### MAINTENANCE/CARE

• Periodically check and tighten all fasteners.

 Stripped, fractured, or bent bolts or nuts need to be replaced.

 After washing of the vehicle make sure to fully dry all surfaces

# SENSOR DISCLAIMER

PLEASE NOTE PARKING SENSORS ARE EXTREMELY DELICATE AND MUST BE HANDLED WITH CARE!

Do NOT touch or shift the clear rubber grommet that surrounds the sensor face. DO NOT glue housing into place until orientation and functionality is determined.

# APPENDIX

#### **Troubleshooting Vehicle Sensors**

- Start with a general inspection of the sensor fitment. Check that both the sensors and the sensor clips are fully secure and the sensors are properly centered in the housing.
- Confirm plastic housing is in the correct mounting holes. Misplaced sensor housings could compress sensor and give false readings or faults.
- Use a clean microfiber to wipe the front face of the sensor.
- Inspect connection. Be sure that the sensor is firmly seated into the harness.
- Run through several start cycles (i.e. fully turn the vehicle on and off).
- Finally, disconnect the battery to reset the sensors.

### WARNING

If your vehicle has adaptive cruise, please ensure that your adaptive cruise is working correctly once the Ranch Hand bumper is installed. Adaptive cruise may need to be cleaned or adjusted to ensure it functions properly. See your owner's manual for care of the adaptive cruise.

Special care should be exercised in the handling, storage and installation of Kaspar Ranch Hand equipment. The actual weight of each piece of equipment will vary depending on style and model. The weight of the equipment is sufficient in volume to warrant special care, assistance and in some instances, the use of mechanical equipment during the transfer and installation of the equipment. Do not assume a position directly under the equipment during installation. Be sure the equipment has been connected and stabilized during installation to prevent falling or shifting of positions. Periodically check tightness of bolts to make sure they are tight, and unlikely to fail.

# SAFETY

- In order to help you make informed decisions about safety, we have provided installation instructions and other information.
- These instructions alert you to potential injury hazards
  Please do a job safety analysis before each task to identify potential hazards for your situation and remove/protect against them.
- You must use your own good judgment.
- Read and understand all safety precautions and instructions before installing this product

### HAZARD

FAILURE TO OBSERVE THESE INSTRUCTIONS COULD LEAD TO SEVERE INJURY OR DEATH.

- Always remove jewelry and wear eye protection.
- Always use extreme caution when jacking up a vehicle for work. Set emergency brake and use tire blocks. Locate and use the vehicle manufacturers designated lifting points. Use jack stands.
- Always use appropriate and adequate care in lifting components into place.
- Always insure components will remain secure during installation and operation.
- Always wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause serious eye injury.
- Always use extreme caution when drilling on a vehicle. Thoroughly inspect the area to be drilled (on both sides of material) prior to drilling, and relocate any objects that may be damaged.
- Always use extreme caution when cutting and trimming during fitting.
- Always tighten all nuts and bolts securely per installation instructions.
- Always route electrical cables carefully. Avoid moving parts, components that become hot and rough or sharp edges.
- Always insulate and protect all exposed wiring and electrical terminals.
- Always perform regular inspections and maintenance on mounts and related hardware.



# INSTALLATION INSTRUCTIONS



### **DESCRIPTION** 2010 DODGE 2500/3500 LEGEND BACK BUMPER

### PART #: BBD100BLSS/BBD100BLL

# **INSTALLATION INSTRUCTIONS:**

- If reverse sensors are present, remove the sensor from the factory bumper. DO NOT DISCONNECT THE SENSOR WIRES. Zip-tie the sensors to the frame to prevent damaging when installing the bumper.
- 2. Unplug the license plate lights and trailer plug from the bumper. Remove the fasteners that hold the wire loom to the receiver hitch.
- 3. Long beds: Remove the back six bolts and leave the front two bolts tight.
- 4. Short beds: Remove the back four bolts and leave the front two bolts tight.
- 5. Remove the three 21mm bolts, on each side, that goes through the frame. Loosen thr four 15mm bolts, on each side, for the side brackets on the bumper.
- 6. Raise the rear of the truck bed high enough to remove the factory bumper and receiver hitch.
- 7. When raising the rear of the truck bed, use caution so that the bed does not hit the rear of the cab.
- 8. When removing the bumper, lift the bumper up high enough over the alignment pins then pull the bumper out.
- 9. Lower the truck bed onto the frame. Reinstall the bed bolts and then tighten.
- 10. Slide the mounting brackets of the Ranch Hand bumper on the inner side of the frame.
- 11. Use three 3/4" x 4 1/2" bolts, on each side, to install. Tighten to 260 ft. lbs. Dry.
- 12. Level bumper and tighten all bolts.
- 13. Make sure all nuts and bolts are tight!!

# 2010 DODGE 2500/3500 LEGEND BACK BUMPER BBD100BLSS/BBD100BLL

### **TOOLS REQUIRED**

Metric & SAE Sockets Metric & SAE Wrenches Floor Jack

