MR24-1

IN THE MATTER OF THE SEARCH WARRANT OF THE DESCRIBIED VEHICLE SEARCH WARRANT RETURN 2021 KIA FORTE VIN 3KPF24AD0ME363330 LOCATED AT NEBRASKA STATE PATROL EVIDENCE FACILITY AT 3921 W CRAW STREET LINCOLN, LANCASTER COUNTY, NEBRASKA 68524.

STATE OF NEBRASKA)) ss. COUNTY OF LANCASTER)

The undersigned states that they received the Search Warrant issued herein on the 3rd day of April, 2024, and that said search warrant was executed the same day.

DATED this 11th day of April, 2024.

Trp. S. Bessmer #104

SUBSCRIBED AND SWORN to before me this <u>//</u> day of <u>Hori 1</u>, 2024.

A General Notary - State of Nebraska BRENDA J. COUFAL
My Comm. Exp. Jan. 25, 2025.



ANCASTER COUNTY 1024 APR 11 PM 3: 50 CLERK OF THE DISTRICT COURT

NSP24010430

STATE OF NEBRASKA)) SS.	SEARCH WARRANT
COUNTY OF LANCASTER	ý	

TO: Simon Bessmer #104, a law enforcement officer of the Nebraska State Patrol, and to all other law enforcement officers:

1. This matter came on for consideration on the April 3rd, 2024, upon the sworn affidavit and application for issuance of a search warrant of Trooper Simon Bessmer, of the Nebraska State Patrol, and the Court, being fully advised in the premises finds as follows:

2. That the Court has jurisdiction of this matter pursuant to <u>Neb.Rev.Stat.</u> § 29-812 through <u>Neb.Rev.Stat.</u> § 29-829.

3. That based upon the sworn affidavit and application for issuance of a search warrant of Trooper Simon Bessmer, of the Nebraska State Patrol dated the third day of April, 2024; there is probable cause to believe that secured on the premises at the Nebraska State Patrol Evidence Facility, 3921 W Craw St, Lincoln, Lancaster County, Nebraska the following property, to-wit:

a. Any airbag Sensing and Diagnostic Module(s) on a 2021 Kia Forte Vin 3KPF24AD0ME363330. Any and all data located in an airbag Sensing and Diagnostic Module (SDM) or any other module of a similar nature, which may include precollision, collision, and post collision data including, but not limited to, vehicle speed, throttle position, brake position and engine revolutions per minute (RPM's) prior to airbag deployment, changes in velocity (delta-v), and seatbelt usage. Said data may be either downloaded via the diagnostic port on the vehicle or the entire module may be removed from the vehicle for later examination off site. It shall be within the sole discretion of the law enforcement officer executing this warrant as to how such data shall be retrieved.

-ANCASTER COUNTY 50 ö 2024 APR I I PM

4. YOU ARE THEREFORE ORDERED, with the necessary and proper assistance, to search the above-described premises, including the dwelling, outbuildings, or vehicles on the premises, for the purpose of seizing the before described property, and if found, to seize and deal with the same as provided by law.

5. IT IS FURTHER ORDERED, that execution of the search warrant be forthwith during daylight hours.

6. IT IS FURTHER ORDERED, that Trooper Simon Bessmer, of the Nebraska State Patrol, or his designee, make return of this search warrant to me within ten days after the date hereof. An amended return may be filed after ten days, if seized and inventoried evidence pursuant to this warrant is further analyzed as authorized herein.

GIVEN under my hand this day of 024JUDGEOF



STATE OF NEBRASKA

LANCASTER COUNTY AFFIDAVIT AND APPLICATION) SS2024 APR 11 PM 3:50 FOR ISSUANCE OF A SEARCH WARRANT

COUNTY OF LANCASTER

CLERK OF THE **DISTRICT COURT**

)

The complaint and affidavit of Trooper Simon Bessmer Badge #104, Nebraska State Patrol, on this April 3rd, 2024, who being first duly sworn, upon oath says:

Your affiant is a Nebraska State Patrol Trooper assigned to the Patrol Division and is stationed in Lincoln, Nebraska. The affiant has been a certified law enforcement officer since 2020 and a Crash Reconstructionist since 2023.

That he has just and reasonable grounds to believe, and does believe, that there is concealed or kept hereinafter described, the following property, to-wit:

1. Any airbag Sensing and Diagnostic Module(s) on a 2021 Kia Forte Vin 3KPF24AD0ME363330. Any and all data located in an airbag Sensing and Diagnostic Module (SDM) or any other module of a similar nature, which may include pre-collision, collision, and post collision data including, but not limited to, vehicle speed, throttle position, brake position and engine revolutions per minute (RPM's) prior to airbag deployment, changes in velocity (delta-v), and seatbelt usage. Said data may be either downloaded via the diagnostic port on the vehicle or the entire module may be removed from the vehicle for later examination off site. It shall be within the sole discretion of the law enforcement officer executing this warrant as to how such data shall be retrieved. Furthermore, such law enforcement officer or agency shall be entitled to request and receive the services of any person to assist such law enforcement officer or agency in retrieving, reading, examining, and/or analysis said data.

That said property is concealed or kept in, on, or about the following described place or person, to-wit:

1. Nebraska State Patrol Evidence Facility, 3921 W Craw St, Lincoln, Lancaster County, Nebraska. The said items described previously are contained in or are presently attached to a 2021 Kia Forte Vin 3KPF24AD0ME363330, presently stored in said facility. That said property is under the control or custody of Nebraska State Patrol at 3921 W Craw St, Lincoln, Lancaster County, Nebraska.

That the following are the grounds for issuance of a search warrant for said property and the reasons for his belief, to-wit:

- 1. The affiant has been trained in the specialized field of traffic accidents and crash reconstruction. The affiant is requesting the retrieval of crash data from vehicle airbag sensing and diagnostic modules (SDM's).
- 2. On March 28th, 2024, a crash occurred in Cass County near mile marker 424 on Interstate 80 eastbound. A 2021 Kia Forte was eastbound on Interstate 80 near mile marker 424 when it was passing vehicles on the inside shoulder. The driver lost control of the vehicle, crossed all three lanes of travel, went into the south ditch, and rolled. Both the driver and the

passenger were ejected from the Kia. Investigations are still on-going to prove who was driving the Kia. Both the driver and the passenger sustained life-threatening injuries. Alcohol was a contributing factor in this crash.

- 1. For the purposes of this application for a search warrant, SDM (sensing and diagnostic modules), RCM (restraint control module), EDR (event data recorders) and a vehicle's black box provide relatively the same information and the terms are used interchangeably. Based upon a review of literature provided by Vetronix, a company that manufactures diagnostic tools and components capable of reading SDM's, the above-described vehicle contains an SDM that may contain pre-crash and crash information that would aid in the investigation of the crash. I believe that the vehicle contains a sensing and diagnostic module (SDM) that may contain pre-crash information that would aid the investigation of this case.
- 2. Crash data useful to determine the cause, location, and conditions of an accident or crash may be available and obtained from certain select model vehicles via airbag sensing and diagnostic modules or SDM's where the airbag has deployed or where there has been a near deployment. SDM is the name typically used by General Motors while Ford calls it an RCM, or Restraint Control Module.
- 3. For a number of years automotive manufactures has installed event data recorders on many of their vehicles equipped with air bags. Initially very limited information, including the presence of any air bag fault codes and a variety of times associated with sensing and deployment, were recorded. Over time, the recording systems have evolved so that additional data, such as the vehicle's longitudinal change in velocity (delta-V), are captured. The most recent generation of sensing and diagnostic modules (SDM) also records some pre-crash data. Specific data elements recorded are vehicle speed, engine rpm, brake light status, and throttle position. These variables are currently recorded at each of five, one second intervals prior to the occurrence of a crash. Also stored is the state of the driver's seat belt switch which can provide an indication of restraint use. The EDR in vehicles can record both an air bag deployment event and a so-called "near deployment". If the SDM identifies a potential crash, it monitors the vehicle's acceleration-time history and its built-in algorithm determines whether or not the air bag systems should be deployed. If the collision is not of sufficient severity to warrant deployment, the incident is recorded in the neardeployment file. Minor near deployment events are over-written by more severe neardeployment events, or are cleared after 250 ignition cycles. In the event that a command to deploy is issued, the associated pre-crash and crash data are permanently written out to the deployment file in the SDM's memory. In the latter case, a warning code is set and, if the vehicle is to be repaired, the SDM must be replaced
- 4. If the SDM identifies a potential crash, it monitors the vehicle's acceleration-time history and a computer determines whether the air bag systems should be deployed. If the collision is not of sufficient severity to warrant deployment, the incident is recorded in the neardeployment file. Minor near deployment events are over-written by more severe neardeployment events, or are cleared after over 100 ignition cycles. In the event that an airbag is deployed, the associated pre-crash and crash data are permanently written out to the deployment file in the SDM's memory. In the latter case, a warning code is set and, if the vehicle is to be repaired, the SDM must be replaced.
- 5. It is my belief that the ignition of the suspect's vehicle has not been cycled 250 times, but less than 10 times since the crash, therefore any near deployment information would still be available through downloading. It is my belief that the force of the crash was likely sufficient

to trigger a deployment response in the SDM.

- 6. Therefore, I am asking for permission to enter the above-described vehicle for the purposes of retrieving and all information located in the SDM module. The SDM itself may or may not be removed. If possible, the retrieval, examination, and/or downloading of the SDM will consist of simply plugging a computer into the diagnostic connection on the vehicle and download the data on the SDM. The data will then be processed by a computer and printed in appropriate graphs and forms. However, due to lack of power, damage to the vehicle or other factors, the SDM may have to be removed from the vehicle. If removed from the vehicle, the data will be removed from the SDM and will be placed back with the vehicle as the data obtained from the SDM is the evidence.
- 7. I request that a search warrant be issued to enter said vehicle and retrieve such data as mentioned above and to be entitled to request and receive the services of any person to assist such law enforcement officer or agency in retrieving, reading, examining, and/or analysis said data.

A warrant authorizing a DAY time search is requested.

WHEREFORE, your affiant requests that a Search Warrant may be issued according to law.

Simon Bessmer Nebraska State Patrol

day of

SUBSCRIBED AND SWORN TO before me this

IN THE MATTER OF THE SEARCH WARRANT **OF THE DESCRIBIED VEHICLE** SEARCH WARRANT RETURN 2017 CHEVROLET EQUINOX VIN 2GNFLGEK9H6140580 LOCATED AT NEBRASKA STATE PATROL EVIDENCE FACILITY AT 3921 W CRAW STREET LINCOLN, LANCASTER COUNTY, NEBRASKA 68524.

STATE OF NEBRASKA)) ss. **COUNTY OF LANCASTER**)

The undersigned states that they received the Search Warrant issued herein on the 3rd day of April, 2024, and that said search warrant was executed the same day.

DATED this 11th day of April, 2024.

S. Bessmer #104

SUBSCRIBED AND SWORN to before me this day of

Notary

A Ger	neral Notary - State of Nebraska
A Ger	BRENDA J. COUFAL
	My Comm. Exp. Jan. 25, 2025.

ANCASTER COUNT ഗ ö ERK OF THE 2 ISTRIC APR | NSP24009424

STATE OF NEBRASKA)) SS.SEARCH WARRANTCOUNTY OF LANCASTER)

TO: Simon Bessmer #104, a law enforcement officer of the Nebraska State Patrol, and to all other law enforcement officers:

1. This matter came on for consideration on the April 3rd, 2024, upon the sworn affidavit and application for issuance of a search warrant of Trooper Simon Bessmer, of the Nebraska State Patrol, and the Court, being fully advised in the premises finds as follows:

2. That the Court has jurisdiction of this matter pursuant to <u>Neb.Rev.Stat.</u> § 29-812 through <u>Neb.Rev.Stat.</u> § 29-829.

3. That based upon the sworn affidavit and application for issuance of a search warrant of Trooper Simon Bessmer, of the Nebraska State Patrol dated the third day of April, 2024; there is probable cause to believe that secured on the premises at the Nebraska State Patrol Evidence Facility, 3921 W Craw St, Lincoln, Lancaster County, Nebraska the following property, to-wit:

a. Any airbag Sensing and Diagnostic Module(s) on a **2017 Chevrolet Equinox Vin 2GNFLGEK9H6140580**. Any and all data located in an airbag Sensing and Diagnostic Module (SDM) or any other module of a similar nature, which may include pre-collision, collision, and post collision data including, but not limited to, vehicle speed, throttle position, brake position and engine revolutions per minute (RPM's) prior to airbag deployment, changes in velocity (delta-v), and seatbelt usage. Said data may be either downloaded via the diagnostic port on the vehicle or the entire module may be removed from the vehicle for later examination off site. It shall be within the sole discretion of the law enforcement officer executing this warrant as to how such data shall be retrieved.

-ANCASTER COUNT

2024 APR 1 1 PM 3: 5

4. YOU ARE THEREFORE ORDERED, with the necessary and proper assistance, to search

the above-described premises, including the dweffling, outbuildings, or vehicles on the premises, for the purpose of seizing the before described property, and if found, to seize and deal with the same as provided by law.

5. IT IS FURTHER ORDERED, that execution of the search warrant be forthwith during daylight hours.

6. IT IS FURTHER ORDERED, that Trooper Simon Bessmer, of the Nebraska State Patrol, or his designee, make return of this search warrant to me within ten days after the date hereof. An amended return may be filed after ten days, if seized and inventoried evidence pursuant to this warrant is further analyzed as authorized herein.

GIVEN under my hand this 'day of JUD

STATE OF NEBRASKA

COUNTY OF LANCASTER

LANCASTER COUNTYAFFIDAVIT AND APPLICATION SS 2024 APR 11 PM 3:51 FOR ISSUANCE OF A SEARCH WARRANT

CLERK OF THE

DISTRICT COURT The complaint and affidavit of Trooper Simon Bessmer Badge #104, Nebraska State Patrol, on this April 3rd, 2024, who being first duly sworn, upon oath says:

Your affiant is a Nebraska State Patrol Trooper assigned to the Patrol Division and is stationed in Lincoln, Nebraska. The affiant has been a certified law enforcement officer since 2020 and a Crash Reconstructionist since 2023.

That he has just and reasonable grounds to believe, and does believe, that there is concealed or kept hereinafter described, the following property, to-wit:

1. Any airbag Sensing and Diagnostic Module(s) on a 2017 Chevrolet Equinox Vin 2GNFLGEK9H6140580. Any and all data located in an airbag Sensing and Diagnostic Module (SDM) or any other module of a similar nature, which may include pre-collision, collision, and post collision data including, but not limited to, vehicle speed, throttle position, brake position and engine revolutions per minute (RPM's) prior to airbag deployment, changes in velocity (delta-v), and seatbelt usage. Said data may be either downloaded via the diagnostic port on the vehicle or the entire module may be removed from the vehicle for later examination off site. It shall be within the sole discretion of the law enforcement officer executing this warrant as to how such data shall be retrieved. Furthermore, such law enforcement officer or agency shall be entitled to request and receive the services of any person to assist such law enforcement officer or agency in retrieving, reading, examining, and/or analysis said data.

That said property is concealed or kept in, on, or about the following described place or person, to-wit:

 Nebraska State Patrol Evidence Facility, 3921 W Craw St, Lincoln, Lancaster County, Nebraska. The said items described previously are contained in or are presently attached to a 2017 Chevrolet Equinox Vin 2GNFLGEK9H6140580, presently stored in said facility. That said property is under the control or custody of Nebraska State Patrol at 3921 W Craw St, Lincoln, Lancaster County, Nebraska.

That the following are the grounds for issuance of a search warrant for said property and the reasons for his belief, to-wit:

- 1. The affiant has been trained in the specialized field of traffic accidents and crash reconstruction. The affiant is requesting the retrieval of crash data from vehicle airbag sensing and diagnostic modules (SDM's).
- 2. On March 20th, 2024, a crash occurred in Sauders County at the intersection of Highway 77 and Highway 109. It appears a northbound 2017 Chevrolet Equinox failed to yield to a 2016 Freightliner Coronado, which had the right of way through the intersection. Both the driver and passenger of the 2017 Chevrolet Equinox were pronounced deceased.

- 1. For the purposes of this application for a search warrant, SDM (sensing and diagnostic modules), RCM (restraint control module), EDR (event data recorders) and a vehicle's black box provide relatively the same information and the terms are used interchangeably. Based upon a review of literature provided by Vetronix, a company that manufactures diagnostic tools and components capable of reading SDM's, the above-described vehicle contains an SDM that may contain pre-crash and crash information that would aid in the investigation of the crash. I believe that the vehicle contains a sensing and diagnostic module (SDM) that may contain pre-crash information that would aid the investigation of this case.
- 2. Crash data useful to determine the cause, location, and conditions of an accident or crash may be available and obtained from certain select model vehicles via airbag sensing and diagnostic modules or SDM's where the airbag has deployed or where there has been a near deployment. SDM is the name typically used by General Motors while Ford calls it an RCM, or Restraint Control Module.
- 3. For a number of years automotive manufactures has installed event data recorders on many of their vehicles equipped with air bags. Initially very limited information, including the presence of any air bag fault codes and a variety of times associated with sensing and deployment, were recorded. Over time, the recording systems have evolved so that additional data, such as the vehicle's longitudinal change in velocity (delta-V), are captured. The most recent generation of sensing and diagnostic modules (SDM) also records some pre-crash data. Specific data elements recorded are vehicle speed, engine rpm, brake light status, and throttle position. These variables are currently recorded at each of five, one second intervals prior to the occurrence of a crash. Also stored is the state of the driver's seat belt switch which can provide an indication of restraint use. The EDR in vehicles can record both an air bag deployment event and a so-called "near deployment". If the SDM identifies a potential crash, it monitors the vehicle's acceleration-time history and its built-in algorithm determines whether or not the air bag systems should be deployed. If the collision is not of sufficient severity to warrant deployment, the incident is recorded in the neardeployment file. Minor near deployment events are over-written by more severe neardeployment events, or are cleared after 250 ignition cycles. In the event that a command to deploy is issued, the associated pre-crash and crash data are permanently written out to the deployment file in the SDM's memory. In the latter case, a warning code is set and, if the vehicle is to be repaired, the SDM must be replaced
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- 5. It is my belief that the ignition of the suspect's vehicle has not been cycled 250 times, but less than 10 times since the crash, therefore any near deployment information would still be available through downloading. It is my belief that the force of the crash was likely sufficient to trigger a deployment response in the SDM.
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of retrieving and all information located in the SDM module. The SDM itself may or may not be removed. If possible, the retrieval, examination, and/or downloading of the SDM will consist of simply plugging a computer into the diagnostic connection on the vehicle and download the data on the SDM. The data will then be processed by a computer and printed in appropriate graphs and forms. However, due to lack of power, damage to the vehicle or other factors, the SDM may have to be removed from the vehicle. If removed from the vehicle, the data will be removed from the SDM and will be placed back with the vehicle as the data obtained from the SDM is the evidence.

 I request that a search warrant be issued to enter said vehicle and retrieve such data as mentioned above and to be entitled to request and receive the services of any person to assist such law enforcement officer or agency in retrieving, reading, examining, and/or analysis said data.

A warrant authorizing a DAY time search is requested.

WHEREFORE, your affiant requests that a Search Warrant may be issued according to law.

104

Simon Bessmer Nebraska State Patrol

SUBSCRIBED AND SWORN TO before me this

day of a