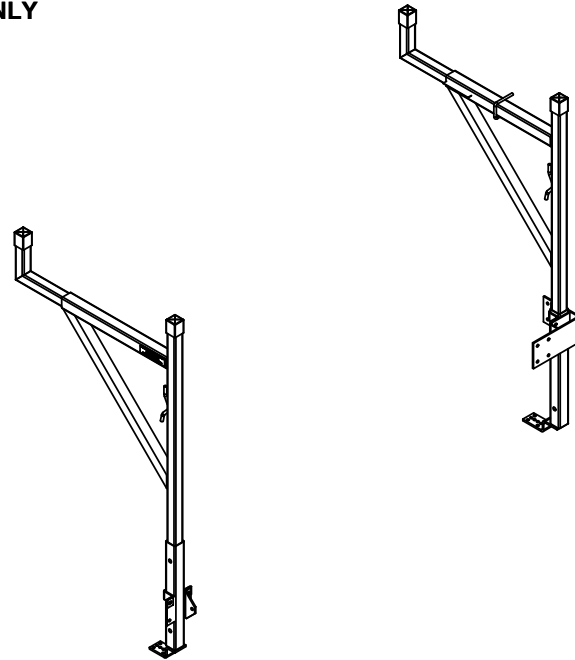


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	28881-0	U-Bracket Tube Clamp	1
2	28884-0	Leg	2
3	28883-0	Rest Arm	2
4	17641-0	PULR, 1D, 2SROPE HOOK, 6.25"	2
5	28902-0	Square Tube PLUG	6
6	28882-0	Support Brace (Square)	2
7	FAS0586	RIVNUT, ROUND 5/16-18 DC	6
8	28879-0	Rest	2
9	28880-0	Rest Stop	2
10	28887-0	Front mount tube base bent	1
11	28885-0	Mount Tube, Front	1
12	28888-0	Rear mount tube base bent	1
13	28886-0	Mount Tube, Rear	1
14	28906-0	Warning Label	1
15	28908-0	LABEL - LOAD FLEX	1
16	30228-0	Front Corner Bracket	1
17	30229-0	Front Corner Spacer	1
18	28893-0	Front Tube Strap	1
19	58098	Cover, Tube, 1.5 sq x 2	4
20	28889-B	REAR BRKT. GMPU-SIDE	1
21	28890-B	Rear Side Body Bracket Bent	1

REFERENCE ONLY



THIS DRAWING IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER DETRIMENTAL TO THE INTERESTS OF ADRIAN STEEL COMPANY

MATERIAL & FINISH

PRINTED DOCUMENT IS UNCONTROLLED

Sheet 1 of 1

TOLERANCES & INSPECTION

UNLESS OTHERWISE SPECIFIED
 ALL BEND ANGLES ARE 90 DEGREES
 ALL DIMENSIONS ARE IN INCHES.
 REFERENCE DIMENSIONS (X.XXX)
 DO NOT REQUIRE INSPECTION

FEATURES	HOLES/SLOTS	ANGLES
0.0 = ± .125	0.0 = ± .062	0° = ± 2°
0.00 = ± .062	0.00 = ± .031	0.0° = ± 1°
0.000 = ± .031	0.000 = ± .015	

Material Thickness: per ASTM Std.
 Weld Callouts per AWS

RELEASE & REVISIONS

INITIAL ECN: **7348**

CURRENT ECN: **21991**

ECN DESCRIPTION:
REPLACED 29427 WITH 58098

REVISED BY: **N/A**

MATERIAL & FINISH

MECHANICAL FINISHING:
N/A

PRIMER: **N/A**

FINAL FINISH: **BlackPwddct**
21770-0

MATERIAL TYPE:

PART / PRODUCT IDENTIFICATION

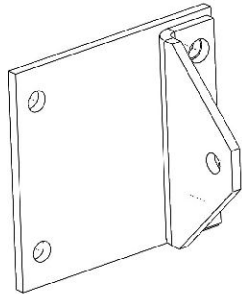
ADRIAN STEEL ADRIAN STEEL COMPANY 906 JAMES STREET, ADRIAN, MI 49221	REVISION LEVEL
	I
MAT'L USED:	DESIGNED BY: D. THOMPSON
DESCRIPTION: LOADFLEX, PU LDRK, BLK	
WEIGHT (Lbs.): 47.07	SEGMENT CODE: PLR
PART NUMBER: LF250	



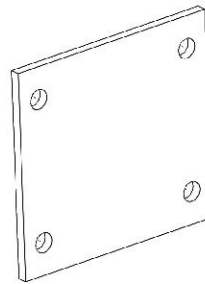
ADRIAN STEEL®

Cargo Management Solutions for Commercial Vehicles

Assembly/Installation Instructions addendum

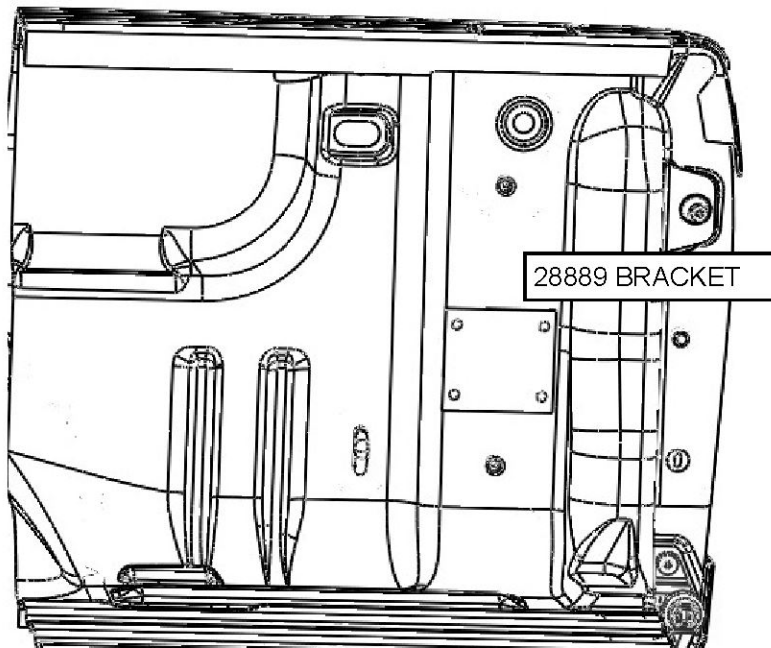


28900 used on DODGE and FORD



28889 used on GM

STEP 5 on page 7 when installing on DODGE, and FORD vehicle will stay the same as shown in STEP 5. But when installing on GM vehicles you will only use 28889 moving it back toward the tailgate so that all (4) holes can be used to mount 28889 onto rear of pickup bed as shown below.



GM PICKUP BED- PLACEMENT OF 28889



ADRIAN STEEL®

906 JAMES ST.
ADRIAN, MI. 49221
(517) 265-6194

Page - 1

LOAD FLEX

FULL SIZE PICKUP LADDER RACK

ASSEMBLY - INSTALLATION

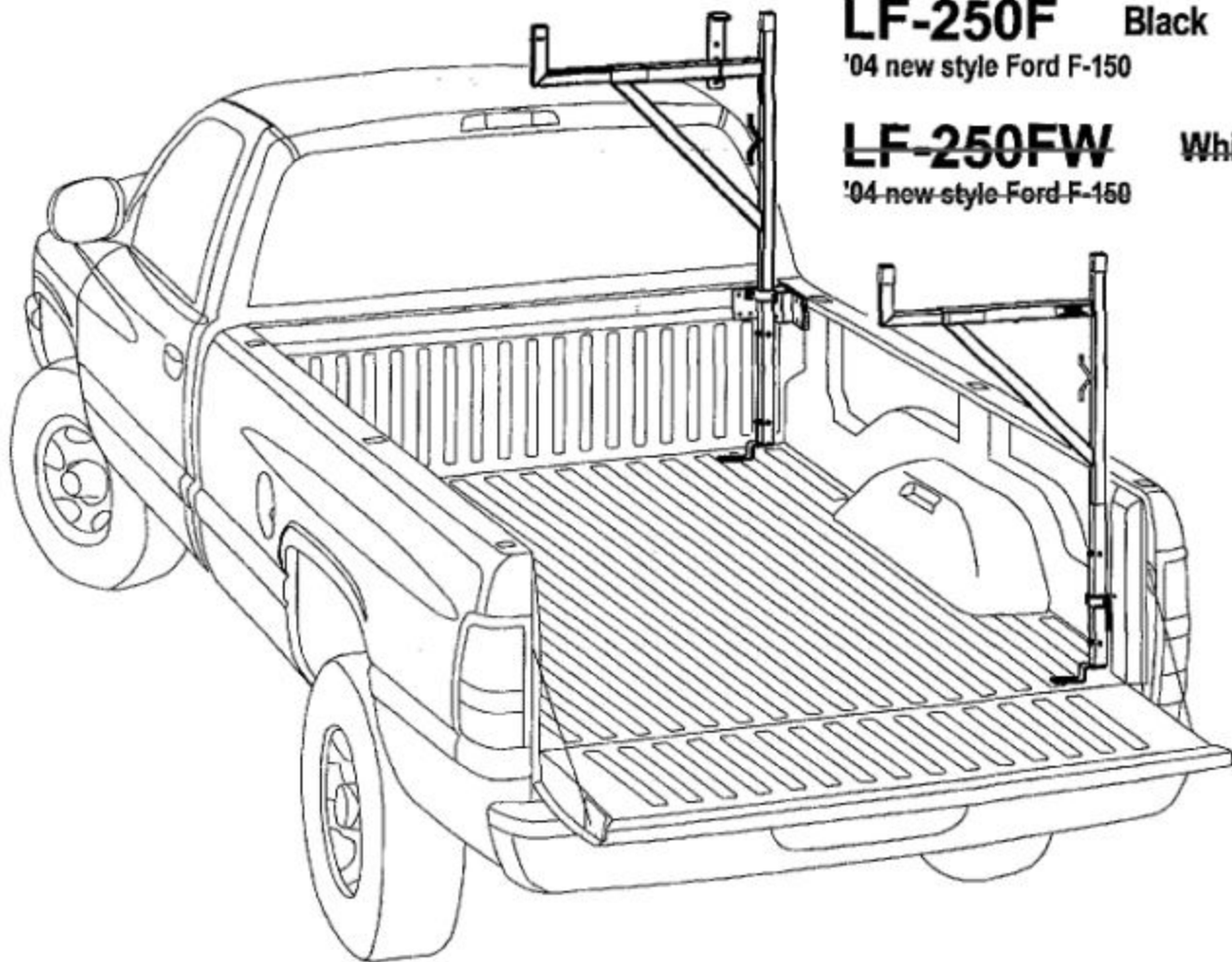
INSTRUCTIONS

LF-250 Black
Most Full Size Pick-Ups

LF-250W White
Most Full Size Pick-Ups

LF-250F Black
'04 new style Ford F-150

LF-250FW White
'04 new style Ford F-150



ECN-14985

DATE: 8/13/12

DWG. BY: KAS

REV. BY: DCS

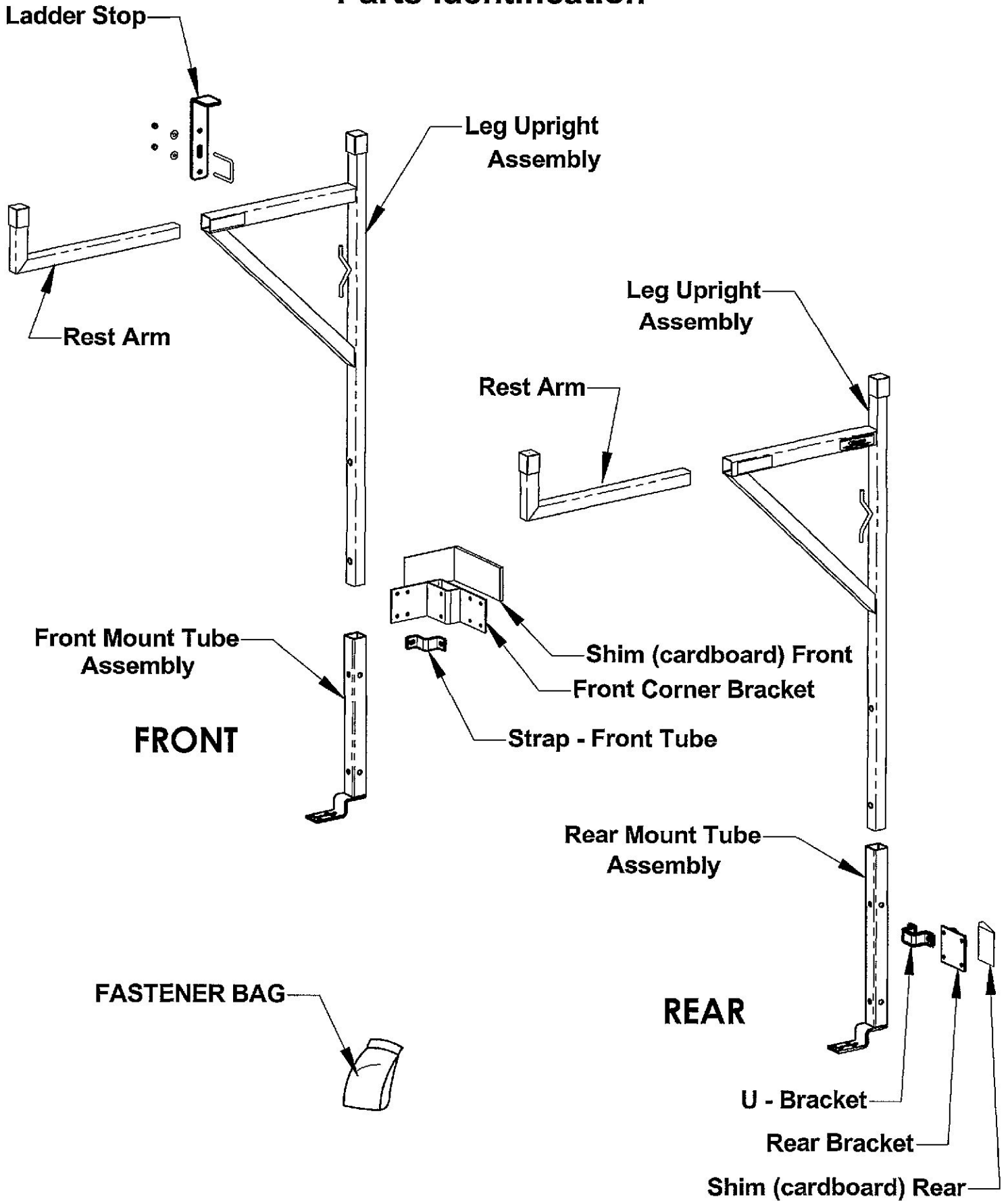
CHK. BY: *ASD*

ISSUE:

P/N: 28910-0

ASSEMBLY LAYOUT

Parts Identification



PARTS LIST

Parts Identification

LF250 (black)

full size pick-up truck

Description	Qty.	Part No.
LOADFLEX PICK-UP LADDER RACK	1	LF250
FAS BAG - LOADFLEX FASTENERS	1	BAGLF250
PLUSNUT USE INSTRUCTIONS	1	22200-1
U-BRACKET (TUBE CLAMP)	1	28881-0
STRAP - FRONT TUBE	1	28893-0
LADDER STOP	1	29843-B
REST ARM	2	28895-0
LEG UPRIGHT ASSEMBLY	2	28896-0
FRONT MOUNT TUBE ASSEMBLY	1	28897-0
REAR MOUNT TUBE ASSEMBLY	1	28898-0
REAR BRACKET	1	28900-0
FRONT CORNER BRACKET	1	30238-0
SHIM (cardboard) - FRONT	1	28933-0
SHIM (cardboard) - REAR	1	28934-0
BASE-REAR SIDE BODY	1	28889-0

PARTS LIST

LF250F (black) '04 new style Ford F-150 pick-up truck

Description	Qty.	Part No.
LOADFLEX PICK-UP LADDER RACK - TALL	1	LF250F
FAS BAG - LOADFLEX FASTENERS	1	BAGLF250
PLUSNUT USE INSTRUCTIONS	1	22200-I
U-BRACKET (TUBE CLAMP)	1	28881-0
STRAP - FRONT TUBE	1	28893-0
LADDER STOP	1	29843-B
REST ARM	2	28895-0
LEG UPRIGHT ASSEMBLY	2	28896-0
REAR MOUNT TUBE ASSEMBLY	1	28898-0
REAR BRACKET	1	28900-0
FRONT CORNER BRACKET	1	30238-0
FRONT MOUNT TUBE ASSEMBLY - TALL	1	28961-0
SHIM (cardboard) - FRONT	1	28933-0
SHIM (cardboard) - REAR	1	28934-0
BASE-REAR SIDE BODY	1	28889-0

FASTENER GUIDE

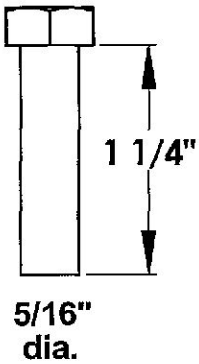
(not to scale)

Fastener Identification

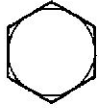
1-1/4 Bolt



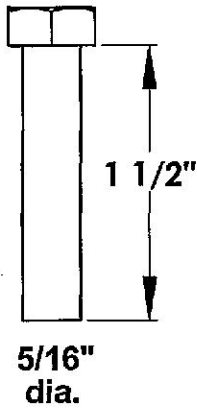
Assembly



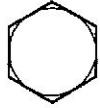
1-1/2 Bolt



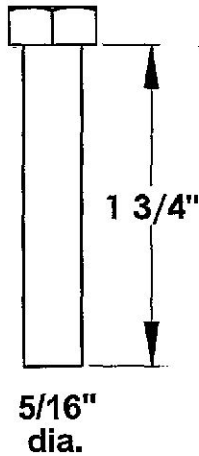
Assembly



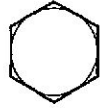
1-3/4 Bolt



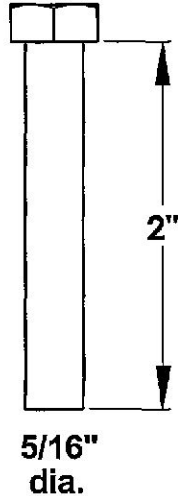
Assembly



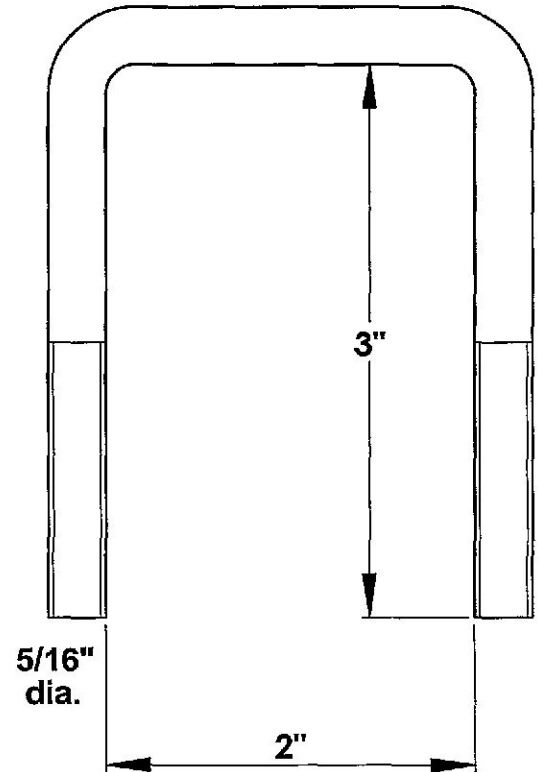
2" Bolt



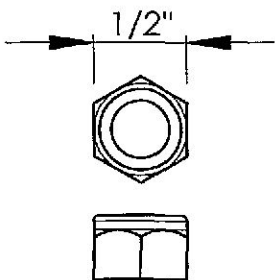
Plusnut



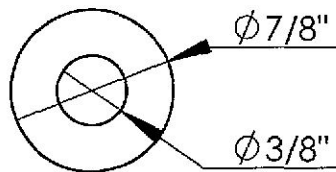
U-Bolt



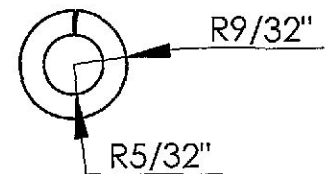
5/16 Lock Nut



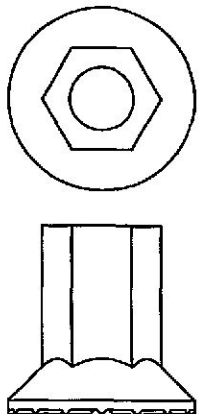
5/16 Flat Washer



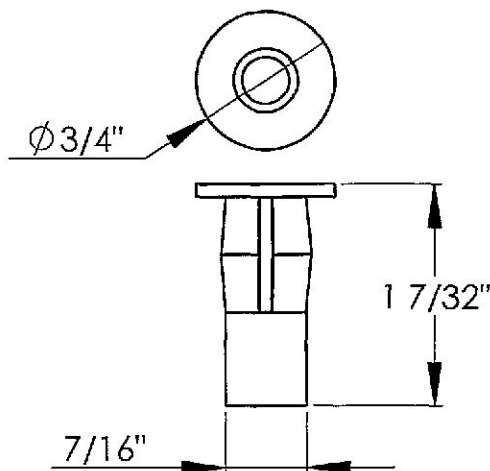
5/16 Lock Washer



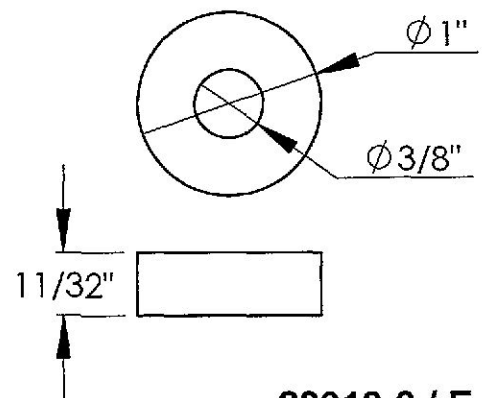
Plus Nut Tool



5/16 Plus Nut



Floor Spacer



ASSEMBLY

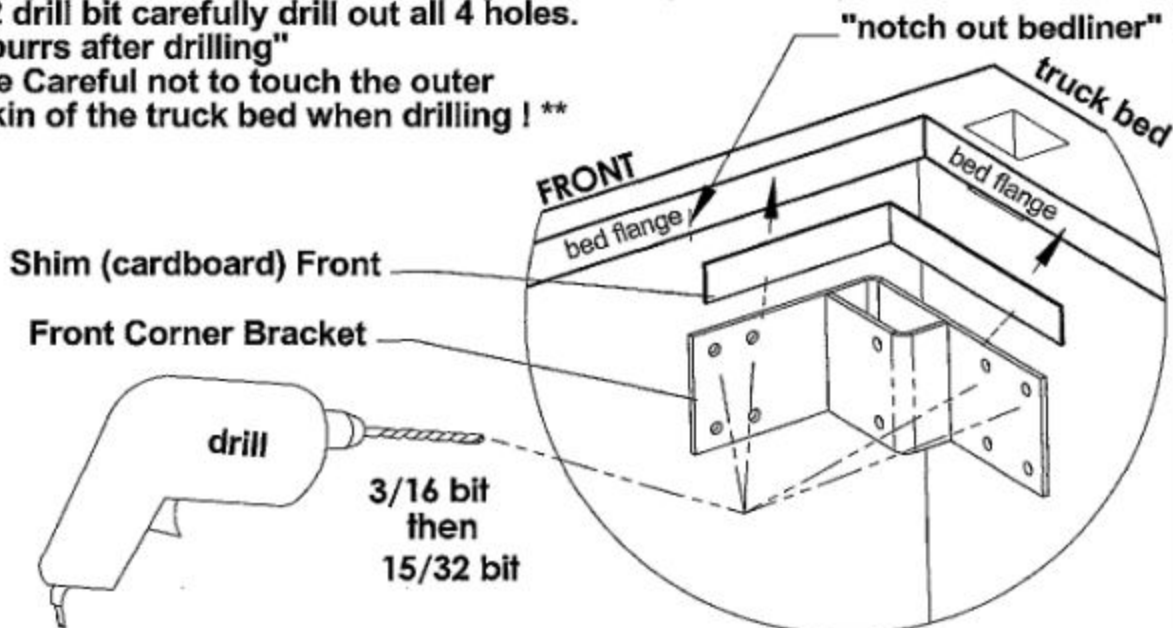
BEFORE YOU BEGIN: Park truck on a flat and level surface !
If your truck has a bedliner some notching of the bedliner will need to be done to allow for fit.

STEP - 1 TOOLS NEEDED: Safety Glasses, Drill, 3/16 & 15/32 Drill Bits

Fit the Front Corner Bracket against the Shim (cardboard) Front and up into the top front corner of the truck bed flush with top edges of the truck bed and drill bed flanges using the 3/16 drill bit through the holes in the Front Corner Bracket as shown below. Set the Front Corner Bracket aside and discard the Shim (cardboard) Front and then using the 15/32 drill bit carefully drill out all 4 holes.

"Clean up any burrs after drilling"

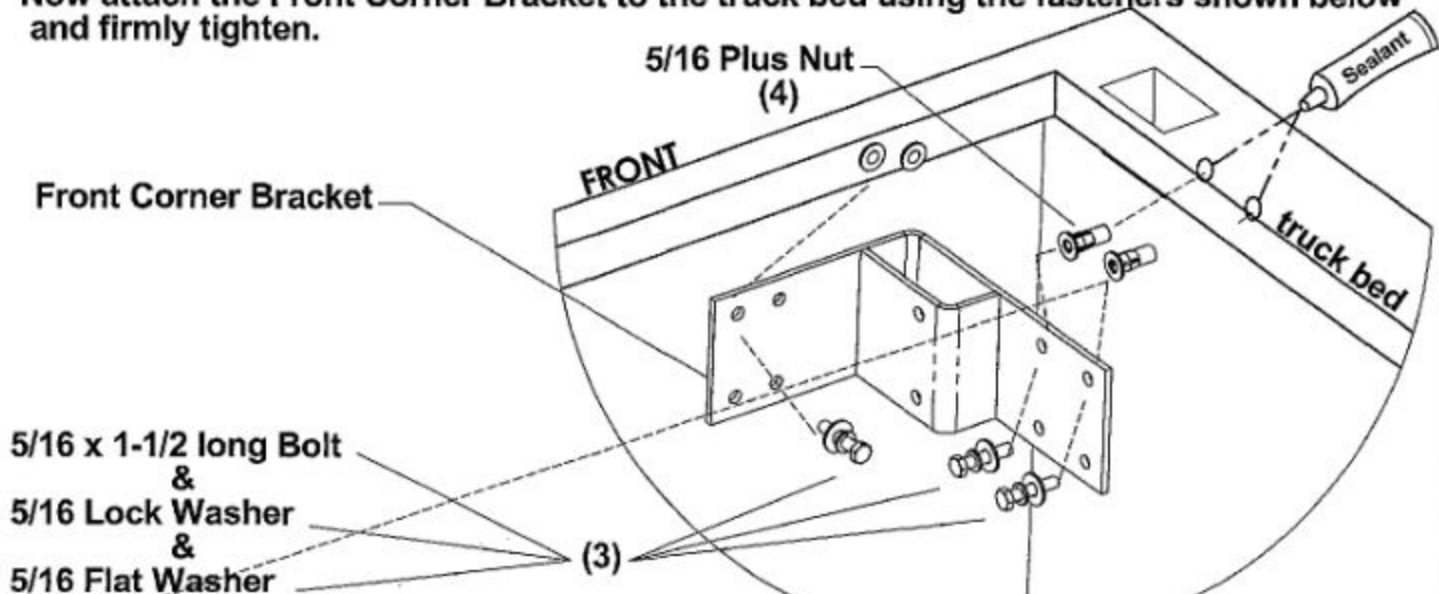
** CAUTION: Be Careful not to touch the outer skin of the truck bed when drilling ! **



STEP - 2 TOOLS NEEDED: 22200-1 Plusnut Sheet, 1/2" Wrench, 9/16" Wrench

Caulk all 4 holes you drilled in Step - 1 using the Sealant provided then set a plusnut into each hole. " See Instruction Sheet 22200-1 "

Now attach the Front Corner Bracket to the truck bed using the fasteners shown below and firmly tighten.



ASSEMBLY

STEP - 3

TOOLS NEEDED: Safety Glasses, Drill, 3/16 & 15/32 Drill Bits, Level

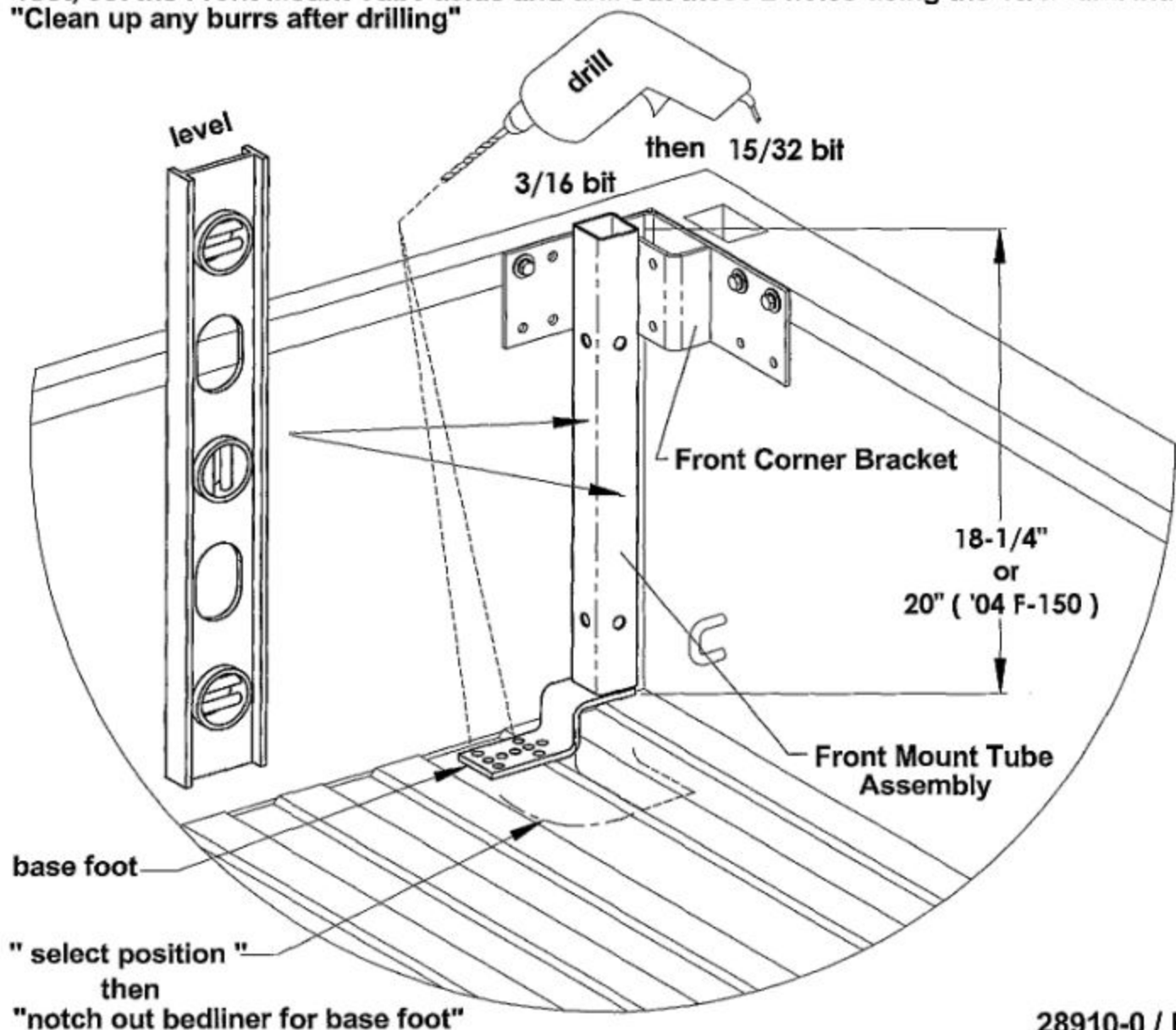
Fit the Front Mount Tube Assembly to the Front Corner Bracket and resting on the floor of the truck bed and select which way the base foot should rest on the bed floor.

**** CAUTION:** You must check the underside of your truck bed for any obstructions (gas lines, electrical lines, etc.) **BEFORE** you decide which way the base foot rests on the bed floor and **BEFORE** you do any drilling! ******

Once you have selected the base foot position then level the Front Mount Tube Assembly front to back and side to side, notch bedliner if present. Next inspect location of the bed floor ribs under the base foot and then select the 2 best holes in the base foot for mounting to the bed floor.

* Remember that underbed structures may dictate which holes are the best choice! *

Using the 3/16 drill bit drill truck bed floor through the holes you selected in the base foot, set the Front Mount Tube aside and drill out these 2 holes using the 15/32 drill bit. "Clean up any burrs after drilling"



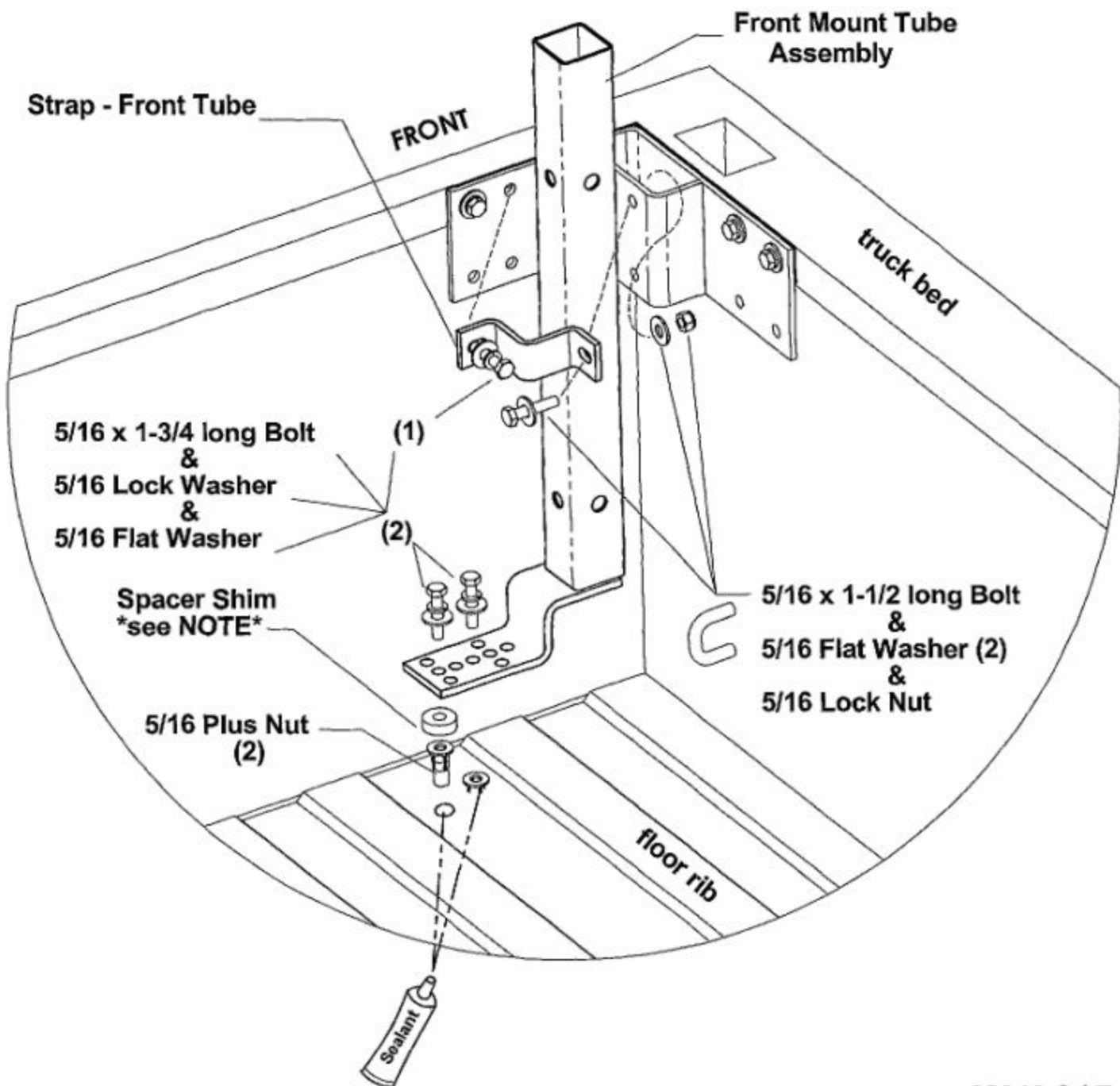
ASSEMBLY

STEP - 4 TOOLS NEEDED: 22200-1 Plusnut Sheet, 1/2" Wrench, 9/16" Wrench

Caulk the 2 holes in the floor you just drilled and then set a plusnut into each hole.
" See Instruction Sheet 22200-1 "

Now install the Front Mount Tube Assembly to the floor and to the Front Corner Bracket using the the Strap - Front Tube and fasteners shown below, tighten fasteners firmly.

NOTE: If a fastener is used in the area between the floor ribs , use a Spacer Shim !



ASSEMBLY

STEP - 5 TOOLS NEEDED: Safety Glasses, Drill, 3/16 & 15/32 Drill Bits, Level

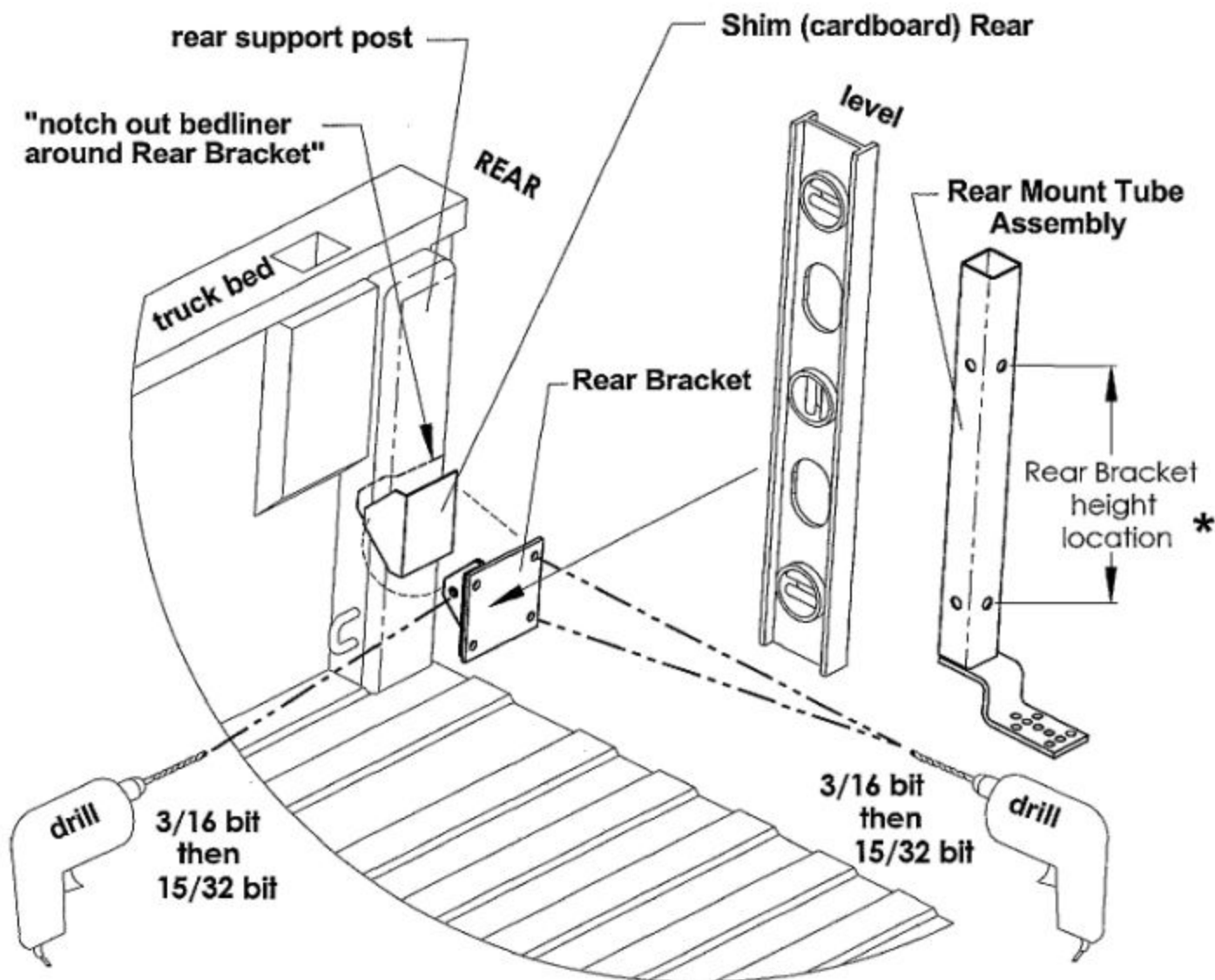
Fit the Rear Bracket against the Shim (cardboard) Rear and up against the rear support post of the truck bed as high off the floor as practical but still between holes indicated below on the Rear Mount Tube Assembly. *

Next, level the Rear Bracket side to side and keeping this position of the Rear Bracket mark the bedliner around the Rear Bracket and notch out the bedliner where you marked, then drill into the rear support post using the 3/16 drill bit through the holes in the Rear Bracket as shown below.

Set the Rear Bracket aside and discard the Shim (cardboard) Rear and then using the 15/32 drill bit carefully drill out all 3 holes.

"Clean up any burrs after drilling"

** CAUTION: Be Careful not to touch the outer skin of the truck bed when drilling ! **



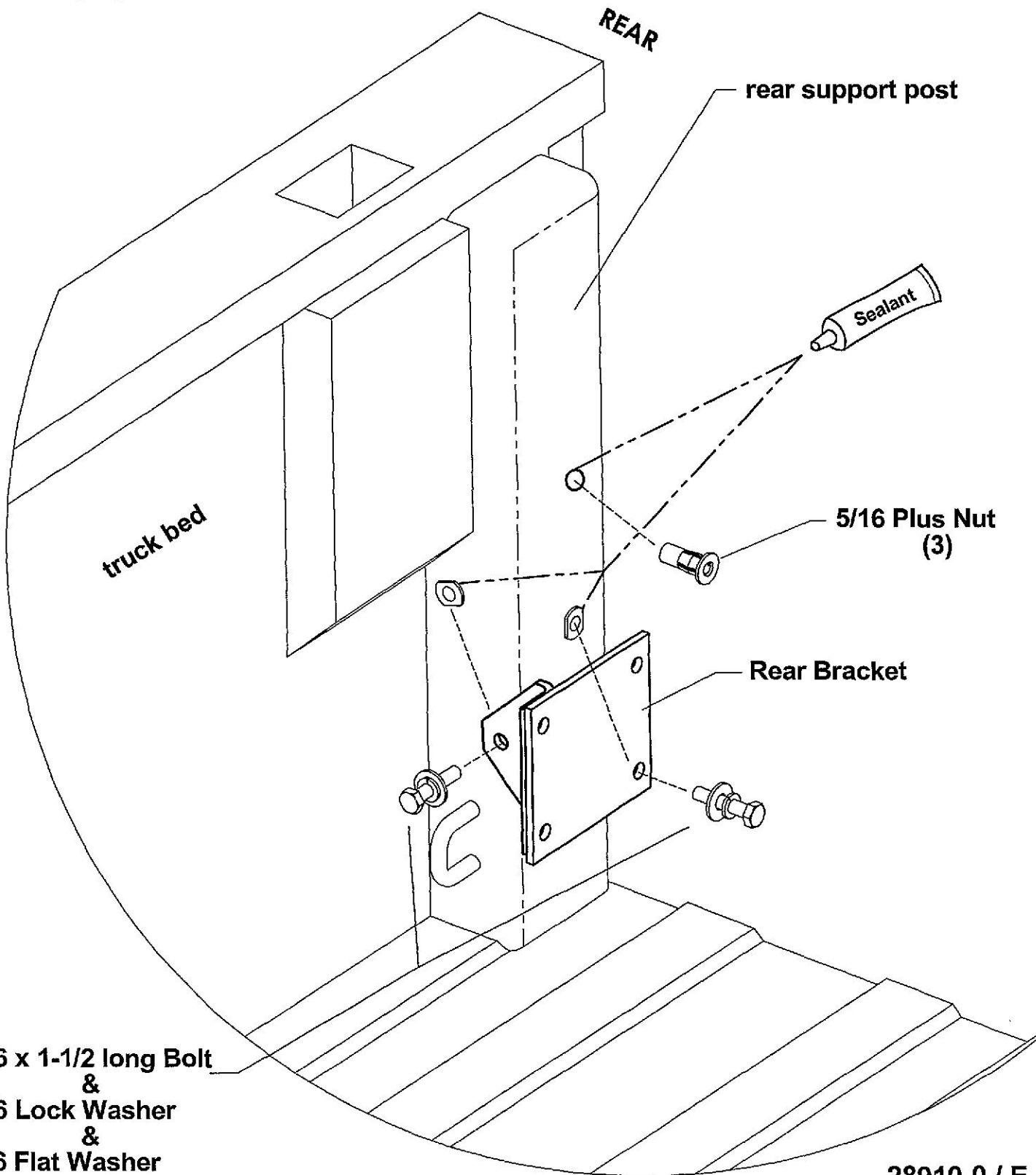
ASSEMBLY

STEP - 6

TOOLS NEEDED: 22200-1 Plusnut Sheet, 1/2" Wrench, 9/16" Wrench

Caulk all 3 holes you drilled in Step - 5 using the Sealant provided then set a plusnut into each hole. " See Instruction Sheet 22200-1 "

Now attach the Rear Bracket to the rear support post using the fasteners shown below and firmly tighten.



ASSEMBLY

STEP - 7

TOOLS NEEDED: Safety Glasses, Drill, 3/16 & 15/32 Drill Bits, Level

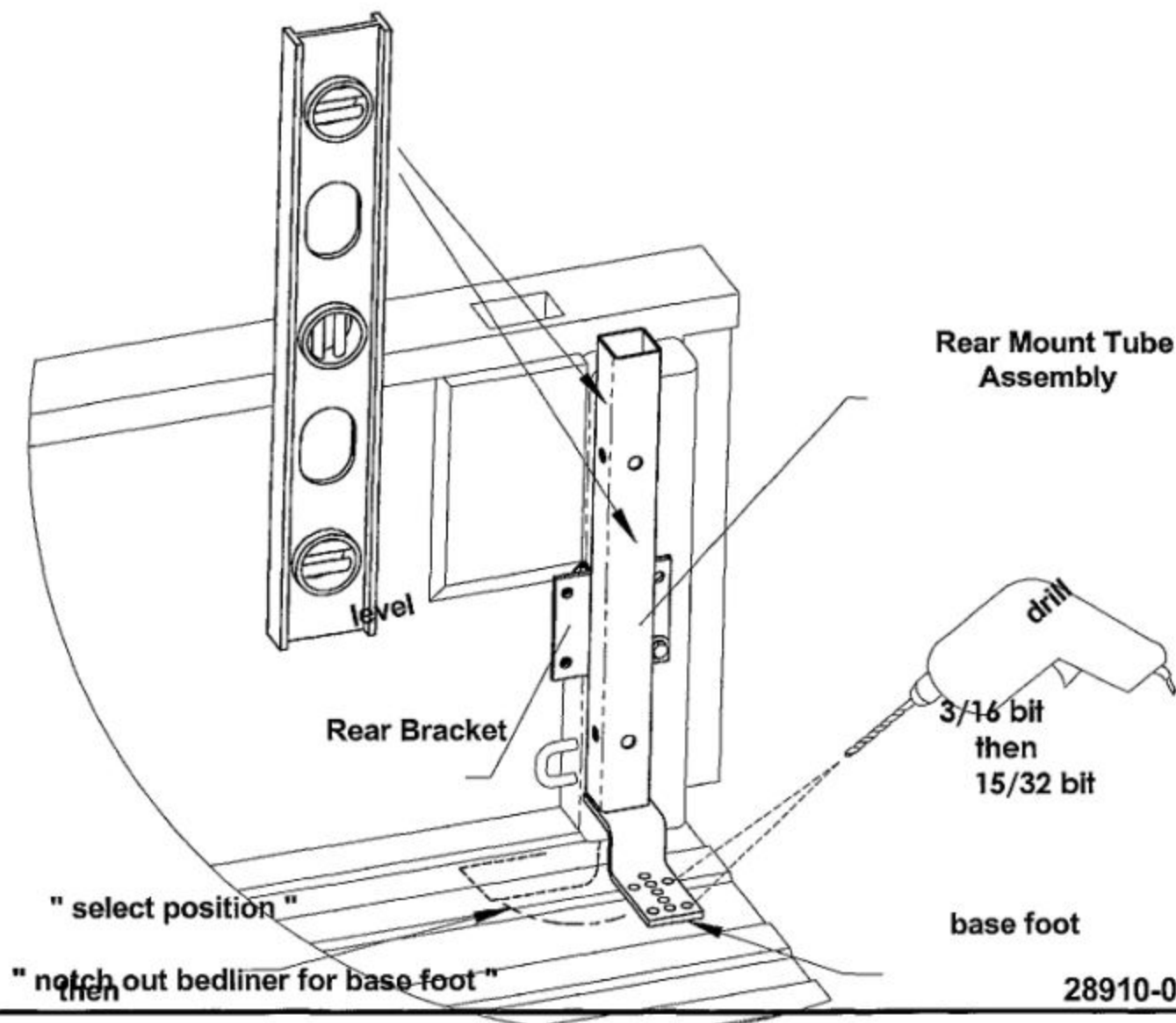
Fit the Rear Mount Tube Assembly to the Rear Bracket and resting on the floor of the truck bed and select which way the base foot should rest on the bed floor.

**** CAUTION:** You must check the underside of your truck bed for any obstructions (gas lines, electrical lines, etc.) **BEFORE** you decide which way the base foot rests on the bed floor and **BEFORE** you do any drilling! **

Once you have selected the base foot position then level the Rear Mount Tube Assembly front to back and side to side, notch bedliner if present. Next inspect location of bed floor ribs under the base foot and then select the 2 best holes in the base foot for mounting to the bed floor.

* Remember that underbed structures may dictate which holes are the best choice! *

Using the 3/16 drill bit drill truck bed floor through the holes you selected in the base foot, set the Rear Mount Tube aside and drill out these 2 holes using the 15/32 drill bit. "Clean up any burrs after drilling"



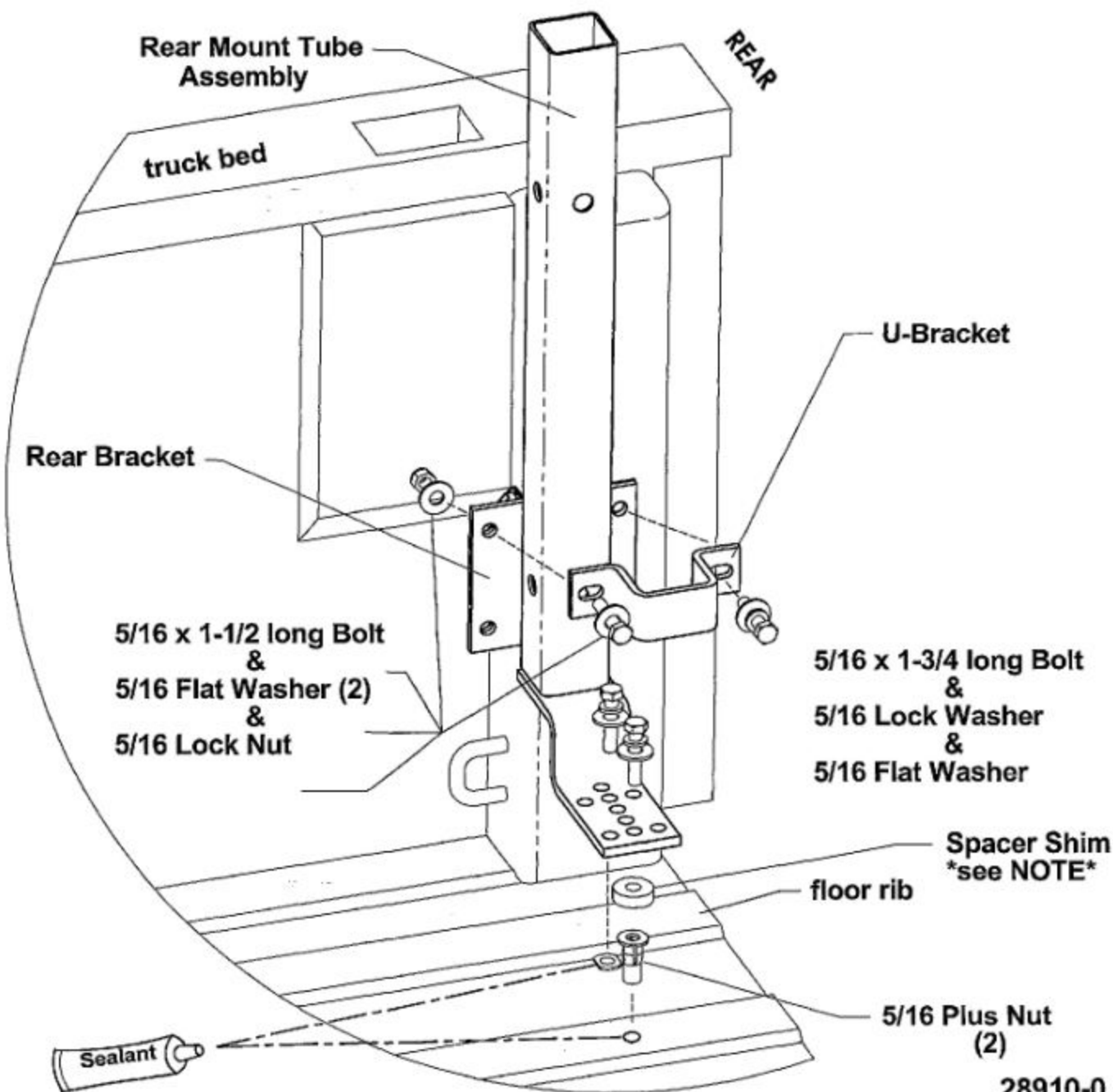
ASSEMBLY

STEP - 8 TOOLS NEEDED: 22200-1 Plusnut Sheet, 1/2" Wrench, 9/16" Wrench

Caulk the 2 holes in the floor you just drilled and then set a plusnut into each hole.
" See Instruction Sheet 22200-1 "

Now install the Rear Mount Tube Assembly to the floor and to the Rear Bracket using the U-Bracket and fasteners shown below, tighten fasteners firmly.

NOTE: If a fastener is used in the area between the floor ribs , use a Spacer Shim !



ASSEMBLY

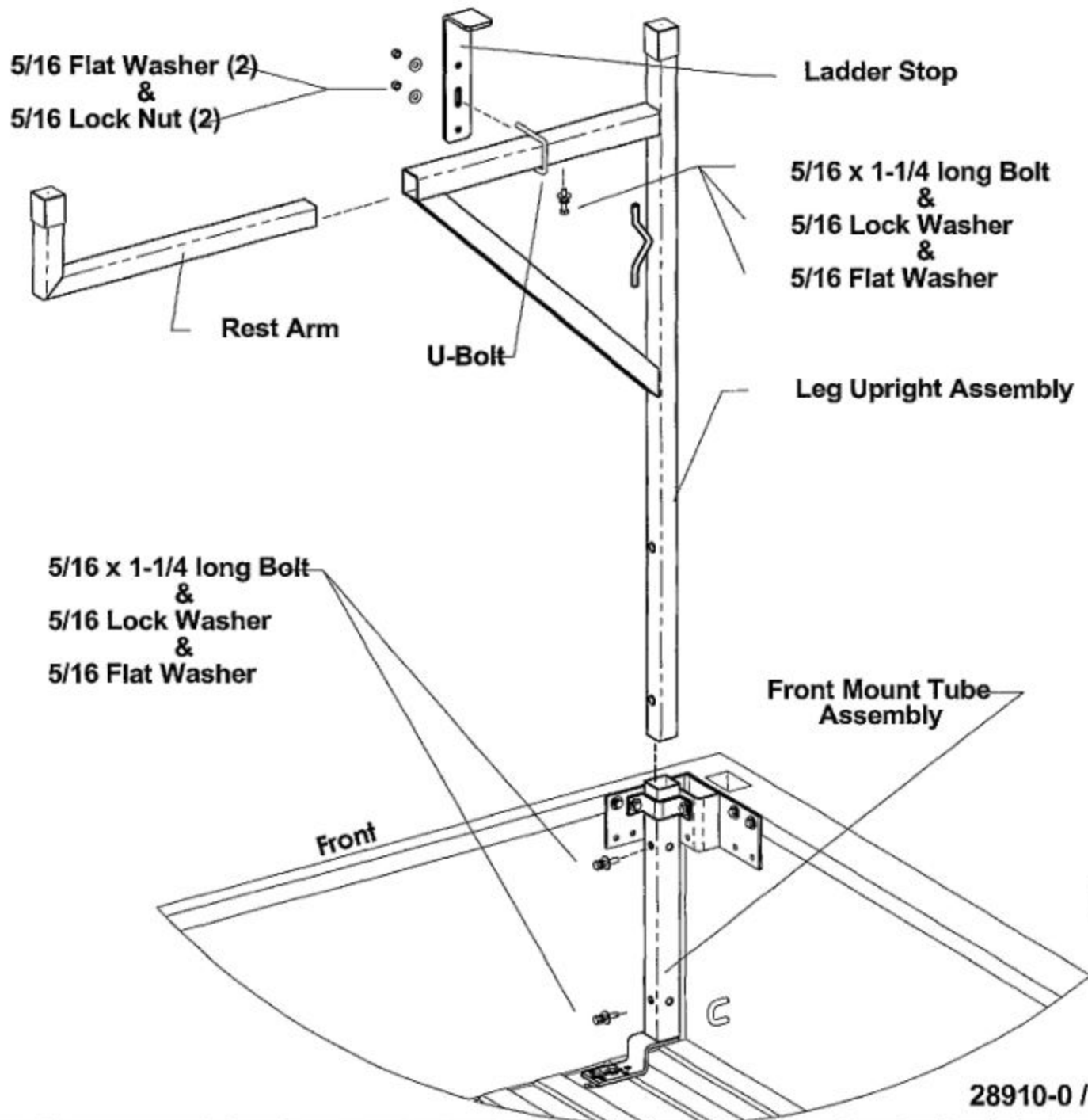
STEP - 9 TOOLS NEEDED: 1/2" Wrench

Slide the Leg Upright Assembly down into the Front Mount Tube Assembly and secure it in place using the fasteners shown below.

Tighten fasteners snug but do not over tighten fasteners !

Now slide the Rest Arm into the Leg Upright Assembly and secure it in place using the fasteners shown below. Tighten fasteners snug but do not over tighten fasteners !

Attach the Ladder Stop to the Leg Upright Assembly as shown below using the fasteners shown for it. Tighten fasteners snug but do not over tighten fasteners !



ASSEMBLY

STEP - 10

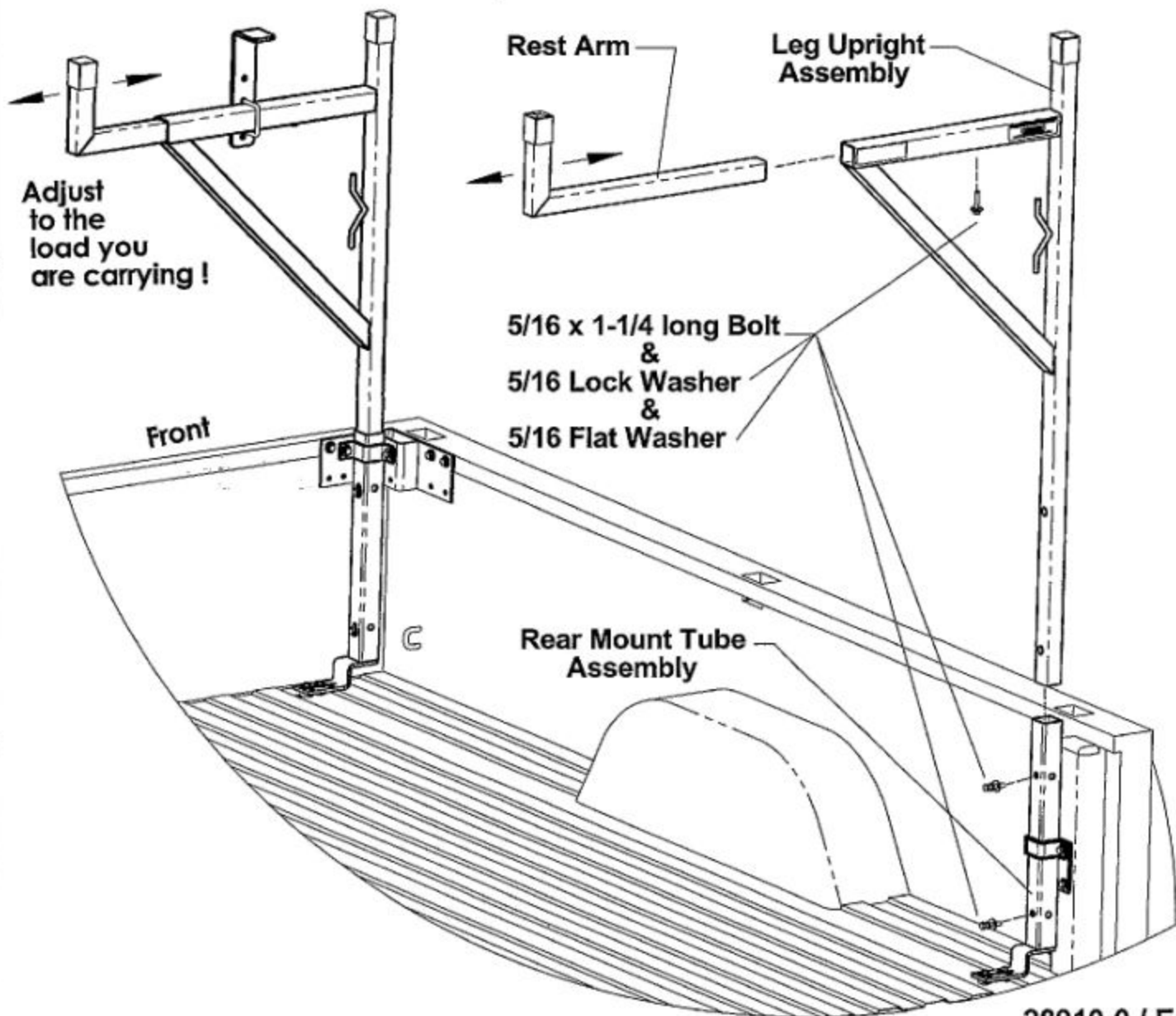
TOOLS NEEDED: 1/2" Wrench

Slide the Leg Upright Assembly down into the Rear Mount Tube Assembly and secure it in place using the fasteners shown below. Tighten fasteners snug but do not over tighten fasteners !

Now slide the Rest Arm into the Leg Upright Assembly and secure it in place using the fasteners shown below. Tighten fasteners snug but do not over tighten fasteners !

The ASSEMBLY is now COMPLETE ! Adjust your LoadFlex to the load or ladder you intend to carry by sliding the Rest Arms in or out and then re-tighten fasteners !

WARNING: This Ladder Rack is only intended for carrying ladders, lumber, pipe or similar materials and all cargo carried must be securely tied down to the Ladder Rack !!





ADRIAN STEEL COMPANY

22200-1

906 JAMES STREET, ADRIAN MICHIGAN 49221, PHONE 517-265-6194
VAN/TRUCK VEHICLE INTERIOR AND FASTENER INSTALLATION PROCEDURE

A. FASTENER APPLICATION STANDARD

The proper fastening method in all cases should be good metal to metal contact, using the fasteners supplied with Adrian's prepackaged arrangements.

1. Use nut and bolt through in all locations where possible.
2. Use a plusnut in all blind locations where nut and bolt is not possible.
3. The use of sheet metal screws is discouraged, except when nut & bolt or plusnuts can not be applied, and when this type of fastener can be applied in such a manner that places it in shear, or allows for several in close formation.

B. GENERAL INTERIOR ASSEMBLY AND INSTALLATION PROCEDURE

Adrian Steel interior arrangements are usually illustrated on a product data sheet which shows the correct orientation of all components in your vehicle.

1. Use the assembly instructions sent with the components to pre-assemble any that may require it, ladder racks, cab/cargo partition, knock-down units, and modules.
2. All Adrian prepackaged interiors, except those for pickup bed boxes, include a cab/cargo partition. The partition should be installed first, using the instructions packed with it.
3. Next install the street side components. If the spare is being relocated to the panel behind the drivers seat, leave at least 10" between the partition and the first component on that side. Always set all the components in place before drilling to install. This allows you to check for obstructions on the vehicle that might require adjustments to the component positioning.
4. Next install the curb side components. Relocate the spare tire, if present, to the panel behind the driver or passenger seats.

C. SPECIAL INSTRUCTIONS FOR ADRIAN STEEL PROVIDED FASTENERS

1. All holes drilled in the vehicle should have their raw metal edges sealed to resist corrosion. When and if, the drilled hole could allow the entry of exhaust gases into the cab area, it should be sealed at the time the fastener is installed with Butyl or silastic material which will remain flexible for an extended period of time.
2. The blind fastener of choice is the plusnut. Adrian supplies two thread sizes, 1/4-20 and 5/16-18. The 5/16-18 is only used for special applications (such as the mini-van polyguard partitions, floor only, or Sprinter Van Interiors).
3. After locating all positions that will need the plusnut, drill the proper size hole for the plusnut, see illustration below. 1/4-20 Plusnuts uses 3/8" dia. (all locations) 5/16-18 uses 1/2" dia. (floor only). The illustration below shows the sequence used to set a plusnut, and the proper way to use the floor spacers.

Plusnut Use and Installation

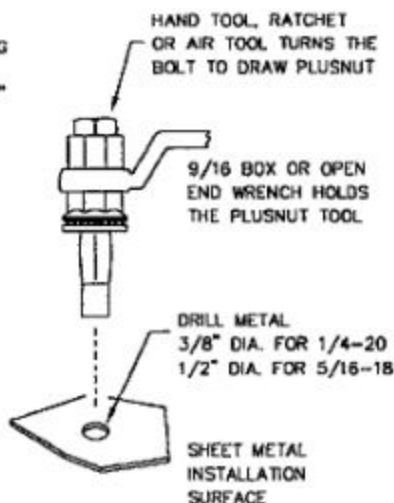
ASSEMBLE THE FOLLOWING

- 1) SETTING BOLT
1/4-20 x 2" LONG
OR
5/16-18 x 2-1/4"
- 2) PLUSNUT TOOL
- 3) PLUSNUT

PLUSNUT TOOL

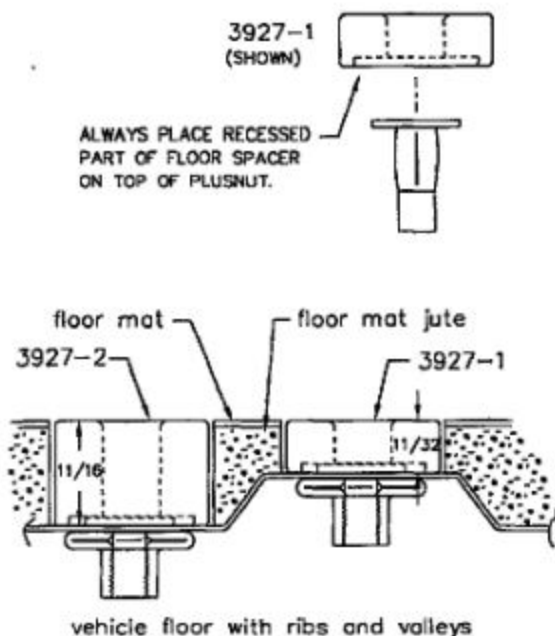
PLUSNUT
1/4-20
OR
5/16-18

SETTING THE PLUSNUT



Set Plusnut till tight,
DO NOT OVERTIGHTEN.

Spacer Use and Installation



Hand operated and pneumatic tools are available to set plusnuts.
Refer to Mc Masters-Carr or similar industrial catalog under rivet nut insert tools.
or call Adrian Steel Co. for more information.