

DELPHI

Mechatronics Change Request Form

CR #:

6115

CN #:

57128

Assigned CN# Date:

Requester: DG. J. Coniff/G.Lin Change Owner: Eduardo Rodriguez Pequeño CO Phone: [REDACTED] Request Date: 1/15/06

Change Request Title: New PCB design and Catera Spring/Plunger for production in Delta Ignition Sw

Customer: GM Program, Product Type & Model Year: GMX357, Delta Ignition Sw 2007

PTS / AR #: 972251 Design Center: DG Manufacturing Sites Affected: Condura

What is the impact of this change? <input type="checkbox"/> Process <input checked="" type="checkbox"/> Final Product <input type="checkbox"/> Purchased Components <input type="checkbox"/> In-House Fab Components	Change Driven by: <input checked="" type="checkbox"/> Customer <input checked="" type="checkbox"/> D-MS <input type="checkbox"/> Supplier	Change Category: <input type="checkbox"/> Warranty <input type="checkbox"/> Cost Savings <input checked="" type="checkbox"/> Product Design <input type="checkbox"/> Process/Quality	Ref. Info.(DAR, Customer Authorization, PRR, etc)
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Change Reason: New PCB has vias enlarge and via holes removed from traces. Cater Spring/Plunger is a Customer request to be in specification according the GM spec for the torque forces.

Change Flow: <input type="checkbox"/> Fast Track <input checked="" type="checkbox"/> Production	Risk Assesment: <input type="checkbox"/> Low <input type="checkbox"/> Med <input checked="" type="checkbox"/> High	Change Type: <input type="checkbox"/> Documentation <input checked="" type="checkbox"/> Running <input type="checkbox"/> Mandatory Date: _____	Request Type: <input type="checkbox"/> Experimental <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Advanced	Program Phase: <input type="checkbox"/> Program Launch <input type="checkbox"/> Concept Direction <input type="checkbox"/> Concept Approval <input type="checkbox"/> Final Approval <input type="checkbox"/> Production Approval <input type="checkbox"/> Close Out/Transfer <input checked="" type="checkbox"/> Present Product
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Technical Analysis

- Theoretical Analysis
- Tolerance Stack UP
- DOE
- Mock Up
- Spec. Review
- Dim.Studies
- Drawings Review
- 3D Analysis
- Prod. Validation
- DFMEA Review
- Where's Used (BPCS)
- Special Testing

1. Description of Change (Use CN Details format if additional space is required to explain better the change):

PCB change is because the fall-out problems in the EOLT and the Catera spring/plunger is because the torque forces.
PCB 12861211 Rev 5 Release in CN57064

Change Verification (Special Testing) Summary:

- * 3 lifes of durability perform without problems
- * Torque and angle test perform for forces and displacements of make/brakes.

CIB - Multifunctional Team

MINIMUM REQUIRED NOTIFICATION

Function	Notified	Responded	Name
Change Owner	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Eduardo Rodriguez
Purchasing:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Carlos Lara
SQA:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Marco Lemus
PC&L - Procurement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Aldo Gonzalez
PC&L - Cust Service:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D.Cardenas/Barbarella G
PC&L - Planning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Israel Leon
Manufacturing Eng:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Jorge MontesdeOca
Process Engineer:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Jorge MontesdeOca
Quality Engineer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Jose Luis Rivera
Industrial Engineer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ernesto Castellanos
Packaging Engineer:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Note: Minimum required, but not limited to this.

Note: Follow next steps to find Condura Contact List to verify CIB names.

(Delphi Mechatronics Systems- Sharepoint Home / Condura Engineering Document Control / Cond Contact List for Engineering Changes)

NOTIFICATION TO THESE POSITIONS UP TO CIB DECISION:

Function	Notified	Responded	Name
Production Line Supervisor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Carlos Zarate
Software Engineer:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
Systems Engineer:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
Component Engineer:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
Validation Engineer:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Aldo Calvillo/Luis Delgado
Sales:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Larry Allen
Finance:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gabriel Ayala
Test Engineer:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Edgar Zambrano
Tool Engineer:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
ECAD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
MCAD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gerardo Cuevas
Other:	<input type="checkbox"/>	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	<input type="checkbox"/>	

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Financial Feasibility Review

IMPORTANT:

Previous to fill out this section, please type Cost, and leadtimes into Checklist/IAP format. Once leadtimes have been received, target dates can be set up in all required tasks into Checklist/IAP format also.

Investment \$	Paid By:		
	TOTAL	Supplier%	Customer%
\$240	0%	0%	100%

Development Engineering Hours	Paid By:		
	TOTAL Hrs-Qty	TOTAL Hrs-Cost\$	Customer%
210	\$21,000	0%	100%

Investment paid by Delphi:

Dept# / Account#	Dept Name	%
3171	SMT department	100%

Total Change Lead Time : 24 wks Planned Obsolescence \$ \$0.00 Piece Part Cost \$ Change From: _____ To: _____

CR Approval

Title	Name	Signature	Date	Title	Name	Signature	Date
Change Owner:	Eduardo Rodriguez	[Signature]	4/12/06	Plant Mgr:	Mauro Gonzalez	[Signature]	
CAL:	Juan Carlos Gonzalez	[Signature]	4/12/06	PC&L Mgr (Proc):	Orlando Salinas	[Signature]	4/13/06
Mech. Prod. Eng. Mgr.:	Paul Verdream	[Signature]	4/12/06	PC&L Mgr (C.S.):	Rocio Barron/R. Ramirez	[Signature]	4/12/06
Elcc. Prod. Eng. Mgr.:	N/A			Purchasing Mgr.:	Eugenia Acosta	[Signature]	4/13/06
Program Mgr.:	Jesus Chavez	[Signature]	ARR-13-06	Production Mgr.:	J. Olvera	[Signature]	4/12/06
Account Mgr.:	N/A			Prod. Line Mgr.:	Carlos Zarate	[Signature]	4/13/06
Mfg. Eng. Mgr.:	Armando Lozano	[Signature]	4/12/06	Quality Mgr.:	Saul Hernandez	[Signature]	4/13/06
Process Mgr.:	Hector Hernandez	[Signature]	13 APR 06	Lab Mgr.:	Francisco Mendoza	[Signature]	4/13/06

Form No: D-MSNAW3.8F1 (Rev. 3) Change Request Form

DELPHI CONFIDENTIAL

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Mechatronics Change Notice Form

Page 1

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CN #:

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Assigned CN# Date:

4/13/06

Change Notice Information

Requester: JG. J. Coniff/G.Li Change Owner: Eduardo Rodriguez Pequeño

CO Phone: XXXXXXXXXX

Request Date: 1/15/06

Change Title: New PCB design and Catera Spring/Plunger for production in Delta Ignition Sw

Customer: GM

Program, Product Type & Model Year:

GMX357, Delta Ignition Sw 2007

Affected Documents Information

Where Used P/N	Affected Doc Description	Type	From this:					To this:				
			Current Doc	Rev	Ver	Disp	Action	Disp	New Document	Rev	Ver	Doc. Owner
741-76307	Assy Ignition Sw	DR	741-76307	B	1	P	R	P	741-76307	C	1	
741-76307	Part List Ignition sw	PL	pl-741-76307	B	1	P	R	P	pl-741-76307	C	1	
741-76307	Dfmea Ignition Sw	DF	df-741-76307	C	1	P	R	P	df-741-76307	D	1	
			OBSOLETE P/N:					OBSOLETE P/N:				
	Detent Spring Plunger	DR	741-75316	A	1	P	R	O	741-75316	-	-	
	Assy Base-PCB	DR	741-79845-T	B	1	P	R	O	741-79845-T	-	-	
	Assy PCB	DR	741-79846-T	A	1	P	R	O	741-79846-T	-	-	
	Assy PCB in process	DR	741-79847-T	A	1	P	R	O	741-79847-T	-	-	
	Printed Circuit Board	DR	12962193	2	1	P	R	O	12962193	-	-	
	Assy Ignition Sw	DR	741-79896	A	1	P	R	O	741-79896	-	-	
	Part List Ignition sw	PL	pl-741-79896	A	1	P	R	O	pl-741-79896	-	-	
	Dfmea Ignition Sw	DF	df-741-79896	A	1	P	R	O	df-741-79896	-	-	
	Data doc support	DS					N		57128dat.doc	-	-	

Type: DRW-Drawing; PL-Part List; SW-Software; DF-DFMEA; DS-Data Support. Disposition: P-Production; S-Service; O-Obsolete. Action: R-Replace; N-New.

CN Approval

Validation Test was successfully completed? Yes No N/A

Validation Ref. Number: C005-177

Has customer approval or concurrence been received for this change? Yes No N/A

Customer Approval Ref. No: See 57123dat for GM3660

Detailed Implementation Action Plan defined & Agrees with CIB: Yes No N/A

GM Identified: Yes No

CIL's Name: Alicia Salazar
 Engineering Manager Name: Paul Verdram
 CAL's Name: Juan Carlos Gonzalez
 Program Mgr Name: Jesus Chavez

Signature: XXXXXXXXXX
 Signature: XXXXXXXXXX
 Signature: XXXXXXXXXX
 Signature: XXXXXXXXXX

Date: 4/21/06
 Date: 4/21/06
 Date: 4/21/06
 Date: ABR-21-06

Document Control Usage Only

CN Number: 57128

Release Date: 04/21/06

D.C. Name & Signature: Jose Luis Alpuete