[Cite as *Romans v. Texas Instruments, Inc.*, 2013-Ohio-5089.]

IN THE COURT OF APPEALS

TWELFTH APPELLATE DISTRICT OF OHIO

MADISON COUNTY

PETER ROMANS, Individually and as Administrator of the Estate of Billi, Ami and Caleb Romans, Deceased,	:	CASE NO. CA2013-04-012
Plaintiff-Appellant,	:	O P I N I O N 11/18/2013
- vs -	:	
TEXAS INSTRUMENTS, INC., et al.,	:	
Defendants-Appellees.	:	

CIVIL APPEAL FROM MADISON COUNTY COURT OF COMMON PLEAS
Case Nos. CVC20090074 and CVC20100126

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HENDRICKSON, P.J.

{¶ 1} Plaintiff-appellant, Peter Romans, individually and as the Administrator for the Estates of Billi, Ami, and Caleb Romans, appeals a decision from the Madison County Court of Common Pleas granting summary judgment in favor of defendants-appellees, Sensata Technologies, Inc. (Sensata) and Bridgestone Retail Operations, LLC (Bridgestone).

I. Background

{¶ 2} In the early morning hours of April 6, 2008, a fire started in Romans' 2001 Ford Expedition, which was parked in the carport adjacent to the Romans' home, and quickly spread to the house. While Romans was able to escape the house, unfortunately, Romans' wife, Billi, and two children, Ami and Caleb, were unable to escape and tragically died in the fire.[1] At the time of the fire, the Expedition's engine was off and the key was not in the ignition.

{¶ 3} On February 24, 2009, Romans filed a products liability wrongful death action against Ford Motor Company (Ford), the manufacturer of the Expedition. Romans alleged that Ford's negligence and various defects in the Expedition resulted in the electrical fire that caused personal injury to Romans and the death of his wife and children.

{¶ 4} Romans filed a second lawsuit on March 29, 2010, against Sensata and Bridgestone.[2] Sensata manufactured the speed control deactivation switch (SCDS), a

1. The Madison County Coroner declared the deaths of Billi, Ami, and Caleb to be homicides. The parties disagree as to whether the fire originated in the SCDS or if it was an act of arson as determined by the State Fire Marshall; however, this issue is not before this court. As stated in Romans' brief, this appeal "addresses two purely legal questions involving the component parts doctrine and the legal duty of automobile service technicians."

2. Sensata was formerly a part of Texas Instruments, Inc. Texas Instruments had a division called the Sensors and Controls Division, and in 2006 Texas Instruments divested that division and it became Sensata. Although

component part of the Expedition's brake and cruise control systems. The SCDS disengages the cruise control system when the brake pedal is depressed and the hydraulic pressure of the brake fluid increases. Romans brought several claims against Sensata including negligence and statutory products liability under R.C. 2307.74, R.C. 2307.75, and R.C. 2307.76. In his complaint, Romans alleged that the SCDS was (1) defective in the manufacture, construction, and design of the switch, and (2) defective due to inadequate warnings, and that such defects caused the fire in his Expedition.

{¶ 5} Romans also brought claims against Bridgestone, which arose out of service work Bridgestone performed on Romans' Expedition a few weeks before the fire. Romans alleged that Bridgestone was negligent in failing to repair the Expedition's braking and electrical systems, failing to warn of the defects and fire hazards associated with the cruise control system and the SCDS, and failing to disable or disconnect the Expedition's cruise control system and the SCDS. Romans' claims against Ford, Sensata, and Bridgestone were consolidated into one action.

A. Sensata's Development of the SCDS

{¶ 6} To appreciate Sensata's role in the manufacture of the SCDS, it is necessary to understand the function of the SCDS within the Expedition's speed control mechanism. The SCDS is a hydraulic pressure switch that functions as a redundant safety shut off for the vehicle's cruise control. As the driver applies pressure to the brake pedal, the switch opens, breaking the circuit to the speed control system and causing the speed control to disengage. The SCDS is mounted on the brake master cylinder, which is generally located on the driver's side of the engine compartment. The SCDS may be mounted on the master cylinder in a vertically up, vertically down, or angled down position depending on the Ford model. The

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the record often refers to Texas Instruments, as that was the entity involved during the relevant time period, for ease of discussion, we refer to Texas Instruments as its successor entity, Sensata.

SCDS was divided into a "wet" hydraulic side containing brake fluid and a "dry" electrical side. The "wet" side interfaces with the brake master cylinder and the "dry" side interfaces with the electrical wiring to the cruise control system and contains electrical contacts that open and close, disengaging the cruise control when the brakes are applied. The two sides were separated by a thin diaphragm of flexible material called Kapton. This diaphragm was often referred to as the Kapton seal. The Kapton seal consisted of three layers of Kapton, each layer coated with Teflon on both sides. The Teflon was used to seal or prevent brake fluid from leaking into the electrical side of the device. In some vehicles, including Romans' Expedition, the switch was powered at all times, meaning the switch received electrical current even when the engine was turned off and the key removed from the ignition.

{¶ 7} In the late 1980's, Ford requested Sensata design and develop the SCDS. Sensata had provided Ford with similar pressure switches in the past for other operations in its vehicles. Sensata agreed that it would be able to provide this type of switch. Sensata began developing the SCDS to be used in two different platforms for Ford: (1) the panther platform, consisting of the Lincoln Town Car, the Ford Crown Victoria, and the Mercury Grand Marquis, and (2) Ford's truck platform, which included the Expedition.

{¶ 8} During the development phase of the SCDS, Sensata and Ford worked together to develop the Engineering Specification (Specification) for the SCDS. The Specification defined the basic function of the SCDS, as well as what testing the switch was required to meet to determine whether it was ready to be launched into production. Sensata often provided feedback to Ford regarding requirements within the Specification, including the practicality of a requirement, and at times, proposed changes to the Specification. Ultimately, however, Ford determined the requirements for the Specification and how the switch would interface and interact with other components of the vehicle. During development of the SCDS, the switch went through extensive testing to ensure that it

continued to meet the Specification. Once the testing was complete and Sensata demonstrated the SCDS met Ford's Specification, Ford approved the SCDS, and Sensata began production.

{¶ 9} Sensata then shipped the SCDS to Tokico, a Ford supplier which manufactured the master cylinder of the Expedition's brake system. Tokico would mount the SCDS on the master cylinder and ship the combined master cylinder to Ford. Ford then integrated the combined master cylinder into the Expedition's brake and cruise control systems. The SCDS was integrated into the truck platform starting in 1992.

{¶ 10} In 1999, Sensata learned from Ford that there was a high incidence of under-hood fires in the panther platform; Ford believed these fires were originating in the SCDS. Ford reported to Sensata that in some of these vehicles, the Kapton seal contained cracks or perforations which allowed brake fluid to leak into the electrical side of the SCDS. According to Ford, the truck platform was not experiencing similar issues. Sensata supported Ford in testing and investigating the SCDS. During its testing, Sensata discovered that once fluid leaked into the electrical side of the SCDS, an electrolytic cell could form inside that side of the SCDS and create a short to ground and cause a fire. However, Sensata could only create this situation with the use of salt water. After extensive testing, Sensata determined that the SCDS continued to meet Ford's Specification and did not make any changes to the SCDS. However, Sensata expressed to Ford its concern that the high incidence of fires may be related to the manner in which the SCDS was integrated into the vehicles. Specifically, Sensata suggested that Ford remove the SCDS from the constant electrical supply because it felt this may be a factor in causing a fire to originate in the SCDS. Ford ultimately attributed the breach in the Kapton seal and the high incidence of fires to a change in Sensata's manufacturing process from a manual to automatic process. As a result, Ford made no changes to the manner in which it integrated the SCDS in its vehicles and continued to

incorporate the SCDS within a powered-at-all-times circuit.[3] However, Ford recalled its 1992 and 1993 panther platform vehicles and replaced the old SCDS with a new identical SCDS.[4] At the end of 2001, Sensata decided to stop supplying Ford with the SCDS as Ford had not made any changes in the way the SCDS was integrated into Ford vehicles.

{¶ 11} In 2004, the National Highway Traffic Safety Administration (NHTSA) began a two-year investigation into the cause of under-hood fires in certain Ford vehicles, including Expeditions manufactured in 2001. NHTSA had received numerous complaints of fires starting when vehicles were parked and the ignition was in the off position. Sensata became aware of fires in the truck platform when this investigation began. As part of the investigation, NHTSA collected and tested numerous SCDSs. NHTSA's Office of Defects Investigation (ODI) "developed an extensive testing and analysis program during this investigation to understand the root cause of the SCDS failures and understand why certain Ford model/model year vehicles had very high rates of key off engine compartment fires, while other models using the same part number SCDS had very low rates of fires." ODI contacted the National Institute of Standards and Technology (NIST) to compare three categories of switches: (1) switches that had already failed, (2) switches "that *were not* likely to fail during their lifetime and [(3)] switches that *were* likely to fail during their lifetime." (Emphasis sic.) The purpose of this comparison was to determine if there were certain characteristics in the "likely to fail" switches that would cause them to fail. In September 2005, before NHTSA concluded its investigation, Ford recalled certain 2001 Ford Expeditions, including Romans' Expedition because "the underhood speed control deactivation switch may overheat, smoke, or burn, which could result in an underhood fire."

3. The record indicates that Ford made some changes to the manner in which the SCDS was being integrated in the Ford Explorer model such that a relay was installed on the circuit in which the SCDS was located.

4. The SCDSs that were installed as a result of this recall were still produced by Sensata and were of the same original design.

{¶ 12} NHTSA completed its investigation and issued Engineering Analysis Closing Report EA05-005 (Closing Report) in August 2006. In this report, NHTSA explained that the NIST analyses found that there were no unique characteristics in the design of the SCDS or issues with the brake fluid that might lead to SCDS failures. Rather, NHTSA found that the "damaged" switches had a common failure pattern which was caused by fatiguing of the Kapton. Based on these results, "ODI began to focus on what *vehicle characteristics* might be causing the Kapton diaphragm to be experiencing a change in orientation * * * that would fatigue the Kapton material." NHTSA ultimately concluded that normal braking actuation fatigued the Kapton seal, causing cracks within the seal which permitted brake fluid to leak from the wet side to the dry side of the SCDS. NHTSA determined that once the leak develops, water-contaminated brake fluid finds its way into the dry electrical side and corrodes the switch's electrical contacts. Once the contacts are corroded, the once dry side of the SCDS becomes a "resistive short to ground that generates heat in the switch cavity" which, in some cases, can cause a fire. In order for a SCDS to fail in this manner and start fire while the vehicle is parked with the ignition in the off position, NHTSA concluded that the following three factors must be present, "the vehicle must: (1) have a PAT [powered at all times] SCDS circuit; [sic.] (2) have a brake system that generates a high enough vacuum to flip the Kapton orientation, and (3) have a SCDS orientation that is not vertically down."[5] The Closing Report made it clear that there must be a combination of all three factors to result in a fire.

{¶ 13} Romans' vehicle was manufactured during the last few months of 2000. On the

5. Some Ford model vehicles experienced a vacuum pressure just after a braking event, when the driver released the brake pedal. The vacuum pressure varied among vehicles and model years; however, in some models NHTSA discovered that "the magnitude of the vacuum pressure was great enough to cause the Kapton 'set' to invert or 'oil can.' This change in orientation of the Kapton material each time the brake pedal is released causes the Kapton material to fatigue and wear out much sooner than if the diaphragm had only experienced pressure applications in one direction." The Specification did not account for this vacuum pressure.

2001 Expedition, such as Romans', the SCDS was mounted on the brake master cylinder in a vertical up position and was on a circuit that was powered at all times. In addition, the brake system experienced a "high" level of vacuum pressure just after a braking event.

B. Bridgestone's Repair and Service of Romans' Expedition

{¶ 14} The parties agree that there is no dispute as to any of the facts relevant to this appeal and the record confirms the following undisputed facts. On March 1, 2008, a few weeks before the fire, Romans took the Expedition to Bridgestone for service because Romans and his wife had been experiencing problems with the Expedition. They had difficulty getting the vehicle out of park and when they applied the brakes, a fuse would blow. After changing the fuse approximately four times, Romans decided to take the vehicle to Bridgestone to determine the source of the problem. To ensure the Expedition would not blow the fuse on the way to the Bridgestone service center, Romans replaced the manufacturer's 5 amp recommended fuse with a larger, 30 amp fuse.

{¶ 15} At Bridgestone, Romans spoke with the service manager, Michael Hoskin, and explained the issue. He reported: "I put a bigger fuse in" and "it keeps blowing the fuse. When you turn the ignition on, touch the brake, and try to put it into reverse, * * * it just blows the fuse." Based on these symptoms, Hoskin generated a work order which stated: "Non-system services-when apply brake 1st time or last time, fuse blows for anti-thef, window etc. . . . Has a 30 A[mp] fuse in to keep from blowing * * *." As part of Bridgestone's normal operating procedure, this work order was forwarded to service technician James Cole to diagnose the problem and perform the necessary repairs.

{¶ 16} Cole, Bridgestone's lead service technician, completed the mechanical work on the Expedition. Based on Cole's standard procedure, he first replaced the 30 amp fuse with a proper 5 amp fuse. Then, he recreated the problem complained of by the customer. Cole explained:

> And then I would blow the fuse as it did when they blew it, and then find out why. * * * I would access on our Mitchell OnDemand computer system, which contains vehicle information pertaining to the particular vehicle, with wiring diagrams to find out what's on that circuit for that fuse that's blowing and proceed with pinpoint testing from that point." [6]

{¶ 17} Cole manually performed the pinpoint testing. To complete this test, Cole, using the wiring diagram, would "[f]ind out what is on the circuit for that fuse and backtrack it. And since [the customer] said that it blows when they apply the brake pedal for the first and last time, [I] would look on that circuit." After running these diagnostic tests on the Expedition, Cole discovered that the Expedition's brake switch, which controls the brake lights, was malfunctioning. Cole then replaced the brake switch. Cole retested the switch to determine if the new switch resolved the issue. Cole again rechecked to see if the fuse continued to blow when the brakes were applied. Because the fuse did not blow, Cole believed the repair was complete. Romans and his wife subsequently picked up the Expedition and had no further contact with Bridgestone.

C. Motions for Summary Judgment

{¶ 18} Following Romans' initiation of the lawsuit, extensive discovery was conducted by the parties. At the close of discovery, Ford, Sensata, and Bridgestone all moved for summary judgment. Sensata submitted various summary judgment materials in support of its motion, including NHTSA's Closing Report, the deposition of Steven Beringhause, a representative for Sensata who headed the pressure switches group from 1998 through 2000, and the depositions of several expert witnesses. Romans also submitted various exhibits in opposition to summary judgment including the deposition of Mark Hoffman, a Ford design and analysis engineer, and the depositions of two of his expert witnesses, Robert S.

6. The Mitchell OnDemand computer system is a vehicle information source that contains certain information for multiple vehicles, such as the number of quarts of oil required for the vehicle or, as used in this case, a diagram of the electrical wiring for the vehicle the technician is working on.

Carbonara, Ph.D. and Gary A. Derian, P.E. Dr. Carbonara, an expert in materials science, examined the SCDS in Romans' Expedition to determine the origin of the fire. Derian, a mechanical engineer, evaluated the design of the SCDS, the circuit it was located on, and the actions that led to the SCDS's failure.

{¶ 19} On March 18, 2013, the trial court entered judgment for Sensata on each claim, finding the component parts doctrine applied as the SCDS was not defective and there was no evidence that Sensata participated in the design or manufacture of the Expedition. The trial court also granted summary judgment in favor of Bridgestone, finding that Bridgestone had no duty to inspect, repair, or disable the SCDS when it serviced the Expedition. As to Ford, the trial court denied Ford's partial motion for summary judgment, and the claims against Ford remain pending. The trial court's entry included Civ. R. 54 language stating there was "no just cause to delay appeal of the rulings in favor of Bridgestone and Sensata." Accordingly, Romans timely appealed the judgments in favor of Sensata and Bridgestone, raising the following two assignments of error:

{¶ 20} Assignment of Error No. 1:

{¶ 21} THE TRIAL COURT ERRED IN GRANTING SUMMARY JUDGMENT IN FAVOR OF DEFENDANT-APPELLEE SENSATA.

{¶ 22} Assignment of Error No. 2:

{¶ 23} THE TRIAL COURT ERRED IN GRANTING SUMMARY JUDGMENT IN FAVOR OF DEFENDANT-APPELLEE BRIDGESTONE.

II. Analysis

A. Standard of Review

{¶ 24} This court's review of a trial court's ruling on a motion for summary judgment is de novo. *Natl. Mut. Ins. Co. v. Gano*, 12th Dist. Madison No. CA2013-04-016, 2013-Ohio-3408, ¶ 10. "De novo review means that this court uses the same standard that the trial

court should have used, and we examine the evidence to determine whether as a matter of law no genuine issues exist for trial." *Id.*

{¶ 25} Under Civ.R. 56, summary judgment is appropriate when "(1) there is no genuine issue of material fact, (2) the moving party is entitled to judgment as a matter of law, and (3) reasonable minds can come to but one conclusion and that conclusion is adverse to the nonmoving party, said party being entitled to have the evidence construed most strongly in his favor." *Simmons v. Yingling*, 12th Dist. Warren No. CA2010-11-117, 2011-Ohio-4041, ¶ 19, quoting *Zivich v. Mentor Soccer Club, Inc.*, 82 Ohio St.3d 367, 369-370 (1998). The moving party has the burden of demonstrating that there is no genuine issue of material fact. *McQueen v. Kings Island*, 12th Dist. Warren No. CA2011-11-117, 2012-Ohio-3539, ¶ 6, citing *Harless v. Willis Day Warehousing Co.*, 54 Ohio St.2d 64, 66 (1978). Once the party moving for summary judgment satisfies its initial burden, the nonmoving party "may not rest on the mere allegations of his pleading, but his response, by affidavit or as otherwise provided in Civ.R. 56, must set forth specific facts showing the existence of a genuine triable issue." *Mootispaw v. Eckstein,* 76 Ohio St.3d 383, 385 (1996).

{¶ 26} With this standard in mind, we address Romans' specific arguments related to Sensata and Bridgestone.

B. Claims against Sensata

{¶ 27} The trial court granted Sensata summary judgment on the basis that the component parts doctrine applied and shielded Sensata from liability. On appeal, Romans asserts that the two exceptions within the component parts doctrine apply, requiring the trial court's decision to be reversed on his products liability claims.[7]

7. The trial court also granted summary judgment to Sensata on Romans' negligence claims. On appeal, Romans does not challenge this finding by the trial court. Accordingly, we only address Romans' arguments as they relate to his statutory products liability claims.

1. Component Parts Doctrine

{¶ 28} Under the component parts doctrine, a manufacturer of a component part is not liable for a defect in a completed product unless: (1) the component itself is defective or dangerous, or (2) the component manufacturer constructs or assembles the completed product or substantially participated in the design of the final completed product. *Wells v. Komatsu Am. Internatl. Co.*, 1st Dist. Hamilton No. C-040089, 2005-Ohio-4415, ¶ 12; *Aldridge v. Reckart Equip. Co.*, 4th Dist. Gallia No. 04CA17, 2006-Ohio-4964, ¶ 69-71; *see also Leibreich v. A.J. Refrigeration, Inc.,* 67 Ohio St.3d 266, 271-272 (1993); *Temple v. Wean United Inc.*, 50 Ohio St.2d 317 (1977), paragraph four of the syllabus; *Searls v. Doe*, 29 Ohio App.3d 309 (10th Dist.1986), syllabus. Although the Supreme Court of Ohio in *Temple* initially adopted the component parts doctrine in the context of common law failure to warn claims, it has also been applied to statutory product liability claims. *See Webb v. S.R.S. Liquidation Co.*, 6th Cir. No. 02-4009, 2004 WL 445162 (Mar. 8, 2004); *Runyon v. Briggs & Stratton Crop*., 2d Dist. Montgomery Nos. 10987 and 11185, 1989 WL 49475, *3 (May 5, 1989); *Aldridge* at ¶ 69; *Wells* at ¶ 12.

{¶ 29} Romans contends that the component parts doctrine does not apply because the SCDS itself was dangerous and defective and because Sensata knew that the specific way in which Ford incorporated the SCDS was causing spontaneous fires.

a. The SCDS was not defective or dangerous.

{¶ 30} Under the product liability statutes, a product may be defective (1) in manufacture or construction, (2) in design or formulation, (3) due to inadequate warning or instruction, or (4) because the product does not conform to the manufacturer's representations. See R.C. 2307.74 to 2307.77. Romans maintains that the SCDS was defective in three respects: (1) defective in manufacture or construction under R.C. 2307.74;

(2) defective in design or formulation under R.C. 2307.75; and (3) defective due to inadequate warnings under R.C. 2307.76.

{¶ 31} After a review of the record, we find that Romans has failed to prove that the SCDS *itself* was defective under any of the theories advanced in this case. In order to overcome the component parts doctrine and impose liability on Sensata, Romans was required to present evidence which indicated the SCDS was defective. This he did not do. Rather, the evidence submitted to the trial court demonstrated that only after the SCDS was integrated into the Expedition did it become defective and create a risk of fire. Both parties and their respective experts relied on the findings contained in NHTSA's Closing Report. In this report, NHTSA concluded that a fire could only ignite when the SCDS was integrated into Expeditions in such a way that the following three vehicle characteristics were present: (1) the SCDS was powered at all times, (2) the SCDS was oriented in a vertical up or an angled down position, and (3) the brake system produced sufficient vacuum pressure to flip the orientation of the Kapton seal. The record demonstrates that Sensata had no control or knowledge of these three vehicle conditions as they related to the final product, the Expedition. It was Ford, not Sensata that decided the orientation of the SCDS when placed on the master cylinder. Further, it was Ford, not Sensata that decided to place the SCDS on a "powered at all times" circuit. It was also Ford that did not consider (1) the vacuum pressure created just after the driver released the brake pedal and (2) the vacuum pressure's effect on the orientation of the Kapton seal when the Specification was created.

{¶ 32} Romans has failed to present any evidence that indicates or creates a genuine issue of material fact regarding whether the SCDS could ignite on its own. Rather, it is clear that the danger here arose only when the SCDS was integrated into Ford vehicles under the three conditions set forth above. As discussed in further detail below, Romans' evidence does not establish that the SCDS was defective in any way apart from its use in the

Expedition designed by Ford.

i. Manufacture or Construction Defect

{¶ 33} Under R.C. 2307.74, a product is defective in manufacture or construction if, "when it left the control of its manufacturer, it deviated in a material way from the design specifications, formula, or performance standards of the manufacturer * * *."

{¶ 34} Romans contends that the SCDS contained a manufacturing defect because it deviated from its own performance standard. Romans maintains that the SCDS was required to prevent brake fluid from leaking into the switch's electrical side for the life of the vehicle, that is 10 years or 150,000 miles of use. Romans further contends there is substantial evidence Sensata materially deviated from this performance standard as, at the time of the fire, his Expedition was 8 years old and had approximately 100,000 miles on it. Romans asserts that Sensata was aware in 1992 that the SCDS was not meeting this performance standard. He further asserts that Sensata knew as of 1999 that its product was defective because it learned that the failure to prevent brake fluid in the electrical side of the switch caused electrolytic corrosion which could result in a fire.

{¶ 35} As an initial matter, we note that Ford's Specification did not require the SCDS to last 10 years or 150,000 miles. Rather, the Specification required the SCDS to withstand "500,000 impulse cycles." The impulse cycle testing was performed on the switches to demonstrate that the switch was capable of surviving the expected *lifetime brake applications* of the vehicle. It is undisputed that the SCDS met Ford's Specification. Romans' experts, Carbonara and Derian, both admitted that at the time the SCDS left Sensata's control, it met each of the requirements in Ford's Specification. Romans cannot create additional requirements to the SCDS's performance standards. Accordingly, the fact that the SCDS did not last 10 years or 150,000 miles cannot be the basis for Romans' claim that the SCDS failed to meet a performance standard.

{¶ 36} Furthermore, the evidence in the record does not support a finding that the SCDS in Ford's truck platform, including the Expedition, failed to meet any of the performance standards of the switch. There was testimony that one of the performance requirements for the SCDS was a "leakage current requirement. To meet that requirement, you could not have fluid in that [electrical] cavity." However, the record does not indicate Sensata had any knowledge, prior to the manufacture of Roman's Expedition, that the SCDS in Ford's truck platforms, were leaking brake fluid through the Kapton seal and creating a potential risk of fire. In 1992 and in 1999, Sensata was only aware of this problem in the SCDS used in Ford's panther platform of vehicles. Specifically, Beringhause testified that in 1992 while Sensata was performing production validation testing for the panther platform, it discovered that some Kapton seals started leaking brake fluid before reaching 500,000 cycles. However, Sensata discovered that a piece of its manufacturing equipment was causing the leaks. Once the equipment was modified and new switches made, the switches met the Specification and were no longer leaking. Moreover in 1999, although Sensata did indeed learn that an electrolytic cell could form inside the electrical side of the SCDS and create a short to ground causing a fire, it could only create this phenomenon when salt water, not brake fluid was used. Again, this testing only related to the panther platform. Romans failed to present evidence that Sensata was aware that a similar condition could occur in the truck platform.

{¶ 37} Based on the foregoing, there is no evidence that the SCDS in Roman's 2001 Expedition contained a manufacture defect.

ii. Design Defect

{¶ 38} Romans argues the SCDS was defective in design because "[t]here are no benefits of the SCDS's design that outweigh the known risk of fire." In his reply brief, Romans asserts the SCDS was defective in design based on Sensata's decision to use a

Kapton seal to prevent brake fluid from entering the "dry" side of the switch. Romans contends that Sensata knew the Kapton seals leaked and again asserts that Sensata learned from its testing in 1999 that the presence of conductive fluid in the electrical side of the SCDS could ignite a fire. Romans further argues Sensata recognized this obvious risk of harm because in 1999 it recommended Ford change the electrical systems of its vehicles so the SCDS did not receive constant power.

{¶ 39} A product contains a design defect if, at the time it left the control of its manufacturer, the foreseeable risks associated with the product's design exceed the benefits of the design. R.C. 2307.75(A). R.C. 2307.75 provides a list of factors to determine the foreseeable risks and benefits associated with the product's design. Some of the factors for assessing the foreseeable risks associated with the design include the nature and magnitude of the risks of harm associated with the design in light of the intended and reasonably foreseeable uses of the product and the consumer's expectations. R.C. 2307.75(B)(1)-(5). In evaluating the benefits of the design of the product, factors such as the intended utility of the product, the safety advantages associated with the design, the technical and economic feasibility of an alternative design and any foreseeable risks associated with the alternative design should be considered. R.C. 2307.75(C)(1)-(3).

{¶ 40} Again, as mentioned above and contrary to Romans assertions, there is no evidence that Sensata was aware in 1999 that its use of Kapton in the SCDS in the truck platform posed a risk of fire. The record does indicate that in 1999 Sensata recognized that a potential cause of fires in the panther platform could be because the switch was powered at all times, and it therefore suggested the SCDS be placed on a circuit that was powered only when in use. However, this recommendation related to the operation of the final product, the Expedition, and not the design of the SCDS. Sensata had no control over the manner in which the SCDS was being integrated into Ford vehicles. Moreover, although Sensata

expressed concerns that there could be "problems" in the other platforms, Ford reassured Sensata that it was reviewing the data and it had not seen "any issues on any other platforms." Finally, the evidence demonstrates that the SCDS on its own, prior to being integrated into the final product was operating as it was intended, including preventing brake fluid from entering the electrical cavity of the switch.

{¶ 41} Romans also asserts that the SCDS was defective in design because there was a technically feasible alternative design available which eliminated the fire hazard. Romans points to Sensata's competitor, Hi-Stat and its design for a speed control deactivation switch as evidence of a feasible alternative design. A plaintiff asserting a design defect must present expert testimony that an alternative design was economically and technically feasible where the existence of such an alternative design is beyond the knowledge possessed by an average lay person. *Aldridge v. Reckart Equip. Co.*, 4th Dist. Gallia No. 04CA17, 2006-Ohio-4964, ¶ 57; *See also Bloomer v. Van-Kow Enterprises*, 8th Dist. Cuyahoga No. 096462, 1994 WL 173651, *3 (May 5, 1994).

{¶ 42} In the present case, Romans has merely pointed to a competing manufacturer and claims that it used a design that did not create a risk of fire. Romans failed to present evidence of the specific design used by Hi-Stat in 2000, the time the SCDS left Sensata's control and was integrated into his 2001 Expedition. Romans suggests the Hi-Stat design was a feasible alternative design because in 2002 Ford began using the Hi-Stat switch in its vehicles. Romans points to a reference in Sensata's internal documents which indicates it conducted a "competitive evaluation of this device" and suggests that Sensata was aware of an alternative design in 1992. However, Romans has not presented evidence that Hi-Stat's design in 1992 would not similarly pose a risk of fire when integrated into the Ford vehicles. Romans suggests the Hi-Stat design does not pose a risk of fire because there have been no complaints of fires in those vehicles with a Hi-Stat switch. However, these vehicles were

produced two years after Romans' Expedition. There is no evidence in the record which indicates the Hi-Stat design in 1992 is the same design Ford began using in 2002. In addition, the document referenced by Romans indicates that at that time, Hi-Stat was also using a Kapton insulator. It is Sensata's use of Kapton which Romans criticizes as a design defect. Moreover, according to Sensata's testing, the Hi-Stat device developed a leak at 100,000 cycles, well below the 500,000 cycles requirement in Ford's Specification. Accordingly, this document is insufficient to support Romans' claim that Hi-Stat's 1992 switch design represented a feasible alternative design. This fact, without more, is insufficient to show that this design was technically and economically feasible and able to function in the 2001 Expedition. Accordingly, Romans failed to meet his burden of proving an alternative design was available.

{¶ 43} Based on the foregoing Romans has failed to present any evidence which creates a genuine issue of material fact regarding whether the SCDS was defective in its design.

iii. Defective due to inadequate warning

{¶ 44} Romans asserts there is a genuine issue of material fact as to whether the SCDS was defective due to inadequate warnings because Sensata "knew the danger of fire when brake fluid leaked through the Kapton seal and it knew the Kapton seals were cracking" yet did not provide a warning concerning the SCDS fire hazard.

{¶ 45} Pursuant to R.C. 2307.76(A)(1), a product is defective if the

> manufacturer knew or, in the exercise of reasonable care, should have known about a risk that is associated with the product * * * [and] failed to provide the warning or instruction that a manufacturer exercising reasonable care would have provided concerning that risk, in light of the likelihood that the product would cause harm of the type for which the claimant seeks to recover compensatory damages and in light of the likely seriousness of that harm.

This duty applies at the time of marketing and continues after the product is sold. R.C. 2307.76(A)(1) and (2).

{¶ 46} Although a manufacturer is subject to potential liability based on a failure to warn under R.C. 2307.76, pursuant to the component parts doctrine, a component manufacturer's duty to warn the end user of the final product does not extend "to the speculative anticipation of how manufactured components * * * can become potentially dangerous dependent upon their integration into a unit designed and assembled by another." *Temple v. Wean United, Inc.,* 50 Ohio St.2d 317 (1977), paragraph four of the syllabus. However, "if a manufacturer has knowledge of a specific use of the component and a possible danger from such use" there is a duty to warn. *Phan v. Presrite Corp.*, 100 Ohio App.3d 195, 200 (8th Dist.1994).

{¶ 47} Romans contends Sensata knew that Ford's specific use of its SCDS was causing fires, yet did not warn the end user of this potential hazard. Beringhause testified that in 1999 Ford informed Sensata of the high incidence of fires in the panther platform and that it believed the fires were originating in the SCDS. In 1999, Sensata supported Ford in its testing and investigation as to the origination of these fires. As part of its testing, Sensata tested the parts beyond specification and confirmed that the SCDS was still meeting the Specification provided by Ford. Sensata expressed its concerns that the Specification might not be adequate and that other vehicles could experience the same or similar "problems" observed in the panther platform. However, Ford reassured Sensata it was "reviewing the data and watching the data and [it] was not seeing any issues on any other platforms." Beringhause testified it was not until NHTSA opened its investigation in 2004 and 2005 that Sensata became aware of fires in the truck platform. Accordingly, although there is some evidence Sensata was aware that there may be a risk of fire related to the SCDS, Romans has only presented evidence as it related to the specific use and integration of the SCDS in

the panther platform and not the truck platform, the platform of Romans' Expedition. As of 1999, Sensata's knowledge regarding the integration of the SCDS into the truck platform and any associated dangers was speculative at best. Accordingly, under these circumstances, we find Sensata had no duty to warn of the potential risk of fire in the Expedition.

{¶ 48} As Romans failed to present evidence Sensata was aware of a fire risk of the SCDS when integrated into the truck platform, more specifically Romans' 2001 Expedition, there is no genuine issue of material fact regarding whether the SCDS was defective due to inadequate warnings.

b. Sensata did not substantially participate in the design or assembly of the Expedition.

{¶ 49} Romans maintains the component parts doctrine does not apply to absolve Sensata of liability because "there was nothing speculative about Sensata's knowledge of the specific way in which Ford incorporated the SCDS or its knowledge that the SCDS was causing spontaneous fires."

{¶ 50} As mentioned above, under the component parts doctrine, a manufacturer of a component part is not liable due to defects in the completed product unless the component manufacturer assembled or constructed the final product or substantially participated in its design. *Wells v. Komatsu Am. Internatl. Co.*, 1st Dist. Hamilton No. C-040089, 2005-Ohio-4415, ¶ 12. Where there is evidence the component manufacturer played a direct role in designing the final product or installing and integrating its component into the final product, then the manufacturer may be held strictly liable for a defect in the final product. *See e.g. Leibreich v. A.J. Refrigeration, Inc.*, 67 Ohio St.3d 266, 271 (1993) (reversing trial court's grant of summary judgment to a component part manufacturer where the evidence indicated the manufacturer played a direct role in designing the final product and installed its component into the final product); *see also Miles v. Kohli & Kaliher Assoc., Ltd.*, 917 F.2d

235, 245 (6th Cir.1990). However, where a component manufacturer merely consults with the assembler or manufacturer of the final product, this is insufficient to impose liability on the component part manufacturer. *See e.g. Searls. Martinez v. Yoho's Fast Food Equip.*, 10th Dist. Franklin No. 02AP-79, 2002-Ohio-6756, ¶ 34; *Acme Steak Co., Inc. v. Great Lakes Mech. Co.*, 7th Dist. Mahoning Nos. 98-CA-146, 98-CA-243, 2000 WL 1506199, *3 (Sept. 29, 2000) (finding a component part manufacturer was not subject to liability for the completed product where the manufacturer reviewed design drawings and specifications but was not involved in the design or construction of the integrated system).

{¶ 51} The obligations of a component part manufacturer do not extend to the "speculative anticipation of how manufactured components, not in and of themselves dangerous or defective, can become potentially dangerous dependent upon the nature of their integration into a unit designed and assembled by another." *Acme Steak Co., Inc.* at *3. Ohio appellate courts have held that component part manufacturers are "not required to procure plans of the entire system, review those plans, and independently determine whether their respective component parts would function in a safe fashion." *Searls v. Doe*, 29 Ohio App.3d 309, 311 (10th Dist.1986); *Roberts v. Performance Site Management, Inc.*, 10th Dist. Franklin No. 03AP0784, 2004-Ohio-2820, ¶ 21. In addition, the mere fact that the component part manufacturer consults with the manufacturer of the final product is insufficient to impose liability for a defect in the completed production. *Acme Steak Co., Inc. v. Great Lakes Mech. Co.*, 7th Dist. Mahoning Nos. 98-CA-146, 98-CA-243, 2000 WL 1506199, *3 (Sept. 29, 2000). "A component parts supplier cannot be expected to operate in a factual vacuum when attempting to match its products to the needs of its customers." *Acme* at *3.

{¶ 52} In support of his argument, Romans relies on Hoffman's and Beringhause's testimony that Sensata and Ford worked in a "back and forth team effort" to develop the

Specification for the SCDS. Romans asserts that Sensata became aware of the SCDS's location in the vehicle and the operating environment as a result of this "active dialogue." After a review of the record, we find that the record simply does not support Romans' characterization of Sensata and Ford's relationship as it relates to the SCDS. Rather, we agree with the trial court's conclusion that the "active dialogue" and the "back and forth" communications arose as part of the normal process of development and cannot be construed as anything more.

{¶ 53} It is undisputed that Ford went to Sensata to develop the SCDS based on its expertise in manufacturing pressure switches. According to Beringhause, during the development phase of the SCDS, there was "active dialogue" between Ford and Sensata regarding the Specification for the SCDS:

> We would discuss the specification with Ford. So Ford would say, this is what we think we need, give us specifications.
>
> We may come back and say, look, we don't think we can meet this specification, but we think we can do this.
>
> And then Ford would look at that and make decisions on ultimately what the specification would be.
>
> So there would be active dialogue, but ultimately it would be the Ford specification and they would * * * be responsible for defining what specification was required.

Hoffman confirmed this arrangement and described the development process as a "team effort." Hoffman also explained that because Sensata was an expert in the field, Ford basically left the internal workings of that part to its expertise. Ford's design for the switch was more "concerned about its requirements as far as how [the switch] interfaces and interacts with the vehicle." Accordingly, the discussions between Sensata and Ford ultimately related to the Specification of the SCDS and its design and not the overall design of the Expedition or how the SCDS would be integrated into the Expedition. Moreover, the

Specification for the SCDS was set and controlled by Ford, not Sensata. The mere fact that Sensata was involved in the design of the switch does not indicate that it had intimate knowledge of the inner workings of the master cylinder or the Expedition. Rather, the evidence submitted to the trial court demonstrated the exact opposite.

{¶ 54} Beringhause testified that Sensata only knew the basic parameters of how the SCDS would be configured based on the Specification, but it "didn't understand the entire system" or have the capability to understand the full system. In particular, Beringhause testified Sensata was unaware of the amount of electrical current flowing through the switch, the amount of pressure in the brake lines, or location where the SCDS would be installed and in which vehicles. Sensata relied on Ford to define those aspects within the Specification as they related to the vehicles' architecture and design.

{¶ 55} Moreover, the evidence established Sensata had no control over the integration of the SCDS into the overall brake system of the Expedition. Even in 1999, when Sensata suggested the switch be removed from a circuit that was powered at all times after its investigation into the panther platform fires, Ford did not make any changes to the SCDS's integration into the Expedition. Finally, it is undisputed that Sensata had no role in designing or assembling the Expedition.[8]

{¶ 56} Although Sensata materially participated in the design of the SCDS, this fact is insufficient to establish that the exception applies. First, the process of development necessarily requires "back and forth" communication as a component manufacturer, as Sensata, cannot be "expected to operate in a factual vacuum." *Acme* at *3. Furthermore, Ohio law requires the component manufacturer substantially participate in the design of the

8. In fact, the record demonstrates that Sensata would ship the SCDS to Tokico, the Ford supplier which manufactured the master cylinder. Tokico would then incorporate the SCDS into the master cylinder and deliver the completed master cylinder to Ford to be installed in the vehicles.

final product, not the component part in order to be held liable. *Searls* at 311. Romans cannot avoid the component parts doctrine by arguing that Sensata was intimately involved in the design of the SCDS. *See Searls* at 311. The evidence demonstrates that Ford maintained overall control over the Specification of the SCDS as well as the design and manufacture of the Expedition. Sensata's concern and responsibility was to ensure that the SCDS met the Specification provided by Ford. It is undisputed that the SCDS met the requirements contained in Ford's Specification.

{¶ 57} Based on the foregoing, Romans has failed to present any evidence that Sensata either substantially participated in the design of the Expedition or constructed or assembled the Expedition.

{¶ 58} As Romans failed to present evidence establishing a genuine issue of material fact regarding whether the SCDS itself was defective or that Sensata participated in the design or integration of the SCDS into the Expedition, we find that Sensata was entitled to judgment as a matter of law. Accordingly, the trial court did not err in granting summary judgment to Sensata. Romans first assignment of error is overruled.

C. Claims against Bridgestone

{¶ 59} The trial court granted summary judgment in favor of Bridgestone on Romans' negligence claims finding that Bridgestone had no duty to "go beyond the [work] order" and warn of, repair, or disable the Expedition's SCDS when the vehicle was in Bridgestone's shop. In his second assignment of error, Romans contends the trial court erred in finding Bridgestone "owed no duty" to check whether the SCDS was malfunctioning or to inform Romans about the danger of a spontaneous fire. Essentially, Romans asserts the trial court erred in defining the scope of Bridgestone's undertaking in servicing the Expedition, and therefore its duty in this case. Romans further argues Bridgestone had a duty to warn, repair, or disable the SCDS because it was aware of the symptoms of a malfunctioning SCDS and

the resulting fire hazard.

1. Scope of Bridgestone's Duty.

{¶ 60} Romans contends he requested Bridgestone inspect and make the necessary repairs that were appropriate to fix the symptoms he reported, which included a fuse blowing and being unable to shift the vehicle into gear. Romans asserts he did not request Bridgestone repair and replace only a specific part of the Expedition. Based on the requested service, Romans asserts Bridgestone had a duty to use reasonable care to diagnose and repair the problem that was causing the vehicle to sporadically blow a fuse, preventing it from shifting into gear. Bridgestone, however, contends that it had no duty to inspect, repair, or disable the SCDS because the SCDS, if defective, was a latent defect and servicing it was outside the scope of Bridgestone's agreed undertaking in servicing the vehicle.

{¶ 61} In order to establish a claim for negligence, a plaintiff must show that a defendant breached a duty owed to plaintiff, and that duty breached proximately resulted in injury to plaintiff. *Risk v. Woeste Eastside Motors, Inc.*, 119 Ohio App.3d 761, 764 (12th Dist.1997). The existence of a duty is a question of law that this court reviews de novo. *Id.* at 764, citing *Mussivand v. David*, 45 Ohio St.3d 314, 318 (1989).

{¶ 62} As to the duty of an automobile repair shop, the Ohio Supreme Court has held that an automobile repair shop is liable for damages proximately resulting from the negligent or unskillful manner in which it makes repairs or performs services. *State Farm Fire & Cas. Co. v. Chrysler Corp.*, 37 Ohio St.3d 1, 8 (1988); *Landon v. Lee Motors, Inc.*, 161 Ohio St. 82 (1954), paragraph seven of the syllabus. Essentially, a repair shop owes the customer a duty to use ordinary skill and judgment in performing the services and repairs requested by the customer. *See Landon* at 101. Therefore, a repair shop's duty in a given case generally depends upon the services and repairs requested by the customer. *See e.g.*, *Gerber v. Jim's*

Goodyear, 12th Dist. Butler No. CA97-05-107, 1998 WL 142404 (Mar. 30, 1998) (finding repair shop did not breach a duty to replace the timing belt in the customer's car where customer only requested the shop to replace the water pump); *see also Risk* at 764. "[A] repairman is not liable for failing to discover a latent defect, unless it is shown that he undertook to discover such defect and negligently failed to do so." *Risk* at 764. A latent defect is a defect that is not obvious by visual inspection. *May v. Northern Propane Gas Co.*, 1st Dist. Hamilton No. C-790007, 1980 WL 352757, *2 (Apr. 16, 1980); *see also Goens v. Torco Companies*, 12th Dist. Butler No. CA89-06-092, 1990 WL 4259, *2 (Jan. 22, 1990).

{¶ 63} There is no evidence in the record that indicates Bridgestone had a duty to inspect, repair, or disable the SCDS. The undisputed evidence in the record reveals Romans reported to Hoskin the following problems with the Expedition: "I put a bigger fuse in" and "it keeps blowing the fuse. When you turn the ignition on, touch the brake, and try to put it into reverse, * * * it just blows the fuse." Similarly, the work order states: "Non-system services-when apply brake 1st time or last time, fuse blows for anti-theft, window etc. . . . Has a 30 A[mp] fuse in to keep from blowing * * *." The record does not indicate Romans reported any issues with the cruise control, reported observing brake fluid leakage, or informed Hoskins that the Expedition was subject to a recall due to the SCDS. There is nothing in the conversation between Hoskin and Romans or in the work order which indicated that the inspection or repair of the SCDS was part of the service requested by Romans. Rather, the evidence demonstrates that Romans only requested Bridgestone fix the symptoms he reported. Accordingly, Bridgestone had a duty to repair the Expedition in such a manner that the fuse would stop blowing when the brake pedal was depressed and the vehicle could be shifted out of park.

{¶ 64} Based on the undisputed evidence in this case, we find that Bridgestone discharged its duty. After Cole replaced the brake switch, the fuse stopped blowing. In fact,

Romans even testified: "I didn't think there was any problem with their service work," and he had no further contact with Bridgestone.

{¶ 65} Moreover, nothing in Cole's inspection of the vehicle triggered the need for Cole to continue his inspection beyond the malfunctioning brake switch to the SCDS.[9] As Cole testified, installing a new brake switch resolved the problem with the fuse blowing. Cole reiterated on multiple occasions that after determining the problem was resolved, he would not go beyond that circuit to look for additional problems, unless, in the course of his diagnostic testing, he discovered more problems on the circuit. Cole testified that by using "voltmeters or ohmmeters, and test lights" he identified the Generic Electric Module (GEM), which is basically a computer within the vehicle, as the circuit where the problem originated. After identifying the circuit, and isolating each individual part, he located the problem as the brake switch. After replacing the brake switch, Cole pressed the brake pedal and the fuse did not blow. Cole further testified that he did not find any additional problems within this circuit, and therefore he did not continue his investigation of the circuit once he isolated the brake switch as the problem. Even if Cole did discover an additional problem, in this case, a defective SCDS, the evidence in the record reveals that any repair to the SCDS would have been a separate service that would have required authorization by the customer.

{¶ 66} Cole reiterated that as a matter of practice, if in performing his diagnostic testing, he discovered additional problems on the circuit he was working on, he would relay these to the salesperson. The salesperson would then discuss the available repair options with the customer. Ultimately, the customer would have to authorize any additional repairs. Moreover, the evidence indicates that Bridgestone did not have the authority to complete any of the repairs related to the recall of the SCDS. Only Ford dealerships were authorized to

9. Although Cole does not remember specifically servicing Romans' Expedition, he based his testimony regarding the repair of this vehicle, on his typical procedure in servicing vehicles and his notes on the work order.

complete the necessary repairs on vehicles with a defective SCDS.

{¶ 67} Finally, the record indicates that the SCDS, if defective, was a latent defect. The SCDS was located in the engine compartment. The malfunctioning brake switch, however, was located in the passenger compartment. Both compartments are enclosed and even if they were not enclosed, electrical circuits, upon inspection, have no "visual identifiers" to indicate a defect. Moreover, Cole testified that there was no machinery or diagnostic tool available to him that would allow him to check the "effectiveness of the [entire] electrical system." Based on the diagnostic tools available to Cole and the location of the SCDS, we find that the SCDS falls squarely within the definition of a latent defect. *See May* at *2. There is nothing in the record which suggests Romans requested Bridgestone undertake an extensive examination of the vehicle's entire electrical system, its cruise control, or braking system. Moreover, the record does not show that Bridgestone attempted to discover such a defect and failed to do so.

{¶ 68} Based on the foregoing, the record contains no evidence that Bridgestone had a duty to inspect, repair, or disable the SCDS as part of the service requested and performed on Romans' Expedition.

2. Duty to Warn of a Defective SCDS

{¶ 69} Within his second assignment of error, Romans also contends Bridgestone had a duty to repair, disable, or warn him of the dangerous condition of the SCDS based on Bridgestone's alleged knowledge of the symptoms of a defective SCDS and the resulting fire hazard. Romans asserts that Bridgestone was aware of the symptoms of a defective SCDS and had "specific knowledge that the SCDS in Mr. Romans' Expedition was defective and posed a substantial risk of fire" yet failed to inform Romans of this risk of fire.

{¶ 70} To support his argument that Bridgestone was aware of the symptoms of a defective SCDS, Romans relies on a memorandum sent to Bridgestone employees which

detailed symptoms of a defective SCDS, including: "the speed control may become inoperable, the vehicle may not shift out of park, * * * or a fuse in the system may open." However, this memorandum was sent to all Bridgestone employees on June 3, 2008, three months *after* Bridgestone serviced Romans' Expedition in March 2008. Romans also argues that Bridgestone was aware of the specific risk of fire due to a lawsuit Bridgestone filed against Ford in December 2008 based on a fire at a Texas Bridgestone repair shop. Yet, there was no indication that Hoskin or Cole was aware of this lawsuit. Accordingly, neither the memorandum nor Bridgestone's 2008 lawsuit is sufficient to impute knowledge to Cole or Hoskin of the symptoms of a defective SCDS or the risk of fire at the time Bridgestone serviced Romans' Expedition.

{¶ 71} Finally, Romans argues that Hoskin was aware Ford had issued a recall regarding the SCDS. Hoskin testified that prior to March 1, 2008, he recalled seeing a few news stories regarding certain Ford vehicles "burning up" and Ford issuing a recall regarding SCDSs. Based on this testimony, Romans asserts that Bridgestone had a duty to inform Romans about the "'issue' of spontaneous fires when he reported precisely the same electrical symptoms associated with SCDS failure." First, as mentioned above, at the time Hoskin spoke with Romans, there is no evidence that Hoskin was aware of the symptoms of a defective SCDS. The record instead reveals that Hoskin was only generally aware that Ford had issued a recall due to defective SCDSs causing fires. Even with this knowledge, there is nothing in the record which would suggest and that Hoskin had a duty to inform Romans of the recall. Romans failed to present evidence demonstrating that a repair shop owes a legal duty to advise customers that their vehicle is subject to a recall. Rather, both Cole and Hoskin testified that they would inform customers of recalls only if they "remembered" that a vehicle was subject to a recall. This was done as a "courtesy" to the customer. According to both Hoskin and Cole, Bridgestone did not have any type of system

with "automatic identifiers of recalls or bulletins" which would warn a technician or a salesperson that the customer's vehicle was subject to a recall. Imposing a legal duty upon a repairman to advise customers of recalls under these types of circumstances would be burdensome and unreasonable.[10] *See Risk* at 764.

{¶ 72} Based on the foregoing, Bridgestone had no duty to repair, disable, or warn Romans of the dangerous condition of the SCDS.

{¶ 73} As Romans failed to establish that Bridgestone owed him a duty to warn of, repair, or disable the Expedition's SCDS, we find the trial court properly granted summary judgment in Bridgestone's favor.

{¶ 74} Romans' second assignment of error is overruled.

III. Conclusion

{¶ 75} Having found no merit to Romans' assignments of error, we conclude that the trial court properly granted summary judgment to Sensata and Bridgestone.

{¶ 76} Judgment affirmed.

S. POWELL and PIPER, JJ., concur.

10. As pointed out by Bridgestone, the Federal government, through NHTSA, has developed an extensive system with stringent guidelines and rules to inform consumers of recalls and potential defects in their vehicles.