

2013 CHEVROLET MALIBU
1G11F5RR3DF [REDACTED]

Thermal Event

Case # [REDACTED]

Body harness
connectors.





Note: The Fiber
cover charred.





High Voltage
cove front

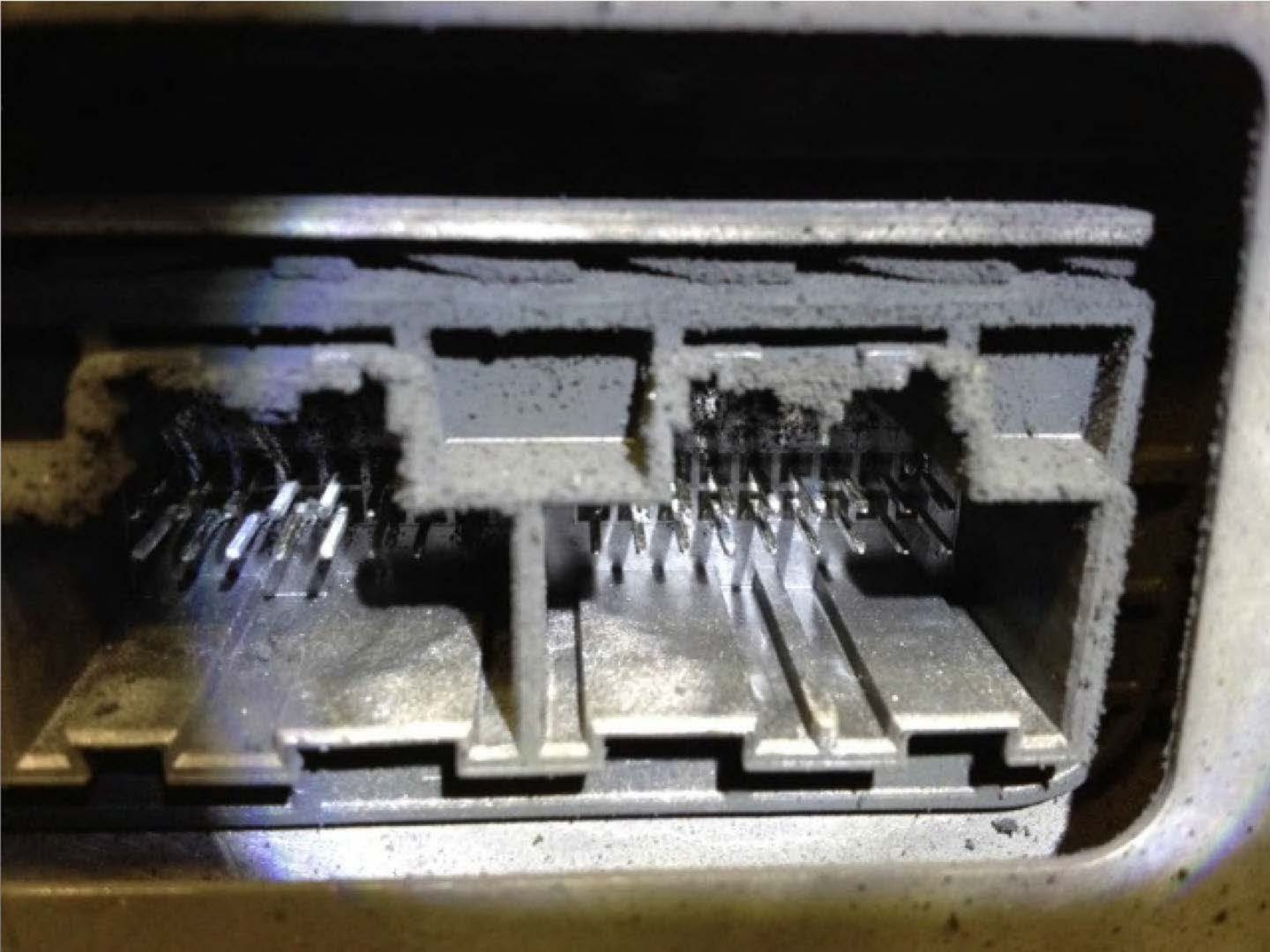
1381
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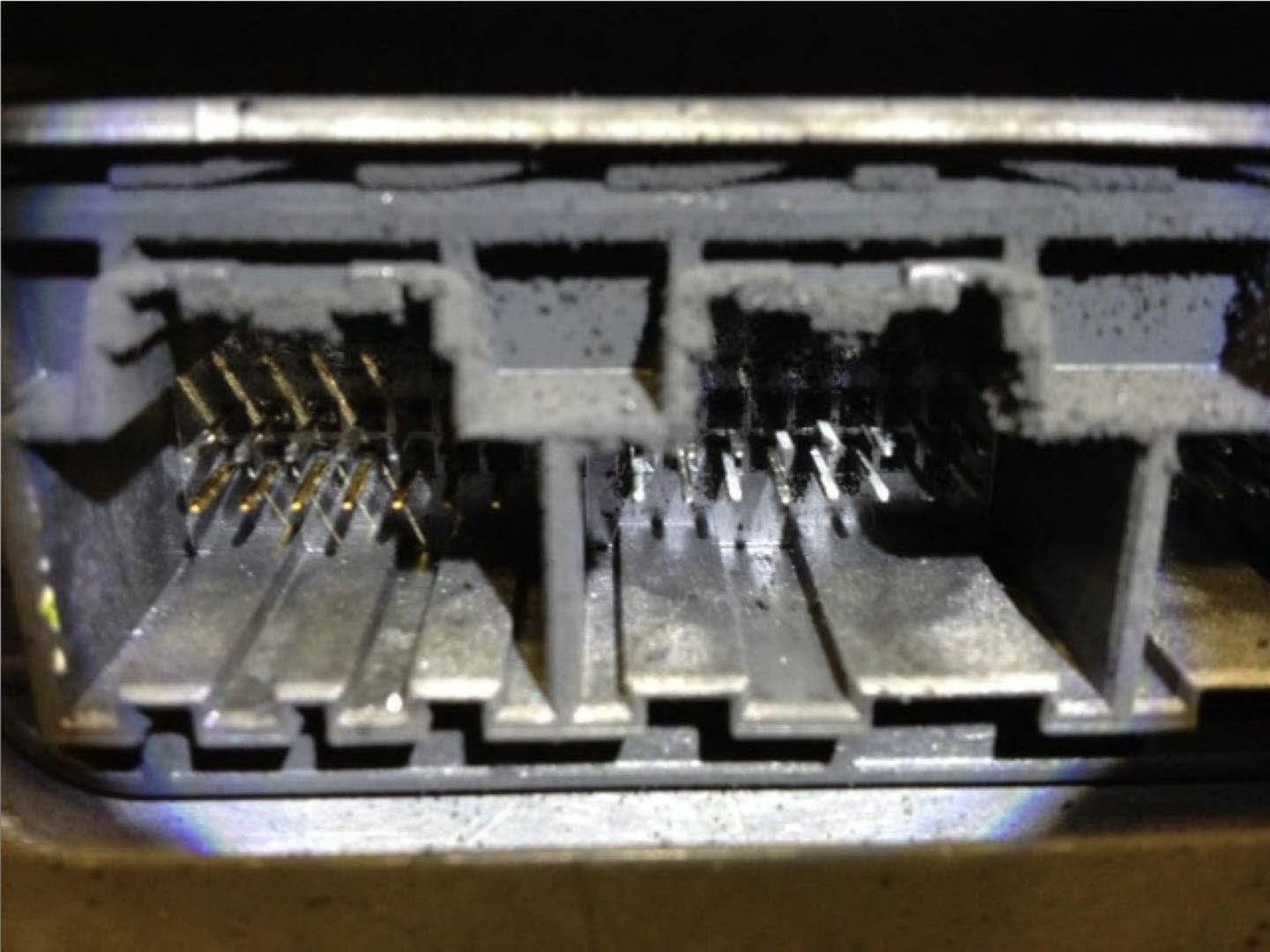
592 24280258
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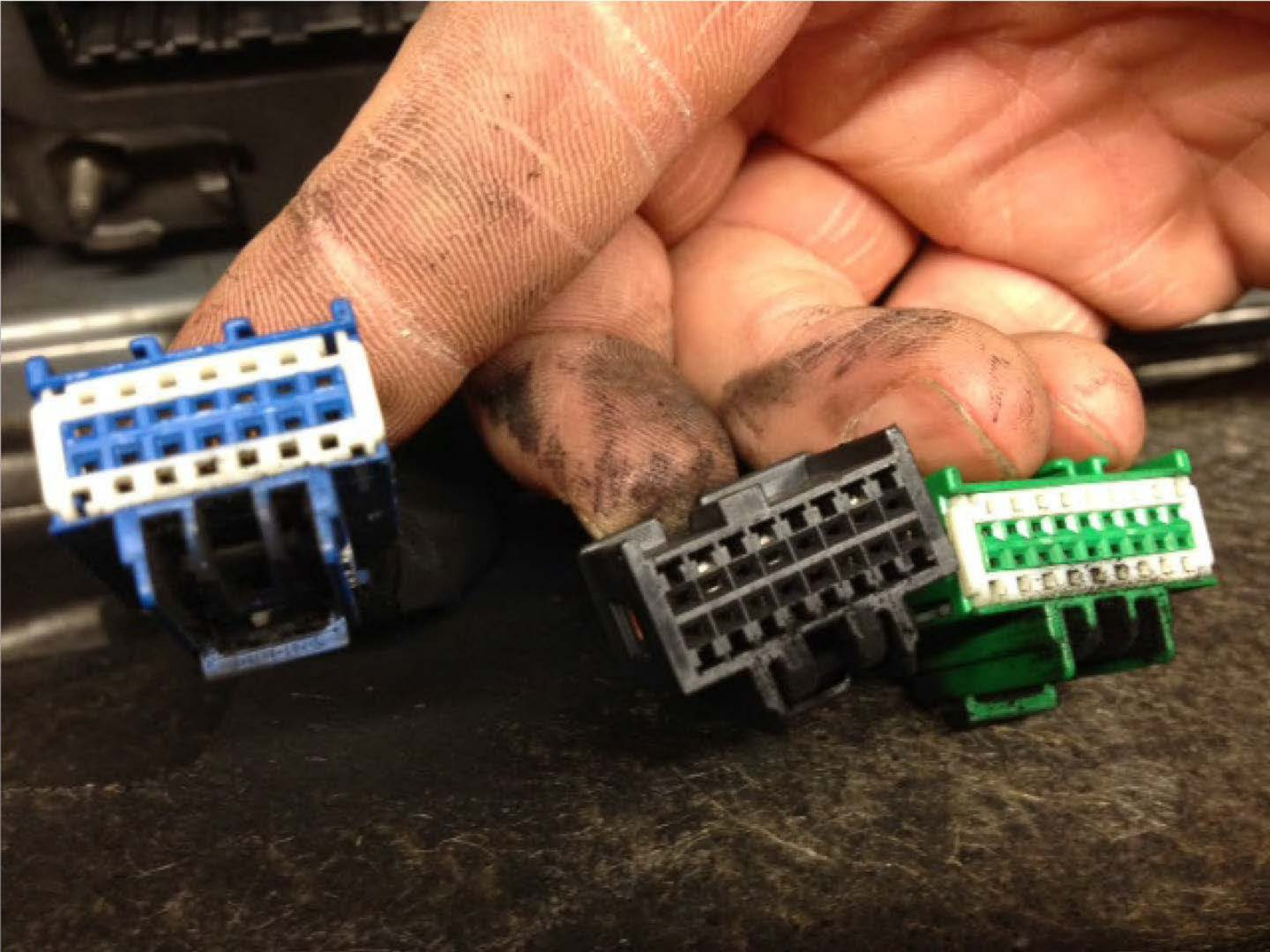
High Voltage cover inside.











We removed the cover to access the top of the unit.





The Underside of the
Battery cover.





The fabric on the passenger's rear seat back is discolored and slightly melted.



MFD BY GENERAL MOTORS LLC

DATE	GVWR	GAWR FRT	GAWR REAR
06/12	2064 KG 4550 LB	1065 KG 2347 LB	999 KG 2203 LB

THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL VEHICLE SAFETY, BUMPER, AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

1G11C5RR7DF [REDACTED]

TYPE: PASS CAR



危险 高压

蓄电设备
为避免发生灼伤或电击
• 仅可由合格技师操作
• 操作前请先卸下人工
断接装置。



S92 22934565

4565



(20T) LQ45654112156039

(1P) 28355927

Made in USA

2158



⚠ DANGER ⚠ HIGH VOLTAGE 130V
ENERGY STORAGE DEVICE
 • To help avoid burns or electric shock:
 • service by qualified personnel only
 • disconnect Manual Service Disconnect
 before service.

⚠ 危險 ⚠ 高壓 130V
PELIGRO
 Para evitar quemaduras o choque eléctrico:
 • el servicio sólo lo debe realizar personal calificado.
 • retire la desconexión manual de servicio antes de dar servicio.

⚠ DANGER ⚠ HAUTE TENSION 130V
SYSTÈME DE STOCKAGE D'ÉNERGIE
 Pour éviter les brûlures ou les chocs électriques:
 • Seul le personnel qualifié est autorisé à effectuer l'entretien.
 • Couper l'alimentation avant de procéder à l'entretien.

⚠ 위험 ⚠ 높은 전압 130V
 에너지 저장 장치
 • 화재 또는 전격
 사고를 피하기
 위하여:
 • 자격 있는
 인원이 정비에
 참여해야
 합니다.
 • 정비 전에 수동
 차단 장치를
 분리합니다.

992 2

4565
08412 196938

100000



EN
T
• S
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b

警告
为避免
• 仅可由
• 操作前
断接装

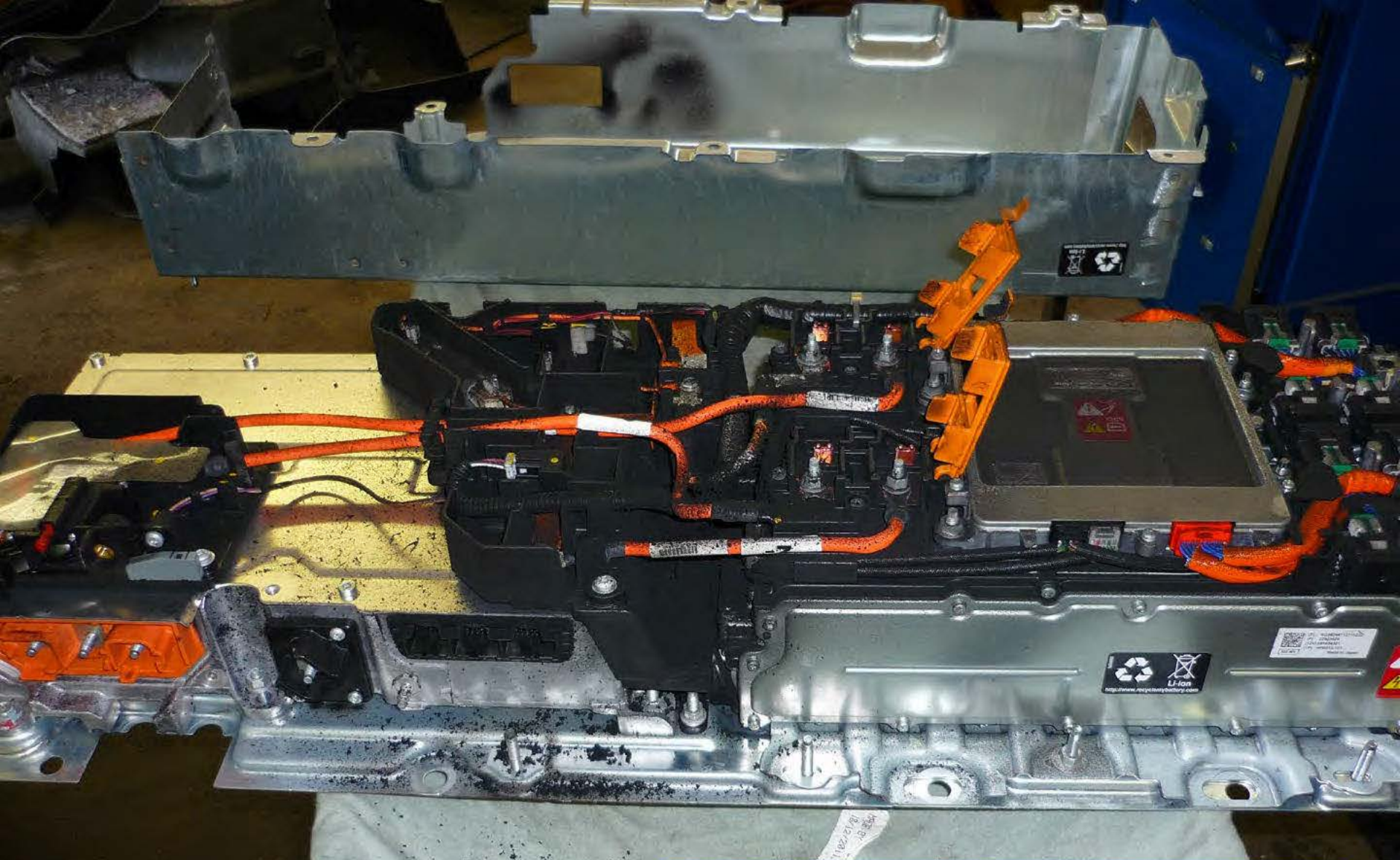
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... (20T) LQ45654J1215603

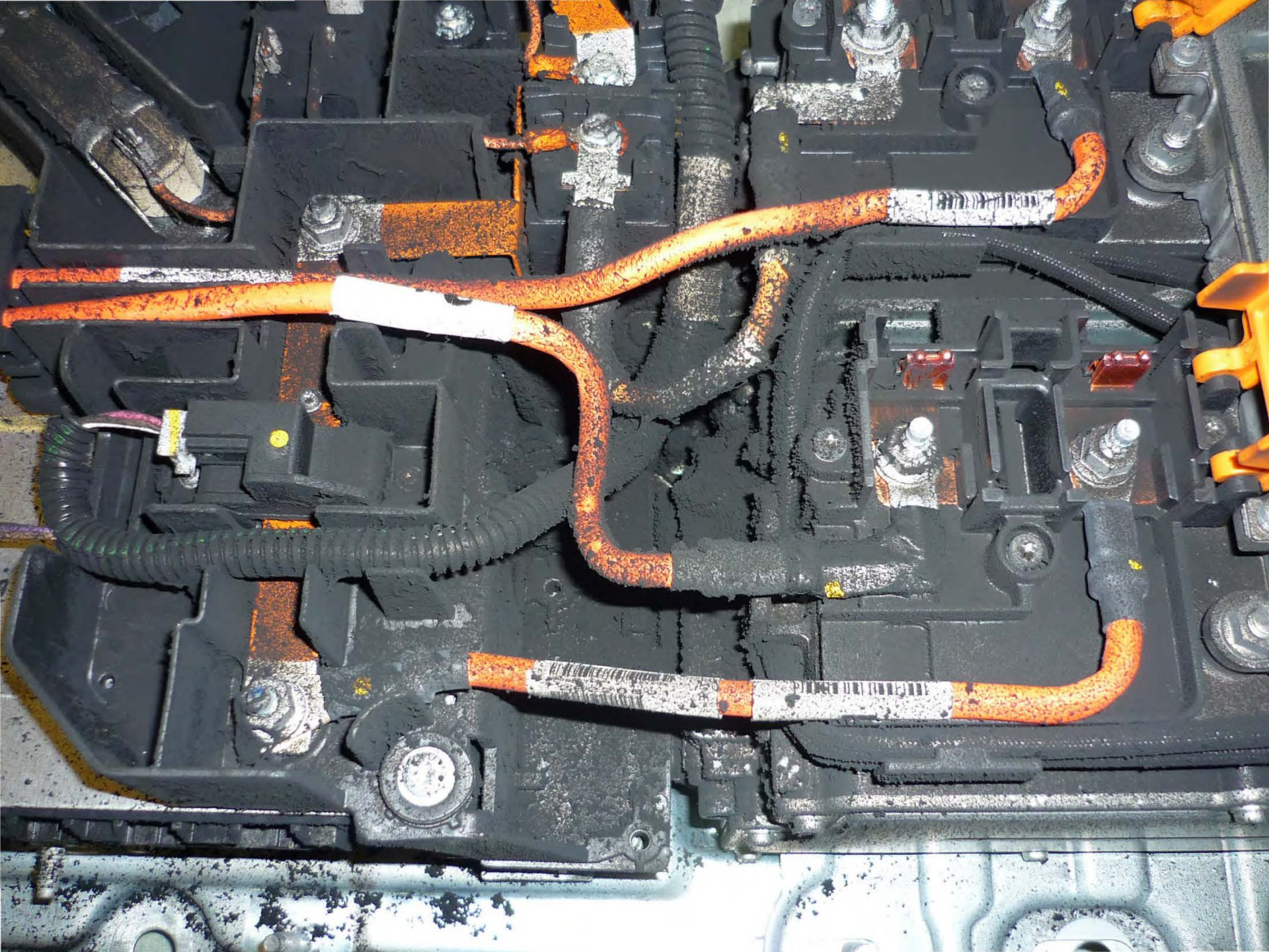


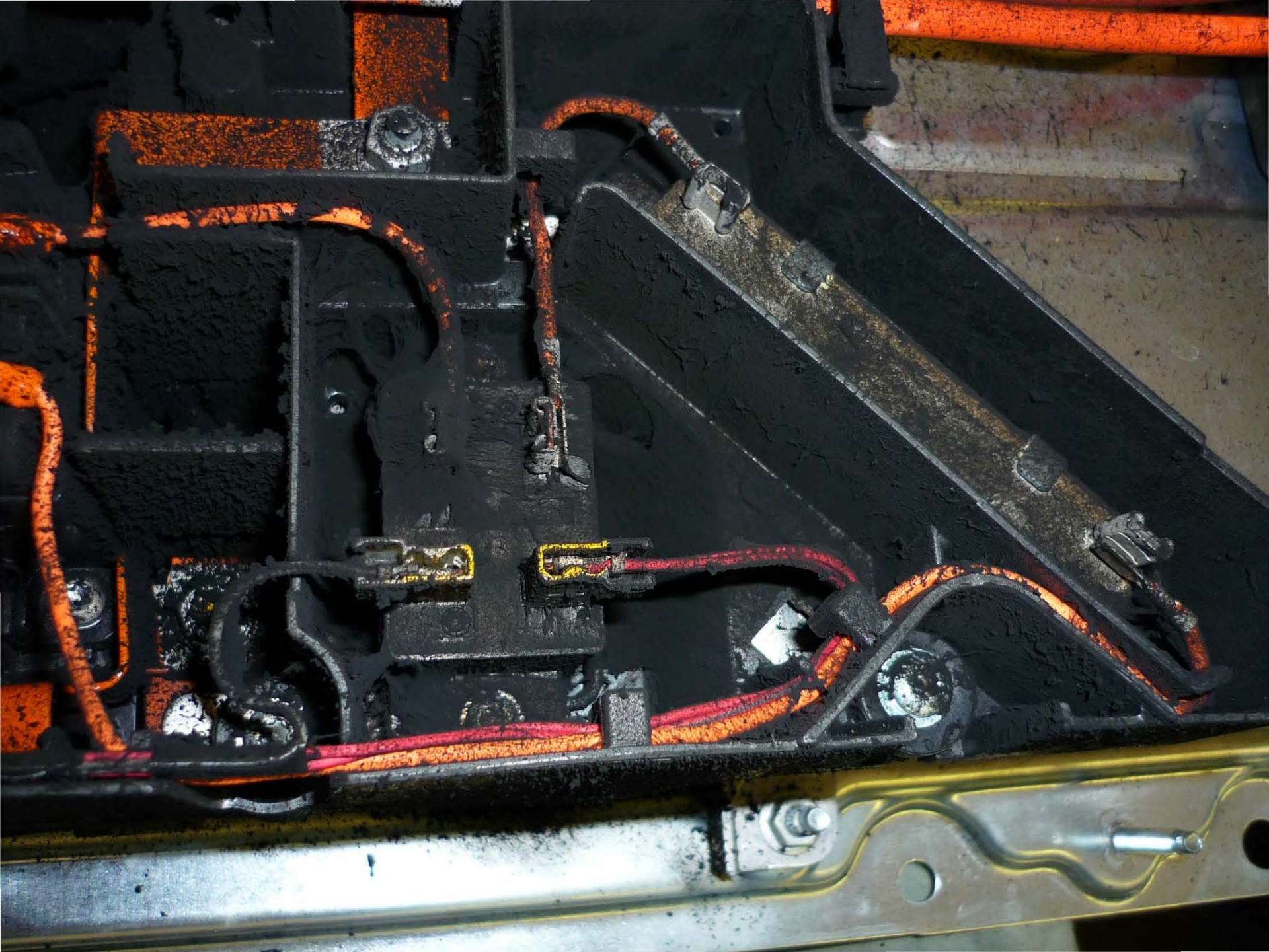
Soot deposits on battery pack trim cover.

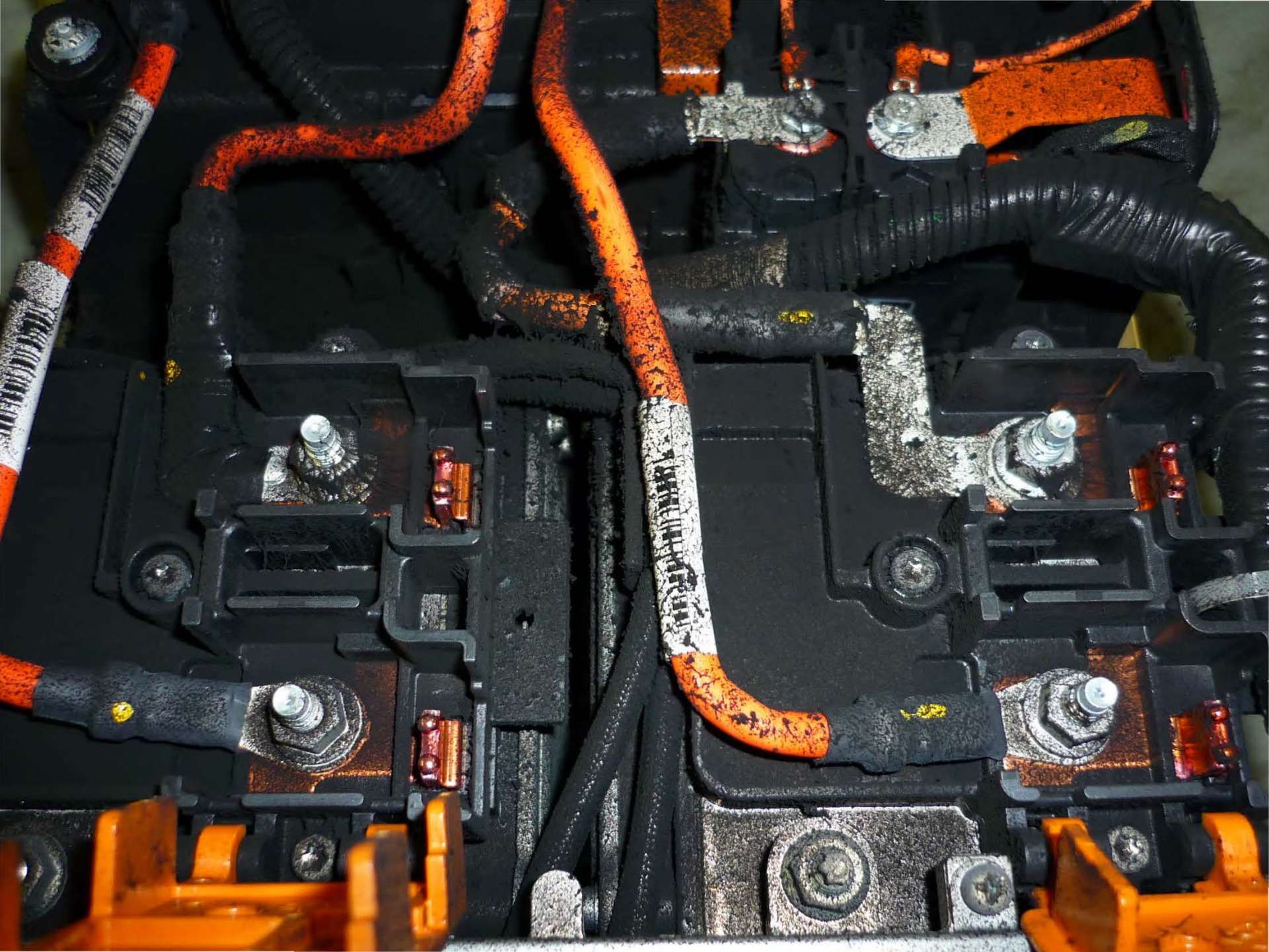


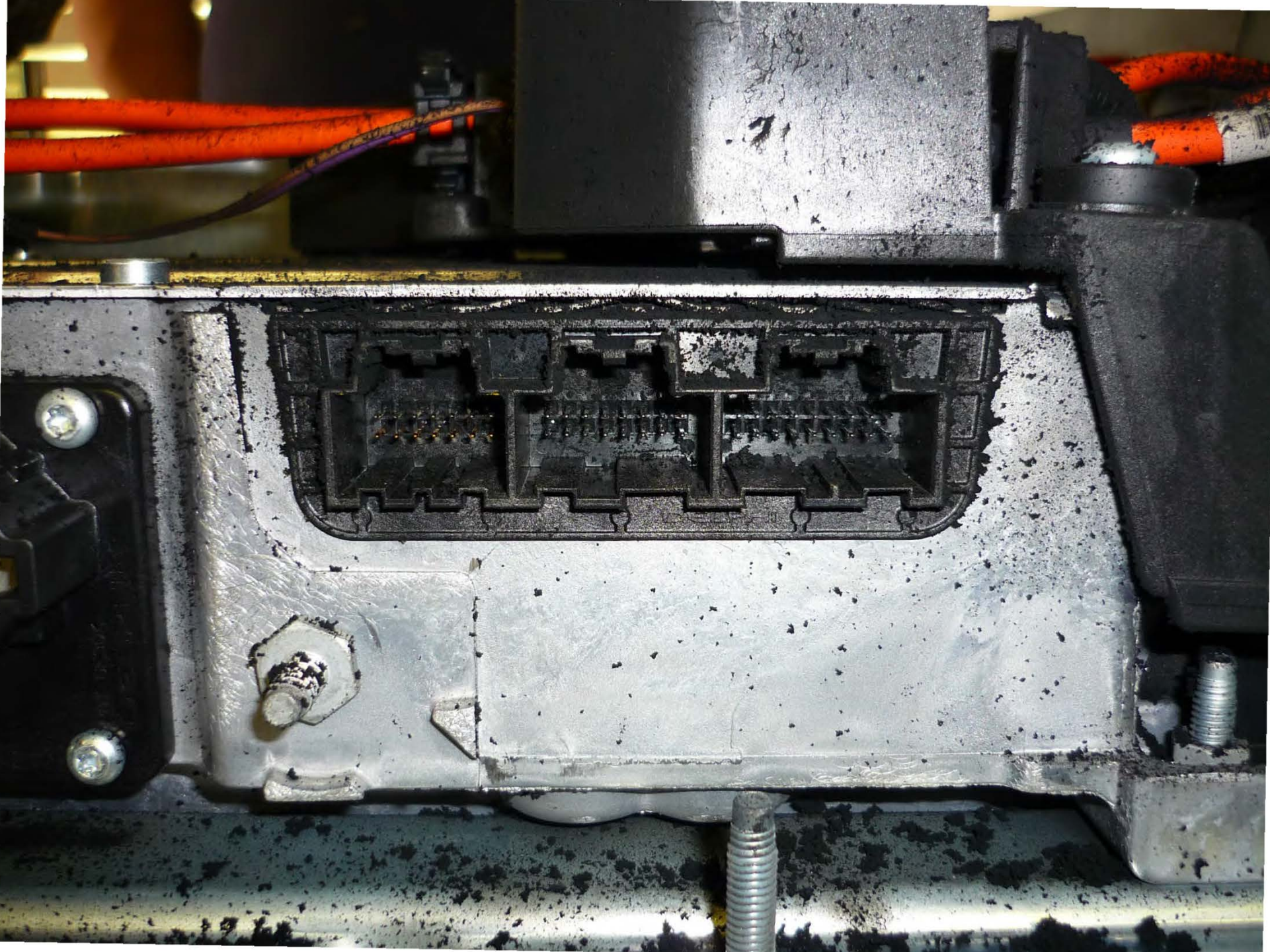


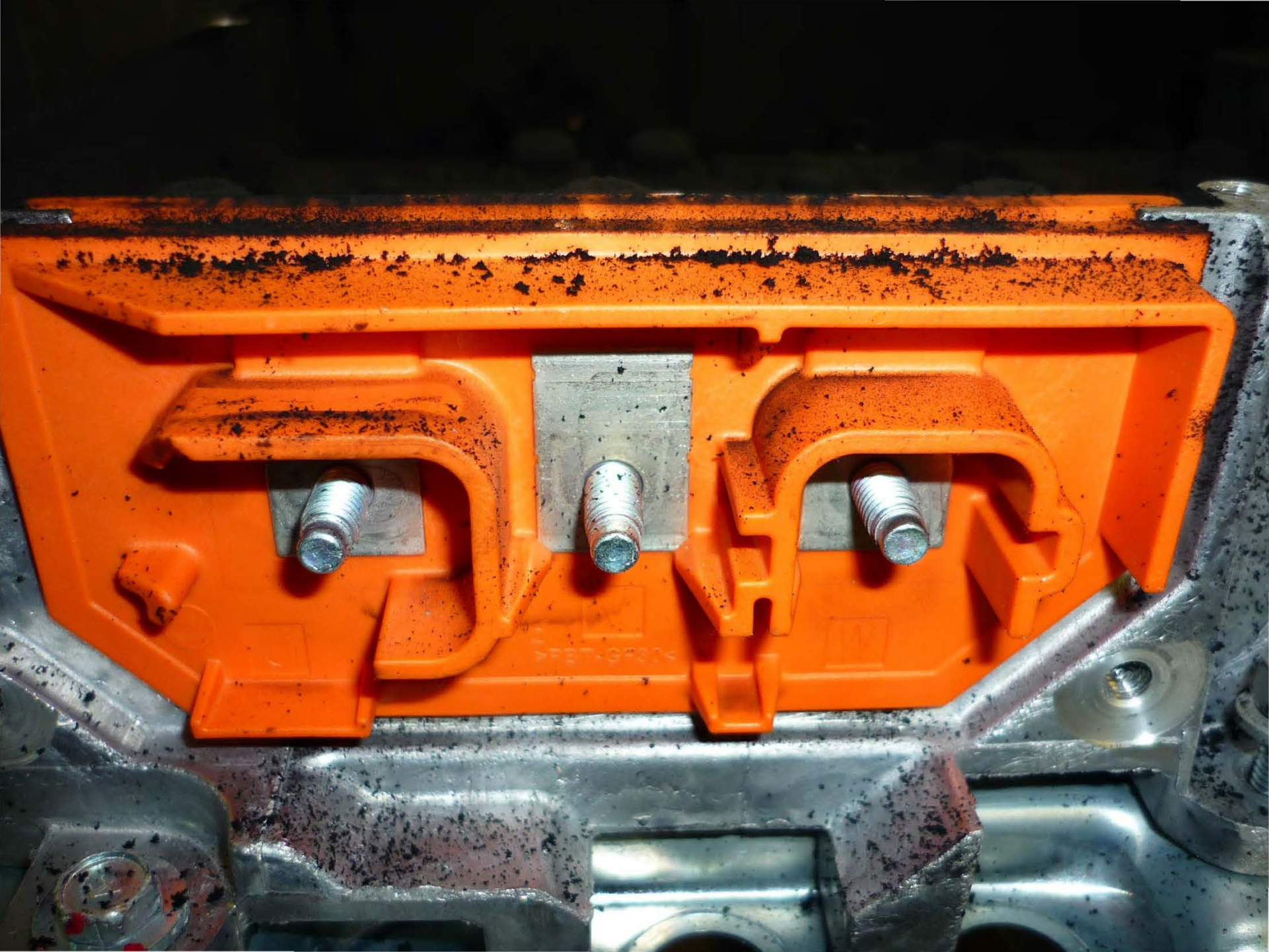
Battery cover removed. Soot and plastic debris found throughout.

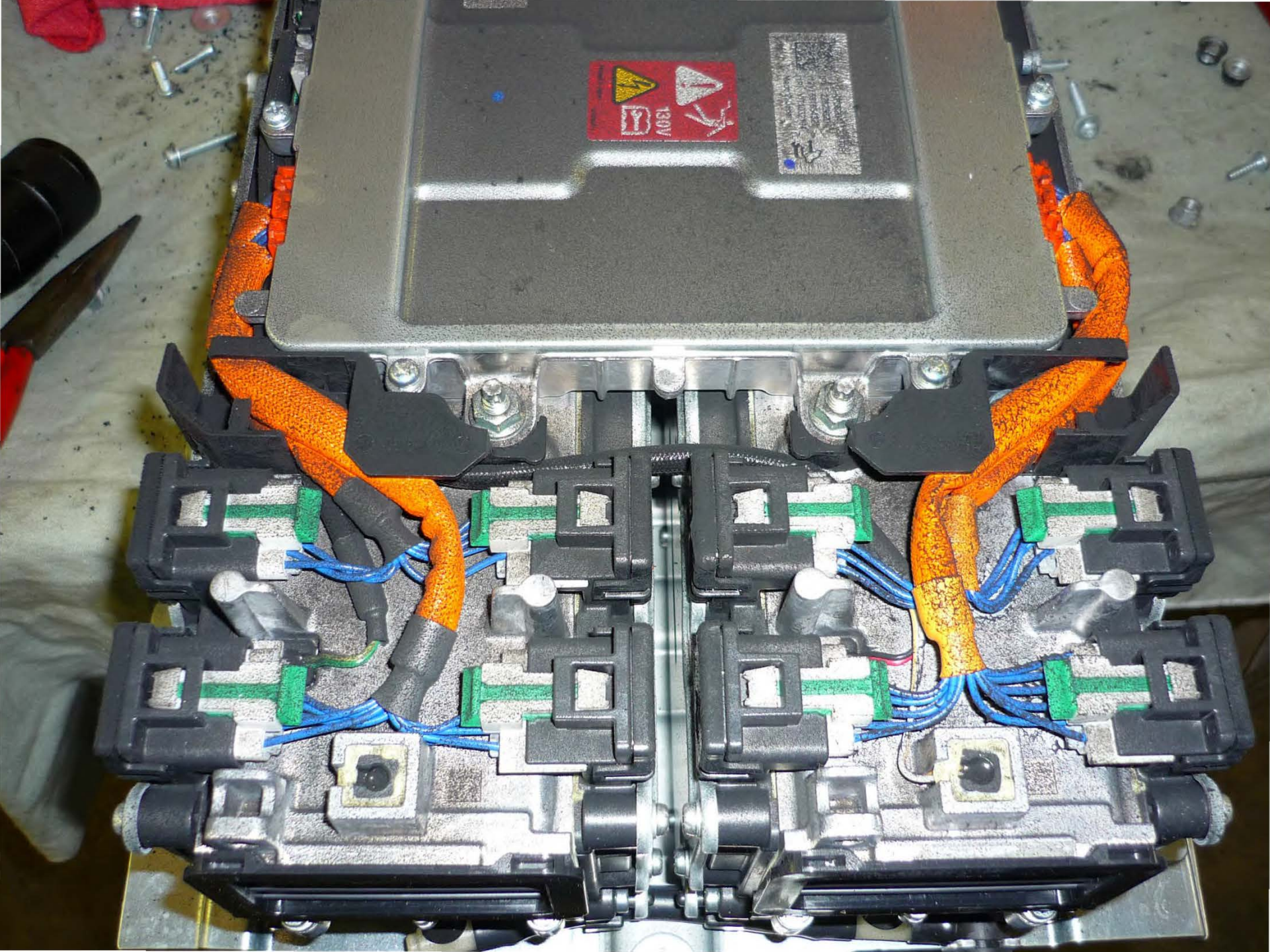


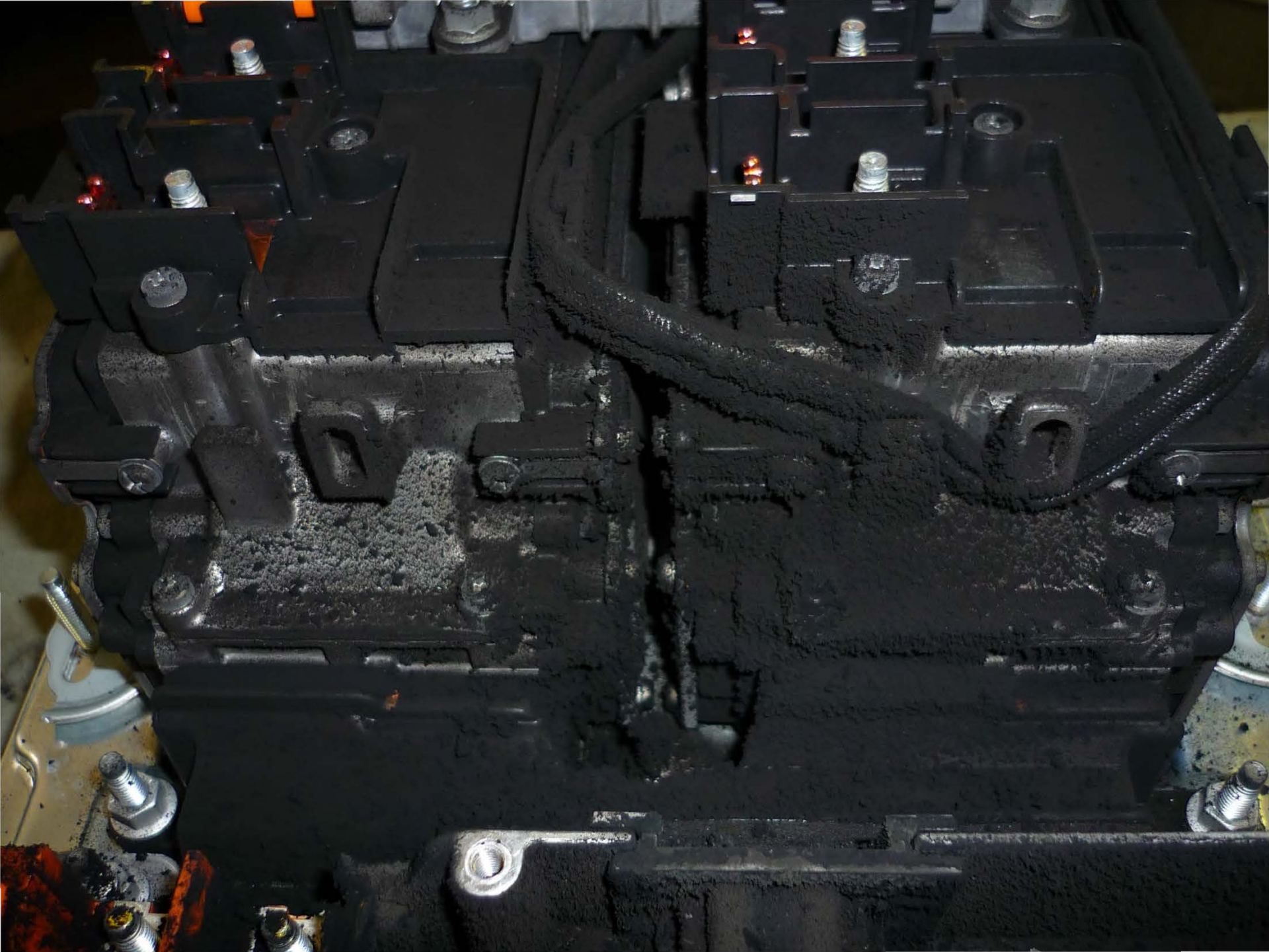


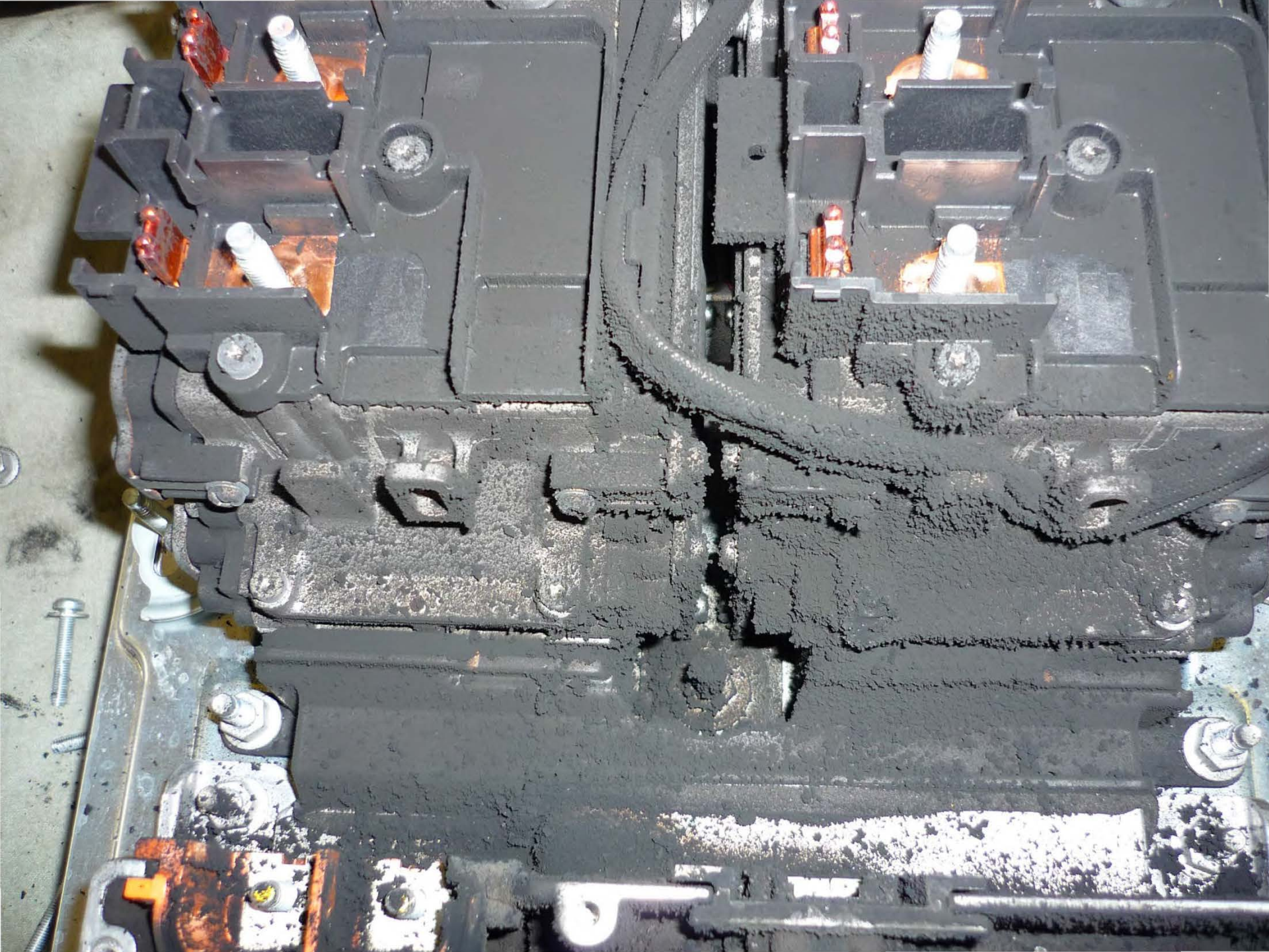






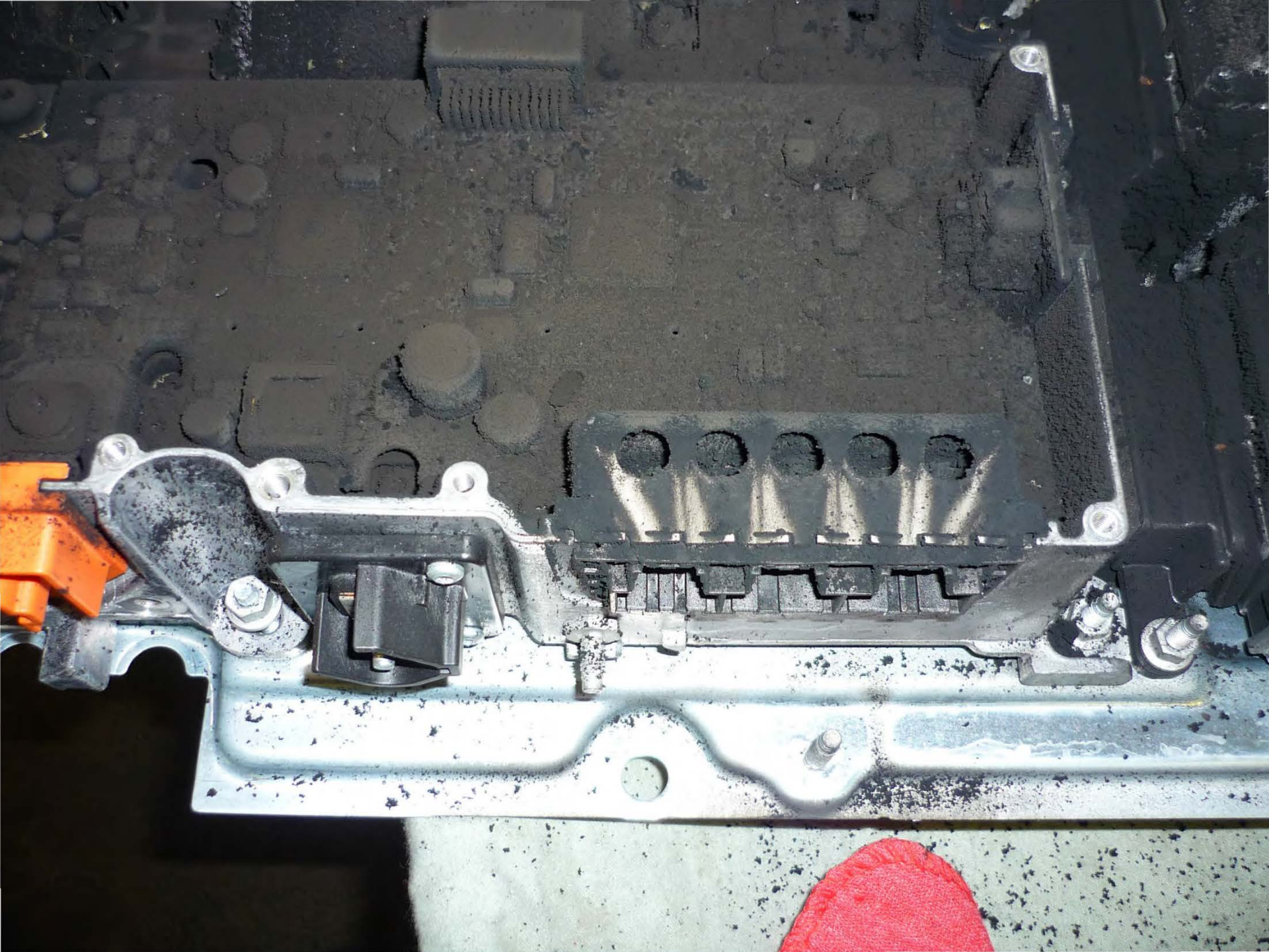




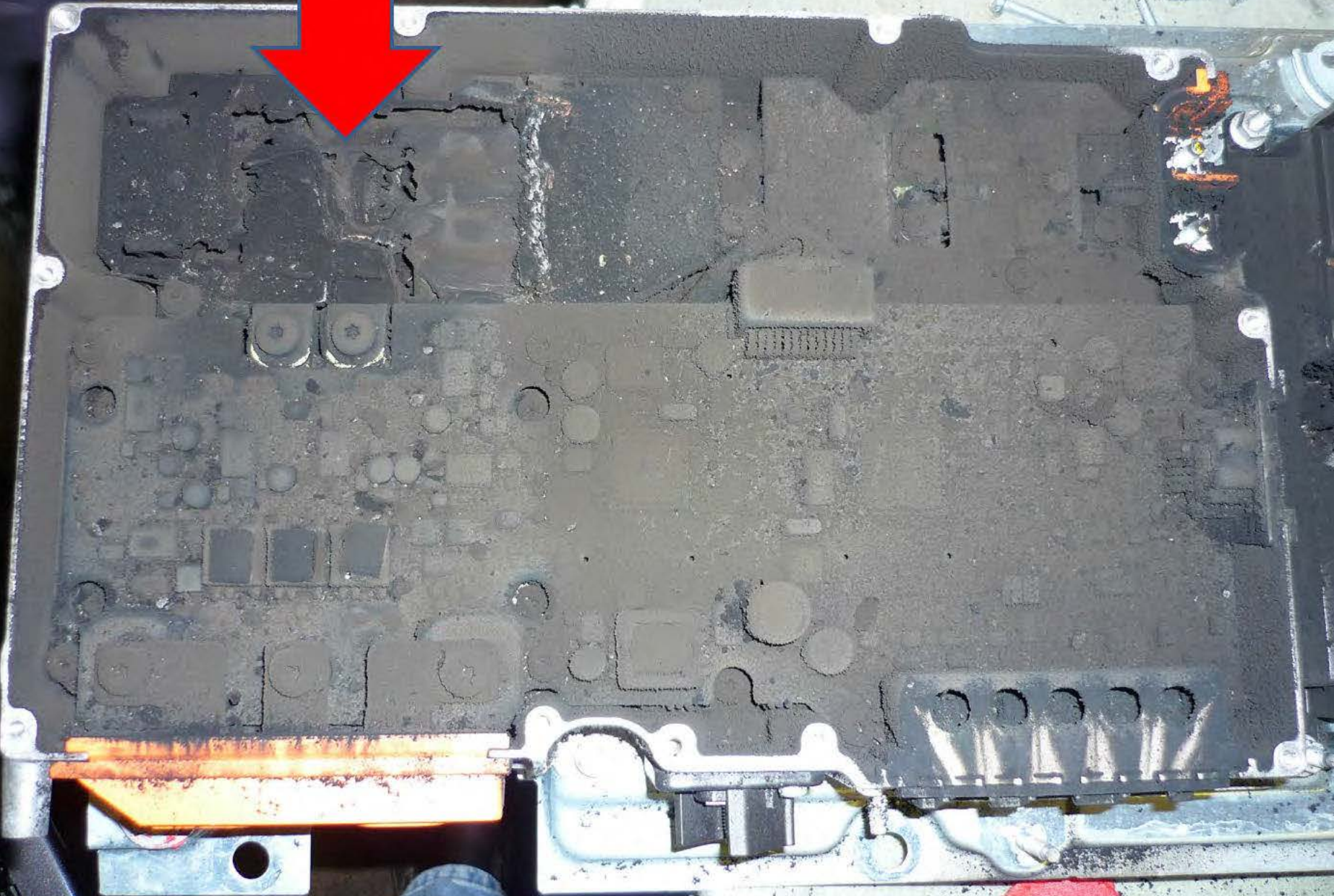


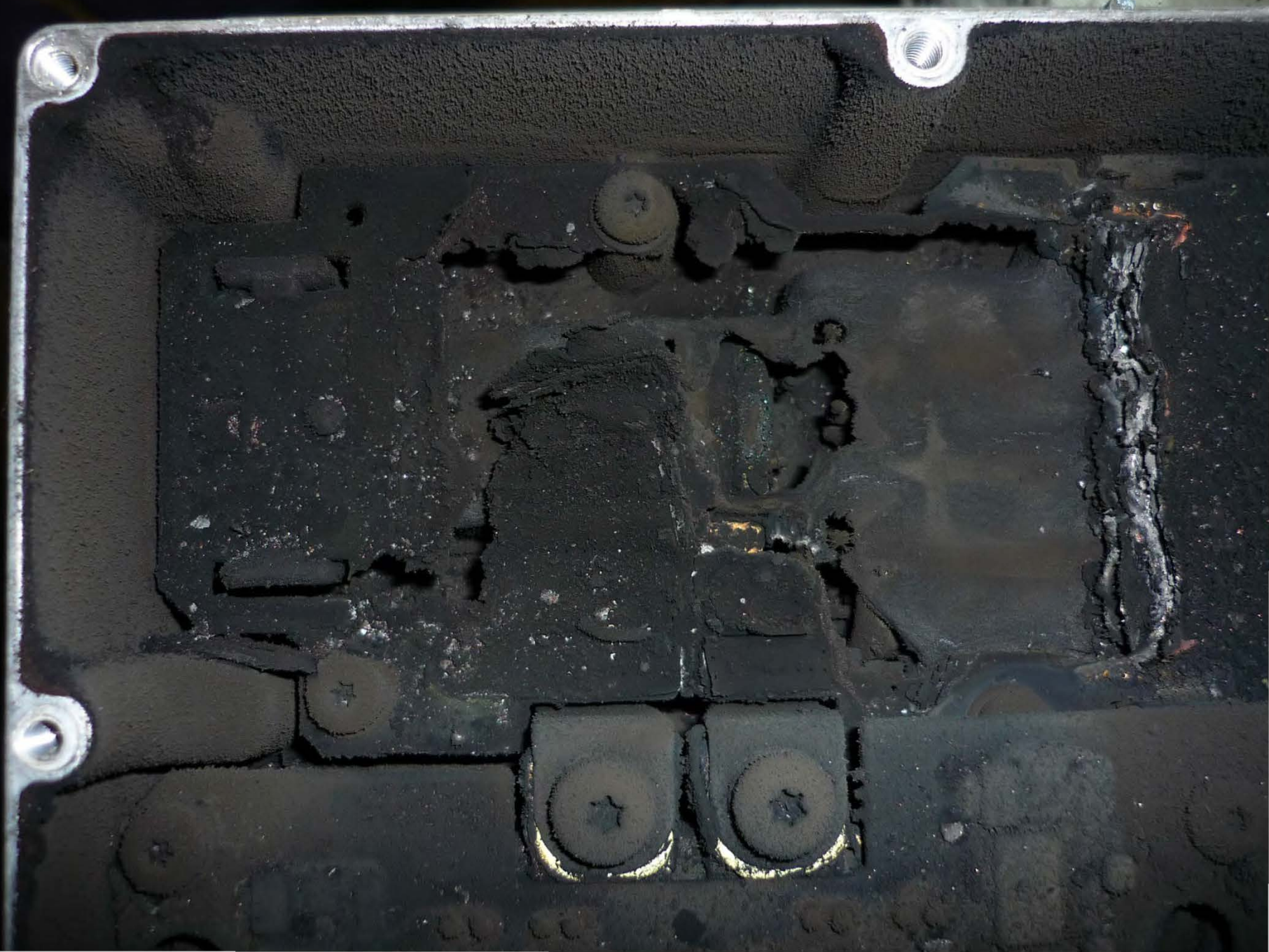
SGCM/APM cover removed.



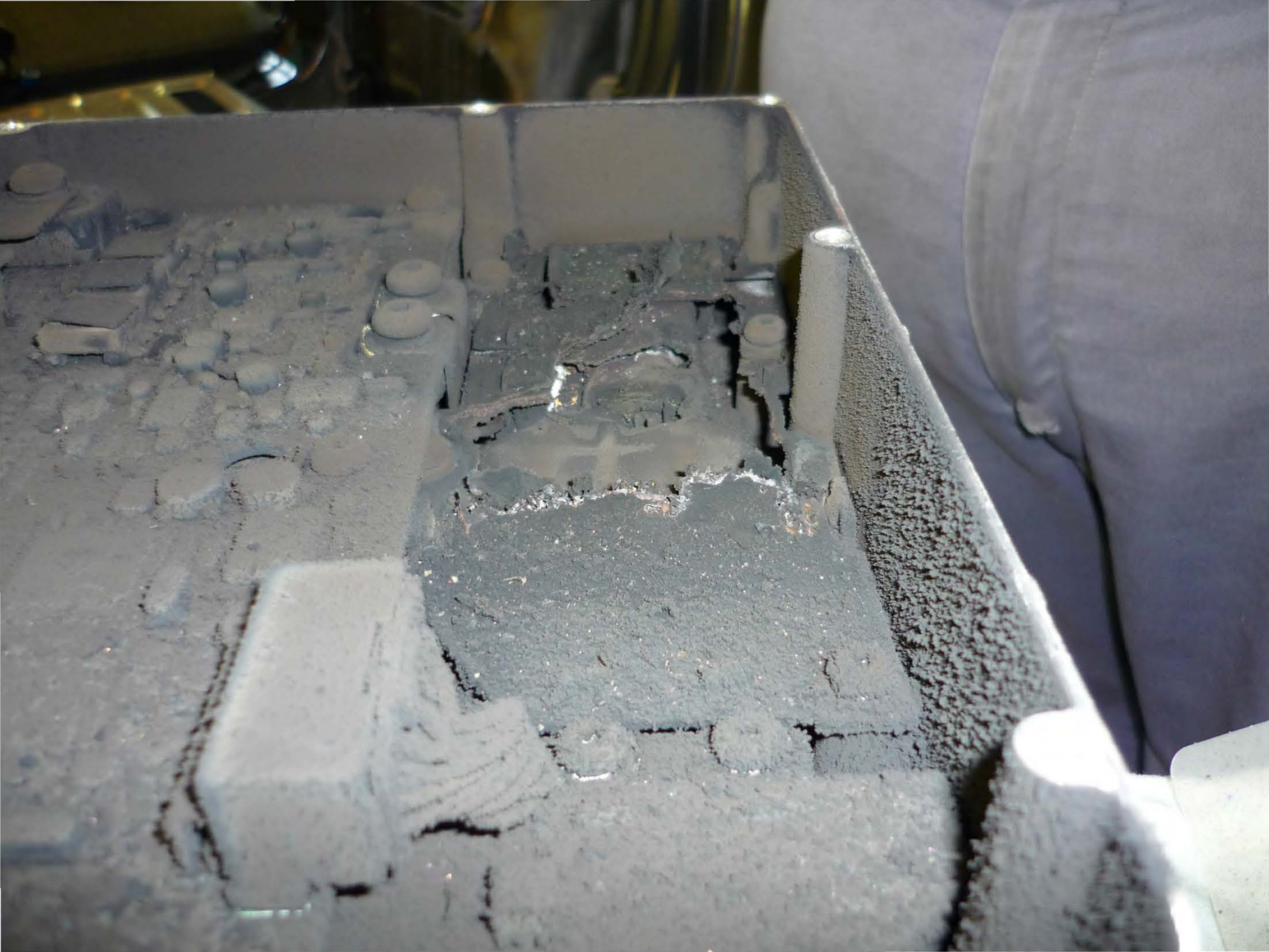


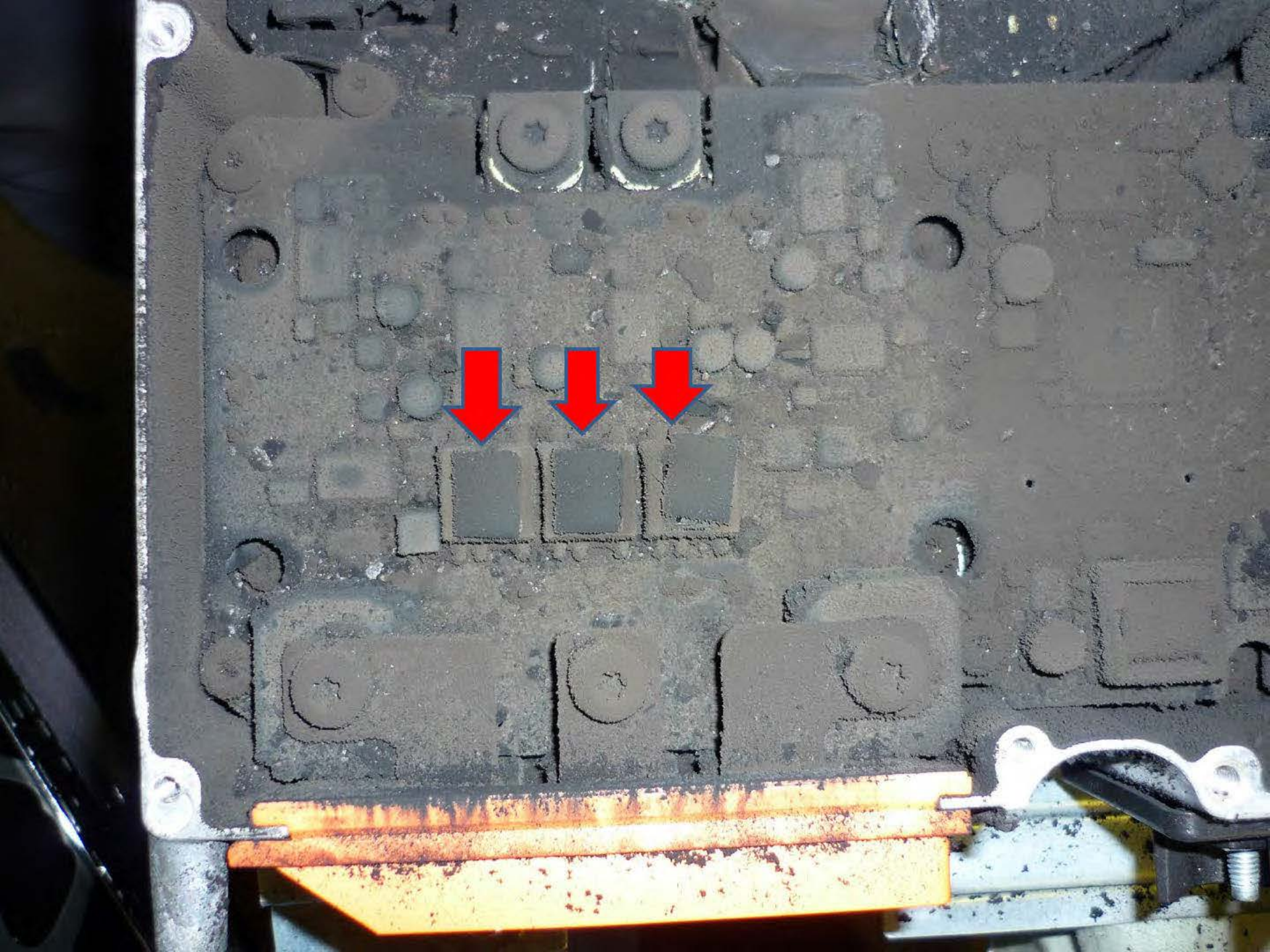
Point of apparent failure.



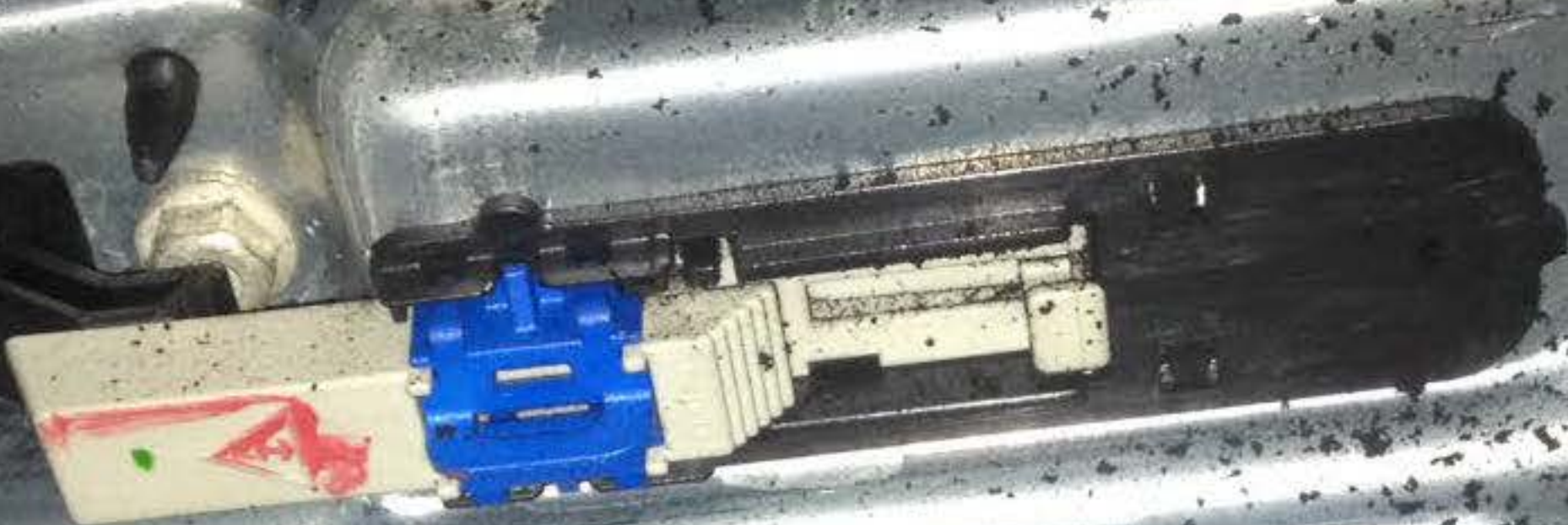














⚠️ DANGER
ENERGY
To help avoid injury:
• service
• disengage
before service



⚠️ 危险
蓄电设备
为避免发生灼伤或
• 仅可由合格技师
• 操作前请先卸下
断接装置。



4565
20T
(1P) 2025502







AUBURN PRODUCT NEWS

PRELIMINARY DATA SHEET

R-10400 M Flame Retardant Silicone Sponge

COHRIlastic® R-10400 from Auburn is a medium density silicone sponge rubber that is flame-retardant closed-cell sponge that can be used in most gasket applications. The unique material will pass UL-94 Flame Testing with V-0 rating from 1/8" (0.125"). This material is flexible and compressible and designed for use in extreme temperature ranges, with excellent weatherability, compression-set resistance, electrical strength and non-stick properties.

Physical Properties

Property	Test Method	R-10400 M
Color	Visual	Blue/Gray
Compression Deflection (psi)	ASTM D	6-14
Tensile Strength (psi)	ASTM D	45 min.
Elongation (%)	ASTM D	100 min.
Compression Set (%)	ASTM D	15 max.
Density (lbs./ft ³)	(D297 hydrostatic method)	30-45
Water Absorption	ASTM D1056	<5
Operating Temperature (°F)	-	-100°F - +500°F
Flame Rating	UL-94	V-O Pending

All properties are typical values and should not be used for writing specifications.

Recommended Uses

- Flame retardant lighting gaskets
- Electronic and environmental dust seals
- Electronic and environmental weather gaskets
- Flame retardant insulation gaskets for aircraft bulkheads
- Flame retardant vibration damping gaskets and seals

Availability

- COHRIlastic® R-10400 sheet goods 36" x 36": 1/16", 1/8", 3/16", 1/4", 3/8", 1/2"
- Roll goods from 1/16" to 1/4"
- Available plain or with adhesive backings.

Features

- UL 94 V-0 performance in thicknesses from ≥1/8".
- True closed-cell silicone sponge.
- Unique silicone-sponge formulation provides superior properties.

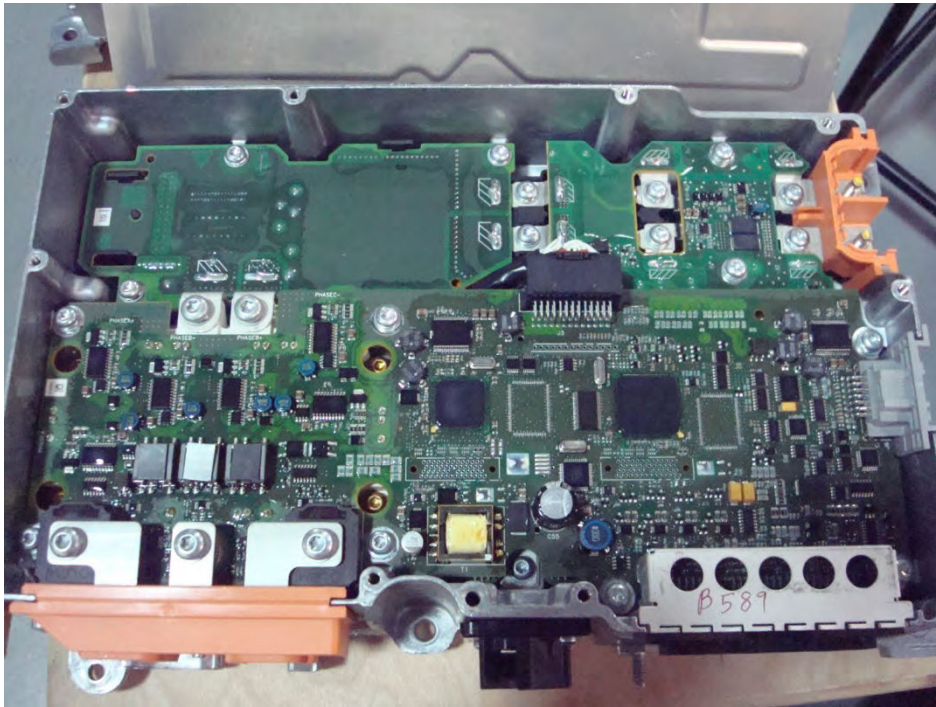
Benefits

- Excellent performance as water-tight seal due to closed-cell structure.
- UL 94 V-0 performance in thicknesses ranging from 1/8"-1/2" .
- Silicone provides a full range of uses & excellent environmental resistance.
- Proprietary formulation creates a product with improved elongation, tensile strength and sealing potential versus other gasket materials.
- Can be affixed with pressure-sensitive adhesive on one or both sides.
- Easy to die-cut into countless shapes with low-cost steel rule dies.
- Odorless, tasteless, non-toxic and non-stick; Resists weathering, ozone and sunlight; Shelf-life is virtually unlimited.

Auburn Manufacturing Company
29 Stack Street
Middletown, CT 06457
Customer Service: (800) 427-5387
Tel: (860) 346-6677
Fax: (860) 346-1334
Email: info@auburn-mfg.com
Website: www.auburn-mfg.com

BPIM Photos

BPIM 589



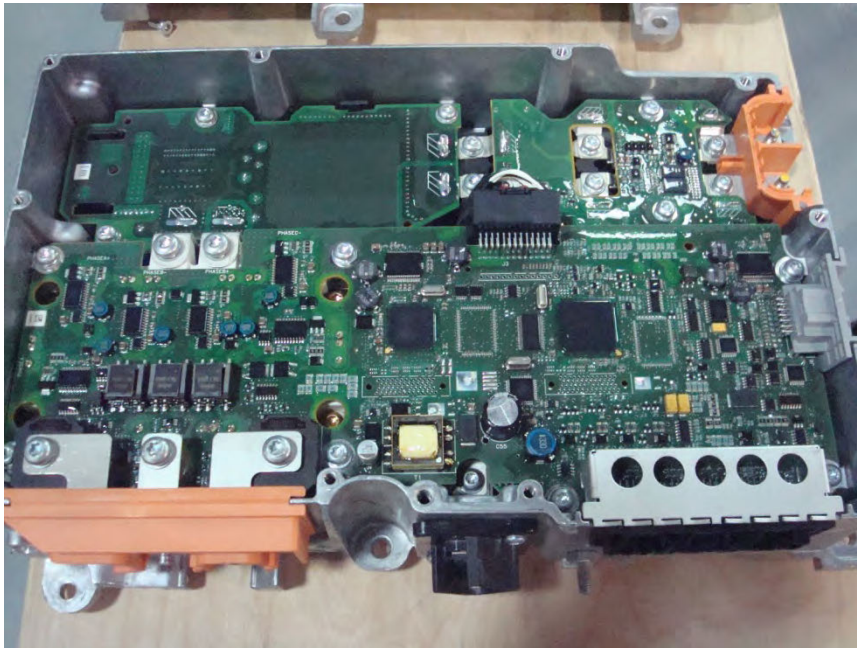
BPIM Photos

BPIM 626



BPIM Photos

BPIM 636





Technical Data Sheet

Pres-On S-600 and S-800 Silicone Foam Tape

- Highly versatile, medium firmness silicone in red, gray or black
- Combines foam lightness with sealing of traditional sponge rubber
- Excellent memory and low stress relaxation
- Resists UV light, ozone, extreme temperatures, corrosion and flame
- Prevents penetration of fine particles and wind-driven rain
- Ideal for sealing and protecting outdoor communications, electronics and HID lighting enclosures from environmental damage

GENERAL DESCRIPTION

S-600 (Acrylic PSA)
S-800 (Silicone PSA)

Our medium density silicone foam tapes are available in several thicknesses and lengths. Your choice of either pressure-sensitive acrylic adhesive (S-600) or pressure-sensitive silicone adhesive (S-800) is available. UL recognized for flame retardance and gasketing. Other densities available as well as pressure-sensitive adhesives on one or two sides.

APPLICATIONS

Outdoor enclosures such as HID lighting fixtures, electronics cabinets, and HVAC units. Isolates vibration in electronic components and vehicles.

STANDARD ROLL SIZES

All rolls available in widths from 1/8" to 36"

Colors: Red, Gray, Black

SERIAL NUMBER	THICKNESS	LENGTH
S603 (acrylic adhesive)	1/32"	60'
S606 (acrylic adhesive)	1/16"	60'
S609 (acrylic adhesive)	3/32"	60'
S612 (acrylic adhesive)	1/8"	60'
S618 (acrylic adhesive)	3/16"	40'
S625 (acrylic adhesive)	1/4"	40'
S637 (acrylic adhesive)	3/8"	20'
S650 (acrylic adhesive)	1/2"	20'
S803 (silicone adhesive)	1/32"	60'
S806 (silicone adhesive)	1/16"	60'
S809 (silicone adhesive)	3/32"	60'
S812 (silicone adhesive)	1/8"	60'
S818 (silicone adhesive)	3/16"	40'
S825 (silicone adhesive)	1/4"	40'
S837 (silicone adhesive)	3/8"	20'
S850 (silicone adhesive)	1/2"	20'

PERFORMANCE

TEST	TYPICAL PERFORMANCE	TEST METHOD
ACRYLIC ADHESIVE (S-600)		
Construction	1.75 mil Acrylic	
Release Liner	70-80# densified kraft	
Peel Adhesive-20 minute dwell	75 oz/inch	PSTC-1
Static Shear @ 72°F 1 x 1 x 500 grams	+24 hours	PSTC-7
Water and Humidity Resistance	excellent	Pres-on PTM-3
Service Temperature	-31°F to 149°C (-25° to 300°F)	
Shelf Life	1 year stored at room temperature	
SILICONE ADHESIVE (S-800)		
Construction	1.8 mil silicone	
Release Liner	2 mil polyester film	
Adhesion to Steel @ 72°F (20 min. dwell)	25 oz/inch	PSTC-1
Static Shear @ 72°F 1 x 1 x 500 grams	+48 hours	PSTC-7
Water and Humidity Resistance	excellent	Pres-on PTM-3
Service Temperature	-50°C to 230° C (-58°F to 446°F)	Pres-on PTM-2
Shelf Life	1 year stored at room temperature	

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	UNIT OF MEASURE	RESULT
PHYSICAL PROPERTIES			
Density	ASTM D 1056	lb/ft	22
Tensile Strength	ASTM D 412	psi	45 (310)
Elongation	ASTM D 412	%	80
Compression Set	ASTM D 1056	%	
	Test D @ 158°F (70°C)		<1
	Test D @ 212°F (100° C)		<5
Compression Deflection @25% deflection	ASTM D 1056	psi	9.0 (62.0)
FLAMMABILITY & OUTGASSING PROPERTIES			
Flame Resistance	UL 94		V-0 and HF-1
Flame Spread Index	ASTM E 162	L _s	<25
Smoke Density	ASTM E 662	L _s	
	Tested @ 4.0 minutes		<50
	Tested @ 1.5 minutes		<20
Toxic Gas Emissions	SMP-800C		Pass
ENVIRONMENTAL PROPERTIES			
Meets Requirements of FDA CFR 177.2600 For Food Contact			
Water Absorption	24 hrs @ room temp	%	1.4
UV Resistance	SAE J-1960		No degradation
Ozone Resistance	ASTM D 1171		0 (no cracks)
Corrosion Resistance	AMS-3568		Pass
ELECTRICAL & THERMAL PROPERTIES			
Dielectric Constant	ASTM D 150		1.42
Dielectric Strength	ASTM D 149	Volts/mil	91
Dry Arc Resistance	ASTM D 495	seconds	92
Volume Resistance	ASTM D 257		10 ¹⁴
Thermal Conductivity	ASTM C 518	BTU in/hr/ft ² /°F (w/m °K)	0.63 (0.09)
TEMPERATURE RESISTANCE			
Flex @ -67°F (-55°C)	ASTM D 1056		Pass
Recommended Temp	SA J-2236	-60°F to 390°F (-55°C to 200°C)	
Recommended High Temp		482° F (250°C)	

1. This information is furnished as a guide for selecting materials. Pres-On disclaims liability for results or use of this information. It is the customer's responsibility to obtain and test samples when determining suitability of material for a particular application.
2. Information and specifications are based upon research and believed to be true but do not constitute a warranty. Pres-On products are sold with the understanding that the purchasers will determine the suitability of the materials for their purpose. Pres-On will supply samples for your testing and evaluation.

APPLICATION NOTES

Thoroughly clean contact surface before use. Therefore, position tape carefully, assuring complete contact with all surfaces. Test product for system compatibility as individual application conditions can impact results. Pres-On does not assume any responsibility or liability for any advice furnished by it, or for the performance or results of any installation or use of the product(s) or any final product into which the product(s) may be incorporated by the purchaser and/or user. The purchaser and/or user should perform its own tests to determine the suitability and fitness of the product(s) for the particular purpose desired in any given situation.



Technical Data Sheet

Pres-On S-500 Acrylic and S-700 Silicone Foam Tapes

- Highly versatile, medium firmness silicone in red, gray or black
- Combines foam lightness with sealing of traditional sponge rubber
- Excellent memory and low stress relaxation
- Resists UV light, ozone, extreme temperatures, corrosion and flame
- Prevents penetration of fine particles and wind-driven rain
- Ideal for sealing and protecting outdoor communications, electronics and HID lighting enclosures from environmental damage

GENERAL DESCRIPTION

S-500 (Acrylic PSA)
S-700 (Silicone PSA)

Our medium density silicone foam tapes are available in several thicknesses and lengths. Your choice of either pressure-sensitive acrylic adhesive (S-500) or pressure-sensitive silicone adhesive (S-700) is available. UL recognized for flame retardance and gasketing. Other densities available as well as pressure-sensitive adhesives on one or two sides.

APPLICATIONS

Outdoor enclosures such as HID lighting fixtures, electronics cabinets, and HVAC units. Isolates vibration in electronic components and vehicles.

STANDARD ROLL SIZES

All rolls available in widths from
1/8" to 36"

Colors: Red, Gray, Black

SERIAL NUMBER	THICKNESS	LENGTH
S503 (acrylic adhesive)	1/32"	60'
S506 (acrylic adhesive)	1/16"	60'
S509 (acrylic adhesive)	3/32"	60'
S512 (acrylic adhesive)	1/8"	60'
S518 (acrylic adhesive)	3/16"	40'
S525 (acrylic adhesive)	1/4"	40'
S537 (acrylic adhesive)	3/8"	20'
S550 (acrylic adhesive)	1/2"	20'
S703 (silicone adhesive)	1/32"	60'
S706 (silicone adhesive)	1/16"	60'
S709 (silicone adhesive)	3/32"	60'
S712 (silicone adhesive)	1/8"	60'
S718 (silicone adhesive)	3/16"	40'
S725 (silicone adhesive)	1/4"	40'
S737 (silicone adhesive)	3/8"	20'
S750 (silicone adhesive)	1/2"	20'

PERFORMANCE

TEST	TYPICAL PERFORMANCE	TEST METHOD
ACRYLIC ADHESIVE (S-500)		
Construction	3.0 mil Acrylic	
Release Liner	90# coated kraft	
Peel Adhesive-20 minute dwell	50 oz/inch	PSTC-1
Static Shear @ 72°F 1 x 1 x 500 grams	+100 hours	PSTC-7
Water and Humidity Resistance	excellent	Pres-on PTM-3
Service Temperature	-31° to 149°C (-25° to 300°F)	
Shelf Life	1 year stored at room temperature	
SILICONE ADHESIVE (S-700)		
Construction	3.5 mil silicone	
Release Liner	2 mil polyester film	
Adhesion to Steel @ 72°F (20 min. dwell)	32 oz/inch	PSTC-1
Static Shear @ 72°F 1 x 1 x 250 grams	+24 hours	PSTC-7
Water and Humidity Resistance	excellent	Pres-on PTM-3
Service Temperature	-50°C to 250° C (-58°F to 530°F)	Pres-on PTM-2
Shelf Life	6 months stored at room temperature	

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	UNIT OF MEASURE	RESULT
PHYSICAL PROPERTIES			
Density	ASTM D 1056	lb/ft	22
Tensile Strength	ASTM D 412	psi	45 (310)
Elongation	ASTM D 412	%	80
Compression Set	ASTM D 1056	%	
	Test D @ 158°F (70°C)		<1
	Test D @ 212°F (100° C)		<5
Compression Deflection @25% deflection	ASTM D 1056	psi	9.0 (62.0)
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Flame Spread Index	ASTM E 162	L _s	<25
Smoke Density	ASTM E 662	L _s	
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	Tested @ 1.5 minutes		<20
Toxic Gas Emissions	SMP-800C		Pass
ENVIRONMENTAL PROPERTIES			
Meets Requirements of FDA CFR 177.2600 For Food Contact			
Water Absorption	24 hrs @ room temp	%	1.4
UV Resistance	SAE J-1960		No degradation
Ozone Resistance	ASTM D 1171		0 (no cracks)
Corrosion Resistance	AMS-3568		Pass
ELECTRICAL & THERMAL PROPERTIES			
Dielectric Constant	ASTM D 150		1.42
Dielectric Strength	ASTM D 149	Volts/mil	91
Dry Arc Resistance	ASTM D 495	seconds	92
Volume Resistance	ASTM D 257		10 ¹⁴
Thermal Conductivity	ASTM C 518	BTU in/hr/ft ² /°F (w/m °K)	0.63 (0.09)
TEMPERATURE RESISTANCE			
Flex @ -67°F (-55°C)	ASTM D 1056		Pass
Recommended Temp	SA J-2236	-60°F to 390°F (-55°C to 200°C)	
Recommended High Temp		482° F (250°C)	

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PRES-ON[®]
Adhering To A Higher Standard

39 Factory Road, Addison, IL 60101
800.323.7467 www.pres-on.com
e-mail: sales@preson.com

Burn-in Option 1

- Summary
- Pros
- Cons

Burn-in Option 2

- Summary
- Pros
- Cons

Burn-in Option 3

- Summary
- Pros
- Cons

Burn-in Option 4

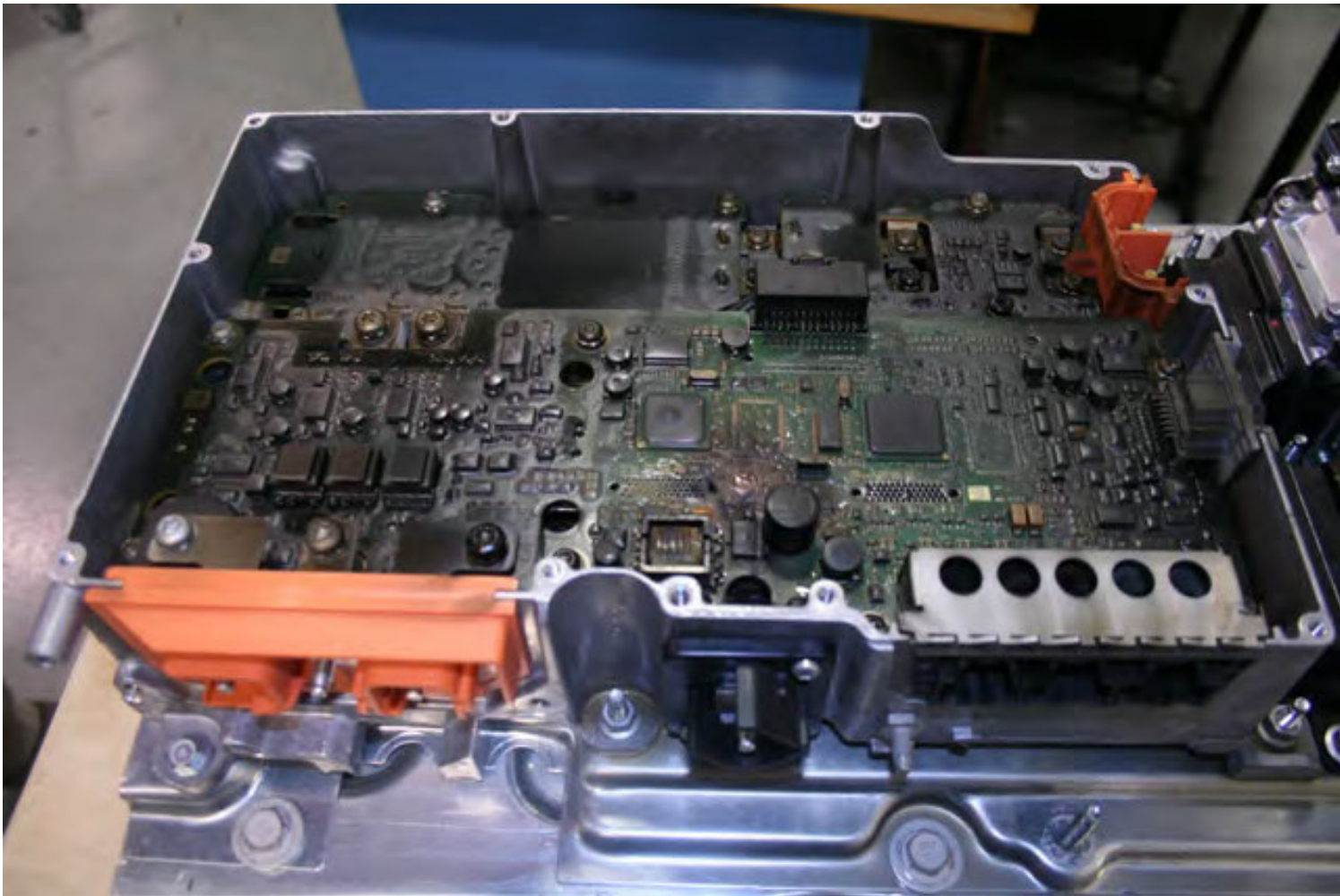
- Summary
- Pros
- Cons

Burn-in Option 5

- Summary
- Pros
- Cons

E-Assist Fairfax Return Unit 3-14-12

Initial Pictures LQ68414112056516



J. Thompson

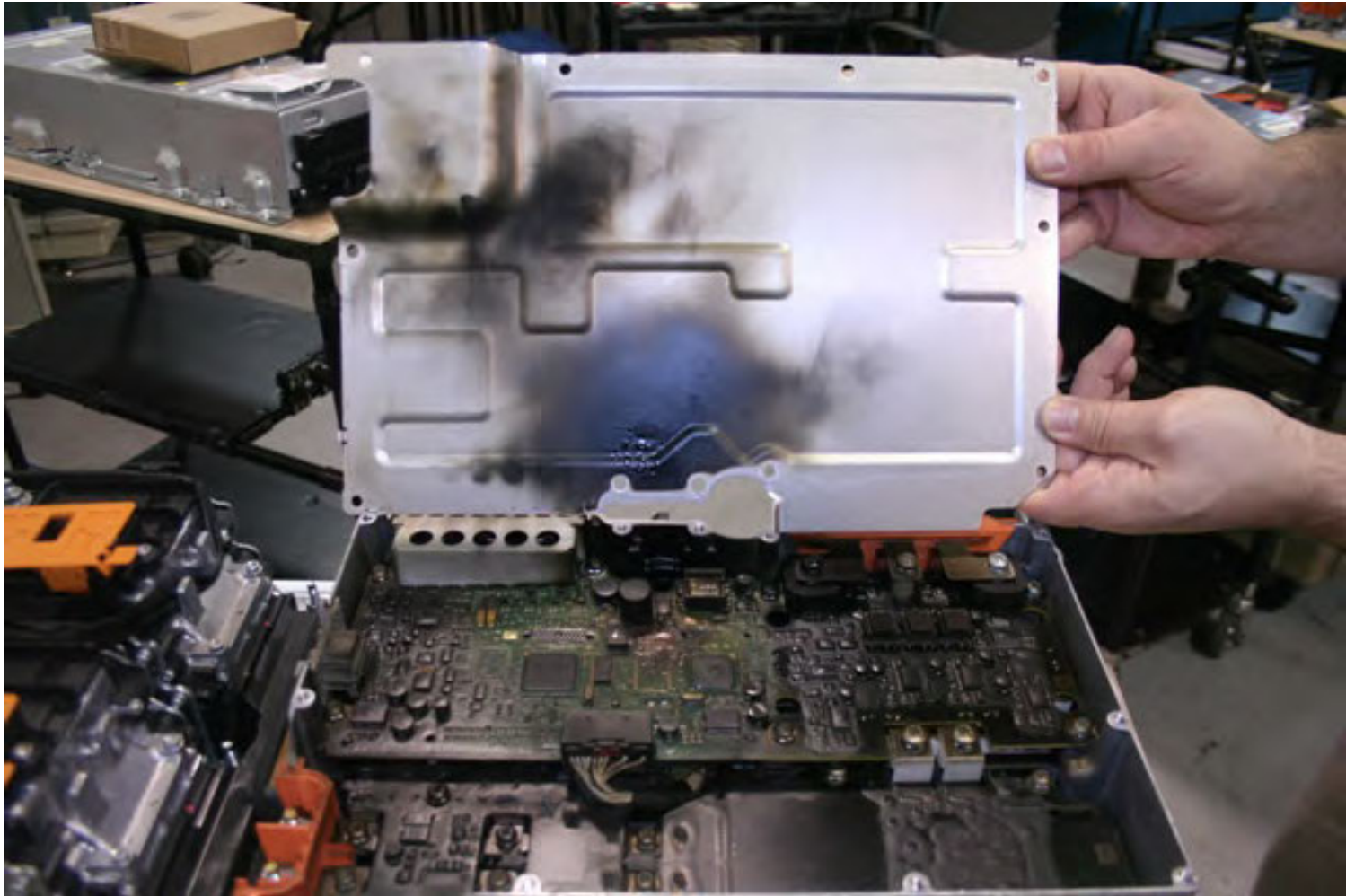
E-Assist Fairfax Return Unit 3-14-12

Initial Pictures LQ68414112056516



E-Assist Fairfax Return Unit 3-14-12

Initial Pictures LQ68414112056516



E-Assist Fairfax Return Unit 3-14-12

Initial Pictures LQ68414112056516



E-Assist Fairfax Return Unit 3-14-12

Initial Pictures LQ68414112056516



SPO Service Request Activity

SR #	71-1100120344	Account Phone #	(941) 488-3667	Cust Concern	SES light		
Account	Darby Buick-Pontiac-GMC, Inc	Site/BAC	118317	Keyword 1	EASSIST	Business Unit	TAC US
Address	1455 S Tamiami Trail			Keyword 2	SES	Keyword 3	
City	Venice	State	FL	Keyword 4			
		Zip	342854145	Non Keyword	U0293 U1817 F23UA OPEN FUSE		
Last Name	Dospel	First Name	Jan	Comp type		Svc Man Sec	Hybrid Power Electronics
Daytime #	(941) 201-7626	Recom Bulletin #		Open Concern	DC10 - SBD performed	Svc Man Sub	Charging System
Veh Family	GB	Mileage Type	M	Symptom Desc	MIL / DTC		
Repair Order	172447	Restricted Part #	24259770	Status	Open	Sub Status	Active
Serial #/VIN	2G4GS5ER4C9215383	Mileage	6	Owner	SLEEMASC	Opened	08/22/2012 15:01:00
Make	Buick	Warranty Start	8/2/2012 12:00:00 AM	Priority	Consultant	Closed	
Model	Regal	Warranty Status					
Year	2012	Veh Series	S				
Veh Line	GS	Body	5E	Engine	R		
Plant	9						

Activities

Created	Created By	Assigned To	Activity Type	Sub-Type	Status	Actual Completion
8/23/2012 11:40:22 AM	GETTELMA	GETTELMA	TAC Part Authorized	eAssist PowerPack	In Progress	
Last Name		First Name		Priority		Start Date
Dospel		Jan		3-Medium		8/23/2012 11:40:22 AM
Times In		Days Down				
1		2				
Description						
24259770 battery pack (QTY1) (OVN)						
Template Text						

SPO Service Request Activity

Activities

ExtendedTemplateText

Created	Created By	Assigned To	Activity Type	Sub-Type	Status	Actual Completion
8/23/2012 11:36:16 AM	GETTELMA	GETTELMA	TAC Inbound Call	Diagnostics	Done	8/23/2012 11:39:28 AM
Last Name	First Name		Priority	Start Date		
Dospel	Jan		3-Medium	8/23/2012 11:36:16 AM		
Times In	Days Down					
1	2					
Description						

Template Text

jan was calling in because he has replaced the F23Ua fuse with the connector undone from the pack. fuse never opened until he plugged in the connector to the battery pack.

tech stated has an odor from inside of pack. tech stated has no other fuses open in vehicle.

advise tech of pic5520d to order complete battery pack from their ESC. advise to read pic5520d carefully since there's info regarding the return process and serial numbers needed.

ExtendedTemplateText

Created	Created By	Assigned To	Activity Type	Sub-Type	Status	Actual Completion
8/22/2012 03:07:11 PM	SLEEMASC	SLEEMASC	TAC Alarm	24 Hour	Scheduled Alarm	
Last Name	First Name		Priority	Start Date		
Dospel	Jan		3-Medium	8/24/2012 03:07:11 PM		
Times In	Days Down					
Description						
SES light						
Template Text						

SPO Service Request Activity

Activities

ExtendedTemplateText

Created	Created By	Assigned To	Activity Type	Sub-Type	Status	Actual Completion
8/22/2012 03:01:46 PM	SLEEMASC	SLEEMASC	TAC Inbound Call	Diagnostics	Done	8/22/2012 03:06:29 PM
Last Name	First Name		Priority	Start Date		
Dospel	Jan		3-Medium	8/22/2012 03:01:46 PM		
Times In	Days Down					
1	1					

Description

Spoke to technician Jan Dospel
No SI doc
No modifications, condition has been duplicated.

Template Text

Jan states he has codes U0293 and U1817 set. He states he found F23UA is open. He states he has an electrical odor from the battery box.

Advised Jan to inspect the inside of the battery box for arcing or soot.

Advised Jan to inspect fuse F73UA 175A fuse.

Advised Jan to call back with the results and we can approve or order the appropriate part for the vehicle.

ExtendedTemplateText



{In Archive} Fw: Internal notification for: G_0000166498 13142 - Safety Recall - Loss of Battery Charge - Replace Generator Control Module

Kevin Diviney to: Stephen Poulos, Bob Agresta, Gary Backs, Kush Shah

05/29/2013 07:23 AM

History: This message has been forwarded.
Archive: This message is being viewed in an archive.

FYI. This is what we 'officially' know about the campaign for Bucket B. I have also attached the customer letter.



13142 letter.doc



Kevin Diviney

Global Program Quality Manager /
Robust Engineering Specialist

Mobile Ph: (248) 343-9311
Mail Code: 483-710-201
email: kevin.diviney@gm.com

**Global Electrification -
Engineering Quality**

General Motors Corp.
Pontiac North CET
895 Joslyn Avenue
Pontiac, Michigan 48340
Cube 2K08

----- Forwarded by Kevin Diviney/US/GM/GMC on 05/29/2013 07:18 AM -----

From: Greg Hall/US/GM/GMC
To: Paul Zayan/US/GM/GMC@GM, Kevin Diviney/US/GM/GMC@GM, Ryan Brown/US/GM/GMC@GM
Date: 05/24/2013 08:35 AM
Subject: Fw: Internal notification for: G_0000166498 13142 - Safety Recall - Loss of Battery Charge - Replace Generator Control Module

Both bulletins launched to dealers yesterday. Phase 1 of the mailing will be completed as soon as the order can be filled by our print vendor. The CCA team will monitor sales daily. We'll let you know if we need any help.

Regards,

Greg Hall

FPE Manager - GMNA Quality
VEC Podium (Green), Cube 1L24-22
☎ (586) 859-8214

📍 Meet Me Line: North America (866) 226-3606 / International (678) 466-7834 Access Code: 4746124

----- Forwarded by Greg Hall/US/GM/GMC on 05/24/2013 08:34 AM -----

From: gm_gmssg_q01 <nobody@gm.com>
To: greg.1.hall@gm.com
Date: 05/23/2013 04:38 PM
Subject: Internal notification for: G_0000166498 13142 - Safety Recall - Loss of Battery Charge - Replace Generator Control Module

Your email client does not support HTML messages

Date: 5/23/2013 Ref. number: Service / Field Action / G_0000166498
Subject: 13142 - Safety Recall - Loss of Battery Charge - Replace Generator Control Module

GM CUSTOMER CARE AND AFTERSALES
DCS2971
URGENT - DISTRIBUTE IMMEDIATELY

Date: May 23, 2013

Subject: 13142 - Safety Recall
Loss of Battery Charge – Replace Generator Control Module

Models: 2012-13 Buick LaCrosse and Regal; 2013 Chevrolet Malibu Eco
Equipped with eAssist

To: All Buick and Chevrolet Dealers

Attention: General Manager, Service Advisor, Service Manager, Parts and
Service Director, Parts Manager, New Vehicle Sales Manager,
Used Vehicle Sales Manager, and Warranty Administrator

General Motors is announcing Safety Recall 13142 today. The total number of U.S. vehicles involved is approximately 21,000. Please see the attached bulletin for details.

Customer Letter Mailing

Customer will be notified in phases. The first phase will begin in early June 2013.

Global Connect (GWM)


The “Investigate Vehicle History” (IVH) screen will be updated May 24, 2013. A list of involved vehicles in dealer inventory is attached to this message.

Campaign Initiation Detail Report (CIDR)

The CIDR will be available June 29, 2013.

END OF MESSAGE
GM CUSTOMER CARE AND AFTERSALES

Message Attachment(s):

 [13142 bulletin.pdf](#) Acrobat PDF (236.7KB)
13142 bulletin

 [13142 Inventory VINs.xlsx](#) MS Excel Workbook 2007 (136.0KB)
13142 Inventory VINs

Contact name: Loren Rusk

E-Mail: loren.rusk@gm.com

Department: Service - Brand Quality

Phone:

Intended roles: General Manager, New Vehicle Sales Manager, Parts & Service Director, Parts Manager, Service Advisor, Service Manager, Used Vehicle Sales Manager, Warranty Administrator

Archives : 6/23/2013

Expires: 5/23/2014



GM Style Sheet.css 13142 bulletin.pdf 13142 Inventory VINs.xlsx



**FIELD PERFORMANCE ASSESSMENT
Photo Documentation Sheet**

CASE NAME MORAN CHEV

DATE 10-24-2012

LOCATION CLINTON TWP., MICH

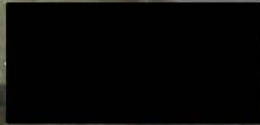
VEHICLE 2013 CHEV. MALIBU

VIN No. 1G11F5RRODF 

PHOTOGRAPHER RON ORLANDO

ROLL No. 1 2 3 4 5 6 7 8

1G11F5RRODF



D8555



1G11F5RR0DE

13 CV MALIBU

1GC69 4DR SDN ECO

SILV ICE MET





812



































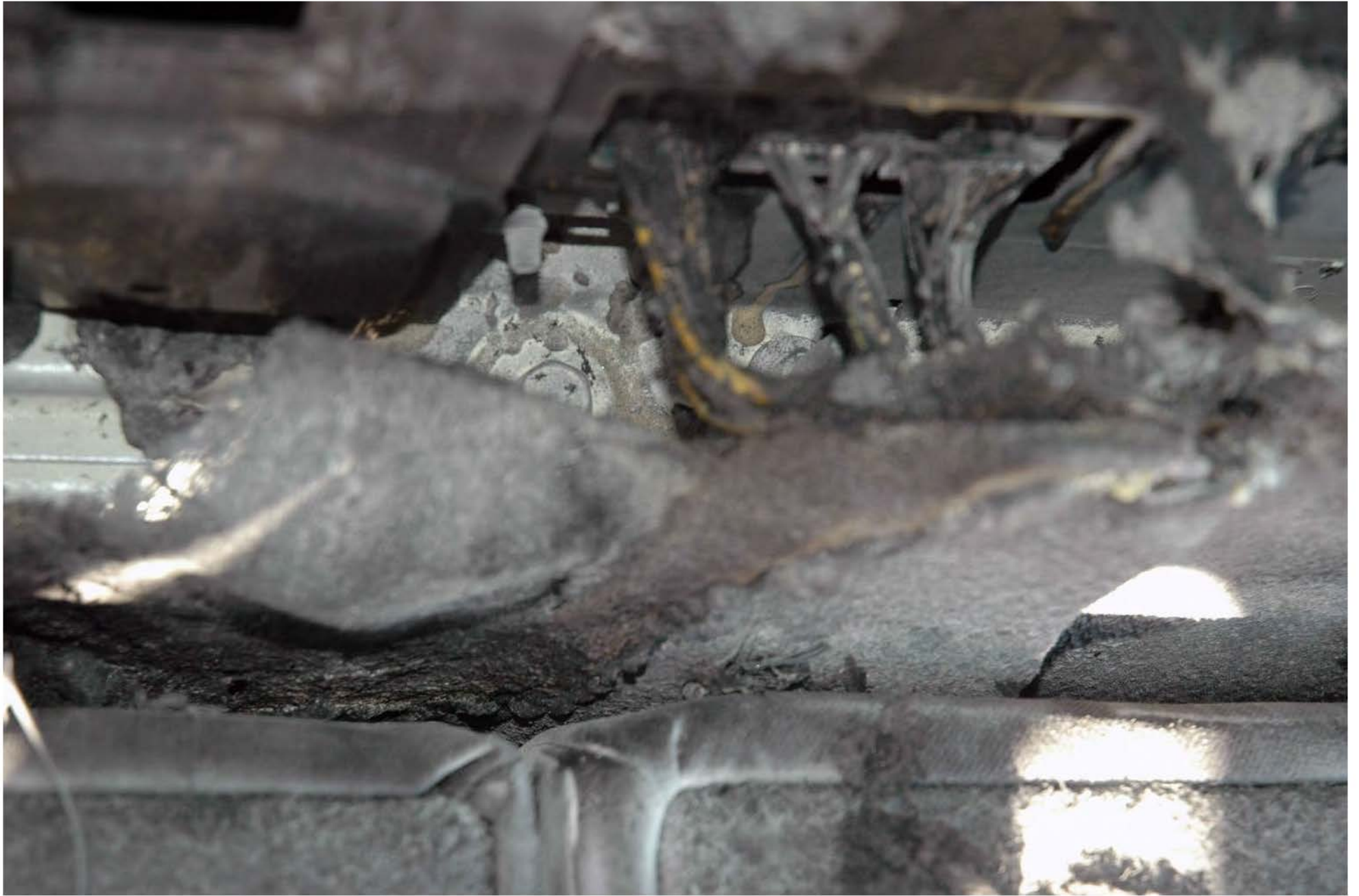






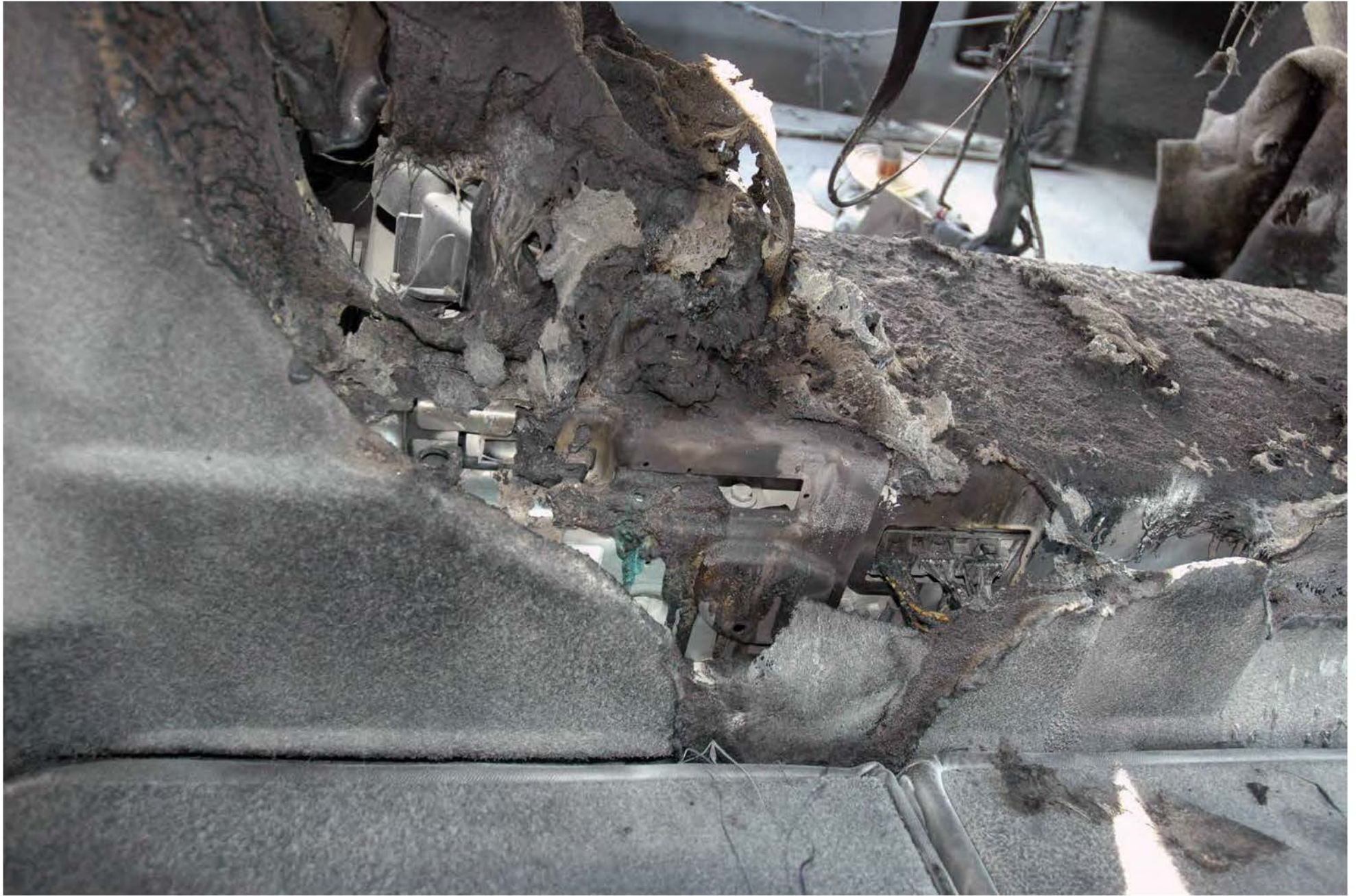




















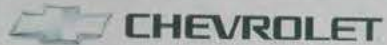












2013 MALIBU ECO 2SA

EXTERIOR: SILVER ICE METALLIC
INTERIOR: JET BLACK

ENGINE, ECOTEC 2.4L DOHC 4CYL
TRANSMISSION, 6 SPD AUTOMATIC

Visit us at www.chevy.com

STANDARD EQUIPMENT

ITEMS LISTED BELOW ARE INCLUDED AT NO EXTRA CHARGE IN THE STANDARD MSRP PRICE INCLUDES:

- 5 YEAR / 100,000 MILE POWERTRAIN LIMITED WARRANTY SEE DEALER FOR DETAILS
- 8 YEAR / 100,000 MILE LIMITED F-ASSIST COMPONENT WARRANTY SEE DEALER FOR DETAILS

MECHANICAL

- ENGINE, ECOTEC 2.4L DOHC 4CYL WITH F-ASSIST
- TRANSMISSION, 6-SPD AUTOMATIC
- ELECTRIC MOTOR GENERATOR, F-ASSIST
- CRUISE CONTROL
- POWER STEERING, ELECTRIC

SAFETY

- STABILITRAK STABILITY CONTROL SYSTEM WITH TRACTION CONTROL
- ANTI-LOCK BRAKE SYSTEM, 4 WHEEL DISC

CHILD LOCKS, REAR DOORS & WINDOWS

- BATTERY RUN-DOWN PROTECTION
- AIR BAGS, DUAL-STAGE FRONTAL THORAX SIDE-IMPACT AND ROBE DRIVER AND FRONT PASSENGER, HEAD CURTAIN SIDE-IMPACT, FRONT AND REAR OUTBOARD POSITIONS

- THEFT DETECTION SYSTEM
- 6 MILES ONSTAR DIRECTIONS AND CONNECTIONS WITH AUTOMATIC CRASH RESPONSE & TURN-ON-TURN NAVIGATION (ASK DEALER ABOUT GEOGRAPHIC COVERAGE)
- REAR VISION CAMERA SYSTEM
- TIRE PRESSURE MONITOR SYSTEM
- TIRE REPAIR KIT

INTERIOR

- POWER WINDOWS, FRONT & REAR EXPRESS-DOWN
- POWER DOOR LOCKS W/IRK

EXTENDED RANGE

- FRONT BUCKET SEATS
- PWR SEAT ADJUSTER, DRIVER 8 WAY W/ POWER RECLINE AND LUMBAR
- SEAT ADJUSTER, FRONT PASSENGER 4 WAY MANUAL
- 2 WAY PWR VERTICAL REMOTE VEHICLE START
- MIRROR, INSIDE REARVIEW W/ A/D DIMMING

- XM RADIO 4-SERVICE, SUBSCRIPTION SOLD SEPARATELY BY SUBSCRIBER AFTER 9 MONTHS
- AIR CONDITIONING, DUAL ZONE AUTO CLIMATE CONTROL
- POWER OUTLET, FRONT CONSOLE
- 12 VOLT
- LEATHER WRAP STEERING WHEEL
- STEERING COLUMN, TILT AND TELESCOPIC
- DRIVER INFO CENTER, COLOR
- CHEVROLET MYLINK

- COLOR TOUCH RADIO W/ 7" SCREEN, CD/MP3 PLAYER, A/D INPUT AND USB PORT
- AUDIO SYSTEM, PIONEER PREMIUM 9-SPEAKER, 250 WATT AMPLIFIER
- STEERING WHEEL CONTROLS, AUDIO AND CRUISE
- UNIVERSAL HOME REMOTE
- BLUE AMBIENT LIGHTING
- CONVENIENCE NET, TRUNK
- FLOOR MATS, FRONT & REAR

EXTERIOR

- DAYTIME RUNNING LAMPS
- FRONT FOG LAMPS
- WHEELS, 17" ALUMINUM
- HEADLAMPS, HALOGEN
- MIRRORS, OUTSIDE HEATED POWER ADJUSTABLE, BODY-COLOR

OPTIONS & PRICING

MANUFACTURER'S SUGGESTED RETAIL PRICE

STANDARD VEHICLE PRICE **\$26,845.00**

LEATHER PACKAGE 1,000.00

- SEAT TRIM, LEATHER APPOINTED
- DRIVER & FRONT PASSENGER HEATED SEATS

TOTAL OPTIONS \$1,000.00

TOTAL VEHICLE & OPTIONS \$27,845.00

DESTINATION CHARGE 700.00

TOTAL VEHICLE PRICE* **\$28,695.00**

EPA DOT Fuel Economy and Environment

Fuel Economy
29 MPG
combined city/hwy

Multiple city range from 19 to 29 MPG. The best vehicles reach 112 MPG.
25 city
37 highway

You save
\$2,350
in fuel costs
over 5 years
compared to the
average sedw vehicle.

Annual fuel cost
\$1,850



Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets 23.8 MPG and costs \$11,600 to fuel over 5 years. Cost estimates are based on 15,000 miles per year at \$3.55 per gallon. 40% less miles per gallon is roughly carbon equivalent. *EPA's estimates are a significant cause of climate change and smog.

fuel economy.gov
Calculate personalized estimates and compare vehicles

434-0257
1-800-241

Gasoline Vehicle

GOVERNMENT 5-STAR SAFETY RATINGS

This vehicle has not been rated by the government for overall vehicle score, frontal crash, side crash or rollover risk.

Source: National Highway Traffic Safety Administration (NHTSA)
www.safercar.gov or 1-888-337-4236

PARTS CONTENT INFORMATION

FOR VEHICLES IN THIS CARLINE:
U.S./CANADIAN PARTS CONTENT: 62%

NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL ASSEMBLY, DISTRIBUTION OR OTHER NON-PARTS COSTS.

FOR THIS VEHICLE:
FINAL ASSEMBLY POINT:
KANSAS CITY, KS U.S.A.
COUNTRY OF ORIGIN:
ENGINE: UNITED STATES
TRANSMISSION: UNITED STATES

This label may contain specific government labeling information. For more information, please refer to the vehicle's user manual. This information is provided for informational purposes only and does not constitute an offer or any other financial product or service.

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1AG1990616

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R SAFETY RATINGS

rated by the government
frontal crash, side crash

PARTS CONTENT INFORMATION

**FOR VEHICLES IN THIS COUNTRY:
U.S./CANADIAN PARTS CONTENT: 62%**

NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL
ASSEMBLY, DISTRIBUTION, OR OTHER NON-PARTS COSTS.

**FOR THIS VEHICLE:
FINAL ASSEMBLY POINT:
KANSAS CITY, KS U.S.A.
COUNTRY OF ORIGIN:
ENGINE: UNITED STATES
TRANSMISSION: UNITED STATES**

This label has been applied pursuant to Federal law - Do not remove prior to delivery to the ultimate purchaser. *Includes Manufacturer's Recommended Pre-Delivery Service. Does not include dealer installed options and accessories not listed above, local taxes [REDACTED]

Safety Administration (NHTSA)
or 1-888-327-4236

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GMLBL_PROD_0026 - 05/20/2012

ORDER NO OHZ07S SALES CODE E
SALES MODEL CODE 1GC69
DEALER NO 44239
FINAL ASSEMBLY:
KANSAS CITY, KS U.S.A.



VIN 1G11F5RR0D [REDACTED]

DEALER TO WHOM DELIVERED
MORAN CHEVROLET, INC.
PO BOX 827
MOUNT CLEMENS, MI 48046-0827

NZ

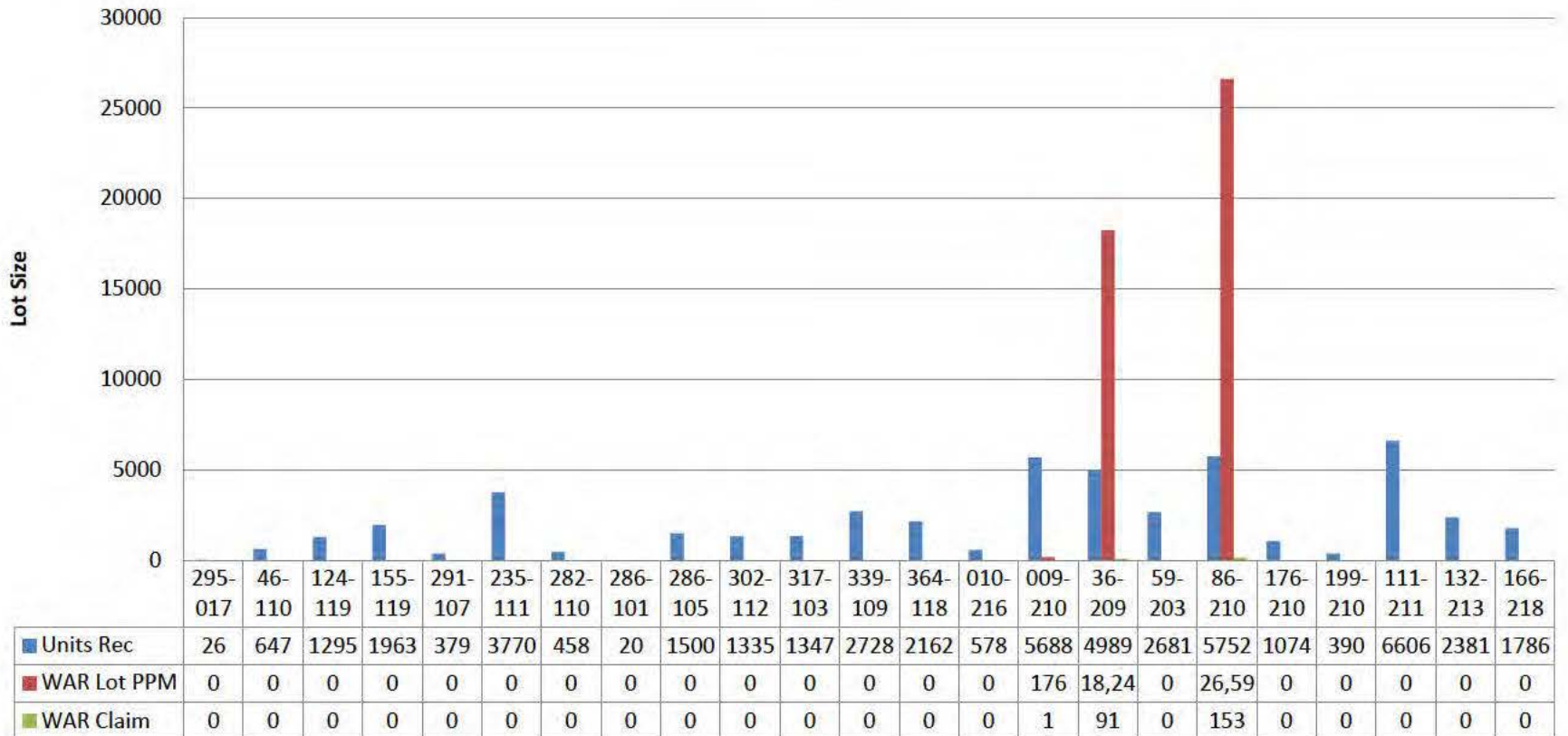
1AG1990816





Revised with additional TAC cases provided 8-13-12

Warranty Returns by Nanya Lot Code all LV and HV Isolation Faults and P1BOB TAC cases



Overview

- PP built in vehicle: LQ45654112135009
- PP built in vehicle build date: 14May2012
- VIN: 1G11D5RRXDF116521
- Vehicle Build Date: 21May2012
- Vehicle Delivery to Dealer: 01Jun2012
(Dick Smith Chevrolet in Moncks Corner, SC)
- Vehicle Sale Date: 08/09Nov2012 with 27 miles (to be confirmed)
- Dealership screen: 18Dec2012 with 946 miles
- Incident date: 23Mar2013
(Vehicle currently located at towing company lot)

Powerpack Build Date

- The build date of the Powerpack built in the vehicle fell within the suspect window.

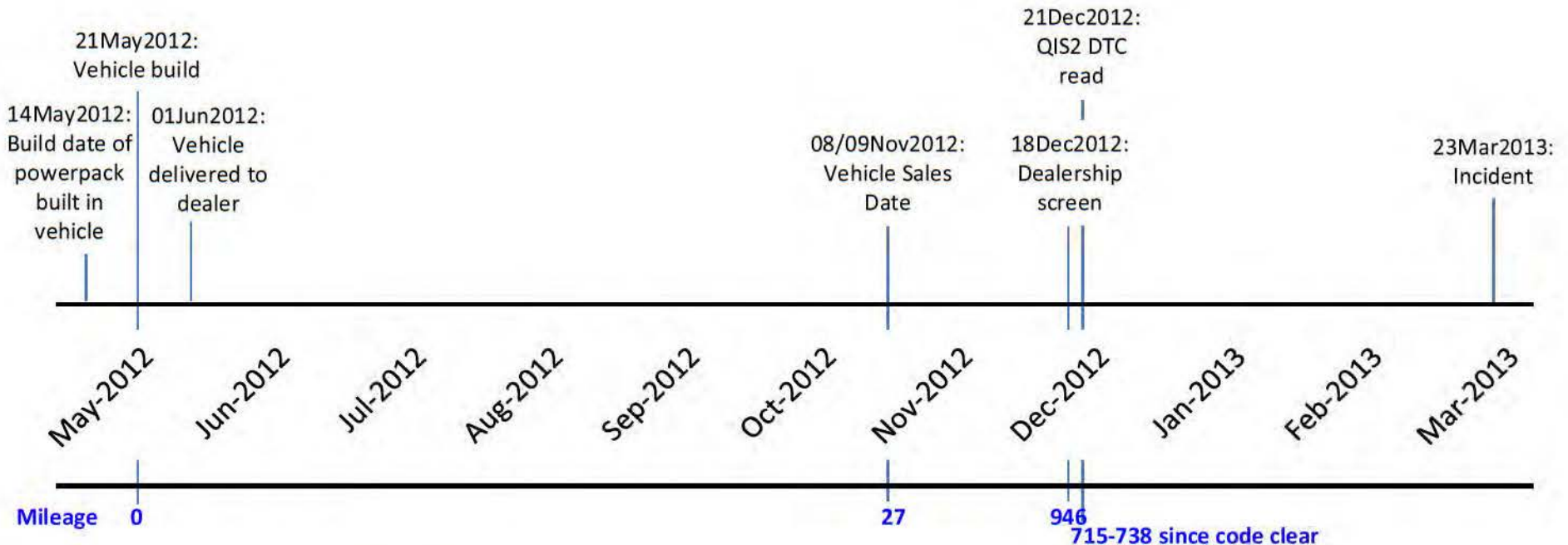
Powerpack Serial Number	Part Number	Powerpack Build Date	VIN	Model Year	Vehicle Build Date	Delivery to Dealer Date
LQ45654112135009	22934565	5/14/2012	1G11D5RRXD [REDACTED]	2013	5/21/2012	6/1/2012

{*} Indicates GM Confidential Business Information Redacted

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Timeline

- PP built in vehicle build date: 14May2012
- Vehicle Build Date: 21May2012
- Vehicle Delivery to Dealer: 01Jun012
- Vehicle Sale Date: 08/09Nov2012 with 27 miles (to be confirmed)
- Dealership screen: 18Dec2012 with 946 miles
- QIS2 DTC Read: 21Dec2013 with 715-738 miles since code clear
- Incident date: 23Mar2013



Warranty Returns with Option 1.5

- Option 1.5: all 3 PCBs with double sheets of pre-preg
- According to GMCH's warranty spreadsheet, there has been one post-option 1.5 return received in Kokomo (return had P1A6F – Starter/Generator System No Crank at Restart – and is not PCB related).

BAS + E56410

Service Release/Field Action

Rick Schroeder
05/07/2013

10/15/2013

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Design

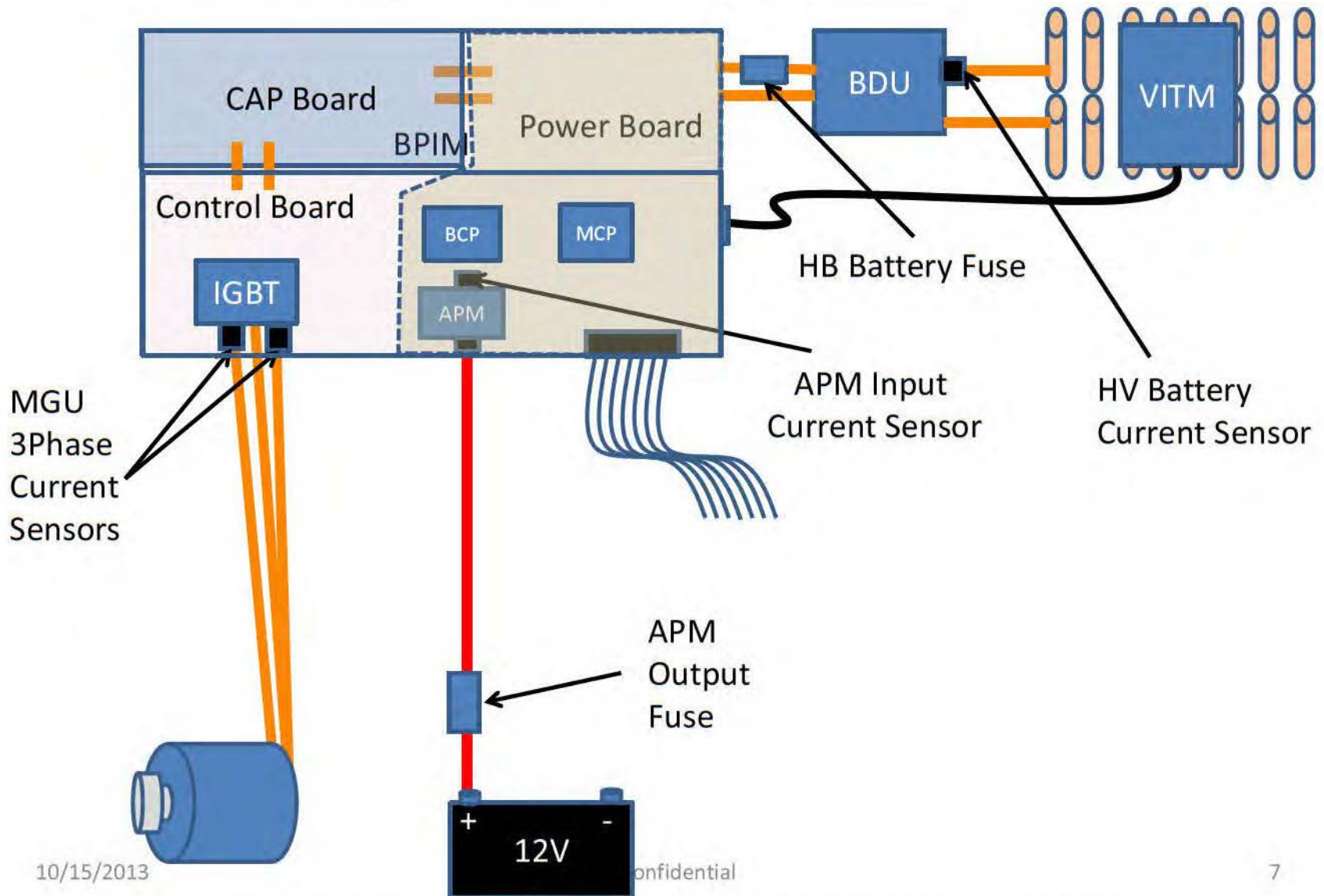
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BAS + HV System



10/15/2013

Confidential

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Agenda 05/03/13

- Explain the reason for this change - Rick Schroeder
- Determine what work needs to be done and by who – All
- Discuss workloads – All
- Create timeline - Rick Schroeder

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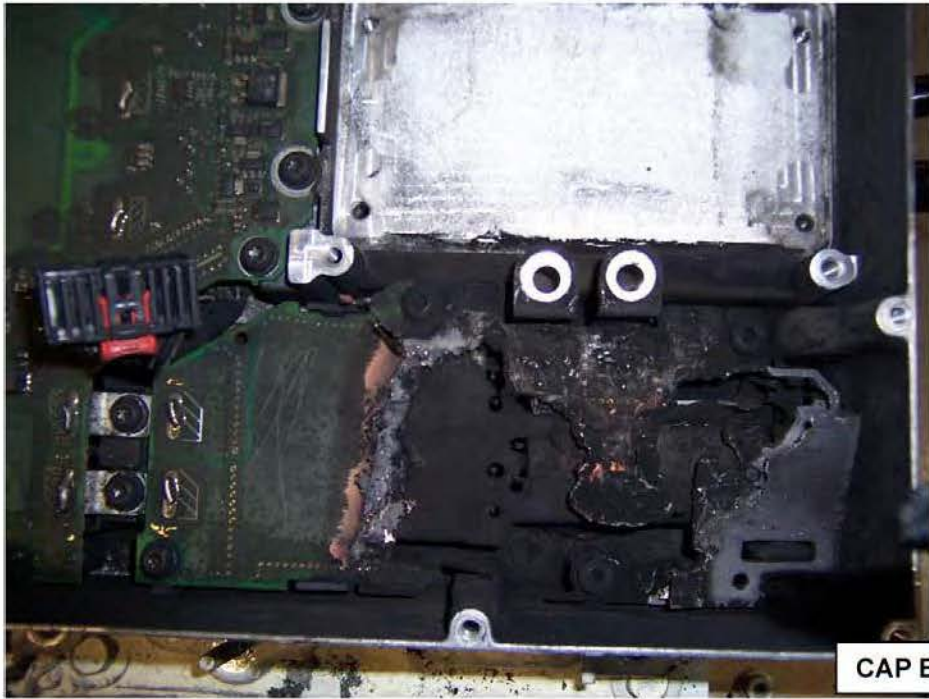


CAP Board Severely Damaged



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CAP Board Severely Damaged

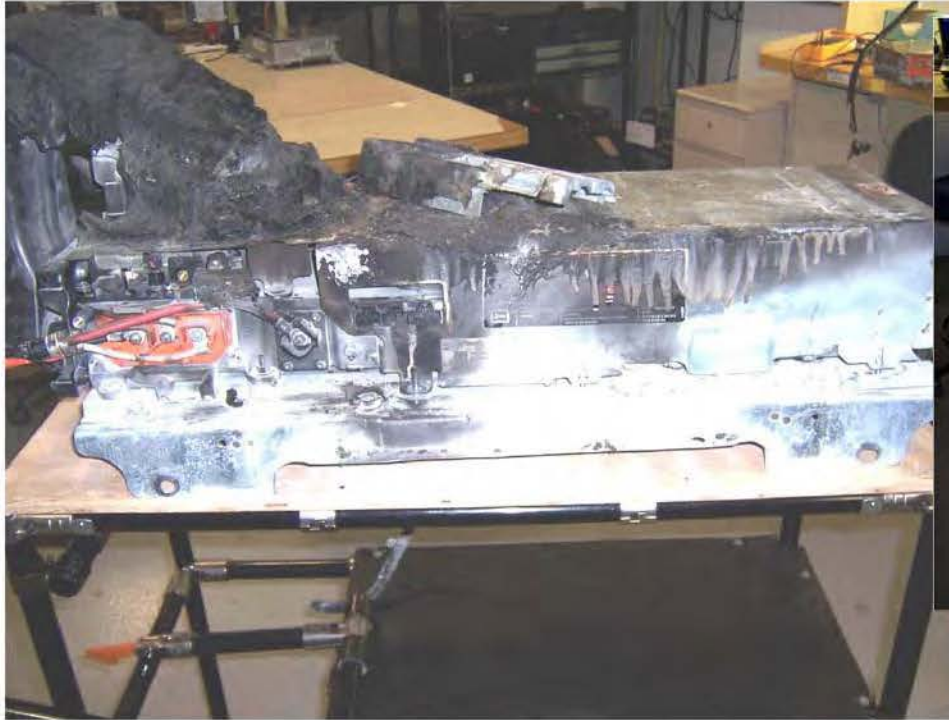


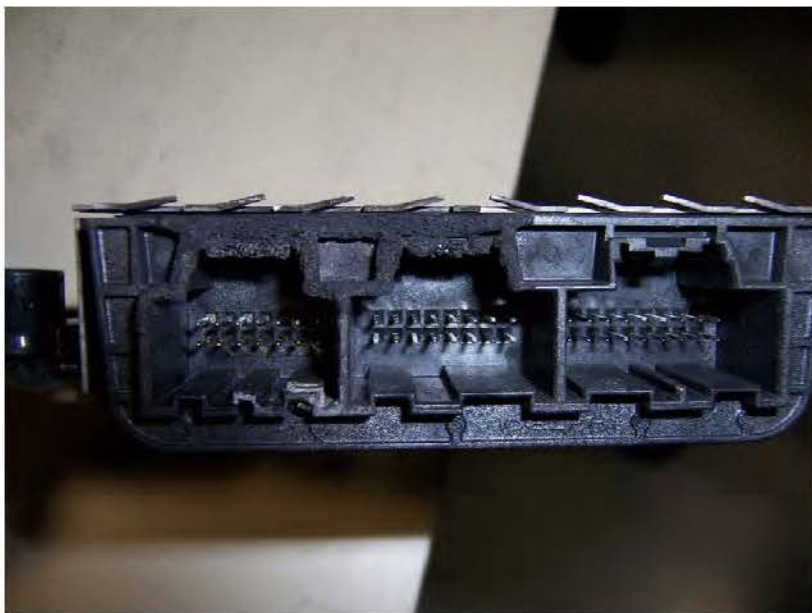
Control Board Only Collateral Damage / Sooted



Power Board Only Collateral Damage / Sooted







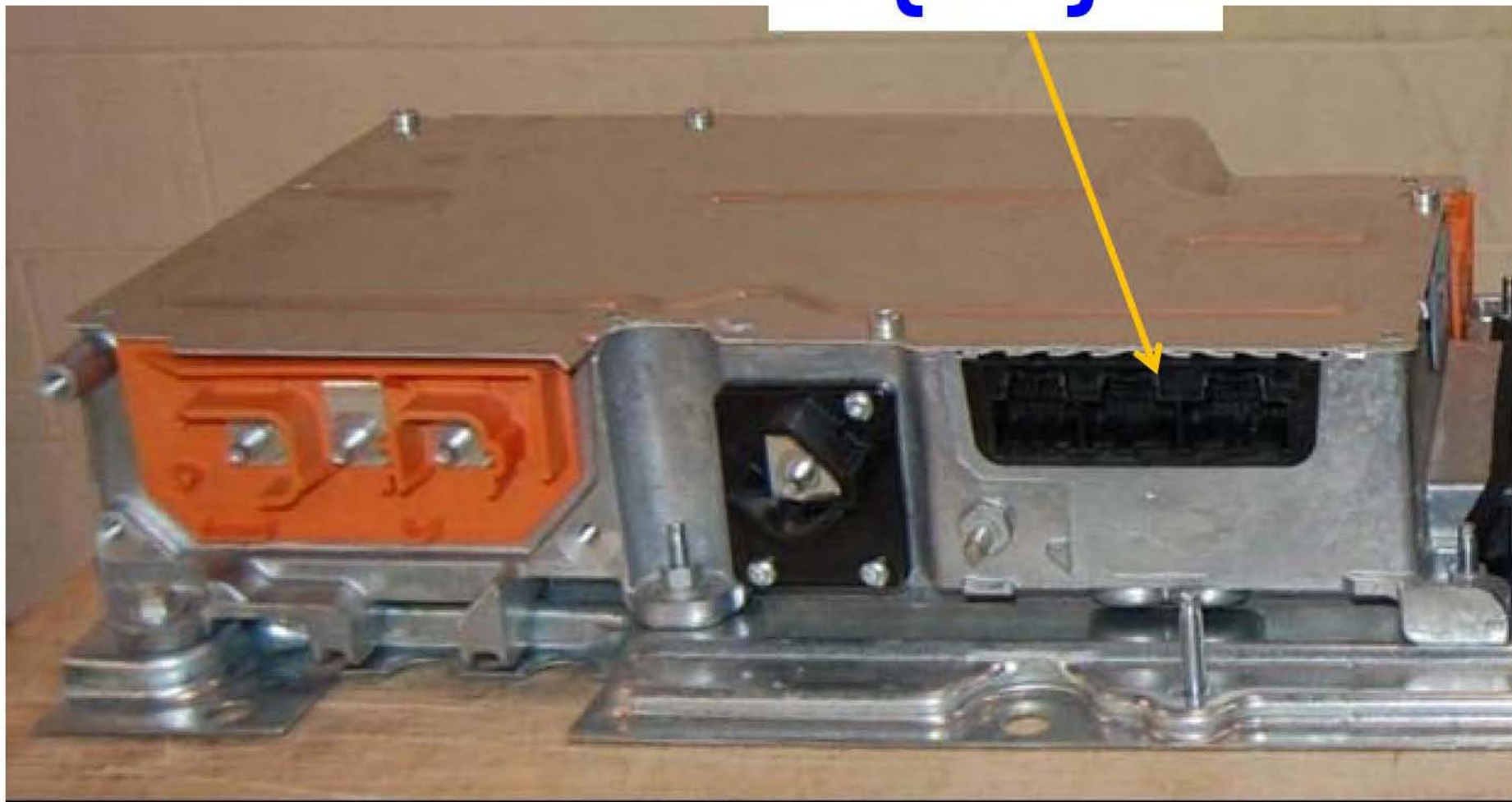


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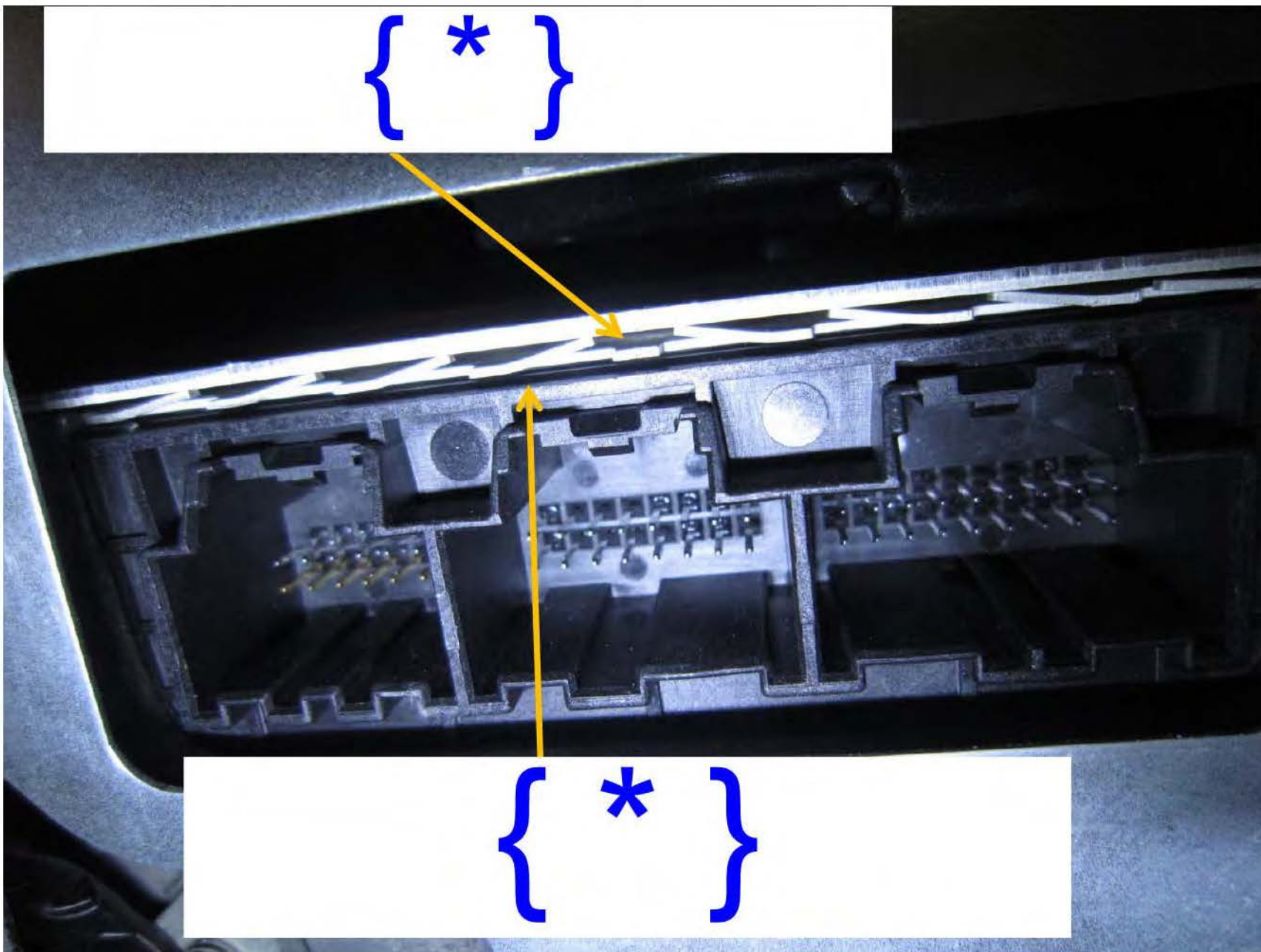
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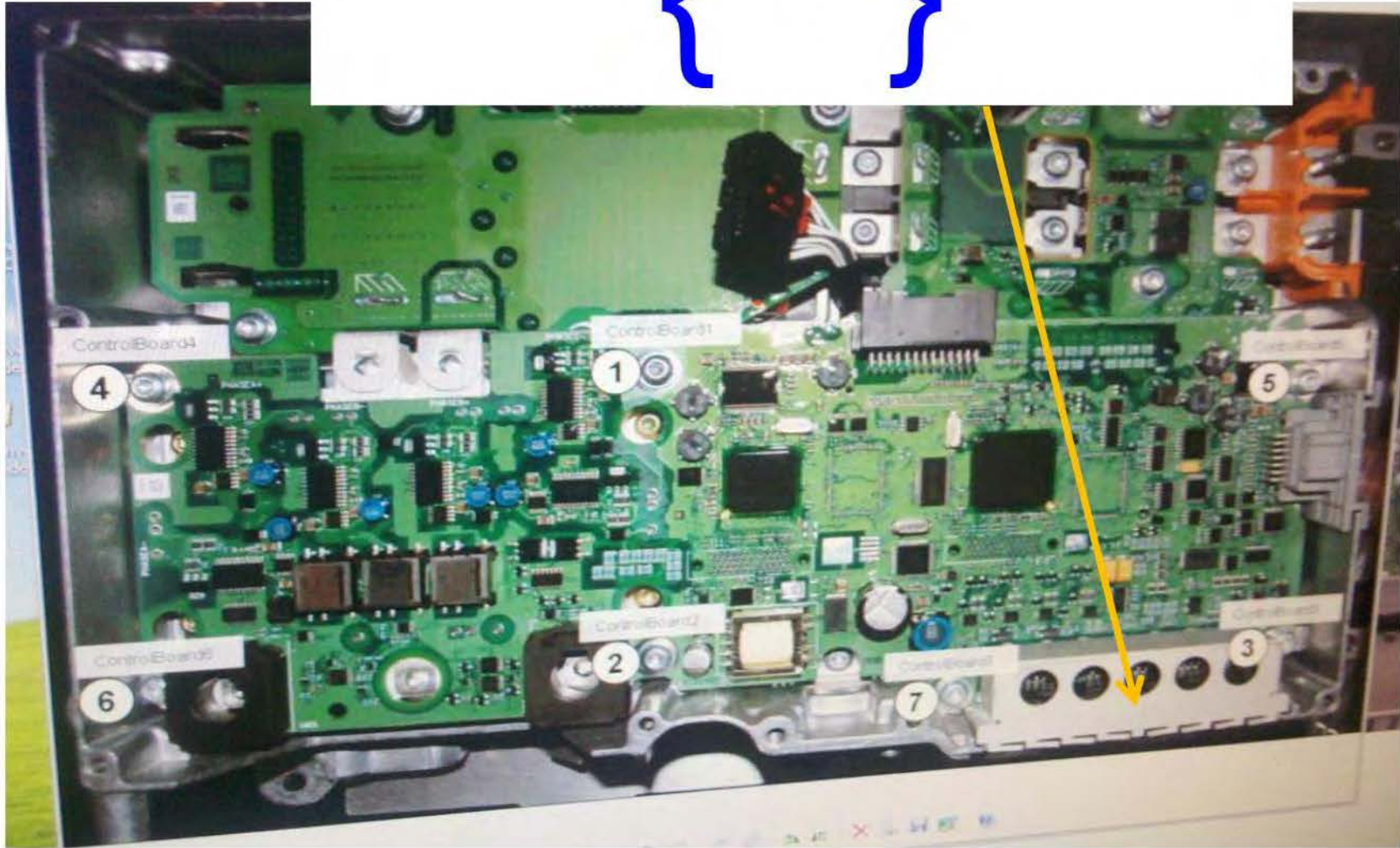
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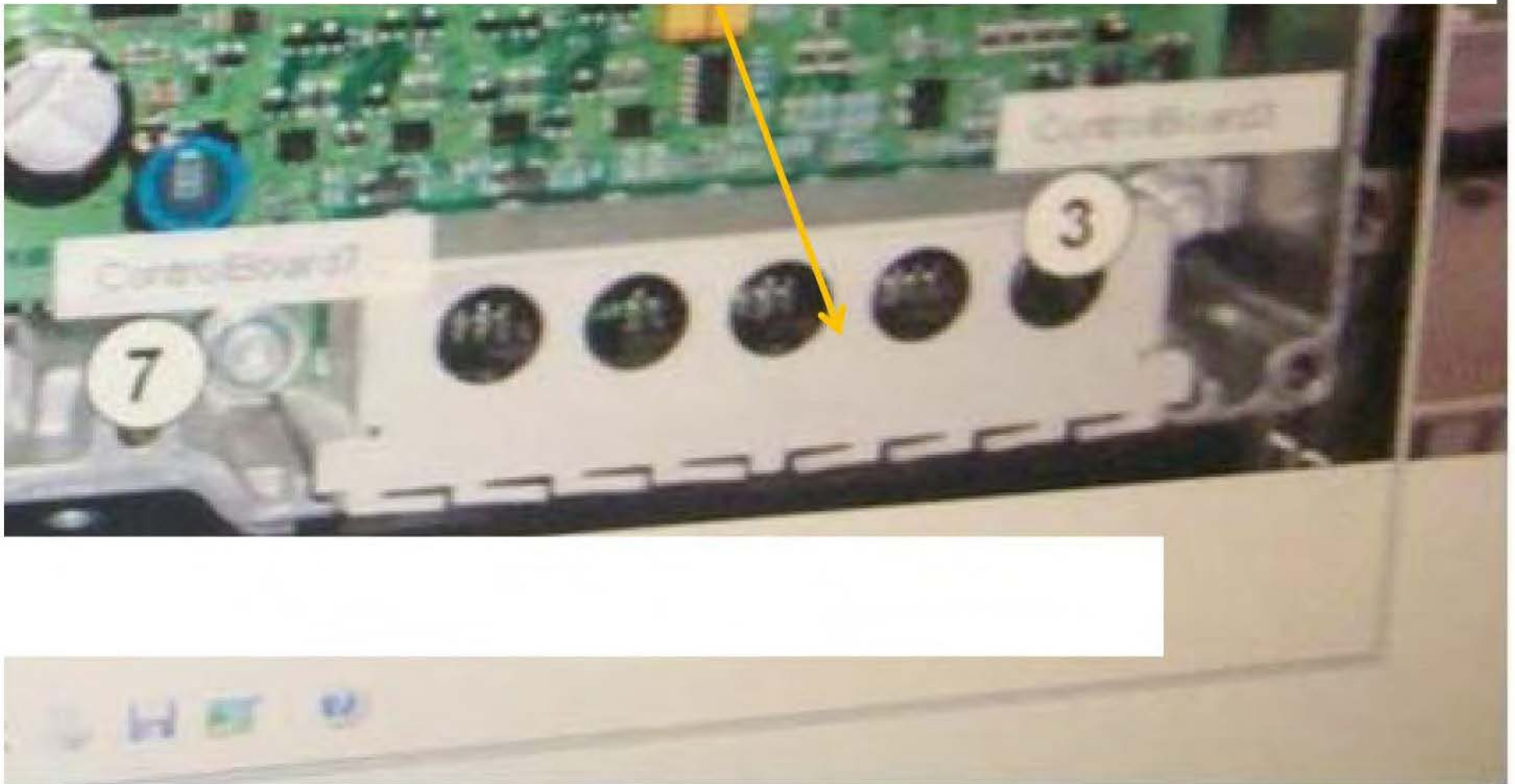




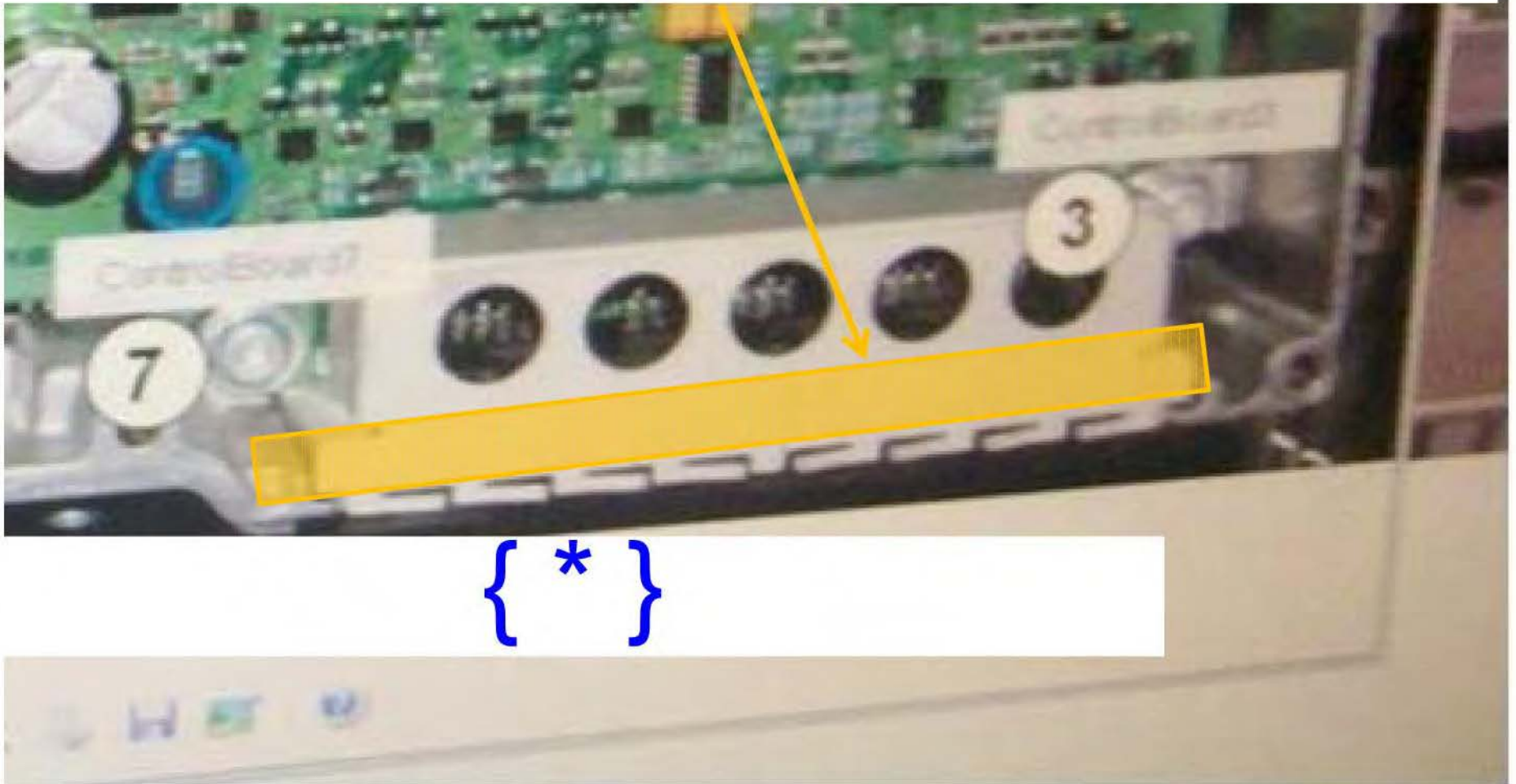
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Adobe Acrobat Document



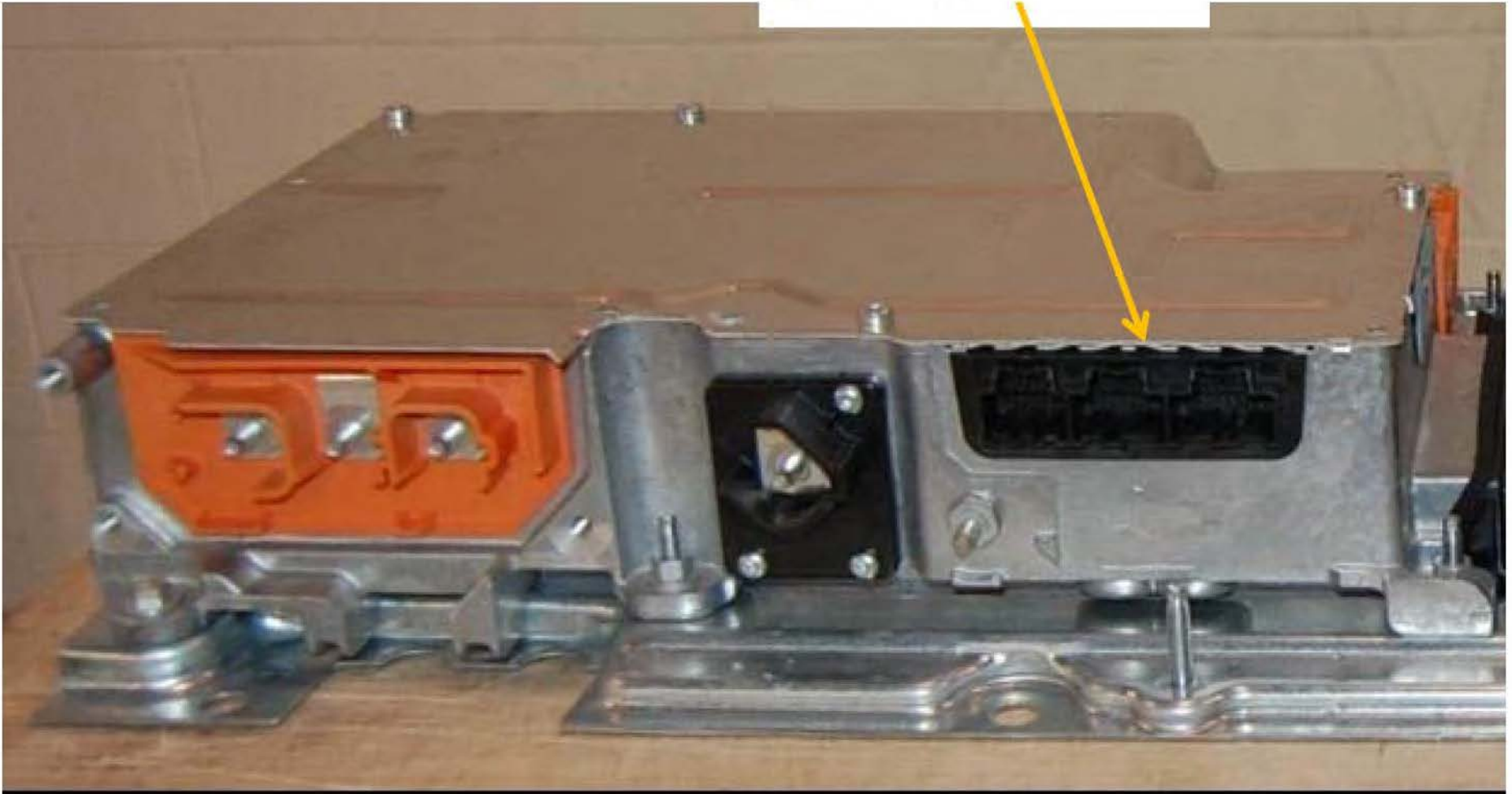
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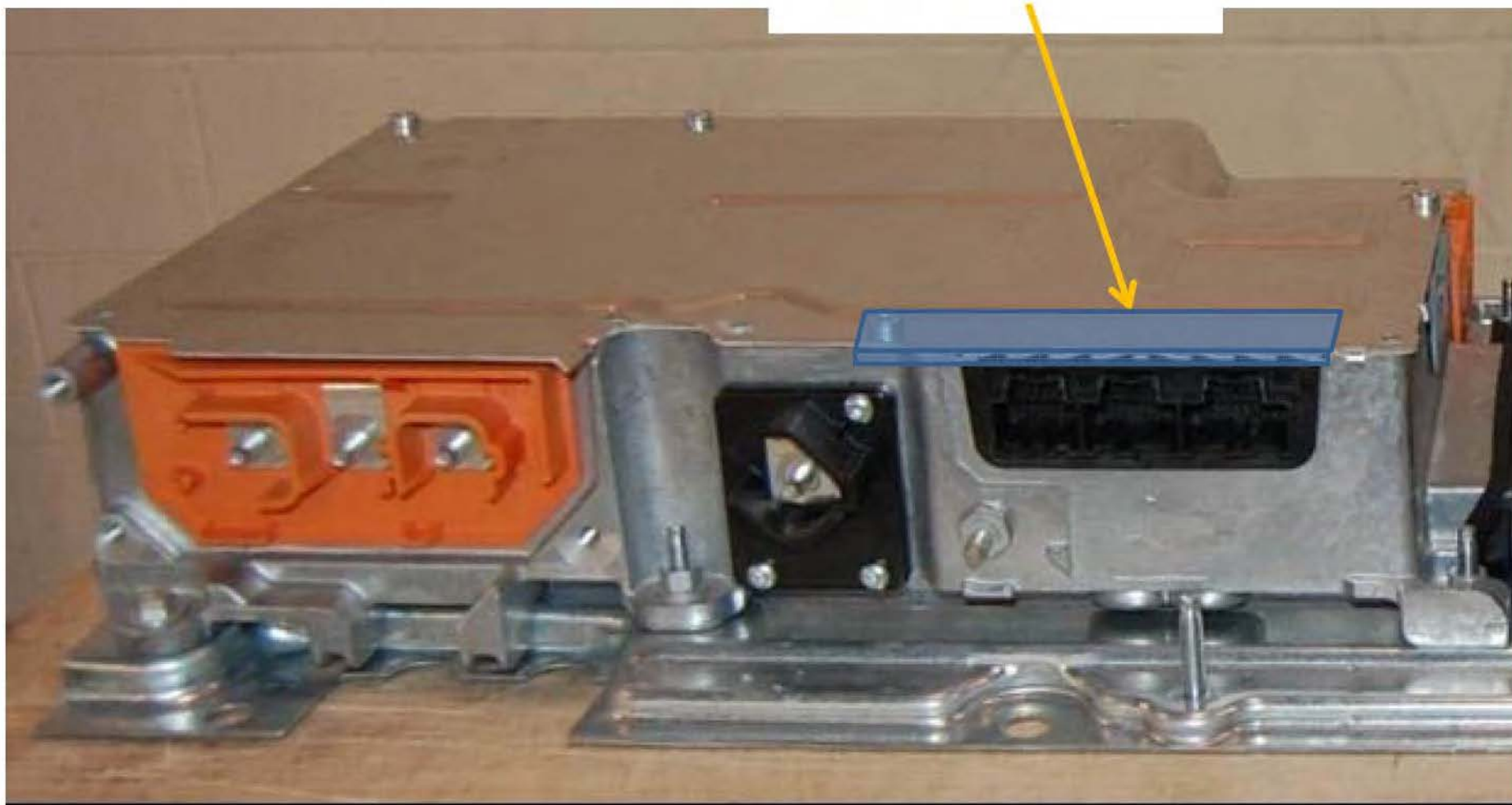
Doc 3

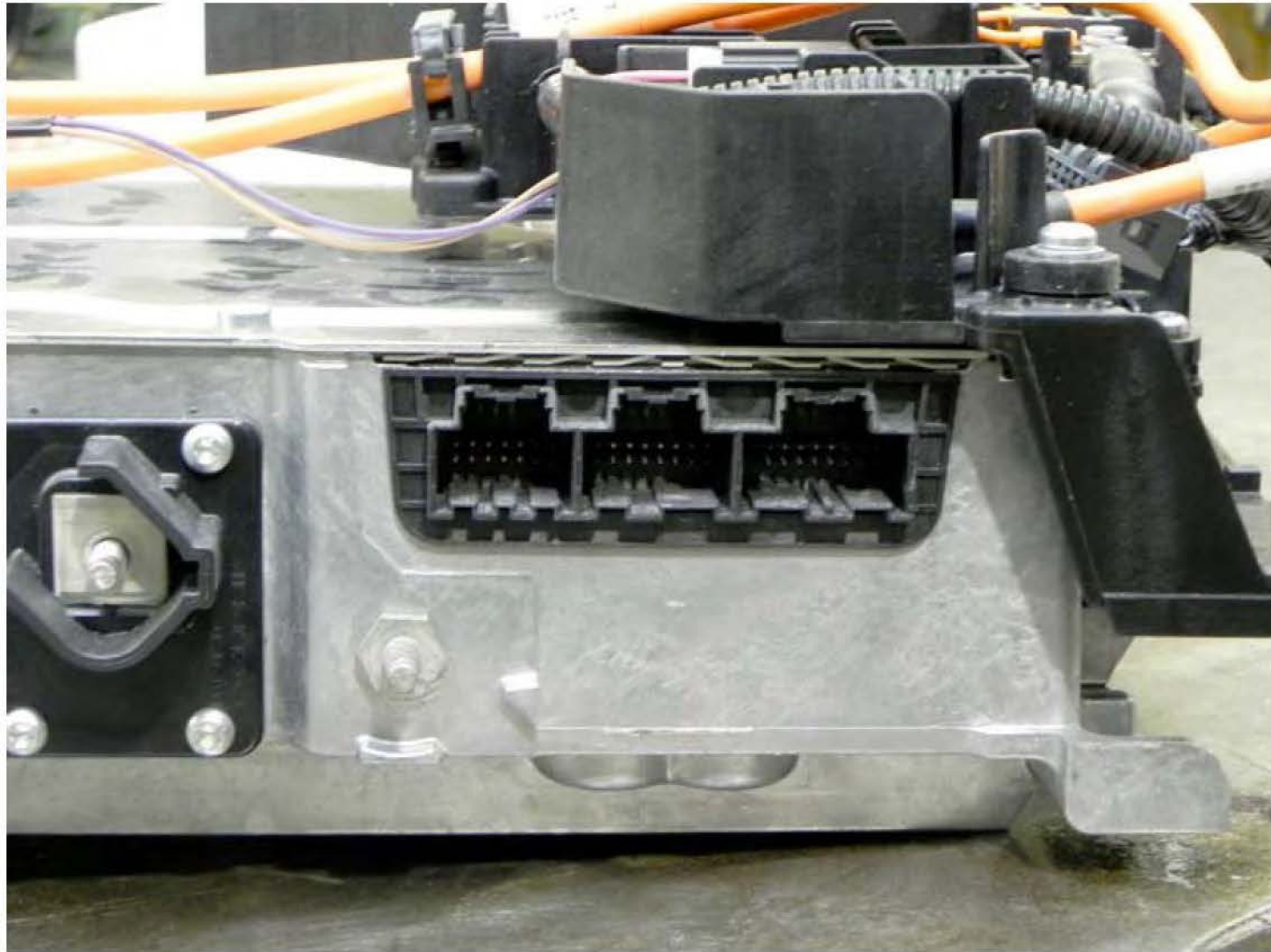
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Date: October 25, 2012

Vehicle: 1G11F5RR0DF118790 MY2012 Malibu Dealer owned. Moran Chevrolet located on Gratiot Ave. in Clinton Township

Incident description: One hour into the idle portion of test procedure called out in service bulletin 12238 observer noticed smoke coming from trunk. The fire was extinguished by dealership personnel with a dry chemical extinguisher. The fire damage was confined to the interior compartment/cargo (trunk) compartments.

The 12V battery was disconnected some time after incident. FPE took photos. Arrangements were made to have vehicle shipped to MPG. Vehicle arrived at MGP on Oct. 26th at 12:00 pm



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WORLD'S BEST VEHICLES

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DESIGN, BUILD & SELL THE
WORLD'S BEST VEHICLES

R SAFETY RATINGS

rated by the government
frontal crash, side crash

Safety Administration (NHTSA)
or 1-888-327-4236

PARTS CONTENT INFORMATION

**FOR VEHICLES IN THIS COUNTRY:
U.S./CANADIAN PARTS CONTENT: 62%**

NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL
ASSEMBLY, DISTRIBUTION, OR OTHER NON-PARTS COSTS.

**FOR THIS VEHICLE:
FINAL ASSEMBLY POINT:
KANSAS CITY, KS U.S.A.
COUNTRY OF ORIGIN:
ENGINE: UNITED STATES
TRANSMISSION: UNITED STATES**

This label has been applied pursuant to Federal law - Do not remove prior to delivery to the ultimate purchaser. Includes Manufacturer's Recommended Pre-Delivery Service. Does not include dealer installed options and accessories not listed above, local taxes or license fees.

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GMLBL_PROD_0026 - 05/20/2012

ORDER NO QH2Q7S SALES CODE E
SALES MODEL CODE 1GC89
DEALER NO 44239
FINAL ASSEMBLY:
KANSAS CITY, KS U.S.A.



VIN 1G11F5RR0 [REDACTED]

DEALER TO WHOM DELIVERED
MORAN CHEVROLET, INC.
PO BOX 827
MOUNT CLEMENS, MI 48046-0827

NZ

1AG1990816



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**DESIGN, BUILD & SELL THE
WORLD'S BEST VEHICLES**



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WORLD'S BEST VEHICLES



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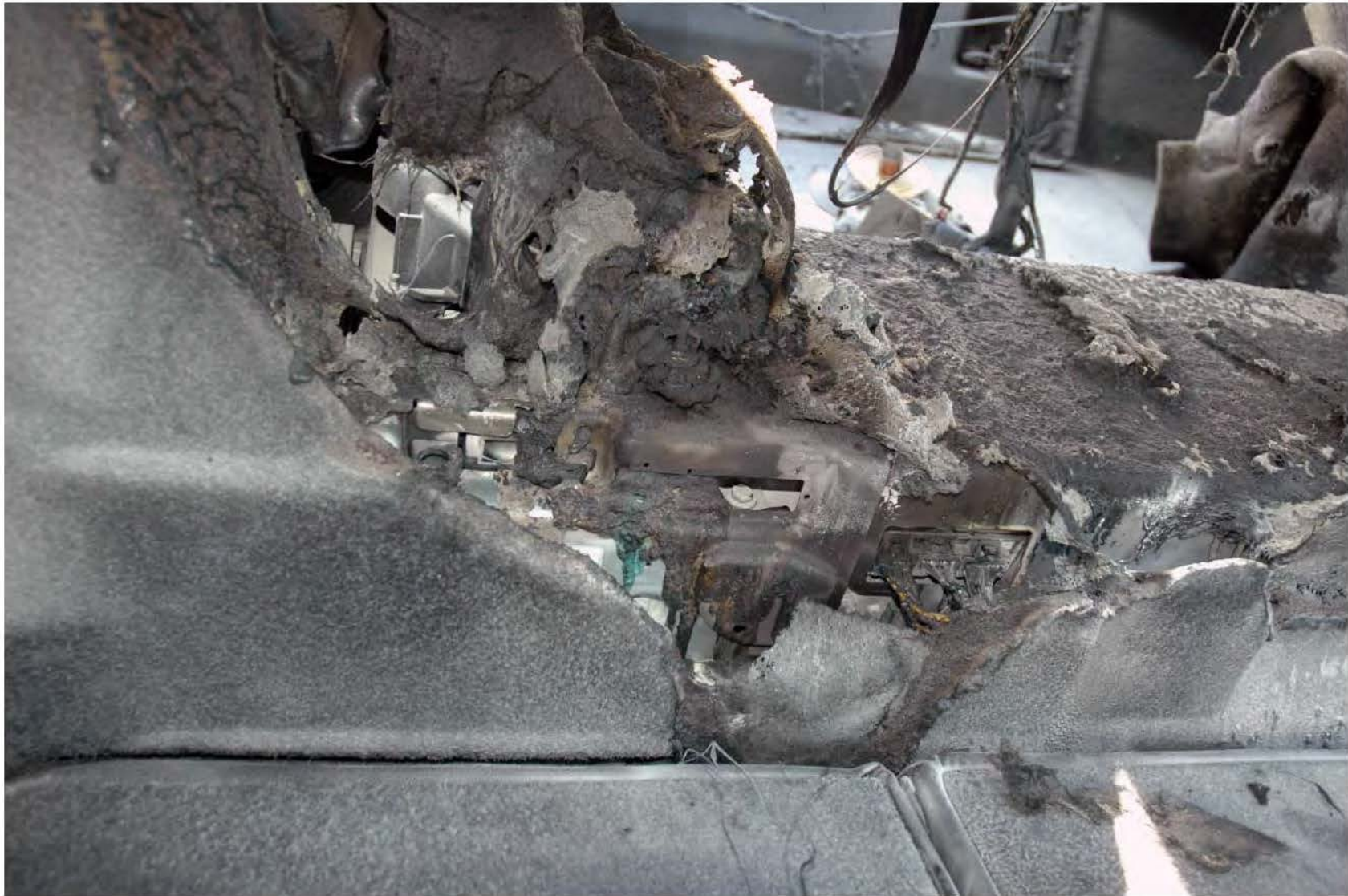
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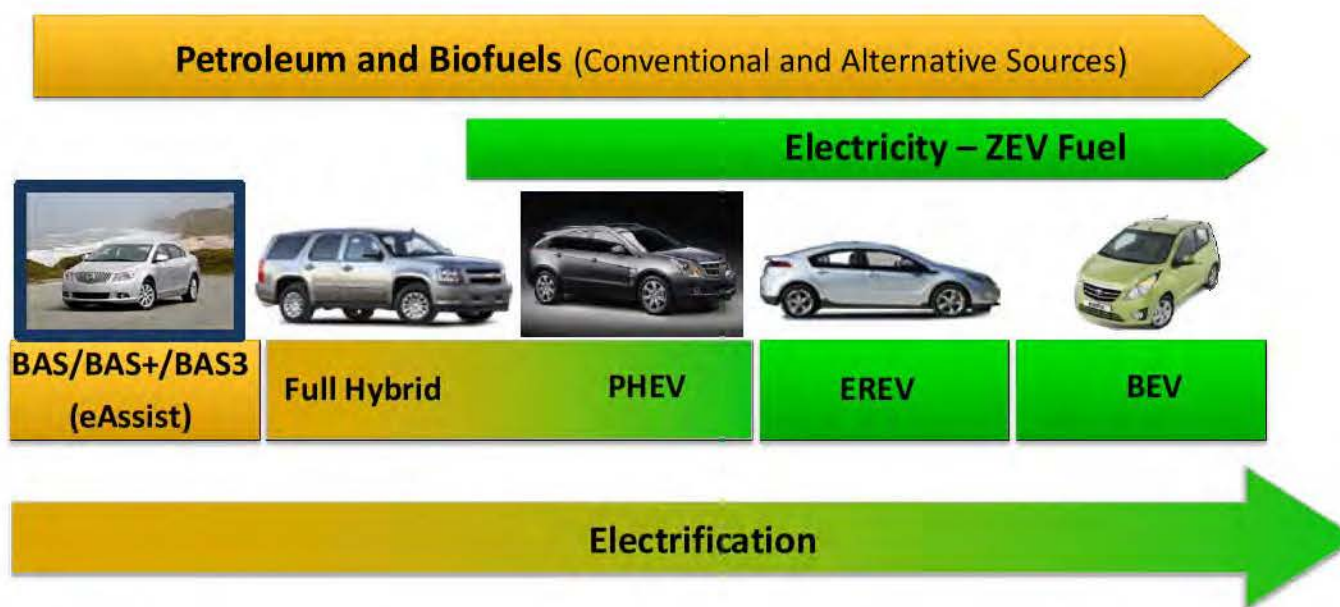


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eAssist Role in GM Electrification Portfolio

- “Light Electrification” – apply “low-hanging fruit” offered by electrification
- 10-15 kW system
- Potential future base powertrain content
- Marketed as eAssist – not “Hybrid”



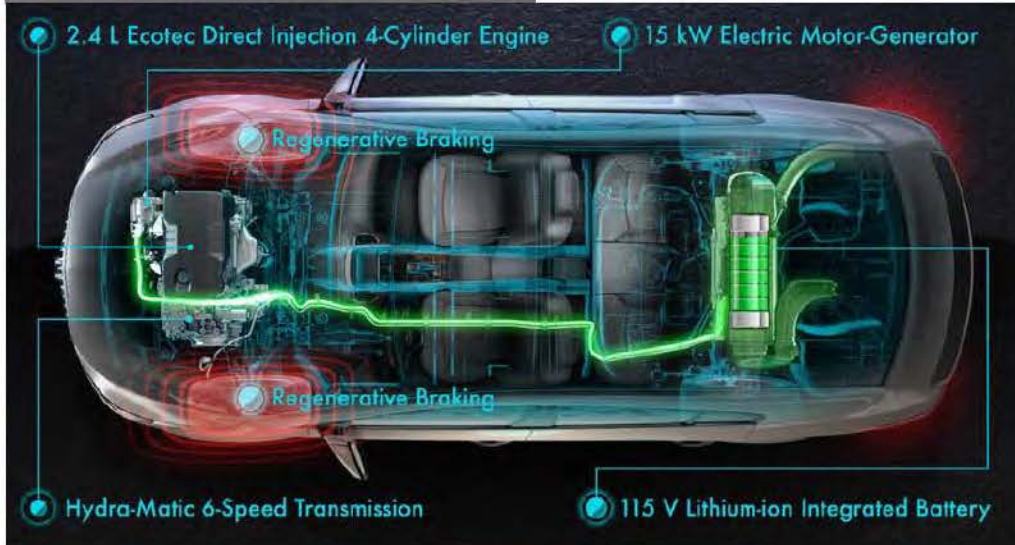
BAS+ / eAssist Production Applications



2012 Buick Regal eAssist



2011 SGM Buick LaCrosse eAssist



2012 Buick LaCrosse eAssist



2012 GMK Alpheon eAssist



2014 Chevrolet Impala ECO



2013 Chevrolet Malibu ECO

Fall 2012

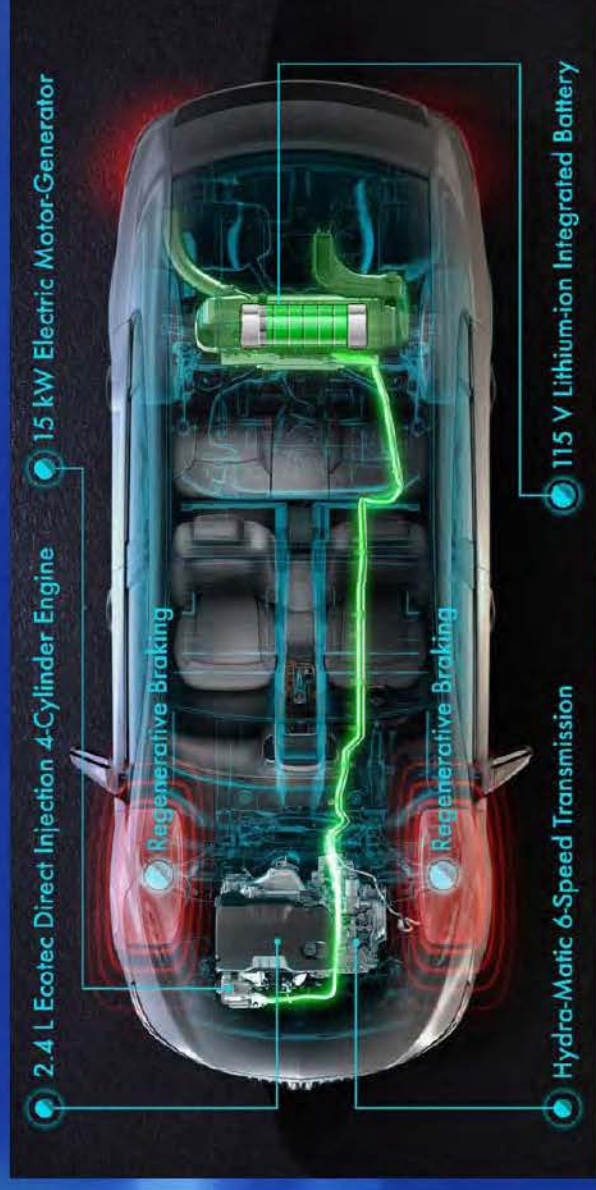
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The Elements of eAssist™

- 15-kW belt-driven induction motor/generator
- Engine accessory drive with a patented dual tensioner
- Air cooled power electronics integrated with a compact, light-weight 115-V lithium-ion battery pack
- Direct-injection 2.4 liter 4-cylinder gasoline engine and slightly modified 6-speed automatic transmission
- Specific features to reduce road load, which work synergistically with the eAssist™ propulsion system to maximize regenerative braking:
 - Low-rolling resistance tires
 - Underbody aero panels
 - Actively controlled grill shutters



How Does eAssist™ Save Fuel?



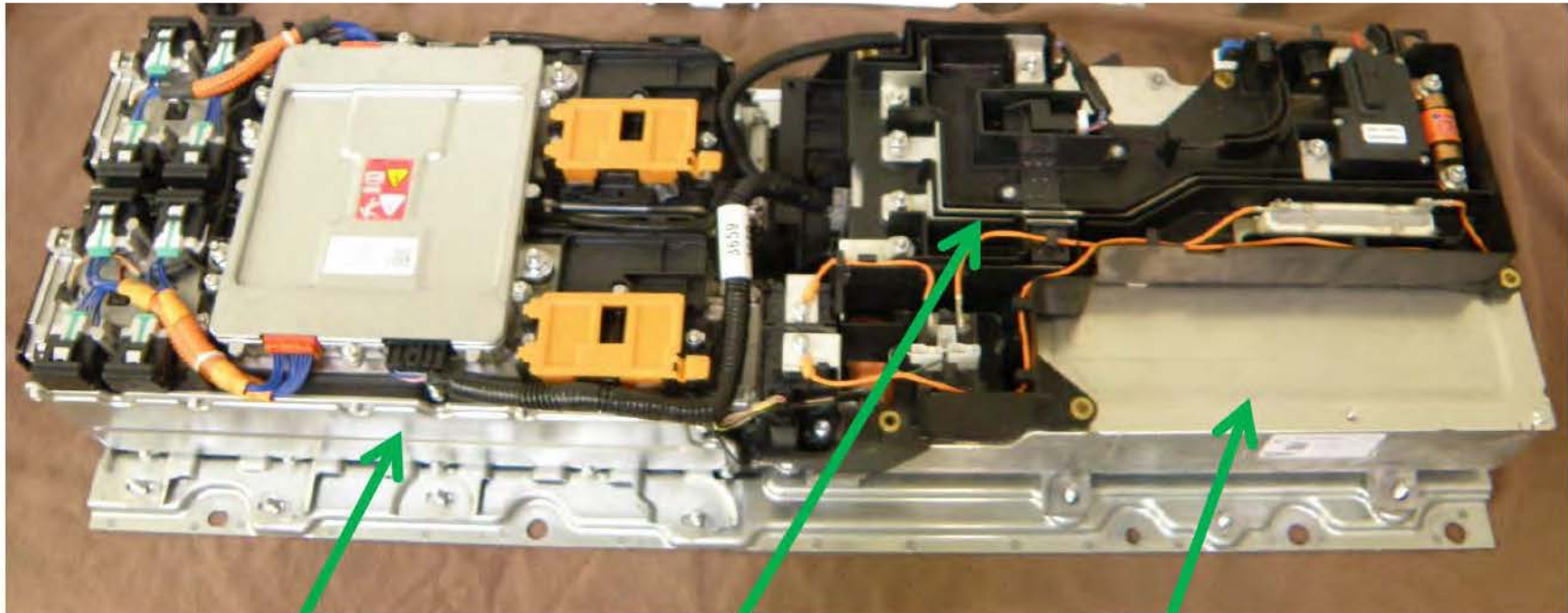
2012 LaCrosse 2.4L Ecotec with eAssist™ Technology

- Smooth engine stop/start
- Regenerative braking
- Full deceleration fuel cut-off
- Electric boost to maintain acceleration and gradeability with more efficient axle ratio

eAssist



eAssist Powerpack (Cover Removed)



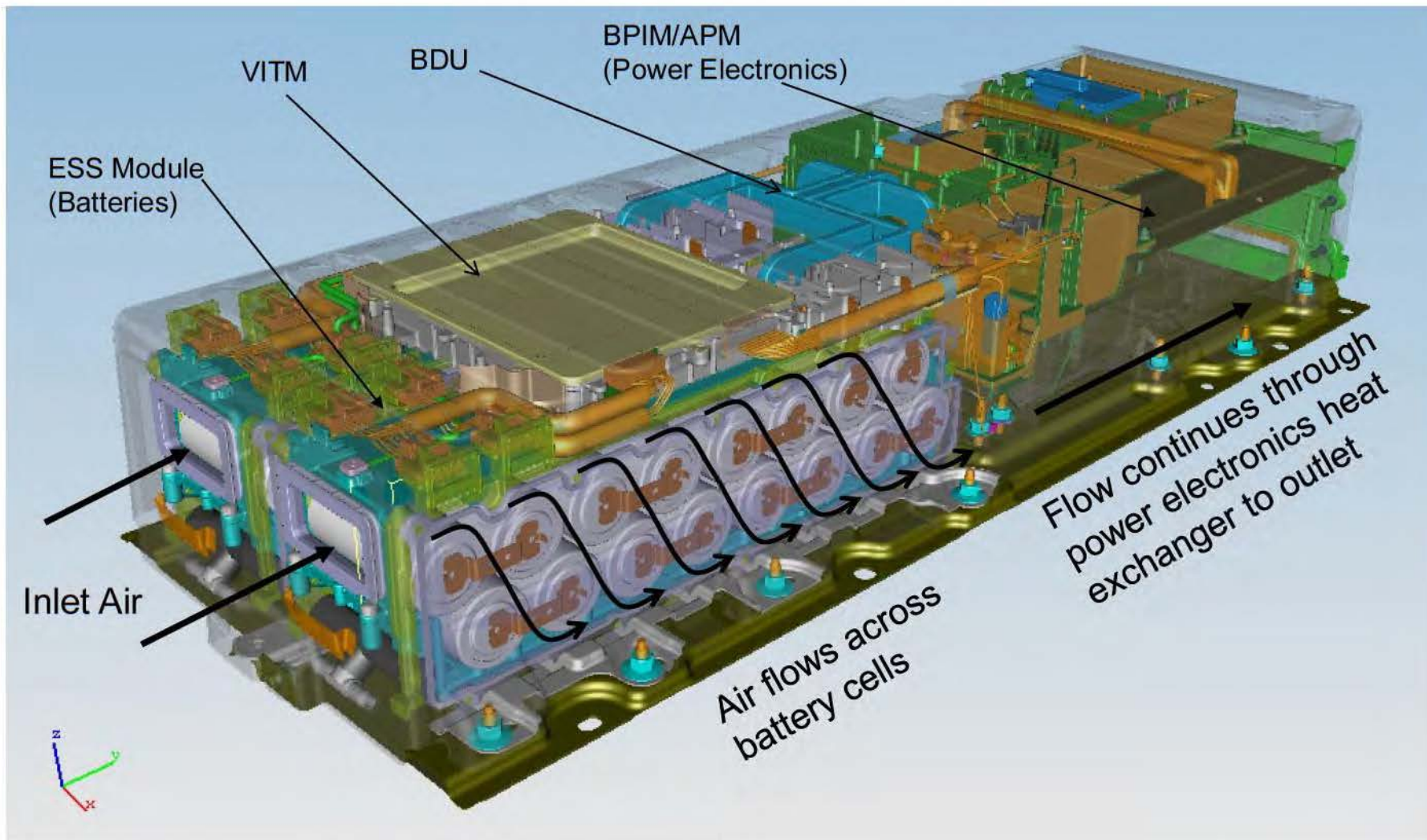
Battery

Battery Disconnect Unit

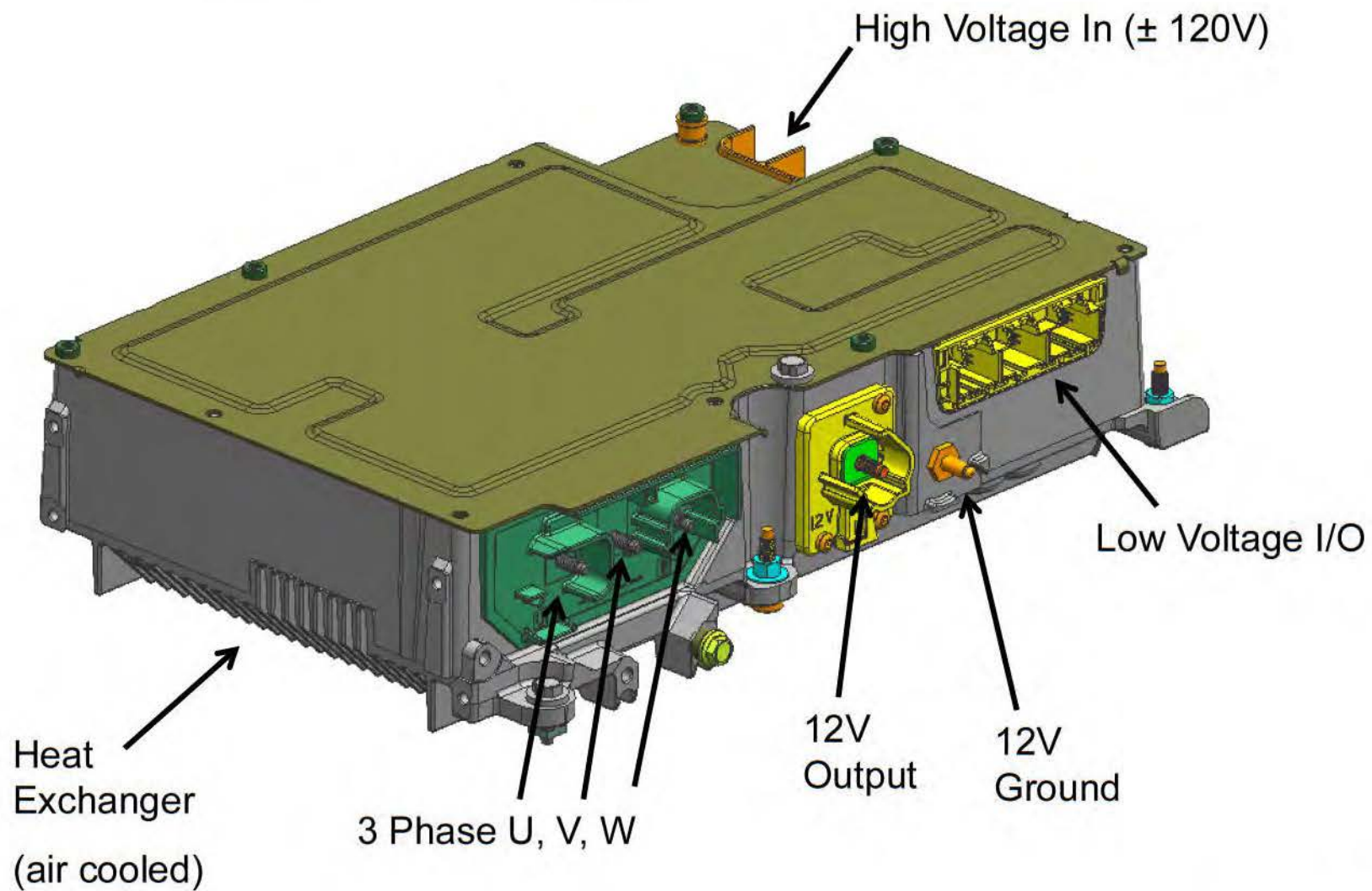
BPIM/APM

(Starter/Generator Control Module)

Powerpack – Basic Layout



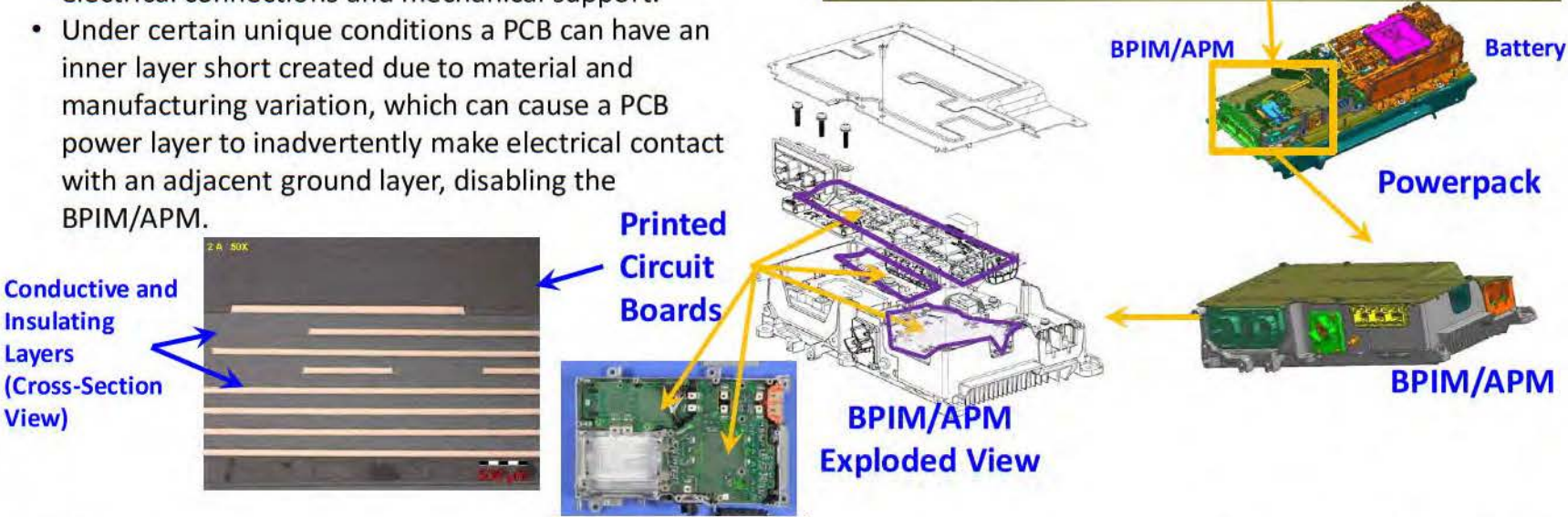
eAssist BPIM/APM – External View



eAssist+: BPIM/APM PCB Failures

Summary:

- Vehicles with this condition are equipped with eAssist (RPO LUK) specifically the 2012 Buick Regal, 2012-2013 Buick LaCrosse, and 2013 Chevrolet Malibu Eco).
- All eAssist vehicles have a Powerpack which contains a Battery Power Inverter Module (BPIM) / Accessory Power Module (APM).
- The BPIM/APM contains three multi-layered Printed Circuit Boards (PCBs).
- A PCB is a multilayered component comprised of conductive and insulating layers which provides electrical connections and mechanical support.
- Under certain unique conditions a PCB can have an inner layer short created due to material and manufacturing variation, which can cause a PCB power layer to inadvertently make electrical contact with an adjacent ground layer, disabling the BPIM/APM.

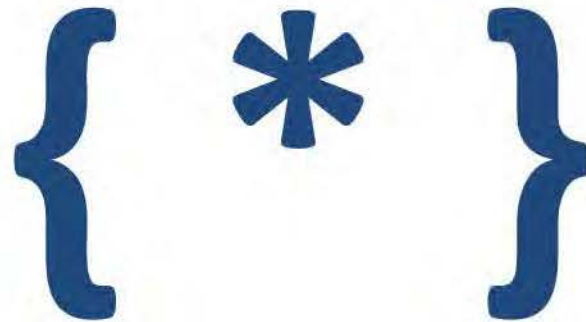


Fall 2012

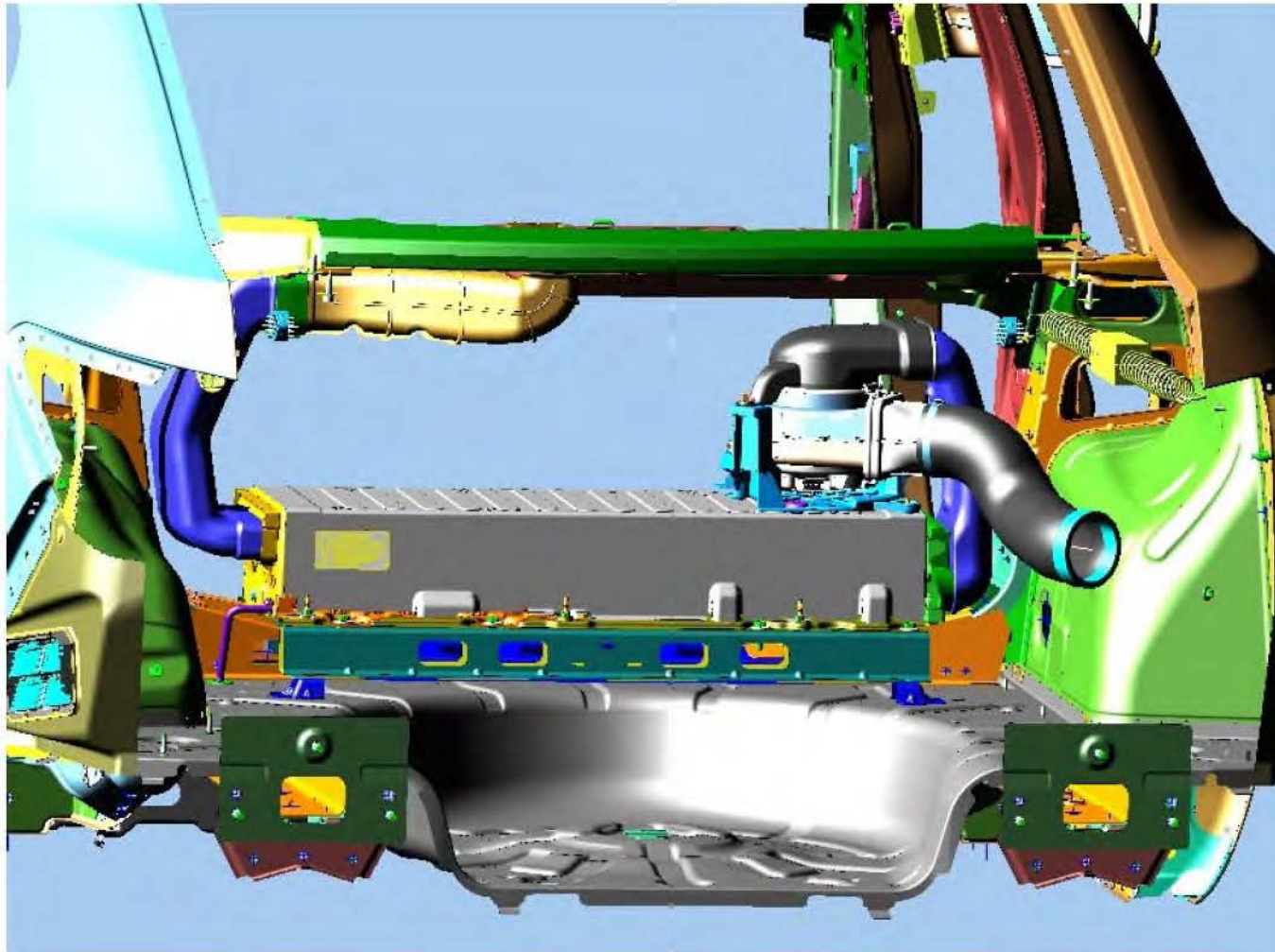
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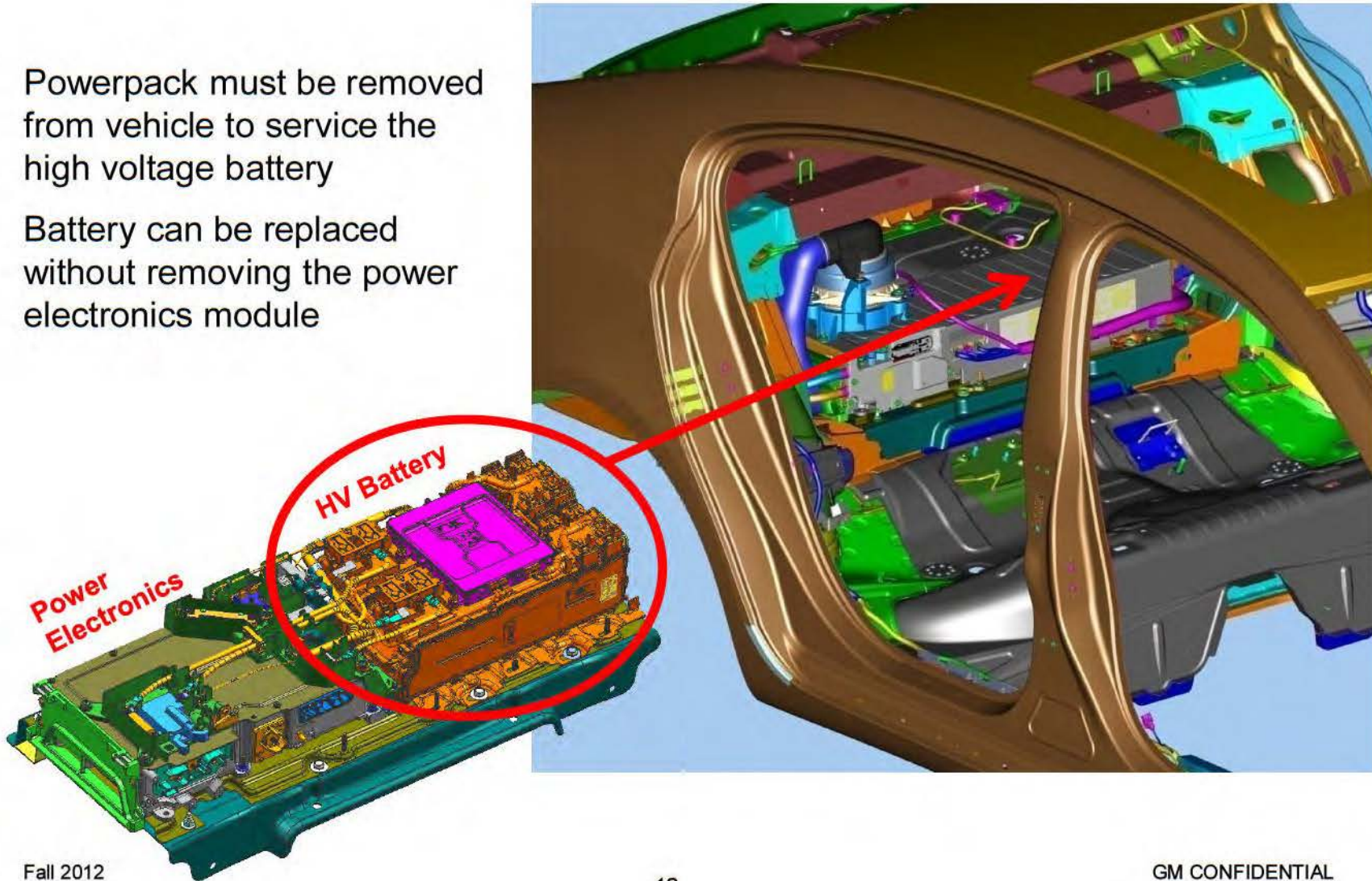
Vehicle Packaging (seen from rear of vehicle) eAssist Powerpack



Serviceability (seen from side of vehicle) eAssist Powerpack

Powerpack must be removed from vehicle to service the high voltage battery

Battery can be replaced without removing the power electronics module

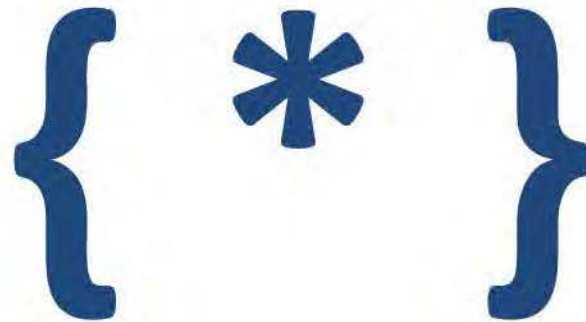


Fall 2012

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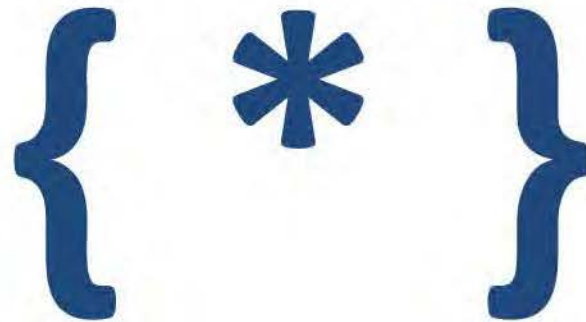


eAssist BPIM Isolation Fault Timeline (Draft)

- July 5, 2011 – SGM vehicle with shorted APM output
- November 2011 – First failure in field for shorted APM output
- January 2012 – Second TAC case for isolation related issues
- March 2012 – Thermal event in Fairfax LQ68414112056516
- March 2012 - SGM TAC that an E11 eAssist in one Beijing dealership had a burned fuse #23.
- Design review indicated PCB best practices not followed (double layer insulation,..)
- May/June 2012 - Spike in TAC cases for isolation related issues
- July/August – Escalation of issue due to increased rate in the field
- August 8, 2012 – 20 minute conditioning screen added at GMCH (sample basis)
- August 2012 – Power board ‘Option 1’ changes implemented at GMCH
- Vehicle screening at the assembly plants
- October 19, 2012 - Service bulletin 12238 issued to screen ‘limited’ population (7,166)
- October 24, 2012 – Thermal event during vehicle screening (cap board)
- November 14, 2012 - Stop build / ship order issued, all vehicles screened prior to shipping
- November 15, 2012 - Service bulletin 12238B updated to expand vehicle population (22,908)
- January 10, 2013 – Service bulletin 12238C updated to include 2013 LaCrosse/Regal part number
- January 16, 2013 – All BPIM PCBs (cap and control boards) have double layer insulation
- February 13, 2013 – Service bulletin 12238D updated to include new parts and clarify instructions
- March 25, 2013 – Letter from customer requesting a buy-back due to a thermal incident

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Service Bulletin (Excerpts)

SUBJECT: Service Update for Inventory Vehicles Only
Loss of Battery Charge – Inspect Generator Control Module
Expires October 31, 2013

MODELS: 2012 Buick Regal
2012-2013 Buick LaCrosse
2013 Chevrolet Malibu Eco
Equipped with eAssist

*The Caution Statement in the service procedure has been revised to the following: **Caution: The service procedure contained in this bulletin is intended to fully stress the generator control module beyond normal customer use. This stress, in rare cases, may result in smoke and thermal damage to the generator control module. For the extended idle portion of the service procedure (Steps 8 and 12), the vehicle should be located outdoors, with the right rear seat back down, and with the location of the power pack in view of an observer in the left rear seat during the complete idle portion. Do not remove any trim panels. If smoke is observed or smelled, even a trace level, or a popping or unusual noise is heard from the power pack, immediately turn off the engine and exit the vehicle. Disconnect the 12V battery and observe for 10 minutes, then contact TAC.***

Please discard all copies of bulletin 12238, issued October 2012.

This service update involves vehicles in dealer inventory only and will expire October 31, 2013.

PURPOSE

This bulletin provides a service procedure to inspect and replace, if necessary, the Generator Control Module (GCM) on **certain** 2012 model year Buick Regal, 2012-2013 model year Buick LaCrosse, and 2013 model year Chevrolet Malibu Eco vehicles, equipped with eAssist. The GCM may not function properly, resulting in the gradual loss of battery charge, illumination of the MIL, and eventual engine stall or no start condition.

DEALER PROGRAM RESPONSIBILITY

Dealers must take the steps necessary to ensure that the service update correction has been made to all involved vehicles in dealer inventory before selling or dealer-trading the vehicle, but no later than October 31, 2013.

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GMCH / PM Functional Self-Assessment

eAssist PET Meeting [10/17/2012]

GLBACKS

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BAS+ S92 BPIM/APM

- Summary of Approved and Proposed Design Changes

Stephen Farris, BPIM DRE
Reena Datta, APM DRE

April 23, 2012



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DRBFM Option 3 Changes and Engineering Checklist



Option 3 DRBFM
Control Board



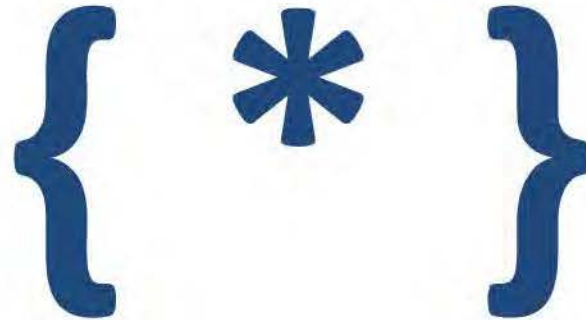
Engineering
Checklist

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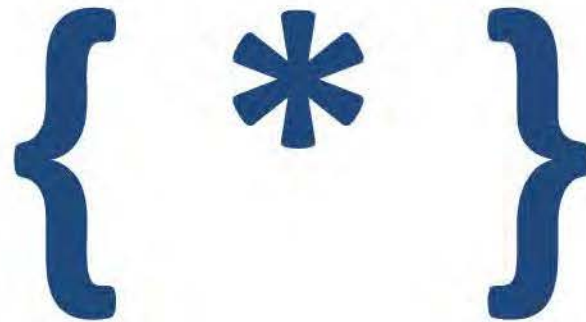
Background

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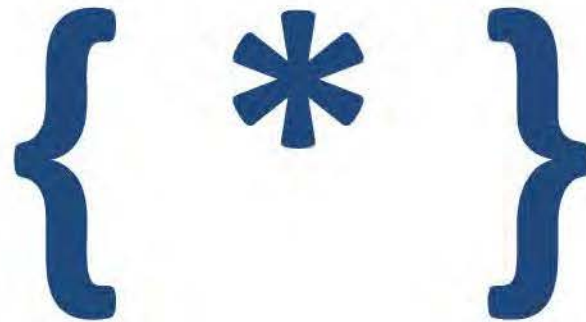
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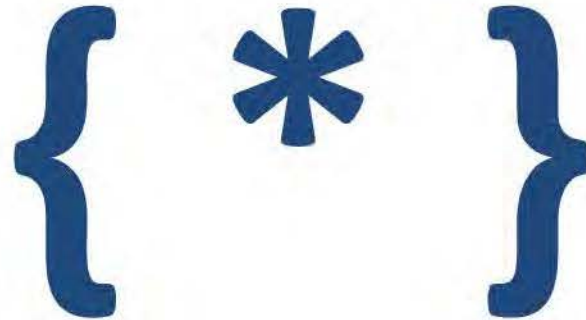


Buckets of Vehicles and Risk Profiles for Each Bucket

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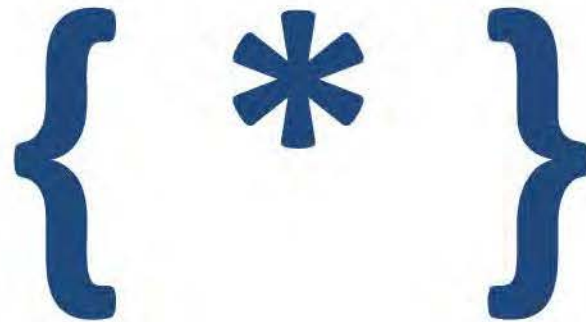










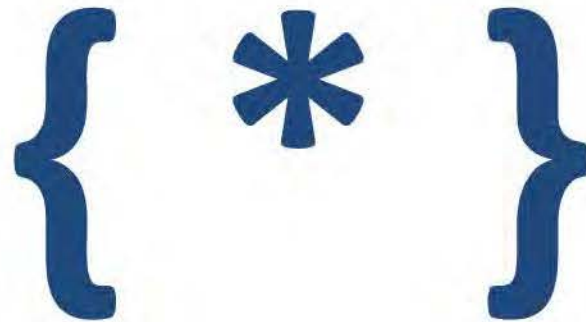








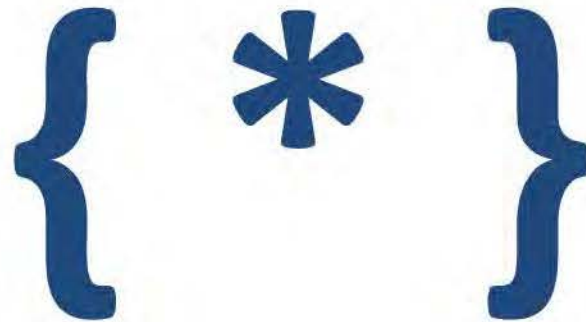


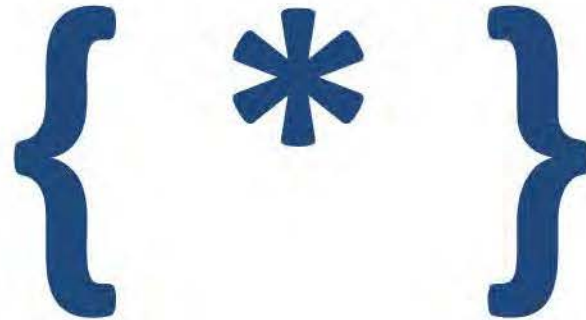


Backup ...

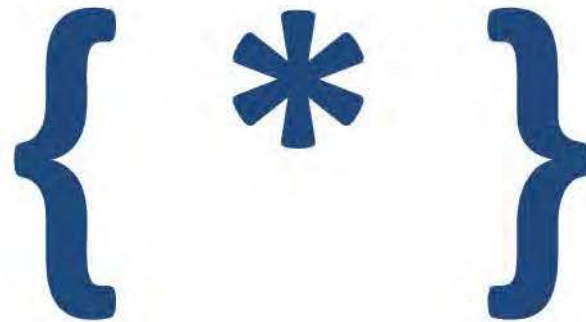
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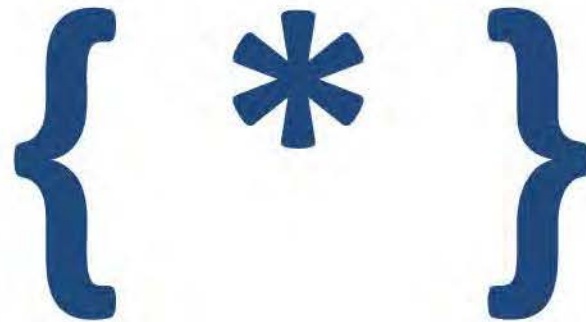




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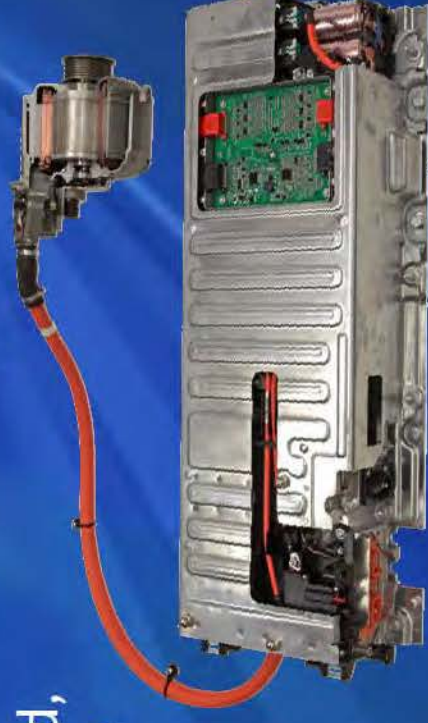




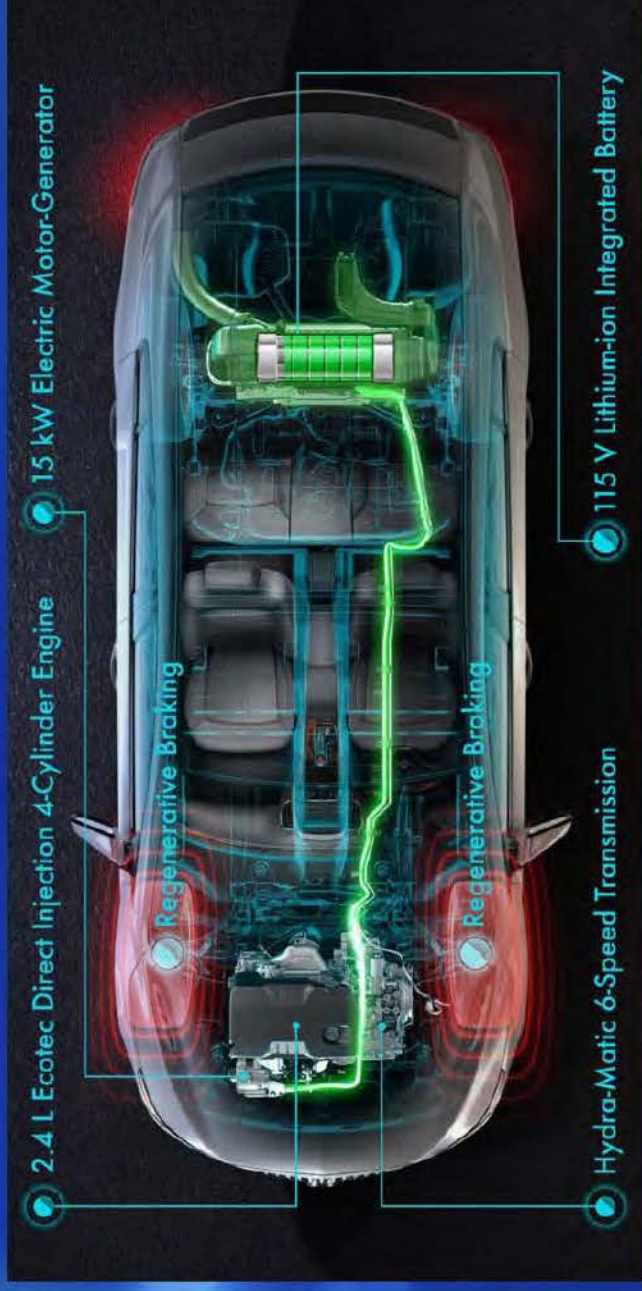


The Elements of eAssist™

- 15-kW belt-driven induction motor/generator
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- Air cooled power electronics integrated with a compact, light-weight 115-V lithium-ion battery pack
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 - Underbody aero panels
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How Does eAssist™ Save Fuel?



2012 LaCrosse 2.4L Ecotec with eAssist™ Technology

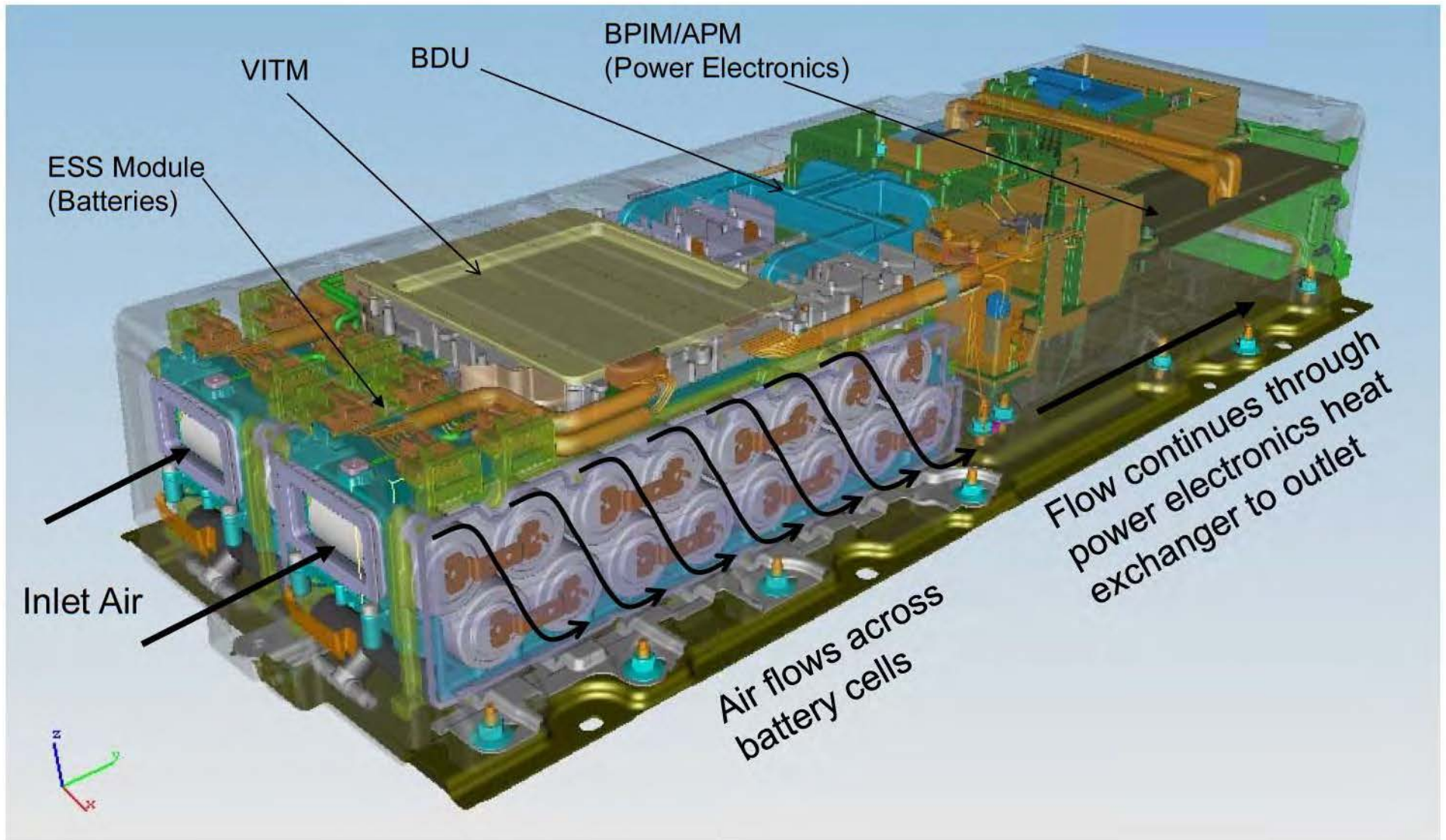
- Smooth engine stop/start
- Regenerative braking
- Full deceleration fuel cut-off
- Electric boost to maintain acceleration and gradeability with more efficient axle ratio

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eAssist

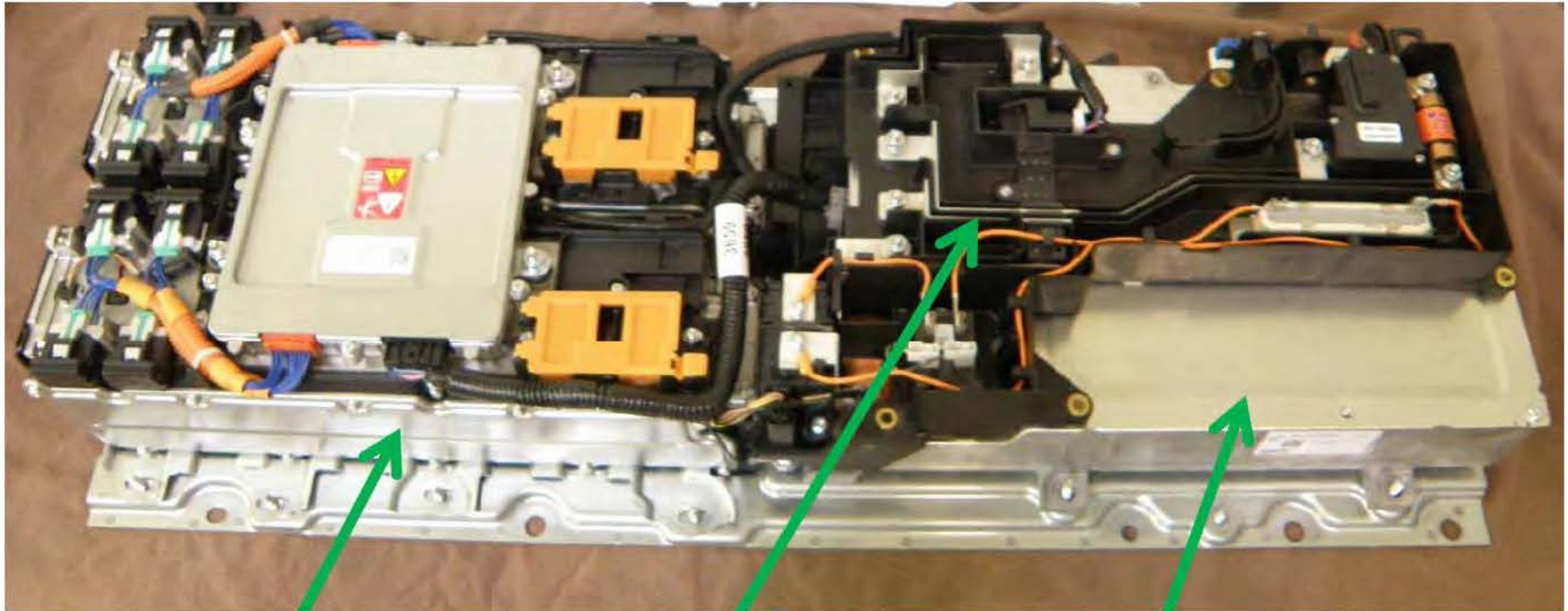


Powerpack – Basic Layout



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eAssist Powerpack (Cover Removed)



Battery

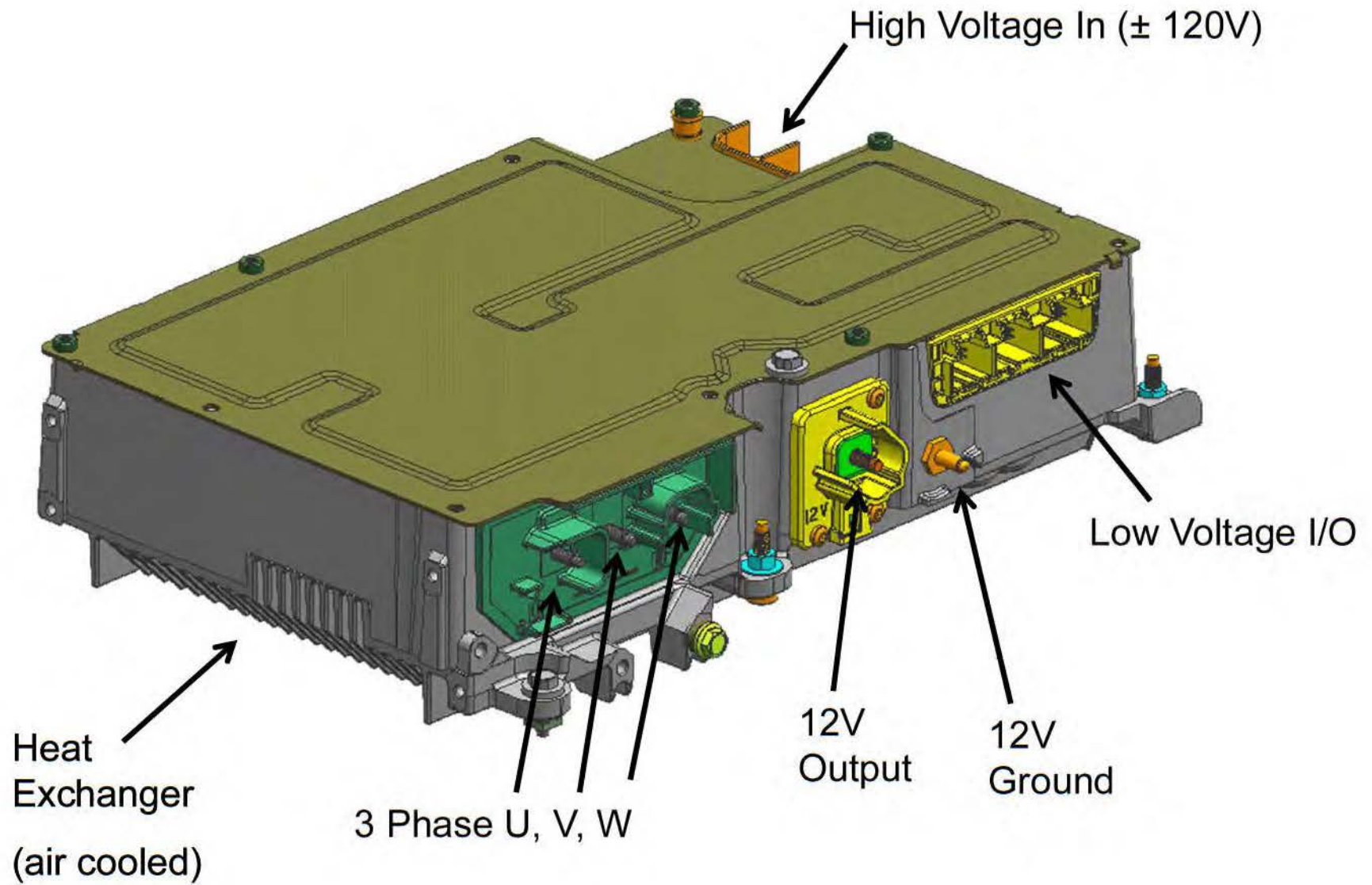
Battery Disconnect Unit

BPIM/APM

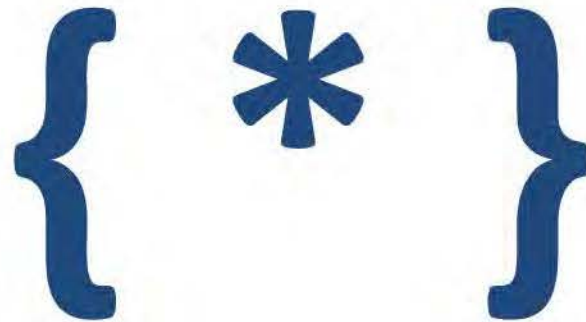
(Starter/Generator Control Module)

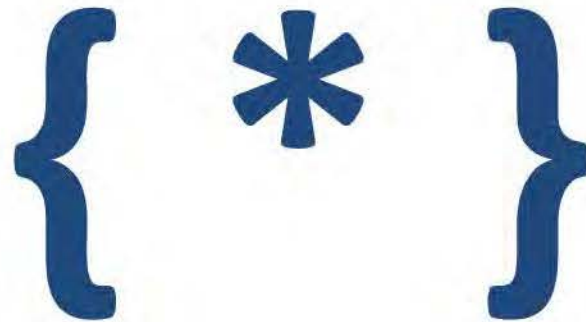
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eAssist BPIM/APM – External View



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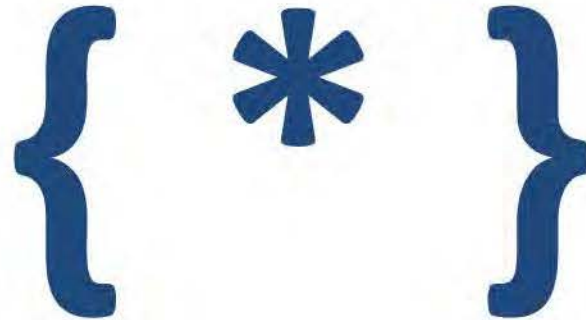






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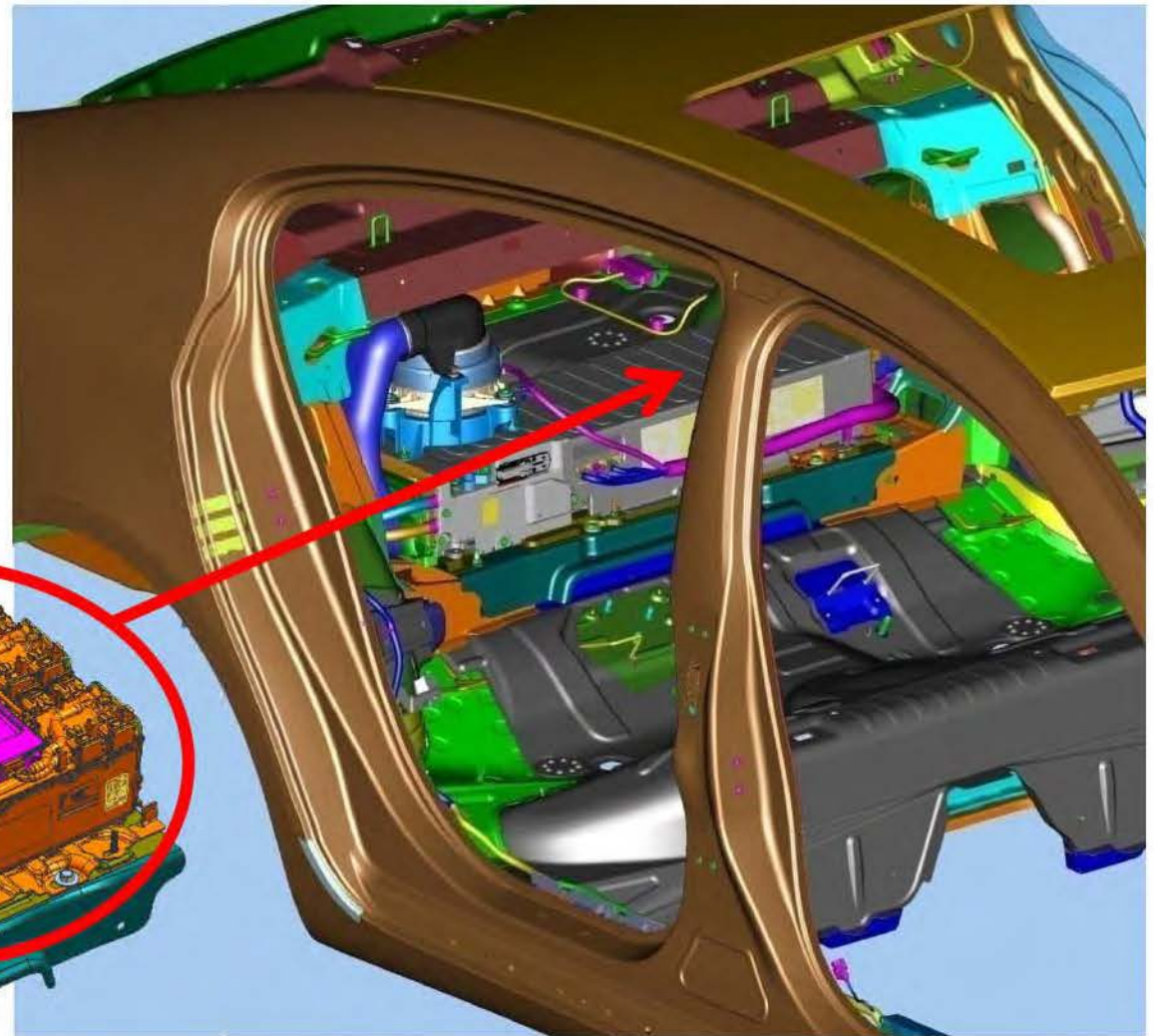
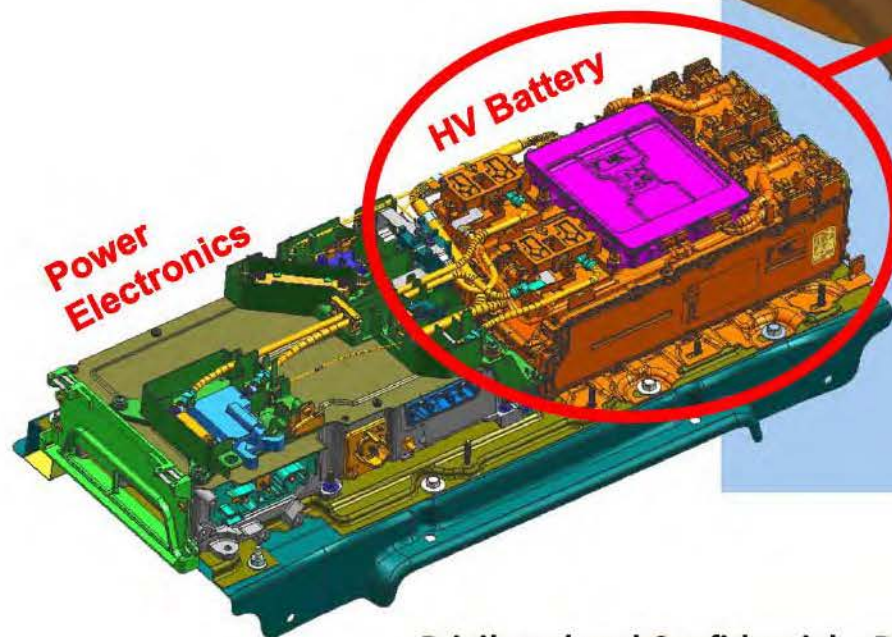




Serviceability (seen from side of vehicle) eAssist Powerpack

Powerpack must be removed from vehicle to service the high voltage battery

Battery can be replaced without removing the power electronics module



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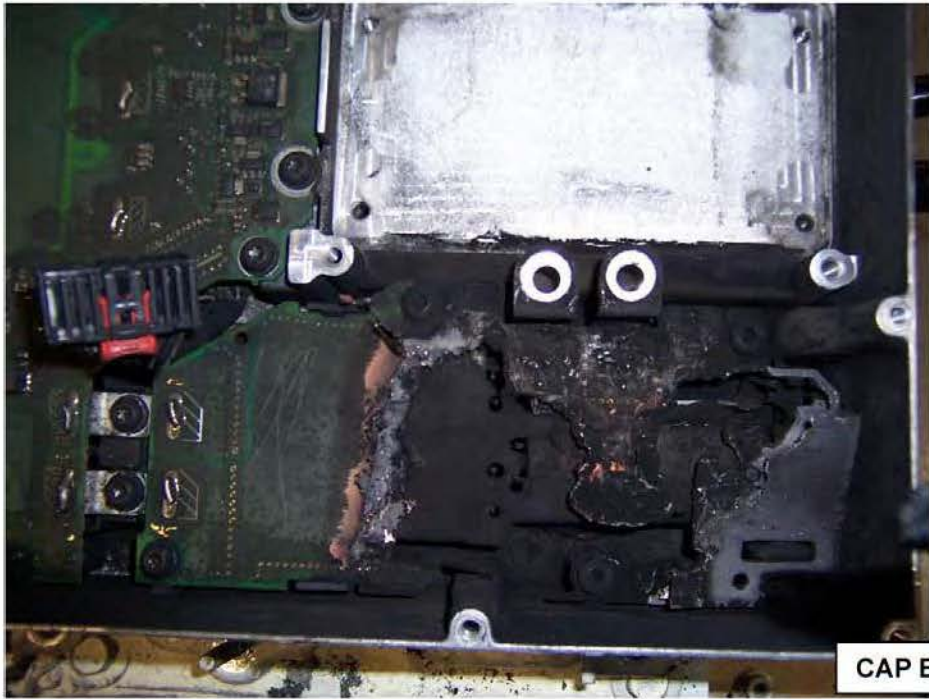
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CAP Board Damaged

Attorney Client Privileged Communication



CAP Board Severely Damaged

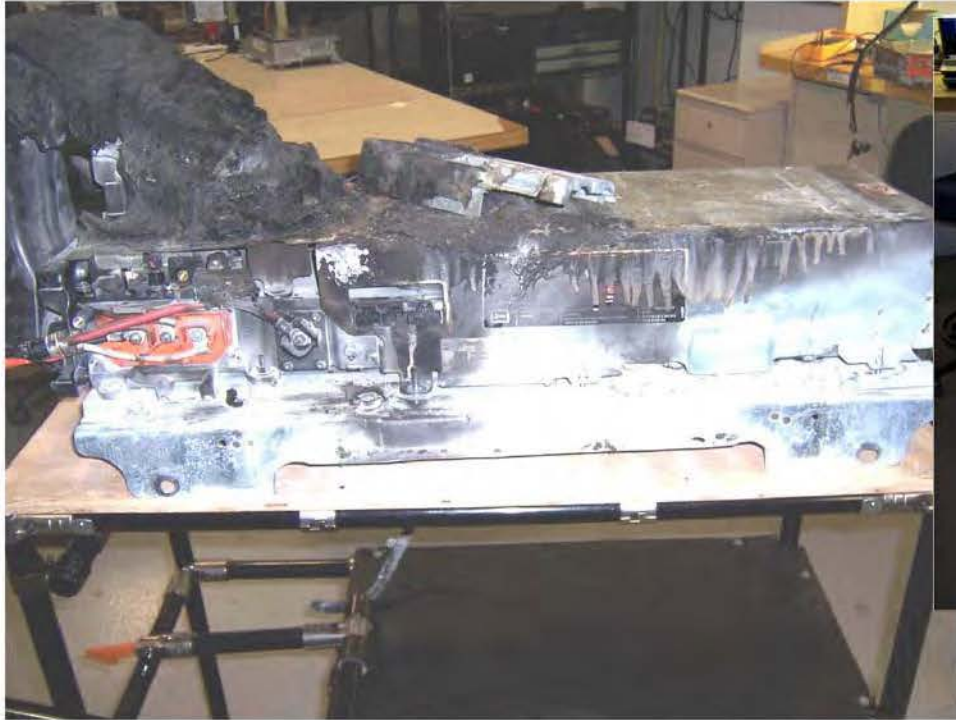


**Control Board Only Collateral
Damage / Sooted**

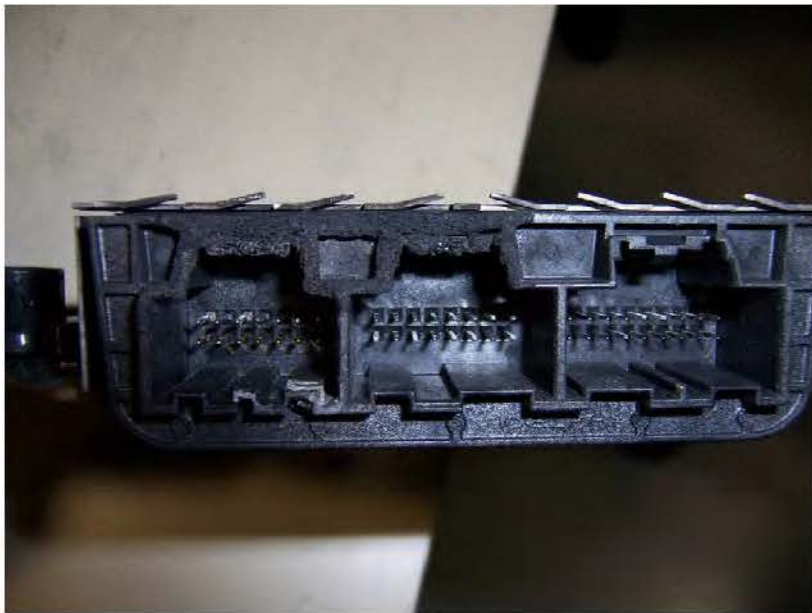


**Power Board Only Collateral
Damage / Sooted**

Attorney Client Privileged Communication



Attorney Client Privileged Communication



Attorney Client Privileged Communication



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Hardware Containment:

Verbal Update at 7am call

Backup

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