INSTALLATION INSTRUCTIONS MOUNTING KIT GENERAL MOTORS 2011

Chevrolet Silverado/GMC Sierra 2500HD & 3500HD

DEALER/INSTALLER:

- (1) Read all instructions before installation
- (2) Provide this Manual to end user.

END USER:

1

2

3

4

5

6

7

8

9

17 5/8" FLAT WASHER

(1) Save this Manual for future reference.



(4)

Failure to follow all of these instructions may result in death or serious injury!

INDEX

- 1. GUIDELINES FOR MATCHING TOW VEHICLE AND TRAILER
- 2. ASSEMBLY INSTRUCTIONS
- 3. CEQUENT PERFORMANCE PRODUCTS, INC. LIFETIME LIMITED WARRANTY

GUIDELINES FOR MATCHING HITCH TRUCK AND TRAILER





*Trailer weight should be the lowest of these recorded ratings for safe towing conditions.

- 2. Cequent Performance Products, Inc. hitches are designed for use with recreational fifth wheel trailers only.
- 3. Use only a SAE 2" kingpin with your *REESE*[®] *Elite*[™] *Series* Fifth Wheel Hitch.
- 4. Approximately 15%-25% of trailer weight should be on hitch (Pin Weight)(Figure 3).



 Trucks come in many different configurations. Cequent Performance Products, Inc. hitches are designed for use in light trucks such as the Ford F-Series, the Chevy Silverado and the Dodge Ram. Cequent Performance Products, Inc. recommends the use of long bed (8') light trucks for the best combination in truck - trailer turning clearance.



6. If a short bed pickup (less than 8' but longer than 6') is to be used for towing, Cequent Performance Products, Inc. recommends the trailer be equipped with an extended pin box to help gain additional truck - trailer turning clearance (See trailer manufacturer for options) (Figure 5). It also may be helpful to add a *REESE Elite Series* Slider (Part # 30070) for increased turning clearance for low speed, non-highway maneuvering.



7. The height of the hitch and the pin box should be adjusted so the trailer is approximately level as it is towed. Allow approximately 6" clearance between the top of the pickup walls and the underside of the front of the trailer for pitch and roll of the trailer. (Figure 6). Allow more clearance between pickup walls and trailer for off road use.



CAUTION:

The measurements above are guidelines. If your measurements are close to these numbers re-check clearances. If vehicle and/or trailer has any added bed vicinity accessories (i.e. fairings, air dams, ground effects, bed rails, etc.). Additional dimensioning and clearance checks have to be made.

8. Hitch height determination:

With trailer leveled and on level ground measure from the ground to the king pin box ("A" in **Figure 7**). Secondly measure the height of the inside of the truck bed ("B" in **Figure 7**). Determine the amount of clearance over the side rails ("C" and "D" in **Figure 7**), as mentioned in **step 7**.

Hitch Height =
$$A - B + 2$$
"

The 2" value is an estimate of suspension compression due to king pin weight of the trailer. This compression could range between 1"-5" depending on the truck being used and the trailer being towed.





Figure 7

9. If a lube plate is to be used with a REESE[®] Elite[™] Series fifth Wheel it must be at least 12" in diameter. Cequent Performance Products, Inc. offers this optional lube plate as part # 83001.

•Connection for trailer wiring must be located at the side of the truck bed between the driver's seat and the rear wheel to prevent operators from working between the truck and trailer.

•Avoid putting any part of your body under the trailer or between the truck and trailer. Unexpected or accidental movement of the truck or the trailer can cause serious injury or death

•If you must place any part of your body under the trailer or between the truck and trailer you <u>MUST</u> perform <u>ALL</u> of the following steps:

- •Check that the truck transmission is in park
- •Check that the emergency brake is on
- •Block in front of and behind all trailer tires
- •Check that the trailer landing gear are resting on firm ground

TOOLS 1-1/8" socket and/or open end wrench 18mm socket 3/8" Hex socket

GENERAL INSTRUCTIONS FOR FIFTH WHEEL INSTALLATION

15/16" Socket & Open End Wrench 200 lb-ft Torque Wrench 3-1/4" Hole Saw OR 3-1/4" Greenlee Knockout Punch

CAUTION!

Read page 2-4 of these instructions before starting installation. Failure to do so could result in significant vehicle damage!

- 1. The following instructions should be used to mount the fifth wheel. Care and attention to detail will ensure a quick quality installation. Check parts against parts list to become familiar with parts in kit. (Figure 1)
- 2. Raise rear of truck high enough to allow jack stands to be placed under rear spring hanger bracket of truck. This will provide maximum room to install the fifth wheel brackets.

\land <u>WARNING:</u>

If the truck is raised, be sure that the truck is properly blocked and restrained to prevent the truck from falling. Failure to do so may result in the truck suddenly falling, causing death or serious injury.

 Plastic drop-in bed liners must be cut out of the way. Remove plastic bed liner if applicable. Spray-in bed liners and bed mats less than 1/4" thick will work with normal installation instructions. Note: Consult installer for recommended curing time on spray-in liner before cutting holes through bed.

CAUTION:

Check for obstructions before drilling. Failure to do so could result in damaged fuel/brake lines, structural members, etc. CEQUENT PERFORMANCE PRODUCTS, INC. does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.

- 4. Use only CEQUENT PERFORMANCE PRODUCTS, INC. supplied bolts, nuts, and washers to install this kit. All bolts and nuts are Grade 8 unless specified otherwise.
- 5. These instructions are intended for a specific group of trucks. Each frame bracket must be bolted to the vehicle frame with two bolts.

CAUTION:

These instructions are guidelines only. Actual installation is the responsibility of the installer and the owner. Always measure truck and trailer before installing hitch to be sure that there is clearance at the cab and at the bumper to allow for turns.

6. Trim rear heat shield as seen in Figure 8. Reinstall heat shield once mounting kit is in place.



- 7. Using a 18mm socket to remove all passenger side bed bolts and loosen or remove all driver side bed bolts. Then raise and support the truck bed.(Only one side may need to be raised in which case the passenger side is recommended.
- 8. Insert rails as shown in the following steps (Figures 9 through 14). With flat side up rear rail should be inserted first. With flat side up insert front rail second. Refasten truck bed bolts after rails are inserted.



Step 1 : Slide one rail in behind the hat channel located over the axel. Lift and position it so that it rests on the frame.



Step 3 : Slide the front rail in over the frame as shown.

Step 2 : Position the rail near the rear hat channel as shown so that it rests evenly on both sides of the frame.



Step 4 : Position the rail approximately as shown so that it rests evenly on both sides of the frame.



Loosely attach frame brackets to rails using 3/4" X 2" hex bolts, 3/4" conical washers, and welded nut/spacer hardware. (Figures 15 & 16).



11. Loosely attach frame brackets to frame using 5/8" x 2" carriage bolts, 5/8" conical washers, spacers, and 5/8" nuts hand tighten (Figure 17&18). Slide spacer onto the carriage bolt and thread the carriage bolt into the pull wire. Guide the pull wire through chassis (using access hole as shown), then guide the wire through the chassis to position bolt and spacer through mounting holes. Loosely attach conical washer and nut from outside of frame rail.



Bolt and a spacer on a pull wire (4 locations)

Using the drivers side edge of the bed corrugation, find the center of the truck bed. Measure the locations of the holes that will need to be cut using Figure 20 (long bed application) or Figure 21 (short bed application). If a plastic drop-in bed liner is used cut 19" X 4" slots in liner measured from center of holes in truck bed. If the REESE® Elite™ Series slider fifth wheel assembly is used, then see fifth wheel slider assembly instructions for slot cut dimensions.



Figure 21 – Short Bed (6')



13. Remove 5/8" x 2" bolts attaching frame bracket to mounting rails. Move rails rearward or forward to prevent interference with hole drilling or punching of the truck bed.

CAUTION:

Check for obstructions before drilling. Failure to do so could result in damaged fuel or brake lines, structural members, etc. CEQUENT PERFORMANCE PRODUCTS, INC. does its best to communicate tow vehicle manufacturer changes; however, it is ultimately the responsibility of the installer to prevent damage due to installation.

- 14. Drill pilot hole in truck bed per measurements. With hole saw or knockout punch in large hole to 3-1/4". Plastic bed liner will need to be removed before drilling or punching out. Bed liner will need to be cut as noted in general instruction #3 on page 5. Optional: Spray under coating around 3-1/4" holes to prevent rusting.
- 15. Loosely reattach rails to frame bracket.
- 16. From truck bed attach pucks and trim rings to rails (**Figure 22**) using 5/8" flat washer under the puck, button head screw and lock washer. Tighten to 100ft.lbs. torque.



- 20. Torque all 5/8" rail kit hex bolts to 170ft.lbs and 3/4" hex bolts to 260ft.lbs
- 21. Replace any brake lines and spare tire that may have been removed/relocated.

ASSEMBLY INSTRUCTIONS Reese[®] Elite[™] Gooseneck Hitch Chevy/GMC/Dodge 2500HD/3500HD

DEALER/INSTALLER:

- (1) Provide this Manual to end user.
- (2) Physically demonstrate procedures in this Manual to end user.
- (3) Have end user demonstrate that he/she understands procedures.

END USER:

- (1) Read and follow this Manual every time you use Gooseneck.
- (2) Save this Manual for future reference.
- (3) Pass on copies of Manual to any other user or owner of Gooseneck.



A <u>WARNING:</u> Failure to follow all of these instructions may result in death or serious injury!

INDEX

1.GUIDELINES FOR MATCHING TOW VEHICLE AND TRAILER 2.ASSEMBLY INSTRUCTIONS 3.IMPORTANT INFORMATION 4.CEQUENT PERFORMANCE PRODUCTS, INC.

GUIDELINES FOR MATCHING HITCH TRUCK AND TRAILER

MARNING: Failure to check and follow tow ratings could result in tow vehicle damage or truck and trailer separation while hauling. Trailer and its contents together must not exceed truck, hitch and/or trailer tow ratings. Towing vehicle must have a manufacturer's rated towing capacity equal to or greater than the gross trailer weight (dry weight of the trailer plus payload of the trailer). (See Fig. 2) Gross weight of trailer must not exceed 25,000 pounds. Pin weight must not exceed 6,250 pounds. (See Fig. 3). If in doubt have pin weight measured by qualified facility.



- 2. Cequent Performance Products, Inc. hitches are designed for use with recreational gooseneck trailers only. Hitch applications other than recreational gooseneck trailers must be approved in writing by Cequent Performance Products, Inc. Engineering Department.
- 3. Use only a SAE 2-5/16" hitchball with your *REESE*[®] *Elite*[™] Gooseneck Hitch.
- 4. Approximately 15%-25% of trailer weight should be on hitch (Pin Weight). See Fig. 3.



5. Trucks come in many different configurations. Cequent Performance Products, Inc. recommends the use of long bed (8') light trucks for the best combination in truck - trailer turning clearance.



6. The height of the coupler should be adjusted so the trailer is approximately level as it is towed. Allow approximately 6" clearance between the top of the pickup walls and the underside of the front of the trailer for pitch and roll of the trailer. (See Fig. 5). Allow more clearance between pickup walls and trailer for off road use.



CAUTION:

The measurements above are guidelines. If your measurements are close to these numbers re-check clearances. If vehicle and/or trailer has any added bed vicinity accessories (i.e. fairings, air dams, ground effects, bed rails, etc.). Additional dimensioning and clearance checks have to be made.

7. Hitch height determination:

With trailer leveled and on level ground measure from the ground to the coupler, Dimension "A" in Fig. 6. Secondly, measure from the height of the inside of the truck bed to the ground, Dimension "B" in Fig. 6. Dimensions "C" and "D" in Fig. 6 can be used to determine the amount of clearance over the side rails, as mentioned in instruction #6 (Additional clearance may be needed for off road maneuvering and/or steep inclines while turning).

The 2" value is an estimate of suspension compression due to king pin weight of the trailer. This compression could range between 1"-5" depending on the truck being used and the trailer being towed.

D - C + 2" > 6" as noted in instruction #6.





<u> ∕∕∕</u> <u>WARNING:</u>

•Connection for trailer wiring must be located at the side of the truck bed between the driver's seat and the rear wheel to prevent operators from working between the truck and trailer.

•Avoid putting any part of your body under the trailer or between the truck and trailer. Unexpected or accidental movement of the truck or the trailer can cause serious injury or death

•If you must place any part of your body under the trailer or between the truck and trailer you <u>MUST</u> perform <u>ALL</u> of the following steps:

•Check that the truck transmission is in park

•Check that the emergency brake is on

•Block in front of and behind all trailer tires

•Check that the trailer landing gear are resting on firm ground

<u>REESE[®]Elite[™]</u> GOOSENECK ASSEMBLY

TOOLS Safety Glasses Impact Wrench 1-1/8" Socket

3-1/2" Hole Saw Torque Wrench

- 1. Check all the boxes for all the components listed in Figure 1 and become familiar with component terminology.
- 2. For cutting pattern and rail installation refer to 30868N Instructions for **Chevy** applications <u>OR</u> 30852N Instructions for **Dodge** applications.
- 3. Place the REESE[®] Elite[™] Gooseneck Hitch under the truck (As shown in figure 7) using the 3/4" hex bolts(3) and 3/4" conical washers(2), slide them into place through the slots found in the Gooseneck center section(1).
- 4. Slide the gooseneck center section up around the holes found on the bottom of the Rails and loosely assemble the hardware. Repeat this process for the remaining 3 bolts. **DO NOT TIGHTEN THE HARDWARE AT THIS TIME**.



- 5. Once the *REESE*[®]*Elite*[™] Gooseneck Hitch has been loosely assembled , locate the collar in the 3-1/2" hole that was cut in step 2.
- Once the top of the gooseneck receiver tube is located in the hole (See figure 8), then tighten the hardware to a torque of 180 ft/lbs, then the safety chains holder (see instruction manual for installation instructions) and 2-5/16" hitch ball may installed.



REESE[®] Elite[™] Gooseneck HITCH SYSTEM IMPORTANT INFORMATION ON TOWING

TOWING EQUIPMENT OWNERS: Make sure all operators of your equipment read and understand this information before towing. Save for reference. This will help you properly use and maintain your towing equipment. Refer to owner's manuals for your tow vehicle, trailer and other parts of your towing system. Learn the capabilities and limitations of each part. GROSS TRAILER WEIGHT and VERTICAL LOAD are the two most important items to consider. THESE WEIGHTS MUST NEVER EXCEED THE LOWEST RATING OF ANY PART OF YOUR TOWING SYSTEM. GROSS TRAILER WEIGHT is the weight of the trailer plus cargo. Measure GROSS TRAILER WEIGHT by putting the fully loaded trailer on a vehicle scale. VERTICAL LOAD is the downward force exerted on the ball by the trailer coupler. Use a vehicle scale to measure VERTICAL LOAD with the fully loaded trailer on a level surface and the coupler at normal towing height.

TRAILER COUPLERS

The coupler should be smooth, clean and lightly lubricated. Adjust per coupler manufacturer's instructions.

SAFETY CHAINS

Connect safety chains properly **EVERY TIME YOU TOW.** Attach securely through the chain loops provided so they can not bounce loose. Leave only enough slack to permit full turning. Too much slack may prevent chains from maintaining control if other connections separate.

TRAILER LIGHTS, TURN SIGNALS, ELECTRIC AND BREAKAWAY SWITCH CONNECTIONS

Make these safety-critical connections **EVERY TIME YOU TOW**, no matter how short the trip. Check operation, including electric brake manual control, before getting on the road.

OTHER USEFUL EQUIPMENT

AIR SPRINGS, AIR SHOCKS, or HELPER SPRINGS are useful for some applications. A TRANSMISSION COOLER may be necessary for heavy towing. Many states require TOWING MIRRORS on both sides.

TIRE INFLATION

Check often. Follow tow vehicle and trailer manufacturer's recommendations.

CHECK YOUR EQUIPMENT/REPLACE WORN PARTS

Check ball, coupler, chains, and all other connections EVERY TIME YOU TOW. Re-check at fuel and rest stops.

NO PASSENGERS IN TRAILER!

Never allow people in the trailer while towing, under any circumstances.

TRAILER LOADING

Place heavy objects on the floor ahead of the axle. Balance the load side-to-side. Secure it to prevent shifting. **NEVER** load the trailer rear heavy. **LOAD THE TRAILER HEAVIER IN THE FRONT, BUT NOT GREATER THAN TONGUE WEIGHT RATING OF THE HITCH.**

DRIVING

The additional weight of a trailer affects acceleration, braking and handling. Allow extra time for passing, stopping, and changing lanes. A gooseneck trailer requires a large turning radius as the trailer tracks to the inside of turns. Severe bumps can damage your towing vehicle, hitch and trailer. Drive slowly on rough roads. **STOP AND MAKE A THOROUGH INSPECTION IF ANY PART OF YOUR TOWING SYSTEM STRIKES THE ROAD. CORRECT ANY PROBLEMS BEFORE RESUMING TRAVEL.**

WARNING

DO NOT MODIFY. Do not tow one trailer behind another, which may cause loss of control. Failure to heed warnings and follow instructions may result in serious personal injury or death, vehicle crash, and/or property damage.