

INSTALLATION OF R-150 REAR MOUNTING KIT 1999-2005 DODGE DAKOTA

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.
- Before performing any work under the vehicle or railgear, ensure the engine is turned off and the parking brake is set.
- Beware of all pinch points on the railgear and keep all parts of the body clear.
- Ensure all removed components are given to the vehicle owner after the installation of the railgear. These components must be re-installed if the railgear is removed from the vehicle.
- Always disconnect the vehicle's battery when welding on the vehicle or railgear to protect the vehicle's electrical system.
- Railway Company rules governing rail travel must always be observed.
- Never operate the vehicle if the Gross Vehicle Weight Rating (GVWR), Gross Axle Weight Rating (GAWR), or the wheel or tire load ratings are exceeded.

INSTALLATION OF REAR MOUNTING KIT

The following procedure details the installation of the rear mounting kit. The hardware required for this installation is listed in table 1.

Table 1: Rear Mounting Kit Installation Parts

Part Number	Description	Qty
R-1826L	Rear Mounting Bracket (Left Side)	1
R-1826R	Rear Mounting Bracket (Right Side)	1
R-1835	Bumper Extension	2
R-1794-1	Railgear Mounting Shim - 0.25" Thick	4
R-1794-2	Railgear Mounting Shim - 0.375" Thick	4
R-1794-3	Railgear Mounting Shim - 0.5" Thick	4
R-990KIT-033	½" UNC Gr.8 Bolt x 4" Long	4
	½" Gr.8 Washer	8
	½" UNC Gr.8 Nylon Insert Lock Nut	4
	¾" UNC Gr.8 Bolt x 4.5" Long	2
	¾" Gr.8 Washer	4
	¾" UNC Gr.8 Nylon Insert Lock Nut	2

1. Remove the original spare tire from under the vehicle's cargo box if so equipped. The original spare tire will not be re-installed.
2. Remove the rear bumper and rear bumper brackets from the frame. Retain the rear bumper and related hardware for re-installation.
3. Place each rear-mounting bracket against the underside and outside of the frame rails as shown, just behind the spring hangers. The three slots in the side of each rear-mounting bracket should align with the three holes in the side of the frame.
4. Fasten each rear mounting bracket to the side of the frame with two ½" x 4" long bolts, four ½" washers, and two ½" nuts and one ¾" x 4.5" long bolt, two ¾" washers, and one ¾" nut.
5. Torque the ½" fasteners to 100 ft-lbs dry and the ¾" fasteners to 175 ft-lbs dry. Do not over torque.
6. The supplied railgear mounting shims are to be used as required when mounting the railgear to the rear mounting brackets.

Following the railgear installation, the rear bumper will not fit in its original position. Rafna supplies rear bumper extensions to move the rear bumper further out, for it to fit over the railgear with minimal trimming required as described in the following steps.

7. Install the vehicle rear bumper extensions on the rear bumper using the original fasteners. The bumper extensions should be centered in the bumper slots.
8. Torque the original fasteners to OEM specifications.

9. Position the rear bumper and rear bumper extensions on the rear most gussets of the rear mounting brackets.
10. Shorten the rear bumper extensions as required.
11. Weld the rear bumper extensions onto the rear most gussets of the rear mounting brackets.
12. The installer may fabricate a cover plate made of aluminium tread plate to cover the gap between the bumper and the vehicle body.
13. The installer may have to trim the bumper to avoid any interference between the railgear and the bumper.

OPERATION, SERVICE, AND PARTS OF R-150 REAR MOUNTING KIT 1999-2005 DODGE DAKOTA

OPERATION AND SERVICE SAFETY PRECAUTIONS

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



- Failure to heed 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.
- Ensure that the position and function of all railgear controls are known before attempting operation.
- Ensure the railgear is locked in road or rail position before starting road or rail travel respectively.
- Ensure all body parts and loose clothing are clear of any moving parts of the equipment.
- If misalignment of the railgear equipment is indicated, promptly perform the alignment procedure.
- Before performing any work under the vehicle of railgear, ensure the engine is turned off and the parking brake is set.
- 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 REAR MOUNTING KIT

With the rear mounting kit installed on this vehicle, it may be operated as normal.

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 rear mounting kit must be serviced regularly to avoid damage to the equipment. Table 1 below provides the Recommended Service Schedule and Table 2 provides Standard Fastener Torque Values.

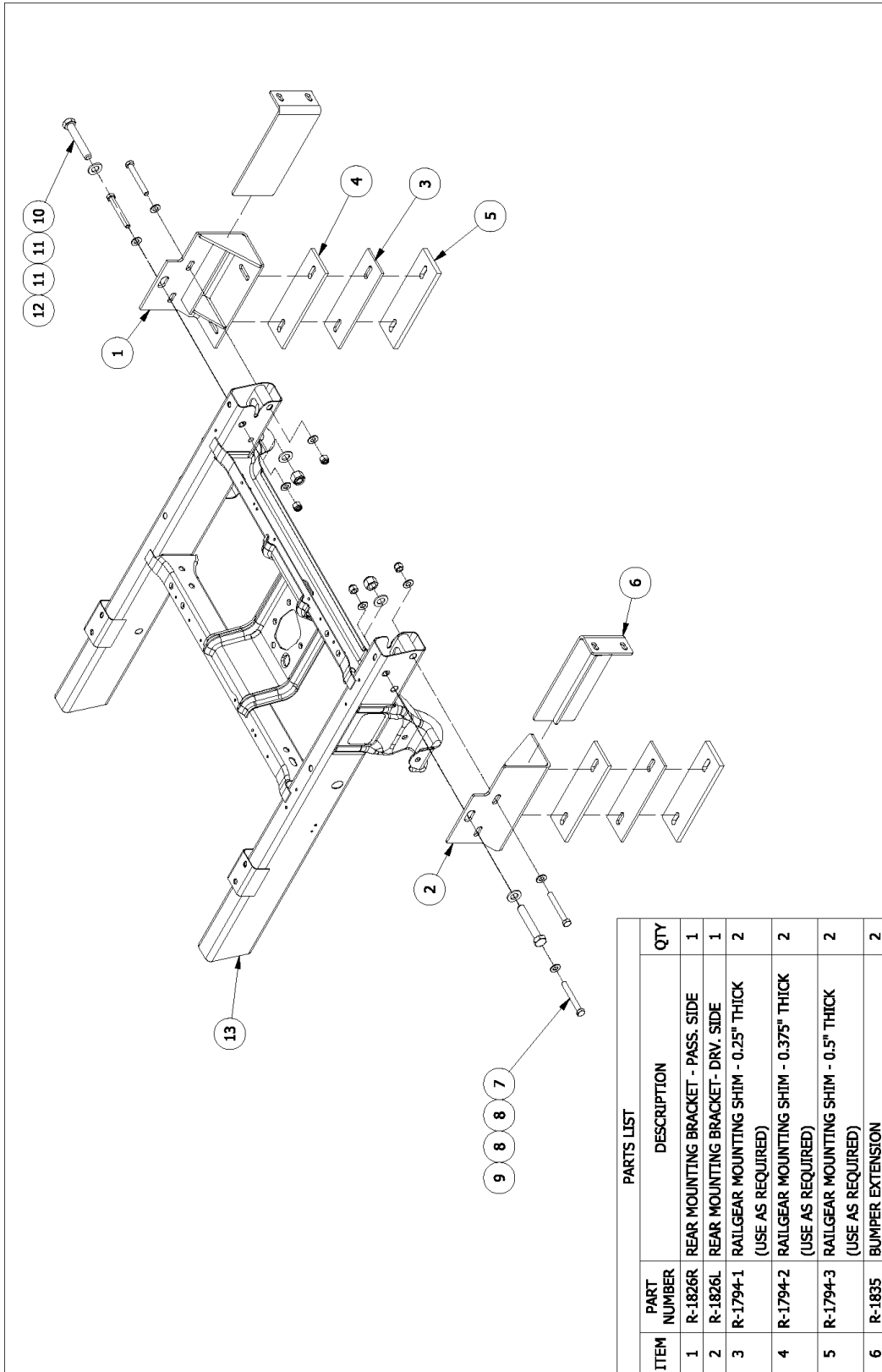
Table 1: Recommended Service Schedule

Service Required	Initial 100 km (62 Miles) of road and/or rail use	Daily	Weekly	Monthly
Inspect rear mounting kit fasteners (re-torque if required)		✓	✓	✓

Table 2: Standard Fastener Torque Values

Fastener Size	Fastener Torque Value (ft-lbs) Dry
1" UNC Gr. 8 Fasteners	250
¾" UNC Gr. 8 Fasteners	175
5/8" UNC Gr. 8 Fasteners	150
½" UNC Gr. 8 Fasteners	100
3/8" UNC Gr. 8 Fasteners	40
¼" UNC Gr. 8 Fasteners	12

PARTS OF REAR MOUNTING KIT



ITEM	PART NUMBER	DESCRIPTION	QTY
1	R-1826R	REAR MOUNTING BRACKET - PASS. SIDE	1
2	R-1826L	REAR MOUNTING BRACKET - DRV. SIDE	1
3	R-1794-1	RAILGEAR MOUNTING SHIM - 0.25" THICK (USE AS REQUIRED)	2
4	R-1794-2	RAILGEAR MOUNTING SHIM - 0.375" THICK (USE AS REQUIRED)	2
5	R-1794-3	RAILGEAR MOUNTING SHIM - 0.5" THICK (USE AS REQUIRED)	2
6	R-1835	BUMPER EXTENSION	2
7		1/2" UNC GR.8 BOLT X 4" LONG	4
8		1/2" GR.8 WASHER	8
9		1/2" UNC GR.8 W/LOCK NUT	4
10		3/4" UNC GR.8 BOLT X 4.5" LONG	2
11		3/4" GR.8 WASHER	4
12		3/4" UNC GR.8 W/LOCK NUT	2
13		VEHICLE FRAME	1

REV	DESCRIPTION OF CHANGES	DATE	BY	APPRVD	ECN #
A	REVISED DRAWING AND BORDER	07/22/19	AJB		

APPROVED	CHECKED	DESIGN	MANUFACTURING

G & B SPECIALTIES INC.
 MANUFACTURER OF QUALITY RAILROAD PRODUCTS
 BERWICK, PENNSYLVANIA (717) 752-5901, FAX (717) 752-8897

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R-150 REAR MOUNTING KIT

PART NUMBER: K-M15XRDR007
 REVISION: A