

(4) Push the tool into the contact cavity until it stops.

(5) Hold the tool against the relay socket and, at the same time, hold the wire against the handle of the tool.

(6) Pull the tool and the wire out of the contact cavity at the same time.

3. RELAY SOCKET ASSEMBLY

A. Contact Assembly

Table 4
CONTACT CRIMP TOOLS

Contact Crimp Barrel Size	Crimp Tool			
	Basic Unit		Locator	
	Part Number	Supplier	Part Number	Supplier
22	MS3191-A	QPL	MS3191-22D	QPL
	ST2220-1-Y	Boeing	ST2220-1-60	Boeing
16	M22520/1-01	QPL	M22520/1-02	QPL
	MS3191-A	QPL	MS3191-16A	QPL

(1) Remove 1/4 inch ±1/64 inch of wire insulation.

(2) Make a selection of the contact crimp tool from Table 4.

(3) Put the wire in the contact crimp barrel.

Make sure that:

- The gap between the wire insulation and the contact is no more than 1/32 inch
- The conductor is visible in the contact inspection hole.

(4) Crimp the contact.

ASSEMBLY OF LEACH SO-1055-8690 REAR RELEASE RELAY SOCKETS

B. Contact Insertion

Table 5
CONTACT INSERTION TOOLS

Contact Crimp Barrel Size	Insertion Tool	Supplier
22	NAS1664-20	QPL
16	NAS1664-1-16	QPL

(1) Examine the contact to make sure that the contact does not have a bend.

NOTE: As an option for contact installation, wired contacts assembled with AWG 22 or larger wire can be inserted by hand, without an insertion tool.

(2) To insert the contact with an insertion tool:

(a) Make a selection of a contact insertion tool from Table 5.

(b) Put the wire and contact into the insertion side of the tool.

(c) Put the tip of the tool against the contact.

(d) At the rear of the relay socket, axially align the tool, the contact, and the contact cavity.

(e) Push the contact into the contact cavity until it stops.

(f) Carefully remove the tool from the contact cavity.

(3) Lightly pull on the wire to make sure that contact is locked in the contact cavity.

CAUTION: DO NOT PULL THE WIRE WITH A STRONG OR A SUDDEN FORCE. THE FORCE CAN CAUSE DAMAGE TO THE CONTACT.

CAUTION: DO NOT MAKE A DENT IN THE WIRE INSULATION WITH THE FINGERNAILS. DAMAGE TO THE WIRE INSULATION CAN CAUSE UNSATISFACTORY PERFORMANCE AND RELIABILITY OF THE WIRE.

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

TABLE OF CONTENTS

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

This subject gives the procedures to install relay sockets and their related relays.

For the 777 ELMS panel, refer to Subject 20-15-46 for the procedures to install relay sockets and their related relays.

Refer to Subject 20-30-00 for terminal torque values for some circuit breakers, relays, contactors, and time delay modules.

1. RELAY SOCKET AND RELATED RELAY INSTALLATION

A. Installation of BACS16AF1 Relay Sockets and Related BACR13CE( ) Relays

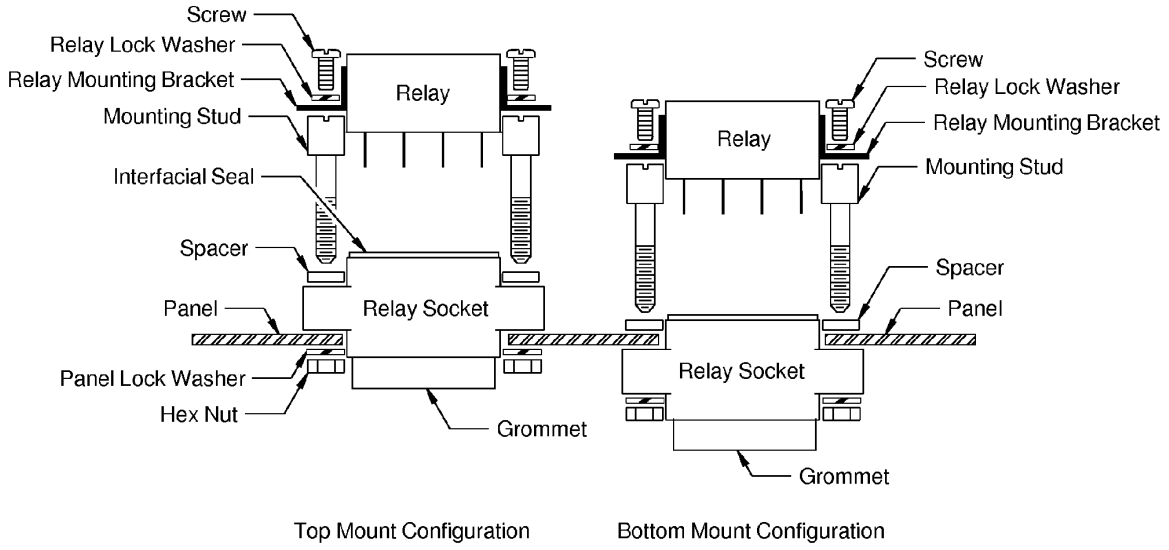
Refer to Subject 20-81-19 for the relay socket part numbers.

NOTE: The installation hardware for the BACS16AF1 relay socket and its relay is shown in Table 1 and in Figure 1.

Table 1
BACS16AF1 RELAY SOCKET INSTALLATION HARDWARE PART NUMBERS

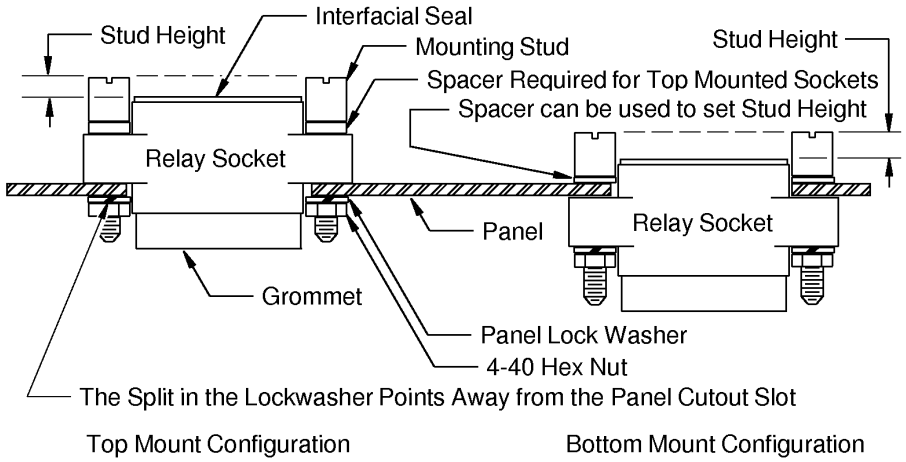
Description	Size	Appleton Part Number	Amphenol - PCD Part Number	Industry Part Number	Marketing Masters Part Number
Screw	2-56	422080-809	200006501	-	-
Relay Lock Washer	2	422080-800	200006201	NAS1676C2	-
Mounting Stud	-	422080-815	200006801	-	-
Spacer	0.050 inch thick	422080-806	200006401	-	-
Panel Lock Washer	4	422080-801	200006301	NAS1676C4	-
Hex Nut	4-40	422080-817	200006901	-	-
Mounting Hardware Kit Includies All Parts Listed Above	-	-	CNA110902	-	-
Screw and Captive Relay Lock Washer	2-56	-	-	-	GAL500-2

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS



IDENTIFICATION OF RELAY SOCKET HARDWARE
Figure 1

(1) Install the BACS16AF1 relay socket on the panel or bracket in the same configuration as its initial installation.



INSTALLATION OF THE RELAY SOCKET AND SPACERS FOR THE CORRECT STUD HEIGHT
Figure 2

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

(a) Mount the relay socket in the top mount configuration if the initial installation was top mounted.

Make sure to use the necessary number of spacers to make the stud height from the surface of the interfacial seal to the end of the mounting stud equal to 0.085 inch minimum to 0.110 inch maximum. Refer to Figure 2.

NOTE: For the top mount configuration on a thin panel, two spacers may be needed.

(b) Mount the relay socket in the bottom mount configuration if the initial installation was bottom mounted.

Make sure to use the necessary number of spacers to make the stud height from the surface of the interfacial seal to the end of the mounting stud equal to 0.085 inch minimum to 0.110 inch maximum. Refer to Figure 2.

(2) Verify that the stud height from the socket interfacial seal is between 0.085 inch minimum and 0.110 inch maximum.

(3) Torque the hex nut on the mounting stud to between 6 and 8 inch pounds.

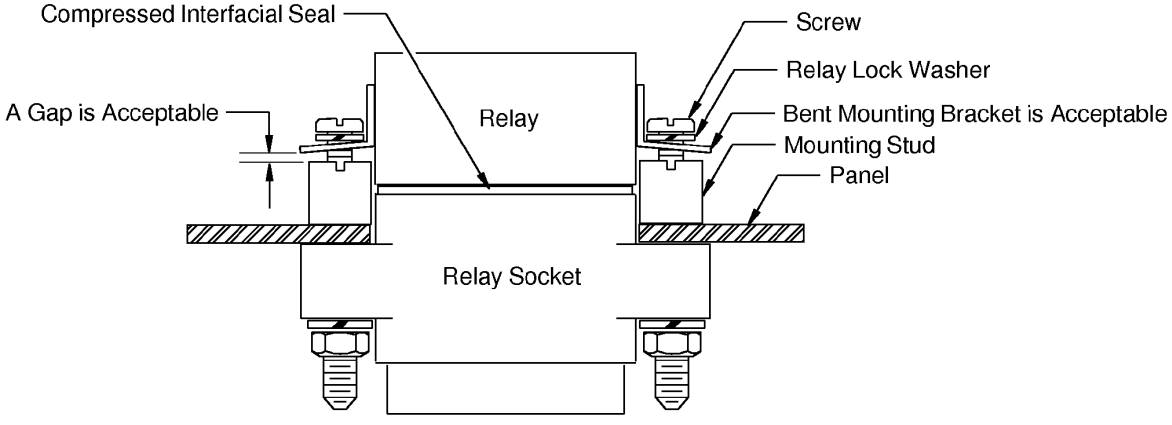
(4) Push the correct BACR13CE( ) relay into the BACS16AF1 relay socket until it stops.

(5) Install the screw and the relay lock washer on each side of the relay.

(6) Torque each screw to between 3.5 and 4.5 inch pounds.

NOTE: These conditions are acceptable after the screws are tightened: Refer to Figure 3.

- A bend in the relay mounting bracket is acceptable
- A gap between the relay mounting bracket and the end of the mounting stud is acceptable.



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ACCEPTABLE CONDITIONS OF THE INSTALLED RELAY
Figure 3

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

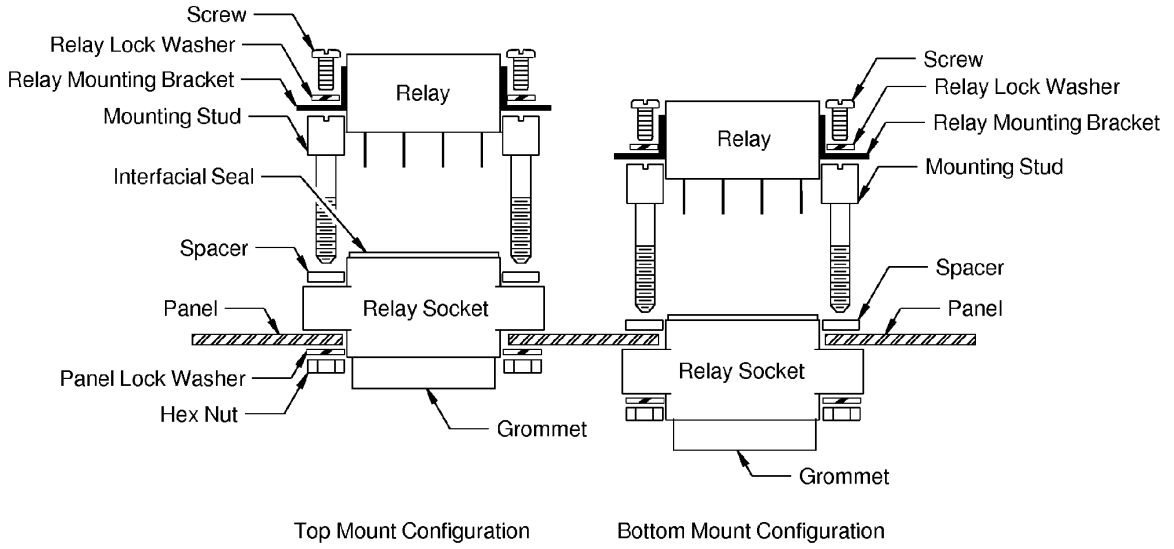
B. Installation of BACS16AG1 Relay Sockets and Related BACR13CD( ) Relays

Refer to Subject 20-81-19 for the relay socket part numbers.

NOTE: The installation hardware for the BACS16AG1 relay socket and its relay is shown in Table 2 and in Figure 4.

Table 2
BACS16AG1 RELAY SOCKET INSTALLATION HARDWARE PART NUMBERS

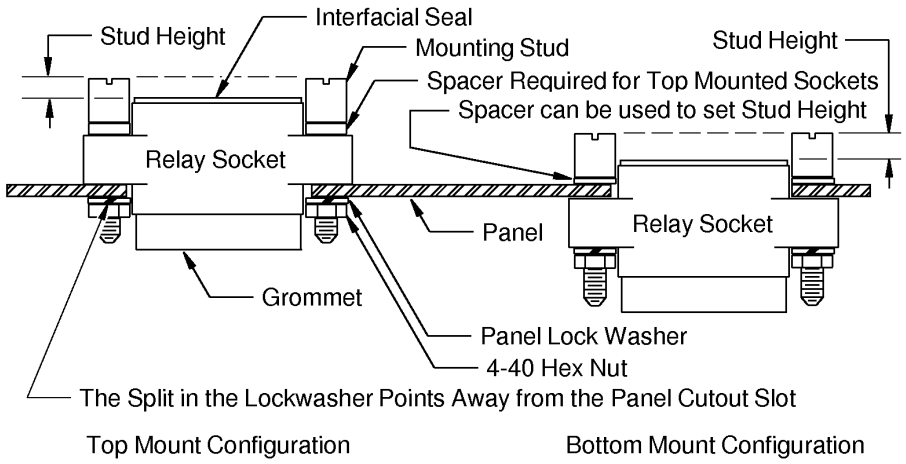
Description	Size	Appleton Part Number	Amphenol - PCD Part Number	Industry Part Number	Marketing Masters Part Number
Screw	2-56	422080-809	200006501	-	-
Relay Lock Washer	2	422080-800	200006201	NAS1676C2	-
Mounting Stud	-	422080-815	200006801	-	-
Spacer	0.050 inch thick	422080-806	200006401	-	-
Panel Lock Washer	4	422080-801	200006301	NAS1676C4	-
Hex Nut	4-40	422080-817	200006901	-	-
Mounting hardware kit including All Parts Listed Above	-	-	CNA110900	-	-
Screw and Captive Relay Lock Washer	2-56	-	-	-	GAL500-2



IDENTIFICATION OF RELAY SOCKET HARDWARE
Figure 4

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

(1) Install the BACS16AG1 relay socket on the panel or bracket in the same configuration as its initial installation.



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INSTALLATION OF THE RELAY SOCKET AND SPACERS FOR THE CORRECT STUD HEIGHT
Figure 5

(a) Mount the relay socket in the top mount configuration if the initial installation was top mounted.

Make sure to use the necessary number of spacers to make the stud height from the surface of the interfacial seal to the end of the mounting stud equal to 0.090 inch minimum to 0.115 inch maximum. Refer to Figure 5.

NOTE: For the top mount configuration on a thin panel, two spacers may be needed.

(b) Mount the relay socket in the bottom mount configuration if the initial installation was bottom mounted.

Make sure to use the necessary number of spacers to make the stud height from the surface of the interfacial seal to the end of the mounting stud equal to 0.090 inch minimum to 0.115 inch maximum. Refer to Figure 5.

(2) Verify that the stud height from the socket interfacial seal is between 0.090 inch minimum and 0.115 inch maximum.

(3) Torque the hex nut on the mounting stud to between 6 and 8 inch pounds.

(4) Push the correct BACR13CD( ) relay into the BACS16AG1 relay socket until it stops.

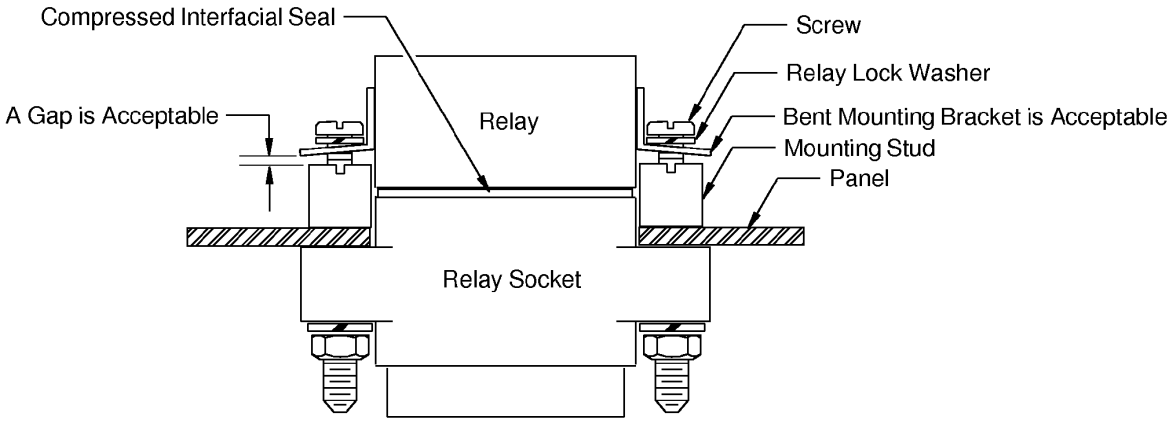
(5) Install the screw and the relay lock washer on each side of the relay.

(6) Torque the each screw to between 3.5 and 4.5 inch pounds.

NOTE: These conditions are acceptable after the screws are tightened: Refer to Figure 6.

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

- A bend in the relay mounting bracket is acceptable
- A gap between the relay mounting bracket and the end of the mounting stud is acceptable.



ACCEPTABLE CONDITIONS OF THE INSTALLED RELAY
Figure 6

C. Installation of BACS16AH1 Relay Sockets and Related TDH-1852, TDH-1853, or TDH 1953 Relays

Refer to Subject 20-81-19 for the relay socket part numbers.

NOTE: The installation hardware for the BACS16AH1 relay socket and its relays is shown in Table 3 and in Figure 7.

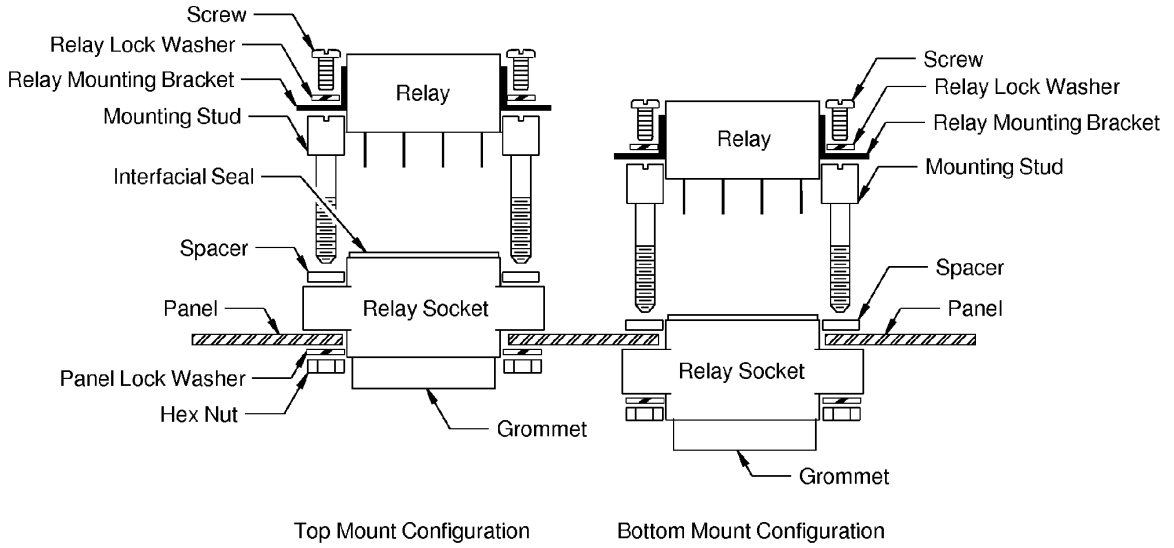
Table 3
BACS16AH1 RELAY SOCKET INSTALLATION HARDWARE PART NUMBERS

Description	Size	Appleton Part Number	Amphenol - PCD Part Number	Industry Part Number	Marketing Masters Part Number
Screw	4-40	422080-813	200006701	-	-
Relay Lock Washer	4	422080-801	200006301	NAS1676C4	-
Mounting Stud	-	422080-811	200006601	-	-
Spacer	0.050 inch thick	422080-806	200006401	-	-
	0.016 inch thick	-	200000401	NAS620-4L	-
Panel Lock Washer	4	422080-801	200006301	NAS1676C4	-
Hex Nut	4-40	422080-817	200006901	-	-

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

Table 3 BACS16AH1 RELAY SOCKET INSTALLATION HARDWARE PART NUMBERS (Continued)

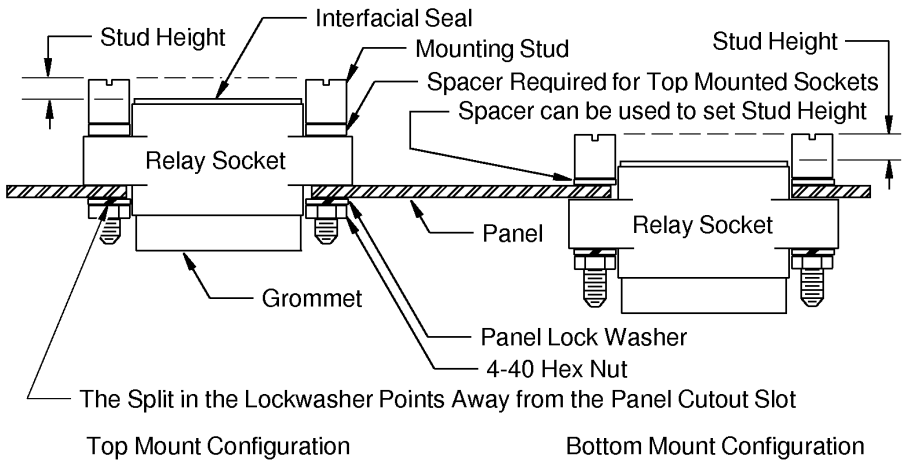
Description	Size	Appleton Part Number	Amphenol - PCD Part Number	Industry Part Number	Marketing Masters Part Number
Mounting hardware kit includes All Necessary Parts	-	-	CNA110903	-	-
Screw and Captive Relay Lock Washer	4-40	-	-	-	GAL500-4



IDENTIFICATION OF RELAY SOCKET HARDWARE
Figure 7

(1) Install the BACS16AH1 relay socket on the panel or bracket in the same configuration as its initial installation.

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS



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INSTALLATION OF THE RELAY SOCKET AND SPACERS FOR THE CORRECT STUD HEIGHT
Figure 8

(a) Mount the relay socket in the top mount configuration if the initial installation was top mounted.

Make sure to use the necessary number of spacers to make the stud height from the surface of the interfacial seal to the end of the mounting stud equal to 0.065 inch minimum to 0.090 inch maximum. Refer to Figure 8.

NOTE: For the top mount configuration on a thin panel, two spacers may be needed.

(b) Mount the relay socket in the bottom mount configuration if the initial installation was bottom mounted.

Make sure to use the necessary number of spacers to make the stud height from the surface of the interfacial seal to the end of the mounting stud equal to 0.065 inch minimum to 0.090 inch maximum. Refer to Figure 8.

(2) Verify that the stud height from the socket interfacial seal is between 0.065 inch minimum and 0.090 inch maximum.

(3) Torque the hex nut on the mounting stud to between 6 and 8 inch pounds.

(4) Push the correct relay into the BACS16AH1 relay socket until it stops.

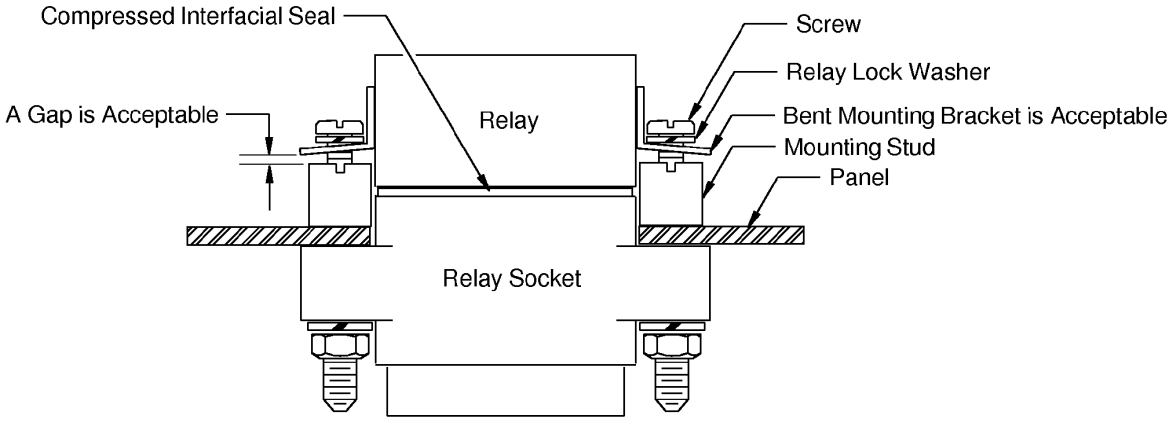
(5) Install the screw and the relay lock washer on each side of the relay.

(6) Torque each screw to between 3.5 and 4.5 inch pounds.

NOTE: These conditions are acceptable after the screws are tightened: Refer to Figure 9.

- A bend in the relay mounting bracket is acceptable

- A gap between the relay mounting bracket and the end of the mounting stud is acceptable.



ACCEPTABLE CONDITIONS OF THE INSTALLED RELAY
Figure 9

D. Installation of BACS16X and BACS16W Relay Sockets and Their Related Relays

Refer to Subject 20-81-12 for alternative relay socket part numbers.

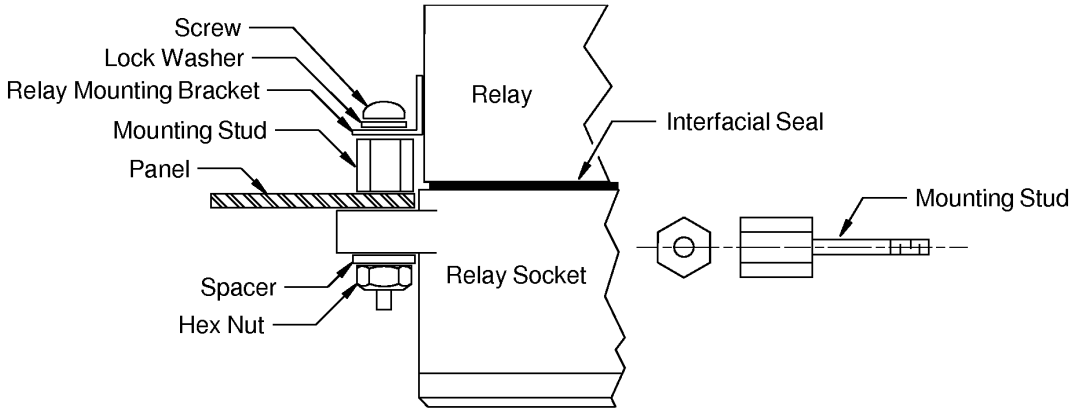
Table 4
APPLICABLE RELATED RELAYS

Relay Part Number	Supplier
BACR13CF2()	QPL
BACR13CG2()	QPL
BACR13CJ()	QPL
J-D4B-056	Leach
J-D9B-013	Leach
J-D4N-068	Leach
KA-D9F-005	Leach
KA-X9E-004	Leach
KL-X4A-011	Leach
600-486-()	Leach
TD-1047-()	Leach
TD-1434-()	Leach

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

Table 4 APPLICABLE RELATED RELAYS (Continued)

Relay Part Number	Supplier
TD-1862-()	Leach
TDH-6108-()	Leach
TDH-7101-()	Leach
TDH-7120-()	Leach
TDH-8116-()	Leach
TDH-8119-()	Leach
TDH-8120-()	Leach
TDH-8127	Leach



BACS16X AND BACS16W RELAY SOCKET INSTALLATION
Figure 10

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

Table 5
RELAY SOCKET PART NUMBERS

Relay Socket Part Number	Stud Finish	Location of Mounting Hardware Part Numbers
BACS16X1A	Passivated	Table 6
BACS16X2A		
BACS16X3A		
BACS16W1A		
BACS16W2A		
BACS16W3A		
BACS16W4A		
BACS16W5A		
BACS16X4A	Black Anodized	Table 7
BACS16X5A		
BACS16X6A		
BACS16W6A		
BACS16W7A		
BACS16W8A		
BACS16W9A		
BACS16W10A		

Table 6
BACS16W AND BACS16X RELAY SOCKET MOUNTING HARDWARE PART NUMBERS THAT HAVE PASSIVATED STUDS

Description	Part Number	Supplier
Hex Nut	BACN10YR04C	Boeing
Screw	MS51957-25	QPL
Lockwasher	NAS1676C6	QPL
Passivated Stud	200008901	Ampheol / PCD
	118-0090-000	Viking
Kit with Passivated Stud	102-KIT-12	Souriau
	102-KIT-13	Souriau
	450600210	Ampheol / PCD
	450600310	Ampheol / PCD
	126-0048-000	Viking
	126-0048-002	Viking
	126-0048-003	Viking

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

Table 7
BACS16W AND BACS16X RELAY SOCKET MOUNTING HARDWARE PART NUMBERS THAT HAVE BLACK ANODIZED STUDS

Description	Part Number	Supplier
Nut	BACN10YR04C	Boeing
Screw	MS51957-25	QPL
Lockwasher	NAS1676C6	QPL
Black Anodized Stud	200008501	Ampheol / PCD
	118-0218-001	Viking
Kit with Black Anodized Stud	102-KIT-22	Souriau
	102-KIT-23	Souriau
	450600200	Ampheol / PCD
	450600300	Ampheol / PCD
	126-0053-001	Viking
	126-0053-002	Viking
	126-0053-003	Viking

(1) Install the relay socket in the same configuration as its initial installation.
Refer to:
- Figure 10 for the installation configuration
- Table 5, Table 6, and Table 7 for the part numbers for the mounting hardware.

(a) Put the relay socket against the panel.

(b) For each mounting hole of the relay socket, install the stud, the washer and the hex nut.

(c) Torque the hex nut to 6 inch-pounds.

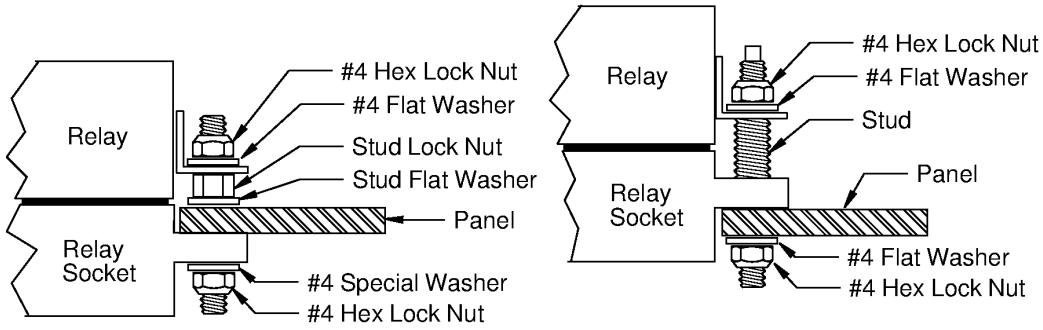
(d) Install the relay, the screw and its lockwasher.

(e) Torque the screw to 3.5 to 4.5 inch-pounds.

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

E. Installation of Leach SO Series and Amphenol/PCD RSE Series Rear Release Relay Sockets

Refer to Subject 20-81-16 for the relay part numbers.



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INSTALLATION OF LEACH SO SERIES AND PCD RELAY SOCKETS THAT HAVE FIXED MOUNTING STUDS

Figure 11

Table 8

RELAY SOCKET PART NUMBERS AND THE LOCATION OF THE MOUNTING HARDWARE PART NUMBER DATA

Relay Socket		Location of the Mounting Hardware Data	Mounting Studs are Fixed to the Relay Socket
Part Number	Supplier		
RSE112()	PCD	Table 9	yes
RSE116()	PCD	Table 9	yes
RSE120()	PCD	Table 10	yes
SO-1048-8308	Leach	Table 9	no
SO-1048-8779	Leach	Table 9	yes
SO-1049-8772	Leach	Table 9	yes
SO-1055-8690	Leach	Table 9	yes
SO-1056-8691	Leach	Table 9	no
SO-1057-8912	Leach	Table 9	yes
SO-1058-8913	Leach	Table 9	yes
SO-1059-8914	Leach	Table 9	yes
SO-1061-8916	Leach	Table 9	yes

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

Table 8 RELAY SOCKET PART NUMBERS AND THE LOCATION OF THE MOUNTING HARDWARE PART NUMBER DATA (Continued)

Relay Socket		Location of the Mounting Hardware Data	Mounting Studs are Fixed to the Relay Socket
Part Number	Supplier		
SO-1062-8917	Leach	Table 9	yes
SO-1063-9033	Leach	Table 9	yes
SO-1064-()	Leach	Table 10	yes
SO-1066-()	Leach	Table 10	yes

Table 9
RELAY AND RELAY SOCKET INSTALLATION HARDWARE FOR RELAY SOCKETS THAT ARE SUPPLIED WITH FIXED OR LOOSE SIZE 10 STUDS

Description	Size	Industry Part Number	Amphenol - PCD Part Number	Boeing Part Number	Marketing Masters Part Number	Leach Part Number
#4 Hex Lock Nut	4	MS21042L04	-	BACN10YR04CM	-	-
#4 Flat Washer	4	NAS620-4L	-	-	-	-
Mounting Stud (Not Fixed in the Relay Socket)	10	-	200001701	-	-	001-6000-000
#4 Special Washer	4	-	200500401	-	-	-
Stud Lock Nut	10	MS21042L3	-	-	-	-
Stud Flat Washer	10	-	200002901	-	FW0007	-

Table 10
RELAY AND RELAY SOCKET INSTALLATION HARDWARE FOR RELAY SOCKETS THAT ARE SUPPLIED WITH FIXED SIZE 8 STUDS

Description	Size	Industry Part Number	Amphenol - PCD Part Number	Boeing Part Number	Marketing Masters Part Number
#4 Hex Lock Nut	4	MS21042L04	-	BACN10YR04CM	-
#4 Flat Washer	4	NAS620-4L	-	-	-
Stud Lock Nut	8	MS21042L08	-	-	-
Stud Flat Washer	8	-	200004001	-	FW0006

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

Table 11
LOCK NUT TORQUE

Lock Nut Size	Necessary Torque (inch-pounds)	
	Minimum	Maximum
4	3	4
8	6	8
10	10	12

(1) Install the relay socket in the same configuration as its initial installation. Refer to Figure 11.

(a) Use the mounting hardware that is supplied with the relay socket, or if necessary, use the relay socket part number and refer to Table 8 to find the location of the correct mounting hardware part numbers in Table 9 or Table 10.

NOTE: The supplied size 4 nylon nut packaged with Leach SO series relay sockets, can be used instead of a #4 lock nut to hold the relay socket to the panel if the relay socket is top mounted.

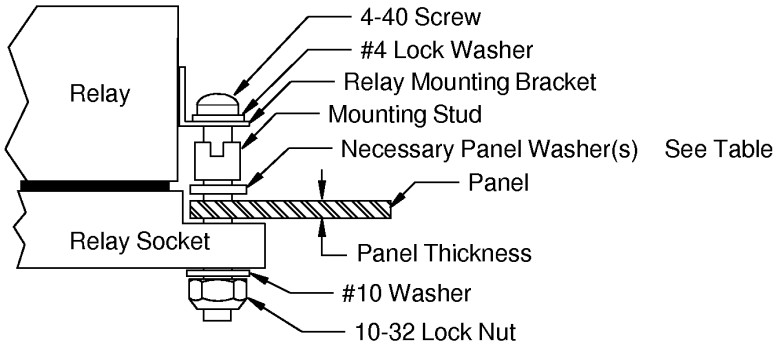
NOTE: The #4 special washer and its #4 hex lock nut are only necessary for bottom mounted relay sockets that have studs that are loose.

(b) Torque the lock nuts. Refer to Table 11 for the necessary torque values.

NOTE: It is acceptable if the elastomeric interfacial seal between the relay and the relay socket becomes compressed when the fasteners are tightened.

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

F. Bottom Mount Installation of Leach So-1018-7119 and So-1021-7127 Relay Sockets



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BOTTOM MOUNT INSTALLATION CONFIGURATION OF THE LEACH SO-1018-7119 AND SO-1021-7127 RELAY SOCKETS
Figure 12

Table 12
RELAY SOCKET MOUNTING HARDWARE PART NUMBERS

Description	Size	Part Number	Supplier
Screw	4-40	NAS600-6	QPL
		NAS600-6P	QPL
Lock Washer	4	AN935-4	QPL
		BACW10WEC4S	Boeing
Mounting Stud	10-32	MS25332-1	QPL
Lock Nut	10-32	MS20365-1032	QPL
		MS21042-L3	QPL

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

Table 13
NECESSARY PANEL WASHERS

Panel Thickness (inch)	Necessary Panel Washers
0.030 - 0.034	Two washers that are supplied with the relay socket
0.047 - 0.049	One washer that is supplied with the relay socket and one NAS1149D0316H washer
0.060 - 0.068	One washer that is supplied with the relay socket
0.077 - 0.083	One NAS1149D0316H washer
0.090 - 0.102	None

Table 14
FASTENER TORQUE

Fastener	Necessary Torque (inch-pounds)	
	Minimum	Maximum
4-40 Screw	3.5	4.5
10-32 Lock Nut	18	25

(1) Install the SO-1018-7119 or the SO-1021-7127 relay socket on the panel in the bottom mount configuration.

Refer to:

- Figure 12 for the installation configuration
- Table 12 for the part numbers of the mounting hardware
- Table 13 for the necessary panel washers
- Table 14 for the necessary torque values.

(a) Put the relay socket against the panel.

(b) For each mounting hole of the relay socket, install the stud, the washer and the lock nut.

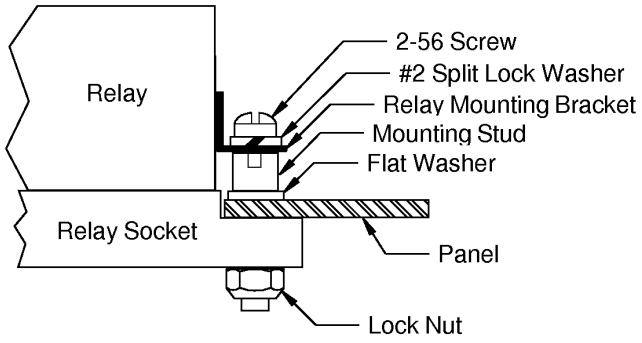
(c) Torque the 10-32 lock nut.

(d) Install the relay, the screw and its lockwasher.

(e) Torque the screw.

INSTALLATION OF RELAY SOCKETS AND THEIR RELATED RELAYS

G. Installation of Armel HRCC-()KM, HRFB-605JV2, HRT-()KM and HRTS-()KM Relay Sockets



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INSTALLATION CONFIGURATION OF ARMEL HRCC-()KM, HRFB-605JV2, HRT-()KM AND HRTS-()KM RELAY SOCKETS
Figure 13

(1) Use the mounting hardware supplied with the relay socket to Install the Armel HRCC-()KM, HRFB-605JV2, HRT-()KM and HRTS-()KM relay socket in the bottom mount configuration. Refer to Figure 13 for the installation configuration.

(a) Put the relay socket against the panel.

(b) For each mounting hole of the relay socket, install the stud, the washer and the hex nut.

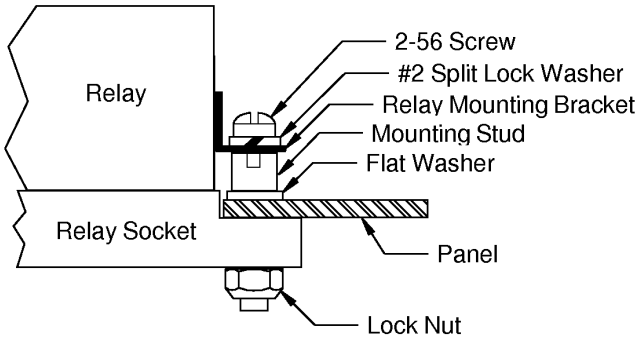
(c) Torque the hex nut to 6 inch-pounds.

(d) Install the relay, the screw and its lockwasher.

(e) Torque the screw to 3.5 to 4.5 inch-pounds.

H. Installation of the 3SAM6015M2 Relay, the HRFB-605JV2 Relay Socket and the 3SBM5134V2 Relay

NOTE: When the 3SAM6015M2 relay is installed in its relay socket, make sure that the relay pin contact that has a blue bead engages relay socket cavity number 1.



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ARMEL HRFB-605JV2 RELAY SOCKET AND 3SBM5134V2 RELAY INSTALLATION CONFIGURATION
Figure 14

(1) Install the Armel HRFB-605JV2 relay socket and the 3SBM5134V2 relay:

(a) Install the Armel HRFB-605JV2 relay socket in its initial configuration. Refer to Figure 14.

Make sure to use the installation hardware that is supplied with the HRFB-605JV2 relay socket.

(b) Install the 3SBM5134V2 relay in the HRFB-605JV2 relay socket.

Make sure that the pin contact on the 3SBM5134V2 relay that has a blue bead engages HRFB-605JV2 relay socket cavity number 6.

(c) Tighten the locknut to 6.0 to 8.0 inch-pounds.

(d) Tighten the screws to 3.5 to 4.5 inch-pounds.