





# **Towing Compatibility Guidelines**

www.escapetrailer.com



# Overview

The Escape 5.0 is a tandem axle 5<sup>th</sup> wheel trailer that was designed to be towed by a standard half-ton pickup truck.

A wide range of vehicle & options package combinations can be used to tow an Escape 5.0. Due to the wide range of possible tow vehicles, Escape Trailers is not able to assess customer vehicles for suitability.

The information in this document is intended to help a customer or installer assess the compatibility of their vehicle with the Escape 5.0.

# Responsibility for Assessing Tow Vehicle Compatibility

## Customers

Customers are responsible for ensuring compatibility of their own tow vehicle and 5<sup>th</sup> wheel installation based on the information presented in this guide.

Assistance with vehicle compatibility can be provided by a third-party professional installer. Escape sales can recommend installers in our local area, please contact <u>sales@escapetrailer.com</u> for more information.

## **Escape Trailer Industries**

Escape Trailer Industries is responsible for checking that upon pickup of their trailer, customers comply with various road safety acts by having:

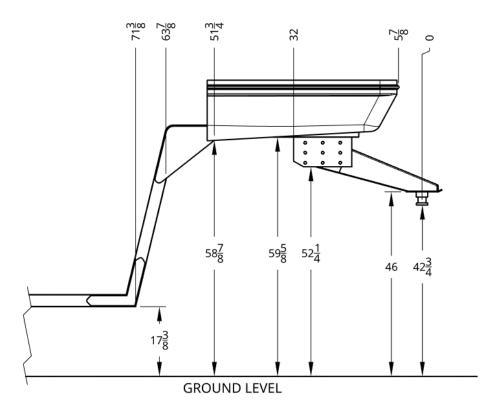
Suitable hitch Functioning brake controller 7-pin wiring connector



# **Escape 5.0 Specifications & Dimensions**

| Plated GVWR      | 5500 lbs     |
|------------------|--------------|
| Pin Weight (dry) | 630 lbs      |
| OEM Pinbox       | Lippert 1716 |

# PINBOX EXTENDED (STANDARD CONFIGURATION)

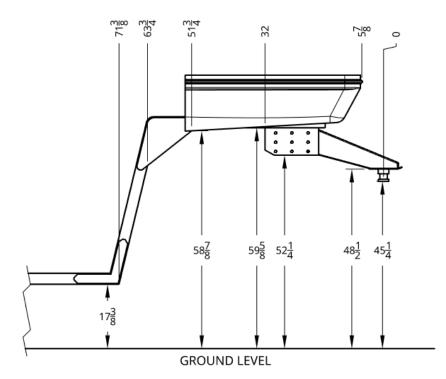


### NOTES

- 1. STANDARD AXLE SHOWN. FOR HIGH LIGHT AXLE, ADD 2-5/16" TO VERTICAL DIMENSIONS.
- 2. DIMENSIONS REFLECT TRAILER SITTING LEVEL. TRAILER CAN SAFELY RUN WITHIN 1" OF LEVEL AS MEASURED FROM BELLY-BAND TO GROUND.
- 3. ALL DRAWINGS ARE ACCURATE TO WITHIN ±1/4".



# PINBOX RETRACTED (OPTIONAL CONFIGURATION)



#### NOTES

- 1. STANDARD AXLE SHOWN. FOR HIGH LIGHT AXLE, ADD 2-5/16" TO VERTICAL DIMENSIONS.
- 2. DIMENSIONS REFLECT TRAILER SITTING LEVEL. TRAILER CAN SAFELY RUN WITHIN 1" OF LEVEL AS MEASURED FROM BELLY-BAND TO GROUND.
- ALL DRAWINGS ARE ACCURATE TO WITHIN ±1/4".



# Key Factors for Vehicle Compatibility

When assessing towing compatibility with the Escape 5.0, the biggest factors are:

- **1.** Payload capacity
- 2. Length of the truck box
- **3.** Position of the 5<sup>th</sup> wheel within the truck box
- 4. Height of the truck's tailgate and bedrails

The factors above lead to common problem areas that customers should consider when assessing their tow vehicle and hitch placement. The following sections explore these common issues.

## **Payload Capacity**

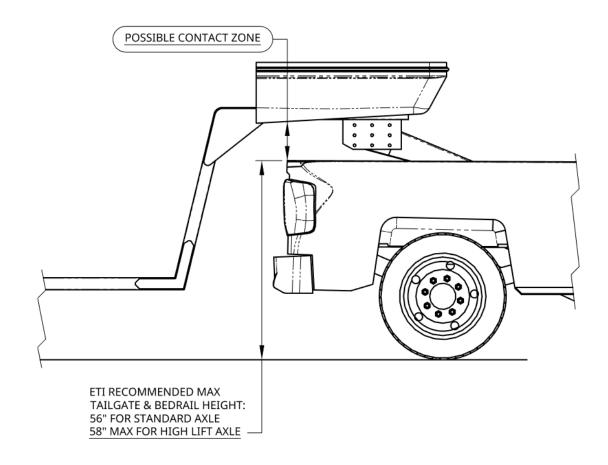
Customers should ensure their vehicle payload capacity is greater the sum of the trailer pin weight, the mass of occupants, and the expected cargo load.



# Tailgate to Bunk Contact

Contact between the tailgate and bottom of the trailer bunk is a concern for 5<sup>th</sup> wheel towing when the unit articulates over crests on ramps or driveways. Please consult your installer for a recommended clearance between the tailgate and bottom of the trailer bunk section.

| Recommended Bedrail and Tailgate Height Limit                       |  |
|---|--|
| 56" maximum bedrail and tailgate height for standard trailer axles  |  |
| 58" maximum bedrail and tailgate height for high-lift trailer axles |  |



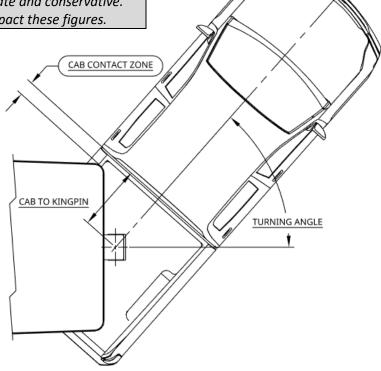


## Trailer to Cab Contact

Particularly on short bed trucks, customers must be aware of the turning limits of their 5<sup>th</sup> wheel unit. Typically turning angle is limited by potential contact between the trailer nose and truck cab, which depends on the installed location of the hitch.

Escape Trailers will not recommend a minimum box length to tow the Escape 5.0. Customers must determine their own comfort level with respect to turning angle requirements.

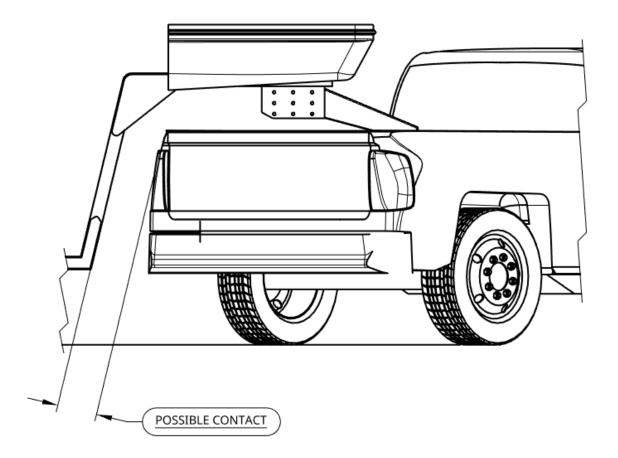
| Distance from Cab<br>to Kingpin Center | Approximate Turning Angle*   |
|--|------------------------------|
| Inches                                 | Degrees                      |
| 28                                     | 51.2                         |
| 29                                     | 53                           |
| 30                                     | 54.9                         |
| 31                                     | 56.8                         |
| 32                                     | 58.8                         |
| 33                                     | 61                           |
| 34                                     | 63.1                         |
| 35                                     | 65.3                         |
| 36                                     | 67.6                         |
| 41.5                                   | 90                           |
| * Turning angles are a                 | pproximate and conservative. |
| Truck specific geometr                 | y can impact these figures.  |
|  |                              |
|  | CAB CONTACT Z                |





## Taillight to Trailer Frame Contact

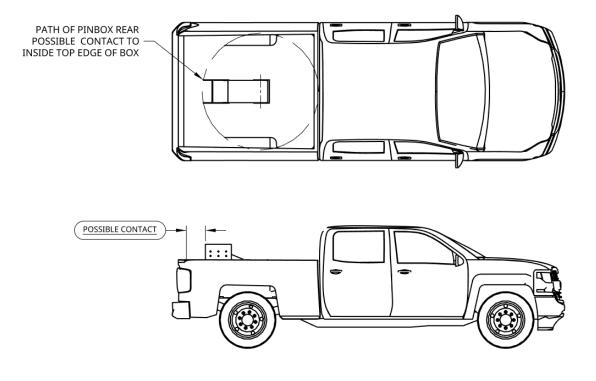
Some long box configurations run the risk of contacting the rear bumper, taillight area, or outside of the bed rails against the frame's vertical member or gusset. While mainly the result of hitch placement too far forward in the box, note that truck height and unit articulation can increase the risk of this scenario.





## Pinbox to Truck Box Contact

Customers should be aware of possible clearance issues between the back edge of the pinbox and the inside of the box edge. Usually an issue on short box trucks when trying to move the hitch rearward to maximize turning angle.



## **Other Articulation**

Note that other truck to trailer contact situations can occur, owners should make themselves aware of the limits of their truck and trailer unit.

# Non-Standard Hitches and Warranty

Towing with a trailer connection other than the supplied pinbox is discouraged and will result in the customer voiding their trailer warranty. Escape trailer will not install alternative pinboxes, hitch adapters, or other non-standard equipment. Some arrangements cause the trailer frame to see increased stress during operation, resulting in risk of damage or injury.

Escape Trailer has validated and is happy to install the Andersen Ultimate line of connections, including the Ultimate Gooseneck Connection.