

## INSTALLATION OF FRONT MOUNTING KIT 2011-2019 GM 2500/3500HD 4x2/4x4

### 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.
- Do not start the vehicle with the power steering hoses disconnected. Reconnect all hoses and secure the power steering cooler if the vehicle is started.
- 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 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.

**Table 1: Front Mounting Kit Installation Parts**

Part Number	Description	QTY
R-21090D	Front Mounting Bracket, Drivers Side	1
R-21090P	Front Mounting Bracket, Passengers Side	1
R-21097	Spacer	2
R-21098	Shim	2
R-2960	Railgear Mounting Shim - 1/2" Thick	4
R-051	Side Wand Set w/ Fasteners	1
R-990KIT-301	1/2" UNC Gr. 8 Bolt x 1.75" Long	6
	1/2" UNC Gr. 8 Bolt x 5.00" Long	4
	1/2" UNC Gr. 8 Bolt x 5.50" Long	4
	1/2" Gr. 8 Flat Washer	24
	1/2" UNC Gr. 8 Nylon Insert Lock Nut	12
R-990KIT-303	3/4" UNC Gr. 8 Bolt x 2.50" Long	4
	3/4" UNC Gr. 8 Bolt x 3.50" Long	4
	3/4" Gr. 8 Flat Washer	8
	3/4" UNC Gr. 8 Nylon Insert Lock Nut	4

1. Remove the front bumper, bumper mounting brackets and tow hooks. Retain the bumper and bumper mounting brackets for re-installation. The tow hooks will not be re-installed.

\*THE BUMPER MOUNTING BRACKETS ARE NOT REMOVEABLE ON 2015 YEAR TRUCKS. THE RAILGEAR MOUNTING BRACKETS MOUNT OVER THE TOP OF THE BUMPER MOUNTING BRACKETS AS SHOWN\*

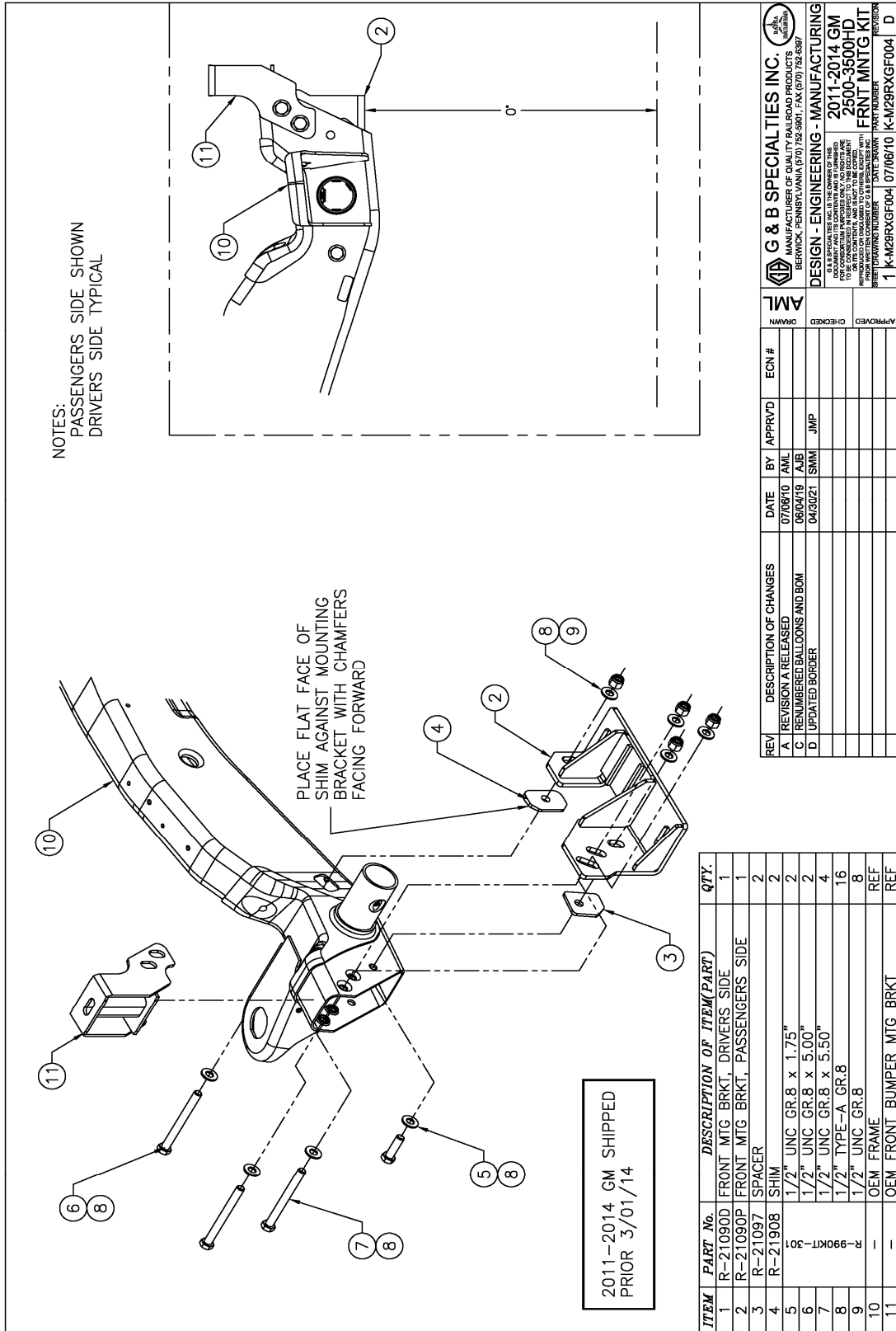
2. Remove the lower air cowling from under the radiator. The air cowling will not be re-installed.
3. Remove the skid plate from the front frame cross member. The skid plate will not be re-installed.
4. Position the front mounting plates on the inner side of the frame as shown so that the front frame cross member (round tube) is cradled tightly by the small square bars welded to the front mounting plates. Ensure that the front mounting plates are tight against the bottom of the front frame cross member.
5. Bolt each front mounting bracket to the frame as shown using the supplied 1/2" hardware, spacers and bumper mounting brackets. Ensure the mounting plate lower surfaces are 0° to the horizontal with the vehicle in the typical road position and aligned with each other. Tighten but do not torque the fasteners.

6. Ensure the front mounting plates are tight against the inner side of the frame and the underside of the front frame cross member and that the mounting plate lower surfaces are 0° to the horizontal. Torque the rear and lower 1/2" fasteners, as shown. Do not over torque. Do not torque the fasteners securing the bumper mounting brackets as these fasteners need to remain loose to adjust the front bumper.
7. The supplied railgear mounting shims are to be used as required when mounting the railgear to the front mounting plates.

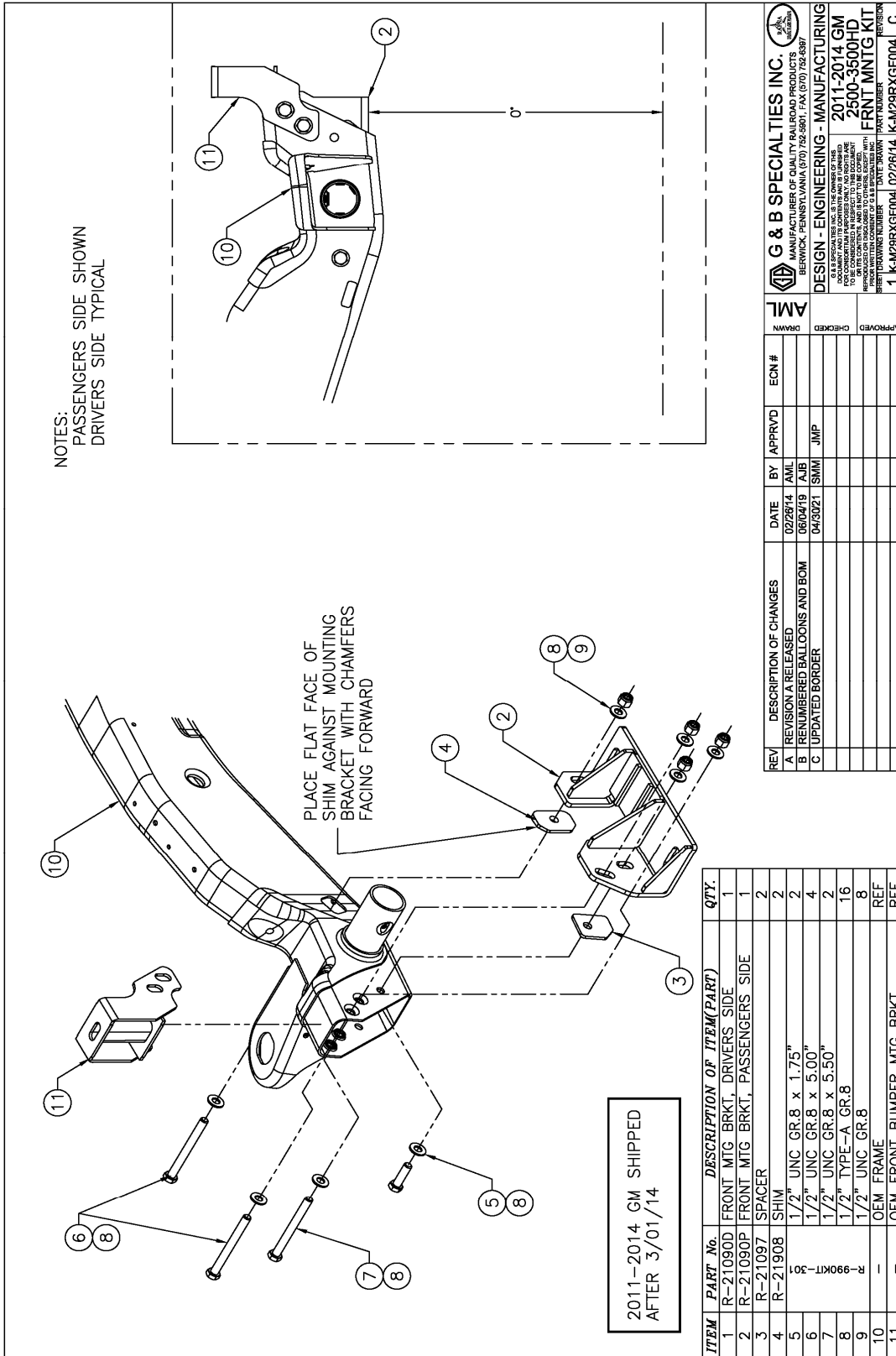
Following the installation of the front railgear, the front bumper will fit in its original position. The front bumper will need to be trimmed/modified as required.

8. Separate the lower plastic air dam section of the bumper from the steel section of the bumper. The lower plastic section will not be re-installed.
9. Modify the OEM bumper as required to create clearance for all railgear components to eliminate any interference during its full range of motion.
10. Once the front bumper has been modified, installed and adjusted as required, tighten and torque the two remaining 1/2" fasteners to 100 ft-lbs dry. Do not over torque.

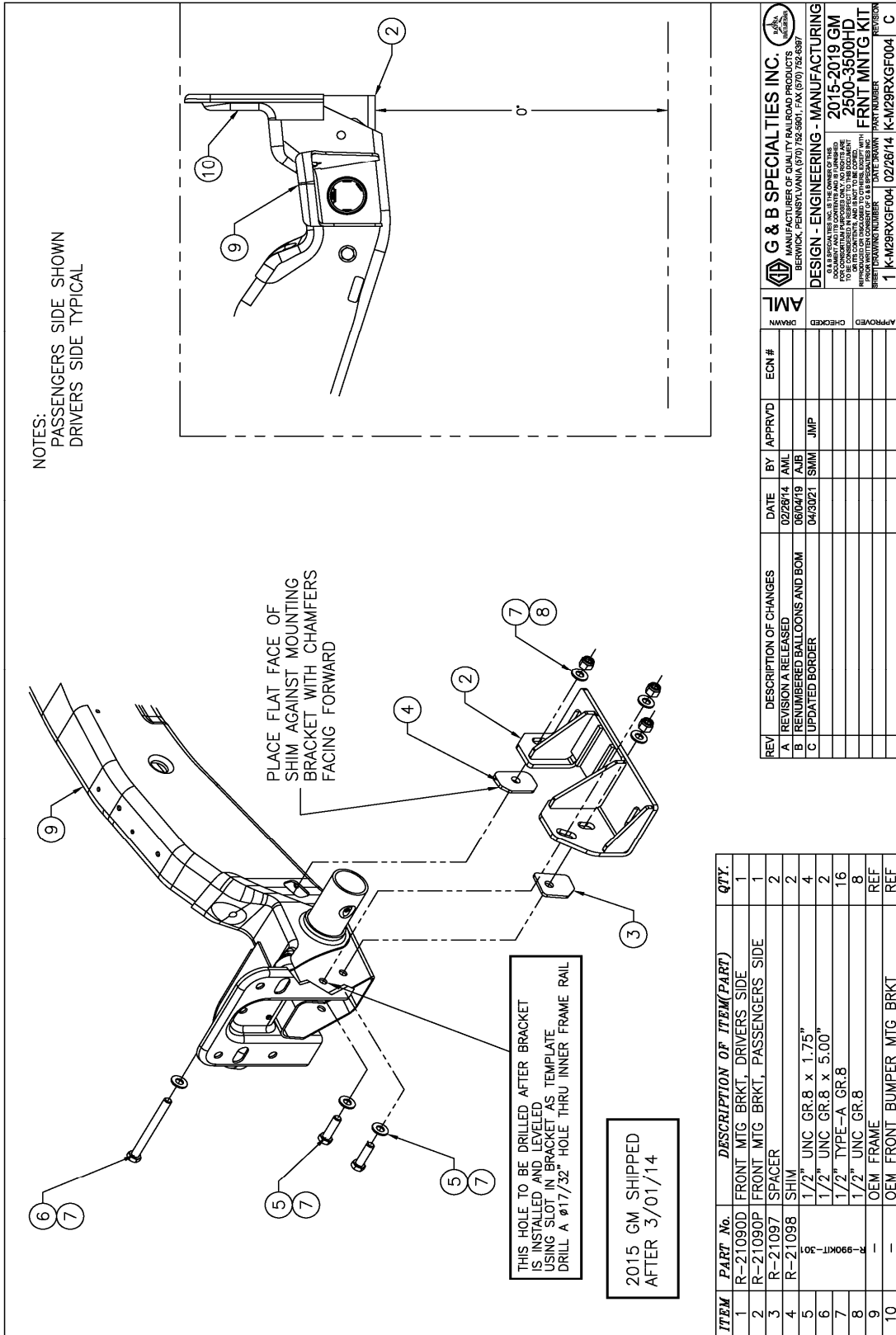
\*ON THE 2015 GM HD MODEL YEAR TRUCKS, THERE MAY BE ADDITIONAL MODIFICATIONS REQUIRED IN ORDER TO INSTALL THE FRONT RAILGEAR UNIT PROPERLY. REFER TO THE FRONT RAILGEAR INSTALLATION SUPPLEMENT FOR FURTHER INSTRUCTION\*



FOR 2011-2014 GM HD TRUCKS SHIPPED PRIOR TO 3/01/2014



FOR 2011-2014 GM HD TRUCKS SHIPPED AFTER 3/01/2014



ITEM	PART No.	DESCRIPTION OF ITEM(PART)	QTY.
1	R-21090D	FRONT MTG BRKT, DRIVERS SIDE	1
2	R-21090P	FRONT MTG BRKT, PASSENGERS SIDE	1
3	R-21097	SPACER	2
4	R-21098	SHIM	2
5	7-990KT-30	1/2" UNC GR.8 x 1.75"	4
6	7-990KT-30	1/2" UNC GR.8 x 5.00"	2
7	7-990KT-30	1/2" TYPE-A GR.8	16
8	7-990KT-30	1/2" UNC GR.8	8
9	—	OEM FRAME	REF
10	—	OEM FRONT BUMPER MTG BRKT	REF

REV	DESCRIPTION OF CHANGES	DATE	BY	APPRVD	EON #	APPROVED
A	REVISION A RELEASED	02/28/14	AML			
B	RENUMBERED BALLBOONS AND BOM	06/04/19	AJB			
C	UPDATED BORDER	04/30/21	SMM	JMP		

**G & B SPECIALTIES INC.**  
MANUFACTURER OF QUALITY RAILROAD PRODUCTS  
BERWICK, PENNSYLVANIA (717) 752-5901, FAX (717) 752-6397

**DESIGN - ENGINEERING - MANUFACTURING**  
2015-2019 GM  
2500-3500HD  
FRNT MNTG KIT

1 K-M29RXGF004 02/28/14 K-M29RXGF004 C

FOR 2015-2019 GM HD TRUCKS











## OPERATION, SERVICE AND PARTS OF FRONT MOUNTING KIT 2011-2019 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.
- 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	Daily	Weekly	Monthly
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