

INSTALLATION OF R-290 WHEEL KIT - STEEL

2011-PRESENT GM 2500/3500 4X2/4X4

THIS MANUAL IS APPLICABLE TO THE FOLLOWING KITS: K-W25XXG007A, K-W25XXG007C,
& K-W25XXG007D

INSTALLATION SAFETY PRECAUTIONS

If any installation problems are encountered, please call G&B Specialties, Inc. for technical assistance before continuing with the installation process.



- Failure to heed to any of the following warnings could result in severe bodily injury and/or equipment damage.
- Read and understand this manual completely before attempting installation of the equipment.
- Installation instructions provided below only address the RAFNA railgear equipment. Applicable railway company procedures and policies must be adhered to.
- The road wheels and tires must be installed before the railgear is installed in order to obtain correct height measurements.
- Do not hit the wheel adapter with any hard objects as this could dent the adapter and cause vibrations when driving. If the adapters do not easily slide onto the hubs, lightly sand the hub and the inside of the adapter.
- Always disconnect the vehicle's battery when welding on the vehicle or railgear in order to protect the vehicle's electrical system.
- Before performing any work under the vehicle or railgear, ensure the engine is turned off and the parking brake is set.
- With the installation of the vehicle road wheels and tires, it is recommended to recalibrate the vehicle's speedometer.

INSTALLATION OF WHEEL KIT

The following procedure details the installation of the wheels and tires required for the vehicle's tires to ride correctly on the rails and avoid contact with the vehicle.

Wheel Installation Kit (for 4 or 5 wheels)

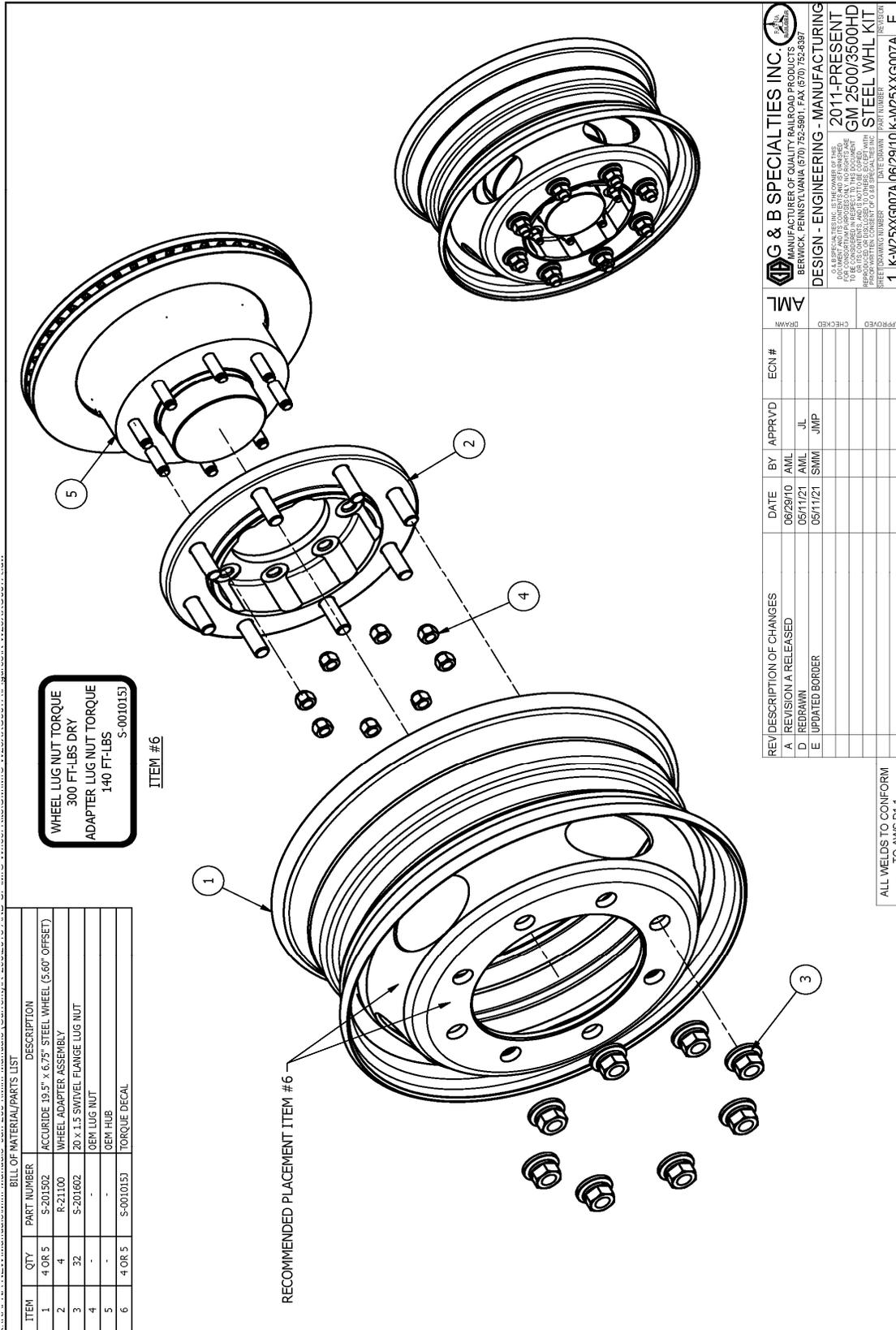
Part Number	Description	QTY
R-21100	Wheel Adapter Assembly	4
S-201502	19.5" x 6.75" Wheel 5.60" Offset	4 or 5
S-001015J	300 ft-lbs Wheel & 140 ft-lbs Spacer Decal	4 or 5
S-201602	M20 x 1.5 Two Piece Flanged Nut	32
R-G622	Goodyear G-622 RSD 245/70R19.5 (Not Supplied)	4 or 5

1. Jack up the vehicle and secure it on jack stands.
2. Remove the original front and rear wheels.
3. Based on rail contact area and load carrying capacity, G&B Specialties, Inc. suggests the use of Goodyear G-622 RSD (245/70R19.5) tires for all wheels on the railgear equipped vehicle. However, at the installer's and/or railroad's discretion, an equivalently sized and rated tire may be used. Mount and balance the tires on the supplied wheels. Install TPMS sensors if required.
4. Affix the supplied wheel and adapter torque decals to the outside face of the wheels.
5. A new location must be found for the spare wheel and the necessary brackets fabricated. It cannot be mounted under the cargo box due to interference with the rear railgear.
6. Install the wheel adapters:
 - a) Start with one wheel adapter on one hub of the vehicle.
 - b) Where fitted, remove all brake drum / disc retaining clips installed on the wheel studs. These clips will prevent the wheel adapter from seating properly.
 - c) Place the wheel adapter on the hub over the OEM wheel studs and fasten in place using the OEM wheel lug nuts.
 - d) Tighten and then torque the OEM wheel lug nuts which hold the adapter to the hub to 140 ft-lbs dry. Do not over torque.
7. Install the wheels:
 - a) Mount the wheels on the wheel adapters with the supplied two-piece flanged nuts.
 - b) Tighten and then torque the two-piece flanged nuts to 300 ft-lbs dry. Do not over torque.
8. Install the front wheel turning stop blocks (not supplied and if needed):
 - a) Position the turning stop blocks over the original turning stops on the hub. To verify their position is correct, fully turn the steering wheel until the turning stop block contacts the suspension arm. The turning stop block should contact the suspension arm squarely on. Repeat for the other side.
 - b) Fully weld the turning stop blocks to the hubs once their position is correct.

9. Due to the modified wheel track on the railgear equipped vehicle, both front and rear tire and wheel clearances must be checked. With the wheels and tires turning installed on the vehicle, ensure that the wheels, tires, and/or balance weights do not contact the vehicle suspension or steering components, the brake lines, the ABS lines and/or any other component/obstruction throughout the entire range of motion of the steering and suspension.

Ensure that any vehicle modifications are done in accordance with the vehicle manufacturer's or their representative's approval.

10. The speedometer will need to be recalibrated due to the change in tire size. Bigger tires will cause your speedometer to register a speed that is slower than your actual speed.
11. The vehicle will need to have a wheel alignment done. After the wheel kit is installed and the railgear is hung.
12. The tire pressure sensors (if equipped) will need to be calibrated to learn new position. For this wheel kit, follow the OEM recommendations as outlined in the vehicle's owner manual.



OPERATION AND SERVICE OF R-290 WHEEL KIT 2011-PRESENT GM 2500/3500HD 4x2/4x4

OPERATION SAFETY PRECAUTIONS

If any operating, services or parts problems are encountered, please call G&B Specialties Inc. for technical assistance.



- Failure to heed to any of the following warnings could result in severe bodily injury and/or equipment damage.
- Read and understand this manual completely before attempting operation of the railgear equipped vehicle.
- Operating instructions provided below only address the RAFNA railgear equipment. Applicable railway company procedures and policies must be adhered to.
- Railway company rules governing rail travel must be observed at all times.
- Before performing any work under the vehicle or railgear, ensure the engine is turned off and the parking brake is set.
- This vehicle has an increased turning radius and decrease stability and braking ability. Use caution when operating both on road and rail.
- Following the first 100 km (62 Miles) of road and rail travel, the road wheel and adapter lug nuts must be retorqued. Refer to the service section of this manual for the procedure.
- Never operate the vehicle if the Gross Vehicle Weight Rating (GVWR), Gross Axle Weight Rating Front or Rear (GAWR), or the wheel or tire load ratings are exceeded.

OPERATION AND SERVICE OF WHEEL KIT

With the wheels and tires installed on this vehicle, it may be operated as normal, however caution must be used as the vehicle now has an increased turning radius and decreased stability and braking ability both on road and rail.

Never operate the vehicle if the Gross Vehicle Weight Rating (GVWR), Gross Axle Weight Rating Front or Rear (GAWR), or the wheel or tire load ratings are exceeded.

The wheels and tires must be serviced regularly to avoid damage to the equipment. See Table 1 below for Service Recommendations.

If ever vibrations are felt through the vehicle, inspect the balance and alignment of the road wheels and tires.

WARNING/CAUTION

- Never use anti-seize on studs or lug nuts.
- Hand torque to specifications, do not use pneumatic tools.
- Always inspect the condition of the wheel before and after service.
- Loose lug nuts can lead to metal fatigue and ultimately to wheel failure or broken studs.

Table 1: Recommended Service Schedule

Service Required	Initial 100 km (65 Miles) of road and/or rail use	Daily	Weekly	Monthly	3 Months
Ensure vehicle is in good operating condition as per Mfg. Spec.		✓			
Check and adjust tire pressure per specification			✓		
Check wheel lug nut torque 65 miles after service or as specified	✓				✓
Check wheel adapter lug nut torque	✓				✓

ACCURIDE STEEL WHEEL TORQUE SPECIFICATION: 300 FT-LBS. DRY
STEEL WHEEL ADAPTER TORQUE SPECIFICATION: 140 FT-LBS. DRY
RECOMMENDED TIRE PRESSURE: 85 PSI