



Electric & Hybrid Vehicle Fire Resource Information

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There are many all-electric and hybrid vehicles on the road and their numbers continue to increase. The following resources are provided to assist fire departments and other first responders with their local training program on electric and hybrid vehicle fires.

1. Palm Beach County Fire First Responder Safety Training: Hands On Review of Alternative Fuel Vehicles video (11:42 min.)
<https://www.youtube.com/watch?v=PynEVAkhdTM>
2. High-Voltage Vehicle Firefighting video covers vehicle firefighting operations for hybrid and fully electric vehicles <https://www.fireengineering.com/technical-rescue/video-high-voltage-vehicle-firefighting/>.
3. EV BASICS 106: How to extinguish electric vehicles fire? | Step-by-step Video Guide (13:39 min.) <https://www.emobilitysimplified.com/2020/02/how-to-extinguish-electric-vehicle-fire-video-guide.html>
4. Risks to Emergency Responders from High-Voltage, Lithium-Ion Battery Fires Addressed in Safety Report (National Transportation Safety Board)
<https://www.nts.gov/news/press-releases/Pages/NR20210113.aspx>
5. USFA Coffee Break Bulletin: Know the Threats Before You Attack an Electric Vehicle Fire <https://www.usfa.fema.gov/blog/cb-061819.html>
6. USFA Infogram: Know Your Safety Risks: Electric Vehicle Battery Fires
<https://www.usfa.fema.gov/blog/ig-012821.html>
7. Interim Guidance for Electric and Hybrid-Electric Vehicles Equipped With High Voltage Batteries quick sheet
https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/interimguide_emergencyresponse_012012_v3.pdf

8. NTSB Lithium-Ion Battery Fires in Electric Vehicles - Safety Risks to Emergency Responders video (5:26 min.) <https://www.youtube.com/watch?v=J6eS6JzBn0k>
9. Safety Risks to Emergency Responders from Lithium-Ion Battery Fires in Electric Vehicles: Safety Report. (NTSB) <https://www.nts.gov/safety/safety-studies/Documents/SR2001.pdf>
10. Fire Fighter Safety and Emergency Response for Electric Drive and Hybrid Electric Vehicles: Final Report. (Fire Protection Research Foundation) http://sikkimfire.nic.in/Download/Download_2.pdf
11. Tesla First Responders Information. (Tesla website) <https://www.tesla.com/firstresponders>
12. Tesla Motors Downloadable Response Guides. <https://www.nfpa.org/Training-and-Events/By-topic/Alternative-Fuel-Vehicle-Safety-Training/Emergency-Response-Guides/Tesla>
13. Tesla EV Safety Training video (37:07 min.). <https://www.youtube.com/watch?v=ntK3rvVI2Qw>
14. Tesla Model X First Responder Training - Advanced Extrication video (22:10 min.). <https://www.youtube.com/watch?v=D4peF1EYke8>
15. Lithium-Ion Battery Emergency Response Guide from Tesla. https://www.tesla.com/sites/default/files/downloads/2020_Lithium-Ion_Battery_Emergency_Response_Guide_en.pdf
16. Emergency Response Guides. NFPA resource list for 35+ alternate fuel vehicles by manufacturers. <https://www.nfpa.org/Training-and-Events/By-topic/Alternative-Fuel-Vehicle-Safety-Training/Emergency-Response-Guides>
17. NFPA Alternative Fuel Vehicles Emergency Field Guide 2018 edition (456 pages). <https://catalog.nfpa.org/Emergency-Field-Guide-P13872.aspx>
18. NFPA Alternative Fuel Vehicles Safety Training Information. <https://www.nfpa.org/Training-and-Events/By-topic/Alternative-Fuel-Vehicle-Safety-Training>
19. NFPA Alternative fuel vehicle safety training for fire investigators. <https://www.nfpa.org/Training-and-Events/By-topic/Alternative-Fuel-Vehicle-Safety-Training/Fire-investigation-training>

20. NFPA Emergency Response to Incident Involving Electric Vehicle Battery Hazards. Downloadable 5 part comprehensive report. <https://www.nfpa.org/News-and-Research/Data-research-and-tools/Electrical/Emergency-Response-to-Incident-Involving-Electric-Vehicle-Battery-Hazards>
21. NFPA Electric/Hybrid Vehicle Safety Training for Emergency Responders. Downloadable 3 part comprehensive report. <https://www.nfpa.org/News-and-Research/Data-research-and-tools/Electrical/Electric-Hybrid-Vehicle-Safety-Training-for-Emergency-Responders>
22. IAAI CFITrainer.Net Electric & Hybrid Vehicle Fires online class. https://www.cfitrainer.net/Training_Programs/Electric_Hybrid_Vehicle_Fires.aspx?utm_source=sendgrid&utm_medium=email&utm_campaign=ElectricHybridVehicleFiresModule
23. Stranded Energy in Electric Vehicles and Firefighting Challenges video (3:57 min.). https://www.youtube.com/watch?v=Sp3WvKON_W4
24. Acura 2017–20 MDX Sport Hybrid Emergency Response Guide. <https://pat.techinfo.honda.com/rjanisis/pubs/web/BCI05460.pdf>
25. 2012 Honda Hybrid Vehicle Shut Down Procedures. <https://www.youtube.com/watch?v=E2VXQEsFUls>
26. Honda Insight Hybrid Emergency Guide. https://www.techinfo.honda-eu.com/documents/22251/26160/Honda+Hybrid+Guide+2015_EN.pdf/0be69d39-674b-4b5f-a48a-418912948484
27. Honda Accord 2018–21 Honda Accord Hybrid Emergency Response Guide. <https://techinfo.honda.com/rjanisis/pubs/web/2018-21%20Accord%20%20Hybrid%20Emergency%20Response%20Guide%20V1-CH-E.pdf>
28. Honda 2020–21 CR-V Hybrid Emergency Response Guide. <https://techinfo.honda.com/rjanisis/pubs/web/AER14177.pdf>
29. Honda Hybrid Emergency Response Guides. <https://techinfo.honda.com/rjanisis/logon.aspx>
30. Hyundai 2011-12 Sonata Hybrid Emergency Response Guide. https://www.oemonestop.com/sites/default/files/Hyundai_HEV_Emergency_Guideline.pdf
31. Hyundai ION IQ Plug-In Emergency Response Guide. https://www.hyundai.com/content/dam/hyundai/au/en/documents/IONIQ_Electric_AE_PHEV_Emergency_Response_Guide_2018_FINAL.pdf

32. Electric Car Fires: What You Need To Know video (8:38 min.). <https://www.youtube.com/watch?v=b6NEww2C-50>
33. Electric Car Fires: What We Know Thus Far - And What You Need to Know video (15:08 min). <https://www.youtube.com/watch?v=KkwGgp256u4>
34. Electric Vehicle Fire Training from Cheshire Fire & Rescue Service, United Kingdom. <https://www.cheshirefire.gov.uk/about-us/key-documents/freedom-of-information/disclosure-log/electric-vehicle-fire-training>
35. Hybrid and Electric Vehicles - Training Spot. (downloadable PowerPoint from Boone County, Missouri, Fire Rescue) https://www.nhtsa.gov/pdf/ev/NFPA_Presentation-Chris_Dubay.pptx
36. Hybrid Vehicle Extrication Made Simple. <https://www.firerescue1.com/fire-products/extrication-tools-cutters-and-spreaders/articles/hybrid-vehicle-extrication-made-simple-kz3hYqwT7pkcHcKX/>
37. Safety Norms for Working on High Voltage Electric Vehicles. <https://evreporter.com/high-voltage-electric-vehicles/>
38. The Hybrid Car Battery: A Definitive Guide. <https://www.hybridcars.com/hybrid-car-battery/>
39. Emergency Response to Hybrid Bus Incidents. https://d3at0mnwuyeh75.cloudfront.net/content/dam/fe/online-articles/documents/FEU/FEU_hybrid_bus.pdf
40. Crash Recovery System. <https://www.moditech.com/crash-recovery-system/>
This is a commercial software program (i.e., not free) available for Android, IOS, and Windows 7 & 10 platforms that provides schematics, vehicle safety information, and rescue relevant information about a vehicle. (This is not an endorsement of the product.)