

# ROCK HARD 4X4 JEEP WRANGLER JK 2/4-DOOR 2007-2017 SPORTS CAGE (MAIN SECTION) PART #: RH-1030/RH-1030-1L Installation Manual



### **PACKING LIST:**

- 1 OVERHEAD CAGE SECTION
- 1 DRIVER SIDE A PILLAR CAGE SECTION
- 1 PASSENGER SIDE A PILLAR CAGE SECTION
- 1 DASH BAR CAGE SECTION
- 1 OVERHEAD BAR CAGE SECTION
- 1 DRILL GUIDE PLATE
- 4 1 3/4" CLAMPS
- 2 1 ¾" CLAMPS (CHAMFERED WITH FLAT SIDES)
- 39 5/16" X 1" SOCKET HEAD BOLTS
- 2 3/8" X 2 ½" BUTTON HEAD BOLTS
- 2 3/8" STD FLAT WASHERS
- 6 3/8" X 1" BUTTON HEAD BOLTS
- 2 3/8" THIN NYLOCK NUTS
- 1 5/16" TAP
- 2 7 GAUGE DOOR POST SPACERS
- 2 11 GAUGE DOOR POST SPACERS

## **REQUIRED TOOLS:**

**TORX 20** PHILLIPS HEAD SCREW DRIVER 13MM SOCKET FLAT HEAD SCREW DRIVER OR CHISEL (IF APPLICABLE) SHARP BLADE DREMEL **BLUE PAINTERS TAPE** HAMMER SHARPIE **PUNCH** 1/4" DRILL BIT (LONG) 3/8" DRILL BIT (LONG) 7/32" ALLEN WD-40 FOR THREAD CLEANING 1/4" ALLEN **10MM SOCKET** 3/8" DRILL BIT

# Thank you for your purchase! Whether you bought this Rock Hard 4x4 product from one of our fantastic dealers or our factory direct team, we thank you for your business.

Rock Hard 4x4 is a family owned and operated business. We are headquartered in Saint Paul, Nebraska where we design, fabricate, and produce every single one of our products. Every single part we manufacture is 100% Made in the USA and exclusively in house by the Rock Hard 4x4 team.

We outsource zero processes.

**To you**, that means the product you are installing is the highest quality and longest lasting component on the market.

**To us**, that means you've selected a part we've spent years developing. Each Rock Hard 4x4 part has gone through more research and development and evolution than most people realize. While our parts may have the same striking look year after year, subtle revisions and refinements we implement maintain their status as the most durable and easy to install on the market.

We invite you to send us your feedback! Please email, call, write, or catch us on an off road trail near you to share your tales, share comments, and ask questions.

#### ROCK HARD 4X4 COLLAR BOLT TIPS:

- Always clean threads with supplied tap prior to ever inserting bolts. Do this during test fitting and after coating.
- Replacement tap size: 5/16-24.
- Always use WD-40 sprits onto each bolt before fastening.
- Always start with top and bottom middle bolts to bring collar together evenly. Once each bolt has started, you can then begin tightening outer 4 remaining bolts.
- Never force a bolt. If it begins to cross thread, back bolt out and clean threads with tap.
- Caps are not designed to tighten flush with collar. There will always be a small gap that is a product of manufacturing process.
- Take your time. Don't rush enjoy the process.

PLEASE NOTE: TEST FITTING IS REQUIRED PRIOR TO POWDER COATING / PAINTING. WHILE WE MAKE EVERY EFFORT TO ENSURE THE HIGHEST QUALITY PARTS ARRIVE FOR INSTALL, ROCK HARD 4X4 CANNOT BE HELD LIABLE FOR ANY COATING EXPENSES ON CAGE COMPONENTS.

- 1. If hard top, remove. If soft top, simply fold back you do not have to unbolt hardware from rear 45-degree factory cage section.
- 2. Remove driver and passenger front doors by unbolting security nuts in hinge pins (if equipped) and unplug electrical connection in foot wells (if equipped).
- 3. Remove sun visors and set aside. These will be reinstalled later when you are done with install. Torx T20.

4. Remove top corner molding on both sides of windshield as shown in photo below. These will be trimmed and reinstalled later. (Reinstalling is optional). A phillips screwdriver may be required to loosen body plugs. Remove 2 upper bolts using 13mm socket.



- 5. Unzip vehicle roll bar covers on both sides and remove foam that is over your front door seats along upper doorframe.
- 6. Remove plastic dash side panel covers. These simply pop out and are not reused.
- 7. Trim dash plastic on upper dash using box cutter or sharp knife. Trim down to defrost vent. On some models you may have to also notch aluminum dash support bracket.





- 8. Install driver side window side bar, lower tip in first, rotating inward slightly. You may have to give it a bump to help it get into position, at the same time you are twisting you can apply upward pressure to help keep plate off your dash pad. Some blue painters tape over the a/c vent helps prevent marring.
- 9. Start bolts in upper two holes by windshield visor mount firmly tighten bolts.







10. Use drill guide to mark where to drill holes. Top of drill guide should be lined up with top of nut plate that is welded to dash side plate. Center punch holes or mark with sharpie. Remove a-pillar upright (unbolt from top of windshield as well) and drill holes using long drill

bit to help clear door hinges. You'll want to drill as straight as possible to prevent misalignment. Drill a ¼" pilot hole first (optional) to confirm alignment. Final drill bit size will be 3/8".



- 11. Lay dash bar across dash and install clamp on driver's side. Start with middle screws to help center cap onto collar. Do not snug bolts at this time. Dash bar is different than overhead bar. The dash bar DOES NOT have chamfered sides on welded on collar. Be sure to use caps that are not chamfered on dash as well. Chamfered caps will be used on overhead bar. Use ¼" allen wrench.
- 12. Install passenger side upright using same steps
- 13. Loosely secure dash bar with clamp to passenger side bar. Dash bar should site approximately ½" above dash.
- 14. Adjust bar up or down slightly (paying care to not scratch powder coat or paint) prior to tightening bolts. Ensure bar is level with dash (not with ground as suspension may not be level.) Once satisfied, tighten hardware. The lower your dash bar the tighter the fit to the dash. Too low however and you may pinch your dash causing a bulge in the middle.

- 15. Install doors to test fit clearance. Do not slam doors shut as this time as you want to verify clearance.
- 16. Door post location from side to side is not consistent on all Wranglers. If your dash side plate is hitting door and not lining up with dash, the spacers included in our hardware kit can be used as needed on bottom bolts. These will shim the side plates enough to provide clearance so doors do not rub cage dash plates.
- 17. Remove doors once satisfied with clearance.
- 18. Cut hole in factory roll bar padding cover as shown in photo. Unzip cloth and remove foam on both sides.



- 19. Install top front bar with curve going towards rear of vehicle and upward away from seats. Ensure caps are facing up, not down towards ground. (Flats on top). Chamfer in collar and caps will cover factory weld where cage bar meets front windshield mount.
- 20. Place one side of bar forward through hole in cloth and install other side through hole in cloth with bar at a diagonal. This allows you to insert clamp on other side of factory cage bar.

21. Once bar is parallel with windshield, slide assembly with clamps as far forward as possible and loosely tighten hardware.



- 22. Remove sound bar using 10mm socket. You do not have to unplug electrical connection. You simply want to lower sound bar so you can drill through factory cage hoop.
- 23. Slide overhead center bars into place between sound bar sheet metal and over windshield cage bar. This forms the overhead "T section". Ensure center bars are centered in Jeep between seats, over center console.
- 24. Use clamps to secure center bars with upper windshield cage bar. Snug hardware.
- 25. Mark and drill holes (3/8" drill bit) on Rock Hard 4x4 overhead bars flat plate into sound bar sheet metal. Use two 3/8" x 2 ½" button head bolts, flat washers, and nylock nuts.
- 26. Tighten all Rock Hard 4x4 cage hardware at this time.
- 27. Reinstall foam (trimming where necessary) above doors and zip cloth back into place.
- 28. Sound bar may sit 3/8" to  $\frac{1}{2}$ " lower in the center.

29. If you wish to reuse upper a-pillar molding corners, trim per photos at this time. This is time consuming and may require numerous test fits.



SOFT TOP: Trim door molding to clear clamp on both sides.



HARD TOP: Some hard tops need to be trimmed as front overhead corner clamps rub fiberglass top. This causes an improper seal and creates wind noise. The thickness of the fiberglass varies up to 1/4" due to variations in fiberglass cooling times and manufacturing facilities. To trim fiberglass –

- 1. Mark top where clamp makes contact with clamp or bolt.
- 2. Grind fiberglass material.