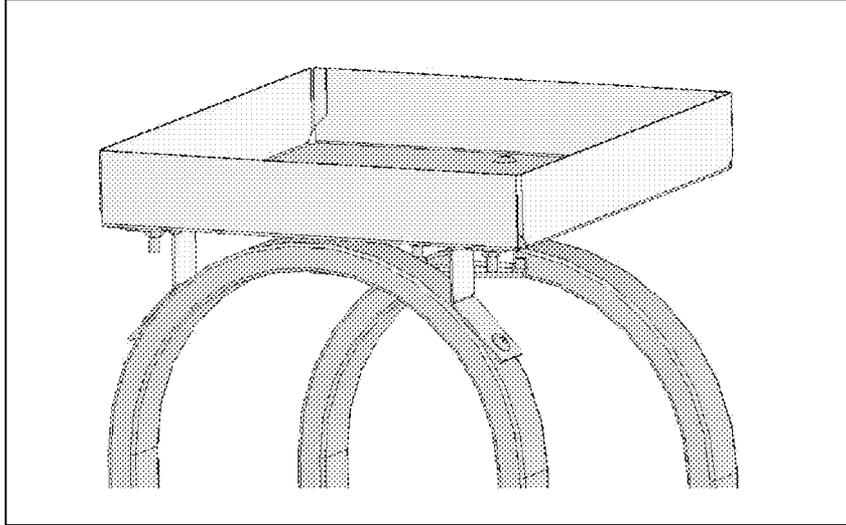


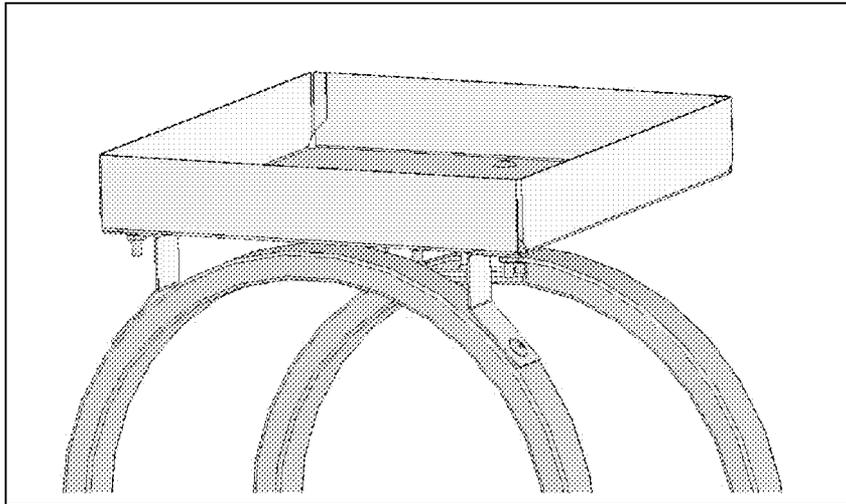


Assembly and Installation Instructions

ECN- 9406 DATE:07-27-2006 DWG.BY: DCS REV.BY: _____ CHK.BY: _____ ISSUE: c P.N.: 32866-0



**TOP TANK RACK SHELF ASSEMBY
SHOWN ON 30# SERIES WTR's
(11.875" FRAME WIDTH)**



**TOP TANK RACK SHELF ASSEMBLY
SHOWN ON 50# & COMBO SERIES WTR's
(14.562" FRAME WIDTH)**



ADRIAN STEEL®

VAN AND PICKUP EQUIPMENT

"WTRTRAY" TANK RACK TOP SHELF ASSY

BEFORE YOU START



IMPORTANT NOTES PERTAINING TO USER AND/OR PRODUCT SAFETY ARE DENOTED BY A STOP SIGN AND THEY MUST BE FOLLOWED IN ORDER TO COMPLETE A SAFE ASSEMBLY AND INSTALLATION!



YOU WILL NEED THE FOLLOWING TOOLS IN ORDER TO COMPLETE THIS JOB.

#2 PHILLIPS SCREWDRIVER
7/16" COMBINATION END WRENCH
RATCHET WRENCH, WITH 7/16" SOCKET
CENTER PUNCH
ELECTRIC DRILL W/3/16" DRILL BIT
SAFETY GLASSES

ALL FASTENERS USED IN THE ASSEMBLY AND INSTALLATION OF THIS PRODUCT SHOULD BE TIGHTENED TO A TORQUE OF 8 FT. LBS.



THE USE OF AIR OR ELECTRIC IMPACT TOOLS FOR THE ASSEMBLY OF FASTENERS IS NOT RECOMMENDED AND COULD CAUSE FASTENER FAILURE!



THE USE OF DRILLS WITH INTEGRAL DRILL STOPS IS STRONGLY RECOMMENDED TO ENSURE THAT VEHICLE DAMAGE IS AVOIDED!

**FASTENER STANDARDS**

- ❑ Proper fastening method of Adrian Steel products should always include good metal contact, using the supplied fasteners with prepackaged arrangements.
- ❑ A nut and bolt should always be used in all locations whenever possible.
- ❑ The use of plusnut(s) is intended for applications where a nut and bolt is not possible.
- ❑ All drilled holes in the vehicle should have the raw metal edges sealed to resist corrosion.



Important: To prevent exhaust fumes from entering the vehicle, all holes should be sealed at installation with Butyl or silicon sealant material, which will remain flexible for an extended period of time.



- ❑ Adrian Steel’s blind fastener of choice is the plusnut. Adrian supplies two thread sizes, 1/4-20 and 5/16-18. 5/16-18 fasteners are used only as directed.
- ❑ After locating all positions that require a plusnut, drill the proper size hole (use a drill stop!) for the plusnut. A 1/4-20 plusnut uses 3/8” diameter drill (all locations), and the 5/16-18 uses 1/2” diameter drill (floor only).

FOR MOUNTING THROUGH A FLOOR MAT AND/OR CARPET

- ❑ Position each item in desired location inside the vehicle.



Important: Before marking each location with a center punch, move the item/jig and check for obstructions or hazards under the vehicle floor.



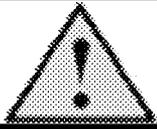
- ❑ Mark the floor mount locations.
Note: If a number of similar installations are being performed, it is recommended that a drilling template be used to ensure all installations are the same.
- ❑ Using the cutting tool, drill a pilot hole thru the mat/carpet and metal floor pan.
- ❑ ***The location of various floor mounts will determine what spacer combination will be used. For example, an 11/32” spacer is used atop floor ribs, and an 11/16” high spacer is used atop floor valleys.***



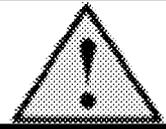
Note: The proper use of spacers is required when mounting over mat/carpet to ensure the metal-to-metal clamp-up, which will minimize component shifting in stressed conditions.



- ❑ Complete your installation using the additional instructions supplied with the equipment.



**TO PREVENT EXHAUST FUMES FROM ENTERING THE VEHICLE,
ALL HOLES SHOULD BE SEALED AT INSTALLATION WITH
BUTYL OR SILICON SEALANT MATERIAL.**



Whenever a plusnut is specified it is important that the proper size installation hole is provided.

PLUSNUT SIZE		DRILL SIZE <i>(with stop)</i>
1/4-20 PLUSNUT, FAS0052		3/8" DIAMETER
5/16-18 PLUSNUT, FAS0091		1/2" DIAMETER

FOR MOUNTING THROUGH A FLOOR MAT AND/OR CARPET

Position each item in desired location inside the vehicle and mark the floor mounting locations.

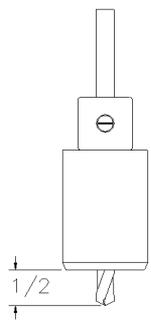
It is recommended that a drilling template be used to ensure an accurate placement of components is achieved for this installation.

Using the cutting tool, drill a pilot hole thru the mat/carpet and metal floor pan.

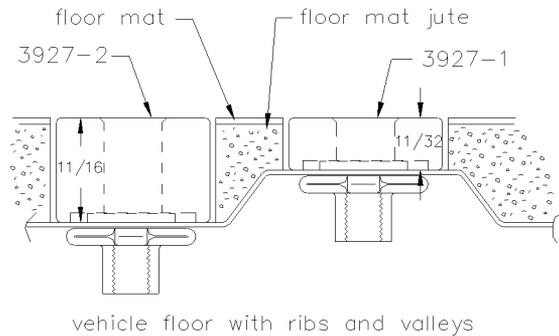
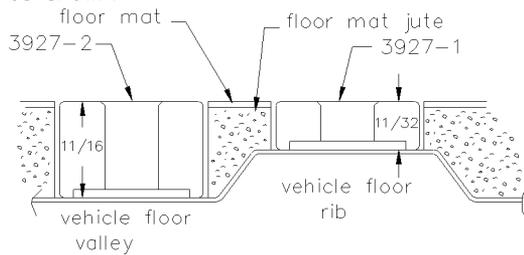
Spacer Use and Installation

3927-1 (SHOWN)

ALWAYS PLACE RECESSED PART OF FLOOR SPACER ON TOP OF PLUSNUT.



Placing the properly sized spacer on top of the vehicle floor pan will make your Adrian interior level, square, and sound. The view below shows the proper sized spacer for the different heights of the vehicle floor. Make sure to place the spacers with the plusnut relief surface down as shown.



The location of various floor mounts will determine what spacer combination will be used. For example, an 11/32" spacer is used atop floor ribs, and an 11/16" high spacer is used atop floor valleys.

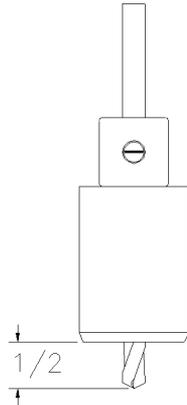


THE PROPER USE OF SPACERS IS REQUIRED WHEN MOUNTING OVER MAT/CARPET TO ENSURE THE METAL-TO-METAL CLAMP-UP, WHICH WILL PREVENT UNWANTED COMPONENT SHIFTING AND POTENTIAL FAILURE DURING USE.

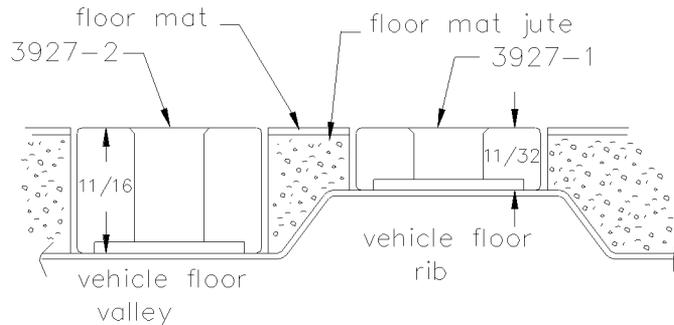




FASTENER STANDARDS cont'd.



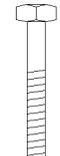
Placing the properly sized spacer on top of the vehicle floor pan will make your Adrian interior level, square, and sound. The view below shows the proper sized spacer for the different heights of the vehicle floor. Make sure to place the spacers with the plusnut relief surface down as shown.



Plusnut Use and Installation

ASSEMBLE THE FOLLOWING

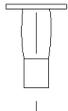
- 1) SETTING BOLT
1/4-20 x 2" LONG
OR
5/16-18 x 2-1/4"
- 2) PLUSNUT TOOL
- 3) PLUSNUT



PLUSNUT TOOL

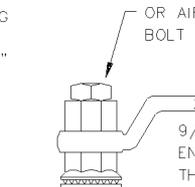


PLUSNUT
1/4-20
OR
5/16-18



SETTING THE PLUSNUT

HAND TOOL, RATCHET OR AIR TOOL TURNS THE BOLT TO DRAW PLUSNUT



9/16 BOX OR OPEN END WRENCH HOLDS THE PLUSNUT TOOL

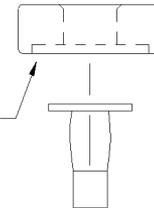
DRILL METAL
3/8" DIA. FOR 1/4-20
1/2" DIA. FOR 5/16-18



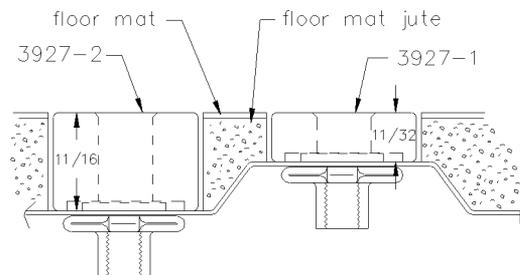
Set Plusnut till tight, DO NOT OVERTIGHTEN.

Spacer Use and Installation

3927-1 (SHOWN)



ALWAYS PLACE RECESSED PART OF FLOOR SPACER ON TOP OF PLUSNUT.

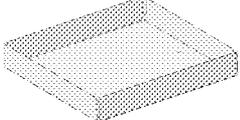


vehicle floor with ribs and valleys



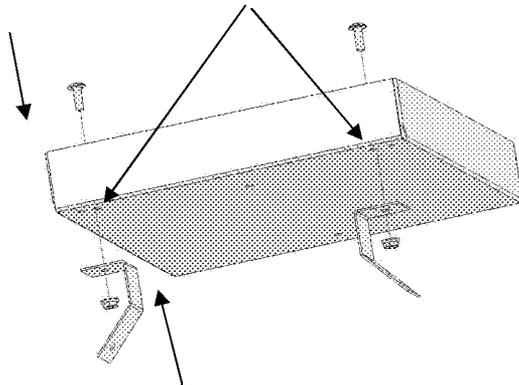
STEP - 01

SHELF MOUNTING LEG INSTALLATION

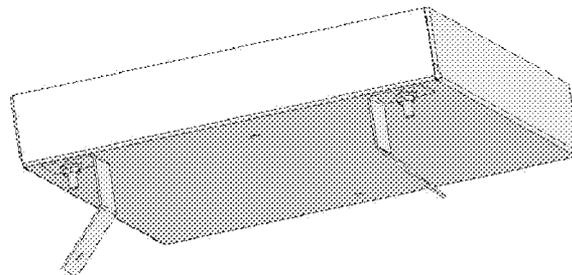
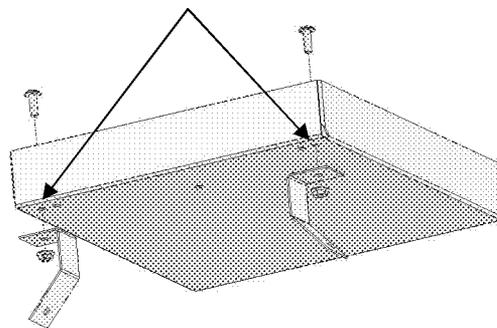
 <p>FAS0062 SCREW, THP, 1/4-20UNC X 3/4" LG (2) REQUIRED</p>	 <p>FAS0058 NUT, NYLON LOCK 1/4-20UNC (2) REQUIRED <i>(8 ft-lbs torque)</i></p>	 <p>32863-0 TOP TANK RACK SHELF</p>	 <p>32865-0 SHELF MOUNTING LEG (2) REQUIRED</p>
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Prior to attaching the SHELF MOUNTING LEGS to the TOP TANK RACK SHELF, you need to know the welded tank rack frame width that the shelf assembly will be mounted on. Tank rack width determines which hole pattern in the shelf to attach the mounting legs with the fasteners shown above. The figure on the top left side illustrates mounting leg hole alignments for a 30# series WTR (11.875" frame width) and the figure on the top right for a 50# series (14.562" frame width). Please note the hole locations in the shelf for your particular WTR size and then secure mounting legs to the bottom of the shelf as shown. Tighten the fasteners HAND TIGHT ONLY at this time, bottom center figure shows typical mounting leg to top shelf installation.

WELDED TANK RACK, 30# SERIES
SHELF MTG LEG HOLE LOCATIONS
(11.875" FRAME WIDTH)



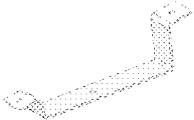
WELDED TANK RACK, 50# & COMBO's SERIES
SHELF MTG LEG HOLE LOCATIONS
(14.562" FRAME WIDTH)



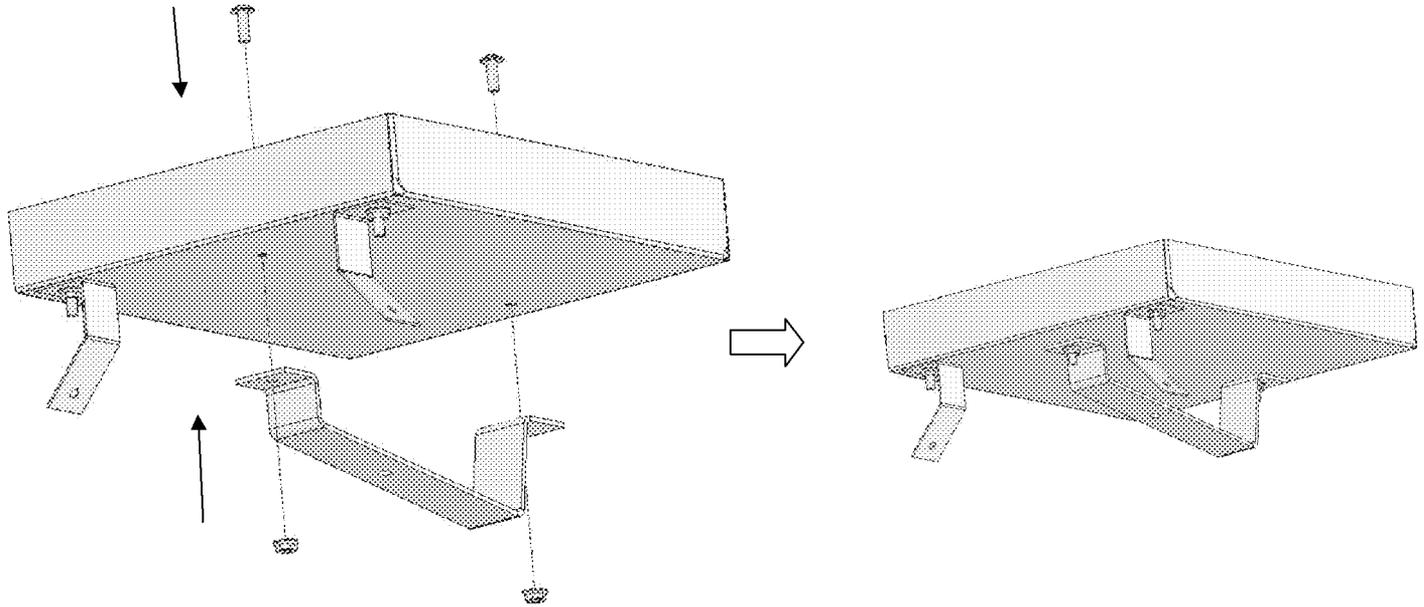


STEP - 02

SHELF CENTER STRAP INSTALLATION

 FAS0062 SCREW, THP, 1/4-20UNC X 3/4" LG (2) REQUIRED	 FAS0058 NUT, NYLON LOCK, 1/4-20UNC (2) REQUIRED <i>(8 ft-lbs torque)</i>	 32864-0 SHELF CENTER STRAP
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Position the SHELF CENTER STRAP against the bottom surface of the TANK RACK TOP SHELF. Confirm strap orientation prior to securing strap the shelf with the fasteners shown above. Tighten fasteners to 8 ft-lbs torque at this time.



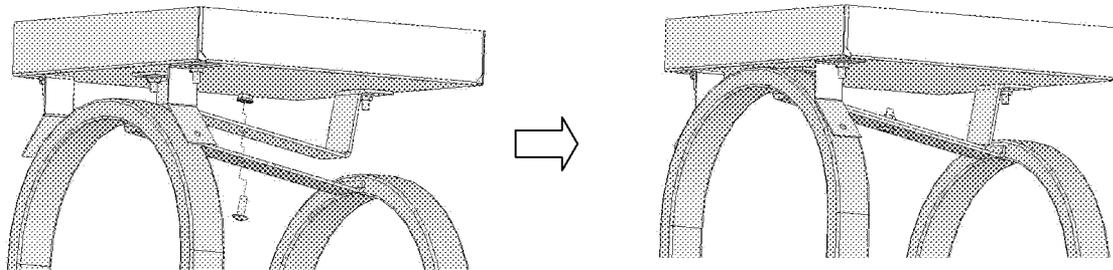


STEP – 03

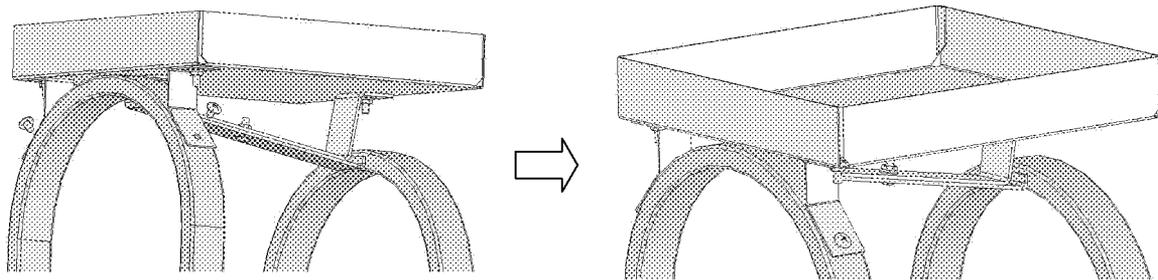
SHELF ASSEMBLY TO THE “WELDED TANK RACK”

 <p>FAS0044 SCREW, THP, TAPPING, #14-10 X 1/2” LG</p>	 <p>WTRTRAY TANK RACK TOP SHELF ASSY</p>	 <p>FAS0062 SCREW, THP, 1/4-20UNC X 3/4” LG (2) REQUIRED</p>	 <p>FAS0058 NUT, NYLON LOCK 1/4-20UNC (2) REQUIRED <i>(8 ft-lbs torque)</i></p>
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Position the TANK RACK TOP SHELF ASSY over the WELDED TANK RACK. Align the through hole in the shelf strap with the hole in the welded tank rack cross support strap. Secure the shelf assembly the welded tank rack with the fasteners shown above, tighten to 8 ft-lbs torque at this time.



Position the shelf mounting legs on the WTR front frame support as shown below. Using the hole in the shelf mounting leg as a “guide bushing”, center punch hole location in frame, drill a 3/16” diameter hole through the welded tank rack frame, one side only. Secure the mounting leg to the welded tank rack frame by installing (1) #14-10x1/2” screw. Repeat for the opposite side. Tighten the previously HAND TIGHT ONLY fasteners previously installed in STEP 01 to 8 ft-lbs torque.



THIS COMPLETES YOUR INSTALLATION OF THE SHELF ON YOUR WELDED TANK RACK