

INSTALLATION OF R-307A FRONT MOUNTING KIT FOR 2011 TO 2019 GM 2500/3500HD

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 G&B Specialties 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.
- 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 in order to protect the vehicle's electrical system.
- Railway Company rules governing rail travel must be observed at all times.
- 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.

INSTALLATION OF FRONT MOUNTING KIT

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

Front Mounting Kit Installation Parts

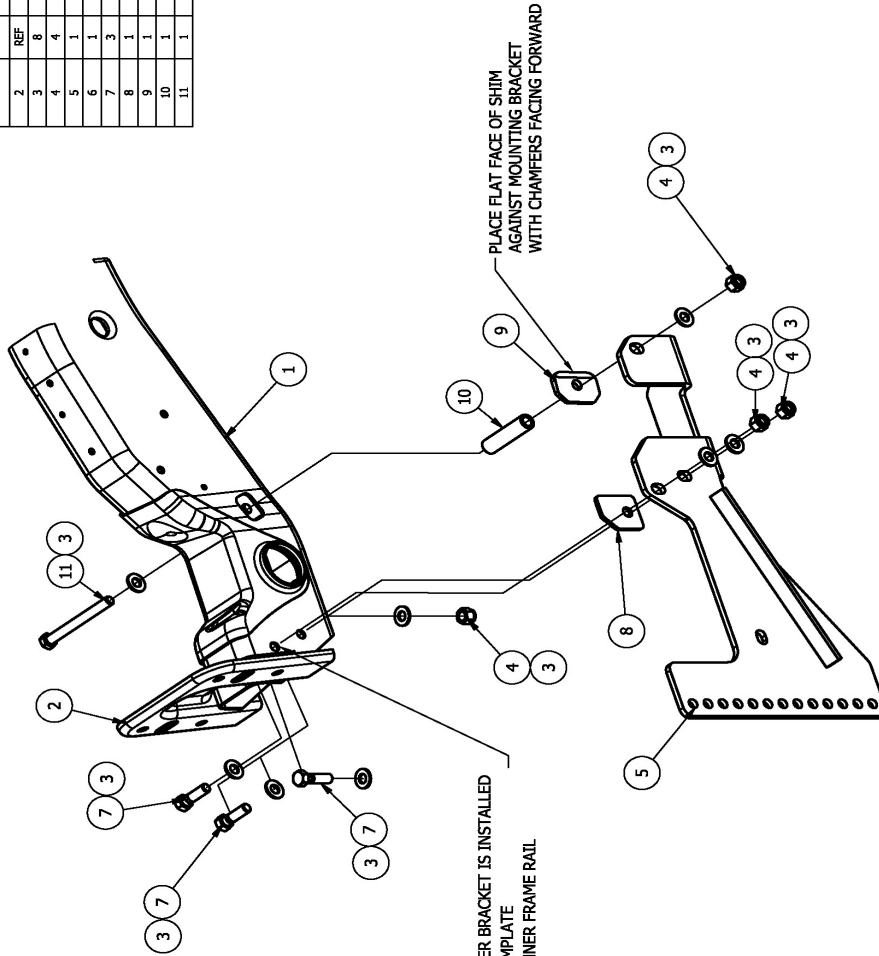
Part Number	Description	Qty
R-32109	Front Mounting Bracket, Drivers Side	1
R-32108	Front Mounting Bracket, Passengers Side	1
R-32110	Bolt, Spacer	2
R-21097	Spacer	2
R-21098	Shim	2
R-32114	Support Brace Assembly	2
R-32848	Side Wand Set w/ Fasteners	1
R-990KIT-390	1/2" UNC Gr. 8 Bolt x 1.75" Long	8
	1/2" UNC Gr. 8 Bolt x 5.00" Long	2
	1/2" UNC Gr. 8 Bolt x 1.50" Long	2
	1/2" Gr. 8 Flat Washer	24
	1/2" UNC Gr. 8 Nylon Insert Lock Nut	12
R-990KIT-391	1/2" UNC Gr. 8 Bolt x 1.75" Long	6
	1/2" UNC Gr. 8 Nylon Insert Lock Nut	12
	1/2" Gr. 8 Flat Washer	6

1. Remove the front bumper and tow hooks. Retain the bumper for re-installation. The tow hooks will not be re-installed.
2. Remove the lower air cowling from under the radiator. The air cowling will not be re-installed.
3. Remove the skid plate from the front frame cross member. The skid plate will not be re-installed.
4. Position the front mounting plates against the inside and bottom of the frame as shown.
5. Bolt each front mounting bracket to the frame as shown using the supplied 1/2" hardware and spacers. Ensure the mounting bracket is flush with the inside and bottom of the frame. Torque 1/2" fasteners to 100 ft-lbs dry.
6. Using the mounting brackets as a guide, drill 17/32" diameter holes thru the inner frame rail as shown.
7. Secure the mounting bracket to the inner frame rail, at the top most hole location, using the supplied 1/2" hardware.
8. After all mounting brackets have been fully secured, take the support brace assembly and mount it to the frame as shown using the 1/2" hardware supplied. Ensure that the brace

assembly's top surface is flush with the top of the mounting bracket as shown. Torque 1/2" fasteners to 100 ft-lbs dry.

Following the installation of the front railgear, the front bumper will not fit in its original position. The front bumper will need to be trimmed/modified as required by the installer.

BILL OF MATERIAL/PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	REF	-	GEM FRAME
2	REF	-	GEM FRONT BUMPER MTG BRKT
3	8	FWASHER	1/2" TYPE-A GR.8
4	4	NYLOCK NUT	1/2" UNC GR.8
5	1	R-32108	FRONT MTG BRKT PASSENGER SIDE
6	1	R-32109	FRONT MTG BRKT DRIVER SIDE
7	3	H.H.C.S	1/2" UNC GR.8 X 1.75"
8	1	R-21097	SPACER
9	1	R-21098	SHIM
10	1	R-32110	BOLT SPACER
11	1	H.H.C.S	1/2" UNC GR.8 5.00"



THIS HOLE TO BE DRILLED AFTER BRACKET IS INSTALLED USING SLOT IN BRACKET AS TEMPLATE. DRILL A $\phi 17/32$ " HOLE THRU INNER FRAME RAIL.

PLACE FLAT FACE OF SHIM AGAINST MOUNTING BRACKET WITH CHAMFERS FACING FORWARD

REV	DESCRIPTION OF CHANGES	DATE	BY	APPRVD	EON #
A	REVISION A RELEASED	11/07/14	KND	AML	
B	UPDATED BORDER	07/12/21	SMM	JMP	

G & B SPECIALTIES INC.
MANUFACTURER OF QUALITY RAILROAD PRODUCTS
BERWICK, PENNSYLVANIA (970) 752-5901, FAX (970) 752-6397

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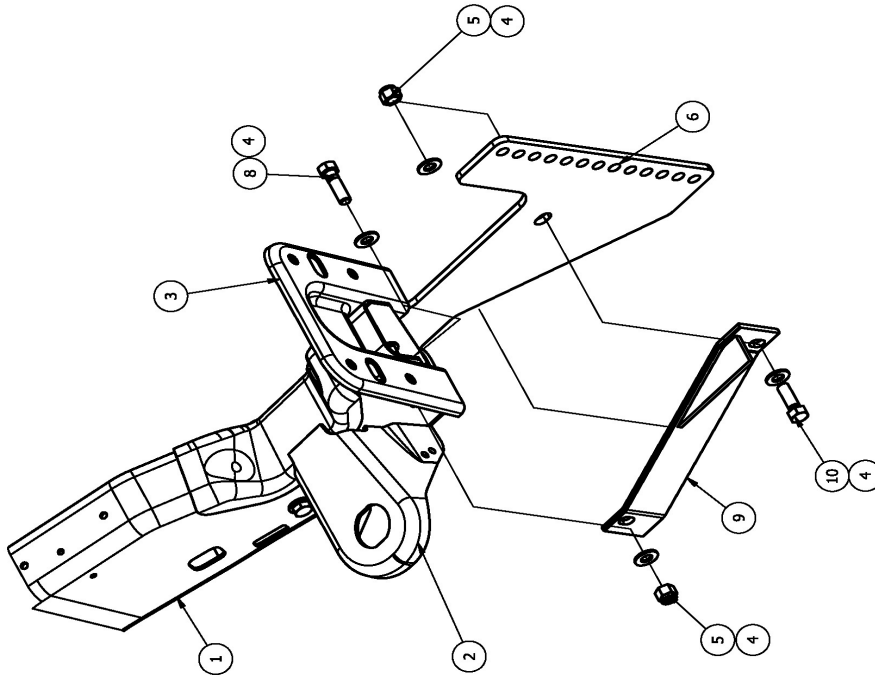
2015-2019 GM
2500/3500HD R-307A
FRNT MNTG KIT

DATE DRAWN: 11/07/14
PART NUMBER: K-M37XRGF001
REVISION: B

NOTES:
PASSENGER SIDE SHOWN
DRIVERS SIDE TYPICAL

ALL WELDS TO CONFORM TO AWS D1.1

BILL OF MATERIAL/PARTS LIST		
ITEM	QTY	PART NUMB DESCRIPTION
1	REF	GEN FRAME
2	REF	GEN BODY MOUNT
3	REF	GEN FRONT BUMPER MTG BRKT
4	4	FWASHER 1/2" TYPE-A GR.8
5	11	NUTS 1/2" UNC GR.8
6	1	R-32108 FRONT MTG BRKT PASSENGER SIDE
7	1	R32109 FRONT MTG BRKT DRIVER SIDE
8	4	H.H.C.S 1/2" UNC GR.8 X 1.75"
9	1	R-32114 SUPPORT BRACE ASSEMBLY
10	1	H.H.C.S 1/2" UNC GR.8 1.50"



REV	DESCRIPTION OF CHANGES	DATE	BY	APPRVD	ECN #
A	REVISION A RELEASED	11/07/14	KND	AML	
B	UPDATED BORDER	07/12/21	TSMH	JMP	

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2015-2019 GM
256003500HD R-307A
FRONT MNTG KIT

REV	DATE	BY	APPRVD	ECN #
1	11/07/14	KND	AML	

NOTE:
PASSENGER SIDE SHOWN
DRIVERS SIDE TYPICAL

ALL WELDS TO
CONFORM TO AWS D1.1

OPERATION AND SERVICE OF R-307A FRONT MOUNTING KIT FOR 2015 TO 2019 GM 2500/3500HD

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.
- 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 FRONT MOUNTING KIT

With the front mounting kit installed on this vehicle, it may be operated as normal; however, the front bumper is located further forward than standard. Side wands are located on the front bumper to aid in determining the length and width of the vehicle. Caution must be used when operating the vehicle.

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 front 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	6 Months
Inspect front 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
⅝" UNC Gr. 8 Fasteners	150
½" UNC Gr. 8 Fasteners	100
⅜" UNC Gr. 8 Fasteners	40
¼" UNC Gr. 8 Fasteners	12