

DATE 5-24-61
 SH. 1 OF 15
 COMPILED BY
H. G.
 APPROVED *H. G.*

TMC SPECIFICATION NO. S-345

TITLE: CONNECTOR & CABLE

JOB

ASSEMBLY INSTRUCTIONS

SERIES TYPE	SHEET	DESCRIPTION
S-345/QDS	2,3	QUICK DISCONNECT, SMALL
S-345/QDL	4,5,6	QUICK DISCONNECT, LARGE
S-345/C	7,8	"C" SERIES
S-345/ST(1 1/8 70)	9,10	1-1/8, 70 ohm Styroflex
S-345/7/8-70	11,12	7/8, 70 ohm Styroflex
S-345/1/2	13	1/2" Box Connector
S-345/TCA	14,15	"TCA" Series, 1-5/8" Styroflex

DATE 5-24-61
 SH. 2 OF 15
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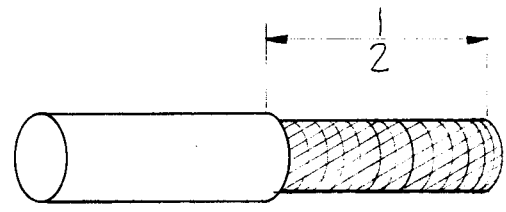
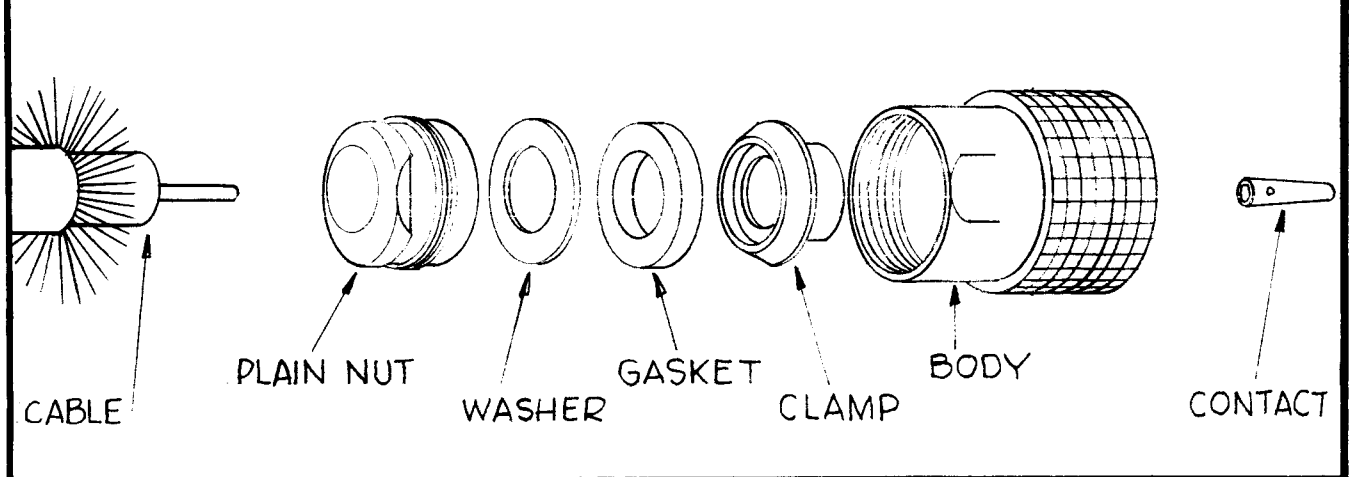
TMC SPECIFICATION NO. S-345/QDS

C

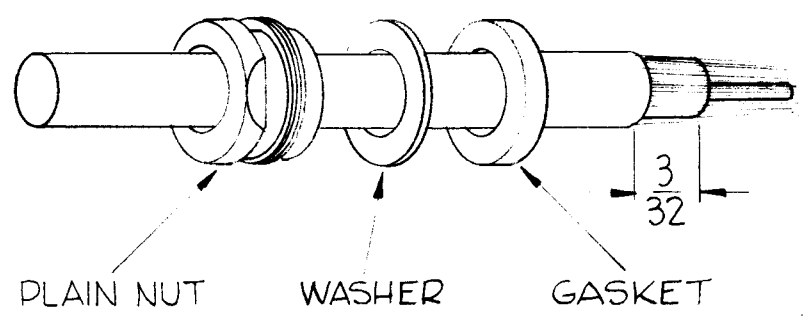
TITLE: CONNECTOR ASS'Y INSTRUCTION FOR QDS SERIES

JOB

APPROVED USING CABLES RG-8/U, 10/U, 11/U, 12/U



A. Cut end of cable even. Remove $\frac{1}{2}$ " of Vinyl Jacket, being careful not to nick the braid.



B. Fray braid and strip inner dielectric $\frac{3}{32}$ ". Taper braid and slide plain nut, washer and gasket onto jacket with "V" groove toward clamp. Clamp is now pushed over braid so that internal shoulder butts flush against vinyl jacket.

DATE 5-24-61
SH. 3 OF 15
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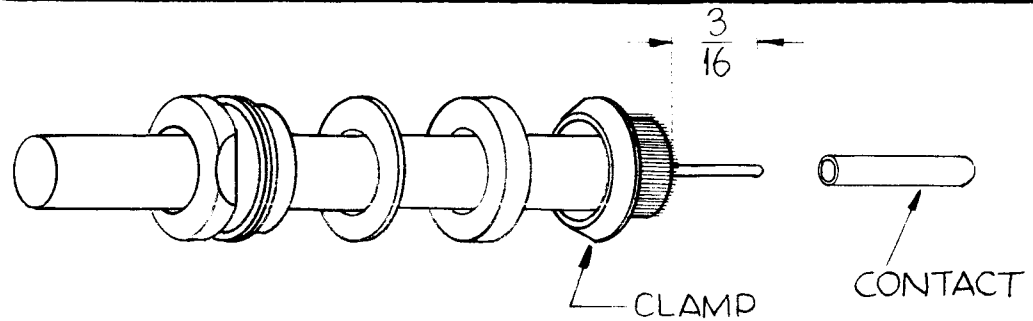
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TITLE: CONNECTOR ASS'Y INSTRUCTIONS FOR QDS SERIES

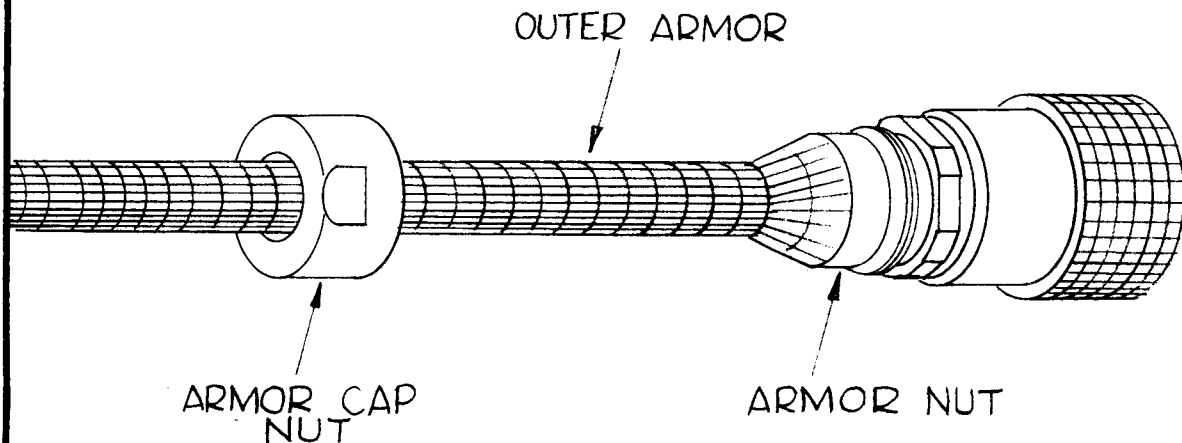
JOB

APPROVED

USING CABLES RG-8/U, 10/U, 11/U, 12/U



- C. Fold braid back over clamp and trim. Cut center conductor $\frac{3}{16}$ ". Slip contact in place, butt it against dielectric and solder. Avoid use of excessive heat.
- D. Push assembly into body as far as it will go. Slide gasket, washer, and plain nut into body and screw into place with a wrench until tight. For this operation, hold cable and body rigid and rotate plain nut. Tighten plain nut securely on body with wrench.



NOTE:

When armor cable (RC-10/U, RG-12/U) is used, follow all instructions as outlined. However, cut outer armor and fan over armor nut as shown. Hold armor nut securely with a wrench and tighten armor cap nut.

DATE 5-24-61
SH. 4 OF 15
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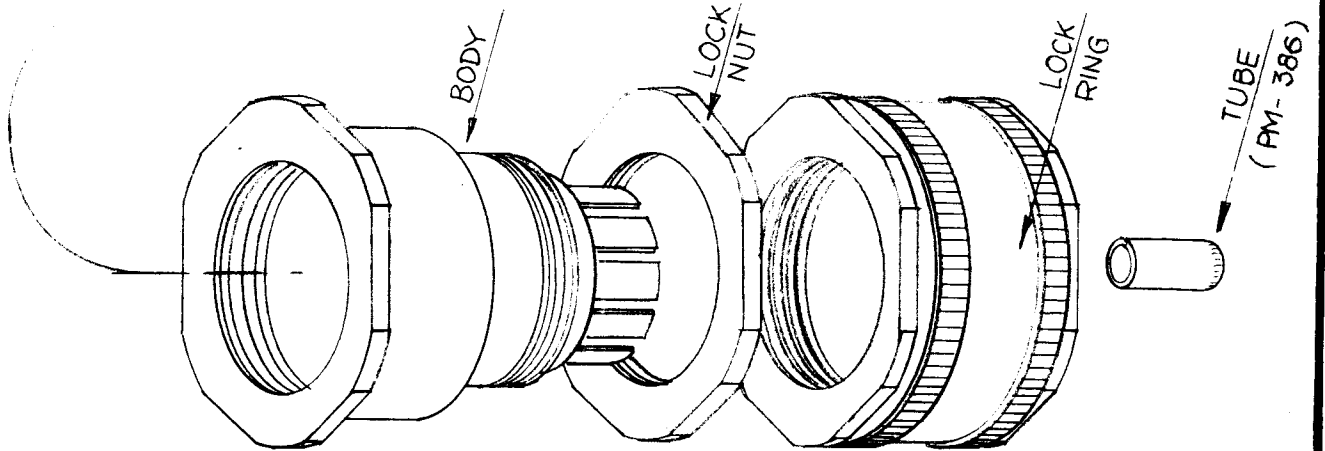
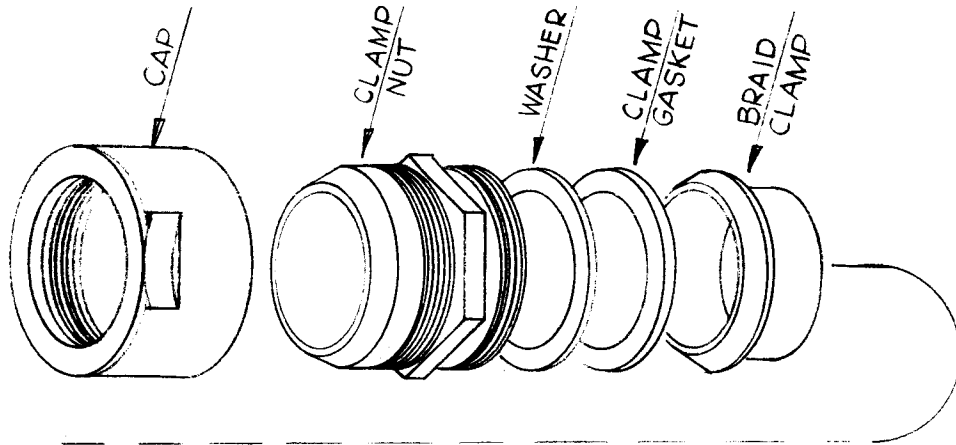
TMC SPECIFICATION NO. S-345/QDL

TITLE: CONNECTOR ASS'Y INSTRUCTIONS FOR ODL SERIES

JOB

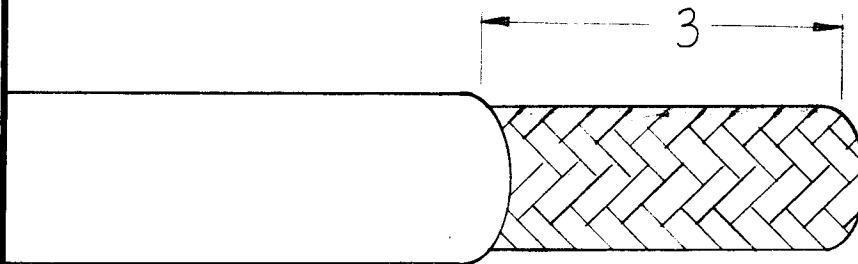
APPROVED

USING CABLES RG-17/U, 18/U, 35/U, 85/U, 164/U



ASSEMBLY PROCEDURE

1. Disassemble plug and layout as shown. (Figure 1.)



2. Remove approximately 3" of outer jacket, being careful not to nick braid. (Figure 2.)

DATE 5-24-61
SH. 5 OF 15
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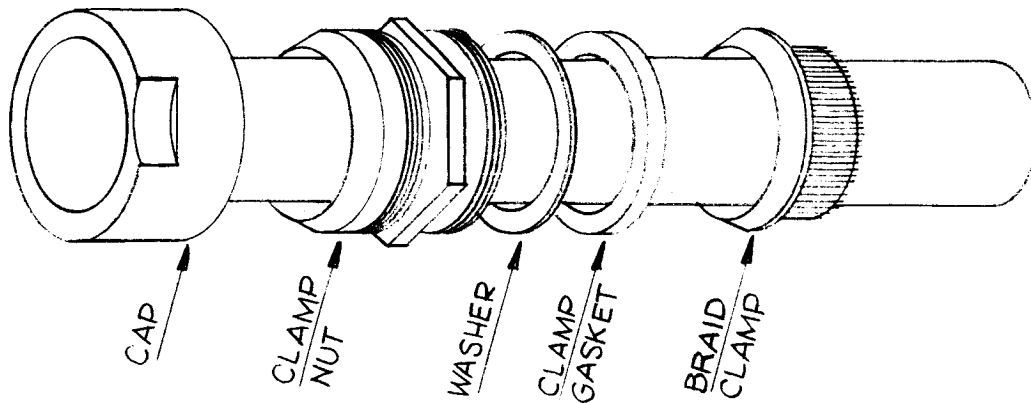
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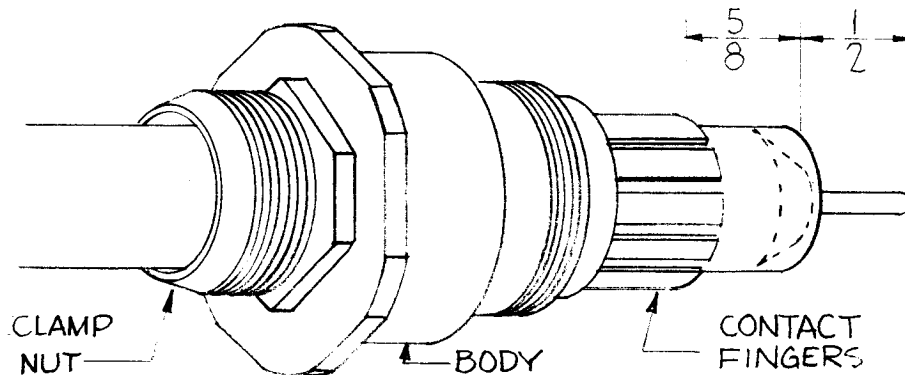
JOB

APPROVED

USING CABLES RG-17/U, 18/U, 35/U, 85/U, 164/U



3. Slide cap, clamp nut, washer, clamp gasket over cable as shown. (Figure 3.)
Note: V groove of gasket must face towards braid clamp.
4. Slide clamp over braid so that internal shoulder butts flush against end of outer jacket. (Figure 3.)
5. With clamp in place, comb out braid and fold back smoothly over braid clamp. Trim off excess strands. (Figure 3.)



6. Slide body carefully over clamp nut as far as it will go and tighten. For this operation, hold body rigid and rotate clamp nut. (Figure 4.)
7. Using sharp knife, remove 5/8" of dielectric, exposing 1/2" of conductor. Be careful not to nick conductor. (Figure 4.)
8. Use TMC tool (TP-106) to shape dielectric as shown by dotted lines. Tool must butt against contact fingers to obtain proper shape and length. (Figure 4.)

Note: When tube (PM-386) is not required, form a full radius on end of conductor.
When tube (PM-386) is required, it should butt flush against dielectric and soldered securely. Form a full radius on end of tube, remove all excess solder. Use chart for cable requirements, reference: PM-386.

Caution: All foreign particles must be removed.

DATE 5-24-61
SH. 6 OF 15
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TMC SPECIFICATION NO. S-345/QDL

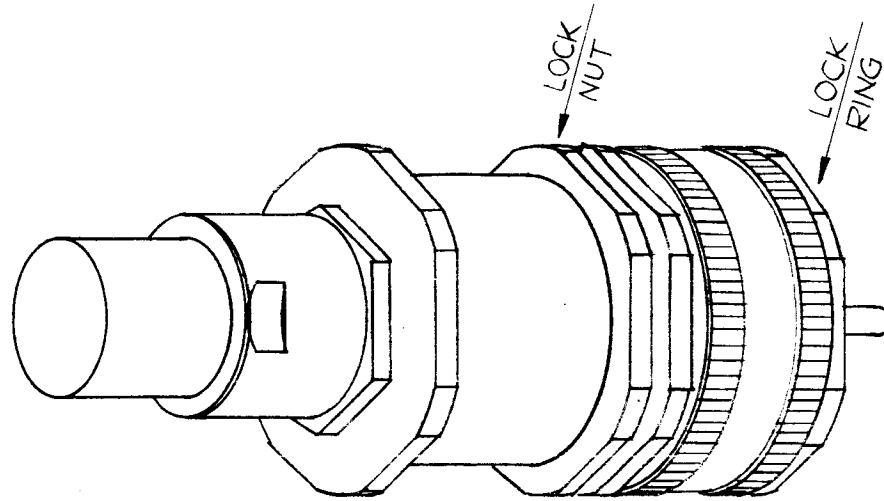
C

TITLE: CONNECTOR ASS'Y INSTRUCTIONS FOR QDL SERIES

JOB

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USING CABLE RG-17/U, 18/U, 35/U, 85/U, 164/U



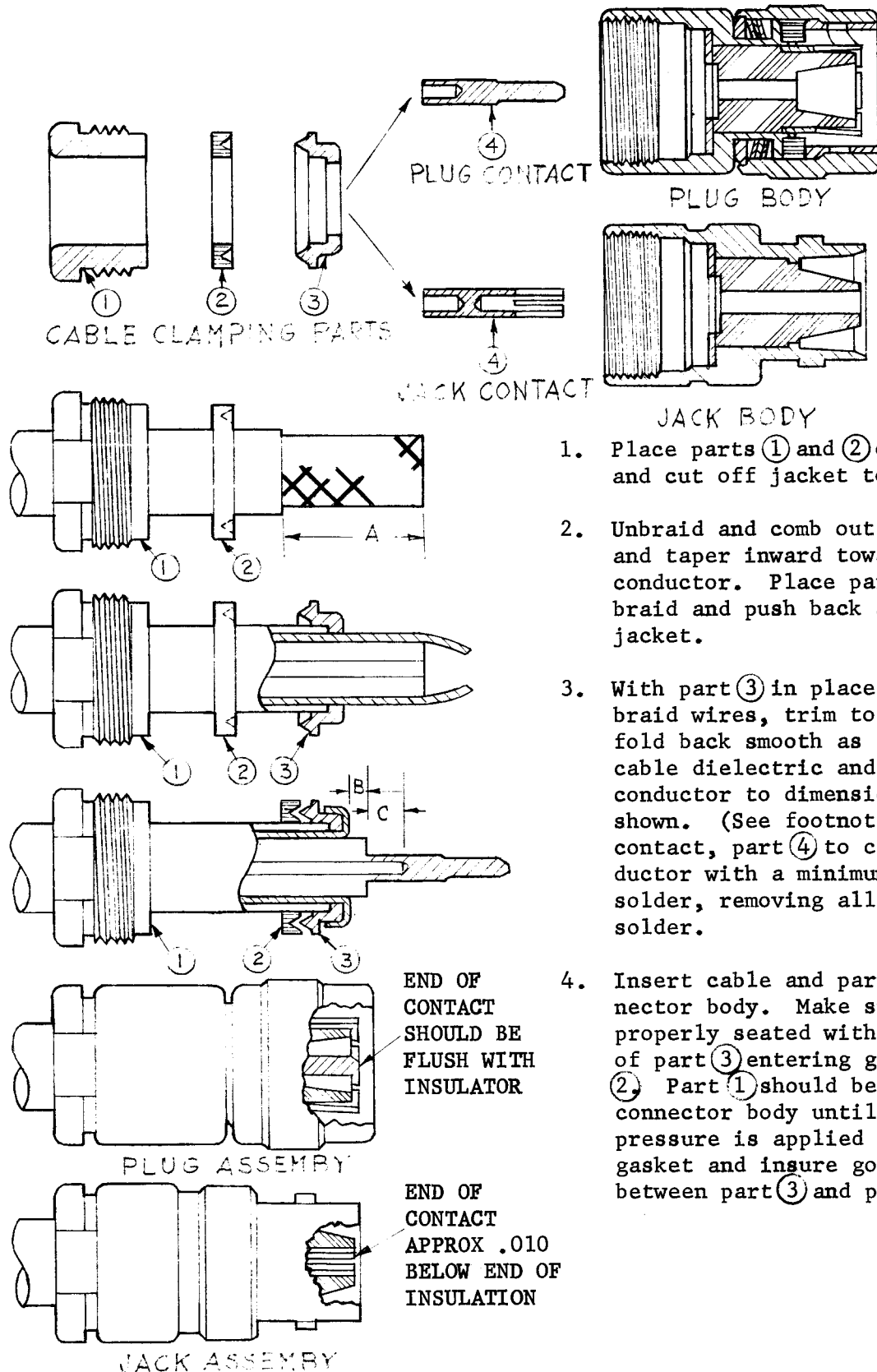
9. Tighten cap securely over clamp nut. Hand tighten lock nut and locking ring on body as shown. (Figure 5.)

CABLE	TUBE (PM-386)
RG-17/U RG-18/U	Not Required
RG-35/U RG-85/U RG-164/U	Required

TITLE: CONNECTOR ASSY FOR "C" SERIES JOB

APPROVED

USING CABLES RG-5/U, 6/U, 8/U, 9/U, 9A/U, 10/U, 59/U, 62/U, 71/U



DATE 6-22-61
 SH. 8 OF 15
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TMC SPECIFICATION NO. S-345/C

C

TITLE: CONNECTOR ASSY FOR "C" SERIES JOB

APPROVED

TYPE	DESCRIPTION	FOR USE WITH CABLE TYPES	DIMENSION A (INCHES)	DIMENSION B (INCHES)	DIMENSION C (INCHES)
UG-633/U	JACK	RG-5/U, RC-6/U			
UG-626/U	PLUG				
UG-629/U	PANEL JACK				
UG-630/U	PANEL JACK	RG-21/U	$\frac{5}{16}$	$\frac{3}{64}$	$\frac{5}{32}$
UG-570/U	PANEL JACK	RG-8/U, RC-9A/U,			
UG-571/U	PANEL JACK	RG-10/U, RC-11/U,			
UG-572/U	JACK	RG-12/U, RC-13/U,			
UG-573/U	PLUG				
UG-710/U	PLUG RIGHT ANGLE	RG-71/U	$\frac{17}{64}$	$\frac{5}{64}$	$\frac{1}{8}$
UG-707/U	PLUG	RG-14/U, RC-74/U	$\frac{11}{32}$		$\frac{11}{64}$
UG-708/U	PLUG	RG-17/U	$\frac{13}{32}$		$\frac{7}{32}$
UG-709/U	PLUG	RG-55/U, RC-58/U	$\frac{3}{8}$	$\frac{9}{64}$	$\frac{5}{32}$
UG-704/U	BULKHEAD JACK	↕	$\frac{11}{32}$	$\frac{1}{8}$	↕
UG-627/U	PLUG		RG-59/U, RC-62/U, & RG-71/U	$\frac{19}{32}$	
UG-631/U	PANEL JACK		$\frac{3}{8}$	$\frac{3}{16}$	$\frac{1}{8}$
UG-628/U	PLUG	RG-8, RC-9A/U	$\frac{19}{32}$	$\frac{11}{32}$	$\frac{5}{32}$
UG-632/U	PANEL JACK				

NOTE: For connectors which employ an insulating bushing for use with cables RG-62/U and RG-71/U subtract 1/32" from dimension "B" and add 1/32" to dimension "C".

DATE <u>5/24/61</u>		TMC SPECIFICATION NO. S-345/ST(1 1/8 70) C
SHEET <u>9</u> OF <u>15</u>		
AM COMPILED	CHECKED	TITLE: INSTALLATION 1-1/8" 70 OHM 7/8 CABLE
APPROVED		

Parts Included:

- 1- GL-118 (Dow Corning #4)
- 1- GL-117 Anti Seize Compound
- 1- 9630-85 Cutoff Tool

Refer to Accompanying Sketch and Assembly Drawing

1. Using a sharp tubing cutter, score cable 1" to 2" from end. Do not cut through aluminum jacket.
2. Using emery cloth, clean a section of the aluminum jacket approximately 1" long centered on scored groove. The emery cloth should be used in shoeshine fashion and all scratches and marks must be removed from jacket. The "O" ring used to seal the connector seats against this surface, and therefore, any scratches or defects may cause leaks in the finished assembly. Brush off sanding dust from jacket.
3. Grip end of cable in vise and flex cable gently until the aluminum jacket fractures at the scored groove. Do not break the Styrene Sleeve just under the aluminum jacket. Pull back on the cable until about 1/8" of Styrene Sleeve is exposed.
4. Using hot knife tool, cut Styrene sleeve and Helix down to center conductor flush with aluminum jacket. Pull off short end of jacket and Styrene. Remove burr from center conductor.
5. Slide clamp ring over cable with counterbore facing end of cable.
6. Check roundness and size of cable using sleeve as gage. The sleeve should slide freely over cable.
7. Push on wire coil over jacket until coil is entirely on jacket and rear end of coil is approximately 3/8" from end of jacket. Coat inside of sleeve with anti-seize compound. Use the compound sparingly and wipe off any excess before starting sleeve on cable.
8. Push sleeve over cable until wire end enters notch and is in line with thread groove. Turn sleeve clockwise, making certain that wire is engaged in thread and is not turning with sleeve. Turn on sleeve until it is completely on cable and cable end is approximately even with flange end of sleeve.
9. Bring up locating cap (9630-85) over center conductor and clamp to sleeve with clamp ring. This is used as an installation jig to assure correct placement of sleeve on cable and to cut center conductor to proper length. Put wrench on sleeve and turn entire assembly approximately 1 turn until end of cable jacket bottoms in locating cap counter-bore. Saw off center conductor flush with end of locating cap.

DATE 5/24/61

SHEET 10 OF 15

TMC SPECIFICATION NO. S-345/8T(187) C

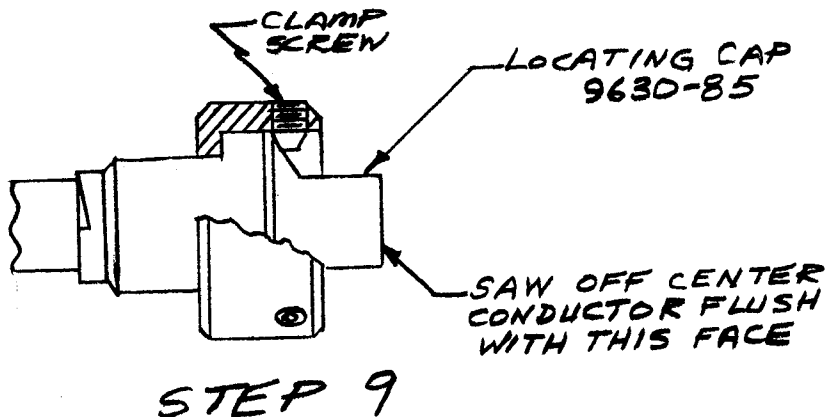
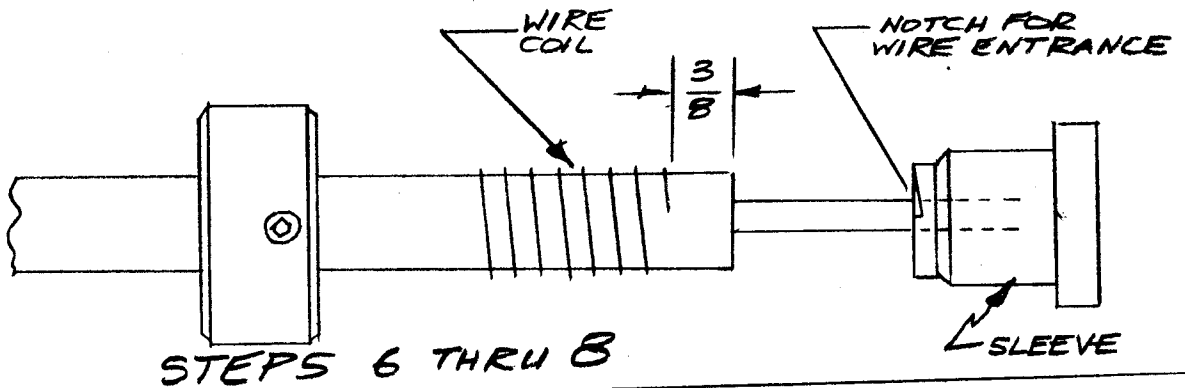
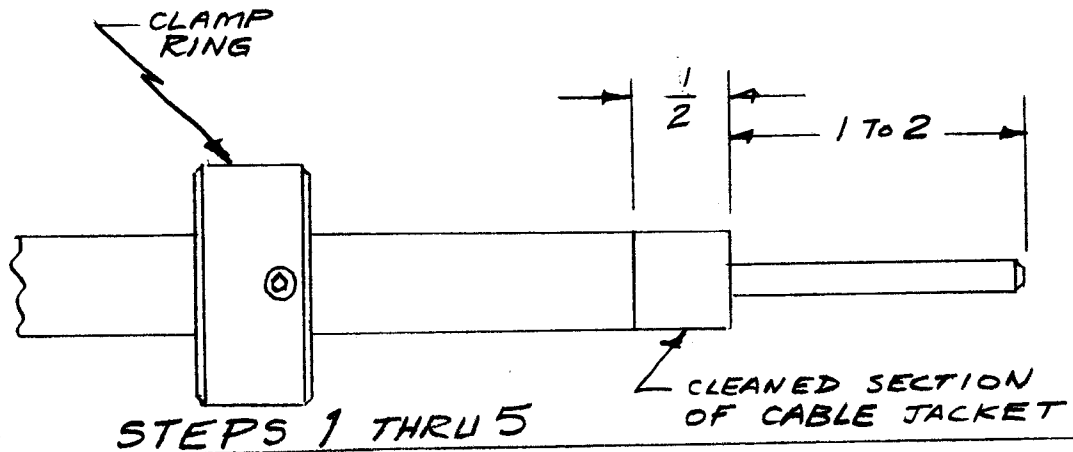
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TITLE: INSTALLATION 1-1/8" 70 OHM 7/8 CABLE

APPROVED

10. Remove locating cap and remove burr from center conductor.
11. Grease "O" ring with "O" ring grease (Dow Corning 4 Compound) and mount over cable end in sleeve counterbore.
12. Bring up connector body, making certain that center conductor enters center contact. Complete assembly by tightening the three clamp screws.



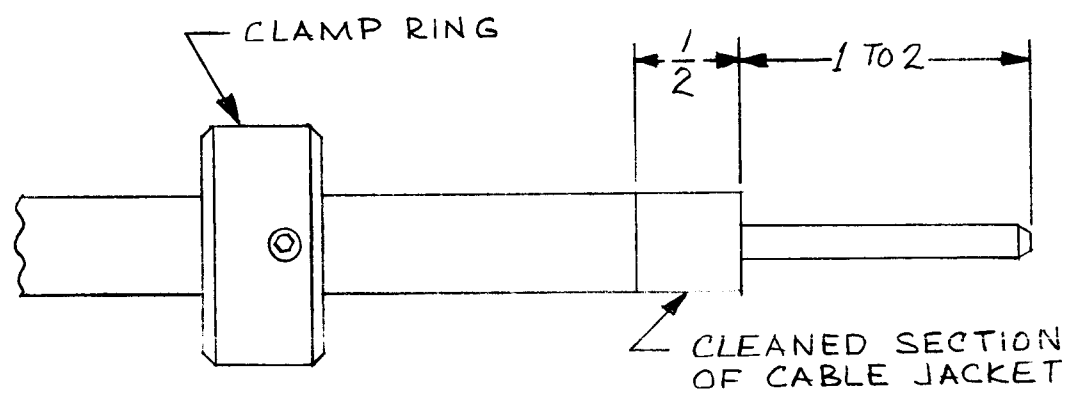
DATE <u>1/16/63</u> SH. <u>11</u> OF <u>15</u> COMPILED BY <i>[Signature]</i>	TMC SPECIFICATION NO. S	
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APPROVED CONNECTORS ACCOMMODATING 70 OHM 7/8 CABLE		
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DATE 1/16/63
SH. 12 OF 15
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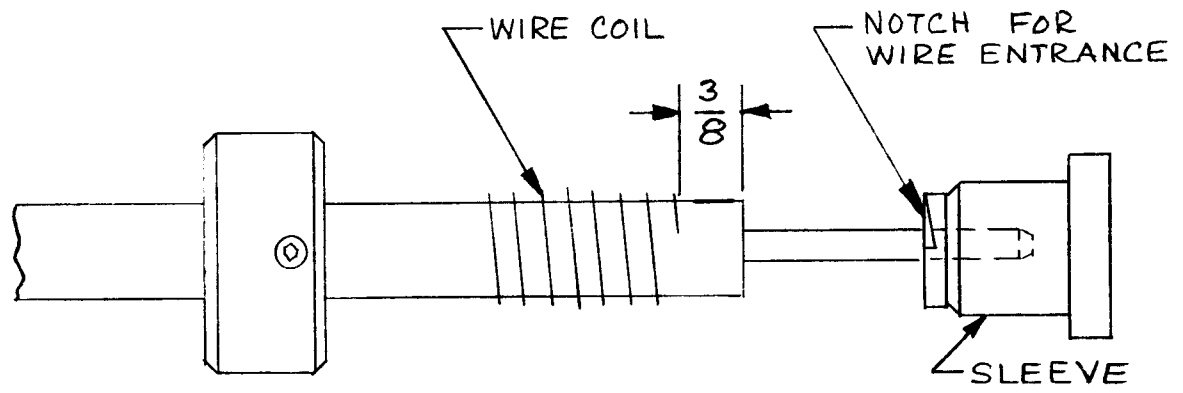
TMC SPECIFICATION NO. S

TITLE: INSTALLATION INSTRUCTIONS for JOB

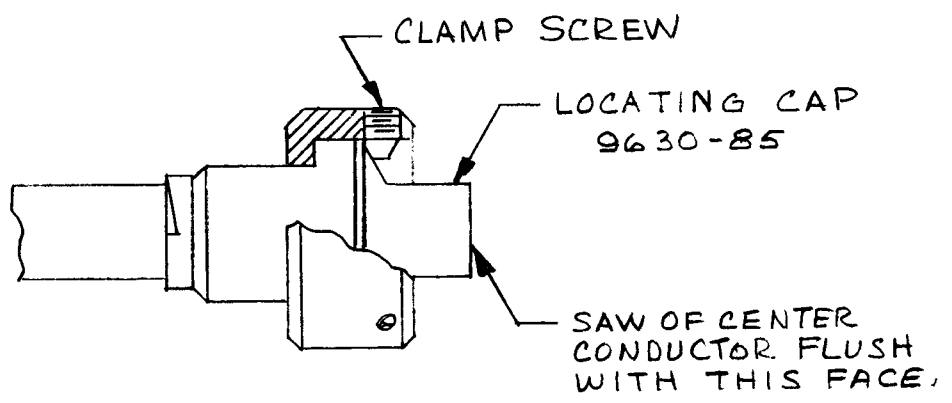
APPROVED CONNECTORS ACCOMMODATING 70 OHM 7/8 CABLE



INSTRUCTIONS 1 THRU 5



INSTRUCTIONS 6 THRU 8



INSTRUCTION 9

DATE August 19, 1963

SHEET 13 OF 15

TMC SPECIFICATION NO. S-345/1/2

C

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TITLE: ASSEMBLY INSTRUCTIONS FOR 1/2" BOX CONNECTOR

APPROVED

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1. Using a sharp tubing cutter, score cable 1" to 2" from end. Do not cut through aluminum jacket.
2. Using emery cloth, clean a section of the aluminum jacket approximately 1" long centered on scored groove. The emery cloth should be used in shoe-shine fashion and all scratches and marks must be removed from jacket. The "O" ring used to seal connector seats against this surface and therefore any scratches or defects may cause leaks in the finished assembly. Brush off sanding dust from jacket.
3. Grip end of cable in vise and flex cable gently until the aluminum jacket fractures at the scored groove. Do not break the Styrene sleeve just under the aluminum jacket. Pull back on the cable until about 1/8" of Styrene sleeve is exposed.
4. Using hot knife tool, cut Styrene sleeve and Helix down to center conductor flush with aluminum jacket. Pull off short end of jacket and Styrene.
5. Cut off center conductor 2-1/2 inches from end of cable. Remove cut-off burr from center conductor. Take care not to allow chips to enter cable.
6. Slide clamp ring over cable. Check roundness and size of cable using sleeve as gage. The sleeve should slide freely over cable.
7. Grease sleeve "O" ring with "O" ring grease, GL-118 Silicone compound, and install in sleeve.
8. Push on wire coil over jacket until coil is entirely on jacket and rear end of coil is approximately 3/8" from end of jacket. Coat inside of sleeve with anti-seize compound. Use the compound sparingly and wipe off any excess before starting sleeve on cable. (Compound GL-117).
9. Push sleeve over cable until wire end enters notch and is in line with thread groove. Turn sleeve clockwise, making certain that wire is engaged in thread and is not turning with sleeve. Turn on sleeve until cable butts internal shoulder.
10. Push bead over center conductor with countersink facing outward. Apply "O" ring grease, GL-118, Silicone compound, to small "O" ring and push it on center conductor. Push second bead on center conductor with countersink facing inward.
11. Place back-up plate over center conductor and push toward sleeve so that beads and back-up plate seat in sleeve counterbores.
12. Bring up sleeve assembly to box and place gasket over tapped holes in box.
13. Bring clamp ring up to box and clamp entire assembly with four (4) bolts and lockwashers.

DATE <u>2/6/63</u>		TMC SPECIFICATION NO. S-345/TCA	C
SHEET <u>14</u> OF <u>15</u>			
<i>[Signature]</i> COMPILED	<i>[Signature]</i> CHECKED	TITLE: INSTALLATION INSTRUCTIONS - TCA Series	
<i>[Signature]</i> APPROVED		1-5/8" Styroflex	

Refer to Accompanying Assembly Drawing

1. Using a sharp tubing cutter, score cable 3" from end. Do not cut through aluminum jacket.
2. Using emery cloth, clean a section of the aluminum jacket approximately 1" long centered on scored groove. The emery cloth should be used in shoeshine fashion and all scratches and marks must be removed from jacket. The "O" ring used to seal connector seats against this surface and therefore any scratches or defects may cause leaks in the finished assembly. Brush off sanding dust from jacket.
3. Grip end of cable in vise and flex cable gently until the aluminum jacket fractures at the scored groove. Do not break the Styrene sleeve just under the aluminum jacket. Pull back on the cable until about 1/8" of Styrene sleeve is exposed.
4. Using hot knife tool, cut Styrene sleeve and Helix down to center conductor flush with aluminum jacket. Pull off short end of jacket and Styrene.
5. Saw off center conductor .061 from end of cable. Make saw cut carefully so that end of center conductor is straight and square, with cable axis. Remove inside and outside burrs from center conductor, being careful to keep chips out of cable.
6. Insert female contact assembly (female contact, anchor screw and anchor) into center conductor of cable. If anchor is difficult to enter in center conductor, unscrew anchor several turns on screw. Insert screwdriver into head of anchor screw and push straight into center conductor until anchor screw and female contact shoulder. Tighten anchor screw until female contact is firmly seated in center conductor.
7. Separate sleeve from connector at clamp.
8. Push on wire coil over jacket until coil is entirely on jacket and rear end of coil is approximately 3/8" from end of jacket.
9. Push sleeve over cable until wire end enters notch and is in line with thread groove. Turn sleeve clockwise, making certain that wire is engaged in thread and is not turning with sleeve. Turn on sleeve until cable extends beyond sleeve 1/32".
10. Grease sleeve "O" ring with "O" ring grease, Dow Corning No. 4 Compound, and install in sleeve.
11. Reassemble connector with sleeve by mating center conductor and tightening clamp.

DATE 2/6/63
SHEET 15 OF 15

TMC SPECIFICATION NO. S-345/TCA

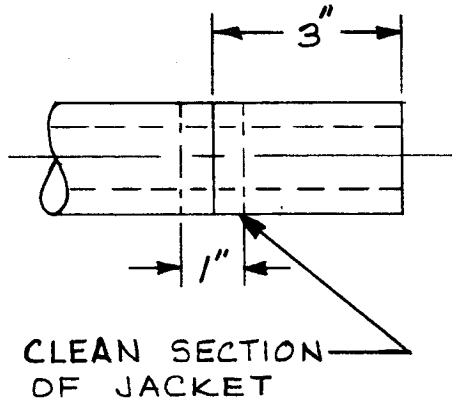
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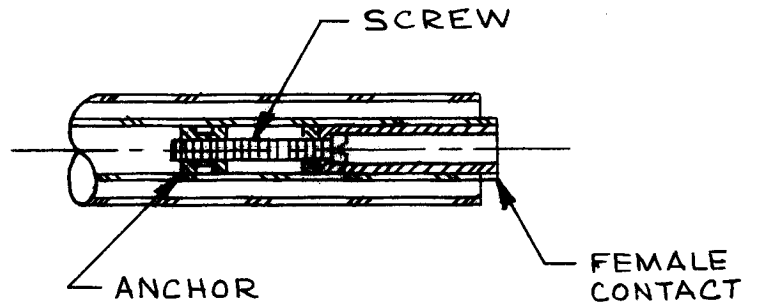
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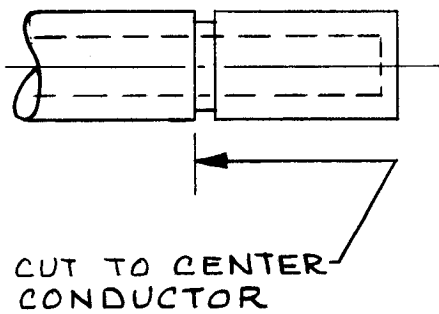
1-5/8" Styroflex



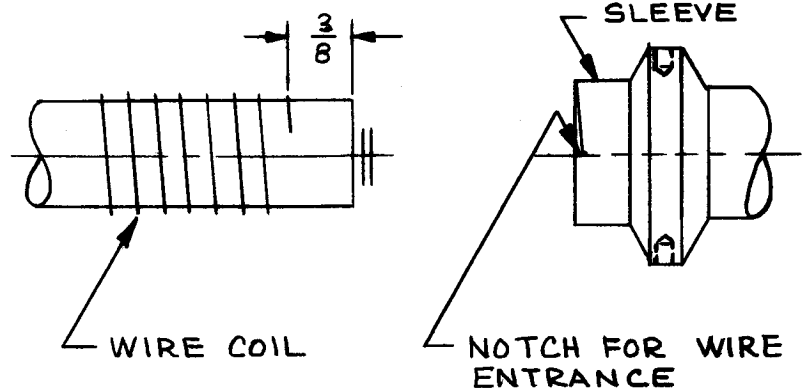
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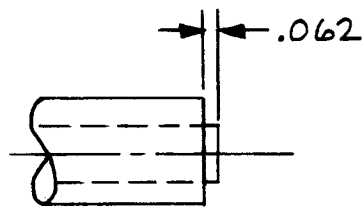
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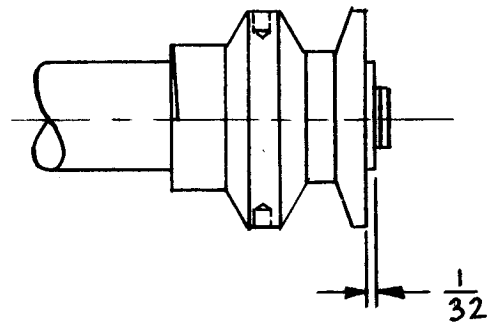
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