



OPERATION, SERVICE AND PARTS OF ROAD WHEELS AND TIRES

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 Industries 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 OF ROAD WHEELS AND TIRES

With the road wheels and tires installed on this vehicle, it may be operated as normal, however caution must be used as the vehicle now has an increase 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.

SERVICE OF ROAD WHEELS AND TIRES

The road wheels and tires must be serviced regularly to avoid damage to the equipment. Table 1 below provides the Recommended Service Schedule.

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

Note that the wheels are secured to the vehicle using wheel adapters which are secured to the vehicle on separate studs than the wheels. The wheels must be removed to torque the wheel adapter lug nuts.

If ever the wheels are removed, torque the wheel lug nuts again as described below after 100 km (62 Miles) of road and/or rail travel.

If ever both the wheels and wheel adapters are removed, torque the wheel adapter lug nuts again as described below after 100 km (62 Miles) of road and/or rail travel.

Table 1: Recommended Service Schedule

Service Required	Initial 100 km (62 Miles) of road and/or rail use	Daily	Weekly	Monthly
Ensure vehicle is in good operating condition as per Mfg. Spec.		✓	✓	✓
Check and adjust tire pressure as per manufacturer’s specification		✓	✓	✓
Torque wheel lug nuts (see procedure below)	✓		✓	✓
Torque wheel adapter lug nuts (see procedure below)	✓			✓



Wheel lug nut torque procedure:

1. Start with one wheel of the vehicle.
2. Without loosening any wheel lug nuts, torque the wheel lug nuts to 165 ft-lbs dry as per the torque sequence provided. Do not over torque.
3. Repeat for the remaining wheels.

Wheel adapter lug nut torque procedure:

1. Start with one wheel of the vehicle.
2. As the wheels will be removed during this procedure, the spare tire can be rotated in at this point.
3. Remove the wheel from the wheel adapter.
4. Without loosening any wheel adapter lug nuts, torque the wheel adapter lug nuts to 165 ft-lbs dry as per the torque sequence provided. Do not over torque.
5. Mount the wheel (or rotated in wheel) onto the wheel adapter with the swiveling lug nuts.
6. Tighten and then torque the wheel lug nuts to 165 ft-lbs dry as per the torque sequence provided. Do not over torque.
7. Repeat for the remaining wheels.
8. Immediately following 100km (62 Miles) of road and/or rail travel, torque the wheel lug nuts again as per the above procedure.



PARTS OF ROAD WHEELS AND TIRES

NOTE: IDENTICAL FASTENERS
NOT SHOWN FOR CLARITY

ITEM	PART NO.	DESCRIPTION	QTY
1	R-8970	WHEEL ADAPTER ASSEMBLY	4
2	S-201601	M14X2.0 SWIVELLING LUG NUT	32
3	R-G124A	GOODYEAR G124 - 225/70R19.5 TIRE (NOT SUPPLIED)	5
4	S-201500	19.5" X 6.0 WHEEL 5.95" OFFSET (NOT SUPPLIED)	5
5	S-001015H	165FT-LBS WHEEL & 165FT-LBS SPACER DECAL	5
6	R-2413	TURNING STOP BLOCK (NOT SHOWN)	2
7	R-5637	SPRING (NOT SHOWN)	1
8	S-204001	EYE BOLT (NOT SHOWN)	2
9	-	1/4" UNC NYLON INSERT LOCK NUT (NOT SHOWN)	4
10	S-204005	FENDER WASHER (NOT SHOWN)	4
11	-	1/4" UNC GR.8 BOLT X 1" LONG (NOT SHOWN)	2
12	S-204010	"P" CLIP (NOT SHOWN)	2
13	-	DEM HUB	N/A
14	-	DEM WHEEL STUD (CUT)	N/A
15	-	DEM WHEEL LUG NUT	N/A

LUG NUT TORQUE SEQUENCE

WHEEL LUG NUT TORQUE
165 FT-LBS DRY

SPACER NUT TORQUE
165 FT-LBS DRY

RAFNA P/N S-001015H

DETAIL ITEM 5

RAFNA INDUSTRIES LTD.	
19300 CLARK-GRAHAM	
BAIE D'URFE, QUEBEC	
(514) 457-4373	
DESCRIPTION:	WHEEL KIT
REFERENCE:	
MAT'L:	
P/N: K-W25XXF004	DATE: DEC 23/03
DRAWN: MER	APPR:
DIM: INCHES	SCALE: 1:1
SHEET: 1	DF 1