

# Installing a Flip Axle



LANDOLL

# Flip Installation Guide

## Purpose:

Once installed, the trailer will be capable of hauling tires, crates or other small items. It also assists by scaling the weight with large loads.

**THIS IS NOT TO EXCEED THE WEIGHT LIMIT OF YOUR FLIP DECK.**

## Tools Needed:

- Hoist
- Chain/Straps
- Socket 1 11/16"
- Alignment Tool
- Torque Wrench 500 FT LBS
- Flip Kit
- Hammer
- Pry Bar
- Allen Wrenches
- Welder



## Safety Message



YOUR SAFETY IS IMPORTANT TO US. PLEASE EXERCISE EXTREME CARE AND PERFORM ALL TASKS IN THE SAFEST WAY POSSIBLE TO AVOID HARM TO YOURSELF, OTHERS OR YOUR EQUIPMENT. NEVER PERFORM A TASK IF YOU ARE UNSURE OF HOW TO DO SO SAFELY AND PROPERLY.



## Understanding Safety Statements

You will find various types of safety information on the following pages and on the machine signs (decals) attached to the trailer. This section explains their meaning!

The Safety Alert Symbol means  
**ATTENTION! YOUR SAFETY IS INVOLVED!**



### **DANGER**

Danger means a life-threatening situation exists. Death can occur if safety measures or instructions on this label are not properly followed.



### **WARNING**

Warning means serious injury or death can occur if safety measures or instructions on this label are not properly followed.



### **CAUTION**

Caution means serious equipment or other property damage can occur if instructions on this label are not properly followed.

### **NOTE**

Note means that failure to follow these instructions could cause damage to the equipment or cause it to operate improperly.

### **NOTE**

Make sure you read and understand the information contained in this manual and on the machine signs (decals) before you attempt to operate or maintain this vehicle.



## Flip Installation: with and without a flip



Prior to installation



Rod installed

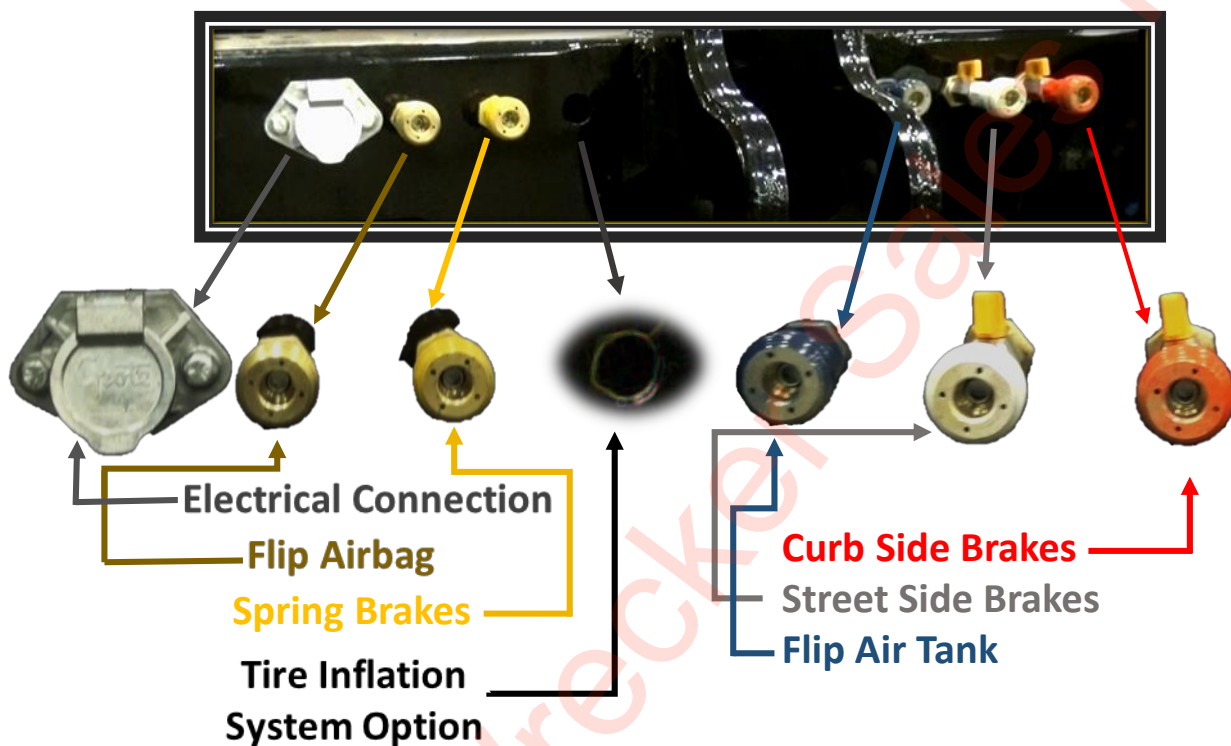


Flip axle fully installed



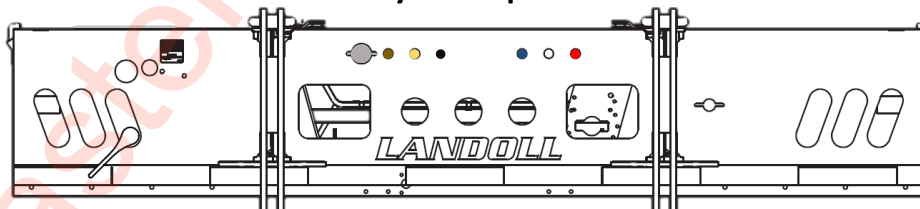


The following connections will be needed to hook up the flip



### Connections starting from the left

1. The **steel one** is the electrical connection
2. The **brass one** is for the **flip airbag**
3. The **yellow one** is for the **spring brakes**
4. The **black one** is the **tire inflation system option**
5. The **blue one** goes to the **flip air tank**
6. The **white one** goes to the **street side brakes**
7. The **red one** goes to the **curb side brakes**



Depending on the age of the trailer, the flip will have 30/30 brake chambers. If this is the case, you will need to cut a hole in the bumper where the brass fitting is and follow diagram installation on drawing 146914 (see page 5).





Trailers built before July 1<sup>st</sup>, 2015 will have different requirements

Post July 1<sup>st</sup>, 2015

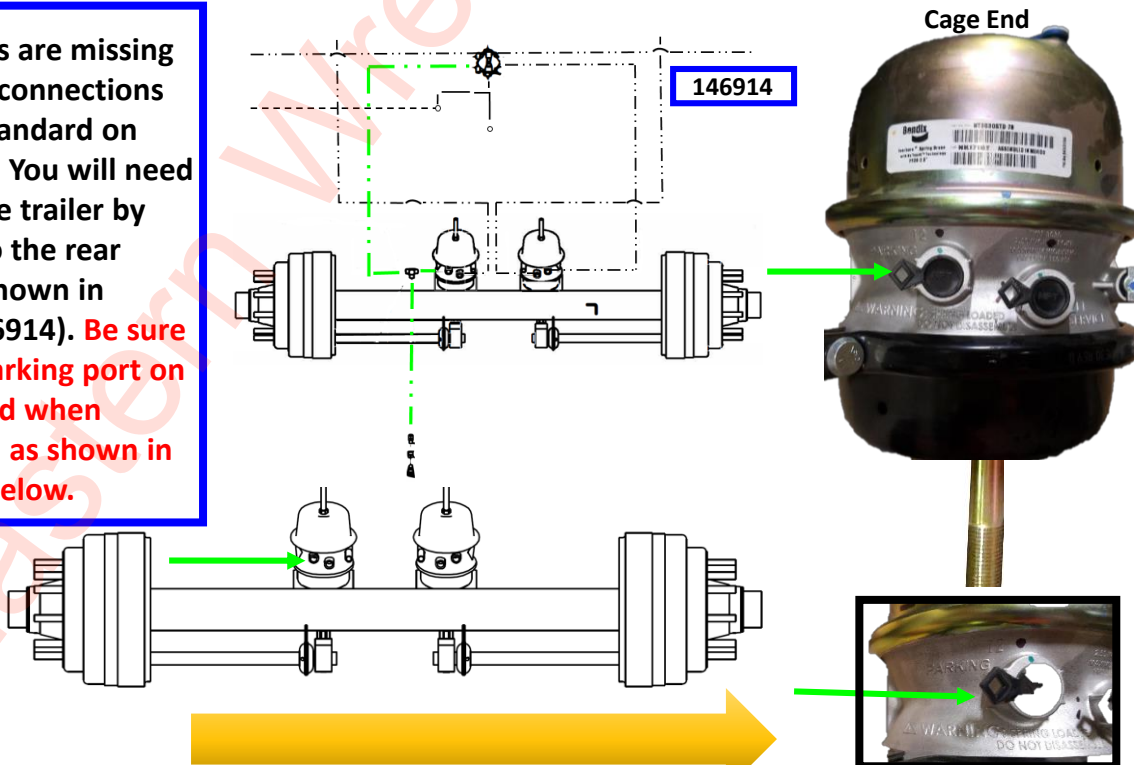


Prior to July 1<sup>st</sup> 2015



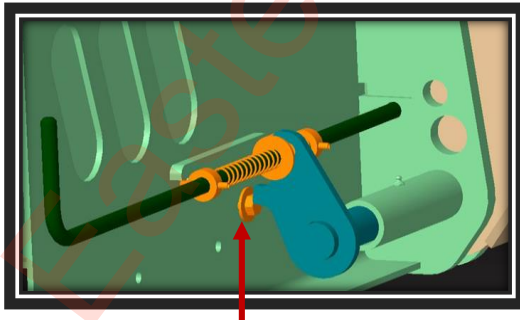
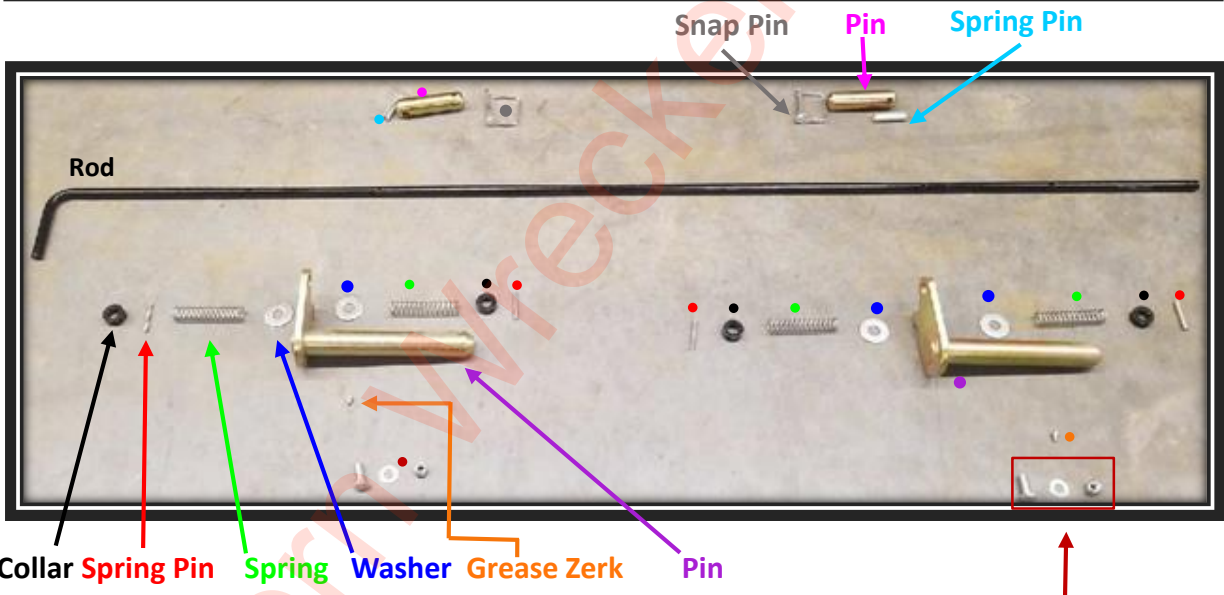
## NOTE

Older models are missing some of the connections that come standard on new models. You will need to modify the trailer by adding a T to the rear bumper as shown in diagram (146914). **Be sure to use the parking port on the brake pod when adding the T, as shown in the images below.**





These are the parts you will need to install the flip



Please note that these are only used on 855 models

Continue to step 1

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1

Installing the rod - See drawing 174069 on page 19

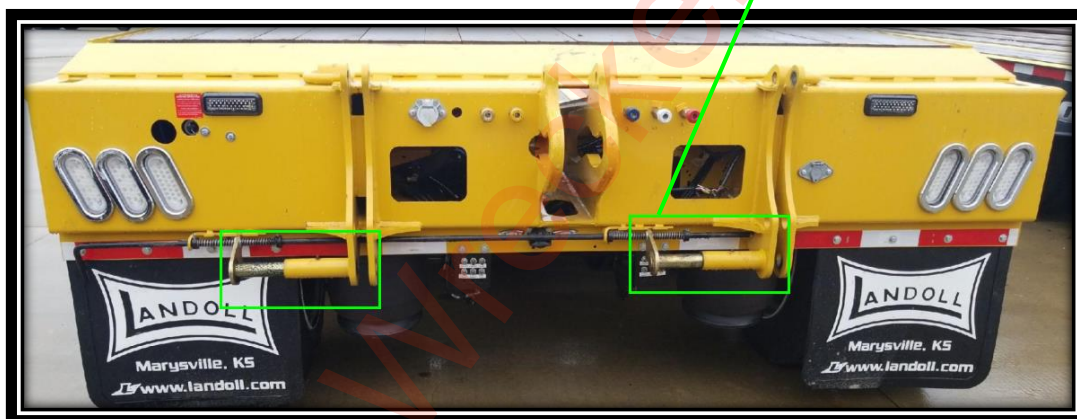
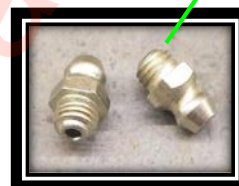
1



Begin by installing the **pins** and the **grease zerks** as shown in these images.



If this is an 855 model, install the bolt, washer and nut as shown on page 6.



2

Starting on the road side (left), begin inserting the **rod** and components. *Continued on page 8*





**1**

**Installing the rod - See drawing 174069 on page 19**

**2**

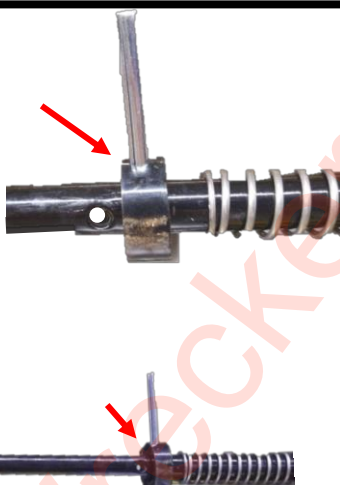
**Insert the rod while adding the components in the following order:**

Bracket—Collar/Pin—Spring—Washer—Bracket—Washer—Spring—Collar/Pin—Bracket—

Bracket—Bracket—Collar/Pin—Spring—Washer—Bracket—Washer—Spring—Collar/Pin

**2a**

Be certain that the pins are installed in the correct opening to ensure proper operation. They must be installed in the upper-most opening. Be sure to do this on the first and third collar.



If the pins are installed as shown in this image, it will restrict the range of motion needed for the rod to move correctly.

Once completed, it will look like the image below.



Check for clearance and be sure that it will latch in place.

**Continue to step 2**

## 2 Move the flip into place and hookup

- 1 Hook the flip to the hoist with the front slightly lowered.



The green arrows indicate where the flip will need to align with the rear to be pinned.



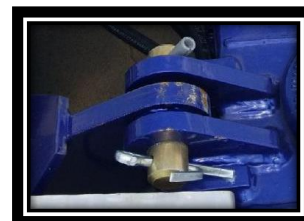
- 2 Cut loose the hoses that are coiled and secured for shipment and allow them to hang down. They will later be used to make the connections shown below.



- 3 Once completed, move the flip into place and hookup.



- 4 Lower the flip into the mounting brackets and attach the pins. **If the pins won't go into the brackets, the flip bed is too far forward and needs to be adjusted for rear clearance.**



**2****Move the flip into place and hookup****5**

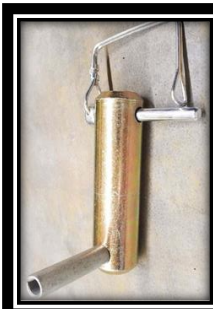
If the flip bed is too far forwards, loosen the four bolts on the frame and move it back.

**6**

When you slide the bed back, you'll want to have at least  $\frac{1}{4}$ " to a  $\frac{1}{2}$ " clearance.

**7**

Install the pins, roll pins and cotter or mud flap pins. Once completed, set the flip on the ground.

**8**

Insert a spacer between the flip bed and the frame of the trailer to hold the spacing.

**Continue to step 3**

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**3**

## Move the flip into place and hookup

**1**

**Retighten the bolts.**

**Perform in this sequence:**

1. Frame bolts
2. Bedframe curbside front
3. Roadside front
4. Roadside back
5. Curbside back



**2**

You may need to add flat washers or spacers to keep the bed at proper height.



**3**

When you finish, make sure you have  $\frac{1}{4}$ " to  $\frac{1}{2}$ " clearance between the flip bed and the trailer frame when you tighten all four bed bolts.



**4**

Remove the chain after lowering it to the ground.



**Continue to step 4**

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# 4

## Connect the hoses

### 1

Starting on the curbside of the trailer, connect the hoses based on their corresponding colors.

**Don't forget to plug in the electric line in the seven pin plug receptacle.**



When looking for pin designs, consider the following:  
*\*drawings found in back*

- For trailers manufactured **before April 2014**, use drawing **186922**.
- For trailers manufactured **later than April 2014**, use drawing **174069**.
- For additional drawing references on **hydraulic installations** on trailers **manufactured after April 2014**, refer to drawing **209086**.

**Continue to step 5**

**5**

## Check your work – Basic Functions



Check electrical system.

Turn air on to flip air bags and make sure they inflate properly.

Insert pins into place to lock the flip into transportation position.



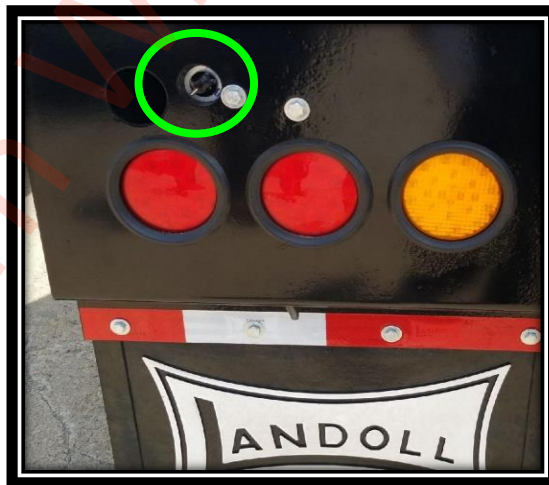
**5**

**Check your work- Ensure proper operation of air raise/lower**



**855- Inside curbside bolster**

**835 – Rear bumper, street side**



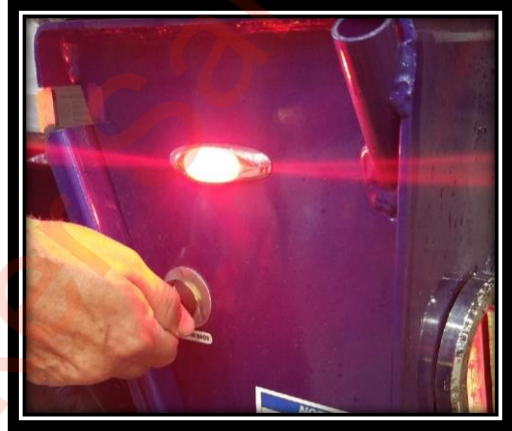
**5**

## Check your work- Transition the flip

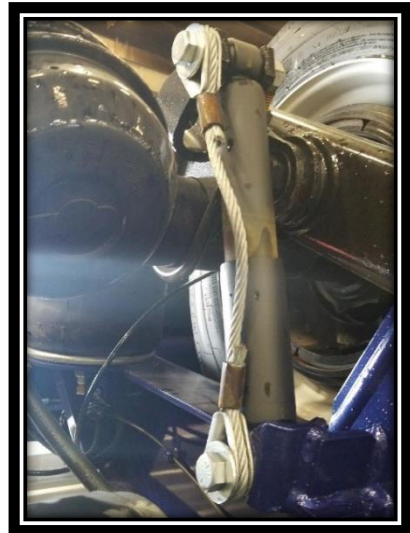
When transitioning from the transport position to the loaded position, it is recommended that you **partially** inflate your air bags to minimize impact.

**1**

With your flip in the transport position, (folded up) use the Flip Axle Air Bags switch to begin inflation.

**2**

When the air bags look like the image in the lower left hand corner, and the shock strap reaches the level of tension shown in the right hand corner, turn the Flip Axle Air Bags switch off.



**Continue to step 6**

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# 5

## Check your work- Transition the flip

### NOTE

- Be certain that all people and items are cleared from the area prior to performing the transition.
- The Flip Axle Air Bags switch **MUST BE OFF** when the flip is in transport position.
- Fully inflating the bags to reduce impact during transition will result in serious damage.
- When the transition is complete, make sure the pins are locked in place.

# 3

Once the desired inflation has been reached and Flip Axle Air Bag Switch has been turned off, pull the Accessory Lever down to begin transitioning the flip.



Continue to step 6

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**6**

## Complete the process



**Align the flip axle to the trailer axle.**

**Make sure the measurement is the same for both road and curb side.**



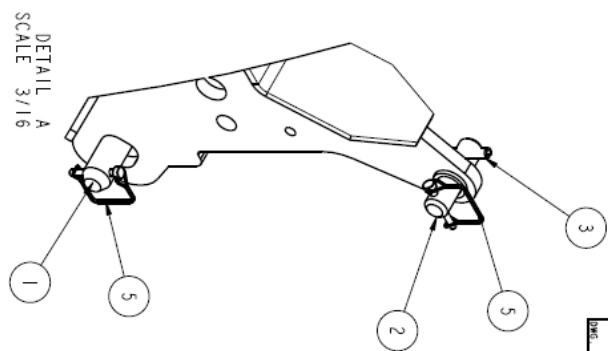
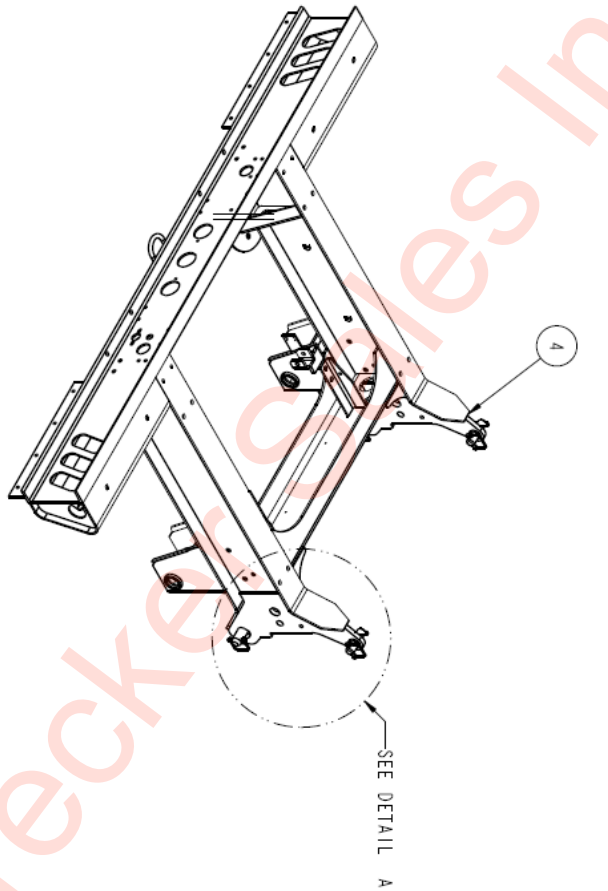
**Tighten bolts to 550 foot pounds.**



**Once the alignment bolts are torqued, spot weld the nuts to the collars on both sides.**

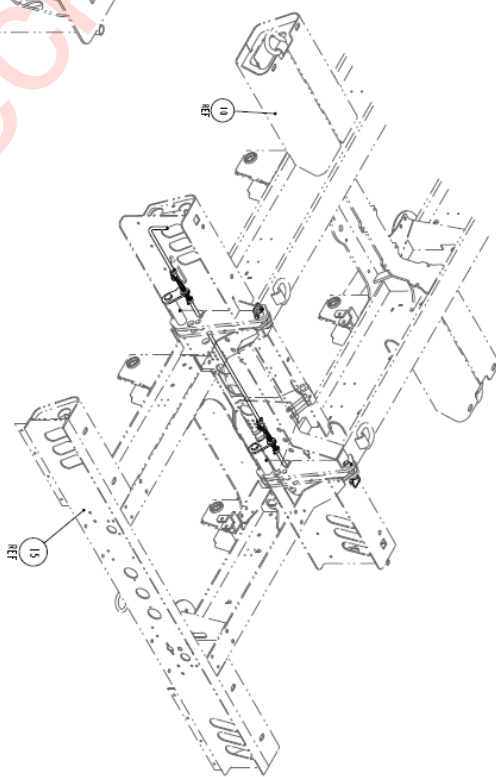


## 186922 Pins for manual flip operation



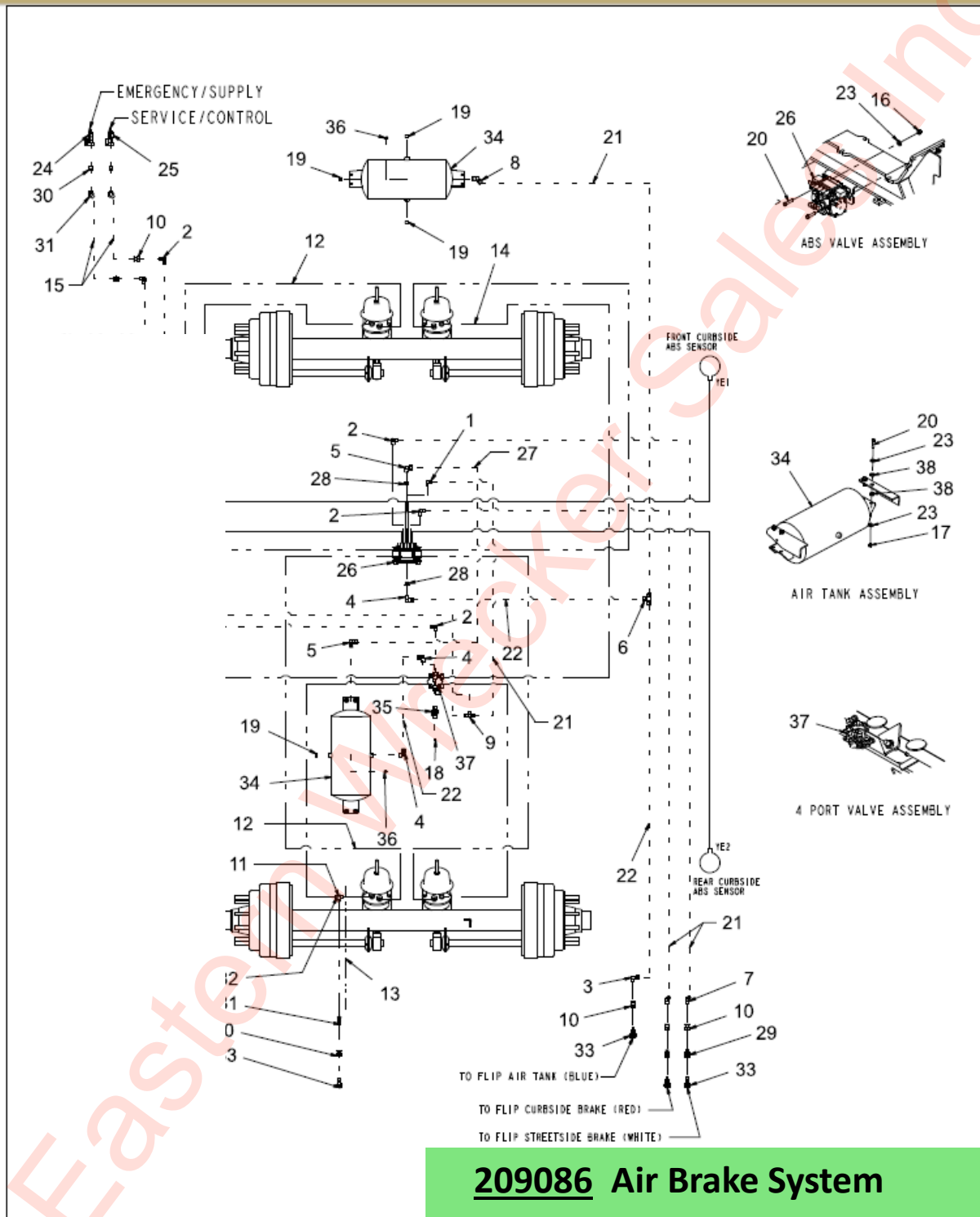
|   |           |     |                                 |         |
|---|-----------|-----|---------------------------------|---------|
| 5 | 516-22PTL | 4   | PIN, MUD FLAP                   | 0.117   |
| 4 | 155036    | REF | FLIP WLDMT 835 W/BUSHING        | 589.987 |
| 3 | 141251    | 2   | SPRING PIN, SLOTTED 1/2 X 2-1/4 | .001    |
| 2 | 128873    | 2   | PIN, FLIP 835 W/BUSHING         | 1.468   |
| 1 | 114712    | 2   | PIN WLDMT FLIP LOWER 835        | 4.323   |

**174069**

[illegible]

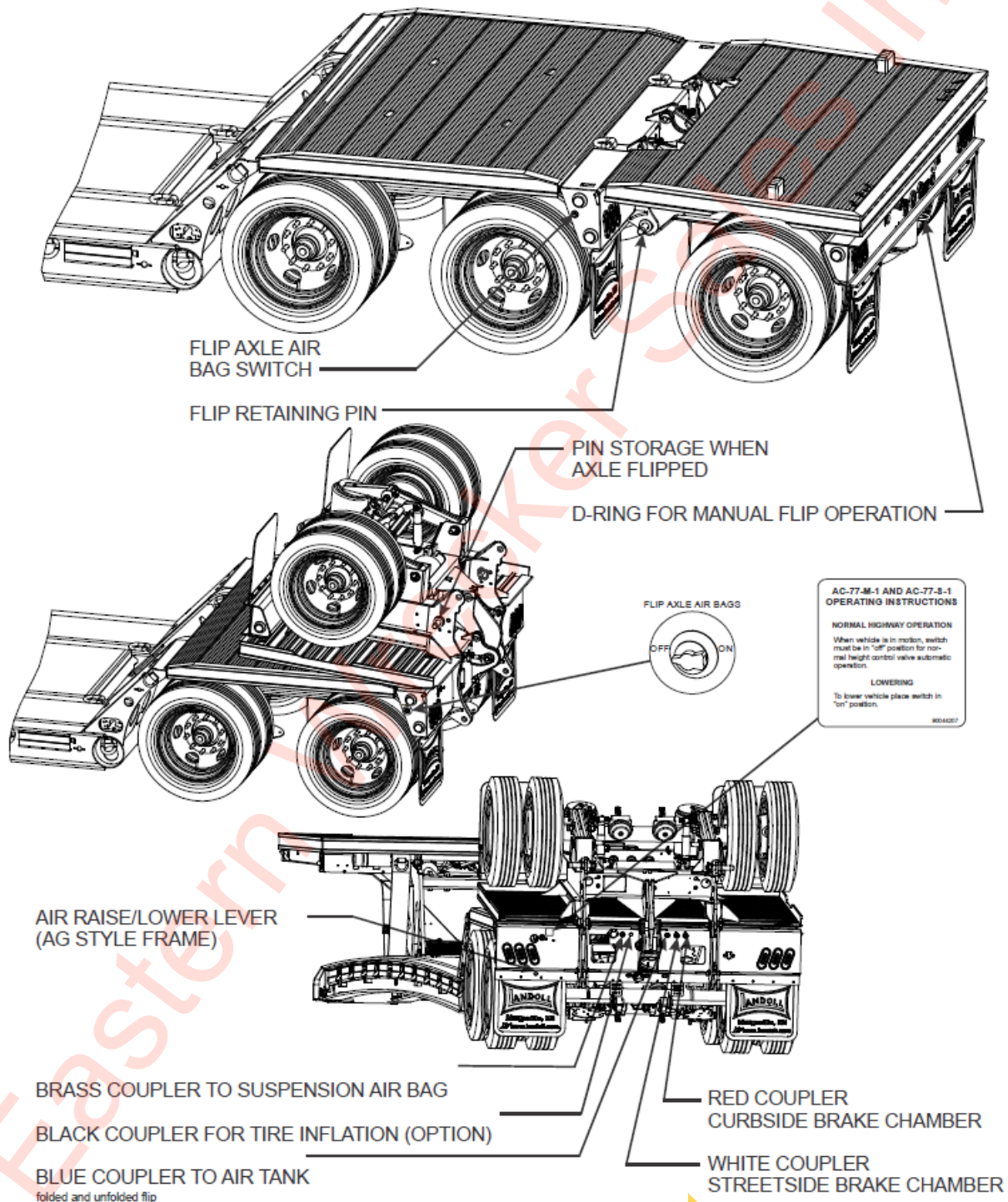


For additional drawing references on **hydraulic installations** on trailers **manufactured after April 2014**, refer to drawing **209086**.





## Installed flip



# Notes



**For any questions or concerns,  
please contact technical support at:  
800-446-5175**

