Mechatronics Change Request Form

Requester: DG J. Coniff/G. Lin Change Owner: Eduardo Rodriguez Pequeño CO Phone: Request Date: 1/13/06
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?
- Process
- Final Product
- Purchased Components
- In-House Fab Components

Change Driven by:
- Customer
- D-MS
- Supplier

Change Category:
- Warranty
- Cost Savings
- Product Design
- Process/Quality

Change Reason:
New PCB has via enlarge and via holes removed from traces. Catera Spring/Plunger is a Customer request to be in specification according the GM spec for the torque forces.

Change Flow:
- Fast Track
- Production

Risk Assessment:
- Low
- Med
- High

Change Type:
- Documentation
- Running
- Mandatory

Request Type:
- Experiental
- Permanent
- Advanced

Program Phase:
- Program Launch
- Concept Direction
- Concept Approval
- Present Product
- Final Approval

Technical Analysis:
- DOE
- Spec. Review
- Drawings Review
- Prod Validation
- DFA Review
- Special Testing

Note: Any change of a product must follow the attached Appendix A before proceeding.

Change Verification (Special Testing) Summary:
- 3 times durability per specification
- Torque and angle test perform for forces and displacements of make/trakes.

MINIMUM REQUIRED NOTIFICATION

Function | Notified | Responded | Name
---|---|---|---
Change Owner | ☑ | ☑ | Eduardo Rodriguez
Purchasing | ☑ | ☑ | Carlos Lara
SQA | ☑ | ☑ | Marco Lemos
PC&L - Procurement | ☑ | ☑ | Alfonso Gonzalez
PC&L - Cust Service | ☑ | ☑ | D. Cardenas/Barbarella
PC&L - Planning | ☑ | ☑ | Israel Leon
Manufacturing Eng | ☑ | ☑ | Jorge Montes de Oca
Process Engineer | ☑ | ☑ | Jorge Montes de Oca
Quality Engineer | ☑ | ☑ | Jose Luis Riveras
Industrial Engineer | ☑ | ☑ | Ernesto Castellanos
Packaging Engineer | ☑ | ☑ | E. Castellanos

NOTIFICATION TO THESE POSITIONS UP TO CIB DECISION:

Function | Notified | Responded | Name
---|---|---|---
Production Line Supervisor | ☑ | ☑ | Carlos Zarate
Software Engineer | ☑ | ☑ | N/A
Systems Engineer | ☑ | ☑ | N/A
Component Engineer | ☑ | ☑ | Aldo Calvillo/Luis Delgado
Validation Engineer | ☑ | ☑ | Larry Allen
Sales | ☑ | ☑ | Gabriel Ayala
Finance | ☑ | ☑ | Edgar Zambrano
Test Engineer | ☑ | ☑ | N/A
Tool Engineer | ☑ | ☑ | N/A
ECAD | ☑ | ☑ | N/A
MCAD | ☑ | ☑ | N/A
Other | ☑ | ☑ | N/A

Note: Follow next step to find Consult Contact List to verify CIB names.
# Mechatronics Change Request Form

## Financial Feasibility Review

**IMPORTANT:**

Previous to fill out this section, please type Cost, and lead times into Checklist/IAF format.

Once leadtimes have been received, target dates can be set up in all required tasks into Checklist/IAF format also.

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Customer%</th>
<th>Delphi%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>$240</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Hrs-Qty</td>
<td>$21,000</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>DEVELOPMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Hours</td>
<td>210</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Investment Paid by Delphi:

<table>
<thead>
<tr>
<th>Dept / Account</th>
<th>Dept Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMF department</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

### Total Change Lead Time:

24 wks

Planned Obsolescence $: $0.00

Piece Part Cost $ Change From: _ _

To: _ _

---

**CR Approval**

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAL</td>
<td>Juan Carlos Gonzalez</td>
<td>[Redacted]</td>
<td>4/13/06</td>
</tr>
<tr>
<td>Program Mgr.</td>
<td>Jesus Chavez</td>
<td>[Redacted]</td>
<td>4/16-13-06</td>
</tr>
<tr>
<td>Account Mgr.</td>
<td>N/A</td>
<td>[Redacted]</td>
<td>4/16-13-06</td>
</tr>
<tr>
<td>Plant Mgr.</td>
<td>Mauro Gonzalez</td>
<td>[Redacted]</td>
<td>4/16-13-06</td>
</tr>
<tr>
<td>PC&amp;L Mgr (Proc.)</td>
<td>Orlando Salinas</td>
<td>[Redacted]</td>
<td>4/16-13-06</td>
</tr>
<tr>
<td>PC&amp;L Mgr (C.S.)</td>
<td>Roque Barrera</td>
<td>[Redacted]</td>
<td>4/16-13-06</td>
</tr>
<tr>
<td>Production Mgr.</td>
<td>J. Olivera</td>
<td>[Redacted]</td>
<td>4/16-13-06</td>
</tr>
<tr>
<td>Lab Mgr.</td>
<td>Francisco Mendoza</td>
<td>[Redacted]</td>
<td>4/16-13-06</td>
</tr>
</tbody>
</table>

---

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

---

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

**Page 1**

**Customer:** GM

**Program, Product Type & Model Year:** GMX317, Delta Ignition Sw 2007

## Change Notice Information

- **Requestor:** JG.1 Consumable Change Owner: Eduardo Rodriguez Pequeño
- **CO Phone:** [Redacted]
- **Request Date:** 4/13/06

## Change Title:

New PCB design and Calera Spring/Plunger for production in Delta Ignition Sw

## Affected Documents Information

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>741-76307</td>
<td>Assy Ignition Sw</td>
<td>DR</td>
<td>741-76307</td>
<td>B</td>
<td>1</td>
<td>P</td>
<td>R</td>
<td>P</td>
<td>741-76307</td>
<td>C</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>741-76307</td>
<td>Part List Ignition Sw</td>
<td>PL</td>
<td>pl-741-76307</td>
<td>B</td>
<td>1</td>
<td>P</td>
<td>R</td>
<td>P</td>
<td>pl-741-76307</td>
<td>C</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>741-76307</td>
<td>Dfines Ignition Sw</td>
<td>DF</td>
<td>df-741-76307</td>
<td>C</td>
<td>1</td>
<td>P</td>
<td>R</td>
<td>P</td>
<td>df-741-76307</td>
<td>D</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Data Adjunct:**

- POSSIBLE P/N: 741-75316
- OBSOLETE P/N: 741-79845-T
- OBSOLETE P/N: 741-79846-T
- OBSOLETE P/N: 741-79847-T

---

**Sheets Drawn:**

- Assy Spring Plunger
- Assy Base-PCB
- Assy PCB
- Assy PCB in process
- Printed Circuit Board
- Assy Ignition Sw
- Part List Ignition Sw
- Dfines Ignition Sw

---

**Data doc support:**

- Data doc support

---

**Validation Test was successfully completed?**

- Yes

**Customer Approval or concurrence has been received for this change?**

- Yes

**Detailed Implementation Action Plan defined & Agrees with CIB?**

- Yes

**CIL's Name:**

- Alicia Salazar

**CAL's Name:**

- Juan Carlos Gonzalez

**Program Mgr Name:**

- Jesus Chavez

**CN Number:** 57128

**Release Date:** 4/12/06

**D.C. Name & Signature:** Jose Luis Alpuche

---

**Type:** DRW-Drawing, PL-Part List, SW-Software, DF-DFMEA, DS-Data Support

**Disposition:** P-Production, S-Service, O-Obsolete, A-Action, R-Replace, N-New

---

**CN Approval**

**Validation Ref. Number:** C065-177

**Customer Approval Ref. No:** See 57128 dat for GMX3660

---

**Date:**

- 4/12/06

---

**Form No:** D-MSNA W2.8F1 (Rev. 3) Change Notice Form

---

**SC-000093**