

Fontaine® Fifth Wheel Installation Guide



www.fifthwheel.com • 800-874-9780

Contents / Application information

Installation instructions

Instructions	6000	7000	7000CC	H5092	X5092	Custom Duty	NT	Ultra HD	Page
Installation Instructions	●	●	●	●	●		●	●	3
Application/restriction levels	●	●	●	●	●		●	●	2
Custom Duty installation instructions						●			14

Additional installation instructions based on mount used

Mounts	6000	7000	7000CC	H5092	X5092	Custom Duty	NT	Ultra HD	Page
LWO light-weight outboard slide							●		4
LWB light-weight slide	●	●	●						5
AWB and MWS wedge slide				●				●	6
XAWX air slide bracket					●			●	7
ATB and MTB wedge slide	●	●	●						8
APB adjustable plate bracket							●		9
PS4 and PS5 plate mount stationary				●	●			●	10
PMA plate mount adjustable	●	●	●					●	11
FMA stationary bracket mount	●	●	●	●				●	12
A36 angle mount	●	●	●						13
Custom duty mount						●			14

Application/restriction levels

Standard duty: Fifth wheel must be used in a 100% on-highway application, with more than 30 miles between each stop. The total number of towed axles equals 2. Road type must be maintained concrete or asphalt. Gross Combination Weight (GCW) is less than 95,000 pounds or 43,000 kilograms. See Fontaine Application Guide LT-076 for specific application recommendations. Product used in unapproved applications voids manufacture warranty.

Moderate duty: Fifth wheel must be used in a less than 10% off-highway application, with no minimum mileage between each stop. The maximum total number of towed axles equals 4. Road type must be maintained concrete, asphalt, gravel, or crushed rock. Gross Combination Weight (GCW) is less than 115,000 pounds or 52,000 kilograms. See Fontaine Application Guide LT-076 for specific application recommendations. Product used in unapproved applications voids manufacture warranty.

Severe duty: Fifth wheel can be used in any off-highway application, with no minimum mileage between each stop. The total number of towed axles equals 5 or more. All road types are acceptable including

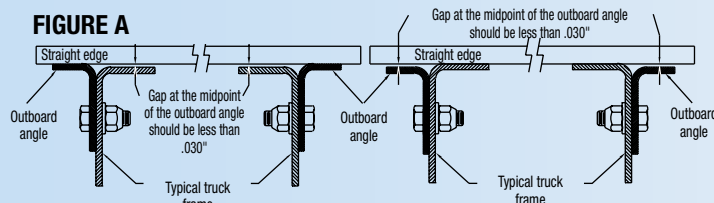
hard packed dirt and non-maintained roads. Gross Combination Weight (GCW) is more than 115,000 pounds or 52,000 kilograms. See Fontaine Application Guide LT-076 for specific application recommendations. Product used in unapproved applications voids manufacture warranty.

Important application Notes:

1. If any single restriction factor within your application is surpassed within a given duty level, the next duty level must be selected.
2. When selecting a fifth wheel, if the application or vehicle usage places the maximum capacity on a certain fifth wheel, then the selection of a fifth wheel with a higher capacity is advised. For example, a tractor that is at a maximum vertical load of 50,000 lbs. in a moderate duty application should be using a fifth wheel with a vertical load capacity of 55,000 lbs. or greater. This additional capacity should give better service life over a longer period of time.
3. All logging applications are considered severe duty. Do not select fifth wheels in the standard or moderate levels when a logging application is designated.

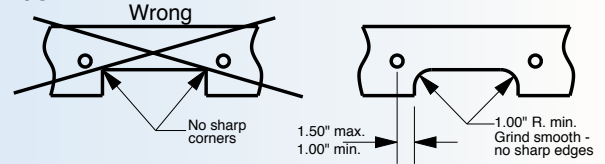
General mounting instructions

1. **Do not** modify and/or customize any fifth wheel or mounting assembly without prior approval from Fontaine. Modifying or welding to the product without approval will void product warranty. Only Fontaine authorized procedures are acceptable. Welding must be performed by an AWS certified welder.
2. The fifth wheel should be installed with the pivot point of the fifth wheel located on or ahead of the rear axle. The installation shall be in accordance with DOT regulations, state and local ordinances, SAE and TMC practices and standards, and tractor manufacturers' recommendations.
3. All fifth wheels shall be located so that the tractor and trailer will maintain clearance at all times. On sliding fifth wheels, it may be necessary to "block out" forward slide positions.
4. All mounting fasteners must be a minimum of:
5/8" (16.0mm) diameter - grade 8 bolts
5/8" (16.0mm) diameter - grade C lock nuts
5/8" (16.0mm) diameter - hardened flat washers
5. Outboard mounting angles shall be ASTM-A-36 or equal with a minimum thickness of 5/16" (7.9mm). If used in a Heavy Duty application mounting angles must be a minimum of 3/8" (9.5mm).
6. Inboard mounting angles must have a 4" (101.5mm) minimum vertical and horizontal leg and shall not be less than 36" (913.7mm) long. (Stationary angle mounts only)
7. Welding of inboard mounting angles must be performed per criteria shown below.
8. Outboard mounting angles must have a minimum horizontal leg of 3" (76.2mm) and vertical leg of 3-1/2" (88.8mm).
9. The full length, horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. **Warning: Failure to follow these specifications will void warranty and could affect product performance.**
See Figure A.

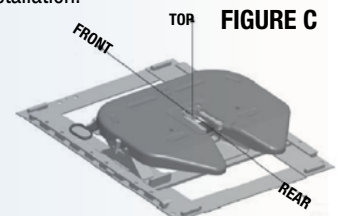


10. All mounting holes shall be drilled, not burned. All edges shall be ground smooth to prevent point loading. See Figure B.

FIGURE B

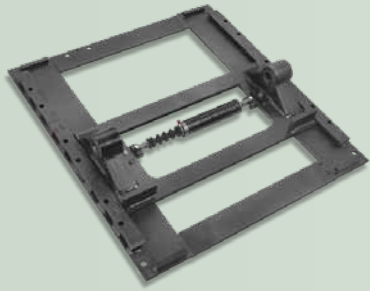


11. When required to clear obstructions, cutouts in the mounting angles shall be smooth and straight with a minimum radius of 1" (25.4mm). No sharp corners are permitted and all edges shall be ground smooth. A minimum of two bolts is recommended beyond a cutout.
12. Care must be taken to avoid interference or contact between the fifth wheel and any other component when rear of fifth wheel is depressed. In order to prevent this, it is recommended that a stop be used. The stop should be positioned so that contact is made with the fifth wheel mounting plate.
13. **Do not** restrict normal rock of fifth wheel. This could create a hazardous operating condition.
14. All fifth wheels subjected to weather abuse must be thoroughly cleaned, inspected, and lubricated prior to installation.
15. Fifth Wheels should be mounted in the proper orientation relative to the tractor (See Figure C. Do not mount the fifth wheel upside down or backward.
16. The trailer that is attached to the fifth wheel should impose a consistent vertical load. Repeated negative loading (trying to pull the fifth wheel off of the brackets with the kingpin) is not allowed. A minimum vertical static load applied to the fifth wheel through the trailer is 10% of the gross trailer weight.
17. **Do not** center load the fifth wheel. The vertical load should be distributed over the entire surface of the fifth wheel.
18. Fixed angle mounts (inboard angles) shall be flush with the top of the truck frame. (No gap between the truck frame and the angle). See Figure A on page 5.
19. **Do not** attempt to "block" any fifth wheel not designed specifically for this purpose.



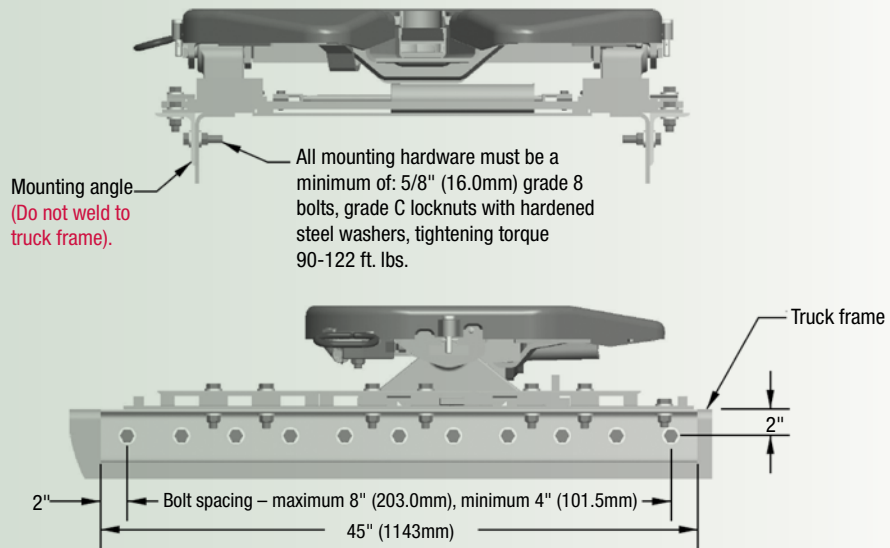
Refer to the application/restriction level guide (page 2) when selecting a fifth wheel for an appropriate application.

LWO light-weight outboard slide



LWO light-weight outboard

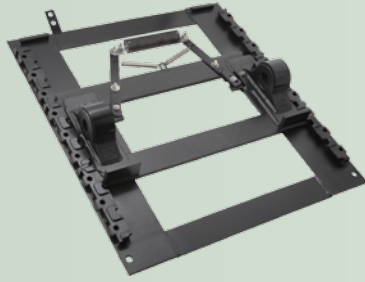
Adjustment of 24" mounting slide shown. Assemblies with greater adjustment require longer angle and additional mounting bolts. See suggested price list for angle sizes and lengths available. The full length of the horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. See installation instructions of your fifth wheel pages 2-5.



Available with this fifth wheel top plate

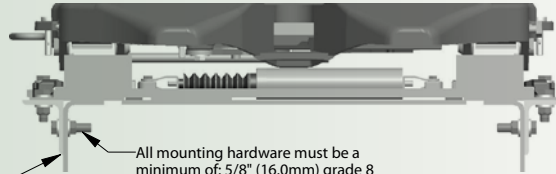


LWB light-weight slide



LWB light weight slide

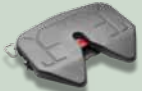
Adjustment of 24" shown. Greater adjustment requires longer angle and additional mounting bolts. See suggested price list for angle sizes and lengths available. The full length of the horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. See installation instructions of your fifth wheel pages 2-5.



Mounting angle
(Do not weld to truck frame).

All mounting hardware must be a minimum of: 5/8" (16.0mm) grade 8 bolts, grade C locknuts with hardened washers, tightening torque 90-122 ft-lbs.

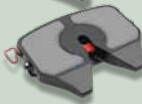
Available with these fifth wheel top plates



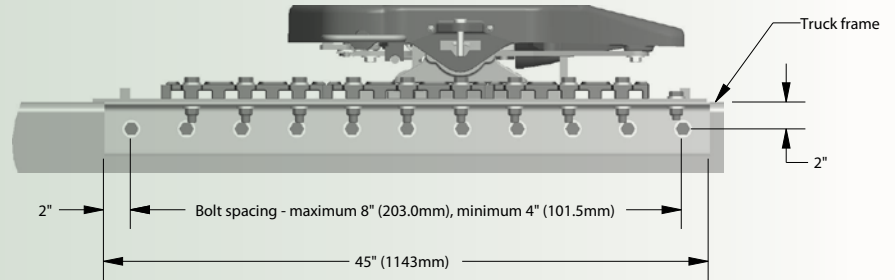
6000



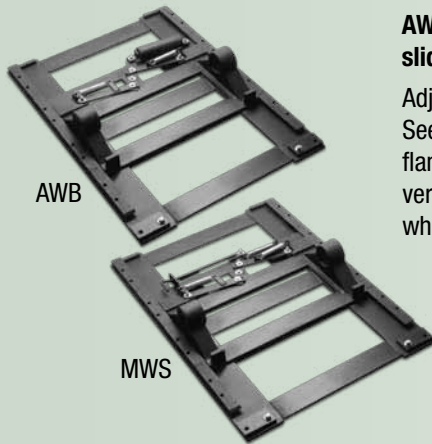
7000



7000CC

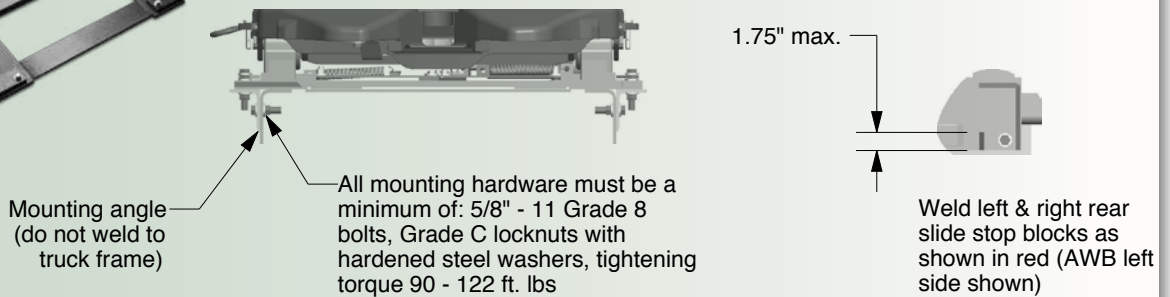


AWB air wedge slide and MWS manual wedge slide

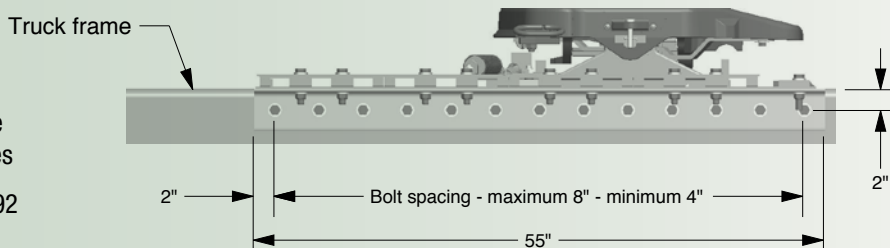


AWB air wedge slide fifth wheel & MWS manual wedge slide- AWB shown

Adjustment of 24" shown. Greater adjustment requires longer angle and additional mounting bolts. See suggested price list for angle sizes and lengths available. The full length of the horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. See installation instructions of your fifth wheel pages 2-5.



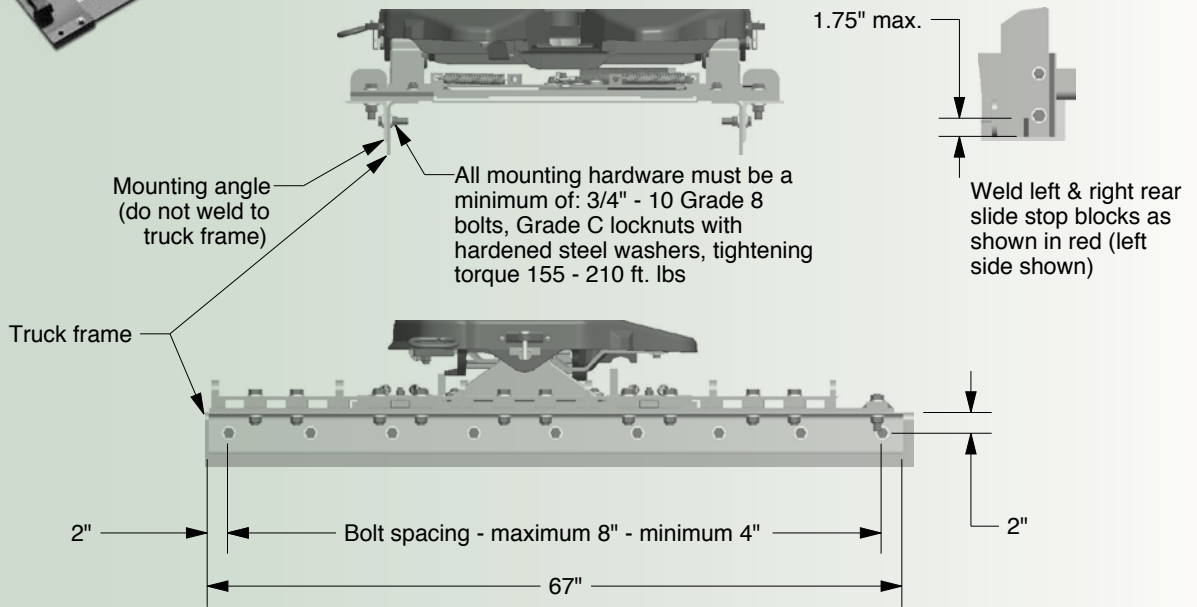
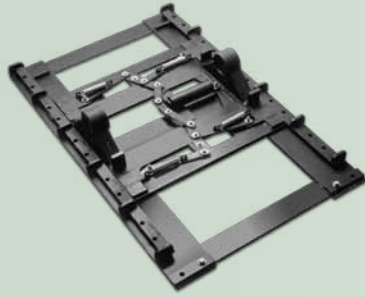
Available with these fifth wheel top plates



XAWX air slide bracket

XAWX air slide bracket

Adjustment of 24" shown. Greater adjustment requires longer angle and additional mounting bolts. See suggested price list for angle sizes and lengths available. The full length of the horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. See installation instructions of your fifth wheel pages 2-5.



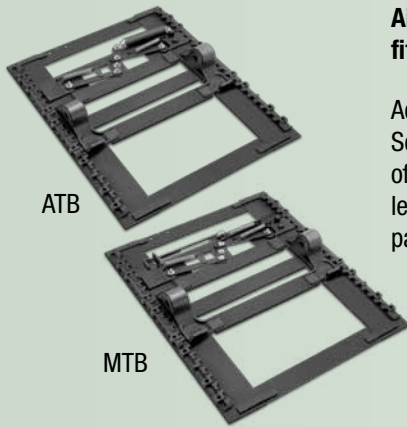
Available with these fifth wheel top plates



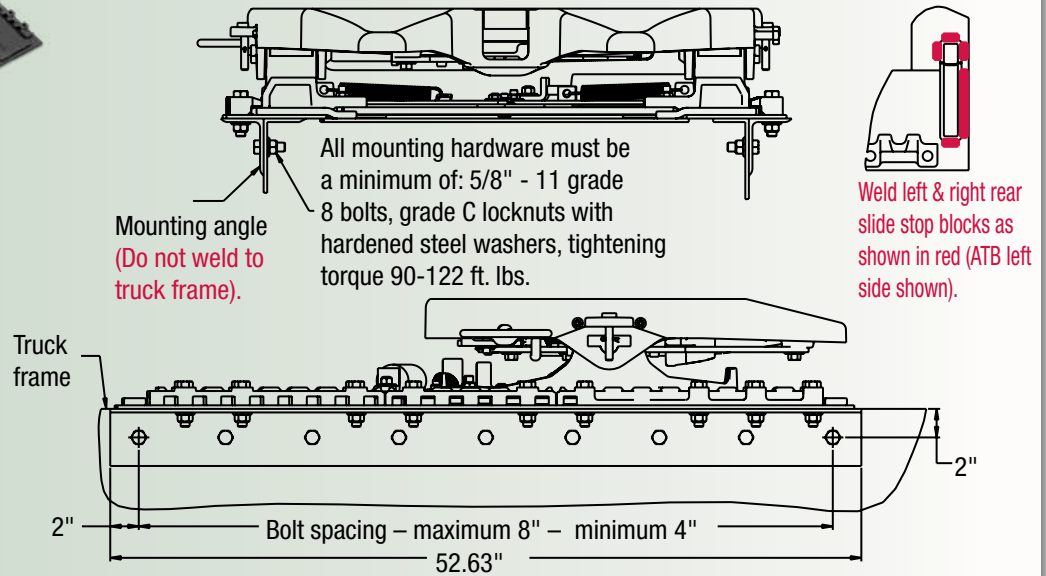
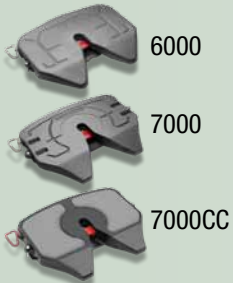
ATB air wedge slide and MTB manual wedge slide

Air wedge slide bracket fifth wheel (ATB) & manual wedge slide bracket fifth wheel (MTB) (ATB shown below)

Adjustment of 24" shown. Greater adjustment requires longer angle and additional mounting bolts. See suggested price list for angle sizes and lengths available. The full length of the horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. See installation instructions of your fifth wheel pages 2-5.



Available with these fifth wheel top plates

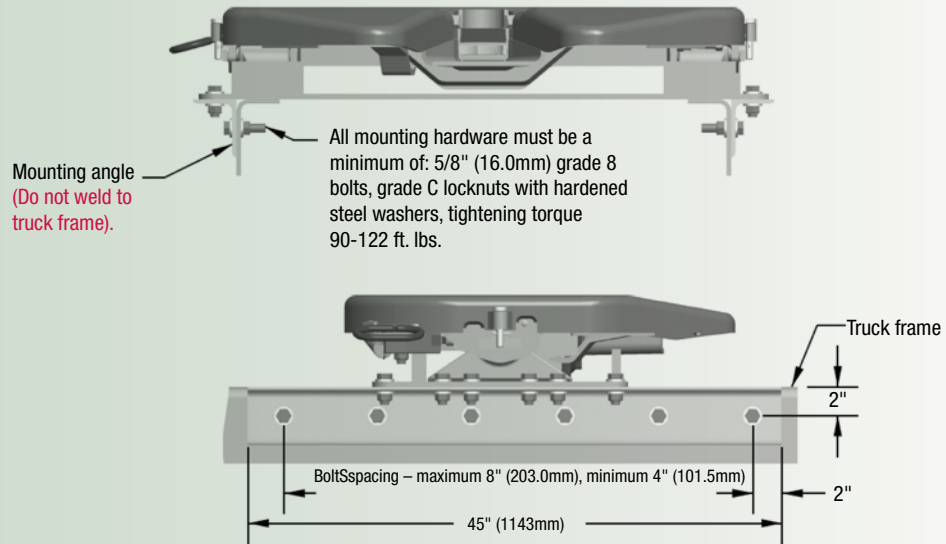


APB adjustable plate bracket



APB adjustable plate bracket

Mounting of 18" adjustable mounting bracket shown. See suggested price list for angle sizes and lengths available. The full length of the horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. See installation instructions of your fifth wheel pages 2-5.

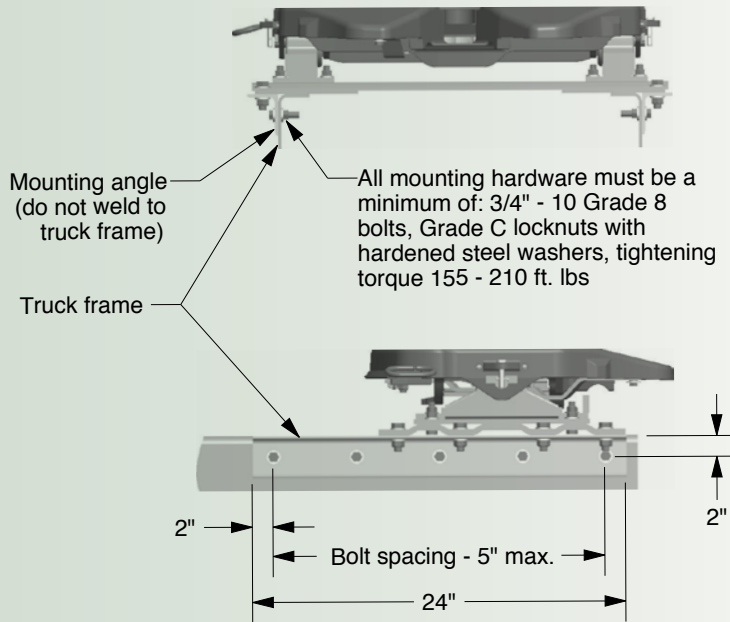
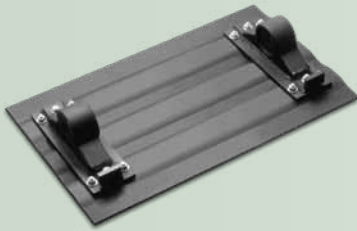


Available with this fifth wheel top plate

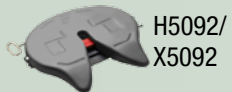


PS4 and PS5 plate mount stationary bracket

The full length of the horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. See installation instructions of your fifth wheel pages 2-5.

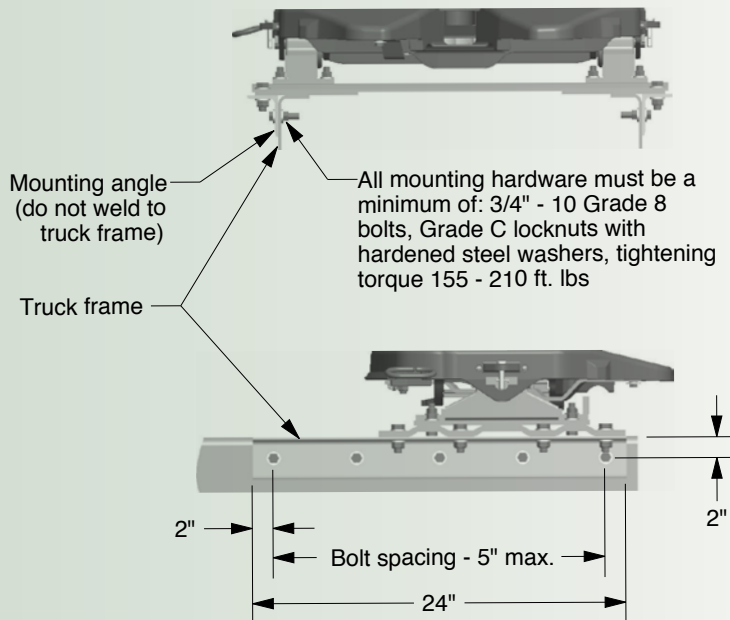
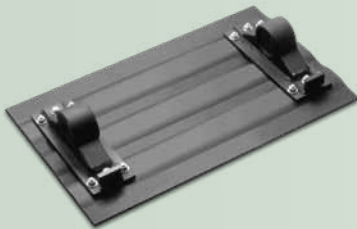


Available with these fifth wheel top plates



PSA plate mount stationary bracket

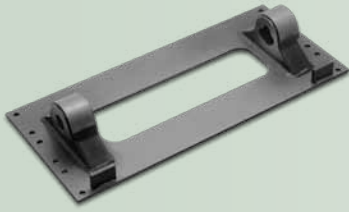
The full length of the horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. See installation instructions of your fifth wheel pages 2-5.



Available with these fifth wheel top plates



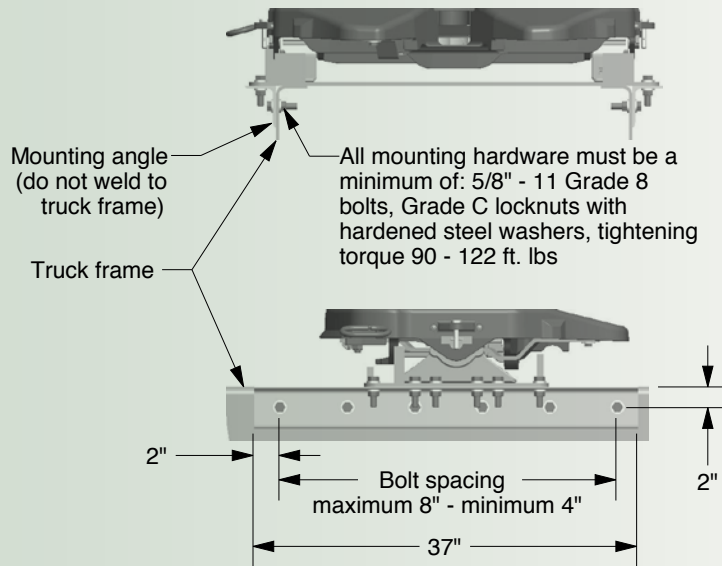
PMA plate mount adjustable



PMA plate mount adjustable

Adjustment of 18" shown. Greater adjustment requires longer angles and additional mounting bolts. See suggested price list for angle sizes and lengths available. The full length of the horizontal flange of the outboard mounting angles must be at the same elevation as the truck frame. The vertical leg of the angle must fit flush with the truck frame. See installation instructions of your fifth wheel pages 2-5.

Available with these fifth wheel top plates



FMA stationary bracket mount

FMA stationary bracket mount

The full length of the horizontal flange of the outboard mounting angles must be at the **same elevation** as the truck frame. The vertical leg of the angle must fit **flush** with the truck frame. The full length of the vertical and horizontal legs of the inboard angles must be **flush** with the inside of the truck frame. See installation instructions of your fifth wheel pages 2-5.

Available with these fifth wheel top plates



6000



7000



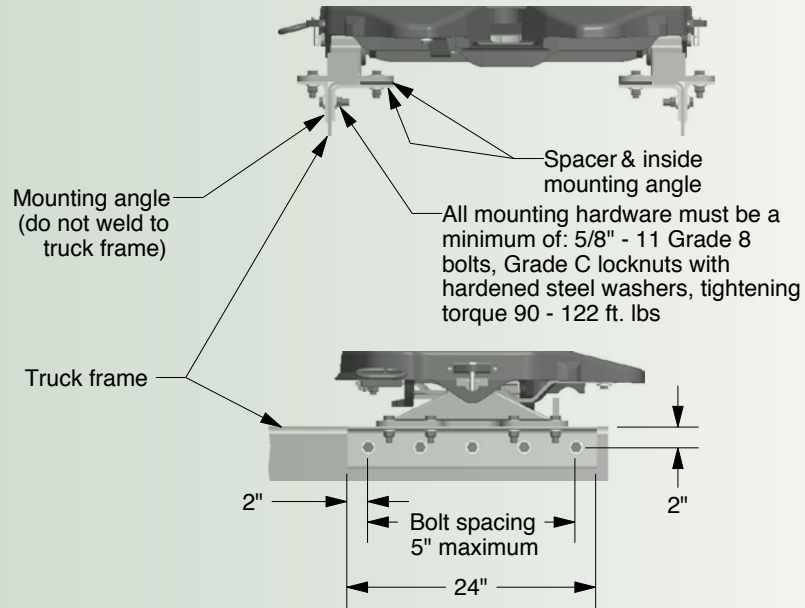
7000CC



H5092/



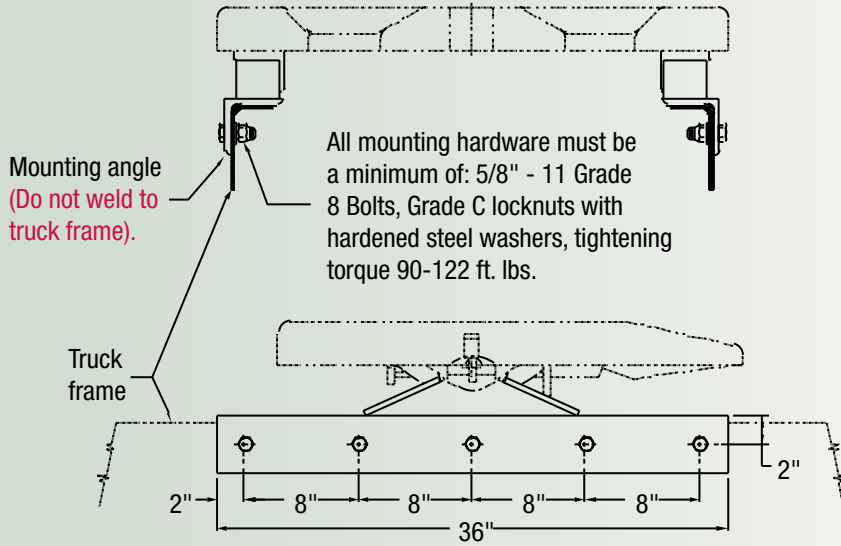
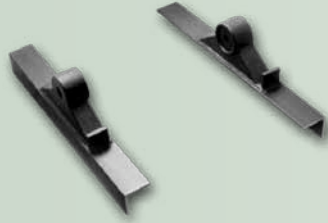
Ultra HD



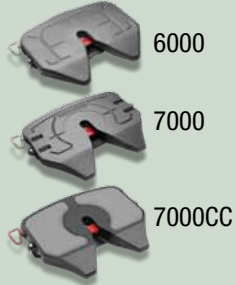
A36 angle mount

A36 angle mount

The full length of the horizontal and vertical legs of the angles must fit **flush** with the truck frame. See installation instructions of your fifth wheel pages 2-5.



Available with these fifth wheel top plates



Custom Duty (CD) fifth wheels



Custom Duty

General mounting instructions

1. **Do not** modify and/or customize any fifth wheel or mounting assembly. Modifying or welding to the product will void product warranty. Only Fontaine authorized procedures are acceptable. Welding must be performed by an AWS certified welder.
2. Installation shall be in accordance with DOT regulations, state and local ordinances, SAE and TMC practices and standards, and tractor manufacturers' recommendations.
3. All fifth wheels shall be located so that the tractor and trailer will maintain clearance at all times. On sliding fifth wheels, it may be necessary to "block out" forward locations.
4. All mounting fasteners must be a minimum of:
 - 5/8" diameter - grade 8 bolts
 - 5/8" diameter - grade C lock nuts
 - 5/8" diameter - hardened flat washers
5. All mounting holes shall be drilled, not burned. All edges shall be ground smooth to prevent point loading.
6. When required to clear obstructions (such as spring hangers) cutouts shall be smooth and straight with a minimum radius of 1". No sharp corners are permitted and all edges shall be ground smooth. A minimum of two bolts is recommended beyond a cutout.
7. Do not restrict normal rock of fifth wheel. This could create a hazardous operating condition.
8. All fifth wheels subjected to weather abuse must be thoroughly cleaned, inspected, and lubricated prior to installation.
9. Fifth wheels with sliding or fixed mounts should be mounted in the proper orientation relative to the tractor. See FIGURE I. **Do not** mount the fifth wheel upside down or backwards.
10. The trailer that is attached to the fifth wheel should impose a consistent vertical load. Repeated negative loading (trying to pull the fifth wheel off of the brackets with the king pin) is not allowed. A **minimum** vertical static load applied to the fifth wheel through the trailer is 10% of the gross trailer weight. See the load rating for the specific fifth wheel for maximum vertical load values.
11. **Do not** center load the fifth wheel. The vertical load should be distributed over the entire surface of the fifth wheel.

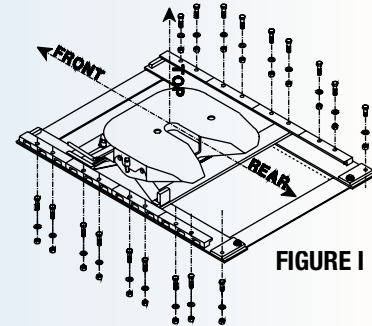


FIGURE I



Fontaine Fifth Wheel • 7574 Commerce Circle • Trussville, AL 35173
800-874-9780 • Fax: 205-655-9982

www.fifthwheel.com