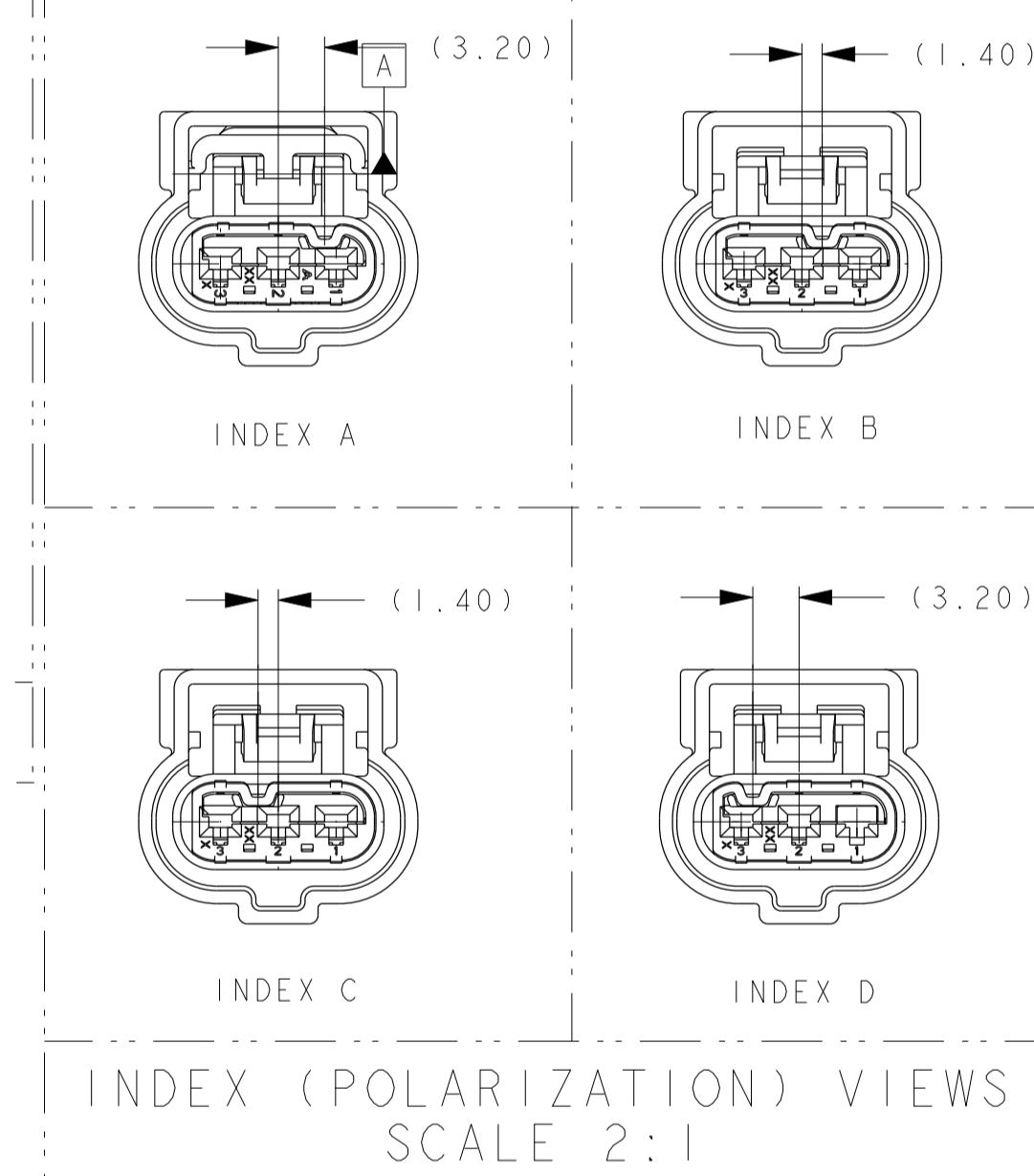
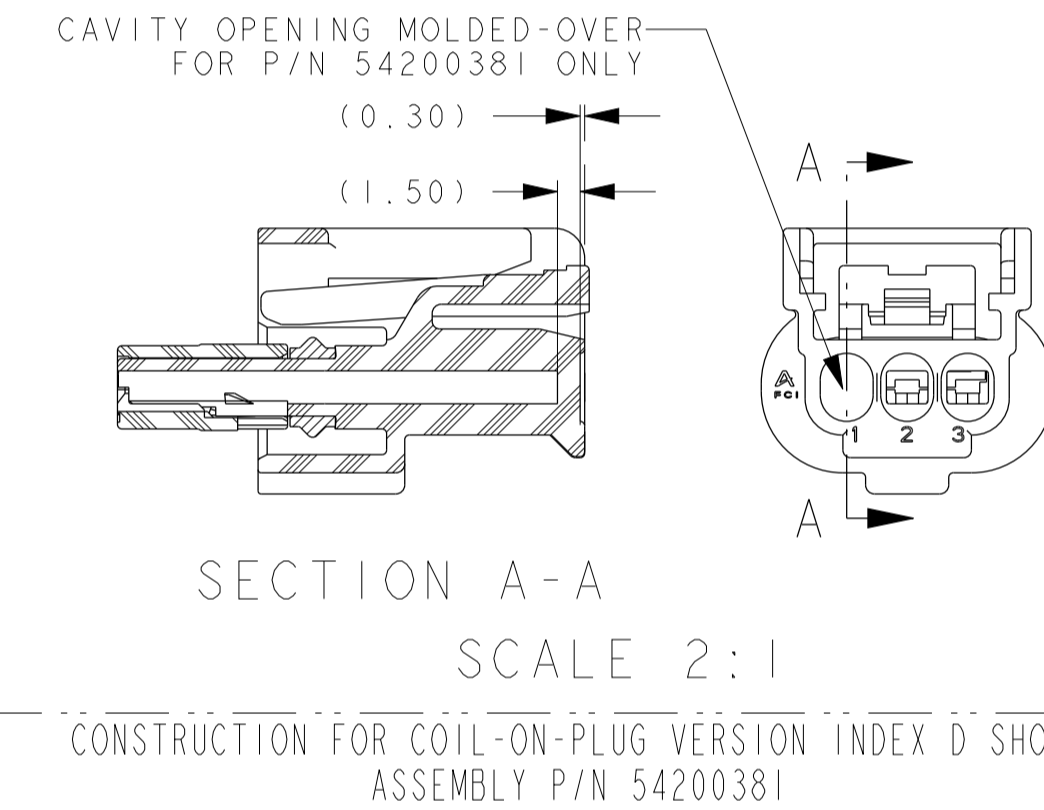
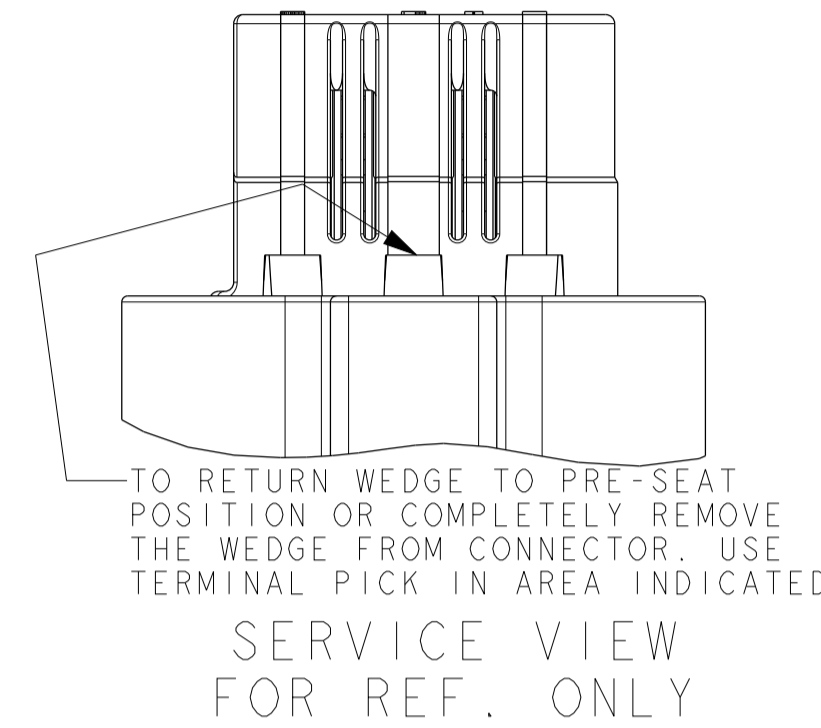
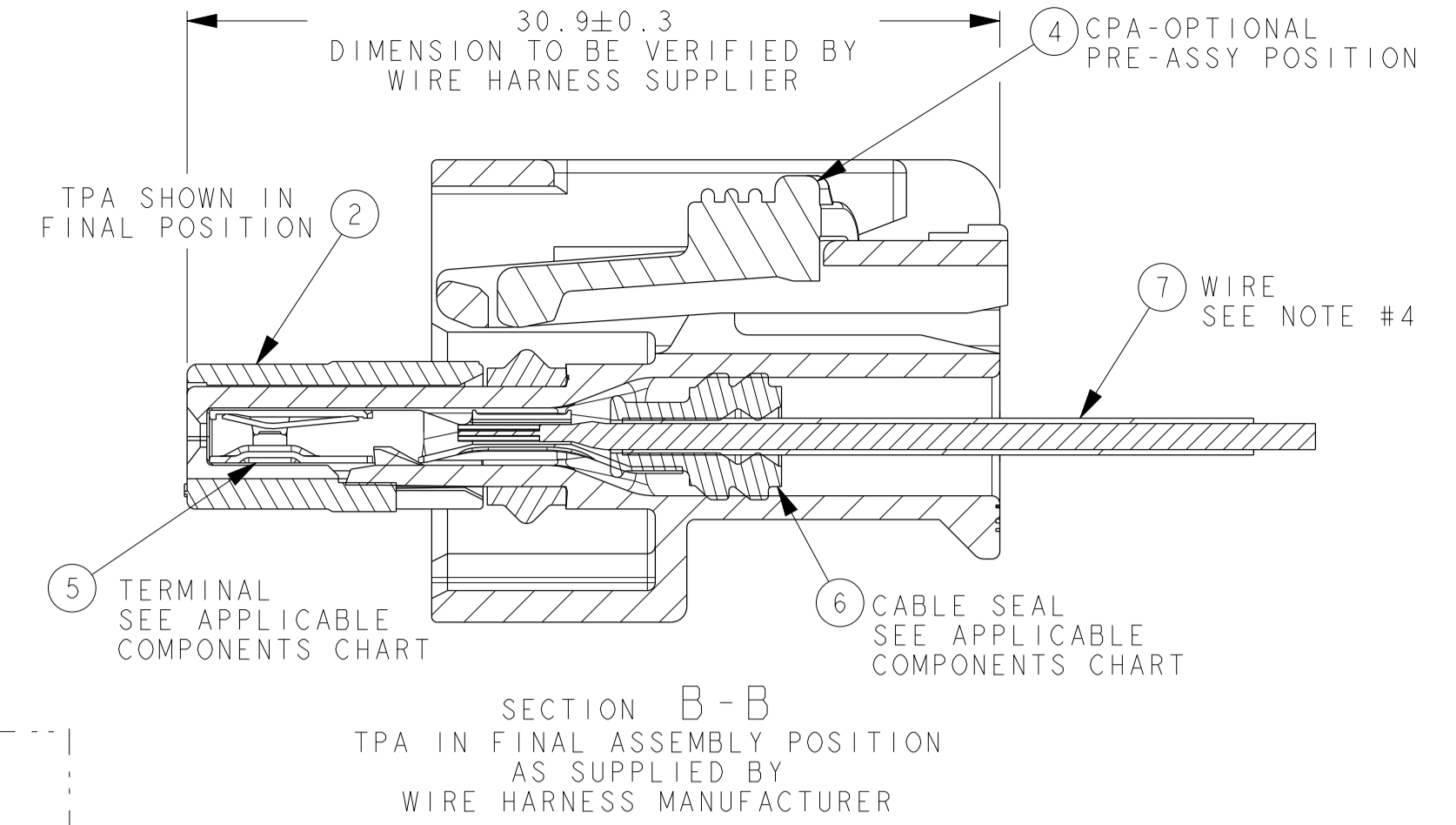
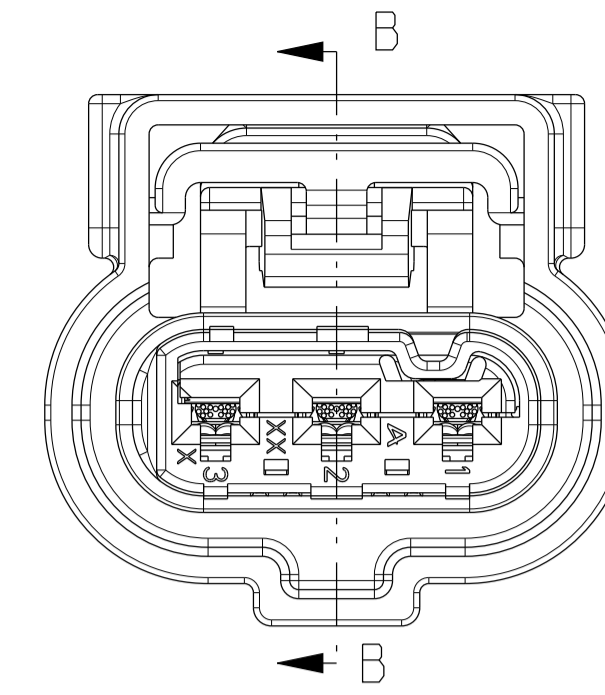
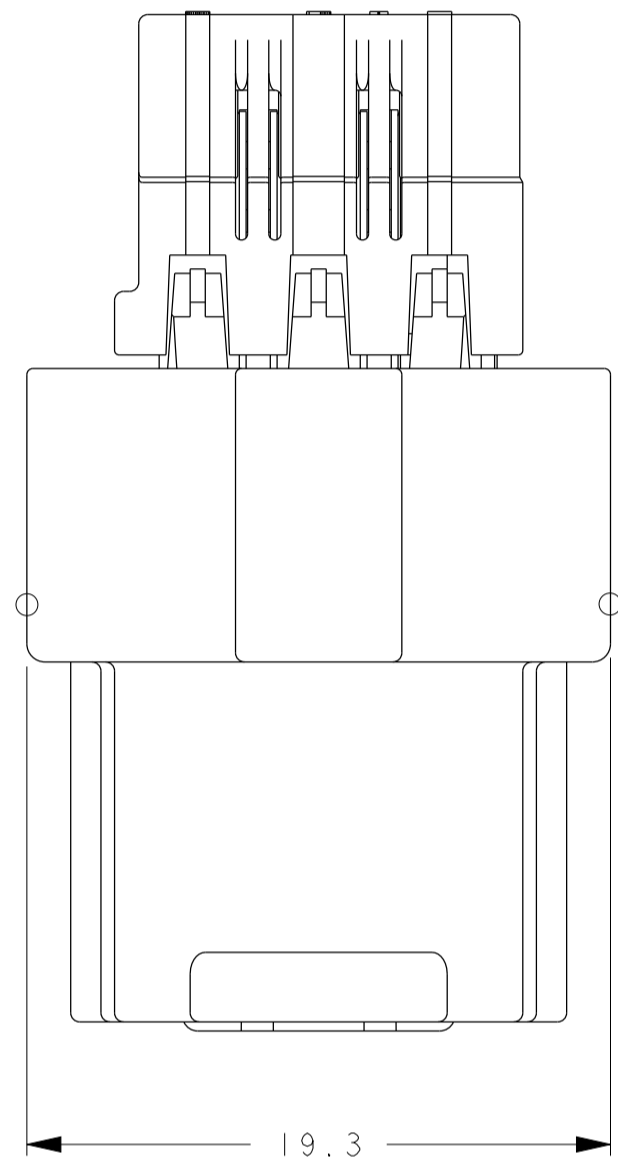


SECTION B-B WEDGE IN PRE-ASSEMBLY POSITION AS SUPPLIED BY CONNECTOR MANUFACTURER



ASSEMBLY P/N'S	PCL	KEY OPTION	COMPONENTS				
			INSULATOR (HOUSING)		TPA (DK. BLUE)	RING SEAL (BURNT ORANGE)	CPA (RED) (OPTIONAL)
			ITEM-1	ITEM-2	ITEM-3	ITEM-4	
54200378	H	A	BLACK	54200382	54200386		
54200379	H	B	LT GRAY	54200383	54200387		
54200380	H	C	BROWN	54200384	54200388		
54200381	H	D	DK GRAY	54200385	54200389		
F519600	H	A	BLACK	54200382	54200386	54200392	
F500900	H	B	LT GRAY	54200383	54200387		F752210
F600900	H	C	BROWN	54200384	54200388		
F177010	H	D	DK GRAY	54200385	54200389		

APPLICABLE COMPONENTS								
ITEM NO.	ITEM DESCRIPTION	PLATING OR COLOR	SUPPLIER	SUPPLIER COMP PART NUMBER	GRIP CODE	WIRE SIZE	INSULATION DIAMETER RANGE	MATERIAL/SPEC NO
5	1.20 SYSTEM TERMINAL	TIN	FCI	54001864	18	18-16 AWG 0.75-1.25mm ²	1.70mm-2.41mm	COPPER ALLOY / NA
	1.20 SYSTEM TERMINAL	TIN	FCI	54002006	20	22-20 AWG 0.35-0.50mm ²	1.20mm-1.90mm	COPPER ALLOY / NA
	1.20 SYSTEM TERMINAL	TIN/SILVER	FCI	54001866	18	18-16 AWG 0.75-1.25mm ²	1.70mm-2.41mm	COPPER ALLOY / NA
	1.20 SYSTEM TERMINAL	TIN/SILVER	FCI	54002007	20	22-20 AWG 0.35-0.50mm ²	1.20mm-1.90mm	COPPER ALLOY / NA
	1.20 SYSTEM TERMINAL	SILVER	FCI	F731400	18	18-16 AWG 0.75-1.25mm ²	1.70mm-2.41mm	COPPER ALLOY / NA
	1.20 SYSTEM TERMINAL	SILVER	FCI	F931400	20	22-20 AWG 0.35-0.50mm ²	1.20mm-1.90mm	COPPER ALLOY / NA
	1.20 SYSTEM TERMINAL	GOLD	FCI	54001863	18	18-16 AWG 0.75-1.25mm ²	1.70mm-2.41mm	COPPER ALLOY / NA
6	1.20 SYSTEM CABLE SEAL ROUND	RUST RED	FCI (QSR)	C528010 (A-0419)	-	18-16 AWG 1.00-1.25mm ²	1.90mm-2.41mm	SILICONE
	1.20 SYSTEM CABLE SEAL ROUND	BLUE	FCI (QSR)	54200391 (A-0131)	-	22-20 AWG 0.50-0.75mm ²	1.40mm-1.90mm	SILICONE
	1.20 SYSTEM CABLE SEAL ROUND	TAN	FCI (QSR)	C073510 (A-0419B)	-	0.35mm ²	1.20mm-1.40mm	SILICONE
1.20 SYSTEM CAVITY PLUG	GREEN	FCI (QSR)	C628010 (A-0412)	-	-	-	SILICONE	

NOTES:

- VALIDATED TO SAE/USCAR-2 REV 3 WITH THE FOLLOWING EXCEPTION(S):
 - SECTION 5.4.5 (Misc. Comp. Engage/Disengage)
 - CPA LOCKED TO PRE-STAGE 8N-30N (FCI REQUIREMENT)
 - SECTION 5.4.1 (Terminal - Connector Insertion/Extraction Force)
 - INSERTION OF TERMINAL INTO CAVITY NOT TO EXCEED 2IN
 - SECTION 5.4.4 (Polarization Feature Effectiveness) >160N FOR ALL COMBINATIONS
 - SECTION 5.4.2 (Connector-Connector Mating/Unmating Force) >95N UNMATING FORCE.
- VALIDATED TO THE FOLLOWING TEMP, VIBRATION, AND SEALING CLASSES:
 - GMW3191 SECTION 4.28 V4 T4 (155°C) WITH GOLD OR SILVER TERMINALS
 - SAE/USCAR-2 V3 T4 (150°C) WITH GOLD OR SILVER TERMINALS
 - SAE/USCAR-2 V3 T3 (125°C) WITH TIN/SILVER TERMINALS
 - SAE/USCAR-2 V2 T3 (125°C) WITH TIN TERMINALS
 - SAE/USCAR-2 SEALING S3 T4 (150°C) (ISO16750 9K EQUIVALENT)
- CONNECTOR MAY BE USED WITH THE FOLLOWING TERMINALS:
 - FCI APEX 1.2 TERMINALS LISTED IN THE APPLICABLE COMPONENTS CHART ON THIS DRAWING WITH WIRE SIZES DEFINED IN NOTE 4
 - SEE FCI DRAWING C18001-1-2-CUST FOR SPECIFIC TERMINAL DETAILS AND CRIMPING REQUIREMENTS
 - PLATING OF TERMINALS AND MATING DEVICE BLADES MUST BE COMPATIBLE
- CONNECTOR SYSTEM VALIDATED TO USCAR-2 REQUIREMENTS WITH THE FOLLOWING RANGE OF WIRE SIZES AND TYPES IN CONJUNCTION WITH APPROPRIATE COMPONENTS FOUND IN THE "APPLICABLE COMPONENTS" CHART:
 - AWG - WIRE SIZES: 22AWG - 16AWG
INSULATION DIAMETER: 1.50mm MIN - 2.41mm MAX
WIRE TYPE: MIL123-A, MS-8288, MS-9502 OR EQUIVALENT (STRUCTURE AND PROPERTIES ACCORDING TO SAE J1128)
 - METRIC - WIRE SIZES: 0.35mm² - 1.25mm²
INSULATION DIAMETER: 1.20mm MIN - 2.30mm MAX
WIRE TYPE: FLR2X, FLR9X OR EQUIVALENT (STRUCTURE AND PROPERTIES ACCORDING TO ISO 6722)
- CONTACT FCI ENGINEERING REGARDING USE OF OTHER WIRE SIZES AND /OR TYPES
WIRE AND INSULATION TYPE MUST BE APPROPRIATE FOR TEMPERATURE CLASS & APPLICATION ENVIRONMENT
- CONNECTOR IS MATE COMPATIBLE WITH DEVICES WHICH CONFORM WITH THE FOLLOWING USCAR INTERFACE SPECIFICATIONS:
 - 120-S-003-1-Z01 (WITH EWCAP-001 TYPE 120-T BLADES)
 - 120-S-003-1-Z02 (WITH EWCAP-001 TYPE 120-T BLADES)
- ANNUAL QUALITY REQUIREMENTS:
 - IT IS PERMISSIBLE TO PERFORM CONTINUOUS CONFORMANCE PER FCI SPECIFICATION #AQA-001 INSTEAD OF ANNUAL LAYOUT AND ANNUAL PV REQUIREMENTS OF 150 TSI16949 AND SAE/USCAR-2 REV 5. FOR TERMINAL TO CONNECTOR AND TPA TO CONNECTOR ONLY.
- SOURCE ID, MOLD & CAVITY ID SIGNIFIES TOOL OWNERSHIP, FOR REFERENCE
- (K) INDICATES IN-PROCESS INSPECTION FOR MANUFACTURING DIMENSIONS OR SPECIFICATIONS.

ECN-12-01303	APP CHRT	ADD 0.35 CABLE SEAL C073510, ADD 0.35mm ² and 22 AWG WIRE
PART BOM	REMOVE F534300, C434300, TEMP CLASS COLUMN	
B11	ADD INSULATION DIA RANGE TO APP CHART	
	REVISE NOTE 4	
12-00271	CHART	F752210 WAS 54200016 (NEW CPA), PCL UPDATED TO 'H', 0.75-1.25mm ² WAS 0.75-1.50mm ²
	NOTES	NOTE #4 WAS CORRECTED (0.50-1.25mm ² WAS 0.50-1.50mm ²)
11970	N13	CORRECTED DIMENSION: 33.30±0.75 WAS 33.1±0.3
11903	CHART	APPLICABLE COMPONENTS CHART REVISED
	CHART	F519600 WAS F400900 (CORRECTION)
11891	CHART	ADDED KEY OPTION D WITH CPA (F177010)
11838	CHART	APPLICABLE COMPONENTS CHART REVISED
	NOTES	REVISED NOTE #5
	CHART	CORRECTED PCL CODES
10700	ALL	REVISED AND REDRAWN IN FCI - CUSTOMER FRAME.
----	D16	ASSY P/N F5434300 FOR FLUOROSILICONE MATERIAL APPLICATION ADDED, CHART UPDATED WITH FLUOROSILICONE SEAL P/N'S (NOT AVAILABLE).
ECN-NO.	ZONE	CHANGE DESCRIPTION
PROJECT SPEC:	PACKAGING SPEC:	APPLICATION SPEC:
USCAR-2 REV 5	NONE	NONE
THIS DRAWING AND ALL OTHER INFORMATION CONTAINED THEREIN IS PROPRIETARY AND THE PROPERTY OF FCI. THIS DRAWING MAY NOT BE COPIED, REPRODUCED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE EXPRESSED WRITTEN PERMISSION OF FCI. FCI, Apr 10, 1999		
TOLERANCES - PLACE DIMS ± 0.25	MATERIAL: (SEE TABLE)	SURFACE FINISH
CONFORM TO: SEE NOTE 5	COLOR: SEE TABLE	
DO NOT MEASURE DRAWING	TOOL NO.:	ECO Loc. Code AN
DATE:	NAME:	TITLE:
2009-07-26	J. LAURIN	CHART ASSEMBLY - 3-WAY FEMALE
2010-09-22	Matt MAJORS	(12MM APEX SEALED CONNECTOR SYSTEM)
2010-09-22	Robert BAUMAN	
2010-09-22	Frank HOLLUB	
3 WAY SENSOMATE 12	AM030093	ECN NO.:
K29002		DOCUMENT UNDER PDS CONTROL, NO MODIFICATION ALLOWED OUTSIDE
DRAWING NUMBER	REV.	APPROVAL LEVEL
K29002	K	A1
STATE	SHEET	1
PART NUMBER	REV.	1
		SCALE 4:00