

## **Ford Vehicle Fires Require The Right Expert**

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**“An expert is someone who has succeeded in making decisions and judgments simpler through knowing what to pay attention to and what to ignore.” – Edward de Bono**

You have just been assigned a new subrogation claim and the adjuster’s file notes indicate that the fire originated in a Ford vehicle parked inside your insured’s garage. You are familiar with the recalls and the numerous reports of fires caused by the failure of Ford’s Speed Control Deactivation Switch (SCDS) and you know these cases generally have good subrogation potential. You call the fire investigator retained by the adjuster and learn that he has already inspected the fire scene. He proudly reports: “I found the defective part and it’s right here in my office. I have already finished my report, do you want a copy?” He informs you that he is familiar with the recalls and SCDS failures and has looked at a couple other Ford fires. You immediately ask yourself if this expert has the necessary experience and knowledge on SCDS failures and how they cause fires. Did he preserve all of the right evidence? Is he the right expert for your case? If not, who do you hire?

### **Finding The Needle In The Haystack**

Any discussion about retaining the right expert for your Ford vehicle fire must start with the basic principle that all vehicle fire investigations are difficult. There are numerous potential ignition sources and many different failure scenarios found within the confined space of the engine compartment. Even if your expert has a theory or an idea as to where the fire started and which part may have caused the fire, an inspection can quickly turn into the proverbial search for the needle in a haystack. Proper evidence identification and collection in any vehicle fire is crucial, and even more so if your loss occurred in a state that does not permit circumstantial evidence or a malfunction theory to prove a product liability, but requires proof of a specific defect. To make matters worse, auto manufacturers are now manufacturing vehicles with parts that burn at higher temperatures, which destroy critical evidence in the engine compartment during a fire. As a result, finding the evidence of a specific defect becomes even more challenging. The proper expert knows where to look and what to look for. The proper expert also knows what is irrelevant and is secondary damage and not the cause of the fire.

### **Additional Challenges With SCDS Failures**

The Ford Speed Control Deactivation Switch (SCDS) cases present additional and unique challenges to your investigation. The parts involved are very small and the cause of the failure is complicated. Detailed testing and analysis is necessary to fully understand how the SCDS fails and how it initiates a fire. The learning curve for this analysis can be steep and the testing itself is very expensive. Unfortunately, because the SCDS failures are so prevalent, almost every fire investigator can boast of having worked on Ford cases over the last few years. In addition, there have been numerous articles and news reports discussing the SCDS problem, such that most experts know the basic failure mode and know generally what evidence to look for. This type of basic experience might be sufficient in some cases where the fire or firefighting operations have not destroyed or altered the critical evidence inside the engine compartment of the Ford vehicle. But, you won’t know how simple or challenging your case will be until your expert is at the scene standing next to Ford’s expert.

### **Balancing The Playing Field**

Ford’s experts begin every investigation with several distinct advantages. They have inspected hundreds (possibly thousands) of Ford vehicle fires due to alleged SCDS failures. They know specifically what to

look for and where to look for it. If a few key indicators are not present, they know to start looking for something else. But, they will not tell your expert he is looking in the wrong place and at the wrong evidence. Ford's experts will also key in on recent repair work and after-market additions during their analysis. These can be the most common causes of fires improperly labeled as SCDS fires. Ford's experts also have access to all of the original product engineering analysis and testing for the SCDS. At this critical juncture, your case can be won or lost with the right expert that has the ability to overcome, or at least counter, this uneven playing field.

### **Other Possible Failures**

Several different defects have been recently discovered in Ford vehicle fires that are unrelated to the SCDS failure. These defects include fuel injector leaks, anti-lock brake module failures, load-leveling device failures, battery cable problems, power control module failures, and AC system malfunctions. There has also been a recent rash of fires in F-250/350 diesel trucks. The diesel vehicle fires are of particular interest because although the diesel platform has the SCDS, it is not powered all the time like the SCDS in other Ford vehicles. Because the SCDS is not powered all the time, Ford asserts that it is not possible to have a fire caused by an SCDS in a vehicle with the diesel platform. However, the fires appear to start in the same area and can be confused with a fire originating in the SCDS. An expert that does not perform the proper analysis and/or is not aware of all of these potentially similar failure patterns could lead your case into certain ruin by preserving the wrong evidence and issuing an unsupported and incorrect opinion.

### **Hiring The Right Expert**

Now that you have considered the issues related to your Ford vehicle fire, how do you choose the right expert for your case? There are several variables that effect which expert might be the best fit. Cost is most likely the first consideration you will need to address. Because you don't know what level of response Ford is going to have to your notice of a claim, your decision-making will necessarily include cost/benefit and risk analysis.<sup>1</sup> What level of expert is justified by the size of your claim? For example, it is not likely that you will hire a professional engineer to perform electron microscope analysis for a claim that has minimal property damage. There are no hard and fast rules because the level of risk will be different for every subrogation professional and every carrier. You also may not know the amount at stake in your case when you start your investigation.

In our experience, Ford has been willing to negotiate settlements on small property damage fires where our only evidence was a local fire department report indicating an SCDS failure and several key photos of the engine compartment showing burn patterns consistent with the fire department's report. Obviously, you wouldn't risk larger property claims by solely relying on the local fire department's report. So, where is the happy medium? Think of your case on a continuum labeled with choices and some basic guidelines.<sup>2</sup> For small property or vehicle only claims, under \$7,500, a local fire department report and "good" photo documentation might be sufficient. On cases above that range, a cause and origin expert, also known as a fire investigator, will likely be necessary. As your claim reaches the \$40,000 level, you have to start giving serious consideration to retaining a professional engineer. Your fire investigator and your professional engineer should be able to work in concert together to establish the origin and cause.

Once the claim is large enough, it is wise to use both a fire investigator and an engineer. The primary job of the fire investigator is to locate the area of origin of the fire and, if possible, identify the cause of the fire. Even if he cannot determine the exact cause of the fire, he must be able to identify all possible causes of the fire within the area of origin. He should then be able to eliminate all other possible causes

of the fire. Basic origin and cause experience may be sufficient to determine an area of origin to the Ford vehicle or even within the engine compartment. But an engineer may be necessary to determine the precise cause of the fire.

In a recent trial involving a fire originating in a piece of heavy equipment, we learned that the jury relied heavily upon both the fire investigator and the electrical engineer to find that the fire was caused by a manufacturing defect. The fire investigator isolated the area of origin to a specific electrical compartment on the vehicle, but could not identify the exact cause of the fire. The electrical engineer discovered that the positive battery cable had come into contact with and arced to a steel push-pull cable. The engineer concluded that the fire had to originate at this location and, in tandem with the fire investigator, they were able to eliminate all other possible causes of this fire. Neither expert could have established the defect on his own, but together they were able to establish the exact area of origin and the exact cause – a manufacturing defect in the manner in which the cables were routed.

### **Which Type Of Engineer Is Right**

Which type of engineer you should retain to investigate a vehicle fire could be a separate topic for a longer presentation. Briefly, an electrical or mechanical engineer with the proper qualifications is best suited for Ford SCDS fires. The proper qualifications will include an engineering degree, a professional engineering license and experience investigating vehicle failures, with specific experience handling Ford SCDS cases. There are some experts that call themselves “automotive consultants,” but this is merely a specialty and may not be indicative of a professionally licensed engineer or any additional training in the field. Ensure that the engineer you retain is well qualified and has the requisite experience with Ford SCDS cases.

### **Experience Should Be “Cases in the Dozens”**

Don’t let your case be the classroom. Make sure that your expert(s) have investigated and analyzed numerous Ford vehicle fires. Even if the expert has investigated a few SCDS fires, the expert can still misidentify the cause of the fire. The mere fact that the fire originated in the engine compartment is not enough. We know of occasions where an inexperienced expert assumed that the fire had to have been caused by the SCDS and failed to do a thorough investigation or preserve the scene. When Ford’s expert reviewed the remains of the SCDS, there were no tell-tall signs of a failure and there was no other evidence preserved upon which to base a claim against Ford. As discussed above, if a fire investigator is working with an engineer, basic origin and cause experience may be enough. However, if your case doesn’t warrant retaining an engineer, your fire investigator will need to have more experience. In a few rare instances, your fire investigator may also be a licensed engineer.

### **What The Proper Expert Knows To Do**

1. Thoroughly photograph the entire engine compartment.
2. Preserve the scene for a joint inspection with Ford’s experts.
3. Preserve the evidence – for later analysis, if necessary.

### **Preserve The Evidence**

No matter the size of your loss, you always want to do your best to preserve the vehicle until the claim is resolved. Understanding that you don’t always control the rights to the vehicle or its owner (ex.; tenant’s vehicle insured by another carrier), you should attempt to coordinate with the other carrier or the owner to have the vehicle secured. In some cases, it may be worth it to purchase the salvage and store it yourself. Insurance auto auctions operate all over the country and should be familiar with

placing a vehicle on “litigation hold.” Some facilities will even have an area set aside just for Ford vehicles.

Before you move the vehicle, if Ford has chosen not to initially inspect the vehicle, your fire investigator or engineering expert should attempt to locate and secure the SCDS, the hexport body and any attached wiring. It can be as easy as finding it dangling in front of the master cylinder or you can be back to looking for the needle in the haystack. But, we at least know what color the needle is now and that it is on the right side of the haystack in front of the master cylinder. Finally, in every case, numerous photos should be taken of the entire engine compartment from several different angles. You will obtain better results if you can preserve this essential evidence.

### **Exemplar Testing**

On larger property claims and cases that require litigation, it will be extremely advantageous if your engineer has conducted or participated in burn testing of exemplar Ford vehicles. This will help him/her to properly distinguish and testify about damage caused when the SCDS and its components fail internally, versus damage caused by a fire originating externally and attacking the SCDS. As of this writing, we are only aware of two engineering firms that have completed this vital testing. Ford was invited to attend both sets of testing, but chose not to. Additionally, we know Ford, in conjunction with NHTSA’s investigations of the Ford recalls, has conducted similar testing of its own. At trial, Ford’s expert witnesses will further their inherent advantage if your engineering expert does not have data from the burn testing.

### **Expert Reports**

Whether to have your expert prepare a report is an academic debate that has raged for years. You can easily find two subrogation professionals who have differing opinions on this subject. The risk with having your expert document their opinions early in the investigation process is that facts can change or new facts can be discovered. If your expert has already issued his report when new facts are discovered, he has to revise his opinion and/or face rigorous cross-examination on why he changed his opinion. It can be a double-edged sword in the mind of a juror. Did the expert’s opinion change because he is being intellectually honest or is it because he is covering up a mistake he made in his first report? Also, if your expert’s report contains an opinion that is incorrect or not properly supported, and you share it with the other side, your chances of success might be severely diminished. If your expert learns more during the course of his investigation, he can only strengthen your position by writing a better report when required for litigation. Ford has requested an expert report in every SCDS case we have handled. However, in cases where a report had already been prepared before we got involved, we provided it. In all of the other cases, we have been able to achieve a positive settlement with proper documentation of the physical evidence and without providing a report.

### **ENDNOTES**

1. Ford’s response to a notice of claim will vary widely based upon the amount of damages and the evidence available for inspection. Ford has even occasionally chosen not to inspect any evidence because Ford’s records indicated that the vehicle owner had previously received a recall notice.
2. These are guidelines – remember no hard and fast rules!