

# Public Safety Official and First Responder Interaction Plan

# Call 1-800-815-0780, Option 1, for immediate assistance with any Aurora autonomous truck

If you need guidance on interacting with one of our self-driving trucks with a <u>vehicle operator on board</u>, see our related guide:

Public Safety Official and First Responder Interaction Plan; Vehicle Operator Edition

The following pages include specific guidance for our <u>driverless</u> trucks.

<u>Introduction</u>	<b>- 04</b>
Identifying an Aurora Truck	_ 07
Current Operations	09
Interacting with the Truck	13
Turning Off Battery Power Supply _	_ 28
Firefighting and Extrication	_ 30
Towing Information	_ 33
Additional Resources	_ 35



## Introduction

This section explains how this guide was developed, its intended use, and what will trigger updates in the future.

#### INTRODUCTION

## Development process & intended use

This guide was developed to assist public safety officials and first responders who may interact with trucks equipped with the Aurora Driver, our self-driving vehicle technology, with input from these stakeholders.

The contents of this guide are aligned with applicable guidance from the Automated Vehicle Safety Consortium's "Best Practice for First Responder Interactions with Fleet-Managed Automated Driving System-Dedicated Vehicles (ADS-DVs)".

In addition to providing this guide to public safety officials and first responders, we notify state and local governments prior to beginning operations and provide relevant updates as needed.

#### INTRODUCTION

## Vehicle operators

Our fleet now operates with a mix of autonomous, single vehicle operator, and co-piloted vehicles.

- Autonomous vehicles will typically have no one on board, but in some instances may have passengers on board who are observing the trip.
- When a single vehicle operator is present in the driver's seat, they are referred to as the "pilot"; they hold a valid CDL, are specially trained to supervise the Aurora Driver, and are solely focused on safe operation of the truck for development and testing purposes.
- As we expand and develop new routes, there may be a trained specialist in the passenger seat who monitors and annotates the behavior of the Aurora Driver on a laptop. This operator is referred to as a "co-pilot".

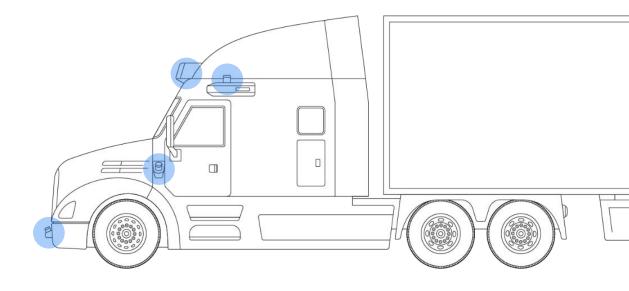
## Identifying an Aurora truck

This section describes the trucks and sensors we use to test the Aurora Driver, our self-driving technology.

#### **IDENTIFICATION**

## Identifying an Aurora truck

- Sensors (see blue dots on the image) are mounted on the roof, right and left sides of the cab below the rear-view mirrors, and on the front of the tractor.
- Aurora branding may be located on the sides of the vehicle next to the driver and passenger side windows.
- Our legal business name, Aurora
   Operations, Inc., and USDOT
   #3441156 are posted on each side
   of the tractor. For assistance on
   site, call 1-800-815-0780.
- Our tractor may be pulling a trailer that does not say "Aurora" on it.



The tractor will be hauling a trailer most of the time

## **Current operations**

This section describes our operational design domain (ODD), including where we operate, the conditions under which we operate, and the policies we follow to keep ourselves and other road users safe.

#### **CURRENT OPERATIONS**

## Where we operate

Beginning in early 2025, and as we progress our technology, we expect our vehicles will operate in autonomy, both supervised and with no vehicle operator, within the following ODD:

- On public roads in Texas, New Mexico, and Arizona;
- Within the speed limits of the roadways where we operate (speed limits ranging from 25 to 75 mph);
- In suburban and urban areas, including in dense traffic;
- Day and night;
- In highway construction and work zones with cones and barriers; and
- In weather conditions for which we understand how the Aurora Driver will perform, including light to medium rain.

#### **CURRENT OPERATIONS**

## Where we operate

The Aurora Driver is capable of driving on asphalt, concrete, and gravel. We are able to navigate all road types and features on our route including:

- A variety of roads, such as:
  - One-way and two-way roads, both divided and undivided
  - Arterials, collectors, connecters, frontage, limited access, and highways
- Roadside features, such as:
  - Bollards, curbs, hydrants, guardrails, jersey barriers, medians, gores, bridges, overpasses, and underpasses

#### **CURRENT OPERATIONS**

## Where we operate

Our current commercial routes are along I-45, I-20, and I-10 in Texas.

#### We have terminals in:

- Aledo
- Palmer
- Houston
- El Paso
- Phoenix (in development)



## Interacting with the truck

This section describes how to identify the system state; how to access documentation and the cab (if necessary); and how to release the vehicle.

## Pulling Over the Vehicle



If law enforcement deems it is necessary to pull over the vehicle, they should approach the truck as they would any other vehicle.



A quick flashing amber light on the sensor pod, located above the side mirrors, will indicate from a distance that the vehicle is clear to approach.

## **Interaction Procedures** for First Responders

#### Follow the recommended actions to secure the truck:

- Determine whether the vehicle is immobilized by referring to the sensor pod lights (see following slides).
- 2. Call 1-800-815-0780 and select Option 1 to speak with the Aurora Command Center.
  - a. State the purpose for your call.
  - b. Identify yourself.
  - c. Ask for instructions to either:
    - i. Access documentation; or
    - ii. Access the cab.
  - d. Communicate required actions for Aurora and / or release the vehicle.

## Determining Vehicle System State

Refer to the illuminated, quick flashing amber light on the sensor pod above the side mirrors to determine the vehicle state. The quick flashing light indicates a "clear to approach" state, and no light indicates that the vehicle can be approached but could potentially move.







## Determining Vehicle System State

A quick flashing amber light on the sensor pod indicates that the vehicle is immobilized and will not move.

The light is visible from in front of, beside, and behind the vehicle.

In rare cases where there is no quick flashing amber light visible, you can approach the vehicle, but be aware that it could move.

It's always best to first call 1-800-815-0780, Option 1, for assistance.



## Disengaging self-driving

- The vehicle will remain stationary until you release it, so there is no need for you to "disable" the vehicle or "disengage" self-driving mode for a routine stop.
- If you believe you need to disengage self-driving mode, please call 1-800-815-0780 and select Option 1 to communicate your concerns to the Command Center.
- A Command Center Specialist will help you access the document lock box, and in special circumstances, the cab.
- If necessary, work with the Command Center and follow the instructions under "Towing" to work with a towing company to move the vehicle.

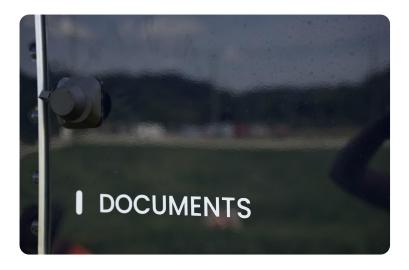
## 1-800 number procedures

- When you call the 1-800 number, the Command Center Specialist will ask for the following:
  - Name,
  - Organization, and
  - Badge / serial number.
- They will then place you on a brief hold and call your Dispatch to verify your identity.
- Once your identity has been verified, the Command Center Specialist will provide you with a code to the key and / or document lockbox.
- Instructions for accessing the key and document lockbox and vehicle key are included on the following slides.

## **Accessing documentation**



A documentation binder is located in a lockbox inside of the passenger's side luggage compartment.



The compartment is labeled "Documents" for easy identification.

## **Accessing documentation**

The document lockbox contains a binder with the following paperwork:

- Insurance card
- Registration
- Preferred towing vendors
- Relevant permits



## **Accessing documentation**

Follow these instructions to access documentation in the lockbox:



**01** Call or radio your dispatch to reach our Command Center at 1-800-815-0780 and select Option 1.



**02** Remove the dust cap from the combination lock.



**03** Enter the three-digit code you receive and turn the lock counter-clockwise to open.

## **Accessing documentation**

Documentation access instructions continued from the previous slide:



**04** Remove the binder from its holder to review paperwork.



**05** Return the binder to its holder when finished with your review.



**06** Secure the door, scramble the code, and release the vehicle (see slide 28).

## Accessing the cab



A key is located in a lockbox beside the passenger's side door.



The compartment is labeled "Key" for easy identification.

## Accessing the cab

If you have cause to enter, follow these instructions to access the cab:



**01** Call or radio your dispatch to reach our Command Center at 1-800-815-0780 and select Option 1.



**02** Enter the four-digit code you receive from Aurora or your dispatcher.



**03** Open the key lockbox by pulling the handle towards you.

## Accessing the cab

#### Cab access instructions continued from the previous slide:



**04** Remove the key from the lockbox.



**05** Unlock the cab by inserting the key into the door. Lock the door when finished.



**06** Return the key, secure the lockbox, and scramble the code.

## Releasing the vehicle



Release the vehicle by telling the Command Center Specialist or your dispatcher that the vehicle may return to the road.



Once released, the vehicle will wait while you return to your vehicle before preparing to re-enter the roadway

## **Turning off battery power supply**

This section provides instructions on how to safely turn off the truck's battery power supply to assist first responder activities.

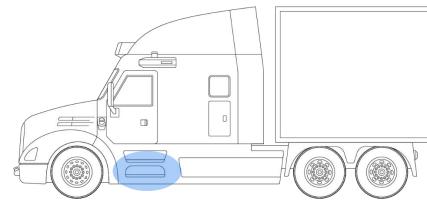


#### TURNING OFF BATTERY POWER SUPPLY

### **Batteries**

Batteries are located beneath the driver's door.

There is no main shut off for power supply, so follow best practices for interacting with batteries and battery fires.







## Firefighting and extrication

This section includes recommended guidance for how to fight a fire in the truck and safety considerations if it is necessary to extricate passengers.

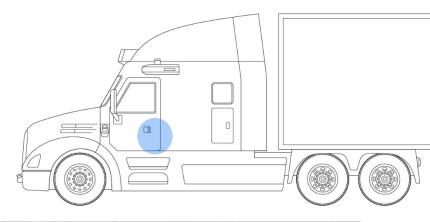
#### FIREFIGHTING AND EXTRICATION

## **Firefighting**

Each truck is outfitted with a fire extinguisher under the driver's seat.

Firefighters and first responders should follow current best practices for fighting fires in commercial motor vehicles.

See <u>Additional Resources</u> (page 35) for more information.



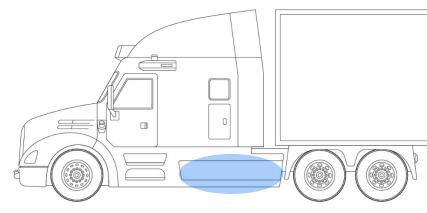


#### FIREFIGHTING AND EXTRICATION

## **Firefighting**

The truck has two fuel tanks located beneath the sleeper cab that are accessible at the rear of the tractor near the catwalk.

Avoid cutting fuel tank, fuel, or coolant lines.







## **Towing information**

This section provides towing information.

#### TOWING INFORMATION

## **Towing**

- Please call 1-800-815-0780 and select Option 1 for assistance with arranging a tow.
- Depending on the situation, Aurora personnel may be en route to repair and / or move the vehicle.
- A heavy duty wrecker is needed; flatbed towing is not possible.
- Towing personnel should refer to page 8 of this guide to review the sensor locations to avoid damage if possible.
- Law enforcement should refer to page 24 of this guide to access the cab to complete the tow inventory sheet.

## **Additional Resources**

This section includes links to additional commercial vehicle firefighting best practice guidance and Aurora company resources.

#### **ADDITIONAL RESOURCES**

## **Firefighting**

#### **Fire Engineering**

Heavy Truck Extrication: Truck Types and Hazard Identification

#### **ADDITIONAL RESOURCES**

### Company resources

Safety at Aurora

aurora.tech/safety

**Aurora's Voluntary Safety Self-Assessment (VSSA)** 

View Our VSSA

#### **Collision Data**

See Aurora's Law Enforcement Guidelines to request collision data

# Aurora