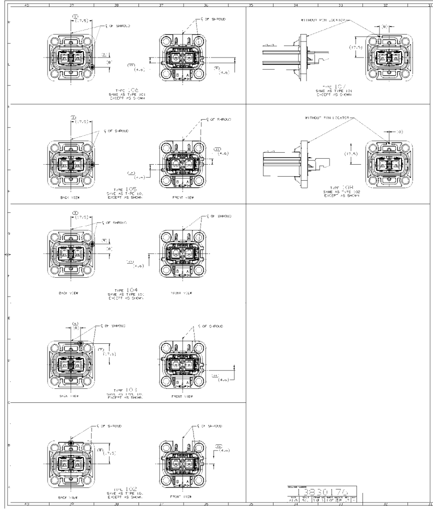
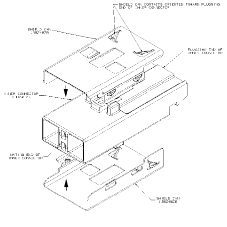


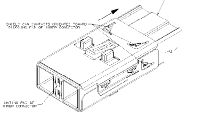
ADDITIONAL ASSEMBLY INFORMATION

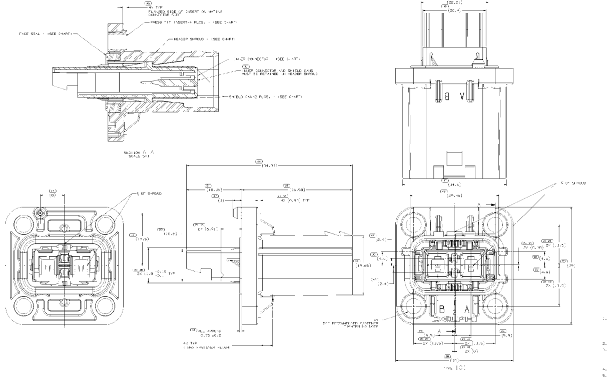
REFER TO VPS# B-249 FOR ADDITIONAL SHIELD CAN ASSEMBLY REQUIREMENTS

ASSEMBLE SHIELD CANS TO INNER
CONNECTOR IN CORRECT ORIENTATION
AS SHOWN BELOW.


SHIELD CAN CONTACTS ORIENTED TOWARD PLUGGING END OF INNER CONNECTOR
SHIELD CAN 13824828
PLUGGING END OF INNER CONNECTOR
INNER CONNECTOR 13824827
MATING END OF INNER CONNECTOR
SHIELD CAN 13824828

PROPERLY ASSEMBLED SHIELD CANS
TO INNER CONNECTOR

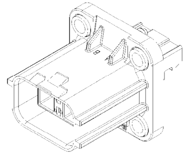

PLUGGING END OF INNER CONNECTOR
SHIELD CAN CONTACTS ORIENTED TOWARD PLUGGING END OF INNER CONNECTOR
MATING END OF INNER CONNECTOR

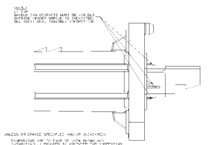

4X TYP
FLANGED SIDE OF INSERT ON MATING CONNECTOR SIDE
PRESS FIT INSERT-4 PLCS. - (SEE CHART)
FACE SEAL - (SEE CHART)
HEADER SHROUD - (SEE CHART)
INNER CONNECTOR - (SEE CHART)
INNER CONNECTOR AND SHIELD CANS MUST BE RETAINED IN HEADER SHROUD
SHIELD CAN-2 PLCS. - (SEE CHART)
SECTION A-A
SCALE 5:1
℄ OF SHROUD
(54.93)
(18.35)
(36.58)
(3)
4X (0.91) TYP
2X (6.91)
(10.6)
(17.5)
(2.4)
(4.6)
MAX FASTENER HEIGHT
B
A
TYPE 101

SYMBOL DEFINITION		
A DIMENSION WITHOUT AN INSPECTION REPORT SYMBOL ( ) DOES NOT REQUIRE INSPECTION. IT MAY BE CONTROLLED ON THE INDIVIDUAL COMPONENT DRAWING.	TOTAL NO. OF INSPECTIONS REQUIRED	65
	LAST NO. USED	51

MISSING SYMBOLS
19 35

DATE	STS	REV	W/P	CHG	ZONE	REVISION HISTORY	AUTH	DR	APPD 1	APPD 2
02JN10	R	01	-	-		CREATED PART DRAWING	410961	L.J	L.J	NL
15OC10	R	02	-	-		ALL PARTS-UPDATED WITH LATEST COMPONENTS.	412259	L.J	L.J	NL
15DE10	R	03	-	-		ADDED SHEET 2 OF 2	412984	L.J	L.J	NL
08AP11	R	04	-	-		ALL PARTS-UPDATED WITH LATEST COMPONENTS, ADDED DIMS 48-51, ADD ADDITIONAL ASSEMBLY INFORMATION & MAX FASTENER HEIGHT WAS 5.	413279	L.J	L.J	NL
19SE11	R	05				ALL PARTS UPDATED WITH LATEST COMPONENTS, ADDED APPEARANCE ITEM/VPS NOTE, ADDED RECOMMENDED TORQUE FOR FASTENERS NOTE, ADDED DISLODGED DURING SHIPPING NOTE & DIM 27 WAS 13.05.	414499	L.J	L.J	NL
08NO11	R	06	-	-		ALL PARTS- ADDED "2X" AND "TYP" TO DIM 48, TOLERANCE ON DIM 48 WAS ±0.1 & ADDED EXTRACTION FORCE NOTES.	415977	L.J	L.J	NL
10NO11	R	07	-	-		ALL PARTS-DIM 50 WAS 22.21-0.1	416125	L.J	L.J	NL
04JA12	R	08	-	-		ALL PARTS- ADDED VPS# B-249 REFERENCE TO "ADDITIONAL ASSEMBLY INFORMATION" & ADDED SHIELD CAN ASSEMBLY REQUIREMENTS NOTE.	416628	L.J	L.J	NL
23AP12	R	09	-	-		ALL PARTS-ADDED CPA UNLOCKING FORCE NOTE AND TPA LOCKING FORCE NOTE.	417913	L.J	L.J	NL
28AU13	R	10	-	-		ALL PARTS - ADDED NOTES PERTAINING TO SAE/USCAR SPECIFICATIONS.	422250	L.J	L.J	NL
31JA14	R	11	-	-		ALL PARTS - UPDATED SEAL DISLODGED NOTE	425400	[illegible]	[illegible]	TD
30MR15	R	12				13240508 - 09 - RELEASED	429263	[illegible]	[illegible]	[illegible]
20AU15	R	13	-	-		13240508 & 09 - UPDATED PART AVAILABILITY	430834	[illegible]	[illegible]	[illegible]
08SE15	R	14	-	-		13269933 & 13269934 - RELEASED	430622	DGR	DGR	DGR
11JA16	R	15	-	-		13269933-34 - UPDATED PART AVAILABILITY	431849	[illegible]	[illegible]	DGR
07JL16	R	16				ALL PARTS - ADDED ELECTRIC VEHICLE CHARGING AND HIGH DUTY CYCLE APPLICATION NOTE	433576	[illegible]	[illegible]	TD
22SE16	R	17				ALL PARTS - CORRECTED ELECTRIC VEHICLE CHARGING AND HIGH DUTY CYCLE APPLICATION NOTE	434196	[illegible]	[illegible]	TD




SHIELD CAN CONTACTS MUST BE VISIBLE THROUGH HEADER SHROUD AS SHOWN. SEE ADDITIONAL ASSEMBLY INFORMATION.

1. UNLESS OTHERWISE SPECIFIED AND/OR INDICATED:

   DIMENSIONS ARE TO FACE OF VIEW SHOWN AND AUTOMATICALLY ROUNDED BY COMPUTER FOR INSPECTION (SEE MATH MODEL FOR PRECISE DIMENSIONS). FOR ALL OTHER DIMENSIONS NOT SHOWN BUT REQUIRED FOR TOOL BUILD, SEE MATH MODEL FOR PRECISE TOOL PATH DATA.

2. FOR MATING CONFIGURATION REQUIREMENTS, SEE PART NUMBER 13032174.

3. THIS PRODUCT IS NOT CATEGORIZED AS AN APPEARANCE ITEM. MINOR IMPERFECTIONS INCLUDING, BUT NOT LIMITED TO, FLOW MARKS, COLOR BLEMISHES, GATE VESTIGE, AND SOFT FLASH THAT DO NOT AFFECT THE FIT, FORM OR FUNCTION OF THE PART ARE PERMISSIBLE PER DPNP-4.7-CS-01. VPS# B-244 TAKES PRECEDENCE OVER DPNP-4.7-CS-01 WHERE APPLICABLE.

4. RECOMMENDED FASTENER TIGHTENING TORQUE IS 3.5±0.5 NEWTON-METERS.

5. SEAL RETENTION MEETS THE MINIMUM ACCELERATION REQUIREMENT PER GMW3191 JUNE 2012.

6. HIGH VOLTAGE 280 TERMINAL-CONNECTOR EXTRACTION FORCE (PRIMARY LOCK) IS ≥ 80 N.

7. HIGH VOLTAGE 280 TERMINAL-CONNECTOR EXTRACTION FORCE (PRIMARY & SECONDARY LOCK) IS ≥ 110 N.

8. CPA UNLOCKING FORCE TO PRE-STAGED POSITION IS > 10 N AND < 30 N.

9. TPA LOCKING FORCE WITH TERMINALS IS ≤ 60 N.

10. REFER TO VPS# B-249 FOR ADDITIONAL SHIELD CAN ASSEMBLY REQUIREMENTS.

11. CONNECTION MEETS THE PERFORMANCE REQUIREMENTS OF SAE/USCAR-2 R5 NOVEMBER 2007, SAE/USCAR-37 AUGUST 2008, AND GMW-3191 DECEMBER 2007 FOR THE FOLLOWING CLASSIFICATIONS:

    TEMPERATURE CLASS 3 (-40°C TO +125°C)
    VIBRATION CLASS 1 (ON BODY OR CHASSIS)
    SEALING CLASS 3 (SEALED PLUS HIGH PRESSURE SPRAY)
    MATING CLASS 1 (10 CYCLES)

12. CONNECTION MEETS DIELECTRIC WITHSTAND VOLTAGE RATING OF 600 VOLTS USING THE SAE/USCAR-37 AUGUST 2008 PARAGRAPH 5.5.2 TEST METHOD.

13. FOR APPLICATION DATA SEE THE INDIVIDUAL APPLICATION DRAWINGS.

14. PARTS 13269933 & 13269934 RESTRICTED FOR USE BY FORD ONLY. REFER TO CHART FOR SPECIFIC RESTRICTED PART NUMBERS.

15. ELECTRIC VEHICLE CHARGING AND OTHER HIGH DUTY CYCLE APPLICATIONS CARRYING 325A REQUIRE THE FOLLOWING:
    - MIN 5.0 MM2 COPPER CONDUCTORS.
    - TERMINAL TO CONDUCTOR INTERFACE RESISTANCES ≤ 0.2 mOHMS. SOLDERED CRIMPS ARE RECOMMENDED.
    TERMINAL TEMPERATURES NEED TO BE MEASURED IN THE VEHICLE APPLICATION TO INSURE T-RISE OVER AMBIENT IS < 55 DEG C AT MAXIMUM CONTINUOUS CURRENT.

PART NO.	REV	N/P	RESTRICTED USAGE	TYPE	HEADER SHROUD	INNER CONNECTOR	SHIELD CAN (2 PLCS)	FACE SEAL	PRESS FIT INSERT (4 PLCS)
13269933	01	AC	RESTRICTED-SEE NOTE 14	108	33272750	13824827	13824828	13830178	33211751
13269934	01	AC	RESTRICTED-SEE NOTE 14	107	33272753	13824827	13824828	13830178	33211751
~~13240641~~	01	AB	-	106	13830169	13824827	13824828	13830178	33211751
~~13240642~~	01	AB	-	105	13830168	13824827	13824828	13830178	33211751
~~1324064[illegible]~~	01	AB	-	104	13830167	13824827	13824828	13830178	33211751
~~13240640~~	01	AB	-	103	13830166	13824827	13824828	13830178	33211751
13240509	01	AC	-	102	13830165	13824827	13824828	13830178	33211751
13240508	01	AC		101	13824829	13824827	13824828	13830178	33211751
~~1383017[illegible]~~	03	AF	-	106	13830169	13824827	13824828	13830178	13824967
~~13830174~~	03	AF	-	105	13830168	13824827	13824828	13830178	13824967
~~13830173~~	03	AF	-	104	13830167	13824827	13824828	13830178	13824967
13830172	03	AF	-	103	13830166	13824827	13824828	13830178	13824967
13830171	03	AF	-	102	13830165	13824827	13824828	13830178	13824967
13824830	03	AH		101	13824829	13824827	13824828	13830178	13824967

PART DRAWING

UNLESS OTHERWISE SPECIFIED

ALL DIMENSIONS ARE IN MILLIMETERS

THIRD ANGLE PROJECTION

DO NOT SCALE

VPS MATH DATA

NX

DELPHI

DELPHI PACKARD ELECTRICAL/ELECTRONIC ARCHITECTURE

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	NAME	DATE
DR	L. JONES	02JN10
CHK	L. JONES	23JN10
APPD	[illegible]	24JN10

SUBSTANCES OF CONCERN AND RESTRICTED CONTENT PER DELPHI DOCUMENT

MATERIAL: SEE DRAWINGS

DRAWING NAME: HDR ASM CONN 4 WAY CTS
1SC W/P 280 HI-VOLTAGE

DRAWING NUMBER: 13830176

SIZE	SCALE	FRAME NO.	SHEET NO.	STS	REV
A1+5	5:1	1 OF 3	1 OF 2	R	17

13830176