

## Supplementary Installation Instructions for RW-1019 on 2005 F4/550s (4x4 & 4x2) (revised 0706)

The 2005 F4/550 has changed in important ways regarding DMF railgear installation:

- The Front Suspension has changed from a leaf spring to a coil spring system
- The 19.5x6.00 rims and hubs have changed from a 8H 225mm Bolt Circle to a 10H 225mm Bolt Circle.

As a result of these changes the installation on RW-1019 railgear has been modified. The rears of the Long Arms now attach to brackets that mount on the leading link suspension arms or Radius Arms as Ford refers to them. The front of the Long Arms are supported by a bracket that bolts to the under side of the front of the frame.

The hydraulic power unit can now be placed in the body or under the cab. Allowing the bumper to be kept in the stock location improves parking maneuverability and safety. With the front bumper in the stock location, the manual pin-offs are not easily reached so cable pin-offs are recommended. The bumper can be extended to allow the pump to mount behind it if desired, which allows the use of manual pin-offs.

The following recommendations for chassis selection remain:

- Avoid rear fuel tanks. They require longer rail-wheelbases which will limit on rail performance in curves and can complicate body mounting.
- Be aware of increased wheelhouse clearance requirements for alternate tires (see wheel/tire changes)

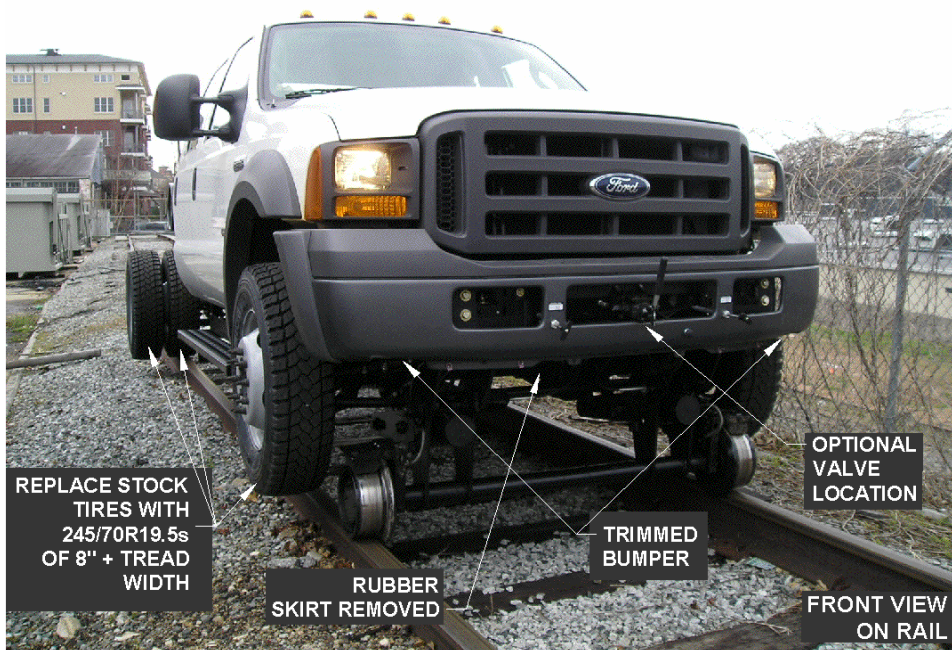


Figure 1: RW-1019 for '05 F4/550 Front View

# Front Railgear Assembly

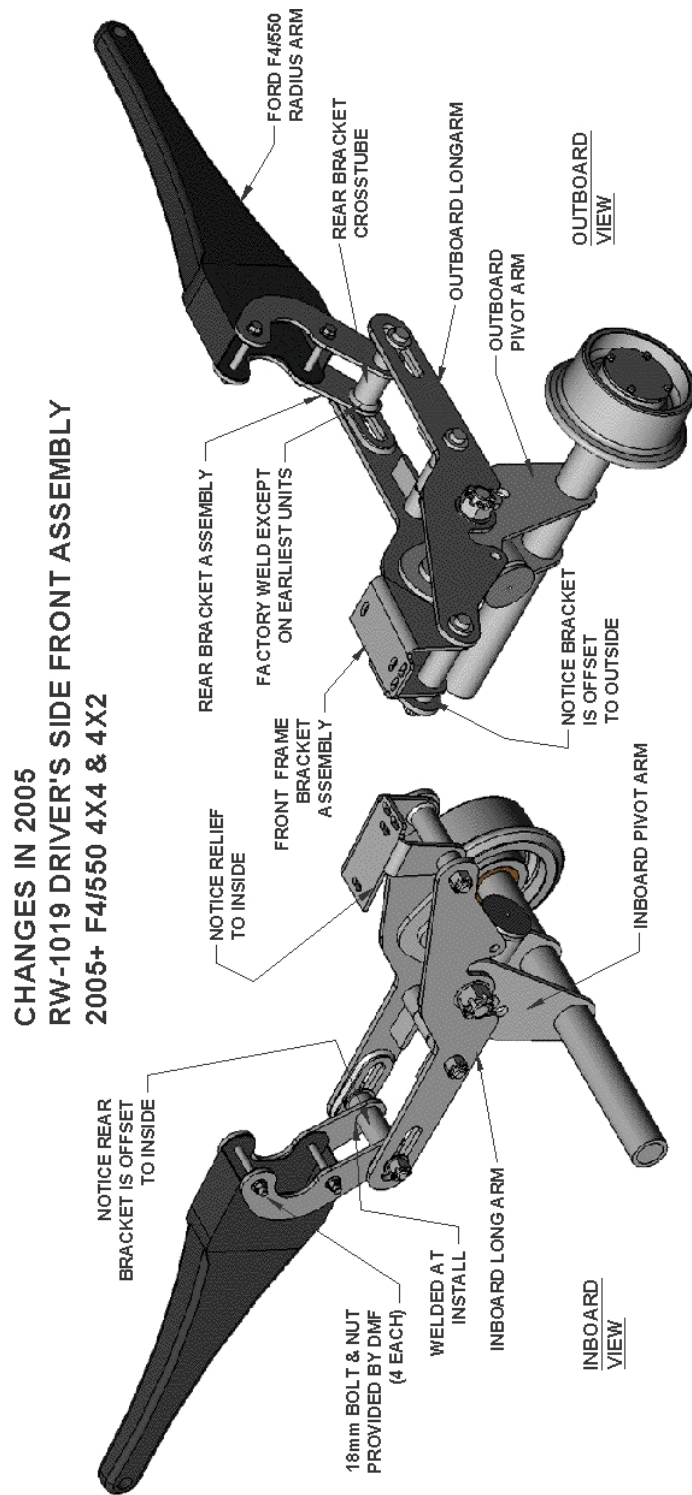


Figure 2: RW-1019 for '05 F4/550 Assembly Details

## Front Railgear Installation

### Bumper Removal

Remove Bumper and set aside.

### Install Front Frame Brackets

Install Frame Brackets with (8) ½"-13UNCx2 bolts, (16) ½" flat washers and (8) ½" hex nuts (see fig 3). Leave fasteners loose enough to allow alignment.

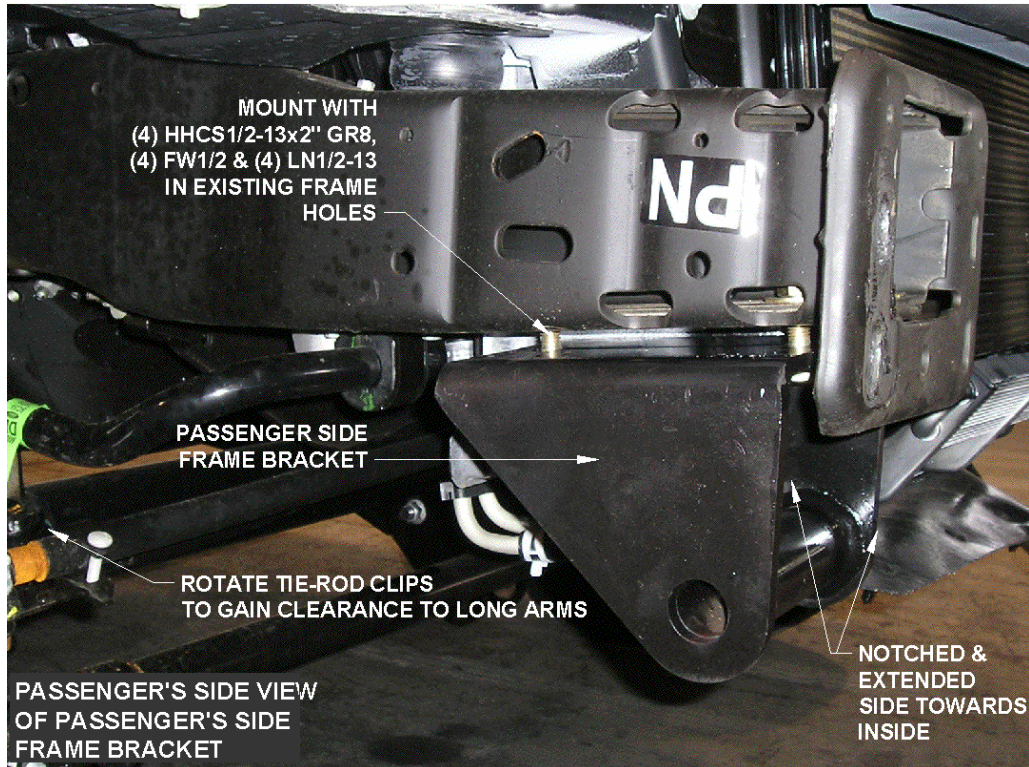


Figure 3: Front Frame Bracket Details

### Install Axle Brackets

- Raise Vehicle with floor jack
- Support axle with (2) jack stands
- Remove front wheels & tires

Repeat for each side:

- Disconnect lower shock mount
- Remove (2 each side) Leading (Radius) Arm mounting bolts & nuts with the arm supported with jack stands or other means.

Note: The upper passenger side nut is tack welded to arm. Grind to remove.

- Install axle bracket with provided bolts & nuts
- Re-attach lower shock mount
- Reinstall wheels & tires
- Lower truck

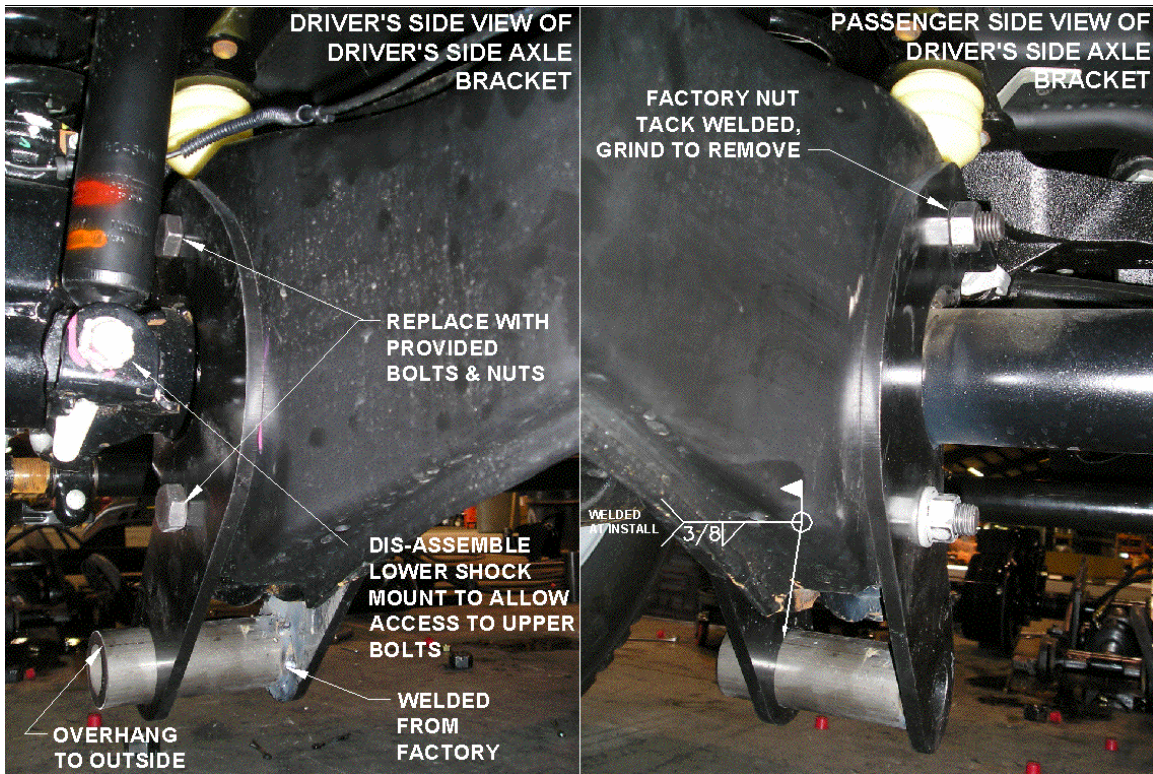
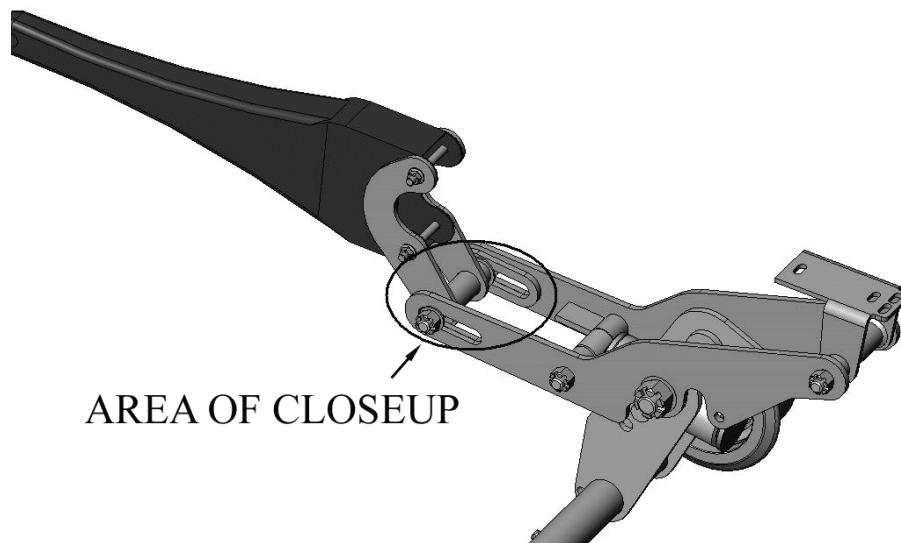
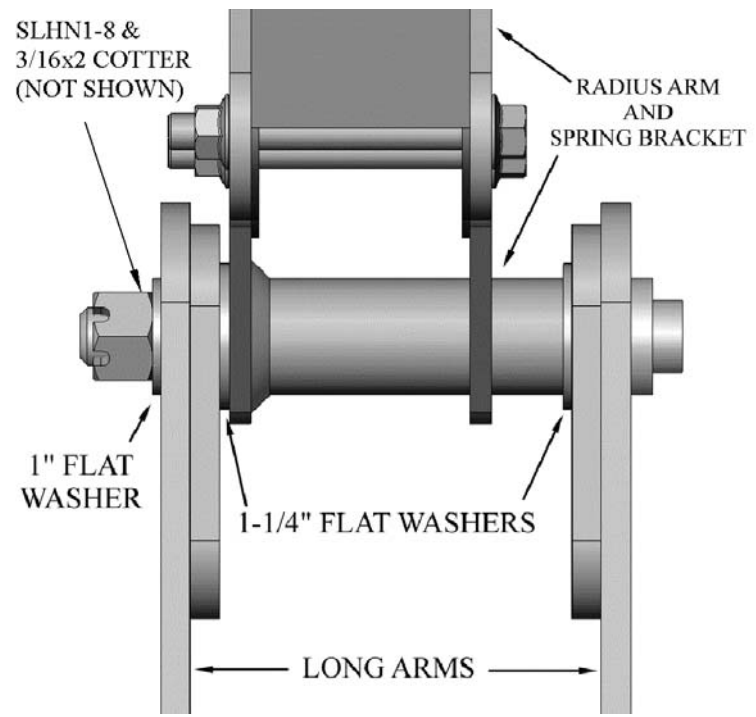


Figure 4: Rear Bracket Details

The picture below shows the driver's side of a front set of RW-1019 railgear for a 2005 model year Ford F-450/550. For each side of the truck there are 3 washers for the rear pin. There is a 1-1/4" washer between each long arm and the spring bracket bolted to the radius arm. Additionally there should be a 1" washer between the inner long arm and the castellated nut.



Please see the close-up diagram below for proper washer location.



## Install Railgear

- Slide railgear under truck.
- Attach front of Long Arms to Front Frame Brackets with Front Pins
- Attach rear of Long Arms to Axle Bracket with Rear Pins

## Align Railgear

Alignment is performed as indicated in the Parts Service & Installation manuals with the following additions:

- The location of the front frame brackets should be squared with the vehicle by measuring the cross and diagonal measurements of the inside long arms. The front brackets should be tapped into square and tightened.
- Continue with alignment as in shown in manual.

## Grease Railgear

- In addition to the lubrication requirements shown in the manual, the slots at the rear of the long arms should be greased.

## Modify Bumper

- Remove Lower Plastic Skirt
- Remove Bumper Corner Brackets
- Trim Bumper to clear railwheel in stowed position (see fig 1)

## **Re-Install Bumper**

Reinstall in factory location or on extensions depending on customer preference and selected pump location.

## **Rear Railgear**

The rear railgear installation is unchanged. Refer to the installation manual.

## **Hydraulics**

Hydraulic Pumps can be mounted in the body, behind the bumper with bumper extensions, under the cab or other locations.

- All electrical connections should be protected from corrosion.
- Front Valves can be located as shown in fig 1 or as required.
- Rear Valve can be mounted as required.

## **Wheel/Tire Changes**

Due to the limited availability of alternate 10H 19.5 rims the rail performance of the RW-1019 on F4/550s is much greater with 245/70R19.5 tires. This is a non-standard tire for 19.5x6.00" rims but can be mounted on the stock rims. We recommend the Michelin XDE M/S due to its particularly wide tread of 8.13". Other 245/70R19.5 tires may be used but the tread width should be 8" or greater. For reference, the inside of tread/inside of tread dimension for vehicles equipped with Michelin 245/70R19.5 XDE tires is 55.0". DMF will provide a sticker noting the tire change so that this requirement will be remembered at tire change time. Please place this sticker on the overhead visor in plain sight.

The rear tire change may influence rear body mounting requiring extra wheel house clearance. The inside clearance of the modified is a maximum of 52.5". Some bodies may require trimming to allow for sufficient clearance.

These instructions are intended to enhance and clarify the differences between this application and previous RW-1019 installations. Any information not covered here is covered in the Parts & Service Manual and or Installation Manual. This information will be incorporated into the next revision of the RW-1019 manual. Please check our website periodically for updates. Please contact DMF if you have any questions at:

Diversified Metal Fabricators  
665 Pylant St. NE  
Atlanta, GA 30306  
404-875-1512  
404-975-4835 fax  
[www.dmfatlanta.com](http://www.dmfatlanta.com)