

REDACTED

From: Rodriguez, Eduardo P

Sent: Friday, June 02, 2006 9:07 AM

To: Rivera Alvarez, Jose; Montesdeoca, Jorge; Hernandez, Saul ; King, Douglas L; scooper [REDACTED]

dbuce [REDACTED] JGregg [REDACTED] Michel, Ignacio; Gonzalez, Aldo; scurrence [REDACTED]

todd.a.seiffert [REDACTED] bruce.keedy [REDACTED] Keith.D.Wells [REDACTED] thomas.vanwirt [REDACTED]

dan.fernandez [REDACTED] raymond.degiorgio [REDACTED]

Cc: Straub, Ted ; Hernandez, Jose A; Gracia, Carlos; Zarate, Carlos (Mechatronic Systems); Nurse, John A; Coniff, John B; Hernandez, Hector; Sosa, Aurelio; Gonzalez, Mauro ; Rairigh, Natalie; Lozano, Armando; Rossi, Lou F; Ulloa, Roberto; Verdream, J Paul; Salinas, Orlando; Gonzalez, Juan C (DMS)

Subject: RE: Delta Ignition Switch Voltage Drop follow up conference

This is the information requested last meeting, a brief description of what is changing in the New PCB. Dentent plunger is implemented to increase torque forces to be within specification.

Regarding the sooner implementation:

-Mechatronics will receive material for production on 6/26. Mechatronics can not implement sooner.

<< File: Top Focus - New PCB and Detent plunger - GM.ppt >>

-----Original Appointment-----

From: Rivera Alvarez, Jose

Sent: Wednesday, May 31, 2006 5:34 PM

To: Rivera Alvarez, Jose; Rodriguez, Eduardo P; Montesdeoca, Jorge; Hernandez, Saul ; King, Douglas L; 'Copper Scott [REDACTED]

'David Bruce [REDACTED] 'JGregg [REDACTED] Michel, Ignacio; Gonzalez, Aldo; 'scurrence [REDACTED]

'todd.a.seiffert [REDACTED] 'bruce.keedy [REDACTED] Keith.D.Wells [REDACTED] 'thomas.vanwirt [REDACTED] 'dan.fernandez [REDACTED]

'raymond.degiorgio [REDACTED]

Cc: Straub, Ted ; Hernandez, Jose A; Gracia, Carlos; Zarate, Carlos (Mechatronic Systems); Nurse, John A; Coniff, John B; Hernandez, Hector; Sosa, Aurelio; Gonzalez, Mauro ; Rairigh, Natalie; Lozano, Armando; Guerrero, Luis; Rossi, Lou F; Ulloa, Roberto; Verdream, J Paul; Salinas, Orlando

Subject: Updated: Delta Ignition Switch Voltage Drop follow up conference

When: Friday, June 02, 2006 2:00 PM-2:30 PM (GMT-06:00) Central Time (US & Canada).

Where: Meeting Line [REDACTED] passcode: [REDACTED]

Friday June 2, 2006 at 14:00 hrs central time. The meet me line number is above.

ISSUES TO REVIEW:

- A) Time line for PCB implementaion. Status.
- B) General comments



PROPOSED PCB LAYOUT

Problem description

- Switch presents Contact Bounces & contact permanent deformation
- Customer rejects switches. Functional Problem when car starts

• Impact : Expenses that Mechatronic paid

- 9% fall out
- Switches scrapped= \$135k
- Premium freights = \$25k
- Mfg Overtime = \$25k

• Proposed actions from Product Engineering

- Change PCB design to remove via holes from contact traces.
- Enlarge PCB vias to avoid contactors being in via limits.
- Detent plunger to increase torque force to be within spec.

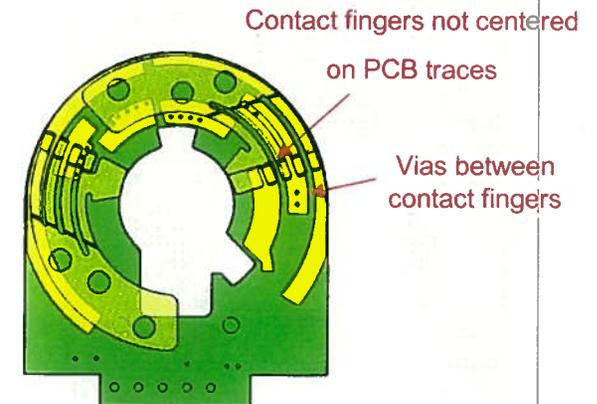
• Current status for PCB

- 1.-Validation for Torque & Angle for timing corrections ~ DONE
- 2.-GM RDE approve GM3660 ~ DONE
- 3.- Run 350 Switches for PTR in Mechatronics ~ DONE
- 4.- PTR samples approval with customer and tiers ~ 6/15/06
- 5.- **Mechatronics receive material for production ~ 6/26/06**
- 6.-SOP @ Condura for new PCB & Spring/Plunger ~ 6/30/06

• Comments

- Mechatronics can not improve the 6/30 base on manufacturing and procurement (PC&L) feedback. Mechatronics will receive material on 6/26.

Current



Proposed

