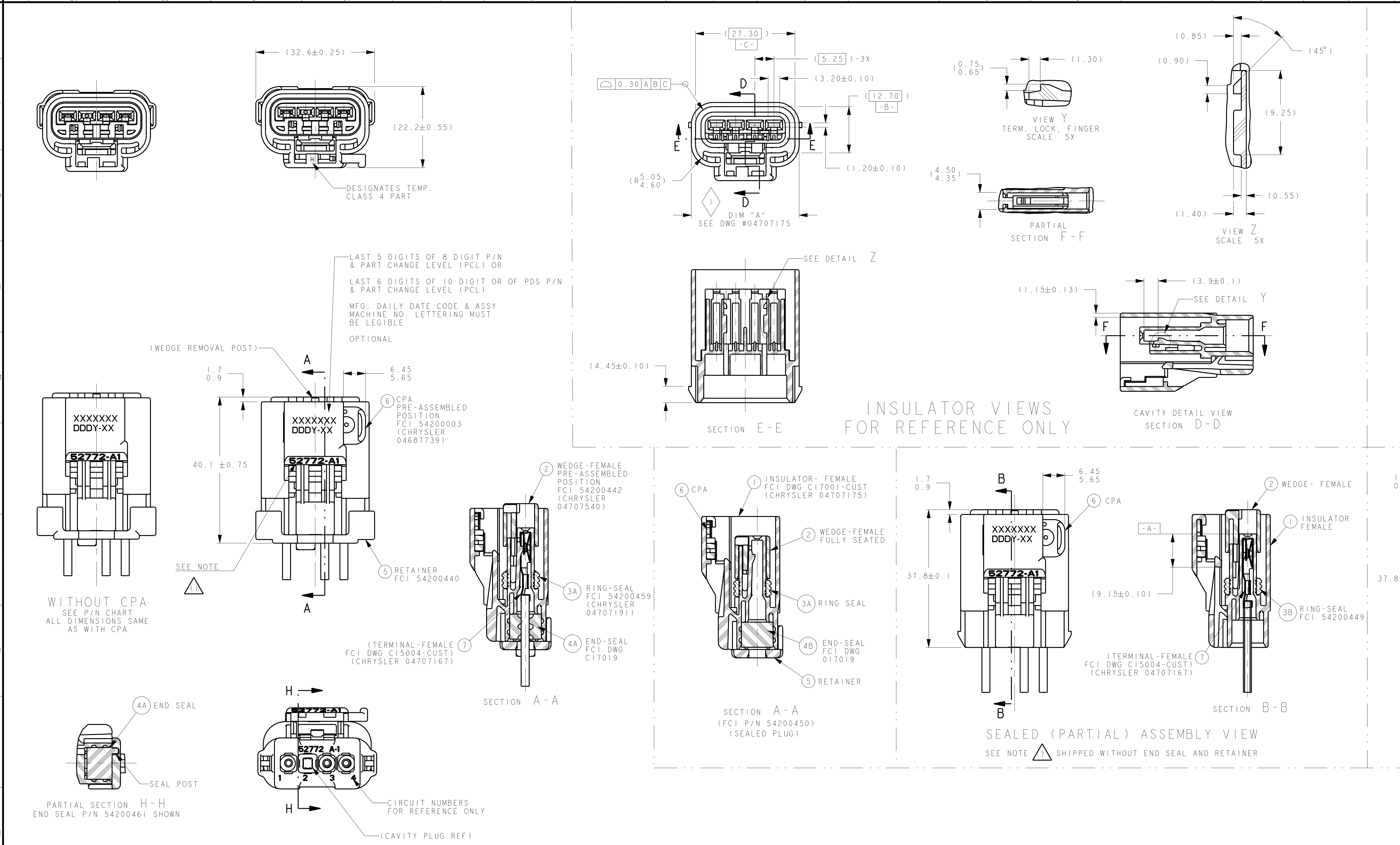
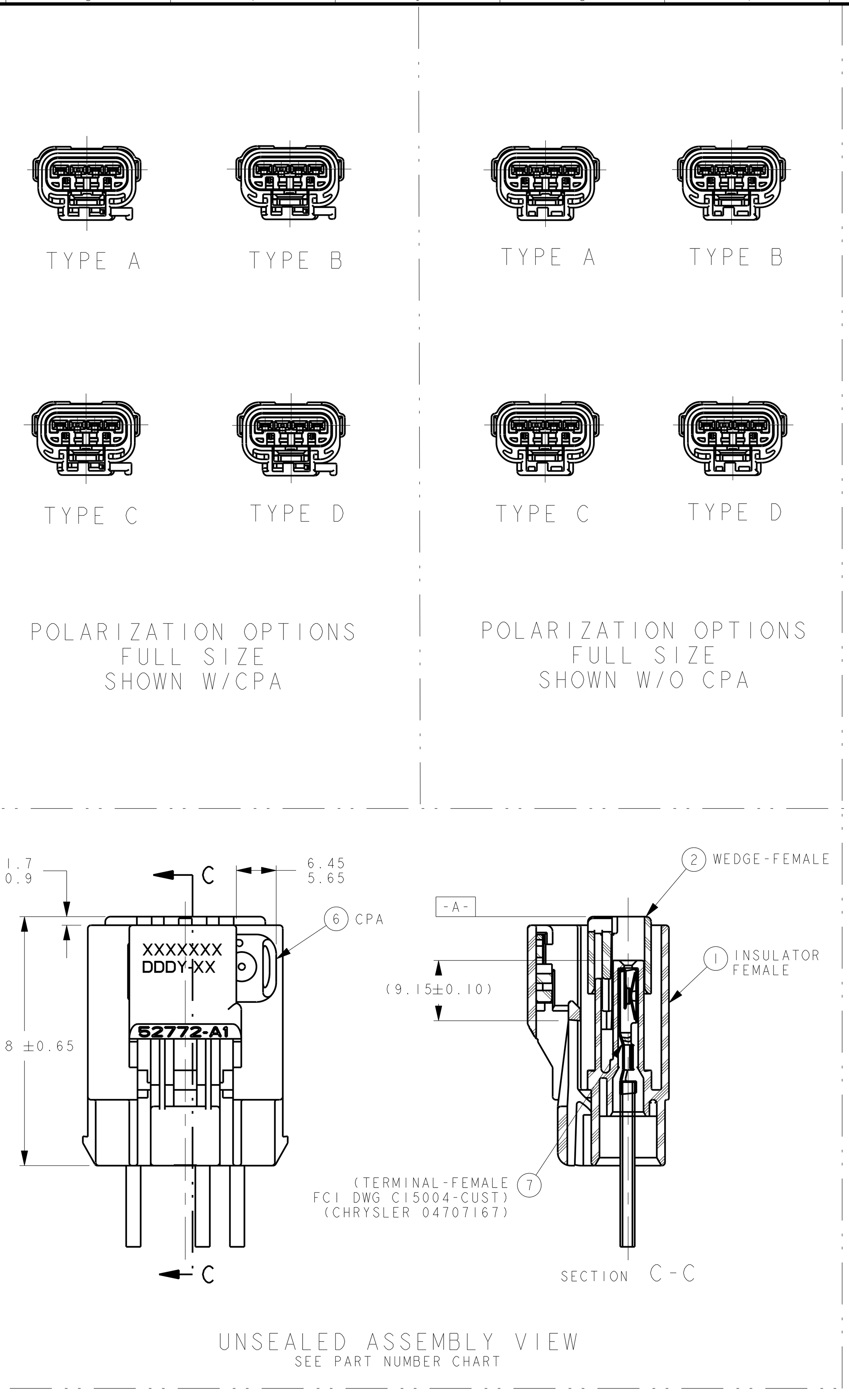
DRAWING NUMBER	REVISION	SHEET	APPROVAL LEVEL
H59003	X	1/1	-

DRAWING -





MATING PART NUMBER CHART

INDEX TYPE	COLOR	SEALED/ UNSEALED	FEMALE ASSEMBLY PART NUMBERS: FCI	FEMALE ASSEMBLY PART NUMBERS: CUSTOMER	MATING ASSEMBLY PART NUMBER FOR REFERENCE ONLY: FCI	MATING ASSEMBLY PART NUMBER FOR REFERENCE ONLY: CUSTOMER
D	NATURAL	UNSEALED	54200404N	N/A	54200424,54200408	N/A
D	NATURAL	UNSEALED	54200404	C 56038053	54200424,54200408	C 56042179,56038055
D	NATURAL	SEALED	54200412N	N/A	54200416	N/A
D	NATURAL	SEALED	54200412	C 04707264	54200416	C 04707380
D	BLACK	SEALED	F915600	N/A	F225600	N/A
C	DK GREY	UNSEALED	54200403N	N/A	54200407	N/A
C	DK GREY	UNSEALED	54200403	C 56038193	54200407	C 56038194
C	DK GREY	SEALED	54200411N	N/A	54200415	N/A
C	DK GREY	SEALED	54200411	C 04707263	54200415	C 04707379
C	DK GREY	SEALED	55200428	N/A	54200429	N/A
C	BLACK	SEALED	F815600	N/A	F125600	N/A
B	LT GREY	UNSEALED	54200402N	C 04688849	54200418,54200419 54200417,54200406	C 04495870,04661922 C 04707209, T.B.D.
B	LT GREY	SEALED	54200450N	N/A	DIRECT CONNECT APPLICATION	
B	LT GREY	SEALED	54200450	C 04707510	DIRECT CONNECT APPLICATION	
B	LT GREY	SEALED	54200447N	C 04801217AA	54200417	C 04707209
B	LT GREY	SEALED	54200422N	N/A	N/A	N/A
B	LT GREY	SEALED	54200422	C 04759394AA	N/A	LH FUEL PUMP
B	LT GREY	SEALED	54200410N	N/A	54200414,54200418 54200419,54200417	N/A
B	LT GREY	SEALED	54200410	F 4L3T-14A464-AA	DIRECT CONNECT APPLICATION	
B	LT GREY	SEALED	54200410	C 04707256	54200414,54200418 54200419,54200417	C 04707267,04495870 C 04661922,04707209
B	LT GREY	SEALED	54200495	N/A	F598500,F760600	N/A
B	LT GREY	SEALED	54200480N	N/A	54200420/F598500	N/A
B	LT GREY	SEALED	54200495	F AU5T-14A464-HAA	DIRECT CONNECT APPLICATION	
B	LT GREY	SEALED	54200480	C 04759900AA	54200420/F598500	LOW PERM HDR
B	BLACK	SEALED	F715600	N/A	F025600	N/A
A	BLACK	UNSEALED	54200400N	N/A	54200405	N/A
A	BLACK	UNSEALED	54200400	C 56038052	54200405	C 56038054
A	BLACK	UNSEALED	INDEX-A	INDEX-A	54200423	C 56042178
A	BLACK	SEALED	F333900	GM 13580766	DIRECT CONNECT INDEX-A	N/A
A	BLACK	SEALED	54200467N	N/A	F860600/DIR CONNECT	N/A
A	BLACK	SEALED	54200467	C 04868299AA	F860600/DIR CONNECT	SOLID STATE RELAY
A	BLACK	SEALED	54200409N	N/A	54200413,54200426	N/A
A	BLACK	SEALED	54200409	C 04707262	54200413,54200426	C 04707266,04759236
A	BLACK	SEALED	54200421N	N/A	54200425	N/A
A	BLACK	SEALED	54200421	C 04759251	54200425	C 04759253
A	BLACK	SEALED	F398500	N/A	F498500	N/A
A	BLACK	SEALED	INDEX-A	INDEX-A	54200426,54200427 54200468	C 04759236, 56042441 C 04759236AB
A	BLACK	SEALED	55200445	N/A	55200446	N/A

CUSTOMER: CHRYSLER - C
FORD - F
GENERAL MOTORS - GM

FCI	52772 OR 52772 H	SEE CHART
VENDOR	VENDOR CODE	P/N

ASSEMBLY PART NUMBER CHART

	UNSEALED W/O CPA				UNSEALED W/CPA			SEALED W/CPA													SEALED W/O CPA										
CUSTOMER P/N'S				C 04688849	C 56038052	C 56038193	C 56038053	C 04707510	C 04707262	C 04707256 / F 4L3T-14A464-AA	C 04707263	C 04707264	N/A	C 04759251	C 04759394AA	C 04868299AA	F AU5T-14A464-HAA	GM 13580766	C 04759900AA	N/A	C 04801217AA									
FCI P/N'S	54200400N	54200403N	54200404N	54200402N	54200400	54200403	54200404	54200450	54200409	54200410	54200411	54200412	55200428	54200421	54200422	54200467	54200495	F333900	54200480	F398500	54200447N	54200450N	54200409N	54200410N	54200411N	54200412N	54200421N	54200422N	54200467N	54200480N
ITEM	REQUIRED							REQUIRED																						
1 (54200431)	I				I				I					I		I		I		I			I				I		I	
1 (54200435)				I				I		I					I		I		I		I	I		I				I		I
1 (54200433)		I				I					I		I												I					
1 (54200434)			I				I					I														I				
2	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
3A								I	I	I	I	I	I	I	I	I	I	I	I	I		I	I	I	I	I	I	I	I	I
3B																					I									
4A (54200428)									I	I	I	I											I	I	I	I				
4A (54200429)													I	I	I												I	I		
4A (54200461)																I	I	I											I	
4A (54200469)																			I	I										I
4B								I														I								
5								I	I	I	I	I	I	I	I	I	I	I	I	I		I	I	I	I	I	I	I	I	I
6					I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I										
CONNECTOR ASSEMBLY TEMPERATURE CLASS PER SAE/USCAR-2 REV 5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
PART CHANGE LEVEL (PCL)	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	V	X	U	V	U	U	U	U	U	U	U	U	U	U

CIR NO.	UNSEALED	SEALED W/CPA						SEALED W/O CPA	
1	22 TO 10 SEE NOTES	PLUG	20,18,16 OR 14	SEE NOTE 15	20 14	12 10	12 10	SEE NOTE 7	SAME AS WITH CPA
2					20 14	12 10	18 14		
3					12 10	20 14	18 14		
4					12 10	20 14	12 10		
	WIRE GAGE		WIRE GAGE		SEE NOTE 18				WIRE GAGE

ITEM	CLASS 3 FCI NO.	CHRYSLER NO.	COLOR	PART NAME (MAT'L)	INDEX	CLASS 4 FCI NO.	COLOR	55200445	F715600	F815600	F915600
								REQUIRED (ASSEMBLY PART NOS. (SEALED))			
1	54200431	04707186	BLK	INSULATOR-FEMALE (NYLON)	A	55200442	BLACK	I			
1	54200435	04688853	LT GRY	INSULATOR-FEMALE (NYLON)	B	F325600	BLACK		I		
1	54200433	04707188	DK GRY	INSULATOR-FEMALE (NYLON)	C	F425600	BLACK			I	
1	54200434	04707189	NATURAL	INSULATOR-FEMALE (NYLON)	D	F525600	BLACK				I
2	54200442	04707540	AQUA	WEDGE-FEMALE;(NYLON)		55200443	NATURAL	I	I	I	I
3A	54200459	04707191	RED	RING SEAL;(SILICONE)		*55200444	DK BLU	I	I	I	I
3B	54200449 (WAS C17007)	N/A	GRN	RING SEAL;(FLUOROSILICONE)							
4A	54200428	N/A	LT BLU	END SEAL;(SILICONE)		*55200439	DK BLU	I	I	I	I
4A	54200429	N/A	BURNT ORG	END SEAL;(SILICONE)							
4A	54200461	N/A	BRT RED	END SEAL;(SILICONE) HYBRID							
4A	54200469	N/A	LT GRY	END SEAL;(SILICONE) HYBRID							
4B	54200458	N/A	BRT YEL	END SEAL;(SILICONE)W/O HOLES							
5	54200440	N/A	BLK	RETAINER;(NYLON)		55200438	NATURAL	I	I	I	I
6	54200003	04687739	RED	CPA LATCH;(NYLON)		54200008	NATURAL	I	I	I	I
CONNECTOR ASSEMBLY TEMPERATURE CLASS PER SAE/USCAR-2 REV 5								4	4	4	4
PART CHANGE LEVEL (PCL)								W	W	W	W
WIRE GAUGE								20 TO 14			

* 16 SEALS BAKED AT 450°F FOR 5 HOURS DURING CONTINUOUSLY INTRODUCED FRESH AIR TO DRIVE OFF VOLITIES

** 17 FORD PART NUMBERS ARE LISTED FOR REFERENCE ARE PPAP'D TO FORD 4L3T-14A464-AA DRAWING

18 MUST USE WIRE SIZES AS SPECIFIED FOR CIRCUIT LOCATION SHOWN: FOR EXAMPLE 12 OR 10 AWG, 20 TO 14 OR 18 TO 14 AWG

NOTES:

1. QUALITY ASSURANCE REQUIREMENTS PER CHRYSLER PS-7300: I ◇ SPC DATA REQUIRED
2. ENGINEERING APPROVAL OF SUPPLIER SAMPLES IS REQUIRED PRIOR TO AUTHORIZATION OF PART PRODUCTION
3. CHANGES IN DESIGN COMPOSITION OR PROCESSING FROM THE PART PREVIOUSLY APPROVED FOR PART PRODUCTION REQUIRES PRIOR ENGINEERING APPROVAL
4. WIRING FABRICATORS MUST PURCHASE FROM SOURCES SHOWN
5. ALL THE SEALED CONNECTOR APPLICATIONS MUST BE USED WITH CHRYSLER WIRE SPEC. MS-8288 OR MS-9502 THIN WALL X-LINK 20,18, 16, 14, 12 & 10 GAGE WIRES ONLY UNLESS OTHERWISE SPECIFIED SEE CHART (WIRE INSULATIONS Ø1.70 MIN TO Ø4.09 MAX.)
6. ALL NON-SEALED APPLICATIONS MAY BE USED WITH ANY WIRE INSULATION 22 GAGE THRU. 10 GAGE (EXCEPT AS NOTED) PROVIDING THAT A TERMINAL GRIP FOR THAT CORE/INSULATION COMBINATION IS SHOWN ON THE FEMALE TERMINAL DRAWING

   MAX. INSULATION CRIMP WIDTH = 4.50
   MAX. INSULATION CRIMP HEIGHT= 4.50
   MAX. INSULATION DIA. =4.09 (10 GA THIN WALL)
7. MUST BE USED WITH FLOUROSILICONE END SEAL FCI P/N 54200430, RETAINER & PROPER GAGE TEFLON WIRES FOR METHANOL OR DIESEL FUEL APPLICATIONS
8. USE WITH CAVITY PLUG FCI P/N 54200005. WHEN REQ'D USE WITH 2.80MM APEX FEM. TERM. PER C15004-CUST SYM. ABOUT CENTERLINE FOR 180° ORIENTATION
9. TEST METHOD PER SAE/USCAR-2 REV. 5, CONNECTOR ENGAGE & DISENGAGE WITH LATCH DEPRESSED FORCE NOT TO EXCEED 75 N. FOR THIS SYSTEM

   CPA SEATING FORCES - 40 N. MAX.

   WEDGE SEATING FORCES - 100 N. MAX.
10. SUPPLIER, MOLD & CAVITY I.D. MUST BE LEGIBLE
11. ANNUAL QUALITY REQUIREMENTS: IT IS PERMISSIBLE TO PERFORM CONTINUOUS CONFORMANCE PER FCI SPECIFICATION #AQA-001 INSTEAD OF ANNUAL LAYOUT & ANNUAL PV REQUIREMENTS OF QS-9000 SECTION 2 & PF-9600

    ALL NON-REFERENCE DIMENSIONS ARE REQUIRED

    - USE INDEX A, BLACK SEALED AND UNSEALED FOR ALL AFFECTED INSULATOR CAVITIES
    - CURRENT PRODUCTION TOOLING
    - POINT OF LAST RUN

    SERVICE TOOLING GUIDE INFORMATION PER APEX TRAINING MANUAL
12. MUST CONFORM TO THE FOLLOWING CHRYSLER/YNA STANDARDS:

    PF-9600 PERFORMANCE (CHRYSLER) EXCEPT AS NOTED ABOVE
    PS-7300 QUALITY ASSURANCE (CHRYSLER)
    PS-4480-CEK-4 (CHRYSLER) PART I.D. (G-009-2 YNA)
    PS-9065 REGRIND (CHRYSLER), (G-009-3 YNA)
    PS-9227 DATA EXCHANGE (CHRYSLER),(G-009-7 YNA)
    PS-10052 INFORMATION SECURITY (CHRYSLER)
13. THIS DRAWING (H59003) REPLACES CHRYSLER DRAWING NUMBER 04707254 LEVEL "R" CHRYSLER DRAWING IS FOR REFERENCE ONLY
14. FCI P/N WITH SUFFIX "N" DESIGNATES ASSEMBLIES W/O CPA
15. P/N'S WITH BURNT ORANGE END SEAL CAN BE USED WITH 12 OR 14 GAGE IN ANY COMBINATION OR ORDER OR WITH THREE 12 GAGE AND ONE 18 GAGE OR ONE 16 GAGE WIRE (ONE END)

ECN-NUMBER	DATE M-D-YY	REVISION	ZONE	CHANGE DESCRIPTION	DRAWN BY	CHK. BY	APPR. BY
11670	9-30-10	X	E16 A13 O20	P/N F333900 AND GM 13580766 ADDED. LETTERS C, F & GM ADDED TO INDICATE CUSTOMER NAMES. NOTE #18 ADDED FOR APPLICABLE WIRE SIZES, #10 REVISED AND P/N 54200429 WAS INCORRECTLY SHOWN AS 54200249, LETTER H ADDED TO DESIGNATE TEMP. CLASS 4 PARTS AND CHARTS UPDATED	ASHOK	SSS	SSS
11287	01-27-10	W	A23 E10	TEMP. CLASS 4 INSULATOR COLOR CHANGED TO BLACK FOR ALL POLARIZATIONS	ASHOK	SSS	SSS
11229	11-20-09	V1	I23 C12	PARTIAL SECTION "H-H" ADDED WITH END SEAL P/N 54200461 & TABLE UPDATED	RRR	SSS	SSS
11017	10-08-09	V	E16 E9	P/N'S 54200495, F398500 TEMP. CLASS 3 AND CORRESPONDING FORD P/N'S ADDED; P/N'S F715600, F815600 & F915600 FOR TEMP. CLASS 4 ADDED, BOTH CHARTS UPDATED	ASHOK	SSS	SSS
10415	6-03-08	U2	C9,D9 C10 B10 E7,E5 B23	NOTE 16 ALIGNED WITH BAKED SEAL PART NUMBERS. THE P/N 55200439 LOCATION CORRECTED, DCA CHANGED TO CHRYSLER, 54200008 WAS 55200008 SAE/USCAR-2 REV 5 WAS PF-9600. 75N WAS 90N DK GREEN ADDED, MATING PART CHART UPDATED.	ASHOK	SSS	SSS
10189	3-12-08	U1	F8	USE WITH 2.80MM APEX FEMALE TERMINAL NOTE ADDED FOR 180° ORIENTATION	ANSU	SSS	SSS
I	I	I	I	90° LATCH OPTION VIEWS & CALLOUTS FROM CHART DELETED	I	I	I
I	I	I	ALL	REDRAWN ON FCI TITLE BLOCK SEE REV'U' FOR PREVIOUS CHANGES	I	I	I

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PRODUCT SPEC. APEX 2.8 MM	PACKAGING SPEC. -	APPLICATION SPEC. -	
TOLERANCES 1 PLACE DIM ± 0.25 2 PLACE DIM ± 0.10 ANGULAR DIM ± 2°	MATERIAL: NOTED ON COMPONENT PRINTS	SURFACE FINISH -	3RD ANGLE; DIMENSION IN MILLIMETERS; CAD SYSTEM pro / eng.; DWG SIZE A0
COUNTERPART NO. H59012	COLOR: -		
DO NOT SCALE DRAWING	TOOL NO. A-047	ECO Loc. Code NA	
DRAWN BY 05-25-05 RAJKUMAR	TITLE: CHART - ASSEMBLY 4WAY FEMALE (2.80MM APEX CONN. SYSTEM)	DRAWING NUMBER H59003	SHEET 1 of 1
CHECKED BY 05-25-05 SUCHA SIAN			
APPROVED BY 05-25-05 SUCHA SIAN	ESR NO. WT-234, 6243 CAT. NO. -	FILE NAME H59003.DWG	SCALE 4:1