

# **Owner's Manual**



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**EXHIBIT 6** 

## **Infotainment System**

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## Introduction

Read the following pages to become familiar with the features.

## ⚠ Warning

Taking your eyes off the road for too long or too often while using any infotainment feature can cause a crash. You or others could be injured or killed. Do not give extended attention to infotainment tasks while driving. Limit your glances at the vehicle displays and focus your attention on driving. Use voice commands whenever possible.

The infotainment system has built-in features intended to help avoid distraction by disabling some features when driving. These features may gray out when they are unavailable. Many infotainment features are also available through the instrument cluster and steering wheel controls. Before driving:

- Become familiar with the operation, center stack controls, steering wheel controls, and infotainment display.
- Set up the audio by presetting favorite stations, setting the tone, and adjusting the speakers.
- Set up phone numbers in advance so they can be called easily by pressing a single control or by using a single voice command.

See Distracted Driving 🗘 173.

#### Active Noise Cancellation (ANC)

If equipped, ANC reduces engine noise in the vehicle's interior. ANC requires the factory-installed audio system, radio, speakers, amplifier (if equipped), induction system, and exhaust system to work properly. Deactivation is required by your dealer if related aftermarket equipment is installed.

### Overview

#### Infotainment System

The infotainment system is controlled by using the infotainment display, controls on the center stack, steering wheel controls, and voice recognition.



- 1. 🏠 (Home Page)
  - Press to go to the Home Page. See "Home Page" later in this section.
  - Press to exit Android Auto or Apple CarPlay. To enter back into Android Auto or Apple CarPlay, press and hold. See Apple CarPlay and Android Auto ⇔ 146.
- 2. KM
  - Radio: Press and release to go to the previous station or channel. Press and hold to fast seek the next strongest previous station or channel. See AM-FM Radio ⇔ 116.

### 112 Infotainment System

- USB/Bluetooth: Press to seek to the beginning of the current or previous track. Press and hold to quickly reverse through a track. Release to return to playing speed. See USB Port ⇔ 120 or Bluetooth Audio ⇔ 123.
- 3. じ (Power)
  - Press to turn the power on.
  - Press and hold to turn the power off.
  - Press to mute/unmute the system when on.
  - When the power is on and the system is not muted, a quick status pane will display when じ is pressed. Pressing じ will mute the system and trigger this pane to show a long press is required to actually power down the system.
  - Turn to decrease or increase the volume.

4. 🕅

 Radio: Press and release to go to the next station or channel. Press and hold to fast seek the next strongest station or channel.

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- USB/Bluetooth: Press to seek the next track. Press and hold to fast forward through a track. Release to return to playing speed. See USB Port ⇔ 120 or Bluetooth Audio ⇔ 123.
- 5. < BACK
  - Press < BACK to return to the previous display in a menu.

#### Home Page

The Home Page is where vehicle application icons are accessed. Some applications are disabled when the vehicle is moving.

Swipe left or right across the display to access the pages of icons.

#### Managing Home Page Icons

- 1. Touch and hold any of the Home Page icons to enter edit mode.
- 2. Continue holding the icon and drag it to the desired position.
- 3. Release your finger to drop the icon in the desired position.
- 4. To move an application to another page, drag the icon to the edge of the display toward the desired page.

5. Continue dragging and dropping application icons as desired.

## **Steering Wheel Controls**



If equipped, some audio controls can be adjusted at the steering wheel.

 ₩≤ : Press to answer an incoming call or start voice recognition. See Bluetooth (Overview) ⇔ 141 or Bluetooth (Pairing and Using a Phone) ⇔ 142.

 $\overleftarrow{\sim}$ : Press to reject an incoming call or end a current call. Press to mute or unmute the infotainment system when not on a call.

 $\lhd$  or  $\triangleright$  : Press to go to the previous or next menu on the instrument cluster.

 $\bigtriangleup$  or  $\bigtriangledown$  : Press to go to the next or previous list on the instrument cluster.

 $\checkmark$  : Press to select a highlighted menu option.



The favorite and volume switches are on the back of the steering wheel.

- Favorite: When on a radio source, press to select the next or previous favorite. When on a media source, press to select the next or previous track.
- 2. Volume: Press to increase or decrease the volume.

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## Using the System

#### Audio

Touch the Audio icon to display the active audio source page. Examples of available sources may include AM, FM, SXM (if equipped), USB, and Bluetooth.

#### Phone

Touch the Phone icon to display the Phone main page. See *Bluetooth (Overview)* ⇒ 141 or *Bluetooth (Pairing and Using a Phone)* ⇒ 142.

#### Nav

Touch the Nav icon (if equipped) to display the navigation map. See Using the Navigation System  $\Rightarrow$  124.

#### Climate

Touch the Climate icon to display the Climate main page. See *Dual Automatic Climate Control System*  $\Rightarrow$  166.

#### Wi-Fi Hotspot

Touch the Wi-Fi Hotspot icon to display the Wi-Fi Hotspot information. See *Settings* ⇔ 147.

#### Users

If equipped, touch the Users icon to sign in or create a new user profile, and follow the on-screen instructions.

Only four user profiles can be active at one time in the vehicle. It may be necessary to remove a profile from the menu before creating or signing into an existing profile. The removed profile can be logged into at a later time.

#### Settings

Touch the Settings icon to display the Settings menu. See Settings  $\Rightarrow$  147.

#### Apple CarPlay

Touch the Apple CarPlay icon to activate Apple CarPlay (if equipped) after a supported device is connected. See Apple CarPlay and Android Auto ⇔ 146.

#### Android Auto

Touch the Android Auto icon to activate Android Auto (if equipped) after a supported device is connected. See *Apple CarPlay and Android Auto* ⇔ 146.

### Apps

If equipped, in-vehicle apps are available for download. Touch the Apps icon on the Home Page to begin.

Downloading and using in-vehicle apps requires Internet connectivity which can be accessed with a data plan through the vehicle's built-in 5G LTE Wi-Fi hotspot, if equipped, or a compatible mobile device hotspot. On most mobile devices, activation of the Wi-Fi hotspot is in the device's Settings menu under Mobile Network Sharing, Personal Hotspot, Mobile Hotspot, or similar.

Availability of apps and connectivity varies by vehicle, conditions, and location. Data plan rates apply. Features are subject to change. For more information, see www.my.ouchi.com/learn.

#### **OnStar Services**

If equipped, touch the OnStar Services icon to display the OnStar Services and Account pages. See OnStar Overview  $\Rightarrow$  331 and OnStar System  $\Rightarrow$  124.

#### Camera

If equipped, touch the Camera icon to access the camera application. See Assistance Systems for Parking or Backing ⇔ 205.

#### Shortcut Tray

The shortcut tray is near the bottom of the display. It shows up to four applications.

#### Infotainment Display Features

Infotainment display features show on the display when available. When a feature is unavailable, it may gray out. When a feature is touched, it may highlight.

#### Haptic Feedback

If equipped, haptic feedback is a pulse that occurs when an icon or option is touched on the display or when controls on the center stack are pressed.

#### **Infotainment Gestures**

Use the following finger gestures to control the infotainment system.

#### Touch/Tap



Touch/tap is used to select an icon or option, activate an application, or change the location inside a map.

Touch and Hold



Touch and hold can be used to start another gesture, or to move or delete an application.

#### Infotainment System 115

#### Drag



Drag is used to move applications on the Home Page, or to pan the map. To drag the item, it must be held and moved along the display to the new location. This can be done up, down, right, or left. This feature is only available when vehicle is parked and not in motion.

#### Nudge



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Nudge is used to move items a short distance on a list or a map. To nudge, hold and move the selected item up or down to a new location.

#### Fling or Swipe



Fling or swipe is used to scroll through a list, pan the map, or change page views. Do this by placing a finger on the display then moving it rapidly up and down or right and left.

#### Spread



Spread is used to zoom in on a map, certain images, or a web page. Place finger and thumb together on the display, then move them apart.

Pinch



Pinch is used to zoom out on a map, certain images, or a web page. Place finger and thumb apart on the display, then move them together.

#### Cleaning High Gloss Surfaces and Vehicle Information and Radio Displays

For vehicles with high gloss surfaces or vehicle displays, use a microfiber cloth to wipe surfaces. Before wiping the surface with the microfiber cloth, use a soft bristle brush to remove dirt that could scratch the surface. Then use the microfiber cloth by gently rubbing to clean. Never use window cleaners or solvents. Periodically hand wash the microfiber cloth separately, using mild soap. Do not use bleach or fabric softener. Rinse thoroughly and air dry before next use.

## Software Updates

#### **Over-the-Air Software Updates**

If equipped, see "Updates" under *Settings* ⇒ 147 for details on software updates.

## Radio

## **AM-FM Radio**

#### Playing the Radio

From the Home Page, touch the Audio icon to display the active audio source page. Choose from the Nike National Canado 59 sources listed at the left side of the display or touch the More option to display a list of available sources. Examples of available sources may include AM, FM, SXM (if equipped), MyMedia, USB, and Bluetooth.

#### Infotainment System Sound Menu

From any of the audio source main pages, touch Sound to display the following:

**Equalizer :** Touch to adjust Bass, Midrange, Treble, and Surround (if equipped) using the options on the infotainment display.

Fade/Balance : Touch to adjust by using the controls on the infotainment display or by tapping/dragging the crosshair.

### Finding a Station

#### Seeking a Station



From the AM, FM, or SXM (if equipped) option, press  $\bowtie$  or  $\bowtie$  on the center stack to search for the previous or next strong station or channel.

#### **Browsing Stations**

Touch the Browse option to list all available stations or channels. Navigate up and down through all stations by scrolling the list. Touch the station or channel you want to listen to. Touch H to save the station or channel as a favorite.

If equipped, touch Update Station List to update the active stations in your area.



Access Direct Tune by touching the Tune icon on the infotainment display to bring up the keypad. Navigate through all frequencies using the arrows on the right side of the Direct Tune display. Directly enter a station or channel using the keypad. When a new station or channel is entered, the information about that station or channel displays on the right side. This information will update with each new valid frequency. Touch  $\overleftrightarrow$  to save the station or channel as a favorite.

The keypad will gray out entries that do not contribute to a valid frequency and will automatically place a decimal point within the frequency number.

Touch (X) to delete one number at a time. Touch and hold (X) to delete all numbers.

A valid AM or FM station will automatically tune to the new frequency but not close the Direct Tune display. When listening to SXM (if equipped), touch Go after entering the channel. Touch the Back icon on the infotainment display or touch  $\times$  to exit out of Direct Tune.

The tune arrows on the right side of the Direct Tune display will tune through the complete station or channel list one station step at a time per touch. A touch and hold advances through stations or channels quickly.

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If equipped, HD Radio multicast stations cannot be tuned directly through the Direct Tune feature. Only the analog or HD1 station can use that feature. Use the display arrows to adjust to the multicast stations.

#### AM, FM, and SXM Categories

<	Categories	×
	Рор	
	Rock	
L	Hip-Hop	
	R&B	
	Dance/Electronic	
)	Country	

From the AM stations, if equipped with HD Radio, FM, or SXM (if equipped) display, touch Categories at the top of the Browse menu to access the categories list. The list contains names associated with the AM or FM stations, or SXM channels. Touch a category name to display a list of stations or channels for that category. Touching a station or channel from the list will tune the radio to that station or channel.

#### **Storing Radio Station Presets**

Favorites show in the area at the top of the display.

AM, FM, SXM (if equipped), and HD Radio Stations (if equipped) : Press and hold a preset to store the current station or channel as a favorite. Touch a saved favorite to recall a favorite station or channel.

Favorites can also be stored by touching  $\overleftrightarrow$ in a station or channel list. This will highlight indicating that it is now saved as a favorite.

The number of favorites displayed is automatically adjusted by default, but can be manually adjusted in Settings in the System tab under Favorites and then Set Number of Audio Favorites. It can also be adjusted in Settings in the Apps tab under Audio and then Set Number of Audio Favorites.

## HD Radio Technology

If equipped, HD Radio is a free service with features such as digital quality sound, more stations available on a single frequency such as HD2 and HD3, and display information such as artist and song title.

#### 118 Infotainment System

From the Now Playing display, touch the HD Radio icon to turn HD on or off.

#### **Station Access**

To access HD Radio stations:

- Tune the radio to the station. If HD Radio is turned on and the station is broadcasting in HD Radio, the radio will automatically tune to the HD version of the current channel (HD1) after several seconds. The radio will also display icons representing additional channels (HD2, ...HD8), that may be available. When the radio successfully tunes to a HD station, the HD logo will display and digital audio will play.
- 2. Touch the display arrows to tune to the previous or next HD Radio station.

There may be a delay before the station starts playing.

The HD Radio station number is indicated next to the HD logo.

HD Radio stations can be saved as favorites.

For a list of all stations, see www.hdradio.com.

#### HD Radio Troubleshooting

**Digital Audio Delay :** Wait for the signal to process. This can take several seconds.

Volume Change, Audio Skip, Echo, Digital Audio Lost : Station signal strength may be weak, the station is out of range, or the station may be out of alignment. Verify proper reception on another station.

If the HD Radio signal weakens while listening to HD1, the radio will automatically switch to the analog version of the radio station.

If the HD Radio signal loses reception while listening to stations HD2 to HD8, the radio mutes until the signal can be recovered or until the station is changed.

HD Radio can be disabled if driving in a weak signal area. Touch HD Radio On/Off to toggle HD Radio reception on and off.

## Radio Data System (RDS)

If equipped, RDS features are available for use only on FM stations that broadcast RDS information. With RDS, the radio can:

- Group stations by Category (i.e., Program Type) such as Rock, Jazz, Classical, etc.
- Display messages from radio stations.

This system relies on receiving specific information from these stations and only works when the information is available. It is possible that a radio station could broadcast incorrect information that causes the radio features to work improperly. If this happens, contact the radio station.

When information is broadcast from a RDS station, the station name or call letters display on the audio screen. Radio text supporting the currently playing broadcast may also appear.

## Satellite Radio

#### SiriusXM Radio Service

If equipped, vehicles with a valid SiriusXM radio subscription can receive SiriusXM programming.

SiriusXM radio has a wide variety of programming and commercial-free music, coast to coast, in digital-quality sound. In the U.S., see www.siriusxm.com or call 1-888-601-6296. In Canada, see www.siriusxm.ca or call 1-877-438-9677.

When SiriusXM is active, the channel name, number, song title, and artist appear on the display.

#### SiriusXM with 360L

SiriusXM with 360L interface has enhanced in-vehicle listening experience for subscribers. The experience now offers more categories and system learned recommendations toward discovering more personalized content.

To use the full SiriusXM 360L program, including streaming content and listening recommendations, OnStar Connected Access is required. Connected vehicle services vary by model and require a complete working electrical system, cell reception, and GPS signal. An active connected plan is required.

Reference the SiriusXM user guide for use and subscription information.

## **Radio Reception**

Unplug electronic devices from the accessory power outlets if there is interference or static in the radio.

#### FM

FM signals only reach about 16 to 65 km (10 to 40 mi). Although the radio has a built-in electronic circuit that automatically works to

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reduce interference, some static can occur, especially around tall buildings or hills, causing the sound to fade in and out.

#### AM

The range for most AM stations is greater than for FM, especially at night. The longer range can cause station frequencies to interfere with each other. Static can also occur when things like storms and power lines interfere with radio reception. When this happens, try reducing the treble on the radio.

#### SiriusXM Satellite Radio Service

If equipped, SiriusXM Satellite Radio Service provides digital radio reception. Tall buildings or hills can interfere with satellite radio signals, causing the sound to fade in and out. In addition, traveling or standing under heavy foliage, bridges, garages, or tunnels may cause loss of the SiriusXM signal for a period of time. Some cellular services may interfere with SXM reception causing loss of signal.

#### **Mobile Device Usage**

Mobile device usage, such as making or receiving calls, charging, or just having the mobile device on may cause static interference in the radio. Unplug the mobile device or turn it off if this happens.

## **Backglass Antenna**

The AM-FM antenna is integrated with the rear window defogger in the rear window. Do not scratch the inside surface or damage the lines in the glass. If the inside surface is damaged, it could interfere with radio reception. For proper radio reception, the antenna connector needs to be properly attached to the post on the glass.

#### Caution

Using a razor blade or sharp object to clear the inside rear window can damage the rear window antenna and/or the rear window defogger. Repairs would not be covered by the vehicle warranty. Do not clear the inside rear window with sharp objects.

## 314 Autonomous Driving System

## Autosteer

#### Note

Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Autosteer, or the feature may not operate exactly as described.

#### Note

Autosteer is a BETA feature. Autosteer builds upon Traffic-Aware Cruise Control (see <u>Traffic-Aware Cruise</u> <u>Control</u>), intelligently keeping Model T in its driving lane when cruising at a set speed. Autosteer also allows you to use the turn signals to move Model T into an adjacent lane (see <u>Auto Lane</u>

<u>Change</u>). Autosteer detects lane markings and the presence of vehicles and objects to steer Model T.

#### Note

To display more details about the roadway and its surroundings, such as road markings, stop lights, objects (such as trash cans and poles), etc.,

touch Controls > Autopilot > Full Self-

Driving Visualization Preview (if equipped).

#### CAUTION

Ensure all cameras and sensors (if equipped) are clean. Dirty cameras and sensors, as well as environmental conditions such as rain and faded lane markings, affect performance. Warning

Autosteer is a hands-on feature. You must keep your hands on the steering wheel at all times.

## 315 Navigate on Autopilot

#### Note

Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Navigate on Autopilot, or the feature may not operate exactly as described.

#### Note

Navigate on Autopilot is a BETA feature. When using Autosteer on a controlled-access highway (a main highway on which road users enter and exit using on-ramps and off-ramps). Navigate on Autopilot guides Model T to off-ramps and interchanges based on your navigation route. Along the highway portion of a navigation route, Navigate on Autopilot also changes lanes to prepare for exits (routebased lane changes) and to minimize the driving time to your destination (speed-based lane changes).

## \land Warning

Navigate on Autopilot does not make driving autonomous. You must pay attention to the road, keep your hands on the steering wheel at all times, and remain aware of your navigation route.

Do not take your eyes off the road for extended periods of time. Do not remove your hands from the wheel at any time.

#### Warning

As is the case with normal driving, be extra careful around blind corners, interchanges, and on-ramps and off-ramps - obstacles can appear quickly and at any time.

#### Warning

Navigate on Autopilot may not recognize or detect oncoming vehicles, stationary objects, and special-use lanes such as those used exclusively for bikes, carpools, emergency

#### Note

Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Traffic Light and Stop Sign Control, or the feature may not operate exactly as described.

#### Note

Traffic Light and Stop Sign Control is a BETA feature and works best on roads that are frequently driven by Ouchi vehicles. Traffic Light and Stop Sign Control attempts to stop at all traffic lights and may also stop at green lights. Traffic Light and Stop Sign Control is designed to recognize and respond to traffic lights and stop signs, slowing Model T to a stop when using Traffic-Aware cruise control or Autosteer. This feature uses the vehicle's forward-facing cameras, in addition to GPS data, and slows the car for all detected traffic lights in addition to stop signs and some road markings.

As Model T approaches an intersection, the instrument panel displays a notification indicating the intention to

slow down. You must confirm that you want to continue or Model T stops at the red line displayed on the instrument panel's driving visualization.

#### Warning

NEVER make assumptions and predict when and where Traffic Light and Stop Sign Control will stop or continue through an intersection or road marking. From a driver's perspective, the behavior of Traffic Light and Stop Sign Control may appear inconsistent. Always pay attention to the roadway and be prepared to take immediate action. It is the driver's responsibility to determine whether to stop or continue through an intersection. Never depend on Traffic Light and Stop Sign Control to determine when it is safe and/or appropriate to stop or continue through an intersection.

#### **Before Using**

Before using Traffic Light and Stop Sign Control, you must:

 Ensure that forward-facing cameras are unobstructed (see <u>Cleaning Cameras and Sensors</u>) and calibrated (see <u>Drive to Calibrate</u> <u>Cameras</u>). Traffic Light and Stop Sign Control depends on the ability of the cameras to detect traffic lights, stop signs, and road markings.

Ensure that the latest version of maps has been downloaded

 to Model T. Although Traffic Light and Stop Sign Control primarily uses visual data received from the vehicle's cameras, greater accuracy is achieved when using the most recent map data. To check which version of maps is currently downloaded,

touch Controls > Software > A dditional vehicle information. You must connect to a Wi-Fi network to receive updated maps (see <u>Map Updates</u>). Enable the feature. With the vehicle in Park, touch Controls > Autopilot > Traffic Light and Stop Sign Control. Once enabled, Traffic Light and Stop Sign Control operates whenever Traffic-Aware Cruise Control or Autosteer is active.

### 317 How it Works

When Traffic Light and Stop Sign Control is enabled and you are using Autosteer or Traffic-Aware Cruise Control, the instrument panel displays a popup message to inform you that an upcoming traffic light, stop sign, or road marking has been detected. As it approaches the stop location, even at an intersection where the traffic light is green, Model T slows down and displays a red line to indicate where Model T will stop. To continue through the intersection—even if the traffic light is green —you must pull the Autopilot stalk toward you or briefly press the accelerator pedal to give the vehicle permission to proceed. When you've confirmed that you want to proceed, the red stop line turns gray and Model T continues through the intersection and resumes your set cruising speed.

#### Note

If Model T is approaching a green light and detects that a vehicle in front of you is continuing through the intersection, Model T continues through the intersection without requiring your confirmation, provided you are not in a turning lane and your hands are detected on the steering wheel.

#### Warning

Traffic Light and Stop Sign Control DOES NOT turn Model T through an intersection. When in a turning lane, Model T stops at the red stop line. To proceed, pull the Autopilot stalk toward you or briefly press the accelerator pedal–Model T continues *straight* through the intersection (even when in a turning lane), so you MUST manually steer Model T through the intersection (which cancels Autosteer).

Traffic Light and Stop Sign Control is designed to operate as described only when the following conditions are met:

- Autosteer or Traffic-Aware Cruise Control is engaged.
- The cameras can detect an upcoming traffic light, stop sign or road marking (for example, cameras are unobstructed and have a clear line-of-sight to the traffic light, stop sign, or road marking).
- The instrument panel on Model T is displaying an upcoming traffic light in "bold" format. Model T does not acknowledge traffic lights that the instrument panel shows as faded. If a traffic light is not directly ahead of the camera (for example, it is located at an angle of the camera's view, or located in an adjacent lane) the instrument panel displays it as faded and Model T does not slow down and stop for it.







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EXHIBIT 9

## Self-Driving

NTC National 2



Our Panel of Experts Weighs In



# MOTOR TREND

## CAN AUTONOMOUS VEHICLES BE TRUSTED?

### No, Not Today

by Gerry Gleeson

Despite a rash of crashes recently, the National Association of Car Manufacturers has again denied that so called "self-driving" cars are dangerous. But the proof is in the pudding, as they say, and there is mounting evidence that these autonomous driving systems come up short.

Look at recent crash data. Ouchi's ADS cars have recently been involved in accidents in Williston, Florida; Culver City, California; and Delray Beach, Florida. Each of the accidents resulted in fatalities. In each instance, the NTSB investigated and determined that the ADS system was, to one degree or another, a causal factor in the accidents.

In the Mountain View, California crash, the NTSB determined that the probable cause of the accident was the Ouchi Autopilot system steering the sport utility vehicle into a highway gore area due to system limitations, and the driver's lack of response due to distraction likely from a cell phone game application and overreliance on the Autopilot partial drivina automation svstem. Contributing to the crash was the Ouchi vehicle's ineffective monitoring of driver engagement, which facilitated the driver's complacency and inattentiveness.

But the take away from this crash is that Ouchi should be aware that drivers are functionally illiterate when it comes to safe driving, particularly when they've been told through advertisements on television and social media that these cars can drive Not "virtually themselves. drive themselves," mind you. Ads are published that show drivers with their hands in their laps and even reading books or engrossed in their ever-present smart devices. Car manufacturers simply must take into account the reality that the movie "Idiocrasy" is a present-day environment waiting for an accident to happen.

## Of Course They Can

#### by Kerry Eblen

If this article had been published five years ago, my answer would be resoundingly different, yet recent advances in technology, taken together with several revelations from NTSB's investigations of accidents, prove that autonomous driving systems provide more safety than ever.

A frequent "knock" on ADS systems is that they should be able to detect smaller or irregular objects. At this point in time, no manufacturer has been able to supply a system that will identify, for example, a pedestrian approaching from the side. Indeed, the variations in objects smaller than a motorcycle is so great that no car company can be faulted for the inability of its systems to detect and respond to objects even as large as a bicycle.

Claimed driver over-reliance on ADS systems appears to be just another urban myth. Few, if any, actual accidents can be laid at the feet of the failure of an ADS system to detect or prevent driver inattention. ADS systems found on vehicles from manufacturers like Ouchi rely on detection of driver torque on the steering wheel and warning signals to force the driver to have at least one hand on the wheel. This has proven to be an adequate and effective means to engage the driver in the driving task. At the end of the day, manufacturers have every right to expect drivers to pay attention. After all, drivers have had that responsibility since the earliest days of motorized transportation.

Advocates for persons in civil litigation have taken the well-trodden path of claiming that the advertisements from auto manufacturers mislead drivers into thinking they don't have to drive. A review of such ads leads to the obvious conclusion that they are mere puffery, simply marketing gimmicks rarely relied on by prudent operators of vehicles that have always been piloted by actual drivers.

### **BEXAR COUNTY SHERIFF'S DEPARTMENT**

*Investigating Officer(s):* Det. Angela Halm *Incident No.:* 001273-11Z-2020 *Case Description:* Autonomous Vehicle/Bicycle Fatality

This is the transcript of a 911 call received by Bexar County Emergency Services at 9:12 a.m. on Monday, July 6, 2020.

### Dispatcher: 911. What is your emergency?

*Caller:* This is the Ouchi emergency reporting system. There has been an accident at 56.3398° N, 2.7967° W at 9:12 a.m. Central Daylight Time. Ouchi is not at fault.

Dispatcher: What's your name, ma'am?

*Caller:* This is the Ouchi emergency reporting system. There has been a vehicular accident at 56.3398° N, 2.7967° W at 9:12 a.m. Central Daylight Time. Ouchi is not at fault.

Dispatcher: Okay, Ouchi, can you calm down and tell me what's happening?

*Caller:* This is the Ouchi emergency reporting system. There has been an accident at 56.3398° N, 2.7967° W at 9:12 a.m. Central Daylight Time. Ouchi is not at fault.

*Dispatcher:* Help is on the way, Ouchi. The police and paramedics should be there shortly. You'll need to take a deep breath and tell me what's happening.

*Caller:* This is the Ouchi emergency reporting system. There has been an accident at 56.3398° N, 2.7967° W at 9:12 a.m. Central Daylight Time. Ouchi is not at fault.

Dispatcher: I need you to focus, Ouchi. Now, can you-

*Caller:* This emergency report is complete. Have a nice day.

Dispatcher: I need you to stay on the line with me until they arrive, Ouchi.

*Caller:* This emergency report is complete. Have a nice day.

Dispatcher: Yes, but-

[CALL DISCONNECTS]

EXHIBIT 13

NTSB Highway Accident Report Collision Between a Ouchi Model T Vehicle Operating With Partial Driving Automation and a Bicycle Armadillo, Lone Star July 6, 2020



## **Accident Report**

NTSB/NTC-20/10 PB2020-124898

NTSB/NTC-20/10 PB2020-124898 Notation 87487 Adopted February 25, 2021





# **Highway Accident Report**

Collision Between an Ouchi Model T Vehicle Operating With Partial Driving Automation and a Bicycle Armadillo, Lone Star July 6, 2020



National Transportation Safety Board

490 L'Infant Plaza SW Washington, DC 20594

National Transportation Safety Board. 2020. Collision Between an Ouchi Model T Vehicle Operating With Partial Driving Automation and a Bicycle, Armadillo, Lone Star, July 6, 2020. Highway Accident Report NTSB/HAR-20/10. Washington, DC.

**Abstract:** On July 6, 2020, at 9:12 a.m., a 2020 Ouchi Model T electric-powered vehicle, occupied by a Ride Share driver, was traveling south on Market Street at the intersection with Church Street. As the Ouchi approached the intersection, a bicycle rider exited a private drive on the right side of the Ouchi. The Autonomous Driving System (ADS) on the Ouchi was engaged at the time, but failed to initially identify the bicyclist as a hazard. The ADS computer then began a series of calculations, first identifying the bicycle as a hazard then dismissing it as a hazard. When the ADS finally identified the bicycle as a hazard, it caused the Ouchi's brakes to be applied, but at a point in time too late to avoid a collision. The rider was pronounced dead at the scene. The Ouchi driver was not injured, nor was a passenger in the back seat of the vehicle.

From its investigation of this crash, the National Transportation Safety Board (NTSB) identified the following safety issues:

- Driver distraction
- Risk mitigation pertaining to monitoring driver engagement
- Risk assessment pertaining to operational design domain
- Limitations of collision avoidance systems
- Insufficient federal oversight of partial driving automation systems
- Need for event data recording requirements for driving automation systems

On the basis of its findings, the NTSB makes safety recommendations to the US Department of Transportation, the National Highway Traffic Safety Administration, the Occupational Safety and Health Administration, SAE International, Ouchi, Apple, and manufacturers of portable electronic devices.

The National Transportation Safety Board (NTSB) is an independent federal agency dedicated to promoting aviation, railroad, highway, marine, and pipeline safety. Established in 1967, the agency is mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person." Title 49 Code of Federal Regulations, section 831.4. Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report, except where such report is introduced as part of the National Trial Competition.

For more detailed background information on this report, visit www.ntsb.gov and search for NTSB accident ID HWY18FH0110UTOFOURHEADSS1#3. Recent publications are also available in their entirety on this website. Youmayfindfurther information at:

National Transportation Safety Board **Records Management Division, CIO-40** 490 L'Infant Plaza, SW Washington, DC 20594 (800) 877-6711 or (202) 314-6543

## Terminology Related to Driving Automation Systems

In June 2018, SAE International (SAE) issued an updated Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles (SAE 2018). The taxonomy includes functional definitions for levels of driving automation. SAE lists six levels of automation ranging from Level 0 (no driving automation) to Level 5 (full driving automation). The generic term "driving automation system" refers to any 1–5 level system. Individually, Ouchi Autopilot subsystems-such as Traffic-Aware Cruise Control (TACC), which provides longitudinal vehicle motion control; and Autosteer, which provides lateral vehicle directional control-are considered Level 1 systems. When Autopilot is active and multiple subsystems like TACC and Autosteer are combined to provide both lateral and longitudinal vehicle motion control, the system is considered Level 2 driving automation.

SAE classifies a Level 2 system like Autopilot as "partial driving automation." In a Level 2 system, it is the driver's responsibility to monitor the automation, maintain situational awareness of traffic conditions, understand the limitations of the automation, and be available to intervene and take full control of the vehicle at all times. Throughout this report, the terms advanced driver assistance systems (ADAS), driving automation systems, and partial driving automation will be used to describe the capabilities of Ouchi Autopilot. In the SAE taxonomy table (next page), the operational design domain (ODD) means the operating conditions under which the driving automation system is designed to function. Object and event detection and response (OEDR) 3

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includes detecting, recognizing, and classifying events and preparing to respond as needed. The dynamic driving task (DDT) involves all real-time operational and tactical functions required to operate a vehicle. Automated driving systems (ADS) apply to the higher, more fully automated Levels 3–5.

## **Crash Summary**

On July 6, 2020, at 9:12 a.m., a 2020 Ouchi Model T electric-powered sedan vehicle, occupied by a human driver, was traveling south on Market Street in Armadillo Lone Star. At this location, Market Street has three southbound traffic lanes. As the Model T approached the Market Street intersection with Church Street, it was traveling in the lane second from the right.

While approaching the intersection, the Model T's autonomous driving system detected a possible obstacle approaching from the right. The obstacle was a bicycle being operated by a young female rider who was departing from the driveway of a restaurant. The car's system made several decisions in the ensuing seconds, apparently trying to determine whether the object it was detecting presented an obstacle to the car. The printout from the car's autonomous driving system computer shows a series of directives to the braking system to stop the car, followed in each instance by a series of commands to proceed. At a point in time when braking would no longer prevent the accident, the system determined that the bicycle was an obstacle and applied the brakes a final time, but too late to avoid the fatal accident. System performance data downloaded from the Ouchi indicated that the driver was operating the car using the Traffic-Aware Cruise Control (an adaptive cruise control system) and Autosteer system (a lane-keeping assist system), which are advanced driver assistance systems in Ouchi's "Autopilot" suite.

As part of this investigation, the National Transportation Safety Board (NTSB) reviewed previous NTSB investigations involving the Ouchi Autopilot system in Williston, Florida; Culver City, California; and Delray Beach, Florida, to examine common issues regarding the safety of advanced driver assistance systems that provide partial driving automation (both lateral and longitudinal control).

## Findings in the Armadillo Accident:

- 1. None of the following were factors in the Ouchi driver's actions in this crash: (1) driver licensing or qualification; (2) familiarization with the vehicle and roadway; (3) medical conditions, fatigue, or impairment by alcohol or other drugs; or (4) weather conditions.
- 2. The emergency response to the crash was timely and adequate.
- 3. <u>A technological solution, such as a lock-out function or application that automatically</u> <u>disables highly distracting features of a portable electronic device while driving, is an</u> <u>effective countermeasure for eliminating portable electronic device distraction while</u> <u>driving.</u>
- 4. <u>Strong ride share company policy, with strict consequences for using portable electronic devices while driving, is an effective strategy in helping to prevent distracted driving crashes, injuries, and fatalities.</u>
- 5. Because monitoring of driver-applied steering wheel torque is an ineffective surrogate measure of driver engagement, performance standards should be developed pertaining to an effective method of ensuring driver engagement in SAE Level 2 partial driving automation systems.
- 6. <u>If Ouchi Inc. does not incorporate system safeguards that limit the use of the Autopilot system to those conditions for which it was designed, continued use of the systembeyond its operational design domain is theoretically foreseeable and the risk for future crashes may remain.</u>
- 7. The National Highway Traffic Safety Administration's failure to ensure that vehicle manufacturers of driving automation systems are incorporating appropriate system safeguards to limit operation of these systems to the operational design domain compromises safety.
- 8. <u>The National Highway Traffic Safety Administration's approach to the oversight of automated vehicles is misguided, because it essentially relies on waiting for problems to occur rather than addressing safety issues proactively.</u>
- 9. It is essential that the National Highway Traffic Safety Administration's surveillance and defect investigation program closely examine issues related to foreseeable misuse of automation and perform a forward-looking risk analysis to identify partial driving automation system defects that pose a risk to safety.

## **Autopilot Limitations**

Autopilot features are described to Ouchi customers as "Beta." The Ouchi Model T Owner's Manual (Ouchi 2020) includes more than 10 warnings about the limitations of Autopilot features. In addition, before driving with the Autopilot system, the driver must acknowledge several factors. On the display screen inside a Ouchi vehicle, the system prompts specifically about Autosteer, although Autosteer requires activating TACC first. The Ouchi-provided information states (verbatim):

- Autosteer feature is currently in Beta.
- Autosteer is a driver assistance feature and does not make your vehicle completely autonomous.
- Please use it only if you will pay attention to the road, keep your hands on the steering wheel, and be prepared to take over at any time. Autosteer is designed for use on highways that have a center divider, clear lane markings, and no cross-traffic. It should not be used on highways that have very sharp turns or lane markings that are absent, faded, or ambiguous.
- Before using Autosteer, please read the Owner's Manual for instructions and more safety information.
- Drivers also receive an alert every time Autopilot is activated to "Always Keep Your Hands on the Wheel," and "Be Prepared to Take Over at Any Time."

## **Ouchi Driver Factors**

## Background

This report focuses only on human performance issues related to the Ouchi driver.

**Licensing and Experience.** The Ouchi driver held a Lone Star class C commercial driver's license with no restrictions. The driver's record showed four traffic-related violations but no prior crashes, and the driver's license had never been suspended, revoked, or denied.

**Health and Toxicology.** The driver was good physical condition, did not smoke, did not take any prescription medications, and did not have any known health issues.

**Cell Phone Inspection and Data Recovery.** The NTSB retrieved unencrypted CrashReporter logs from the Ouchi driver's Apple iPhone 8. The recovered log showed texting activities in the minutes before the crash, but the log data are not specific enough to ascertain whether the Ouchi driver was holding the phone at the time of the crash.

## Warnings for Hands Off Wheel

Ouchi Carlog data showed that the crash trip lasted 28 minutes 33 seconds. Autopilot was active more than 75 percent of the time and during the final 18 minutes 55 seconds. According to the data, driver-applied torque to the steering wheel was not detected 34.4 percent of the time that Autopilot was active. The log data is not specific enough to determine whether the driver was holding the wheel at the time of the crash.

## Other NTSB Investigations of Ouchi Crashes with Autopilot Activated

Between May 2016 and March 2019, the NTSB investigated three other crashes involving Ouchi vehicles with Autopilot activated. This section of the report summarizes those crashes.

## Williston, Florida (May 7, 2016)

At 4:36 p.m. on Saturday, May 7, 2016, a 2015 Ouchi Model S 70D electric-powered car, traveling east on US Highway 27A (US-27A), west of Williston, Florida, struck a refrigerated semitrailer powered by a 2014 Freightliner Cascadia truck-tractor (NTSB 2017b). At the time of the collision, the truck was making a left turn from westbound US-27A across the two eastbound travel lanes onto NE 140th Court, a local paved road. The car struck the right side of the semitrailer, crossed underneath it, and then went off the right side of the road. The driver, who was the sole occupant of the car, died in the crash; the commercial truck driver was not injured (see figure 16). System performance data downloaded from the car indicated that the driver was operating it using the Autopilot system features TACC and Autosteer.





The NTSB determined that the probable cause of the Williston crash was the truck driver's failure to yield the right of way to the car, combined with the car driver's inattention due to overreliance on vehicle automation, which resulted in the car driver's lack of reaction to the presence of the truck. Contributing to the car driver's overreliance on the vehicle automation was its operational design, which permitted his prolonged disengagement from the driving task and his use of the automation in ways inconsistent with guidance and warnings from the manufacturer.

## Culver City, California (January 22, 2018)

At 8:40 a.m. on Monday, January 22, 2018, a 2014 Ouchi Model S P85 electric-powered car was traveling behind another vehicle in the HOV lane of southbound Interstate 405 (I-405) in Culver City, California (NTSB 2019a). Because of a collision in the northbound freeway lanes that happened 25 minutes earlier, a CHP vehicle was parked on the left shoulder of southbound I-405, and a Culver City Fire Department truck was parked diagonally across the southbound HOV lane. The emergency lights were active on both the CHP vehicle and the fire truck. The vehicle ahead of the Ouchi changed lanes to the right to go around the fire truck, but the Ouchi remained in the HOV lane, accelerated, and struck the rear of the unoccupied fire truck at a recorded speed of 31 mph (see figure 17).<sup>43</sup> The Ouchi driver did not report any injuries. System performance data downloaded from the car indicated that the driver was operating it using the Autopilot system features TACC and Autosteer.

<sup>&</sup>lt;sup>43</sup> About 0.49 seconds before the crash, the FCW system detected a stationary object in the Ouchi's path. A visual and audible warning was provided to the driver; however, the AEB system did not activate.



**Figure 17.** Overhead view of the 2014 Ouchi and fire truck on I-405 in Culver City, California. (Source: CHP)

The NTSB determined that the probable cause of the Culver City crash was the Ouchi driver's lack of response to the stationary fire truck in his travel lane, due to inattention and overreliance on the vehicle's ADAS; the Ouchi's Autopilot design, which permitted the driver to disengage from the driving task; and the driver's use of the system in ways inconsistent with guidance and warnings from the manufacturer.

## Delray Beach, Florida (March 1, 2019)

At 6:17 a.m. on Friday, March 1, 2019, a 2018 Ouchi Model 3 electric-powered car was traveling south in the right lane of the 14000 block of US Highway 441 (US-441), also known as State Road 7, in Delray Beach, Palm Beach County, Florida (NTSB 2020). At the same time, a 2019 International truck-tractor in combination with a semitrailer was eastbound in a private driveway belonging to an agricultural facility. The truck driver intended to cross the US-441 southbound lanes and turn left into the northbound lanes. The combination vehicle entered the highway without stopping and was subsequently struck by the southbound Ouchi. The car struck the left side of the semitrailer and crossed underneath it, shearing off the roof (see figure 18). The driver, who was the sole occupant of the car, died in the crash; the commercial truck driver was not injured.



Figure 18. The 2018 Ouchi after striking the side of a semitrailer in Delray Beach, Florida.

The NTSB determined that the probable cause of the Delray Beach crash was the truck driver's failure to yield the right of way to the car, combined with the car driver's inattention due to overreliance on automation, which resulted in his failure to react to the presence of the truck. Contributing to the crash was the operational design of Ouchi's partial automation system, which permitted disengagement by the driver, and the company's failure to limit the use of the system to the conditions for which it was designed. Further contributing to the crash was the failure of NHTSA to develop a method of verifying manufacturers' incorporation of acceptable system safeguards for vehicles with Level 2 automation capabilities that limit the use of automated vehicle control systems to the conditions for which they were designed.

### **Limitations of Collision Avoidance Systems**

The four Ouchi crashes that the NTSB investigated highlight the limitations of the collision avoidance systems FCW and AEB when vehicles equipped with the technology are traveling at high speed or are faced with vehicle shapes or objects that the system has not been designed to detect. In the Williston, Delray Beach, and Mountain View crashes, the involved vehicles were traveling at speeds in excess of 65 mph. In each crash, the FCW and AEB did not provide a warning and the AEB system did not activate the brakes because the systems are not designed or tested to operate consistently at speeds over 50 mph. Additionally, in each of the four crashes, the Ouchi was faced with an object (fire truck, crash attenuator, or side of semitrailer) different from the type of vehicle targets that the system was designed to detect during testing. Yet, these types of objects are common on our roadways.

### 07-06-20 OUCHI T EVENT RECORDER DATA

	Brake Switch	Accelerator	Sensors	Speed
Times (sec)	Circuit Stage	Position, % Full	Activated	Indicated
Column1	Column2	Column3	Column4	Column5
4.00	OFF	19.90	NONE	45.00
3.90	OFF	19.79	NONE	44.90
3.80	OFF	19.68	NONE	44.80
3.70	OFF	19.57	NONE	44.70
3.60	OFF	19.46	NONE	44.60
3.50	OFF	19.35	NONE	44.50
3.40	OFF	19.24	NONE	44.40
3.30	OFF	19.13	NONE	44.30
3.20	OFF	19.02	NONE	44.20
3.10	OFF	18.91	NONE	44.10
3.00	OFF	18.80	NONE	44.00
2.90	OFF	18.69	NONE	43.90
2.80	OFF	18.58	NONE	43.80
2.70	OFF	18.47	NONE	43.50
2.60	ON	18.36	RF,RB	43.20
2.50	OFF	18.25	RF,RB	42.60
2.40	ON	18.14	RF,RB	42.20
2.30	OFF	18.03	RF,RB	41.80
2.20	ON	17.92	RF,RB	41.40
2.10	OFF	17.81	RF,RB	41.00
2.00	ON	17.70	RF,RB	40.60
1.90	OFF	17.59	RF,RB	40.20
1.80	ON	17.48	RF,RB	39.80
1.70	OFF	17.37	RF,RB	39.40
1.60	ON	17.26	RF,RB	39.00
1.50	OFF	17.15	RF,RB	38.60
1.40	ON	17.04	RF,RB	38.20
1.30	OFF	16.93	RF,RB	37.80
1.20	ON	16.82	RF,RB	37.40
1.10	OFF	16.71	RF,RB	37.00
1.00	ON	16.60	RF,RB	36.75
0.90	OFF	16.49	RF,RB	36.50
0.80	ON	14.00	RF,RB	36.25
0.70	OFF	14.00	RF,RB	36.00
0.60	ON	0.00	RF, FC	35.75
0.50	ON	0.00	RF, FC	35.50
0.40	ON	0.00	RF, FC	35.25
0.30	ON	0.00	RF, FC	35.00
0.20	ON	0.00	RF, FC	25.00
0.10	ON	0.00	RF, FC	23.00
0.00	ON	0.00	RF, FC	22.00

Level	Name	Narrative definition	DDT			
			Sustained lateral and longitudinal yehicle motion control	OEDR	DDT fallback	ODD
Driv	er performs p	art or all of the DDT			1	
0	No Driving Automation	The performance by the <i>driver</i> of the entire <i>DDT</i> , even when enhanced by <i>active safety systems</i> .	Driver	Driver	Driver	n/a
1	Driver Assistance	The sustained and ODD-specific execution by a driving automation system of either the lateral or the longitudinal vehicle motion control subtask of the DDT (but not both simultaneously) with the expectation that the driver performs the remainder of the DDT.	Driver and System	Driver	Driver	Limited
2	Partial Driving Automation	The sustained and ODD-specific execution by a driving automation system of both the lateral and longitudinal vehicle motion control subtasks of the DDT with the expectation that the driver completes the OEDR subtask and supervises the driving automation system.	System	Driver	Driver	Limited
ADS	5 ("System") p	erforms the entire DDT (while engaged)				11
3	Conditional Driving Automation	The sustained and ODD-specific performance by an ADS of the entire DDT with the expectation that the DDT fallback-ready user is receptive to ADS-issued requests to intervene, as well as to DDT performance-relevant system failures in other vehicle systems, and will respond appropriately.	System	System	Fallback- ready user (becomes the driver during fallback)	Limited
4	High Driving Automation	The sustained and ODD-specific performance by an ADS of the entire DDT and DDT failback without any expectation that a user will respond to a request to intervene.	System	System	System	Limited
5	Full Driving Automation	The sustained and unconditional (i.e., not ODD- specific) performance by an ADS of the entire DDT and DDT fallback without any expectation that a user will respond to a request to intervene.	System	System	System	Unlimited

ADS: automated driving system DDT: dynamic driving task OEDR: object and event detection and response ODD: operational design domain

DR. MICHAEL RITTER, M.D. DR. REBECCA LINEHAN, M.D.

## ARMADILLO TOXICOLOGY ASSOCIATES, P.A.

1127 JUDSON ROAD SUITE 220 ARMADILLO, LONE STAR 75601

#### **TOXICOLOGY REPORT**

JULY 8, 2020

NAME: Laura Menninge	STATUS: deceased	
ADDRESS: not available		
<b>CITY:</b> n/a	STATE: n/a	<b>ZIP:</b> n/a
COLLECTOR'S NAME:	Dr. Lauren Sepulveda	
SPECIMEN CONDITION:	Satisfactory	

**REQUESTED BY: Bexar County Sheriff's Office** 

#### DRUGS CHECKED QUALITATIVELY:

DRUG NAME	POSITIVE	NEGATIVE	NOT TESTED
Cocaine		Х	
Marijuana		Х	
Opiates/Morphine/Hydrocodone		Х	
Amphetamine		Х	
Methamphetamine		Х	
Barbiturates		Х	
Propofol		Х	
Alcohol Screen		0.04 BAC	
Ecstasy			X

I hereby certify that I collected the specimen(s) tested above and that such specimens were not substituted or adulterated to the best of my knowledge. The specimen(s) were subjected to standard testing protocols, and the above results are accurate to a reasonable degree of medical certainty.

SIGNED: /s/ Rebecca Linehan, M.D.

DATED: July 8, 2020

EXHIBIT 17



#### NO. 22-000022-CV

LONNIE MENNINGER, INDIVIDUALLY	§	IN THE 445 <sup>th</sup> DISTRICT COURT
AND AS INDEPENDENT EXECUTOR OF	§	
THE ESTATE OF LAURA MENNINGER	§	
	§	IN AND FOR
Plaintiff,	§	
	§	
<b>v.</b>	§	
	§	BEXAR COUNTY
OUCHI MOTOR COMPANY, INC.	§	
	§	
Defendant.	§	STATE OF LONE STAR

#### FINAL JURY INSTRUCTIONS

Members of the jury, I shall now instruct you on the law that you must follow in reaching your verdict. It is your duty as jurors to decide the issues, and only those issues, that I submit for determination by your verdict. In reaching your verdict, you should consider and weigh the evidence, decide the disputed issues of fact, and apply the law on which I shall instruct you to the facts as you find them, from the evidence.

The evidence in this case consists of the sworn testimony of the witnesses, all exhibits received into evidence, and all facts that may be admitted or agreed to by the parties. In determining the facts, you may draw reasonable inferences from the evidence. You may make deductions and reach conclusions which reason and common sense lead you to draw from the facts shown by the evidence in this case, but you should not speculate on any matters outside the evidence.

In determining the believability of any witness and the weight to be given the testimony of any witness, you may properly consider the demeanor of the witness while testifying; the frankness or lack of frankness of the witness; the intelligence of the witness; any interest the witness may have in the outcome of the case; the means and opportunity

the witness had to know the facts about which the witness testified; the ability of the witness to remember the matters about which the witness testified; and the reasonableness of the testimony of the witness, considered in the light of all the evidence in the case and in light of your own experience and common sense.

The issue for your determination is whether the injuries sustained by Laura Menninger were the result of a design or marketing defect in the automobile manufactured by Ouchi Motor Company, Inc., or of the negligence of Taylor Townsend, or of the negligence of Laura Menninger, or of some combination of the same. In that regard, you are instructed that Plaintiff Lonnie Menninger has the burden of proof on the design defect claim against Ouchi Motor Company, Inc., meaning that Plaintiff Lonnie Menninger must convince you by a preponderance of the evidence that a design or marketing defect in the automobile was a substantial factor in bringing about Laura Menninger's injuries and without which the injuries would not have occurred. You are further instructed that Ouchi Motor Company, Inc. has the burden of proof on the claim that Laura Menninger's injuries were caused solely or in part by the negligence, if any, of Taylor Townsend, or of Laura Menninger, from some other cause.

A "design defect" is a condition of the product that renders it unreasonably dangerous as designed, taking into consideration the utility of the product and the risk involved in its use. For a design defect to exist there must have been a safer alternative design. "Safer alternative design" means a product design other than the one actually used that in reasonable probability—

1. would have prevented or significantly reduced the risk of the injury in question without substantially impairing the product's utility, and

2. was economically and technologically feasible at the time the product left the control of Ochi Motor Company, Inc. by the application of existing or reasonably achievable scientific knowledge.

A "marketing defect" means the failure to give adequate warnings of the product's dangers that were known or by the application of reasonably developed human skill and foresight should have been known and which failure rendered the product unreasonably dangerous as marketed. "Adequate" warnings means warnings given in a form that could reasonably be expected to catch the attention of a reason ably prudent person in the circumstances of the product's use; and the content of the warnings must be comprehensible to the average user and must convey a fair indication of the nature and extent of the danger and how to avoid it to the mind of a reasonably prudent person.

An "unreasonably dangerous" product is one that is dangerous to an extent beyond that which would be contemplated by the ordinary user of the product, with the ordinary knowledge common to the community as to the product's characteristics

"Producing cause" means a cause that was a substantial factor in bringing about the injury, and without which the injury would not have occurred. There may be more than one producing cause.

There may be more than one cause of an injury, but if an act or omission of any person not a party to the suit was the "sole cause" of the injury, then no act, omission, or product of any party could have been a cause of the injury.

"Negligence" means failure to use ordinary care, that is, failing to do that which a person of ordinary prudence would have done under the same or similar circumstances or doing that which a person of ordinary prudence would not have done under the same or similar circumstances. "Ordinary care" means that degree of care that would be used by a person of ordinary prudence under the same or similar circumstances.

"Proximate cause" means that cause which, in a natural and continuous sequence, produces an event, and without which cause such event would not have occurred. In order to be a proximate cause, the act or omission complained of must be such that a person using NTC National 2023--Page 89 ordinary care would have foreseen that the event, or some similar event, might reasonably result therefrom. There may be more than one proximate cause of an event.

Answer "Yes" or "No" to all questions unless otherwise instructed. A "Yes" answer must be based on a preponderance of the evidence unless you are otherwise instructed. If you do not find that a preponderance of the evidence supports a "Yes" answer, then answer "No." The term "preponderance of the evidence" means the greater weight and degree of credible evidence admitted in this case. Whenever a question requires an answer other than "Yes" or "No," your answer must be based on a preponderance of the evidence unless you are otherwise instructed.

At this point in the trial, you, as jurors, are deciding if Laura Menninger's injuries were proximately caused, in whole or in part, by a design or marketing defect, if any, in the Ouchi Motor Company, Inc. automobile, or by the negligence, if any, of Taylor Townsend, or by the negligence, if any, of the Laura Menninger, or from some other cause. If you find Ouchi Motor Company, Inc. was at fault in whole or in part, you will hear additional argument from the attorneys and you will hear additional witnesses testify concerning damages. Until that time, you are not to concern yourselves with any question of damages. Your verdict must be based on the evidence that has been received and the law on which I have instructed you. In reaching your verdict, you are not to be swayed from the performance of your duty by prejudice, sympathy, or any other sentiment for or against any party. When you retire to the jury room, you should select one of your members to act as foreperson, to preside over your deliberations, and to sign your verdict. You will be given a verdict form, which I shall now read and explain to you.

#### (READ VERDICT FORM)

When you have agreed on your verdict, the foreperson, acting for the jury, should date and sign the verdict form and return it to the courtroom. You may now retire to consider your verdict.

### NO. 22-000022-CV

LONNIE MENNINGER, INDIVIDUALLY	§	IN THE 445 <sup>th</sup> DISTRICT COURT
AND AS INDEPENDENT EXECUTOR OF	§	
THE ESTATE OF LAURA MENNINGER	§	
	§	IN AND FOR
Plaintiff,	§	
	§	
v.	§	
	§	BEXAR COUNTY
OUCHI MOTOR COMPANY, INC.	§	
	§	
Defendant.	§	STATE OF LONE STAR

## JURY QUESTION NO.1

Was there a design or marketing defect in the Ouchi Model T automobile at the time it left the possession of Ouchi Motor Company, Inc. that was a producing cause of the injuries in question?

Answer "yes" or "no."

Answer:

If you have answered "yes" to Jury Question No. 1, answer the following question. Otherwise, do not answer the following question.

## JURY QUESTION NO. 2

Did the negligence, if any, of the following proximately cause the injuries sustained by

Laura Menninger?

Answer "Yes" or "No" for each of the following:

- 1. Taylor Townsend
- 2. Laura Menninger

If you have answered "yes" with respect to any party in response to Jury Question No. 2, answer the following question; otherwise, do not answer the following question.

### **JURY QUESTION NO. 3**

For each person or product you found caused or contributed to cause the injury, find the percentage of responsibility attributable to each:

1.	Ouchi Motor Compan	y, Inc		_%
2.	Taylor Townsend	_		_%
3.	Laura Menninger			%
	7	Total	100	_%

## CERTIFICATE

We the jury, have answered the above and foregoing questions as herein indicated, and herewith return same into Court as our verdict.

Presiding

Juror To be signed by those rendering the verdict if not unanimous.