NOTE: we recommend reading instructions before beginning the installation.

Heavy Duty Receiver Hitch Installation Instructions

Model HDRH24400

Call or Email us for Installation Support
hitches@turnoverball.com www.turnoverball.com

Vehicle Make and Years
1997-2003 Ford 1/2 Ton trucks with factory bumper

### Parts List

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
<th>Quantity</th>
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<tr>
<td>1</td>
<td>Hitch Center Section</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Driver Side Plate</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Passenger Side Plate</td>
<td>1</td>
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<tr>
<td>4</td>
<td>Trailer Plug Bracket</td>
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<tr>
<td>5</td>
<td>7%13 1 X 1/2% Hex Head Cap Screw</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>7%13 Hex Finish Nut</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>7%1 Split Lock Washer</td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>Spacers 7%8 X 1 X 1/2</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>Spacers 7%8 X 1/2 X 1/2</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>#14 X 3/4 Sheet Metal Screw</td>
<td>2</td>
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</table>

BEFORE INSTALLING

**WARNING**
Although this hitch contains a V-S rating of 12,000 lb. WC, the tow vehicle manufacturers recommended towing capacities should under no circumstances be exceeded.

**WARNING**
B&W Receiver Hitches are designed to fit vehicles as produced by the factory. Any equipment or accessories added to the vehicle may affect the fit of the hitch. B&W will not warranty the hitch if any alterations are made during the installation process. Occasionally there are rare vehicle options that may prohibit the hitch from installing properly. Please contact the manufacturer for support if this is the case.

**WARNING**
Always use safety chains while towing. Crossing the safety chains under the tongue of trailer may prevent some damage to the trailer if detachment occurs.

**WARNING**
Periodically inspect hitch, making sure that all fasteners are tightly secured.
BEFORE INSTALLING

This receiver hitch may require slight modification to the frame or other structure of the vehicle such as drilling or relocating equipment so that the hitch may be installed in the proper location. It is very important to make sure that you have the correct hitch for your application before any modifications to the vehicle are made.

Any brackets or accessories not critical to the structure of the vehicle that are mounted to the bottom of the frame at the rear may need to be removed. See the steps on positioning and mounting the hitch for the hitch location to see if there will be any interference. Bumper reinforcement brackets can be removed if the bumper will not be used for towing.

Remove spare tire before installation. This will provide easier access to the frame. Be sure that the vehicle frame where the hitch will mount is free from debris or other material that may interfere with the installation.

STEP 1: HITCH ASSEMBLY

Assemble the hitch as shown on the main diagram using the ½” x 1-½” long bolts, lock washers and nuts. Attach the side plates to the hitch center section with the “ears” of the side plates toward the inside as shown in the main diagram. Do not fully tighten the hardware at this time.

STEP 2: INSTALLING HARDWARE

Place the bolts and washers for the rearward slots in the side plate ears into the existing holes in the frame as shown allowing the threaded portion of the bolts to protrude downward from the frame. See main diagram.

STEP 3: POSITIONING/MOUNTING HITCH

Position the hitch, placing the ears of the side plates over the bolts installed in step 2. Secure these connections with flat washers, lock washers, and nuts as shown in the main diagram. The rivet protruding from the bottom of the frame should be in the hole in the side plate ear. Hand tighten the hardware only at this time. Next, install the hardware into the remaining slots of the side plate ears as shown. Make sure that the hitch is centered between the frame rails of the vehicle and that the receiver tube is parallel to the centerline of the truck.

STEP 4: TIGHTENING HARDWARE

Tighten the hardware on the connections between the frame and the side plates first. Torque the bolts to 80 foot pounds. Next make sure that the edges of the side plate mounting brackets on the center section match up with the bottom and rearward edges of the side plates and tighten these connections. Torque these bolts to 80 foot pounds as well. When replacing the spare tire, push the tire toward the cab as the cable lifts the tire into position so that it rests just in front of the hitch center assembly.

STEP 5: OPTIONAL BRACKET INSTALLATION

An optional trailer plug mounting bracket has been included with this hitch. If your vehicle does not have a place to mount the trailer wiring receptacle, this bracket will accept many different receptacles on the market. Mount the bracket using the two self-tapping sheet metal screws as shown in diagram 5.1. Be aware of ground clearance limitations that this wiring plug bracket or any other may add to the hitch.