

**NOTES:**  
 DRAWING PREPARED IN  
 ACCORDANCE WITH  
 DOD-STD-100.

REVISIONS			
LTR	DESCRIPTION	DATE	APVD
AF	BW8393 – A&C Consolidation Miscellaneous	98-05-04	JMD
AG	BX4036 – Miscellaneous, Return to Records 439-7397 thru 439-7399 Convert to lleaf	01-03-29	JMD

Statement A, Unlimited

1.0 Scope: This drawing details the requirements for a polytetrafluoroethylene (PTFE) insulated hook-up wire, in accordance with MIL-W-16878, except as noted herein.

- The part number is the ten (10) digit drawing number as specified in Table I.
- Paragraph(s), table(s) and/or figure(s) followed by "■" indicate a change by the latest revision.
- All sheets are the same revision status.

<b>FOR SUGGESTED SOURCES OF SUPPLY, SEE ROCKWELL COLLINS DRAWING 126-8035-010 LIST NO II</b>	TA	SEE LIST	USE RCPN
<b>SUGGESTED SOURCES OF SUPPLY</b>	CAL	CAGE CODE	VENDOR PN

<b>UM Feet (FT)</b>		<b>VENDOR ITEM DRAWING</b>			
<b>CONTRACT NO</b>		<b>Rockwell Collins, Inc.</b> 400 Collins Rd NE Cedar Rapids, IA 52498			
PREP C. Schwach					
CHK J. Davis 56-06-18		<b>Wire, Electrical</b>			
ENGR C. Schwach APVD 91-12-13					
DOCUMENT GENERATED USING INTERLEAF		SIZE <b>A</b>	CAGEC <b>13499</b>	DWG NO <b>439-7300/7396</b>	REV LTR <b>AG</b>
<b>DO NOT REVISE MANUALLY</b>		SCALE NONE		SHEET 1 OF 7	

2.0 Applicable Documents: The following documents of the issue in effect on the date of invitation for bids form a part of this drawing to the extent specified herein.

Military Specification

MIL-W-16878/4 Wire, Electrical, Polytetrafluoroethylene (PTFE) Insulated, 200°C, 600 Volts, Extruded Insulation

Military Standard

MIL-STD-202 Test Methods for Electronic and Electrical Component Parts

3.0 Requirements: Wire furnished to this drawing shall be in accordance with MIL-W-16878/4, except as noted herein.

3.1 Electrical:

3.1.1 Voltage Rating: 600 volts Root Means Square (RMS) maximum.

3.2 Mechanical:

3.2.1 Conductor: Silver plated copper covered steel (copperweld) wire having 40% minimum conductivity, 11.6 pounds minimum breaking strength and 10% minimum elongation.

3.2.1.1 Wire Size: 26 American Wire Gauge (AWG).

3.2.1.2 Minimum Stranding Combination: 7 strands of 34 AWG.

3.2.1.3 Conductor Diameter: 0.019 ± .001 inches.

3.2.2 Insulation: Extruded polytetrafluoroethylene (PTFE).

3.2.2.1 Color: See Table I

3.2.2.2 Elongation: 150% minimum.

3.2.3 Markings: As a minimum, marking shall include the manufacturer's name or cage code, and the manufacturers part number. Where unit size precludes marking, markings may be on the unit or the smallest unit container.

3.3 Environmental: See 3.0

3.3.1 Solderability: Test in accordance with MIL-STD-202, Method 208.

3.4 Temperature Rating: 200°C.

3.5 Overall Diameter: 0.043 inch maximum.  
0.035 inch minimum.

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4.0 Quality Assurance Provisions:

4.1 Qualification Requirements: Qualification shall consist of the necessary tests and inspections required to verify conformance to section 3.0.

4.2 Quality Conformance Inspection: The suppliers shall be responsible for those in-process controls and inspections necessary to supply a product consistently conforming to the requirements of this drawing.

The procuring activity reserves the right to inspect for any of the requirements of this drawing to determine the acceptability of a lot and to reject nonconforming parts or lots containing nonconforming parts, on the basis of the test results so obtained.

4.3 Design Change Approval: Any changes in form, fit, function, materials, or performance that affect the part or materials defined by this drawing, must be approved by the cognizant procuring activity prior to the incorporation of the proposed changes.

5.0 Preparation For Delivery:

5.1 The parts shall be packaged in a manner that will afford adequate protection against contamination, corrosion, deterioration and physical damage during shipment and storage. Parts shall be packaged so they will be easily accessible without damaging the parts.

6.0 Notes: The information contained in this section is for reference only.

6.1 Identification of the suggested source(s) of supply herein is not to be construed as a guarantee of present or continued availability as a source of supply for the item(s).

6.2 Reference military part number: M16878/4CDB42. Includes reference part number, body color, tracers, color code.

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**TABLE I**

Rockwell Collins Part Number, Body Color, Tracers and Military Part Number Reference

Rockwell Collins Part Number	Body Color	1st Tracer	2nd Tracer	Military Part Number M16878/4CDB (Ref)*
439-7300-000	White			9
439-7301-000	White	Black		90
439-7302-000	White	Brown		91
439-7303-000	White	Red		92
439-7304-000	White	Orange		93
439-7305-000	White	Green		95
439-7306-000	White	Blue		96
439-7307-000	White	Black	Red	902
439-7308-000	White	Black	Orange	903
439-7309-000	White	Black	Green	905
439-7310-000	White	Black	Blue	906
439-7311-000	White	Brown	Red	912
439-7312-000	White	Brown	Orange	913
439-7313-000	White	Brown	Green	915
439-7314-000	White	Brown	Blue	916
439-7315-000	White	Red	Orange	923
439-7316-000	White	Red	Green	925
439-7317-000	White	Red	Blue	926
439-7318-000	White	Orange	Green	935
439-7319-000	White	Orange	Blue	936
439-7320-000	White	Green	Blue	956
439-7321-000	White	Black	Black	900
439-7322-000	White	Black	Brown	901
439-7323-000	White	Black	Yellow	904
439-7324-000	White	Black	Violet	907
439-7325-000	White	Black	Gray	908
439-7326-000	White	Brown	Black	910
439-7327-000	White	Brown	Brown	911

(CONTINUED ON FOLLOWING SHEET)

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**TABLE I (CONTINUED)**

Rockwell Collins Part Number, Body Color, Tracers and Military Part Number Reference

Rockwell Collins Part Number	Body Color	1st Tracer	2nd Tracer	Military Part Number M16878/4CDB (Ref)*
439-7328-000	White	Brown	Yellow	914
439-7329-000	White	Brown	Violet	917
439-7330-000	White	Brown	Gray	918
439-7331-000	White	Red	Black	920
439-7332-000	White	Red	Brown	921
439-7333-000	White	Red	Red	922
439-7334-000	White	Red	Yellow	924
439-7335-000	White	Red	Violet	927
439-7336-000	White	Red	Gray	928
439-7337-000	White	Orange	Black	930
439-7338-000	White	Orange	Brown	931
439-7339-000	White	Orange	Red	932
439-7340-000	White	Orange	Orange	933
439-7341-000	White	Orange	Yellow	934
439-7342-000	White	Orange	Violet	937
439-7343-000	White	Orange	Gray	938
439-7344-000	White	Yellow	Black	940
439-7345-000	White	Yellow	Brown	941
439-7346-000	White	Yellow	Red	942
439-7347-000	White	Yellow	Orange	943
439-7348-000	White	Yellow	Yellow	944
439-7349-000	White	Yellow	Green	945
439-7350-000	White	Yellow	Blue	946
439-7351-000	White	Yellow	Violet	947
439-7352-000	White	Yellow	Gray	948
439-7353-000	White	Green	Black	950
439-7354-000	White	Green	Brown	951
439-7355-000	White	Green	Red	952

(CONTINUED ON FOLLOWING SHEET)

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SCALE NONE		SHEET 5	

**TABLE I (CONTINUED)**

Rockwell Collins Part Number, Body Color, Tracers and Military Part Number Reference

Rockwell Collins Part Number	Body Color	1st Tracer	2nd Tracer	Military Part Number M16878/4CDB (Ref)*
439-7356-000	White	Green	Orange	953
439-7357-000	White	Green	Yellow	954
439-7358-000	White	Green	Green	955
439-7359-000	White	Green	Violet	957
439-7360-000	White	Green	Gray	958
439-7361-000	White	Blue	Black	960
439-7362-000	White	Blue	Brown	961
439-7363-000	White	Blue	Red	962
439-7364-000	White	Blue	Orange	963
439-7365-000	White	Blue	Yellow	964
439-7366-000	White	Blue	Green	965
439-7367-000	White	Blue	Blue	966
439-7368-000	White	Blue	Violet	967
439-7369-000	White	Blue	Gray	968
439-7370-000	White	Violet	Black	970
439-7371-000	White	Violet	Brown	971
439-7372-000	White	Violet	Red	972
439-7373-000	White	Violet	Orange	973
439-7374-000	White	Violet	Yellow	974
439-7375-000	White	Violet	Green	975
439-7376-000	White	Violet	Blue	976
439-7377-000	White	Violet	Violet	977
439-7378-000	White	Violet	Gray	978
439-7379-000	White	Gray	Black	980
439-7380-000	White	Gray	Brown	981
439-7381-000	White	Gray	Red	982
439-7382-000	White	Gray	Orange	983
439-7383-000	White	Gray	Yellow	984

(CONTINUED ON FOLLOWING SHEET)

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SCALE NONE		SHEET 6	

**TABLE I (CONTINUED)**

Rockwell Collins Part Number, Body Color, Tracers and Military Part Number Reference

Rockwell Collins Part Number	Body Color	1st Tracer	2nd Tracer	Military Part Number M16878/4CDB (Ref)*
439-7384-000	White	Gray	Green	985
439-7385-000	White	Gray	Blue	986
439-7386-000	White	Gray	Violet	987
439-7387-000	White	Gray	Gray	988
439-7388-000	Yellow	Black		40
439-7389-000	Yellow	Brown		41
439-7390-000	Yellow	Red		42
439-7391-000	Yellow	Orange		43
439-7392-000	Yellow	Green		45
439-7393-000	Yellow	Blue		46
439-7394-000	Yellow	Violet		47
439-7395-000	Yellow	Gray		48
439-7396-000	White	Yellow		94

Notes:

- \* Military designation for M16878/4CDB does not exist and remains as reference only.

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