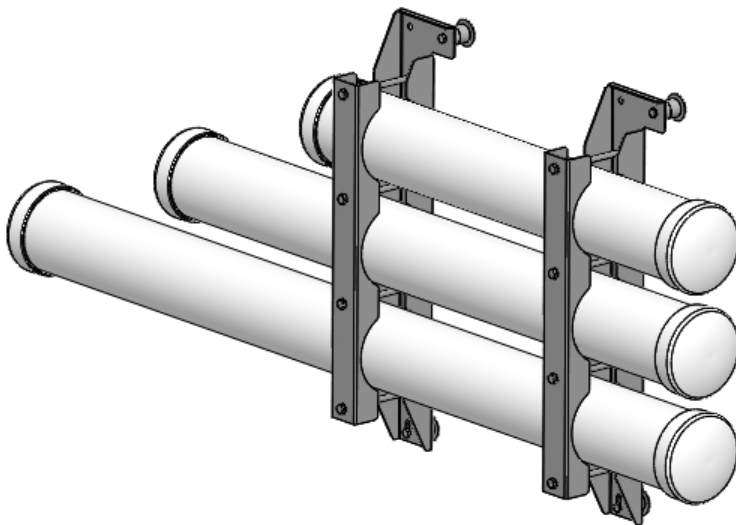


## TUBE HOLDER KIT



PRODUCT WEIGHT  
**32 LBS**

WIDTH x DEPTH x HEIGHT  
**56" x 8" x 24"**

CAPACITY  
**25 LBS PER TUBE**

COLOR

**GRAY**

CATALOG NUMBER

**70-5**

### PRODUCT FEATURES

**This tube holder kit is intended to attach to your installed partition, but can be installed to other product in your interior. Position assembly in the desired location and attach per the installation instructions.**

**SEE PAGE 2 FOR APPLICATION NOTES AND ACCESSORIES, OTHER PRODUCTS THAT WORK WITH THIS UNIT.**



**CATALOG NUMBER      70-5**

***PRODUCT APPLICATION***

**This product is designed to secure customer product in PVC tubing within the cargo area.**

***ACCESSORIES THAT WILL WORK WITH THIS PRODUCT***

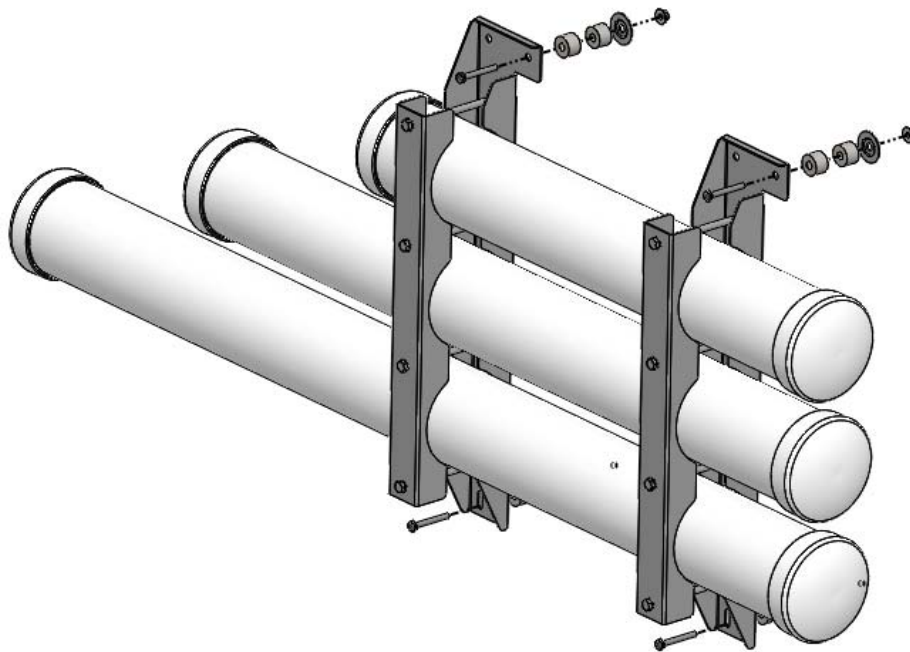
<b>CATALOG NUMBER</b>	<b>DESCRIPTION</b>
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***SPECIAL APPLICATION NOTES***



**ADRIAN STEEL®**  
*Cargo Management Solutions for Commercial Vehicles*

## Assembly/Installation Instructions and Owners Manual



**70-5**

**TUBE HOLDER KIT**

## - PRECAUTIONS -





 **CAUTION**   
**THE USE AIR IMPACT TOOLS CAN  
OVER-TORQUE FASTENERS AND  
CAUSE FASTENER FAILURE!**



 **CAUTION**   
**ALL INSTALLATION HOLES SHOULD BE SEALED  
WITH SILICON OR BUTYL SEALANT TO PREVENT  
EXHAUST FUMES FROM ENTERING THE VEHICLE!**



 **DANGER**   
**INSPECT FOR FUEL TANK, FUEL LINES, BRAKE LINES, HIGH  
VOLTAGE BATTERIES AND ELECTRICAL LINES PRIOR TO  
DRILLING TO AVOID DAMAGING CRITICAL VEHICLE SYSTEMS  
OR INJURY TO INSTALLER DURING INSTALLATION PROCESS!**



 **CAUTION**   
**TO AVOID DAMAGING THE VEHICLE ALWAYS  
USE DRILL STOPS WHEN DRILLING ANY IN-  
STALLATION HOLES!**



## - IMPORTANT WARRANTY REQUIREMENTS -

1. SUBSTITUTING ADRIAN STEEL SPECIFIED FASTENERS FOR ASSEMBLY AND/OR INSTALLATION WILL VOID YOUR PRODUCT WARRANTY.
2. ALL HOLES DRILLED INTO VEHICLE SHOULD HAVE THE RAW METAL EDGES SEALED WITH A SELF-ETCHING PRIMER TO RESIST CORROSION AND POTENTIAL FASTENER POINT FAILURE.
3. ALL FASTENERS USED IN THE INSTALLATION OF THIS PRODUCT SHOULD BE TIGHTENED TO THE TORQUE(S) SPECIFIED IN THESE INSTRUCTIONS.
4. THESE INSTRUCTIONS SHOULD BE KEPT WITH THE VEHICLE.

### THE BASIC TOOLS NEEDED FOR MOST INSTALLATIONS



DRILL



DRILL BIT WITH  
STOP



RATCHET, SOCKETS  
AND/OR WRENCHES



SCREWDRIVERS



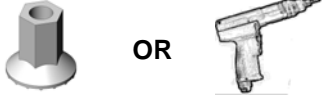
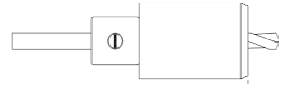
MEASURING TAPE

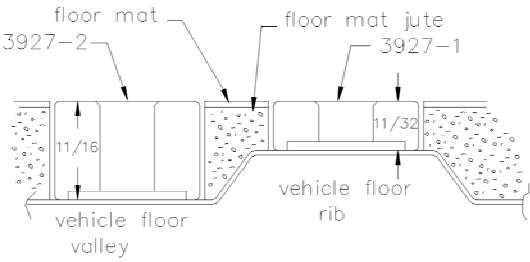
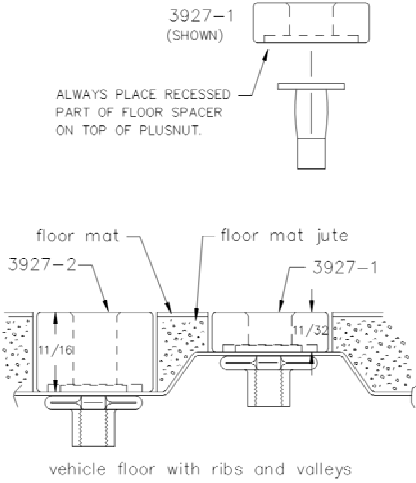
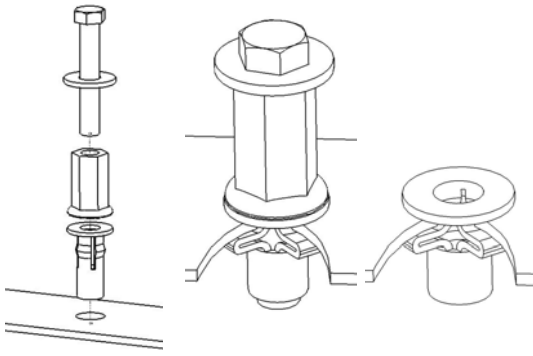
ADDITIONAL TOOLS MAY BE NEEDED FOR THIS INSTALLATION AND THEY WILL BE IDENTIFIED IN THE STEPS THAT FOLLOW.





## Assembly/Installation Instructions and Owners Manual



**WHEN INSTALLING PLUSNUTS MAKE SURE YOU USE THE CORRECT DRILL BIT WITH A STOP!**

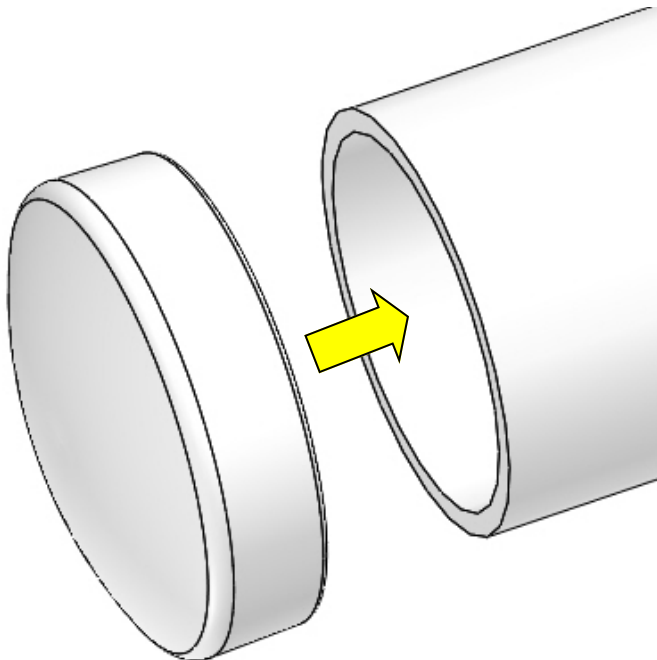
PLUSNUT SIZE	DRILL BIT SIZE
1/4-20 PLUSNUT, FAS0052	USE A 3/8" DIAMETER DRILL BIT WITH A STOP.
5/16-18 PLUSNUT, FAS0091	USE A 1/2" DIAMETER DRILL BIT WITH A STOP.
 <b>NOTE: A PLUSNUT SETTING TOOL IS REQUIRED FOR PLUSNUT INSTALLATION AND IS NOT SUPPLIED WITH THIS KIT. ORDER PLUSNUT TOOLS FROM ADRIAN STEEL (P.N. 22200-0) OR USE AN AIR POWERED PLUSNUT SETTING GUN.</b>	
<b>NOTE: If your vehicle contains carpet or a rubber floor mat you will need to prepare the mounting locations using a 1-3/16" carpet cutter.</b>	<b>1-3/16" DIAMETER CARPET CUTTER P.N. 31183-0.</b> 

	<h3>Step 01</h3> <p><b>Optional</b></p> <p>If your vehicle contains carpet or a rubber floor mat you will need to prepare the mounting locations. <b>(if not, skip to STEP 02)</b></p> <p>Position the product to be installed into the vehicle and once you are satisfied with the mounting locations, mark the mounting locations. Using a 1-3/16" diameter carpet cutter. Select the appropriate floor spacers as shown in the illustration to the left. Set those aside for use later into the installation process.</p> <p>Once you have prepared the carpet/floor mat for</p>
 <p>ALWAYS PLACE RECESSED PART OF FLOOR SPACER ON TOP OF PLUSNUT.</p>	<h3>Step 02</h3> <p><b>Prepare Mounting Locations</b></p> <p>Using a drill and drill bit (see table at top of page for correct size) drill the mounting holes in the vehicle sheet metal to prepare for installing the plusnuts.</p> <p>If you are thru-bolting at any of the locations simply drill a hole that is 1/16" larger than the bolt size(s) for those locations.</p> <p>Once you have drilled the holes into the vehicle, the raw metal edges should be sealed using a self-etching primer to resist corrosion and potential fastener point failure.</p>
	<h3>Step 03</h3> <p><b>Setting Plusnuts</b></p> <p>Use an Air Powered Plusnut Setting Gun to "set the plusnut" or if installing manually with hand tools, assembly the following.</p> <p><b>1/4-20UNC Plusnut (FAS0052)</b> FAS0080 SCREW, HXHD, 1/4-20UNCx2.00, G8 FAS0067 WASHER, FLAT, 1/4"ID 22200-0 PLUSNUT TOOL</p> <p><b>5/16-18UNC Plusnut (FAS0091)</b> FAS0095 SCREW, HXHD, 5/16-18UNCx2.00", G8 FAS0086 WASHER, FLAT, 5/16"ID 22200-0 PLUSNUT TOOL</p> <p>Place barrel of the plusnut body in sheet metal thru hole until flange is flush with sheet metal.</p> <p>Using a 9/16" combination wrench of plusnut tool body and a second hand wrench, ratchet, or air tool, rotate the hex bolt head CW to draw plus nut flanges up (set the plusnut).</p> <p>Remove hex bolt, washer, and plusnut. Inspect installation.</p>

<b>PARTS YOU WILL USE FOR</b>  <b>STEP 01</b>	51702, 51703 & 51704 PVC TUBES (1) EACH	08989-0 PVC 4" END CAP #40 (3) EACH	34015-0 PVC PRIMER/SOLV 4 oz	34016-0 PVC CEMENT 4 oz
				

## Instructions for Step 01

**GLUE (3) THREE END CAPS TO TUBES**



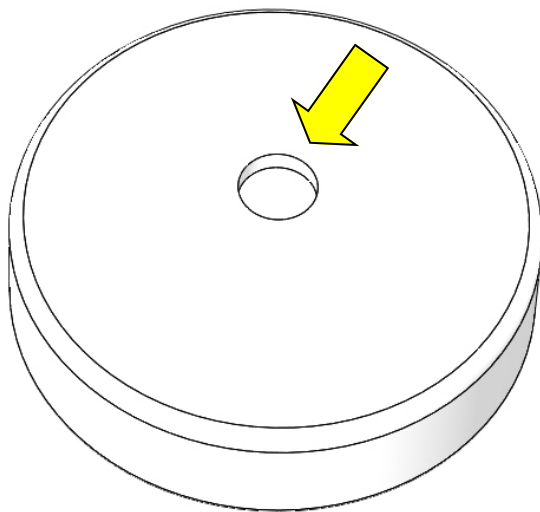
FOLLOW THE DIRECTIONS ON THE PRIMER AND THE CEMENT CONTAINERS AND GLUE ONLY (1) ONE END CAP TO EACH PVC TUBE.

**WARNING!**  
**DO NOT GLUE**  
**END CAPS TO**  
**BOTH ENDS OF**  
**THE TUBE!**  
**WARNING!**




# STEP 02

## Instructions for Step 02

**DRILL 3/4" DIAMETER HOLES INTO (3) THREE END CAPS**

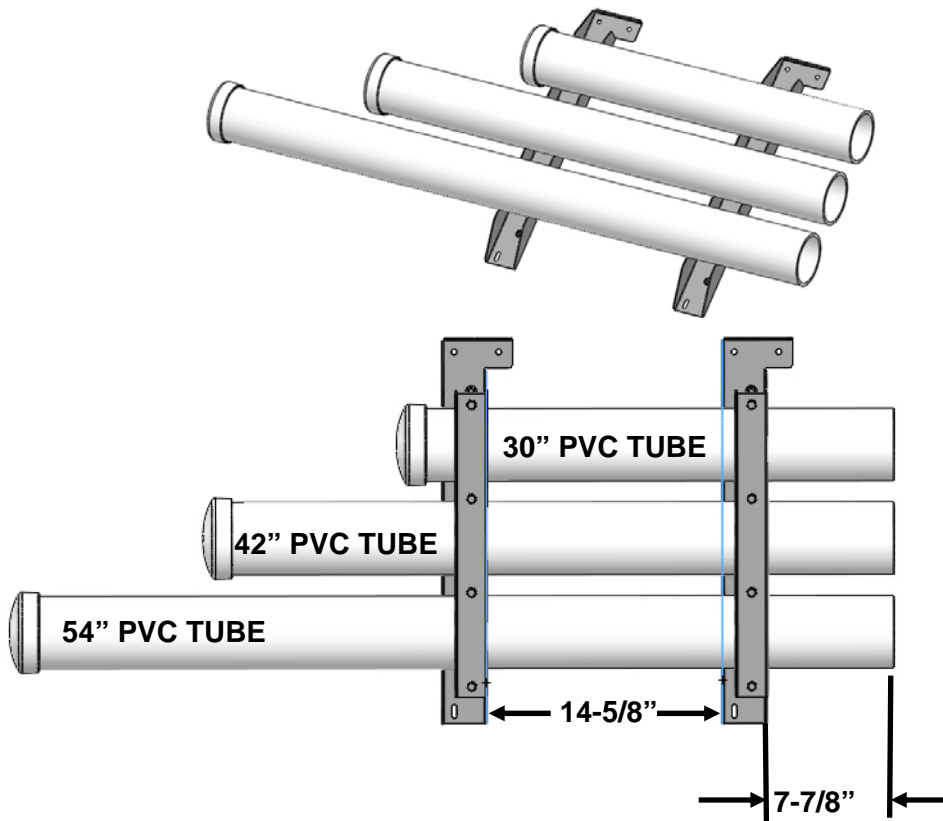


DRILL (1) ONE 3/4" HOLE INTO THE CENTER OF EACH OF THE THREE REMAINING END CAPS AS SHOWN.

<b>PARTS YOU WILL USE FOR</b>  <b>STEP 03</b>	PVC TUBE ASSEMBLIES FROM PREVIOUS STEP	51911-G TUBE HOLDER BASE ASSM. (2) EACH.	MEASURING TAPE	
				

## Instructions for Step 03

### POSITION BASES AND TUBES FOR ASSEMBLY



POSITION BASES FLAT ON WORKSURFACE WITH TABS TO UPPER RIGHT AS SHOWN WITH 14-5/8" BETWEEN PARTS.

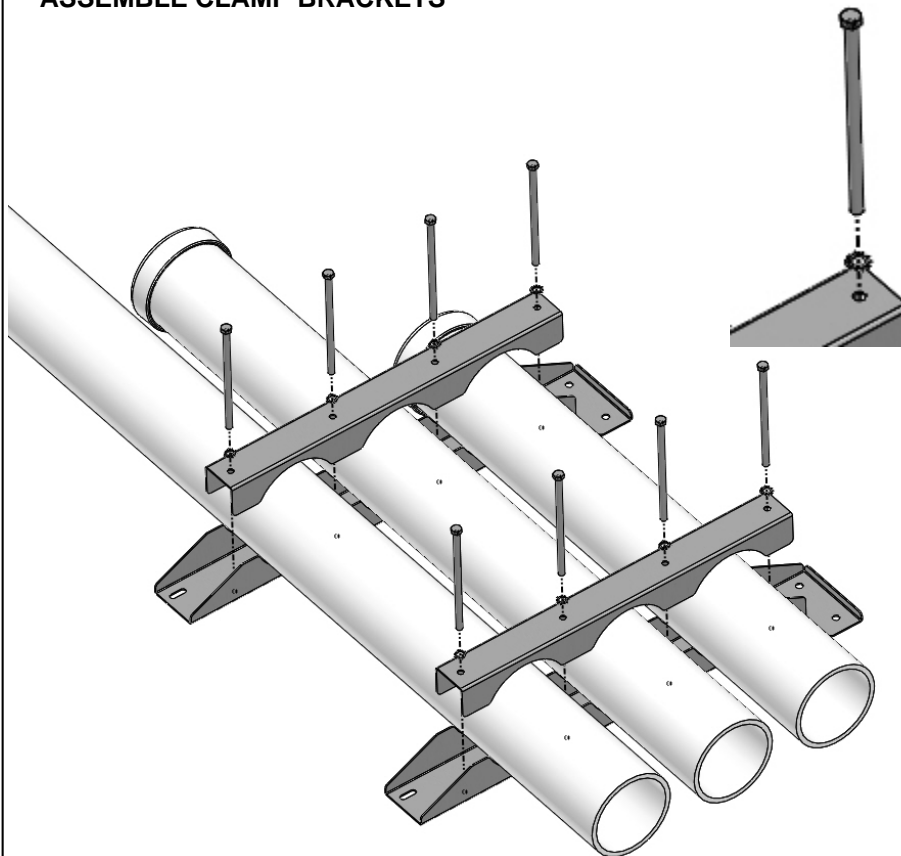
POSITION TUBES WITH THE OPEN ENDS TO THE RIGHT WITH THE OPEN ENDS 7-7/8" FROM THE BASE FLANGE AS SHOWN.



<b>PARTS YOU WILL USE FOR</b>  <b>STEP 04</b>	SUB-ASSEMBLY FROM PREVIOUS STEP.	51912-G TUBE HOLDER CLAMP BRACKET (2) EACH	FAS0276 5/16x 6" HH SCREW (8) EACH	FAS0085 5/16" LOCK WASHER (8) EACH
				
	DRILL/DRIVER	1/2" SOCKET		
				

## Instructions for Step 04

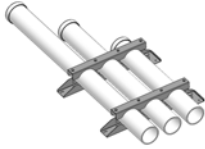


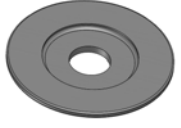
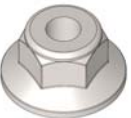



### ASSEMBLE CLAMP BRACKETS



PLACE CLAMP BRACKETS OVER TUBING ON SUB-ASSEMBLY TO LINE UP WITH RIV-NUTS IN BASES.

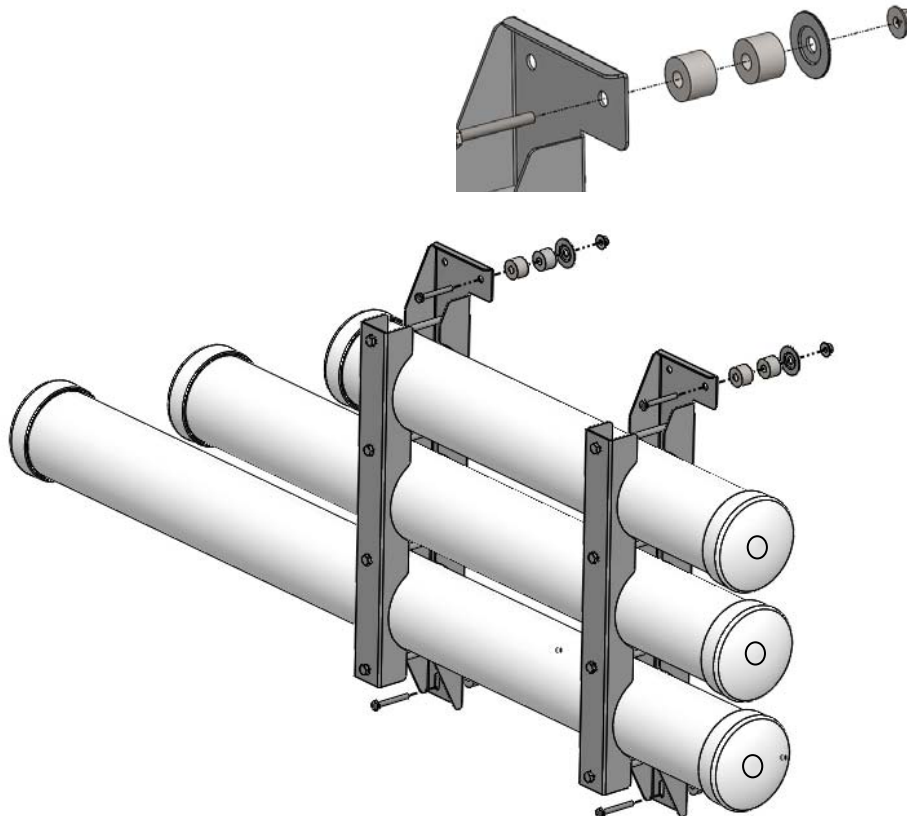
FASTEN CLAMP BRACKETS USING LOCK WASHER AND HEX BOLTS (4 PER CLAMP BRACKET) AND EVENLY TIGHTEN TO SEAT THE BRACKETS AGAINST THE TUBING.

DO NOT OVER-TORQUE FASTENERS!

<b>PARTS YOU WILL USE FOR</b>  <b>STEP 05</b>	SUB-ASSEMBLY FROM PREVIOUS STEP.	03927-2 SPACER (8) EACH	FAS0080 1/4 x 2" HH SCREW (4) EACH	FAS0833 CUP WASHER (4) EACH
				
	FAS0055 1/4" FLANGE LOCK NUT (4) EACH	DRILL/DRIVER & 7/16" SOCKET	DRILLED END CAPS FROM STEP #02 (3) EACH	7/16" BOX WRENCH
				

## Instructions for Step 05

### INSTALL ASSEMBLY IN VEHICLE



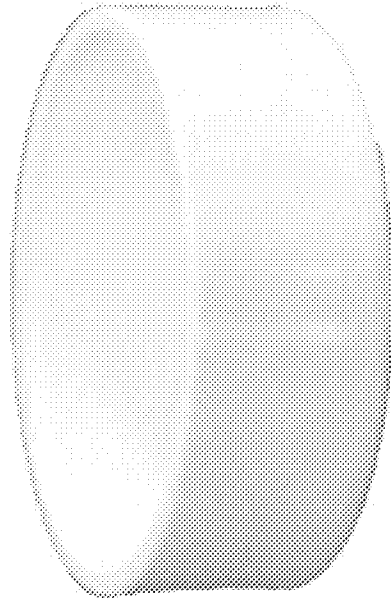
POSITION ASSEMBLY IN DESIRED LOCATION (OR REFER TO PDS PACKAGE DRAWING FOR LOCATION DETAILS). FASTEN ASSEMBLY TO PARTITION, CABINET, END PANEL OR OTHER LOCATION USING THE ABOVE LISTED FASTENERS.

IF ATTACHING TO A PARTITION THE CUP WASHER AND FLANGE NUTS SHOULD BE ON THE CAB SIDE OF THE PARTITION.

APPLY DRILLED END CAPS TO THE OPEN ENDS AS SHOWN.

**WARNING!**  
**DO-NOT-GLUE THE DRILLED END CAPS!**  
**WARNING!**

YOUR ASSEMBLY IS NOW COMPLETE.

**ITEM DESCRIPTION: 4" PVC END CAP SCH 40**

MANUFACTURER: ANY  
 MANUFACTURERS PART NUMBER: ANY

SPECIFICATIONS: SCHEDULE 40  
 WHITE  
 FITS 4" PVC PIPE

SPECIAL NOTES: N/A

**SUPPLIED BY: THIS ITEM IS ADRIAN AVAILABLE!**

**PURCHASED PRODUCT DATA SHEET (PPDS)**

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Corps Management Solutions for Commercial Vehicles

906 JAMES STREET  
 ADRIAN, MI 49221  
 517-265-6194

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**CAUTION**



WHEN INSTALLING EQUIPMENT IN OR ON  
 VEHICLES CHECK FOR FUEL TANKS, FUEL  
 LINES, CONTROL LINES AND ELECTRICAL  
 WIRING BEFORE DRILLING! ALWAYS USE  
 DRILL BITS WITH INTEGRAL STOPS  
 WHENEVER POSSIBLE!

DRAWN BY  
 BTS

DATE DRAWN  
 06/13/11

ECN NUMBER  
 13955

ECN DATE  
 06/13/11

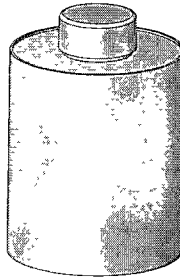
PART WEIGHT  
 0.00 LBS.

REV. LEVEL  
 3.0

PART NUMBER

**08989-0**

PART NUMBER

**34015-0****ITEM DESCRIPTION: CLEAR PVC CEMENT, 4oz****MANUFACTURER: HERCULES****MANUFACTURERS PART NUMBER: N/A**

**SPECIFICATIONS:** For PVC Types I & II  
DW & DWV/SW Pipe and Fittings  
4 FL. OZ. (118 ml)

**SPECIAL NOTES: NONE****SUPPLIED BY: THIS ITEM IS ADRIAN SUPPLIED!****PURCHASED PRODUCT DATA SHEET (PPDS)**

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**ADRIAN STEEL**  
VAN AND PICKUP EQUIPMENT

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**CAUTION**

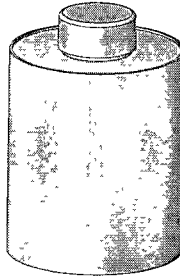
WHEN INSTALLING EQUIPMENT IN OR ON  
VEHICLES CHECK FOR FUEL TANKS, FUEL  
LINES, CONTROL LINES AND ELECTRICAL  
WIRING BEFORE DRILLING! ALWAYS USE  
DRILL BITS WITH INTEGRAL STOPS  
WHENEVER POSSIBLE!

**DRAWN BY**  
DCS**DATE DRAWN**  
04-03-2007**ECN NUMBER**  
10132**ECN DATE**  
04-03-2007**PART WEIGHT**  
0.25 LBS.**REV. LEVEL**  
A

PART NUMBER

**34015-0**

PART NUMBER

**34016-0****ITEM DESCRIPTION: PVC PRIMER/SOLVENT, 4oz****MANUFACTURER: HERCULES****MANUFACTURERS PART NUMBER: N/A****SPECIFICATIONS: 4 FL. OZ. (118 ml)****SPECIAL NOTES: NONE****SUPPLIED BY: THIS ITEM IS ADRIAN SUPPLIED!****PURCHASED PRODUCT DATA SHEET (PPDS)**

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WHENEVER POSSIBLE!**

**DRAWN BY  
DCS****DATE DRAWN  
04-03-2007****ECN NUMBER  
10132****ECN DATE  
04-03-2007****PART WEIGHT  
0.25 LBS.****REV. LEVEL  
A**

PART NUMBER

**34016-0**