



W20, W22 and W24 Workhorse Motor Home Chassis Rear Bar





Use these torque specs, **UNLESS** otherwise specified.

Tools Required

18MM Combo Wrench	1-1/8" Socket
1-1/8" Combo Wrench	3/4" Socket
3/4" Combo Wrench	15/16" Socket
1/2" Drive Ratchet	7/8" Socket
1/2" x 6" Extension	22MM Socket
1/2" Torque Wrench	18MM Socket
	16MM Socket



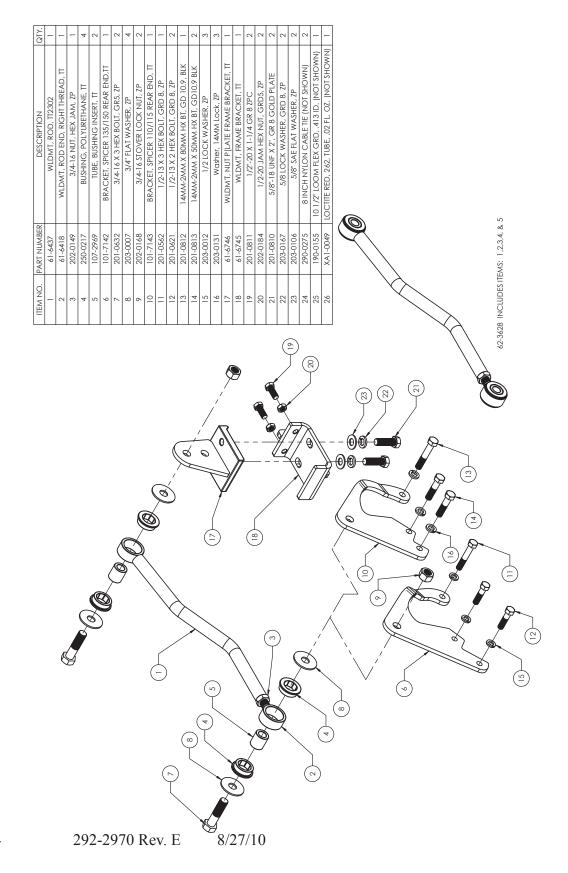
A qualified mechanic using normal automotive tools and following all safety measures known should perform installation of this product.

Torque Specs	
Bolt Description	Torque Spec.
1/2 x 4.5 U-bolt	75 ft/lbs
1/2 x 1 1/2 USS GR. 8	95 ft/lbs
1/2 x 2 USS GR. 8	95 ft/lbs
1/2 x 2 1/2 USS GR. 8	95 ft/lbs
1/2 x 3 USS GR. 8	95 ft/lbs
1/2-13 x 1 SQ. Set Screw	75 ft/lbs
1/2 x 1 1/4 SAE GR. 8	75 ft/lbs
5/8 x 2 SAE GR. 8	150 ft/lbs
5/8 x 2 3/4 SAE GR. 8	150 ft/lbs
3/4 x 3 SAE GR. 5	150 ft/lbs
3/4 x 3 1/2 SAE GR. 5	150 ft/lbs
3/4 X 5 SAE GR. 5	150 ft/lbs
12-1.75 x 55 MM HEX 10.9	65 ft/lbs
12-1.75 x 120 MM HEX 10.9	65 ft/lbs
12-1.75 MM HEX NUT 10.9	65 ft/lbs
14-2.0 x 40 MM HEX 10.9	125 ft/lbs
14-2.0 x 80 MM HEX 10.9	125 ft/lbs

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Installation Instructions:

1. Move the coach to a level, flat surface. By driving the coach back and forth 10 feet once or twice, ensure the vehicle's front wheels are straight ahead before starting installation. Set the brake and chock wheels.



IMPORTANT

There are two (2) Spicer Brackets (#1 and #2) in the kit. One fits the Spicer metric rear (110-115) and one fits the larger rear (135-150). Match the bracket to the bolt pattern and discard the one that does not fit.



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IMPORTANT

Some OEM bolts may be metric. Check the size closely before installation. Metric bolts are larger and provided.

2. Installation of the Spicer Bracket (#6 or #10), refer to Photo (#1). Hold the Spicer Bracket (#6 or #10) up to the spicer to locate the 3 OEM bolts. Remove the bolts and discard. Install the Spicer Bracket (#6 or #10) to the spicer with the supplied bolts (size 1/2" x 2") or metric and lock washer. Be sure to use Loctite on the bolts before installing. If flat washers are used on OEM bolts reuse the flat washers between the bracket and the spicer casting. Torque to spec. (See chart)



3. Install the Frame Bracket Assembly (#17 and #18) on the right-hand side (passenger side) frame rail of the coach. The Frame Bracket (#18) goes up on the bottom of the Frame Rail with the drilled and tapped holes towards the center of the coach. Place the Nut Plate (#17) on the top side of the bottom frame rail inside of the frame. (Note: Be sure that there are no wires, hoses or lines that come in contact with Nut Plate (#17) that would be crushed). Assemble Frame Bracket Assembly (#17 and #18) with supplied 5/8" bolts and washers (#21, #22 and #23). Now install the two 1/2" by 20 bolts with jam nuts (#19 and #20) into the Frame Bracket (#18) to where they contact the Nut Plate (#17). Leave this assembly loose enough so that you can slide it forward and backward on the



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frame at this time. These bolts will be tightened after the Rod Assembly (#1, 2, 3, 4, 5) is installed on the Axle Bracket (#6 or #10), then you can slide the Frame Bracket (#17 and #18) forward or backward to align it with the Rod Assembly, using the bottom hole of Nut Plate (#17). Now tightened the bolts

4. Installation of Rod Assembly (#1, 2, 3, 4, 5) – Install the Rod Assembly using the 3/4" bolts, flat washers and lock nuts (#7, 8, 9). Be sure that there is a flat washer on each side of the polyurethane bushings (#4). When adjusting the length of the Rod Assembly, it is necessary that the coach's full weight be

on the suspension. NOTE: Rod Assembly should be installed on the rear of the Axle Bracket (#6 or #10) and either the front or the rear of the Frame Bracket Assembly (#17 and #18) using the bottom hole in the Nut Plate (#17).

5. Be sure to check all fasteners for proper torque (See torque chart), including the jam nut, which must be 100-150 ft. lbs. on the Rod Assembly (#1, 2, 3, 4, 5). Inspect for any wires or hoses that may rub, if so use supplied split loom to cover the wires or hoses and the supplied snap ties to secure. This completes the installation.



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