

## Dual Battery Tray Installation Instructions 1997 - 2006 Wrangler

## **Contents:**

- (1) Lower Battery Tray
- (1) Upper Battery Tray
- (2) Threaded Rods
- (4) Hex Head Nuts Threaded Rod
- (1) Battery Hold Down Bracket (2) Counter Sunk Allen Head Bolts
- (2) Hex Head Bolts
- (1) Battery Relay Mounting Bracket
  - w / hardware



WARRNING: This kit requires batteries to be placed on their sides during installation and use. ONLY Orbital Gel batteries can be used with this kit. DO NOT USE standard wet cell batteries or damage to vehicle may result.

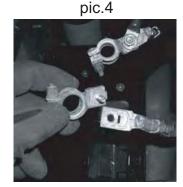
- Step 1: Disconnect Battery by removing the NEG (-) cable first and then the POS (+) connector. Remove battery from tray (pic.1). Loosen and remove the four bolts securing the factory battery tray and remove from vehicle. DO NOT discard bolts (pic.2).
- Step 2: Place Lower Battery Tray onto mounting bracket. Using the supplied counter sunk Allen head bolts secure the tray to the bracket (pic.3). Reuse the factory bolts for the other mounting holes located towards the fender wall.
- Step 3: If possible unbolt battery connectors and flip connector to the backside of the battery cables. This allows the cables to be connected to the lower battery (pic.4). *NOTE: Earlier model* vehicles may not have reversible connectors. longer cables may be required.
- Step 4: Install (main) battery onto lower tray and connect terminals back to battery starting with POS (+) cable first. Avoid contact with grounded metal.
- Step 5: Test fit upper tray on top of lower battery. If the battery tray has interference with the fuse box the fuse box mounting bracket will need to be relocated. If there is no issue with tray clearance proceed to step # 7. If the fuse box mounting bracket does need to be relocated proceed with step #6. Bracket relocation will be discussed later in step # 13-19.
- Step 6: Remove relay box from bracket by depressing retainer clips and lifting fuse box upward (pic.5). With fuse box removed the upper tray can now be installed.
- Step 7: With lower battery installed and upper battery tray in place insert the threaded rods through the upper battery tray and into the lower tray. To aid in the threading of the rod into the lower tray place two hex head nuts onto rod (pic.6)

pic.1



pic.2















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- Step 8: Tighten the two nuts together. You can now thread the rod into the lower battery tray by tightening the top nut (pic.7). Thread rod until it is flush with the bottom of the lower battery tray.
- Step 9: Remove the top nut from threaded rod. Hand tighten the remaining nuts to the upper tray. Tighten with wrench until secure. DO NO OVER TIGHTEN! (pic.8). **NOTE: AC line may need to be pushed away from threaded rod. Tube can be bent to avoid contact with rod.**
- Step 10: Place top battery onto upper tray with terminals facing towards the front of the vehicle. Place battery hold down bracket onto threaded rods and lower onto battery (pic.9).



pic.8



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- Step 11: Thread nuts onto rods and secure hold down bracket to top battery. DO NOT OVER TIGHTEN. (pic.10). Attach second battery cables as desired. Always connect POS (+) cable first.
- Step 12: This kit has been supplied with a relay mounting bracket. The bracket is designed to mount to the grille support rods. Install relay bracket onto support rod (pic.11). Mount relay to bracket and position so that relay does not make contact with hood (when lowered) or any other items inside engine compartment (pic12).
- Step 13: For some later model Wranglers the fuse box and bracket will need to be relocated. Place fuse box back down onto fuse box mounting bracket. (fuse box was removed in step #6). Move fuse box forward until it clears upper battery terminals. The fuse box will need to be moved about 1.75" forward (pic.13).
- Step 14: With fuse box removed drill out rivets securing fuse box mounting bracket (pic.14).
- Step 15: With rivets removed slide bracket forward the the distance needed to clear battery terminals. this should be about 1.75". The front of the mounting bracket will need to be turn inward towards the air box by .20" or 1/5". Reconnect fuse box to loose bracket and place in new location. Check that hood can close without touching fuse box (pic.15). When correct location has been determined mark the new location of mounting bracket to the fender base (pic.16). Mark the front and back with marker.

pic.9

pic.10











pic.14

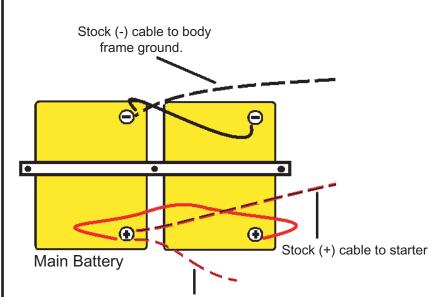


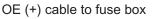


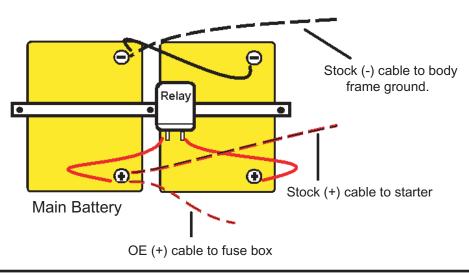


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- Step 16: With location marked on fender base remove the fuse box from mounting bracket. Place mounting bracket back down onto fender base. Align front and rear alignment marks and scribe new hole locations with marker (pic.17).
- Step 17: Drill new hole locations in fender base (pic.18). Make sure that drill bit used matches new screws needed to secure fuse box mounting bracket. (NEW SCREWS ARE NOT SUPPLIED WITH KIT)
- Step 18: Secure fuse box mounting bracket to fender base using machine screws (pic.19).
- Step19: Secure the fuse box back onto fuse box mounting bracket. Check for battery cable clearance and possible contact with hood (pic.20).
- Step 20: Drawings supplied show how batteries may be connected for use with or without extra relay.









pic.15



pic.18

pic.17



pic.19



pic.20





