

## TESLA SAFETY INVESTIGATION- NHTSA-

### **TESLA SAFETY REPORT- Public Wiki Produced for NHTSA and other governmental agencies**

Draft- 1.04 (Document under construction - not final)  
For Public Comment and Review

**Please refer all agencies to this document link at:**

<http://wp.me/P2BJXK-yn>

#### **CONTENTS:**

1. Overview
2. Issues
3. Safety tests that were never conducted and must now be conducted.
4. How many fire incidents have there been.
5. Contacts to follow-up on investigations
6. Are Tesla drivers more likely to get in accidents than mainstream drivers?
7. Original participant conflicts-of-interest created reduced safety oversight

#### Appendix

- Lithium ion site
- NHTSA Demand Letter

(Supplemental material now numbers over 10,000 pages and will be submitted directly to regulators in order to avoid congesting this site)

#### 1. **Overview**

Regulators asked Tesla to detail the possible consequences of battery pack damage to the Model S and how those problems were addressed in the Model S design. NHTSA also asked Tesla to describe the "limits of that design to prevent damage to the propulsion battery, stalling and fires". While electric cars have been in commercial production since the 1800's, and have been widely released by major automobile manufacturers, only the Tesla vehicles have experienced the fire issues, relative-to-inventory, in this magnitude.

#### 2. **Issues.**

- Dense packing non-automotive lithium cells
- Self ignition from exposure to air
- Self ignition from exposure to water
- Burning lithium ion, plastics and human skin
- Inability to extinguish lithium ion fires
- Failure to provide disclosures to buyers
- Failure to provide required CO2 fire extinguishers to buyers
- Toxic carcinogenic chemicals released in Tesla Fire- Danger to passengers

- Toxic carcinogenic chemicals released in Tesla Fire- Danger to bystanders
- Brain damage from toxic chemicals released in Tesla Fire- Danger to passengers
- Brain damage from toxic chemicals released in Tesla Fire- Danger to bystanders
- Lung damage from toxic chemicals released in Tesla Fire- Danger to passengers
- Lung damage from toxic chemicals released in Tesla Fire- Danger to bystanders
- Birth defects from toxic chemicals released in Tesla Fire- Danger to passengers
- Birth defects from toxic chemicals released in Tesla Fire- Danger to bystanders
- Home and office conflagration as warned in Tesla's own patents
- BMS (Battery Management System) programming, ie: Vampire issues, etc.
- Danger to factory workers exposed to internal materials in Tesla Lithium ion cells
- Electronic door locks failing. Could passengers be locked inside car in fire?
- Previous seat safety recall
- Miscellaneous owner complaints about technical issues and relation to safety

Additional...

[Tesla Model S is dead after the first day | Forums | Tesla Motors](#)

Tech was adamant the 2nd key would fix the problem... well, the 2nd key was 30 ... They would unlock the door remotely, try to fix the car in my ...

[www.teslamotors.com/forum/forums/tesla-model-s-dead-after-first-day](http://www.teslamotors.com/forum/forums/tesla-model-s-dead-after-first-day) - [View by Ixquick Proxy](#) - [Highlight](#)

[Charge Port Door Opens Spontaneously | Forums | Tesla Motors](#)

This was diagnosed to be because of a defective charging cable. ... is locked when it is parked in a public place, the charge port door is locked.

[www.teslamotors.com/forum/forums/charge-port-door-opens-spontaneously](http://www.teslamotors.com/forum/forums/charge-port-door-opens-spontaneously) - [View by Ixquick Proxy](#) - [Highlight](#)

[Tesla recalls some Model S cars due to seat-mount defect ...](#)

19 Jun 2013 ... Electric car maker Tesla Motors will recall 1228 of its 2013 Model S cars ... The Palo Alto automaker twice recalled its first model, the two-door ...

[www.contracostatimes.com/ci\\_23491448/tesla-recalls-some-model-s-cars-due-seat](http://www.contracostatimes.com/ci_23491448/tesla-recalls-some-model-s-cars-due-seat) - [View by Ixquick Proxy](#) - [Highlight](#)

[Door Handles: Warning! Random Door Opening While Locked! \[Archive ...\]](#)

Tesla needs to figure out the problem and fix it ASAP. .... I have started to lock the door manually (key fob push) rather than depending on the ...

[www.teslamotorsclub.com/archive/index.php/t-13017.html](http://www.teslamotorsclub.com/archive/index.php/t-13017.html) - [View by Ixquick Proxy](#) - [Highlight](#)

Good Credit, Bad Credit Auto Loans

Yesterday, 02:24 PM #1

**LovelyMoon**

2.4 Liter SIDI ECOTEC



Join Date: Oct 2013  
Posts: 254  
Thanks: 14  
Thanked 57 Times in 41 Posts

**Tesla model-s-still-loses-power-while-turned-off**

*The Tesla Model S, for all its technical and design artistry, has a dirty little secret: the car has a substantial appetite for kilowatt-hours even when turned off and parked. Since the Model S was introduced in 2012, this "vampire" power drain from the cars sold so far has consumed roughly 15 gigawatt-hours of electric energy, nearly a day's output for a mid-size nuclear power plant. It's enough wasted energy to drive the cars 50 million miles.*

*After nine months of promises to fix it, Tesla finally sent out a software update a week ago to the Model S fleet that it claims "significantly reduces power usage when (the car is) shut down."*

*But based on a week's worth of measurements on my 60-kWh Model S, I've concluded that the new software is only mildly effective.*

*As far as I can tell, the vampire's fangs are still sharp.*

*Wasted power*

*Shortly after taking delivery of my Model S last February, I noticed that I would typically lose 10-15 miles of indicated range overnight. On average, I was losing 23 miles of indicated range every 24 hours.*

Read more: <http://www.greencarreports.com/news/...#ixzz2lsLv4ftz>

Reply Reply with Quote

Yesterday, 06:08 PM #7

**zete**

GMI Staff Member  
PREMIUM MEMBER



Join Date: Dec 2005  
Location: NCR, Great White North  
Posts: 8,761  
Thanks: 0  
Thanked 2 Times in 2 Posts

**Re: Tesla model-s-still-loses-power-while-turned-off**

What interests me most is that the 23-25 mile loss overnight the writer of the article mentions is in line with what the NY Times mentioned and yet Musk claimed it wasn't so. It's recently been "improved" to a 15 mile loss, but that's still substantial.

Others have pointed out the loss overnight and were pooh-poohed by Silicon Valley types claiming biased reporting. But it seems there is a problem and losing 20 or so miles overnight could be the difference between getting home and getting stranded.

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*As other have noted, this has not been a secret, every Tesla owner knows about this. Second, most reports I have seen, and my own experience, puts the previous vampire loss at about 3kWh, not 4.5. With the latest update, that has been reduced to about 1 kWh. And they are not done optimizing yet.*

I think the idea of it being a "secret" comes from the fact that this is a weakness that the general media doesn't cover. Not yet anyway. I think if it were common knowledge that every Tesla born is like plugging in a couple of incandescent light bulbs forever whether you use the car or not, its reputation might be just a little less rosy. Lord knows if it were the Volt with this kind of issue, it would be top headlines on the hour on Fox News.

You may know this author better than I, but I didn't see any evidence that he used an inaccurate methodology. He was very clear about how it was done, and acknowledged that he could use a larger sample size to draw more accurate conclusions. Rather, it seems to me it's *your* claim that the latest update reduces daily vampire drain to 1 kWh that could use some evidence. I certainly wouldn't take it from a Tesla forum or Tesla corporate, which should automatically come with questions about objectivity. And this 1 kWh figure seems directly in contradiction to the author's findings by a wide margin.

IMO, a lot of time has passed with a known and significant issue (actually a set of related issues it seems), and despite promises and a concerted effort, what seems like it should be an eminently solvable problem has not been solved at all. As someone who's worked in IT for over 30 years, If I were in charge of R&D there, I'd be feeling like I should maybe offer my resignation! There is a tendency to look at Tesla with rose-colored glasses, something I'm seeing even in this thread, and IMO this issue is potentially more of a problem for Tesla than the recent spate of road-incident fires.

Originally Posted by **MrEnergyCzar**

*How many KWH per day does a plugged in Tesla draw? 2? What amount are we talking about here? Thanks...*

MrEnergyCzar

According to the article, he's seeing an average of 3.5 kWh per day after the latest software update.

Last edited by volt11; 15 Hours Ago at 11:53 PM.

Reply With Quote

8 Hours Ago

#13

richard13  
Member

Join Date: Oct 2013  
Location: Mill Creek,  
WA  
Posts: 88

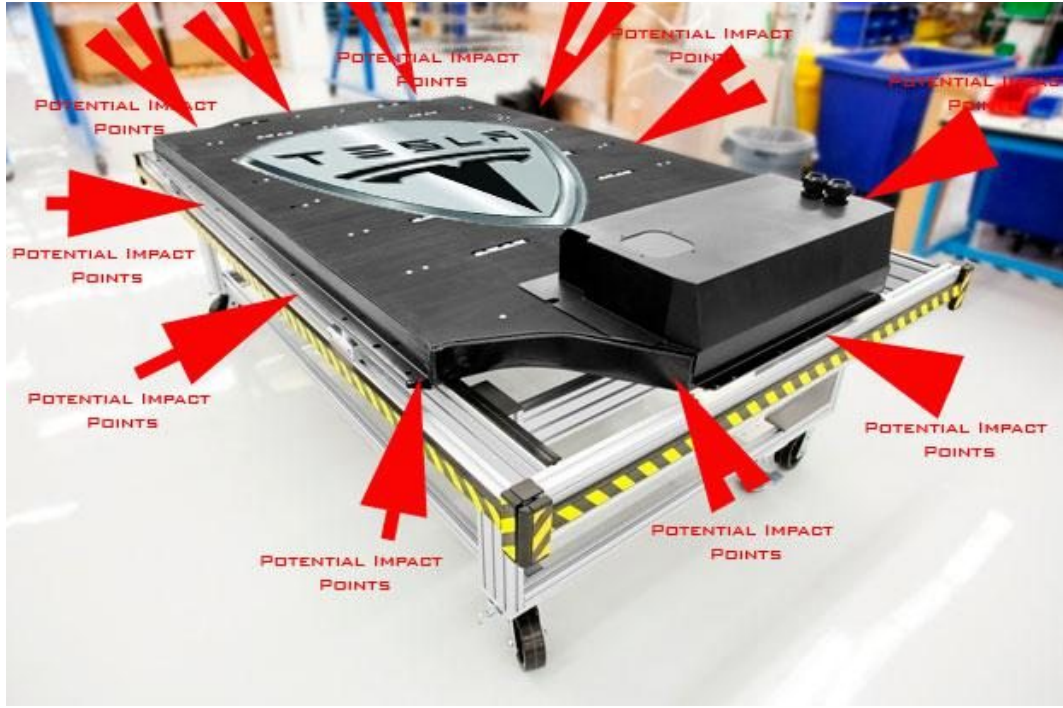
Originally Posted by **bonaire**

*I love my 2011 hold mode. It is called mountain mode. Works great for my long distance trips.*

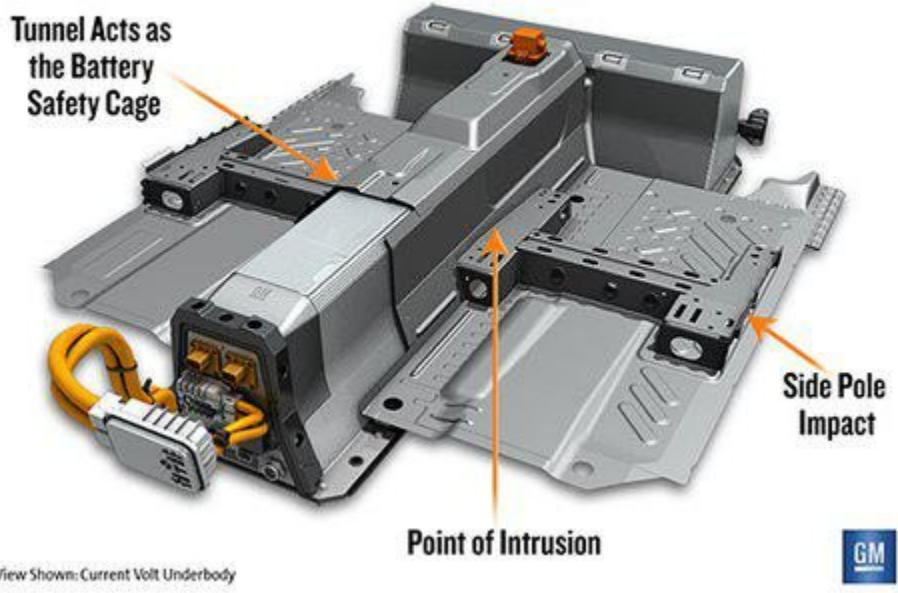
*I personally don't consider Tesla vehicles as green. From 10,000 miles out of rear 21" tires to more kWh per mile than other cars to the excess power from the motor and far too large a battery subsystem. Add to that the vampire drain and it just isn't conservative enough for my tastes.*

I agree with this. To me the Tesla is less of a green automobile and more of a wasteful alternative fuel sports car.

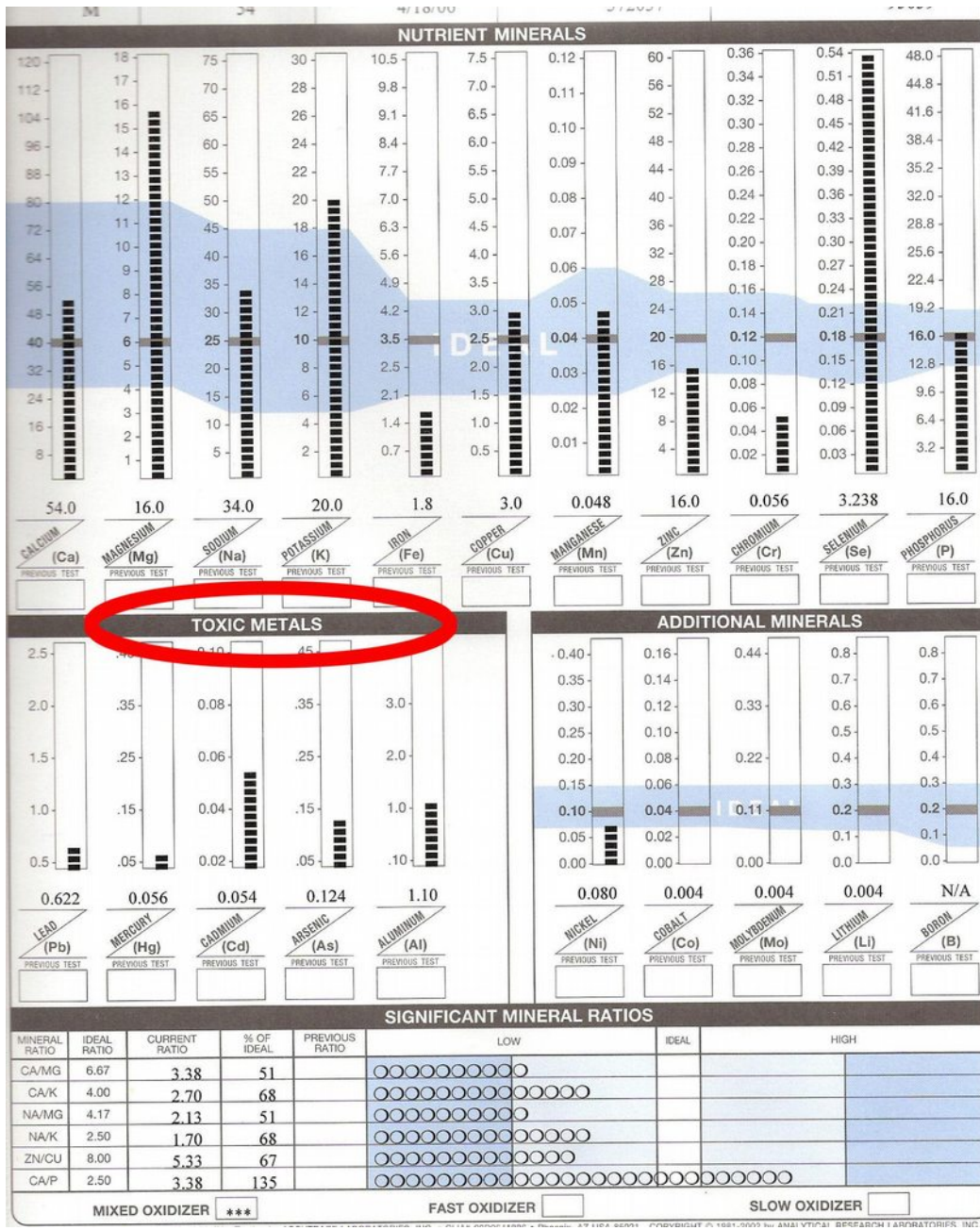




 **STRUCTURE ENHANCEMENTS**



View Shown: Current Volt Underbody



**International Journal of**  
**ELECTROCHEMICAL**  
**SCIENCE**  
[www.electrochemsci.org](http://www.electrochemsci.org)



**Keywords:** Lithium ion battery, ionic liquid, electrolyte, safety, thermal stability

## 1. INTRODUCTION

Lithium ion batteries have been widely used on personal computers and mobile phones for their high-voltage, high-energy-density characteristics [1-4]. Especially, the rapidly need for cleanly resource and crisis of energy, lithium ion batteries attract more attention as the power source of electric and hybrid electric vehicles. However, Lithium ion batteries have not been large-scale applied to electric vehicles for the safety issues, the volatile and flammable organic solvent organic solvents is the main components of electrolytes in lithium ion batteries, the cases of flaming, smoking or thermal runaway caused by electrolytes are the main reason for the safety problem. Therefore, electrolyte system, which has more stable features, is necessary to be found.

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*Int. J. Electrochem. Sci., Vol. 6, 2011*

2399

### [Door handle problems | Forums | Tesla Motors](#)

Two weeks ago my right rear **door** handle assembly was replaced by the **Tesla** Ranger. He also replaced the 12v battery as a separate issue. This week, my driver **door** handle has the same **problem** and they are coming this week to replace it.  
[teslamotors.com/nl\\_NL/forum/forums/door-handle-problems](http://teslamotors.com/nl_NL/forum/forums/door-handle-problems)

### [Door Problem | Forums | Tesla Motors](#)

... rispondi ai filoni di discussione aperti con i proprietari e gli appassionati **Tesla**, oppure ... I only noticed it today when the car wouldn't **lock**. ... The old design still uses a pressure switch and because there is no give when pulling on the **door** handle, this causes **problems with the** ...  
[teslamotors.com/it\\_IT/forum/forums/door-problem](http://teslamotors.com/it_IT/forum/forums/door-problem)

### [Tesla Model S gets Consumer Reports' recommendation - Oct. 28 ...](#)

The **Tesla** Model S is now Consumer Reports Recommended. The Model S isn't perfect, according to its owners, but none have reported any **problems with** the car's battery-powered electric drive system or with the enormous iPad-like touch screen inside the cabin.  
[money.cnn.com/2013/10/28/autos/tesla-model-s-consumer...](http://money.cnn.com/2013/10/28/autos/tesla-model-s-consumer...)

### [Tesla Model S: Glitches, Quirks, and Peccadilloes Roundup](#)

**Door locks** are electronic on many cars. If a solenoid misfires, the **door** unlocks. ... the **door problems** are a lie despite **Tesla's** publicly acknowledging the **problem**, etc... When people write good things, they are true and you don't question them.  
[greencarreports.com/news/1081935\\_tesla-model-s-glitches-qui...](http://greencarreports.com/news/1081935_tesla-model-s-glitches-qui...)

### [Door Won't Open! - Tesla Motors Club - Enthusiasts & Owners Forum](#)

So I got my **Tesla** S Performance and was so excited to show it off to as many people ... Do you have 4.2 (1.19.42) installed? I had **problems with** this exact **door**. It only worked randomly. I did the update and it hasn't failed to work. The **door** seemed to get better (before my update) the more ...  
[teslamotorsclub.com/showthread.php/13213-Door-Won-t-Open!](http://teslamotorsclub.com/showthread.php/13213-Door-Won-t-Open!)

[Elon doesn't understand | Forums | Tesla Motors](#)

The press is not Elon Musk's advertising agency. omarsultan | November 22, 2013. What a bunch of self-aggrandizing horse doo-doo - sounds ...

[www.teslamotors.com/forum/forums/elon-doesnt-understand](#) - [View by Ixquick Proxy](#) - [Highlight](#)

[Tesla CEO: We Get Way Too Much Attention - \[H\]ardForum](#)

Elon Musk loved all the attention before the fires. I guess he ... Habitual lying, self-aggrandizing, unethical business practice...yup, sociopath.

[www.hardforum.com/showthread.php?t=1792765](#) - [View by Ixquick Proxy](#) - [Highlight](#)

[Long Open Thread, Elon's Hyperloop - Decline of the Empire](#)

8 Aug 2013 ... And because I called out Elon Musk before I stopped publishing daily, ... How awful for a self-aggrandizing denizen of Americana Hopium to be ...

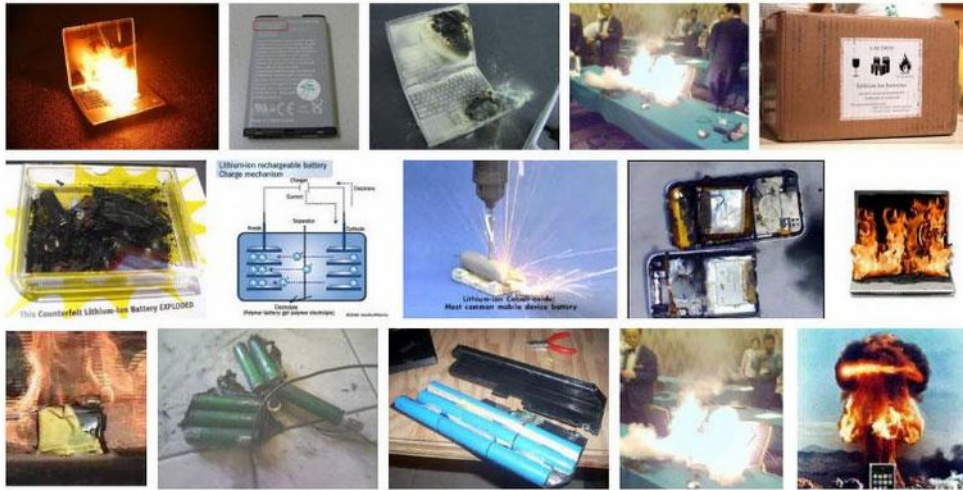
[www.declineoftheempire.com/2013/08/long-open-thread-elons-hyperloop.html](#) - [View by Ixquick Proxy](#) - [Highlight](#)

[Elon Musk: Visionary Or Crazy Person? - The Car Connection](#)

21 Jan 2009 ... Elon Musk. Enlarge Photo. There are a lot of ... He is also, as most people of his type are, fairly self-aggrandizing: "We're all focused on our little ..."

[www.thecarconnection.com/news/1017872\\_elon-musk-visionary-or-crazy-person](#) - [View by Ixquick Proxy](#) - [Highlight](#)

*A number of incidents of cell phones with lithium ion batteries blowing up in peoples pockets, notebook computers blowing up in peoples briefcases and other shocking fires have been deeply documented.*



LITHIUM ION BATTERIES BLOWING UP ON THEIR OWN



THIS IS AN ACTUAL BOEING BATTERY



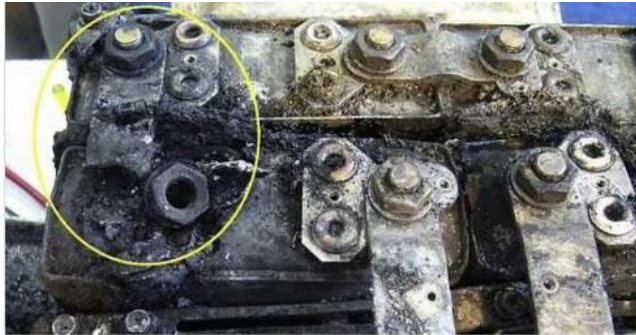
Here is what the Lithium Ion Batteries did to their home:



TESLA HAS TO TEST THEIR BATTERIES IN a **BLAST CHAMBER!!!!!!!**:



IF TESLA SAYS THIS THING IS SO SAFE WHY DO THEY TEST IT IN A STEEL ENCLOSED EXPLOSION ROOM WITH WIRES COMING IN THROUGH BLAST HOLES!!!!?????



HERE IS THE BATTERY YOU COULD HAVE BEEN SITTING ON TOP OF IN A TESLA



THIS IS THE TESLA MAGIC CARPET OF DOOM. THIS WHOLE THING IS FULL OF LITHIUM. YOUR WHOLE FAMILY IS SUPPOSED TO SIT ON TOP OF THIS!!!

# Airbus to drop lithium-ion batteries for A350 due to regulatory concerns

Text Size Print E-mail Reprints

By Associated Press, Updated: Thursday, February 14, 6:44 PM

NEW YORK — Airbus is dropping lithium-ion batteries from its new A350 airplane because of uncertainty surrounding the technology that has led to the grounding of Boeing's 787.

The European planemaker said late Thursday that it has decided to revert to nickel-cadmium batteries for the A350. The plane is a wide-body jet rival to the 787 and is expected to make its first flight around the middle of the year.

**0** **Comments**  
Weigh In Corrections?

Tweet 0 More

Airbus says it does not expect the battery switch to delay the A350.

Federal officials grounded the 787 last month because of problems with its lithium-ion batteries that caused one fire and forced another plane to make an emergency landing.

Airbus says the A350 uses batteries in a different setup to the 787, making it unlikely that it would face the same problems.

## Gallery



now? Fisker's insurance company is balking at paying for this saying: 'You knew this would happen.'



These links show vast sets of Fisker electric cars that burst into flames just because they GOT WET:  
<http://updates.ialopnik.com/post/34669789863/more-than-a-dozen-fisker-karma-hybrids-caught-fire-and>



**Panasonic Batteries**

Panasonic Industrial Company  
 A Division of Panasonic Corporation of North America  
 5201 Tolview Drive, 1F-3  
 Rolling Meadows, IL 60008  
 Toll Free: 877-726-2228  
 Fax: 847-468-5750

**Product:** Lithium-ion Batteries (Li-ion)

**Applicable models/sizes:** All Cylindrical and prismatic Lithium-ion Cobalt type Batteries

**FIRE SAFETY**

In case of fire, you can use dry chemical, alcohol resistant foam or carbon dioxide fire extinguishers. Cooling the exterior of the batteries will help prevent rupturing. Burning of these batteries will generate toxic fumes. Fire fighters should use self-contained breathing apparatus.

employees.

Because all of our batteries are defined as "articles", they are exempt from the requirements of the Hazard Communication Standard, hence a MSDS is not required.

The following components are found in a Panasonic Lithium Ion battery:

Component	Material	Formula
Positive Electrode	Lithium Cobalt Oxide	LiCoO <sub>2</sub>
Negative Electrode	Graphite	C
Electrolyte	Ethylene Carbonate - Solvent	C <sub>4</sub> H <sub>8</sub> O <sub>3</sub>
	Diethyl Carbonate - Solvent	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>
	Lithium Hexafluorophosphate - Salt	LiPF <sub>6</sub>

The overall reaction is: Li<sub>1-x</sub>C + Li<sub>1-x</sub>CoO<sub>2</sub> ↔ C + LiCoO<sub>2</sub>



**DISPOSAL**

All Panasonic Lithium Ion batteries are classified by the federal government as non-hazardous waste and are safe for disposal in the normal municipal waste stream. These batteries, however, do contain recyclable materials and are accepted for recycling by the Rechargeable Battery Recycling Corporation's (RBRC) Battery Recycling Program. Please call 1-800-8-BATTERY for information on recycling your used Lithium Ion battery or go to the RBRC website at [www.rbrc.org](http://www.rbrc.org) for additional information.

**TRANSPORTATION**

Effective October 1, 2008 all Panasonic lithium ion batteries are not subject to the requirements of the Department of Transportation (DOT) Subchapter C, Hazardous Materials Regulations, shipped in compliance with 49 CFR 173.185 and Special Provision 188.

Currently all Panasonic lithium ion batteries can be transported under the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA) under Special Provision A45. Effective January 1, 2009 Special Provision A45 will be replaced by Packing Instructions (PI) 965 (Batteries), PI 966 (Batteries, packed with equipment) and PI 967 (Batteries, contained in equipment).

Currently all Panasonic lithium ion batteries are regulated by the International Maritime Organization (IMO) under Special Provisions 188 and 230. These regulations will stay in effect until January 1, 2010 when Special Provisions 188 and 230 will be updated.

If you build any of our lithium cells into a battery pack, you must also assure that they are tested in accordance with the UN Model Regulations, Manual of Test and Criteria, Part III, Subsection 38.3. If you plan on transporting any untested prototype battery packs contact your Panasonic Sales Representative for regulatory information.

**Notice:** The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. Panasonic Industrial Company makes no warranty expressed or implied.



## Lattice Energy LLC

# Key take-aways

- ✓ In July 2010, Lattice began to issue public warnings about thermal runaway risks with large, scaled-up Lithium-based battery packs; on Slide #54 in an August 6, 2013 Lattice presentation subtitled "A Fool's Paradise" we questioned whether Tesla's engineering had solved problematic runaway issues, or whether they had just been lucky - so far
- ✓ October 1, 2013 fire incident (really a form of battery runaway) with Tesla Model S that occurred near Seattle, WA suggests that they had merely been lucky to date — battery thermal runaway issues have not yet been truly solved by Tesla Motors or anyone else
- ✓ As seen in the progression of news stories quoted from herein, Tesla began the news cycle by trying to assert that the battery pack had nothing to do with the hot fire that consumed the front end of a \$70,000 car. By Wednesday evening they finally admitted that the battery was in fact the culprit, but that the incident had been triggered by the vehicle's impact with "metal debris" that had been lying on the road surface and that consequent mechanical damage to battery cells triggered the thermal runaway fire event; they are emphatically asserting that the battery did not catch fire spontaneously
- ✓ While Tesla's theory of the incident is plausible, it is inconsistent with statements made by the highway patrol officer — trained to be keenly observant — who first investigated the accident scene and found no evidence whatsoever of any claimed "metallic debris"
- ✓ Unless conclusive physical evidence is revealed that proves otherwise, Lattice believes it is more likely that the fire was caused by a spontaneous heat-event inside the battery

## Lattice Energy LLC

# Tesla Motors Model S car catches fire on road Incident occurred on October 1, 2013 near Seattle, WA

While nothing is totally conclusive yet, circumstances are suspicious re battery

### Large Lithium-based EV batteries are potentially risky

Lewis Larsen

President and CEO  
Lattice Energy LLC  
October 3, 2013



### Tesla Stock Tumbles After Model S Catches Fire

SEATTLE October 3, 2013 (AP)

By MIKE BAKER Associated Press



Shares of electric car company Tesla sank more than 6 percent Wednesday after an Internet video showed flames spewing from one of the company's vehicles near Seattle.

Source: <http://www.king5.com/news/local/Tesla-stock-tumbles-after-Model-S-catches-fire-near-Seattle-226207991.html>

Contact: 1-312-861-0115  
[lewisglarsen@gmail.com](mailto:lewisglarsen@gmail.com)

<http://www.slideshare.net/lewisglarsen>

October 3, 2013

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## Lattice Energy LLC

# Thermal runaway severity varies in Lithium-based batteries

### "Garden variety" thermal runaways:

- Temps: ~300° C up to 600° C (Lattice's criteria)
- Reasonably well understood failure events
- Triggered by substantial over-charging or excessively deep discharges of Li batteries
- Triggered by external mechanical damage to battery cells, e.g., crushing, punctures; growth of internal dendrites pierces plastic separators



### Field-failure thermal runaways can also include electric arc internal shorting:



- Temps: > 600° C - can go up to thousands of ° C with arcs
- Much rarer and comparatively poorly understood by industry
- Many believe triggered and/or accompanied by electrical arc discharges (internal shorts); what causes initial micro-arcs?
- Much higher peak temperatures vs. garden variety events
- Lattice suggests: super-hot low energy nuclear reactions (LENRs) could well be initial triggers for some % of them

October 3, 2013

Lattice Energy LLC [Get in touch](#) All rights reserved

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### 3. Safety Tests That Were Never Conducted and Must Now Be Conducted.

The continued failure to engage in these tests, and/or provide the results from these tests, continues to call into question the efficacy and conflicts of interest of the original testing. The batteries used by Tesla were never designed, or created, to be used in automobiles and this short-cut to cost reduction must be mitigated by the relative increase in safety reduction.

- Vehicle with **fully charged batteries** drives into 3', 4", 5", 6", 7" 8" concrete curb at 5MPH, 15MPH, 20MPH, 25MPH, 30MPH, 35MPH, 40MPH, 45MPH, 50MPH, 55MPH, 60MPH, 65MPH, 70MPH, 75MPH and then is allowed to sit, post crash, for up to 3 hours to analyze spontaneous lithium ion combustion.

- Vehicle with **fully charged batteries** drives into 3", 4", 5", 6", 7" 8" metal post embedded in road at 5MPH, 15MPH, 20MPH, 25MPH, 30MPH, 35MPH, 40MPH, 45MPH, 50MPH, 55MPH, 60MPH, 65MPH, 70MPH, 75MPH and then is allowed to sit, post crash, for up to 3 hours to analyze spontaneous lithium ion combustion..

- Vehicle with **fully charged batteries** drives into 3", 4", 5", 6", 7" 8" concrete curb at 5MPH, 15MPH, 20MPH, 25MPH, 30MPH, 35MPH, 40MPH, 45MPH, 50MPH, 55MPH, 60MPH, 65MPH, 70MPH, 75MPH and then is allowed to sit, post crash, for up to 3 hours in simulated rain storm to analyze spontaneous lithium ion combustion..

- Vehicle with **fully charged batteries** drives into 3", 4", 5", 6", 7" 8" concrete curb at 5MPH, 15MPH, 20MPH, 25MPH, 30MPH, 35MPH, 40MPH, 45MPH, 50MPH, 55MPH, 60MPH, 65MPH, 70MPH, 75MPH and then is allowed to sit, post crash, for up to 3 hours after complete immersion in water as in a hurricane or high-water event to analyze spontaneous lithium ion combustion..

- Rolling the vehicle with **fully charged batteries** in a 3 roll crash at 20MPH, 25MPH, 30MPH, 35MPH, 40MPH, 45MPH, 50MPH, 55MPH, 60MPH, 65MPH, 70MPH, 75MPH ending in the vehicle laying on it's roof and counting the number of lithium ion cells that came loose from their mounts risking burning lithium falling on passengers.

- Rolling the vehicle with **fully charged batteries** in a 3 roll crash at 20MPH, 25MPH, 30MPH, 35MPH, 40MPH, 45MPH, 50MPH, 55MPH, 60MPH, 65MPH, 70MPH, 75MPH ending in the vehicle laying on it's roof and counting the number of lithium ion cells that had their housings damaged risking burning lithium falling on passengers.

- Rolling the vehicle with **fully charged batteries** in a 3 roll crash at 20MPH, 25MPH, 30MPH, 35MPH, 40MPH, 45MPH, 50MPH, 55MPH, 60MPH, 65MPH, 70MPH, 75MPH ending in the vehicle laying on it's roof and simulating a full rain storm on the, now exposed, underside of the vehicle for 2 hours to see if lithium ion ignites when wet risking burning lithium falling on passenger and to analyze spontaneous lithium ion combustion.

- Filling the battery compartment, with **fully charged batteries**, with water, draining it and observing for 4 hours to analyze spontaneous lithium ion combustion.



- Pouring 18 Oz. soft drinks into the battery compartment, with **fully charged batteries**, and observing for 4 hours to analyze spontaneous lithium ion combustion.
- Impacting the lower quarter panel of Tesla with **fully charged batteries** on the side of the car, on each side, at the lower center of the passenger door and two feet to either side at 20MPH, 25MPH, 30MPH, 35MPH, 40MPH, 45MPH, 50MPH, 55MPH, 60MPH, 65MPH, 70MPH, 75MPH at 3", 4", 5", 6", 7" 8" so as to penetrate the battery chamber at least 4 inches and then saturating the damaged area with water and waiting four hours to analyze spontaneous lithium ion combustion.
- Forced ignition of lithium ion cells in flipped over (vehicle resting upside down on it's roof) with **fully charged batteries** and timing of penetration of smoke and flames to occupants simulated as contained within.
- Spectrograph analysis and complete full-range chemical read-out of the front metal and plastics of a Tesla on fire with **fully charged batteries** along with the lithium ion batteries. Disclosure of all known harmful chemicals in said smoke.
- Manually cutting 10 (ten) **fully charged** lithium ion Tesla battery cells in half long-ways in open air at average humidity and videotaping the results followed by dropping them in a bucket of water 60 seconds after cutting them. With the large number of lithium ion cells in a Tesla, physics and the law of averages predict that at least 10 cells will be fully ruptured in a high speed accident.

Plus such additional tests to be specified by:

### [The Center for Auto Safety](#)

Davis College Engineering Department  
 Denver College Engineering Department  
 General Motors  
 Ford Motor Company  
 Automobile Dealers Association  
 and other public interest safety groups

#### 4. **How many fire incidents have there been.**

Factory Fire 1?  
 Factory Fire 2?  
 Boston Fire?  
 Half Moon Bay Fire?  
 Tenn. Fire?  
 Seattle Fire?  
 Mexico Fire?  
 Factory Prototype Fires?  
 other post crash and testing fires...







Tesla now? Fisker's insurance company is balking at paying for this saying: "You knew this would happen".



These links show vast sets of Fisker electric cars that burst into flames just because they GOT WET:  
<http://updates.jalopnik.com/post/34669789863/more-than-a-dozen-fisker-karma-hybrids-caught-fire-and>  
<http://green Autoblog.com/2012/08/12/fisker-flambe-second-karma-spontaneously-combusts-w-video/>











By TOM KRISHER, AP Auto Writer  
Updated 2:09 pm, Thursday, November 7, 2013

[VIEW: LARGER](#) | [HIDE](#)

2 of 9

[◀ PREV](#)

[NEXT ▶](#)



In this Wednesday, Nov. 6, 2013 photo provided by the Tennessee Highway Patrol, emergency workers respond to a fire on a Tesla Model S electric car in Smyrna, Tenn. Spokeswoman Liz Jarvis Shean says Tesla has sent a team to Tennessee to investigate the fire. Two other Model S cars have caught fire in the past five weeks, one near Seattle and the other in Mexico. Photo: Tennessee Highway Patrol, AP

now? Fisker's insurance company is balking at paying for this saying: "You knew this would happen".



These links show vast sets of Fisker electric cars that burst into flames just because they GOT WET:

<http://updates.laonuk.com/post/34669789863/more-than-a-dozen-fisker-karma-hybrids-caught-fire-and>

TESLA BATTERIES EXPLODE INTO FLAMES ON PUBLIC ROAD



TESLA BATTERIES EXPLODE INTO FLAMES ON PUBLIC ROAD



TESLA BATTERIES EXPLODE INTO FLAMES ON PUBLIC ROAD

## 5. **Contacts to follow-up on investigations**

## <http://www.nhtsa.gov/Contact>

With a copy to:

## [public.affairs@dot.gov](mailto:public.affairs@dot.gov)

## [The Center for Auto Safety](#)

Organization that informs consumers about auto safety issues.

[www.autosafety.org](http://www.autosafety.org)

1825 Connecticut Ave, NW  
Suite 330  
Washington, DC 20009-5708  
(202) 328-7700 <http://www.autosafety.org/fileacomplaint>

Criminal Investigations:

<https://tips.fbi.gov/>

with a copy to:

[askdoj@usdoj.gov](mailto:askdoj@usdoj.gov)

[antitrust.complaints@usdoj.gov](mailto:antitrust.complaints@usdoj.gov)

<https://wb-gop-oversight.house.gov/>

Chairman Barbara Boxer  
Senate Select Committee on Ethics  
220 Hart Senate Office Building  
Washington, D.C. 20510  
Fax: (202) 224-7416

For German Investigations:

Kraftfahrt-Bundesamt (KBA) at:  
[pressestelle@kba.de](mailto:pressestelle@kba.de)

and at this link:

[http://www.kba.de/cln\\_031/nn\\_540136/EN/Service\\_en/Contact/Contact\\_node\\_en.html?  
\\_\\_nn=true](http://www.kba.de/cln_031/nn_540136/EN/Service_en/Contact/Contact_node_en.html?__nn=true)

and by hard-copy mail to:  
Kraftfahrt-Bundesamt  
Stabsstelle (Office of Interdepartmental functions)  
Mr. Thomas Meyer  
24932 Flensburg

6. **Are Tesla drivers more likely to get in accidents than mainstream drivers?**

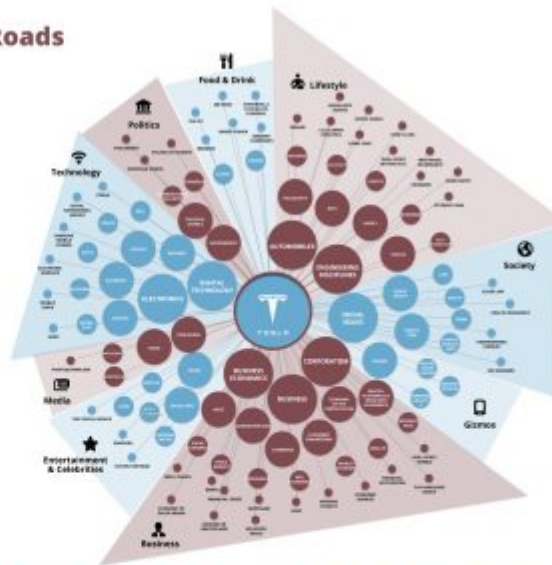
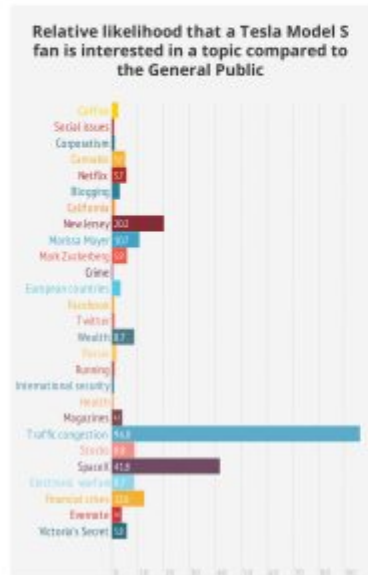


## Tesla Fans: Sex, Money & Open Roads

What the Tesla Model S says about you

### We all have an Interest Graph...

It's the set of things you care about and how much you care about them. When we all get together as a group, we have one big interest Graph that describes us too. Let's see what a whole lot of Interest Graphs from folks who are into the Tesla Model S can tell us about them.



**21,000**

Tesla Model S 2013 sales estimates

**183,000**

Humans with Interest Graphs indicating a meaningful interest in the Model S

## DRUNKS & Douche Bags Drive Teslas Making crashes 50% more likely



*Tesla Driver*

*now charged with homicide of two in crash.*

7. **Original participant conflicts-of-interest created reduced safety oversight**

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Appendix: Reference Data:

FROM: <http://lithium-ion.weebly.com>

The lurking threat in your car and home

Picture

"over a milion failures of this chemistry and these batteries.."

Go to <http://www.nts.gov/> and demand action:

"LITHIUM ION BATTERIES ARE MADE OVERSEAS BY CHEAP LABOR WHERE OSHA CAN'T WATCH. POOR PEOPLE MAKE LITHIUM ION BATTERIES OFF SHORE WHERE THEY ARE NOT TOLD ABOUT THE TOXIC CANCER, LIVER AND LUNG DISEASES THEY GET FROM THE MANUFACTURING PROCESS. SILICON VALLEY VC'S PUSH LITHIUM ION BECAUSE THEY CAN MAKE A HUGE PROFIT ON THE CHEAP LABOR BUILDING A BATTERY THAT SELF DESTRUCTS BUILT BY WORKERS WHO DIE FROM TOXIC POISONING. CHINESE, MALAY, MEXICAN AND OTHER WORKERS, SHOULD FILE CLASS ACTION LAWSUITS AGAINST SILICON VALLEY VC'S WHO PUSH THESE BATTERIES."

TESLA EXPLODE IN FLAMES:

<http://static3.businessinsider.com/image/524c7d5369bedd842edc40a0-482-361/tesla-58.jpg>

<http://www.youtube.com/watch?v=uFl8v1lxH0k>

-----

October 2, 2013, 4:27 PM

Tesla Motors Inc. TSLA shares tanked after a video of a Model S on fire circulated on the web, prompting the electric car company to move quickly to douse the flames of bad publicity.

Elizabeth Jarvis-Shean, director of global communications at Tesla, confirmed that the vehicle engulfed in flames was indeed a Tesla but stressed that the driver walked away without injuries.

-----

Tesla Issues Statement On Fiery Car Crash That Caused The Stock To Tank

MMamta Badkar Oct. 2, 2013, 3:45 PM 13,469 11

tesla

Aj Gill via YouTube

Tesla's stock was down over 7% to a low of \$175.40 today, but pared some of its losses to close down 6.24% at \$180.95.



It appears that shares began to tumble in the last half hour on reports that a Tesla Model S car caught fire on Washington State Route 167.

Some speculated that the video highlights problems with the car's battery. Though others rushed to point out that the battery is located in the back of the car.

-----  
"Media finds that "Safety Investigators" (read "SHILLS") are bribed by VC's and lithium holding companies to say "nothing to see here", "lithium batteries are probably ok". Beware of NTSB "consultant's" and "investigators" who are being bribed, offered after-politics high pay jobs, called up by bribed congressional staff with "suggestions", given sports tickets, handed stock in certain ventures and other bribes. Many of the "investigators" need to be put under investigation themselves!!!! When you see an investigator talking about how lithium ion is a wonderful thing, investigate them!"

The following are a variety of quotes, from across the web, demonstrating the critical nature of this public safety issue:

"Lithium ion batteries are blowing up, starting fires and, generally, destroying people's homes, cars, electronics and physical health. Boeing was just ordered to stop flying the 787 Dreamliner because it's Lithium ion batteries are catching fire spontaneously."

"A group of silicon valley venture capitalists forced/leveraged the government to buy and pay for these specific batteries, that they have stock in, in order to benefit their profit margins. Other batteries don't have these problems. They knew about this from day one but put greed ahead of safety. There are thousands and thousands of reports of spontaneous lithium ion fires but the VC's who back lithium ion pay to keep this information hushed up. Millions of these batteries have been recalled for fire risk. The VC's tried to push as many as they could before they got caught. Now they are caught. These VC's own stock in lithium mining companies too."

"Here is the Fisker Karma after it got wet and the batteries blew up. These batteries blow up JUST FROM GETTING WET! ALL of these burned up hulks are brand new \$100,000.00+ cars that just blew up and torched everything around them just because they got wet! How bad do you want a Fisker or Tesla now? Fisker's insurance company is balking at paying for this saying: "You knew this would happen".

Picture

These links show vast sets of Fisker electric cars that burst into flames just because they GOT WET:

<http://updates.jalopnik.com/post/34669789863/more-than-a-dozen-fisker-karma-hybrids-caught-fire-and>

<http://green.autoblog.com/2012/08/12/fisker-flambe-second-karma-spontaneously-combusts-w-video/>

<http://www.autoblog.com/2012/11/05/how-sandy-may-have-set-17-plug-in-hybrids-on-fire/>

<http://www.digitaltrends.com/cars/fisker-karma-spontaneously-combusts/>  
<http://cbdakota.wordpress.com/2012/11/07/fisker-karmas-catch-fire-following-inundation-by-sandy/>  
<http://www.engadget.com/2012/08/12/fisker-karma-hybrid-ev-second-fire/>  
<http://www.techfever.net/2012/08/fisker-karma-hybrid-ev-ignites-while-parked/>  
<http://evmc2.wordpress.com/2012/11/04/fisker-karma-fire-report/>  
<http://fellowshipofminds.wordpress.com/2012/05/12/karma-burns-owners-mansion/>  
<http://www.carbuzz.com/news/2012/11/1/Karmas-Ignite-After-Hurricane-Floods-Newark-Port-7711437/>

There are vast sets of other links proving the point.

Picture

TESLA BATTERIES EXPLODE INTO FLAMES ON PUBLIC ROAD

Picture

TESLA BATTERIES EXPLODE INTO FLAMES ON PUBLIC ROAD

Picture

TESLA BATTERIES EXPLODE INTO FLAMES ON PUBLIC ROAD

Look at this: We were just sent a link that our website showed up in this movie:

Here is another link to the movie at: <http://tinypic.com/r/7295hs/6>

Picture

Picture

HERE IS THE BATTERY YOU COULD HAVE BEEN SITTING ON TOP OF IN A TESLA

Picture

THIS IS THE TESLA MAGIC CARPET OF DOOM. THIS WHOLE THING IS FULL OF LITHIUM. YOUR WHOLE FAMILY IS SUPPOSED TO SIT ON TOP OF THIS!!!

TESLA HAS TO TEST THEIR BATTERIES IN a BLAST CHAMBER!!!!!!!:

Picture

IF TESLA SAYS THIS THING IS SO SAFE WHY DO THEY TEST IT IN A STEEL ENCLOSED EXPLOSION ROOM WITH WIRES COMING IN THROUGH BLAST HOLES!!!!???????

"TESLA ELECTRIC CARS HAVE 6800 CHANCES OF "GOING THERMAL".

"TESLA ELECTRIC CAR BATTERIES ARE MORE LIKELY TO BLOW UP." SAYS STANFORD ENGINEER, "USING LITHIUM ION IN AN ELECTRIC CAR DOUBLES THE CHANCES IT WILL EXPLODE OR GO THERMAL BECAUSE AN ELECTRIC CAR PUSHES IT FURTHER THAN ANYTHING ELSE. BOEING HAD MANY SAFETY CIRCUITS AND EVEN THOSE FAILED. THERE IS NO WAY THE TESLA SAFETY CIRCUITS WILL NOT EVENTUALLY FAIL"

"Tesla Electric cars have 6800 lithium ion batteries wedged into a box. This can create a repercussive thermal event that can set the whole car off. The TESLA 18650 batteries can be seen exploding in multiple YOUTUBE videos. It is NOT TRUE that they are "an entirely different battery" they are the same chemical compound that blows up."

"A direct quote from Tesla's patent application, below. Tesla KNEW this was going to happen and never adequately warned anybody. Tesla wrote these words in the federal papers they filed yet they never showed these words to any buyers :

"Thermal runaway is of major concern since a single incident can lead to significant property damage and, in some circumstances, bodily harm or loss of life. When a battery undergoes thermal runaway, it typically emits a large quantity of smoke, jets of flaming liquid electrolyte, and sufficient heat to lead to the combustion and destruction of materials in close proximity to the cell. If the cell undergoing thermal runaway is surrounded by one or more additional cells as is typical in a battery pack, then a single thermal runaway event can quickly lead to the thermal runaway of multiple cells which, in turn, can lead to much more extensive collateral damage. Regardless of whether a single cell or multiple cells are undergoing this phenomenon, if the initial fire is not extinguished immediately, subsequent fires may be caused that dramatically expand the degree of property damage. For example, the thermal runaway of a battery within an unattended laptop will likely result in not only the destruction of the laptop, but also at least partial destruction of its surroundings, e.g., home, office, car, laboratory, etc. If the laptop is on-board an aircraft, for example within the cargo hold or a luggage compartment, the ensuing smoke and fire may lead to an emergency landing or, under more dire conditions, a crash landing. Similarly, the thermal runaway of one or more batteries within the battery pack of a hybrid or electric vehicle may destroy not only the car, but may lead to a car wreck if the car is being driven or the destruction of its surroundings if the car is parked."

"WTF!!!!!!

Tesla's own staff have now admitted that once a lithium ion fire gets started in one of their cars, it is almost impossible to extinguish burning lithium ion material. This is Tesla's own words in THEIR patent filing, (You can look it up online) saying that the risk is monumental. Tesla has 6800 lithium ion batteries, any one of which can "go thermal" and start a chain reaction! If you look at all of the referenced YOUTUBE movies you will see how easy it is to set these things into danger mode."

"Imagine a car crash with a Tesla where these 6800 batteries get slammed all over and then exposed to rain, fire hose water, water on the roads, cooling system liquid.. OMG!! And then if, in that same accident the other car is a gasoline car... getting burned alive sounds "BAD"! Tesla is covering up the problems with its batteries."

"Lithium ion batteries have already crashed a UPS plane and killed people. Look here:  
<http://washingtonexaminer.com/dreamliner-fires-spark-new-doubts-about-a-green-energy-technology/article/2519353> "

More Lithium Ion Battery disasters: <http://www.forbes.com/sites/petercohan/2013/01/24/is-787s-lithium-ion-battery-hazardous-to-boeings-health/>

"AS A DEMONSTRATION OF HOW DANGEROUS LITHIUM IS, NASA IS GOING TO MAKE IT BURN IN OUTER SPACE:

"If you're along the Eastern Seaboard tonight, it might be worth your while to look at the sky this evening. NASA's Wallops Flight Facility is scheduled to launch a sounding rocket that will release "two red-colored lithium vapor trails in space."



As Space.com reports, those trails might be seen across the Mid-Atlantic and perhaps as far north as Canada and as far south as northern Florida. Space.com explains how these trails will produce a "night sky show:" "The sounding rocket that will be used to create the two NASA-made glowing cloud trails will be a Terrier-Improved Orion. In this technology test launch, two canisters in the rocket's payload section will contain solid metal lithium rods or chips embedded in a thermite cake. The thermite is ignited and produces heat to vaporize the lithium.

"Once the vapor is released in space, it can be detected and tracked optically. The rocket will eject two streams of lithium which will be illuminated at high altitudes by the sun (which will be below the local horizon at ground level)."

In a statement, mission project manager Libby West said the launch is a test flight for two upcoming missions. It'll give scientists a view of two different methods for creating lithium vapor trails. By the way, NASA says the "lithium combustion process poses no threat to the public during the release in space."

If lithium is so dangerous it will even burn in space, why are we putting it in our airplanes and cars???????

Lithium Ion batteries blow up and burn down commercial building:

<http://westhawaii.com/sections/news/nation-world-news/787-battery-blew-%E2%80%9906-lab-test-burned-down-building.html>

"Tesla and Fisker have only sold a few hundred cars, (thank god) because nobody but dicks want these overpriced eliteist toys. A regular car company sells hundreds of thousands of cars per model. Every single Tesla or Fisker sold increases the likelihood of a burn up. Those burn-ups will affect the homes, cars and lives of the people next door who never even bought one."

"Go to <http://www.youtube.com> and type into the search window:

"Lithium ion explosion" or "lithium battery and water" or "lithium ion water" and any related derivation and you will find hundreds of videos about how dangerous these batteries are. There are numerous videos of Tesla's 18650 batteries blowing up."

"This article in the LA Times sheds more light on the horrors of Lithium Ion:

<http://articles.latimes.com/2013/jan/18/business/la-fi-dreamliner-battery-20130119> "

"Lithium Ion batteries "go thermal" in peoples pockets, in your notebook, especially in your Tesla and Fisker car and everywhere else. There are thousands and thousands of articles documenting this and there is a cover-up by the VC's that fund these things to keep this fact out-of-sight.

Making Lithium Ion batteries poisons the workers who make them. It is a dangerous product. Each time the workers, particularly in Asia, realize they are being poisoned by the factory, they jack up the product. Outlaw lithium ion batteries. Demand a recall."

There are PLENTY of other energy storage solutions that do not involve the highly compromised Lithium Ion chemistry!"

"Below are a few samples of HUNDREDS of videos proving that Lithium Ion Batteries JUST BLOW UP. This is why TSA does not want them, or liquid, on planes."

Report: Galaxy S 4 Lithium Explosion Burns Hong Kong Home To The Ground:

By Stephanie Mlot July 30, 2013

A Hong Kong couple have been displaced after an exploding Samsung Galaxy S 4 smartphone burst into flames, burning their house to a crisp.

The man, identified in the original Xianguo.com report only as Mr. Du, claims that his phone, battery, and charger were all legitimate Samsung products, but that's now difficult to confirm since his home and everything in it were destroyed.

According to the translated report, Du sat on the living room sofa playing the game "Love Machine" on his charging GS4 when it suddenly exploded. In the heat of the moment, he threw the device onto the couch, which caught fire. The flames then spread to the curtains and the rest of the house, "out of control," Xianguo said.

Du, his wife, and his dogs managed to escape the house unscathed; neighbors were temporarily evacuated as firefighters fought the flames. Almost all of the couple's furniture and appliances burned to ash, the news site said, adding that their Mercedes parked outside was also damaged.

Whether or not the true cause of an entire house fire was a singular 5-inch smartphone remains to be seen, though a fire department investigation initially resulted in a report of "no suspicious circumstances."

Samsung did not immediately respond to PCMag's request for comment, but told Xianguo that it will "carry out detailed investigations and tests to determine the cause of the incident." Last year, a Galaxy S III owner in Dublin was driving in his car when the device caught fire. Cell phone safety is increasingly becoming an issue in Asia, where two cases of iPhone shock occurred within a week of each other this month. On July 11, a 23-year-old flight attendant with China Southern Airlines was allegedly electrocuted when she took a call on her Apple device while it was charging. She was reportedly using the original charger when she was killed.

Here is what the Lithium Ion Batteries did to their home:

Picture

Boeing 787 Dreamliner woes put spotlight on lithium ion battery risks

BY KEN BENSINGER, Los Angeles Times

Chances are the same kind of battery that twice caught fire in Boeing 787 Dreamliners in recent weeks is in your pocket at this very moment.

Lithium ion batteries, small and powerful, have become the electricity storage device of choice. They are everywhere — in cellular phones, laptops, power tools, even cars. They allow us to talk, email and drill longer than ever possible in the past.

But the incidents that led to the grounding of the 787 fleet worldwide, and the decision by Boeing on Friday to temporarily halt all deliveries of the plane, have highlighted a troubling downside of these energy-dense dynamos: their tendency to occasionally burst into flames.

FOR THE RECORD: Dreamliner batteries: An article in the Jan. 19 Section A on lithium ion battery safety and the grounding of the Boeing 787 incorrectly described a fire in a Chevrolet Volt automobile. The battery did not ignite spontaneously; instead it burned after a crash test damaged the vehicle's cooling system and the test car was left parked with the battery fully charged, eventually causing it to overheat. With investigators now working to determine the cause of the incidents, one on a Dreamliner on a Boston runway, the other forcing an emergency landing of a 787 in western Japan, the larger question of lithium ion safety has snapped into focus.

"Every battery can burn and every battery can be flammable," said Mike Eskra, a Milwaukee-based battery development scientist who also works as a battery fire investigator for insurers. "But lithium ion batteries are more dangerous because they store more energy. It's like a firecracker instead of a stick of dynamite."

The casualty list is long. In recent years, tens of thousands of laptop batteries have been recalled due to the risk of fire or explosion. The 400-pound lithium ion battery on General Motors' cutting-edge electric car, the Chevrolet Volt, burst into flames seemingly spontaneously while parked in 2011. And investigators blamed a cargo hold full of lithium ion batteries for a fire that caused a UPS-operated 747 to crash shortly after takeoff from Dubai in late 2010.

That crash, which killed both pilots, is one of more than 100 incidents recorded by the Federal Aviation Administration linking lithium ion batteries to onboard fires over the last two decades. This month, new rules took effect limiting the transport of lithium ion batteries in aircraft. And the FAA had long prohibited use of the technology in commercial airplanes.

That changed in 2007, when it granted Boeing permission to use the batteries in the 787 under a number of conditions to ensure safety. For Boeing the lithium ion advantage was clear.

Thanks to their chemistry, the rechargeable batteries can store as much energy as a nickel metal hydride pack that's 50% heavier, while charging and discharging faster than other battery types. That's made them attractive for military applications such as the B-2 bomber and also for use on the International Space Station and the Mars Rover.

Lithium ion batteries enabled Boeing to swap out heavy hydraulic systems in the airframe for lightweight electronics and electric motors to operate systems like wing de-icers. That's a key reason the Dreamliner burns 20% less fuel than other wide-body aircraft.

The weight and power savings are exactly what made lithium ion batteries popular in other applications. In excess of 95% of mobile phone batteries worldwide are lithium ion, and without lithium ion, laptops couldn't run anywhere near as long as they do without a recharge.

"They completely dominate the consumer market," said Vishal Sapru, energy and power systems research manager at consulting firm Frost & Sullivan in Mountain View, Calif.. He estimates that global sales of lithium ion batteries reached \$14.7 billion last year, up from \$9.6 billion in 2009, a 53% increase. Sapru expects the market to soar to \$50.7 billion by 2018. "No other battery chemistries are growing at that rate."

But lithium ion also has downsides. The batteries tend to have shorter life spans than older, more proven battery technologies. And although the price is falling, lithium ion is still more expensive than other batteries. Although some carmakers have embraced the technology, others, such as Toyota, have decided against it. Several makers of lithium ion auto batteries for electric vehicles have filed for bankruptcy last year because of weak demand.

Safety experts also have concerns. Because lithium ion batteries can store more energy, and discharge it more quickly, than other batteries, lithium ion cells can get much hotter than other technologies in the event of an overcharge or the external application of a heat source. Larger applications, such as the 63-pound batteries on the 787, incorporate multiple cells and the heat can spread rapidly from cell to cell, a chain reaction called "thermal runaway."

And while other types of batteries use a water-based electrolyte in each cell, lithium ion relies on a highly flammable solvent. When heated up, that solvent tends to vaporize, spraying the burnable gas into the surrounding air. As a result, lithium ion battery fires burn extremely hot, as high as 2,000 degrees Fahrenheit.

Those conditions were blamed for an explosion at a General Motors battery testing lab last April that caused \$5 million in damage and sent one person to the hospital. GM said flammable gas had vented from an experimental lithium ion battery that heated up during extreme testing.

"Lithium ion is very controversial in the safety engineering space," said Brian Barnett, vice president for battery technology at Tiax, a technology firm in Lexington, Mass. He spoke last month at a conference on battery safety in Las Vegas, where more than three-quarters of the presentations focused on lithium ion batteries.

The cause of the fires in the two Dreamliners has still not been determined and neither Boeing nor the Japanese company that made the batteries, GS Yuasa, have publicly commented on likely factors. Boeing subjected the batteries on the plane to thousands of hours of testing and installed numerous safety systems specific to the batteries.

"We have high confidence in the safety of the 787 and stand squarely behind its integrity as the newest addition to our product family," Boeing Chief Executive Jim McNerny said Friday.

Barnett and others emphasize that it's not uncommon to see problems in relatively new technologies. But they add that most lithium ion fires are caused by an external problem, such as



a bad circuit or a software glitch that leads to overcharging. Another common problem in consumer electronics is the use of low-cost wiring and other components that can overheat and spark or catch fire next to the battery itself.

Eskra, the battery fire investigator, said he's seen fires started by Chinese-made toys that use lithium ion batteries hooked up to chargers designed for nickel cadmium or nickel metal hydride batteries. Manufacturing errors, including allowing tiny metal particles to contaminate cells, can cause dangerous shorts, although they are exceedingly rare.

"Somebody tried to cut corners somewhere," he said, noting that most lithium ion fires are caused by a tiny part that malfunctioned somewhere along the line and are easily resolved. "It's a \$2 fix, but it takes half a million dollars in research to figure out what it is."

Sometimes the problem is more persistent. In 2006, Sony announced a global recall of more than 10 million lithium ion laptop batteries used in a variety of laptop computers after more than a dozen fires, and two years later issued a second recall.

"This is a battery type that is only one of hundreds of possible batteries but this particular type was pushed by a few companies and investors so they could make money off it at the risk of public injury or death..."

Picture

**THIS IS AN ACTUAL BOEING BATTERY**

"2006 fire under NTSB scrutiny

Carli Brosseau Arizona Daily Star

When a test of a lithium-ion battery charger turned into an inferno at Securaplane Technologies Inc. in 2006, temperatures reached as high as 1,200 degrees and three waves of firefighters failed to save the building. An employee of the Oro Valley company blasted the flaming battery with a fire extinguisher to no effect. Two hours later, the galvanized metal roof collapsed, and the 10,000 square-foot building was a total loss.

It's a fire that federal safety regulators are taking another look at now, since Securaplane provides two key battery components to the Boeing 787 Dreamliner, the start-power and battery-charger units. Records from local Golder Ranch Fire Department, the first of three fire departments to respond to the blaze, describe "an uncontrolled thermal reaction (that) caused the battery to vent and this venting caused the ignition to various items and fixtures throughout the test lab area."

"The electrical technician who was performing a test on the battery when it exploded likened the experience to being near a jet after-burner. Electrolytes from inside the battery were shooting 10 feet into the air, the former Securaplane employee, Michael Leon, said in an interview Friday. "The magnitude of that energy is indescribable."

"The fire stands as a graphic illustration of the power stored within energy-dense lithium-ion batteries and the potential consequences if something goes awry. It also highlights the importance and delicacy of the quality-control measures applied to a novel - and potentially explosive - technology, a technology now allowed, under special conditions, to be used as the main and auxiliary power source of certain aircraft.

The Boeing 787 Dreamliner, the company's newest and most energy-efficient plane, uses two lithium-ion batteries. After two battery-related incidents in the past month, the 50 Dreamliners distributed so far have been grounded."

"Whistleblower: Dreamliner LITHIUM ION Batteries Could Explode

He says he was fired after warning about battery problems  
By Christopher Freeburn, InvestorPlace Writer

Boeing's (NYSE:BA) new 787 Dreamliner could end up being a nightmare for the aircraft giant.

A former senior engineering technician at Securaplane Technologies, which makes the charging system for the lithium-ion batteries used in 787 Dreamliners, told CNBC that the batteries are defective and liable to explode if they overheat."

"Lithium-ion batteries are heat intolerant, according to a potential whistleblower familiar with... Lithium-ion batteries are heat intolerant, according to a potential whistleblower familiar with their technology. "Too much heat on those things, they will go into a thermal runaway, they will explode." The informant, a former senior engineering technician of Securaplane Technologies, was fired in 2007 for repeated misconduct, but he says it was in retaliation for voicing concerns about the batteries. The NTSB acknowledges that the lithium-ion batteries in Boeing's (BA) Dreamliner experienced a thermal runaway, but insists there's no connection between the incident and the whistleblower's claims. "The Japan Transport Safety Board makes a number of interim points. This battery, unlike one that burst into flames in a Japan Airlines 787 earlier in January, did not actually ignite. It experienced a thermal runaway, as a result of a build up of heat, yet the materials affected did not start burning. While the semantics might escape the casual observer the safety investigator said:-

"The battery was destroyed in a process called thermal runaway, in which the heat builds up to the point where it becomes uncontrollable.

"But it is still not known what caused the uncontrollable high temperature".

In simple language, uncontrollable rises in temperature will if uncontrolled most likely result in a fire, including one that can burn through structural composites and alloys, and prove almost uncontrollable by fire fighters, even on the ground.

It took a Boston airport fire brigade detachment 99 minutes to put out the Japan Airlines fire using equipment unavailable if the airliner was hours away

from an emergency landing strip in the high arctic or north Pacific, which that particular flight had only recently traversed before the fire broke out after landing.

he Japan air safety investigator said the wire supposed to ground or discharge static electricity build ups in the battery had been severed meaning it had experienced abnormal levels of current.

However as also confirmed by the early stage of the US incident investigation into the Japan Airlines fire, this large lithium-ion battery had not experienced a voltage surge, and had so far as flight data recordings could tell, had been operating normally immediately before the emergency landing.

Expect the news release in Japan to cause more tension between those who want the 787s to fly again pending a full understanding of the causes and cures in these incidents, and independent safety investigators who will recommend to safety regulators like the FAA a continuation of the grounding"

"One aspect that may confuse some people relates to the decision to use this particular type of battery. The danger posed by it has been evident by a lengthy and documented list of disturbing events in recent years. They include many thousands of batteries used in laptops being recalled, because of determined risks of fire or explosion. General Motors were also placed in the battery limelight. In 2011, the 400 pounds Lithium ion battery in their Chevrolet Volt apparently was subject to spontaneous combustion when it burst into flames, while reportedly in a parked vehicle. In 2010, a UPS-operated Boeing 747 crashed just after take-off from Dubai. Investigators placed the blame on a cargo hold that contained Lithium ion batteries, for a fire that caused the incident."

A number of incidents of cell phones with lithium ion batteries blowing up in peoples pockets, notebook computers blowing up in peoples briefcases and other shocking fires have been deeply documented.

Picture

LITHIUM ION BATERIES BLOWING UP ON THEIR OWN

Picture

FISKERS CARS THAT BLEW UP AND BURST INTO FLAMES JUST BECAUSE THEIR LITHIUM ION BATTERIES GOT WET

"Here is where they make some of these batteries, in forced labor camps:

<http://www.thedailybeast.com/newsweek/2013/01/13/china-s-labor-pains.html> Because, as we all know, chinese prostitutes are the best choice to make the things that keep our airplanes in the air and our cars on the road. The silicon valley venture capital guys front these batteries because they have such cheap labor to give them great profits.. quality control? not so much..."

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**NHTSA DEMAND LETTER**



U.S. Department  
of Transportation  
**National Highway  
Traffic Safety  
Administration**

Nov. 27, 2013

1200 New Jersey Avenue SE  
Washington, DC 20590

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. James Chen  
Vice President of Regulatory Affairs  
Tesla Motors, Inc.  
1050 K Street, N.W., Suite 101  
Washington DC 20001

NVS-212  
PE13-037

Dear Mr. Chen:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Preliminary Evaluation (PE13-037) to investigate underbody deformation in certain model year (MY) 2013 Model S motor vehicles resulting from impacts with road debris, including, but not limited to, consequent intrusion into propulsion battery compartment(s) and the associated risks to motor vehicle safety, and to request certain information. The Tesla Model S is manufactured by Tesla Motors Inc.

ODI has received information on two incidents of deformation/intrusion into the propulsion battery caused by impact with roadway debris and resulting in a thermal reaction and fire in 2013 Tesla Model S vehicles. The office is also aware that the Model S may be equipped with an active suspension system that automatically adjusts the vehicle's ride height under certain driving conditions, such as at highway speeds.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicles:** All 2013 Tesla Model S manufactured for sale or lease in the United States, including, but not limited to, the District of Columbia, and current U.S. territories and possessions.
- **Subject component:** The high-voltage propulsion battery, including its enclosure baseplate (skid plate) and the components and materials it is constructed of, and all components and materials contained within the enclosure including the individual battery cells.
- **Tesla:** Tesla Motors, Inc., and all of their past and present officers and employees, whether assigned to their principal offices or any of its field or other locations, including all of their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Tesla





(including all business units and persons previously referred to), who are or, in or after 2006, were involved in any way with any of the following related to the alleged defect in the subject vehicles:

- a. Design, engineering, analysis, modification or production (e.g. quality control);
- b. Testing, assessment or evaluation;
- c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
- d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.

**Alleged defect:** Deformation or damage to the subject component from impacts to the subject component or failure of the subject component to withstand an impact such that the propulsion battery or individual cells of the battery are damaged by the impact, and/or shut down of the vehicle propulsion system, stalling of the vehicle or fire or other thermal event in the propulsion battery following an impact to the subject component.

- **Document:** "Document(s)" is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by Tesla, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)"

also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by Tesla or not. If a document is not in the English language, provide both the original document and an English translation of the document.

**Short:** The term "Short" refers to an unintended change in the path of electrical current flow within a circuit, battery, semiconductor, conductor or electro-mechanical device.

- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as Tesla has previously provided a document to ODI, Tesla may produce it again or identify the document, the document submission to ODI in which it was included and the precise location in that submission where the document is located. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Please repeat the applicable request verbatim above each response. After Tesla's response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State, by model and model year, the number of subject vehicles Tesla has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Tesla, state the following:
  - a. Vehicle identification number (VIN);
  - b. Power rating/capacity of the propulsion battery;
  - c. Whether the suspension system (ride height) is actively controlled;
  - d. Date of manufacture;
  - e. Date warranty coverage commenced; and,
  - f. The State in the United States where the vehicle was originally sold or leased.

Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA."

2. State the number of each of the following, received by Tesla, or of which Tesla is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:
  - a. Consumer complaints, including those from fleet operators;
  - b. Field reports, including dealer field reports;
  - c. Reports involving a crash, injury or fatality;
  - d. Reports involving a fire;
  - e. Reports involving a thermal reaction and/or short not included in Tesla's response to subpart d above;
  - f. Property damage claims;
  - g. Third-party arbitration proceedings where Tesla is or was a party to the arbitration; and
  - h. Lawsuits, both pending and closed, in which Tesla is or was a defendant or codefendant.

For subparts "a" through "h," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "h," provide a summary description of the alleged problem and causal and contributing factors and Tesla's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "g" and "h," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:
  - a. Tesla's file number or other identifier used;
  - b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
  - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
  - d. Vehicle's VIN;
  - e. Vehicle's make, model and model year;
  - f. Vehicle's mileage at time of incident;
  - g. Incident date;
  - h. Report or claim date;
  - i. Whether a crash is alleged;
  - j. Whether a fire, thermal reaction and/or short is alleged;
  - k. Whether property damage is alleged;
  - l. Number of alleged injuries, if any; and
  - m. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Tesla used for organizing the documents. Describe in detail the search methods and search criteria used by Tesla to identify the items in response to Request No. 2.
5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Tesla to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

- a. Tesla's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number;
- h. Problem code;
- i. Replacement part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA."

6. Describe in detail the search methods and search criteria used by Tesla to identify the claims in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State the terms of the new vehicle warranty coverage offered by Tesla on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Tesla offered for the subject vehicles and state the number of vehicles that are covered under each such extended warranty.
7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Tesla has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Tesla is planning to issue within the next 120 days.



8. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions," and including actions conducted during subject vehicle design, development, and validation) that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Tesla. For each such action, provide the following information:
  - a. Action title or identifier;
  - b. The actual or planned start date;
  - c. The actual or expected end date;
  - d. Brief summary of the subject and objective of the action;
  - e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
  - f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

9. Provide detailed engineering drawings depicting dimensional specifications of the subject component and including all subassemblies and mechanical, electrical, and battery components. The drawings should contain sufficient detail, such as sectional views of the battery cells/modules that show proximity to the enclosure baseplate and/or other conductive materials which would allow ODI to assess the consequences of enclosure baseplate deformation or damage and the likelihood that it could lead to cell damage.
10. Describe all modifications or changes made by, or on behalf of, Tesla in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:
  - a. The date or approximate date on which the modification or change was incorporated into vehicle production;
  - b. A detailed description of the modification or change;
  - c. The reason(s) for the modification or change;
  - d. The part number(s) (service and engineering) of the original component;
  - e. The part number(s) (service and engineering) of the modified component;
  - f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
  - g. When the modified component was made available as a service component; and
  - h. Whether the modified component can be interchanged with earlier production components.

Also, provide the above information for any modification or change that Tesla is aware of which may be incorporated into vehicle production within the next 120 days.

11. Describe all modifications or changes made by, or on behalf of, Tesla in the function and operation of the actively controlled suspension system, from the start of production to date,

which affects, or may affect the subject vehicle ride height, including but not limited to software or other programming modifications/revisions. For each such modification, provide the following information:

- a. A detailed description of the modification;
- b. The reason(s) for the modification as it pertains to the alleged defect;
- c. The changes in vehicle ride height due to the modification;
- d. Whether the modification was incorporated into vehicle production, and if so, the date it was incorporated;
- e. Whether the modification was introduced (released) as a service update for consumer owned subject vehicles, and if so;
  - i) The date the modification was released;
  - ii) The number of subject vehicles available for updated (i.e., how many were produced to the original/unmodified condition);
  - iii) The number of consumer owned vehicles that have been modified/updated to date; and,
- f. A description of how the service update is applied (the procedure or method used to make the modification) to an affected vehicle.

Also, provide the above information for any modification or change that Tesla is aware of which may be incorporated into vehicle production, or as a service update, within the next 120 days.

12. Describe in detail all possible consequences to the vehicle from an impact to the subject component that damages the battery. Describe in detail how these possible consequences were addressed in the design of the subject vehicle and the limits of that design to prevent damage to the propulsion battery, stalling and fires.
13. Furnish Tesla's assessment of the alleged defect in the subject vehicle, including:
  - a. The causal or contributory factor(s);
  - b. The failure mechanism(s);
  - c. The failure mode(s); and,
  - d. The risk to motor vehicle safety that it poses.

#### **Legal Authority for This Request**

This letter is being sent to Tesla pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information.

#### **Civil Penalties**

Tesla's failure to respond promptly and fully to this letter could subject Tesla to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, as amended, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to \$7,000 per violation per day, with a maximum of \$35,000,000 for a related series of daily violations, for failing or

refusing to perform an act required under 49 U.S.C. § 30166. This includes failing to respond completely, accurately, and in a timely manner to ODI information requests. The maximum civil penalty of \$7,000 per violation per day is established by 49 CFR 578.6(a)(3). The maximum civil penalty of \$35,000,000 for a related series of daily violations of 49 U.S.C. § 30166 is authorized by 49 U.S.C. § 30165(a)(3) as amended by § 31203(a)(1)(B) of the Moving Ahead for Progress in the 21<sup>st</sup> Century Act, Public Law 112-141.

If Tesla cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, Tesla does not submit one or more requested documents or items of information in response to this information request, Tesla must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

#### **Confidential Business Information**

**All business confidential information must be submitted directly to the Office of Chief Counsel as described in the following paragraph and should not be sent to this office.** In addition, do not submit any business confidential information in the body of the letter submitted to this office. Please refer to PE13-### in Tesla's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel.

If Tesla claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, Tesla must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, as amended, to the Office of Chief Counsel (NCC-111), National Highway Traffic Safety Administration, Room W41-227, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Tesla is required to **submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.** Please remember that the phrase "ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION" or "CONTAINS CONFIDENTIAL BUSINESS INFORMATION" (as appropriate) must appear at the top of each page containing information claimed to be confidential, and the information must be clearly identified in accordance with 49 CFR 512.6. If you submit a request for confidentiality for all or part of your response to this IR, that is in an electronic format (e.g., CD-ROM), your request and associated submission must conform to the new requirements in NHTSA's Confidential Business Information Rule regarding submissions in electronic formats. See 49 CFR 512.6(c) (as amended by 72 Fed. Reg. 59434 (October 19, 2007)).

If you have any questions regarding submission of a request for confidential treatment, contact Otto Matheke, Senior Attorney, Office of Chief Counsel at [otto.matheke@dot.gov](mailto:otto.matheke@dot.gov) or (202) 366-5253.