

Claim No: 413158

IN THE SMALL CLAIMS COURT OF NOVA SCOTIA  
Cite as: Marks v. Custom Vehicle Outfitters Ltd., 2013 NSSM 50

BETWEEN:

DAVID MARKS

Claimant

- and -

CUSTOM VEHICLE OUTFITTERS LIMITED

Defendant

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**REASONS FOR DECISION**

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**BEFORE** Eric K. Slone, Adjudicator

Hearings held at Halifax, Nova Scotia on July 30, September 13 and October 1, 2013

Decision rendered on November 20, 2013

**APPEARANCES** For the Claimant Terry Degen, counsel  
For the Defendant Ian Mclsaac, counsel

**BY THE COURT:**

[1] The gist of this case is well summarized by the Notice of Claim, which reads:

The plaintiff, David Douglas Marks, wished to have a lift kit installed on his 2010 Nissan Frontier four-wheel-drive and approached the defendant, Custom Vehicle Outfitters Limited, [CVO] to have a kit installed. Within thirty days the vehicle became inoperable when the front end differential had a catastrophic failure due to the bearings having inadequate lubrication. When the lift kit was installed the installation resulted in the front end differential being raised so that it was higher than the balance of the drive-shaft components. A proper installation would have required additional oil to be added so that lubrication was available to the moving bearings. The vehicle had been inspected by a Nissan dealership prior to the installation and after the failure of the vehicle had not had any additional lubrication to compensate for the increased height that the differential had after the installation of the lift kit.

[2] The amount claimed by the plaintiff included the following three components:

- a. \$4,100.30 for the cost of the lift kit, which the Claimant is willing to return to the Defendant;
- b. \$5,825.13 being the cost of repair the vehicle to its pre-installation condition, and
- c. \$345 for towing fees after the vehicle broke down.

**The evidence**

[3] As the Claim states, the Claimant was the owner of a 2010 Nissan Frontier 4WD pickup truck and wished to have installed a suspension lift kit, which I understand to be a fairly common modification done to certain kinds of

trucks and SUV's. The effect is to raise the ride height of the vehicle, enabling it to perform better under certain conditions (such as off-roading) and also enabling it to take on larger tires. I suspect that some people just like the look of a vehicle that sits a little higher off the road.

[4] The Defendant is a company that specializes in this type of modification. The Claimant appears to have done some research about suitable lift kits for his vehicle, and attended at the Defendant's shop and negotiated a price for the purchase and installation of this kit. The particular kit is one manufactured in California by company called Fabtech.

[5] The kit was not something that the Defendant had in stock, as it did not typically use this kit. One was ordered (either from California or from an intermediary) and, it would appear from all the evidence, installed precisely according to the manufacturer's instructions.

[6] According to the Claimant, everything worked fine for about a month until October 14, 2012 when his vehicle seized up and would not move. The wheels were locked in place. The vehicle had to be towed and arrived back at the Defendant's shop to be inspected.

[7] The Defendant looked at the somewhat muddy condition of the vehicle and questioned whether it had been driven off road, which the Claimant interpreted as an accusation of abuse. At that point, he instructed the Defendant to transfer the vehicle over to the Nissan dealership in Dartmouth. It was there that the vehicle was eventually repaired.

[8] What the Claimant instructed the Nissan dealership to do was to return the vehicle to its prior condition. In other words, he did not wish to use the lift kit and instructed that it be completely removed. This process required repairs to the frame of the vehicle, which had been cut into as part of the lift kit installation.

[9] The Claimant asserts that he did nothing unusual with the vehicle during that time he drove it, and that he had been off road only a couple of times. Most of his driving was normal road and highway driving.

[10] The Claimant himself does not claim any expertise in auto mechanics. He called upon a friend, Hollis Conrad, who is a former auto repair instructor and red seal mechanic. He was called to give expert testimony at the trial, although no expert report had been prepared in advance. I ruled the time that he was qualified to give opinion evidence.

[11] It was Mr. Conrad's opinion that the differential on the vehicle failed because the pinion bearings and pinion overheated and fused together due to a lack of oil. He noted that one of the effects of the lift kit was to change the angle of the pinion by some 25°. In that particular vehicle, the components in the differential remain lubricated by what is referred to as "splash lubrication". As I understand it, this means that the oil essentially splashes around within the differential and with the right amount of oil and the usual horizontal placement of the differential, enough oil reaches all of the components to keep them lubricated. It is Mr. Conrad's opinion that once the angle of the differential, and the components inside, became tilted too far off the horizontal, the process of oil splashing did not reach all of the pinions and bearings with the result that they

became overheated and fused. Once this happened, catastrophic failure of the differential occurred.

[12] Mr. Conrad based his opinion in part on his examination of the remains of the differential after it was removed and replaced.

[13] Mr. Conrad testified that a mechanic installing this lift kit ought to have anticipated this problem, and either modified the installation by changing the pinion angle to something less than the 25°, or added additional differential fluid. This latter step might have also required that the fill hole be relocated, or an additional fill hole installed, in order for the fluid not to run out as it was being essentially overfilled.

[14] Mr. Conrad was not very specific about how the lift kit might have been installed differently, without radically deviating from the manufacturer's instructions. He suggested that the instructions themselves are probably faulty, in that they do not take any account of this problem. It is his view that installing this item according to the manufacturer's instructions will inevitably lead to problems of this type. Those instructions include the following statement:

Verify differential fluid is at manufacturers recommended level prior to kit installation. Installation of the kit will reposition the differential and the fill plug hole maybe in a different position. (For example, if the manufacturer recommends 3 quarts of fluid, make sure the differential has 3 quarts of fluid.) check your specific manual for correct amount of fluid.  
(Emphasis in original)

[15] The court heard from several witnesses called on behalf of the Defendant. Ray Hickey, the owner operator of the Defendant company, testified that he has twenty-five years in the industry and has been installing lift kits for approximately

fifteen years. During those years he has installed many Fabtech lift kits, although not this particular one for the Nissan Frontier. It was his testimony that after the kit was received, he and his mechanics followed the included instructions precisely. He testified that he has personally installed hundreds of lift kits, many of which have had the effect of changing the pinion angle. In his experience none have failed, at least not because of the change in pinion angle. He testified that after the installation, they ensured that the proper recommended amount of fluid was in the differential, and that he saw no reason to overfill the differential. Indeed, he said, there are significant risks if one overfills the differential, since it can send oil to places where it can harm other components.

[16] Mr. Hickey stated that when the vehicle came back to his shop, it appeared to be coated with mud suggesting that it had been driven off road. He also quoted the Claimant as having denied that he had received instructions about re-torquing the wheels some time after the installation, at which time Mr. Conrad pointed out that the instructions were visible right in the back of the Claimant's truck. According to those instructions, there was a need to tighten the lug nuts after 50 miles. I am unsure from the evidence whether the possible looseness of these lug nuts could possibly have contributed to the problem.

[17] One of Mr. Hickey's theories for what may have gone wrong is that the underside of the vehicle hit something while off-roading, with the result that something internal must have become displaced. Mr. Hickey never had a chance to verify any of his suspicions as he was instructed not to open up the differential, but rather to return the vehicle to the Nissan dealer. At that time, he understood that the Claimant was exploring whether or not his problem might be fixed under warranty. He did not realize at the time that he would never get a chance to look closely at the failed components.

[18] He questions whether the problem really derived from oil starvation, because what he did see did not suggest that this level of heat had been generated.

[19] It was his view that the cost to replace the differential would have been in the vicinity of \$500 plus the actual cost of the part, amounting to perhaps \$1,000 in total. This would have been a far cry from the approximately \$10,000 amount that the Claimant is seeking.

[20] On cross-examination, Mr. Hickey was questioned about the Fabtech company and their experience with this particular lift kit. He said that he spoke to someone at Fabtech and was informed that they had sold approximately 200 such kits, without incident, for the Nissan Frontier, which is a relatively rare vehicle.

[21] He also testified that his mechanics and he would not lightly deviate from the manufacturer's instructions, because as far as he knows these are developed by skilled engineers who are much better qualified. Only in an extreme example, if something looked very wrong, might they have to question those instructions.

[22] I also heard from Craig Stevens, another skilled mechanic who works for the Defendant and who testified that he has installed literally thousands of lift kits, including assisting Mr. Hickey with this one. He testified that he would never overfill a differential when installing a properly engineered lift kit. He said that his training was always to follow manufacturers instructions.

[23] He offered the suggestion that another possibility for why this differential failed, might have been contamination of the fluid. This would not have been something they had caused or could have prevented, because all they did was check the fluid level after the lift kit installation. He also testified that the vehicle, when it came back, looked like it had been off road because of the amount of mud and grass stuck in the fender well.

[24] He also speculated that the type of catastrophic failure of the differential that occurred here, could have been caused by excessive wheel spinning. This can occur if a vehicle is stuck in mud and is revved too high, and the wheel suddenly catches. In order to have traced the cause more accurately, the bearings ought to have been sent away for testing. The observations of someone qualified might have given a more accurate cause.

[25] When asked about the change in angle of the pinion caused by this particular kit, he testified that it was not that different from many other kits that they typically install. Once this problem became known, he did some research to see if other people who have bought this kit have been reporting a similar problem, but did not find anything.

[26] In rebuttal, the Claimant called Trevor MacDonald who is a mechanic at O'Regan's Nissan. He was also the opinion that the likely cause of the failure was that the pinion seized up as a result of oil starvation. He identifies the 25° change in pinion angle to be the culprit. That particular vehicle is designed with a 0° pinion angle, and he believes that 25° is much greater than its inherent tolerance. On cross-examination, he conceded that he does not install these



type of after-market kits, and agreed with the proposition that if doing so a mechanic should follow the manufacturer's instructions.

[27] He also agreed that these instructions did not give the mechanic any discretion to change the angle. He also confirmed that when the vehicle was delivered back to Nissan, he checked the fluid level and found that the recommended amount was indeed still within the differential.

### **Findings of fact**

[28] Many of the facts are not in serious question. The Defendant has expertise in the area of suspension lift kits, and the Claimant placed his reliance on that expertise. Although the Claimant appears to have selected the particular lift kit himself, rather than relying on any recommendations from the Defendant, he would have expected the Defendant to talk him out of it if his selection was clearly ill advised.

[29] The Defendant ordered the lift kit from a reputable manufacturer, and installed it precisely as the manufacturer recommended.

[30] The questions I have to answer are (a) whether the product was negligently designed, and (b) whether that design defect was so obvious that the Defendant ought to have detected the design and either recommended against the kit, or modified it.

[31] The evidence was mixed as to whether or not the angle of the lift kit is in itself problematic. Mr. Conrad strongly believes so, as does Mr. MacDonald.

Neither of these individuals is in the business of either designing or installing suspension lift kits. The witnesses for the Defendant, who have installed thousands of lift kits, testified that many other lift kits also change the pinion angle, without incident. I accept that Messrs. Conrad and MacDonald testified to their opinions in good faith, and that they are knowledgeable people, but I do not believe that these opinions are sufficient to establish that this lift kit is inherently flawed. On all of the evidence, the manufacturer Fabtech is a reputable designer and manufacturer and it is hard to believe that its engineers would not have anticipated that changing the pinion angle is problematic, if it were indeed as obvious as Mr. Conrad appeared to suggest.

[32] There was no evidence before me that this kit has created problems for anyone else. There does not appear to have been any product recall. Mr. Hickey looked for evidence on the internet of similar problems with this lift kit, and found none. In this day and age, it is very easy for consumers who have experienced a common problem to link up with each other and share stories, and perhaps take common action. That has not occurred here.

[33] I believe it would have been extraordinary for the Defendant, had it even considered the possibility of a problem because of the pinion angle, to have taken it upon itself to make modifications and deviate from the manufacturer's instructions. Had such a thought even crossed their minds, they almost certainly would have concluded that they would get into a great deal of potential trouble by doing so. Had anything gone wrong, they would have been justifiably criticized for not following the instructions. They likely also would have voided any warranty that Fabtech might have extended. As such, it is difficult to fault their behaviour.

[34] I am not prepared to make a factual finding that this failure of the differential was caused by the change in pinion angle. On the evidence, there are other possibilities which are cumulatively as probable as the pinion angle theory.

[35] Given my finding that it has not been proven that there is something inherently wrong with the design of this lift kit, it is unnecessary to answer the question as to whether or not the Defendant had a duty, in law, to detect that flaw and/or to improvise some modifications to address this problem.

### **Damages**

[36] Although I have not found any liability, I have a duty to assess damages.

[37] The cost of a new differential, plus labour, would obviously be recoverable. However, I have some difficulty with the Claimant's position, that he should be refunded the entire cost of the lift kit and have his vehicle returned to its original condition.

[38] The Claimant's theory of liability - indeed his only theory set out in the Notice of Claim - included the proposition that the differential needed to be overfilled. If that were correct, then he could have had a new differential installed, with overfill of fluid, and he would have had the entire benefit of what he contracted for. That would have been a job costing about \$1,000.00 - which is a far cry from his \$10,000.00 claim. In my view, that would have been reasonable mitigation, and I would have limited his damages to that, plus the towing bill.

[39] I appreciate that the Claimant probably became spooked by his experience, but he cannot necessarily saddle a third party with the most expensive solution when a modest solution is available.

[40] In the result, however, the claim is dismissed.

**Eric K. Slone, Adjudicator**