

**LEW FREDERICK**  
**STATE SENATOR**  
DISTRICT 22



**OREGON STATE SENATE**  
**900 COURT STREET ST NE**  
**SALEM, OREGON 97301**

March 22, 2023

RE: SB 780 – Senate Judiciary Committee Public Hearing 3/22/2023

Chair Prozanski, Vice-Chair Thatcher and members of the committee,

My Chief of Staff, Nathan Soltz, asked our legislative intern Cameron Quackenbush to compile a memo on the issue of the Carolina squat. Below, I am submitting that memo for the record, which I think you will find very informative. I thank Cameron for putting this together.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Lew Frederick", written in a cursive style.

Lew Frederick  
State Senator  
District 22 – N/NE Portland

To: Nathan Soltz  
From: Cameron Quackenbush  
RE: The Automobile Modification known as the “Carolina Squat”  
Date: 3/12/23

**Question Presented:**

The Carolina Squat is an automobile modification, typically applied to a truck or SUV, which lifts the front end of the truck while leaving the back close to the ground—resembling a “squat.” While its origins are mixed, one thing seems clear—the Carolina Squat is drawing attention all over the country. This leaves the question, what is being done about it? And how safe is this modification?

**Short Answer:**

While I attempted to find a wide array of voices and opinions on the Carolina Squat, my research turned up the simple answer that this modification is simply dangerous and pointless. This modification not only leads to decreased control over a vehicle and blind spots in the front, but also causes issues with the usage of headlights (for both the driver of the vehicle and others). As this trend has been spread largely due to social media, and not due to any utility advantage of the vehicle, passing a law to ban the use of the Carolina Squat is my recommendation.

**Introduction:**

The Carolina Squat (or “Squatted Trucks”<sup>1</sup>) is essentially a truck or an SUV with a lifted front axle and a lowered rear— making the vehicle ride at an angle with the front end pointing up.<sup>2</sup> Its original application was likely Baja Racing in California,<sup>3</sup> for the purpose of “...giv[ing] [the vehicle]... clearance and suspension travel so that the rear of the truck lands before the front when you launch it off of a jump.”<sup>4</sup>

Squatted Truck’s application to drag racing also deserves note given the other bills before the legislature at the moment<sup>5</sup>-- as the tilted body shifts the weight of the engine back towards the rear wheel of the vehicle, giving the rear wheels more traction.<sup>6</sup> Crossed with its increasing popularity on Social Media,<sup>7</sup> Squatted Trucks are seeing a rise to popularity amongst

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<sup>1</sup> Alex Harrington, *Squatted Trucks: What is “Carolina Squat” and why is it banned?* Grandtournation.com (June 6, 2022), <https://grandtournation.com/cars/what-is-carolina-squat-and-why-is-it-banned-for-truck-owners/>

<sup>2</sup> Bill Chappell, *The Carolina Squat is now Illegal on North Carolina’s Roads*, NPR (Dec. 3, 2021), <https://www.npr.org/2021/12/03/1061200749/carolina-squat-squatted-trucks-suvs-illegal-north-carolina>.

<sup>3</sup> *Id.* See also Harrington, *Squatted Trucks: What is “Carolina Squat” and why is it banned?* (June 6, 2022); Kenny Norman, *Carolina Squat: What it is and who started it?* Hotcars.com (Feb. 12, 2022), <https://www.hotcars.com/carolina-squat-what-it-is-where-come-from/> ; Michelle Moscuza, *6 Dangers of Modifying Your Ride Into a Squatted Truck*, MotorBiscuit.com (Feb. 4, 2023), <https://www.motorbiscuit.com/6-dangers-modifying-ride-squatted-truck/>

<sup>4</sup> Bill Chappell, *The Carolina Squat is now Illegal on North Carolina’s Roads*, NPR (Dec. 3, 2021).

<sup>5</sup> S. 363, South Carolina 152nd Legislative Session (S.C. 2023).

<sup>6</sup> Kenny Norman, *Carolina Squat: What it is and who started it?* Hotcars.com (Feb. 12, 2022).

<sup>7</sup> *Id.*

even those who will not be participating in either sort of racing event,<sup>8</sup> other legislatures around the United States have begun taking notice. Already outlawed in both North Carolina, with a bill to ban the dangerous truck modification likely to pass the legislature in South Carolina this year, the Carolina Squat is certainly under scrutiny.<sup>9</sup>

### Specific Dangers:

Though I tried to find a variety of statistics and opinions on Squatted Vehicles for this brief, my research consistently turned up the same result: this modification is dangerous to the driver, to those around them and to the vehicle itself.<sup>10</sup> I will break out three short and concise sources to better explain what I mean:

The first source is the now successful Change.org signature gathering page, which inspired the legislature of North Carolina to take action—banning the truck modification in state statute.<sup>11</sup> It reads in full:

“These trucks blind people with their headlights pointed to the sky and show zero care for others safety, they also pose a danger to passengers in cars by having the nose of their trucks pointed up, causing a side collision to flip a passenger car or truck, their steering is off balance, their trucks braking power is worse. All drivers usually cut off their catalytic converters causing pollution to the enviroment! There is supposed to be a law stating a front bumper shouldn’t be so high but it’s not enforced! This law needs to be done so that lifts on trucks don’t allow a front bumper to go above a standard cars trunk lid and to not allow just the front of a Truck be raised up to cause an unbalance in the trucks suspension and safety issues for others in the community!!!”<sup>12</sup>

The next source to which I would like to draw attention is the aforementioned article by Michelle Moscuzza, *6 Dangers of Modifying Your Ride into a Squatted Truck*,<sup>13</sup> which mirrors much of what was said in the former petition. The article’s six points are:

1. The modification makes towing unsafe, if not impossible, because of how low the bumper sits, and its angle downwards.

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<sup>8</sup> Out of curiosity, I performed a cursory Google Search utilizing the terms “Squatted Trucks Oregon,” and found roughly 4.5 million results, with multiple local car dealerships (including Kandall Auto Oregon, Sherry 4x4, and Lot 99, LLC) seeming willing to make these modifications.

<https://www.google.com/search?q=squatted+trucks+oregon&oq=squatted+trucks+oregon&aqs=chrome..69i57j0i22i30j0i390i2.4530j0j7&sourceid=chrome&ie=UTF-8#ip=1>

<sup>9</sup> See S. 363, South Carolina 152nd Legislative Session (S.C. 2023), <https://www.scstatehouse.gov/billsearch.php> ; and see also H.B. 692, Gen. Assemb. North Carolina (N.C. 2021).

<https://www.ncleg.gov/Sessions/2021/Bills/House/PDF/H692v3.pdf>

<sup>10</sup> See, *inter alia*, Bill Chappell, *The Carolina Squat is now Illegal on North Carolina’s Roads*, NPR (Dec. 3, 2021).

<sup>11</sup> See H.B. 692, Gen. Assemb. North Carolina (N.C. 2021).

<https://www.ncleg.gov/Sessions/2021/Bills/House/PDF/H692v3.pdf> ; see also Harrington, *Squatted Trucks: What is “Carolina Squat” and why is it banned?* (June 6, 2022).

<sup>12</sup> *Make “Carolina Squat” Trucks Modification Illegal*, Change.org (2021). <https://www.change.org/p/north-carolina-state-house-make-carolina-squat-trucks-modifications-illegal?redirect=false>

<sup>13</sup> Michelle Moscuzza, *6 Dangers of Modifying Your Ride Into a Squatted Truck*, MotorBuscuit.com (Feb. 4, 2023).

2. The lower the “squat,” the less headlights do—as when drivers jack up their front bumper, headlights point skywards. This can not only defeat the purpose of headlights for the driver—illuminating nothing in front of them—but can also blind oncoming traffic.
3. Squatted trucks have poor visibility, creating blind spots in the front of the vehicle.
4. Squatting wears out suspensions faster, due to over use from low clearance.
5. Squatting negatively affects braking, as the process of this modification allegedly leads to “decreased brake pad and rotor performance” which can wear on brake pads overtime. This section also notes that braking systems are not designed for the increased friction this can generate at high speeds.
6. Finally, this author notes that Squatting Trucks have increased drag, which decreases fuel efficiency.<sup>14</sup>

Finally, a comprehensive article from Way.com., *Are Squatted Trucks Illegal? Updates on the Squatted Truck Ban*<sup>15</sup> also contains a section written on the dangers of Squatted trucks which reiterates the issues of the frontside blind spots, the tilt leading to issues with headlights (blinding oncoming traffic), wear and tear on the brakes and suspension, and even issues with towing and hauling.<sup>16</sup> This article goes on, in a section entitled “why squat a truck?”, to state:

“Since desert racing is no longer a thing, there is no genuine functional need for folks to squat their trucks. Instead, drivers mostly do it for ‘aesthetic’ reasons these days, probably helped by its social media popularity....The Carolina Squat is kind of popular on social media. This sort of customized car has its own Facebook groups and Instagram profiles. In addition, due to market demand, several manufacturers have created their own squat kits that are available for purchase by anybody.”<sup>17</sup>

It is clear from the various articles cited in this brief that this modification is dangerous and pointless. It should be outlawed in pursuit of increasing safety on public roads.

### **Other State’s Responses:**

Finding no helpful legislation tracking information from the National Conference of State Legislatures on Modified or Squatted Vehicles, or “the Carolina Squat,” I turned to my various sources as potential experts on the subject.<sup>18</sup> As Bill Chappell’s NPR Article state, and Rene Martin’s Way.com Article reiterates, only three states have taken a stance on the Carolina

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<sup>14</sup> *Id.*

<sup>15</sup> Rene Martin, *Are Squatted Trucks Illegal? Updates on the Squatted Truck Ban*, Way.com (2022), <https://www.way.com/blog/are-squatted-trucks-illegal-squatted-truck-ban/#:~:text=Currently%20squatted%20trucks%20are%20illegal,effect%20on%20December%201%2C%202021.>

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> <https://www.ncsl.org/ncsl-search-results/topics/%20/t/1678666517364?searchtext=carolina%20squat>

Squat—North Carolina and Virginia (which have both banned the modification) and South Carolina (with a bill that has passed the senate, and is before the house for passage now).<sup>19</sup>

North Carolina tackled the issue of Squatted Trucks in 2021, with House Bill 692 in 2021.<sup>20</sup> According to the available measure summary posted to North Carolina’s Legislative Website, H.B. 692 “Prohibit[s] the operation of a private passenger automobile which has been altered so that the front fender is four or more inches above the height of the rear fender, on a highway or public vehicular area. [And] [m]ake[s] a third or subsequent violation of the prohibition within 12 months result in license revocation for at least one year.”<sup>21</sup> According to Chappell’s Article, this bill was a response to an online petition, which raised more than 72,000 signatures advocating for outlawing the car modification.

Virginia followed North Carolina’s lead, banning the Carolina Squat following a fatal car crash on Feb. 16, 2022, in which a 19-year old driver crossed the centerline of a road and hit an oncoming car— leaving a father of one dead.<sup>22</sup> In passing S.B. 777, Virginia outlawed squatting trucks in a similar manner to its predecessor, by mandating “that no passenger car or pickup or panel truck shall be operated on a public highway if the suspension, frame, or chassis has been modified by any means so as to cause the height of the front bumper to be four or more inches greater than the height of the rear bumper.”<sup>23</sup>

Finally, South Carolina has joined the conversation during this legislative session, introducing and progressing from the Senate all the way to the House Floor, SB 0363.<sup>24</sup> Strikingly similar in language and scope to the previous two passed bills, South Carolina’s ban “...relat[es] to the restriction of elevating or lowering a motor vehicle; so as to prohibit motor vehicle modifications that result in the motor vehicle's front fender being raised four or more inches above the height of the rear fender, to provide for the manner of measuring the height of the front fender in relation to the rear fender, and to provide penalties for violations.”<sup>25</sup> I have tracked down these pieces of legislation, and have attached them for reference.

## Conclusion:

To conclude, the Carolina Squat (or Squatted Vehicles) serve practically no purpose in the modern age beyond drag racing or truck jumping, and really exist only as personal vanity statements. This modification is dangerous, as it leads to vehicle blind spots, headlight malfunctions, and mechanical defects within the car. Other states are taking action to ban this modification, and following this lead early will only curb this problem before it has a chance to

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<sup>19</sup> See Bill Chappell, *The Carolina Squat is now Illegal on North Carolina’s Roads*, NPR (Dec. 3, 2021); see also Rene Martin, *Are Squatted Trucks Illegal? Updates on the Squatted Truck Ban*, Way.com (2022),

<sup>20</sup> H.B. 692. Gen. Assemb. (N. Carolina, 2021). [https://dashboard.ncleg.gov/api/Services/BillSummary/2021/H692-SMTT-74\(e2\)-v-1](https://dashboard.ncleg.gov/api/Services/BillSummary/2021/H692-SMTT-74(e2)-v-1)

<sup>21</sup> *Id.*

<sup>22</sup> James Gilboy, *The ‘Carolina Squat’ Truck Trend is Outlawed in Virginia Now, Too: A fatal crash spurred a second stat into banning the mod*, TheDrive.com (Mar. 22, 2022), <https://www.thedrive.com/news/44861/the-carolina-squat-truck-trend-is-outlawed-in-virginia-now-too>

<sup>23</sup> Staff Summary of S.B. 777, Reg. Leg. Session (Virginia, 2022), <https://lis.virginia.gov/cgi-bin/legp604.exe?221+sum+SB777S>.

<sup>24</sup> S.B. 0363, 125th Gen. Assemb. (S. Carolina, 2023). <https://www.scstatehouse.gov/billsearch.php>

<sup>25</sup> *Id.*

gain a foothold. As my research demonstrates, lifted trucks are already a market within Oregon. And with the influences of social media, how long will it be until this trend catches on?