

# CANTILEVER REAR CAMERA MOUNT



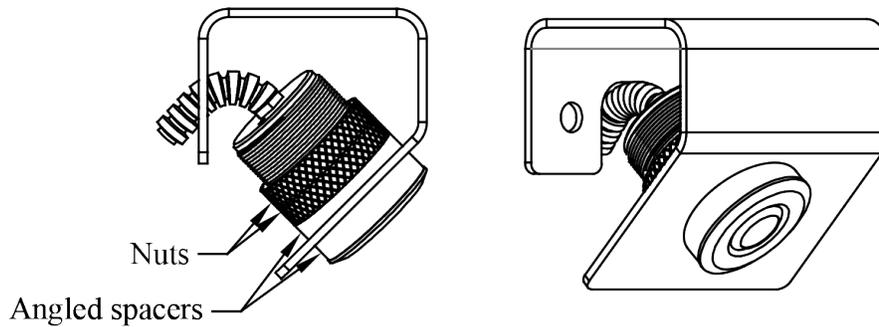
## FMVSS 111 Compatible Camera Bracket

Part Number: 15598

Effective May 1, 2018, vehicles manufactured on or after May 1, 2018 with a 10,000-pound or less GVWR must meet all conditions of FMVSS 111 rear visibility. This applies to original, final-stage, or altered-stage manufactures. This regulation applies to the installation of all Cantilever model liftgates, on some van body manufacturer models and body styles.

When you combine the purchase of a FMVSS 111 compatible Rear View Safety, Inc. (<https://www.rearviewsafety.com/>) Backup Camera System with Flush Mount Camera and Tommy Gate’s adaptable camera bracket, you are able to mount the camera directly onto the Cantilever model liftgate. This allows for a vehicle with a liftgate installed to meet FMVSS 111 requirements.

*\*Camera sold separately*



\*The above bracket and separately purchased FMVSS 111 compatible Backup Camera System (see below chart), are compatible on all manufacturer models and body styles for the Cantilever model liftgate.

Purchase the below parts from Rear View Safety, Inc.	
VENDORPARTNO.	DESCRIPTION
RVS-659	FLUSH MOUNT BACKUP CAMERA
RVS-6137N	7" LED DIGITAL PANEL COLOR MONITOR
RVS-826N OR RVS-825N	33' CAMERA CABLE OR 66' CAMERA CABLE

In view of the responsibility of altered-stage vehicle manufacturers to comply with FMVSS 111, Tommy Gate offers its "Camera Kits" as a possible solution. However, it is the sole responsibility of the upfitter/final stage manufacturer to determine if the Tommy Gate Camera and Sensor Kit meets FMVSS 111 and/or any other applicable vehicle certification - and it is not the responsibility of Tommy Gate/Woodbine Manufacturing Company. Any information made available by Tommy Gate regarding its Camera Kit is not intended to be, and shall not be, relied upon as a final determination of compliance with FMVSS 111 and/or any other vehicle certification. Each distributor must, on its own, make each such required determination for each vehicle it offers to a customer. Tommy Lifts are industrial products for material handling only and are not to be used as personnel or wheelchair lifts. For safe handling and operating instructions, visit: [www.tommygate.com](http://www.tommygate.com).

These instructions will aid you in installing a FMVSS 111 compatible *Rear View Safety, Inc.* (<https://www.rearviewsafety.com/>) Backup Camera System With Flush Mount Camera onto a Tommy Gate Cantilever model liftgate.

## Preparing for Installation

1. **Verify** that you have a compatible camera, cable and monitor. (Table 1)
2. **Verify** all parts are included in the bracket kit. (Table 2 and Figure 1)

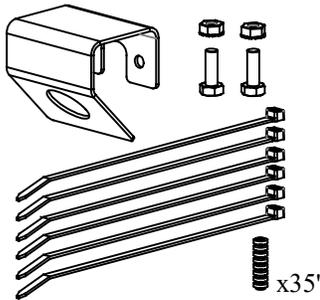


Table 2: Tommy Gate CVL Backup Camera Bracket Kit

QTY.	PART NO.	DESCRIPTION
1	015558	CAMERA MOUNTING BRACKET
2	000630	1/4-20x3/4" HEX HEAD CAP SCREW
2	011081	1/4-20 KEPS NUT
35'	015597	SPLIT 1/4" CONVOLUTED TUBING
5	009077	3/16"x7-1/2" CABLE TIE

Figure 1: Mounting Kit Parts.

Table 1: Purchase These Parts From Rear View Safety, Inc.

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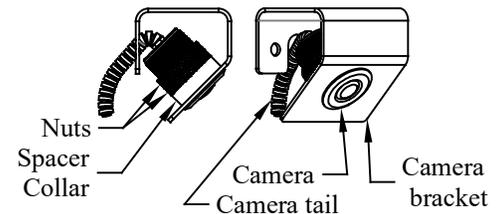


Figure 2: Flush mounted camera.

## Installing the Camera

1. **Cover** the camera tail with 2' of convoluted tubing and **secure** the tubing with a cable tie.
2. **Position** the camera within the bracket.
3. **Secure** the camera from the back using the spacer collar and both included nuts. (Figure 2)
4. **Remove** the four bolts securing the lower liftgate cover (figure 3) with a 3/8" socket.
5. **Remove** the lower liftgate cover.
6. **Use** the provided dimensions (Figure 4) or template. (Figure 7) **Drill** three holes within the suggested bracket mounting area in the lower liftgate cover. (Figure 3)
7. **Route** the camera tail through the 3/4" drilled hole.
8. **Attach** the camera mounting bracket to the lower liftgate cover with the provided 1/4" fasteners.
9. **Reattach** the Lower Liftgate Cover in its original location.
  - Allow the camera tail to hang where it will be accessible later.

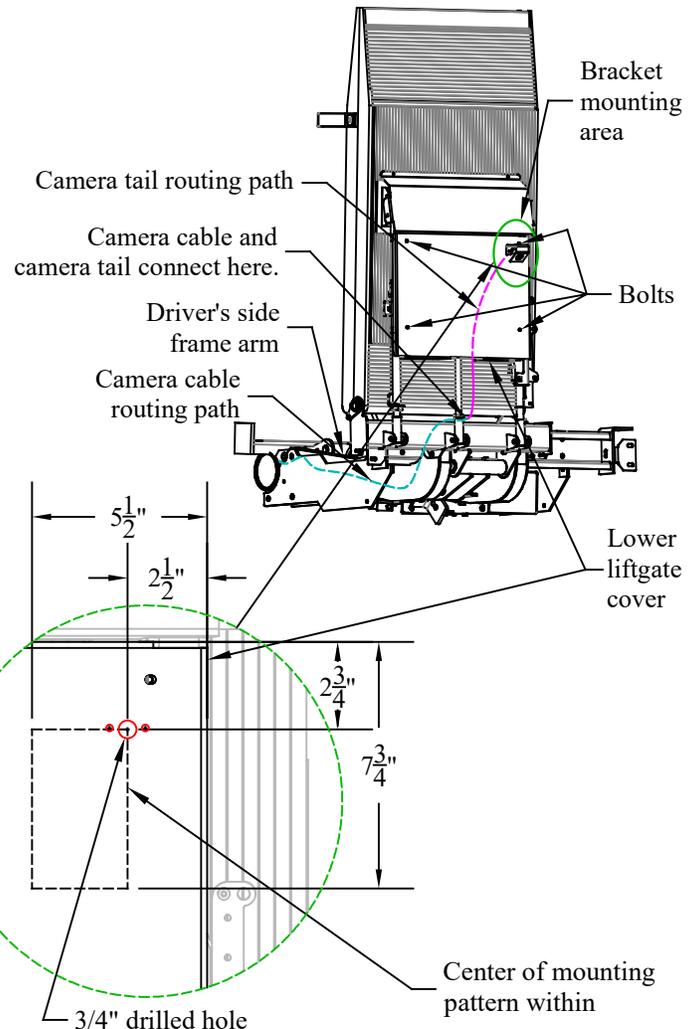


Figure 3: Bracket mounting area.

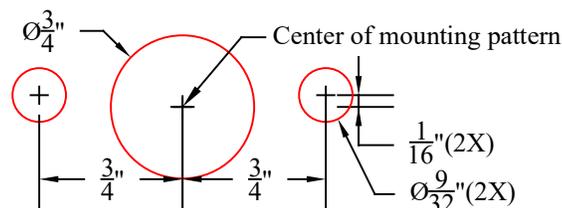


Figure 4: Mounting hole pattern and dimensions.

# CVL Backup Camera Bracket Installation Instructions (Backup Camera Not Included)

## Routing the camera cable and installing the monitor

1. **Cover** the camera cable with the remaining convoluted tubing. Keep the rubber sheaths on the camera cable near their respective plugs.
2. **Route** the camera cable through the driver's side liftgate arm. **Route** about 1' of slack between the platform pivot and platform.
3. **Plug** the camera tail into the camera cable. **Secure** the threaded fastener attached to the pair of connectors. **Cover** both connectors with the silicone sheath attached to the long cable.
4. **Route** the remainder underneath the hinge on the other end of the liftgate arm. (Figure 5)
5. **Route** the camera cable to the front of the vehicle along the same path as the liftgate power wires by following the power wiring instructions appropriate for your vehicle.
  - **Keep** the cable away from sources of excessive heat and sharp edges. **Take care** to avoid pinching or kinking the cable.
6. **Mount** the monitor in the vehicle's cab **following** the installation instructions provided with the monitor.
7. **Connect** the camera cable to the monitor using the instructions included with the monitor to select the appropriate plug.
8. **Cover** both connectors with the rubber sheath attached to the camera cable.
9. **Connect** the remaining power and signal wires to the vehicle electrical system by following the instructions provided with the camera system.

## After Installation

1. **Verify** that your installed camera is oriented correctly and meets FMVSS 111 requirements.
  - If a different field of view is desired, use the two angled collars on either side of the bracket instead of the spacer collar. (Figure 6) Turn the two collars to adjust the angle of the camera until the desired field of view is achieved.
2. **Secure** the cables to the hydraulic hose and in other places where needed using the provided zip ties.
3. **Operate** the liftgate and **check** for binding of the cables. Adjust the cable as needed.

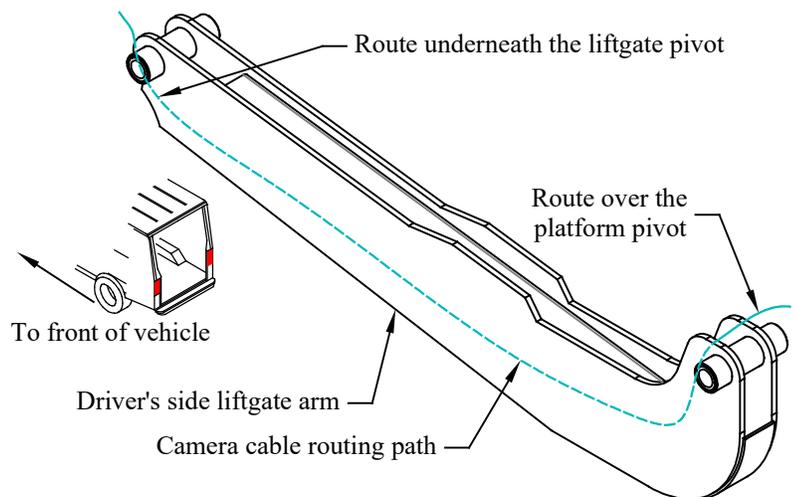


Figure 5: Routing the camera cable.

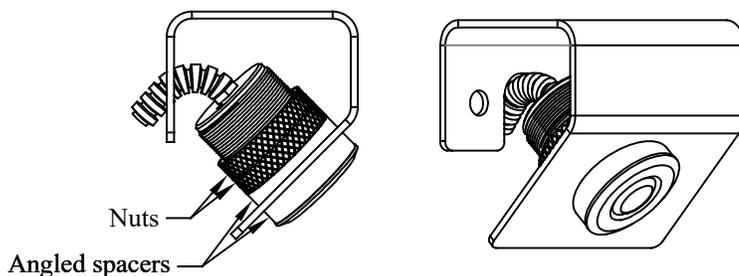


Figure 6: Angled spacer mounted camera.

Note: Adjust your print settings to avoid scaling the page if you wish to use this template:

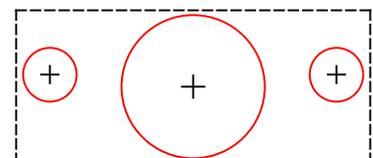


Figure 7: Full sized drill template.