



Janus™ Front Mount Exterior (FME) Transponder Mounting Instructions

The FME transponder is recommended for when the interior transponder cannot be used.

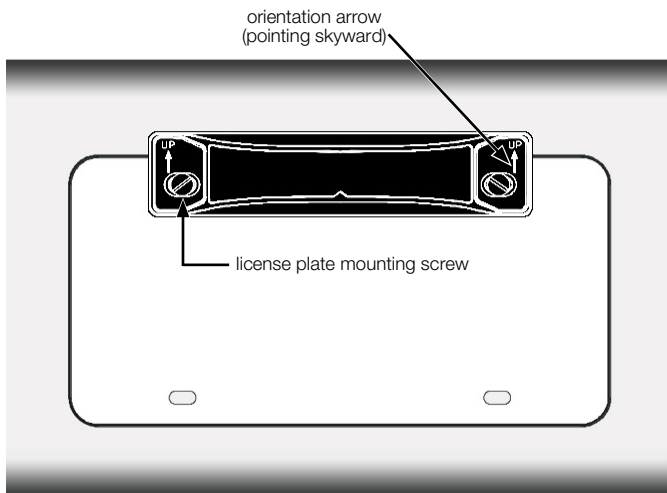
Requirements

- For reliable operation of the transponder, the vehicle must be equipped with only one correctly mounted TDM transponder while passing through a toll facility. Other TDM transponders present in or on the vehicle must be switched off or enclosed in an RF shield.
- FME transponders must be mounted in the location for which they were programmed. FME transponders programmed for License Plate must be mounted on the front of the vehicle. FME transponders programmed for Rooftop must be mounted on the roof.
- The mounting location must provide direct line-of-sight communication between the transponder and the toll facility's overhead antenna.
- FME transponders cannot be used where local regulations prohibit externally mounting transponders on the roof of the vehicle, the front license plate, front bumper, or other external surfaces
- The presence of certain classes of front impact-absorbing materials used in the construction of the vehicle may affect the operation of the FME transponder. The mounting location must be free of such materials.
- Apply Dual Lock™ Reclosable Fasteners in accordance with 3M™ document [70-0709-4029-4](#).

Passenger Vehicle Front Mounting

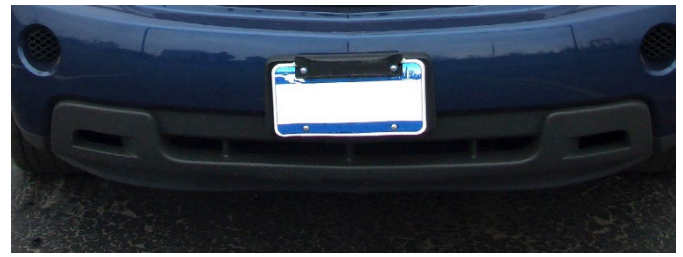
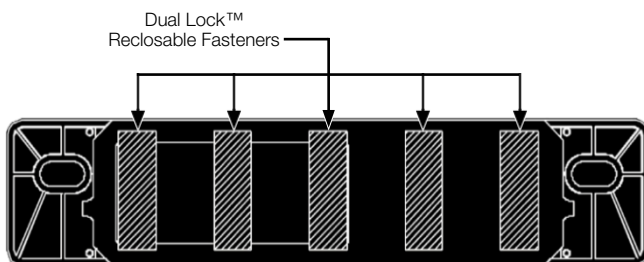
Preferred Mounting Location - the front license plate using the existing license plate mounting screws.

1. Remove the two upper license plate mounting screws securing the license plate to the front of the vehicle.
2. Using the license plate mounting screws removed in step 1, secure the transponder, with arrows pointing skyward, and the license plate to the front of the vehicle.

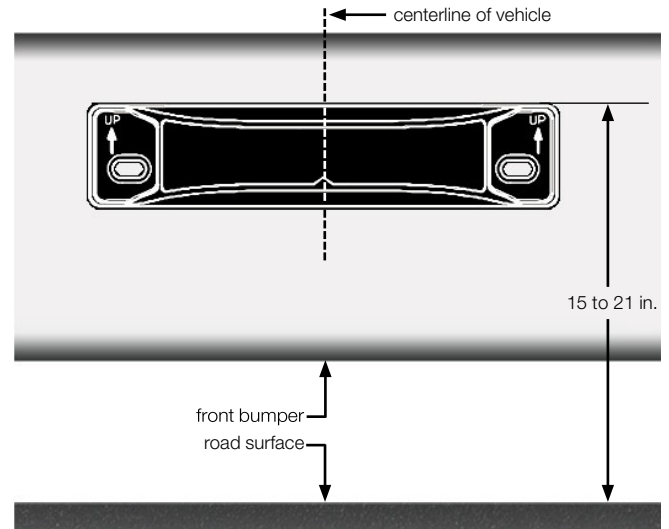


Optional Mounting Location - the front bumper using 3M™ Dual Lock™ fasteners.

1. Apply one side of five 3M™ Dual Lock Fasteners to the FME in accordance with the 3M™ document [70-0709-4029-4](#).
 - a. Using rubbing alcohol, clean the rear surface of the transponder to ensure the bonding surface is free of dirt and any surface contaminants.
 - b. Allow the rear surface of the transponder to dry completely.
 - c. Cut the Dual Lock fastener into five 1 in. lengths.
 - d. Remove the protective backing from one side of the five Dual Lock fasteners and apply the fasteners equally spaced on the rear of the transponder.



2. Select the transponder mounting location on the front bumper at the center of the vehicle (as measured from the right and left sides of the vehicle), 15 to 21 in. from the top of the transponder to the road surface.



3. Using rubbing alcohol, clean the mounting location on the bumper. Allow the mounting location to dry completely.
4. Remove the remaining protective backing from the five Dual Lock fasteners and press the transponder onto the mounting location on the bumper, ensuring the orientation arrows are pointing skyward. Maintain pressure for 15 seconds to ensure a good bond.
5. Remove the transponder by lifting any corner with sufficient force to separate the Dual Lock strips. Do not reuse the Dual Lock strips after removing them from the bumper. Obtain new strips as required.

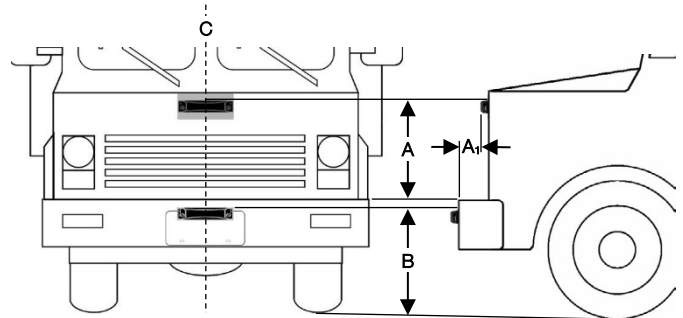
Trucks & Buses

Front Mounting

FME transponders programmed for front mounting only.

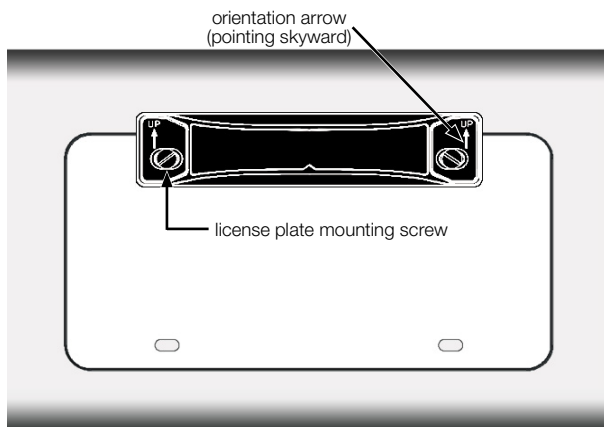
Select a mounting location either on the front license plate using the license plate mounting screws or on the front of the vehicle using the mounting plate. Consider the following criteria:

- a minimum of 24 in. clearance if bumper or large object extends 7+ in. (A₁).
- a minimum of 15 in. from the top of the transponder to the roadway for front bumper mounting.
- the transponder must be mounted within 4 in. of the vehicle center.



If mounting the transponder on the front license plate:

- Remove the two upper license plate mounting screws securing the license plate to the front of the vehicle.
- Using the license plate mounting screws removed in step 1, secure the transponder, with orientation arrows pointing skyward, and the license plate to the front of the vehicle.

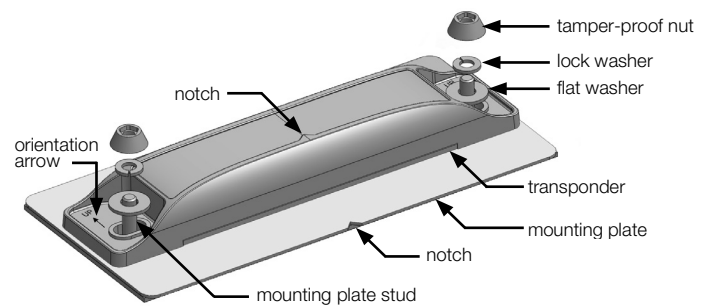


If mounting the transponder horizontally on the front of the vehicle:

- The back of the mounting plate is covered with 3M™ VHB™ acrylic foam tape. Prepare the mounting location in accordance with 3M™ document [70-0704-8701-5](#).

NOTE: Ensure the mounting plate is installed on the vehicle so that when the transponder is installed on the mounting plate, the orientation arrows on the transponder point skywards.

- Remove the protective backing from the adhesive on the back of the mounting plate and firmly press the mounting plate against the mounting surface with either a roller or platen pressure, maintaining pressure for 15 seconds to ensure a good bond.
- Using the supplied tamper-proof nuts, lock washers, and flat washers, secure the transponder to the mounting plate with the notches on the transponder and mounting plate aligned and with the orientation arrows on the transponder pointing in the direction of forward travel.



FME Transponder with Mounting Plate

Trucks & Buses

Roof Mounting

FME transponders programmed for roof top mounting only.

Select a mounting location within 4 in. of the centerline (as measured from the right and left sides of the vehicle). Consider the following criteria:

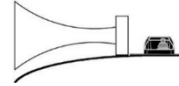
- Do not mount within 2 ft. of any radio transmitter.



- Do not mount on a slope (+/- 5 deg.)



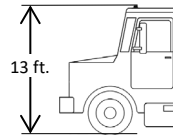
- Do not mount behind horns, lights, or other metal objects.



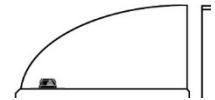
- Do not mount within 6 in. of any metal object (trailer, decals, horn, lights, or metallic paint-cover surfaces).



- Do not mount more than 13 ft. above roadway.



- A non-metal air dam may cover the transponder provided that no metallic paint or metal foil decals cover the dam.

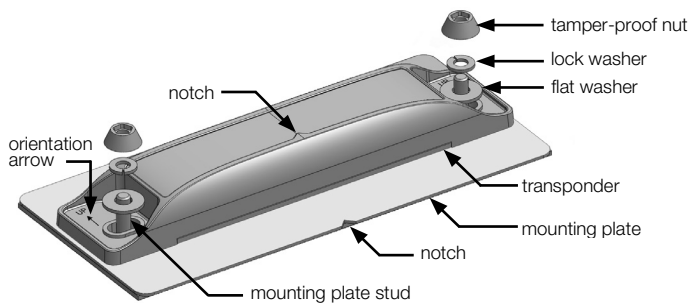


If securing the transponder WITH the mounting plate:

- The back of the mounting plate is covered with 3M™ VHB™ acrylic foam tape. Prepare the mounting location in accordance with 3M™ document [70-0704-8701-5](#).

NOTE: Ensure the mounting plate is installed on the vehicle so that when the transponder is installed on the mounting plate, the orientation arrows on the transponder point in the direction of forward travel.

- Remove the protective backing from the adhesive on the back of the mounting plate and firmly press the mounting plate against the mounting surface with either a roller or platen pressure, maintaining pressure for 15 seconds to ensure a good bond.
- Using the supplied tamper-proof nuts, lock washers, and flat washers, secure the transponder to the mounting plate with the notches on the transponder and mounting plate aligned and with the orientation arrows on the transponder pointing in the direction of forward travel.

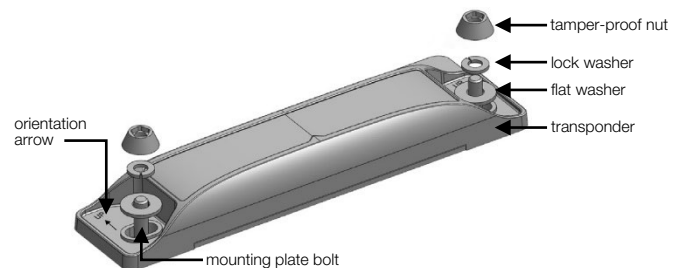


FME Transponder with Mounting Plate

If securing the transponder WITHOUT the mounting plate:

NOTE: The transponder mounting holes must be used when securing the transponder to the roof of the vehicle using this method.

- Place the transponder in the selected mounting location. Using the transponder mounting holes as a guide, mark the locations on the roof through which the mounting bolts will pass. Remove the transponder.
- Drill a mounting bolt hole at both locations marked in step 1.
- Using two, 1/4-in.-diameter stainless steel mounting bolts of sufficient length, two stainless steel tamper-proof nuts, two stainless steel lock washers, and two stainless steel flat washers, secure the transponder to the roof of the vehicle with the orientation arrows on the transponder pointing in the direction of forward travel.
- Apply sealant to the mounting bolts and mounting location as necessary.



FME Transponder without Mounting Plate

FCC License Notice - This device complies with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.