

DWG NO
439-5200/5239-000

SH
1

REVISIONS			
LTR	DESCRIPTION	DATE	APVD
J	AW9302 - MISCELLANEOUS	93-11-11	GAR
K	AZ3958 - OBSOLETE 439-5228-000 -5229, -5230, -5232, THROUGH -5239. NONPREFER DRAWING. MISC.	96-11-27	SJK
L	BW8453 - A&C CONSOLIDATION REINTATED 439-5228, -5229, -5230, -5232 THROUGH -5239. REINSTATED DOCUMENT TO PREFERRED	98-05-21	JMD
M	BW3931 - MISCELLANEOUS	98-08-31	JMD

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

STATEMENT A, UNLIMITED

1.0 **SCOPE:** THIS DRAWING DETAILS A SINGLE SHIELDED AND JACKETED
POLYTETRAFLUOROETHYLENE (PTFE) INSULATED HOOK-UP WIRE.

THE PART NUMBER IS AS SPECIFIED IN TABLE I.

PARAGRAPH(S), TABLE(S), AND/OR FIGURE(S) FOLLOWED BY "I" INDICATE A
CHANGE BY THE LATEST REVISION.

SUGGESTED SOURCES OF SUPPLY	CAGE CODE	VENDOR PART NO.	CAL
BELDEN WIRE AND CABLE, RICHMOND, IN	16428	SEE TABLE II	TA
QUIRK WIRE, W. BROOKFIELD, MA	24868	SEE TABLE II	TA
THERMAX, FLUSHING, NY	12814	SEE TABLE II	TA
HARBOUR IND., SHELBURNE, VT	27478	SEE TABLE II	TA

U/M: SEE 6.2 SPECIFICATION CONTROL DRAWING

CONTRACT NO		ROCKWELL COLLINS, INC.			
PREP J. MICHALOWSKI 62-10-10		400 COLLINS ROAD NE		CEDAR RAPIDS, IA 52498	
CHK P. CLARK 62-10-15		CABLE, ELECTRICAL			
APVD J. MCDANIEL 62-10-15	SIZE A	CAGEC 13499	DWG NO 439-5200-000 THRU 439-5239-000	REV M	
SCALE NONE			SHEET 1 OF 5		

RE-IMAGED WITHOUT CHANGE ON 2011-7-5- PDM RELEASED

2.0 APPLICABLE DOCUMENTS: THE FOLLOWING DOCUMENT, OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS FORMS A PART OF THIS DRAWING TO THE EXTENT SPECIFIED HEREIN.

MILITARY STANDARDS

MIL-STD-202

TEST METHODS FOR ELECTRONIC AND ELECTRICAL COMPONENT PARTS

3.0 REQUIREMENTS:

3.1 ELECTRICAL:

3.1.1 VOLTAGE RATING: 600 VOLTS ROOT MEAN SQUARE (RMS) MAXIMUM.

3.2 MECHANICAL:

3.2.1 CONDUCTOR: SILVER PLATED SOFT DRAWN COPPER.

3.2.2 WIRE SIZE: 22 AMERICAN WIRE GAUGE (AWG).

3.2.3 MINIMUM STRANDING COMBINATION: 7 STRANDS OF 30 AWG.

3.2.4 INSULATION: EXTRUDED PTFE.

3.2.5 COLOR: SEE TABLE I.

3.2.6 SHIELD: A SINGLE BRAID OF 36 AWG SILVER-PLATED SOFT OR DRAWN AND ANNEALED COPPER WIRE WITH 90% MINIMUM COVERAGE.

3.2.7 OUTER JACKET: EXTRUDED FEP, COLOR WHITE.

3.2.8 SOLDERABILITY: IN ACCORDANCE WITH MIL-STD-202, METHOD 208.

3.2.9 OVERALL DIAMETER: O.D. OVER INSULATION 0.054 INCH MAXIMUM. FINISHED 0.101 INCH MAXIMUM.

3.3 ENVIRONMENTAL:

3.3.1 TEMPERATURE RATING: 200°C.

SIZE A	CAGEC 13499	DWG NO 439-5200-000 THRU 439-5239-000	REV M
SCALE NONE		SHEET 2	

4.0 QUALITY ASSURANCE PROVISIONS:

4.1 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 TEST RESULTS SO OBTAINED.

4.2 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, DETERIORATION, CORROSION, 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 HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM(S).

6.2 UNIT OF MEASURE: FEET

SIZE A	CAGEC 13499	DWG NO 439-5200-000 THRU 439-5239-000	REV M
SCALE NONE		SHEET 3	

TABLE I
PART NUMBER, BODY COLOR, TRACER

ROCKWELL/COLLINS PART NUMBER	BODY COLOR	1ST TRACER	2ND TRACER	3RD TRACER
439-5200-000	BLACK			
439-5201-000	BROWN			
439-5202-000	RED			
439-5203-000	ORANGE			
439-5204-000	YELLOW			
439-5205-000	GREEN			
439-5206-000	BLUE			
439-5207-000	VIOLET			
439-5208-000	GRAY			
439-5209-000	WHITE			
439-5210-000	WHITE	BLACK		
439-5211-000	WHITE	BROWN		
439-5212-000	WHITE	RED		
439-5213-000	WHITE	ORANGE		
439-5214-000	WHITE	GREEN		
439-5215-000	WHITE	BLUE		
439-5216-000	WHITE	BLACK	RED	
439-5217-000	WHITE	BLACK	ORANGE	
439-5218-000	WHITE	BLACK	GREEN	
439-5219-000	WHITE	BLACK	BLUE	
439-5220-000	WHITE	BROWN	RED	
439-5221-000	WHITE	BROWN	ORANGE	
439-5222-000	WHITE	BROWN	GREEN	
439-5223-000	WHITE	BROWN	BLUE	
439-5224-000	WHITE	RED	ORANGE	
439-5225-000	WHITE	RED	GREEN	
439-5226-000	WHITE	RED	BLUE	
439-5227-000	WHITE	ORANGE	GREEN	
439-5228-000	WHITE	ORANGE	BLUE	
439-5229-000	WHITE	GREEN	BLUE	
439-5230-000	WHITE	BLACK	RED	ORANGE
439-5231-000	WHITE	BLACK	RED	GREEN
439-5232-000	WHITE	BLACK	RED	BLUE
439-5233-000	WHITE	BROWN	RED	ORANGE
439-5234-000	WHITE	BROWN	RED	GREEN
439-5235-000	WHITE	BROWN	RED	BLUE
439-5236-000	WHITE	RED	ORANGE	GREEN
439-5237-000	WHITE	RED	ORANGE	BLUE
439-5238-000	WHITE	RED	GREEN	BLUE
439-5239-000	WHITE	ORANGE	GREEN	BLUE



TABLE II
ROCKWELL PART NUMBER, VENDOR PART NUMBER

ROCKWELL/ COLLINS PART NUMBER	QUIRK WIRE PART NUMBER	BELDEN PART NUMBER	THERMAX PART NUMBER	HARBOUR PART NUMBER
439-5200-000	439-5200-000	439-5200-000	439-5200-000	439-5200-000
439-5201-000	439-5201-000	439-5201-000	439-5201-000	439-5201-000
439-5202-000	439-5202-000	439-5202-000	439-5202-000	439-5202-000
439-5203-000	439-5203-000	439-5203-000	439-5203-000	439-5203-000
439-5204-000	439-5204-000	439-5204-000	439-5204-000	439-5204-000
439-5205-000	439-5205-000	439-5205-000	439-5205-000	439-5205-000
439-5206-000	439-5206-000	439-5206-000	439-5206-000	439-5206-000
439-5207-000	439-5207-000	439-5207-000	439-5207-000	439-5207-000
439-5208-000	439-5208-000	439-5208-000	439-5208-000	439-5208-000
439-5209-000	439-5209-000	439-5209-000	439-5209-000	439-5209-000
439-5210-000	439-5210-000	439-5210-000	439-5210-000	439-5210-000
439-5211-000	439-5211-000	439-5211-000	439-5211-000	439-5211-000
439-5212-000	439-5212-000	439-5212-000	439-5212-000	439-5212-000
439-5213-000	439-5213-000	439-5213-000	439-5213-000	439-5213-000
439-5214-000	439-5214-000	439-5214-000	439-5214-000	439-5214-000
439-5215-000	439-5215-000	439-5215-000	439-5215-000	439-5215-000
439-5216-000	439-5216-000	439-5216-000	439-5216-000	439-5216-000
439-5217-000	439-5217-000	439-5217-000	439-5217-000	439-5217-000
439-5218-000	439-5218-000	439-5218-000	439-5218-000	439-5218-000
439-5219-000	439-5219-000	439-5219-000	439-5219-000	439-5219-000
439-5220-000	439-5220-000	439-5220-000	439-5220-000	439-5220-000
439-5221-000	439-5221-000	439-5221-000	439-5221-000	439-5221-000
439-5222-000	439-5222-000	439-5222-000	439-5222-000	439-5222-000
439-5223-000	439-5223-000	439-5223-000	439-5223-000	439-5223-000
439-5224-000	439-5224-000	439-5224-000	439-5224-000	439-5224-000
439-5225-000	439-5225-000	439-5225-000	439-5225-000	439-5225-000
439-5226-000	439-5226-000	439-5226-000	439-5226-000	439-5226-000
439-5227-000	439-5227-000	439-5227-000	439-5227-000	439-5227-000
439-5228-000	439-5228-000	439-5228-000	439-5228-000	439-5228-000
439-5229-000	439-5229-000	439-5229-000	439-5229-000	439-5229-000
439-5230-000	439-5230-000	439-5230-000	439-5230-000	439-5230-000
439-5231-000	439-5231-000	439-5231-000	439-5231-000	439-5231-000
439-5232-000	439-5232-000	439-5232-000	439-5232-000	439-5232-000
439-5233-000	439-5233-000	439-5233-000	439-5233-000	439-5233-000
439-5234-000	439-5234-000	439-5234-000	439-5234-000	439-5234-000
439-5235-000	439-5235-000	439-5235-000	439-5235-000	439-5235-000
439-5236-000	439-5236-000	439-5236-000	439-5236-000	439-5236-000
439-5237-000	439-5237-000	439-5237-000	439-5237-000	439-5237-000
439-5238-000	439-5238-000	439-5238-000	439-5238-000	439-5238-000
439-5239-000	439-5239-000	439-5239-000	439-5239-000	439-5239-000