

• Preface

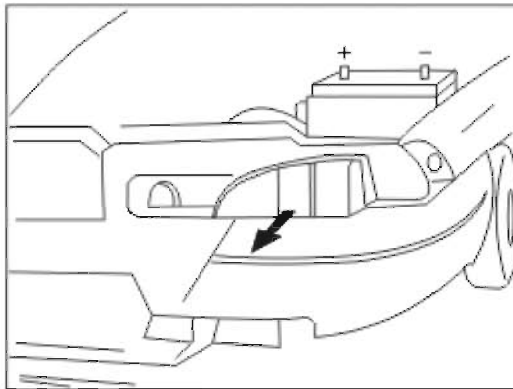
The following is a general HID installation guide to help you install your newly purchased HID kit. Please read before installation and follow these instructions to avoid unnecessary damage to the equipment and vehicle. Failure to follow directions may result in accidental breakage or damage from operation of some vehicles that are not covered under manufacturer's warranty. Please check with your vendor for vehicle specific requirements or any questions related to proper installation.

• Before Installation

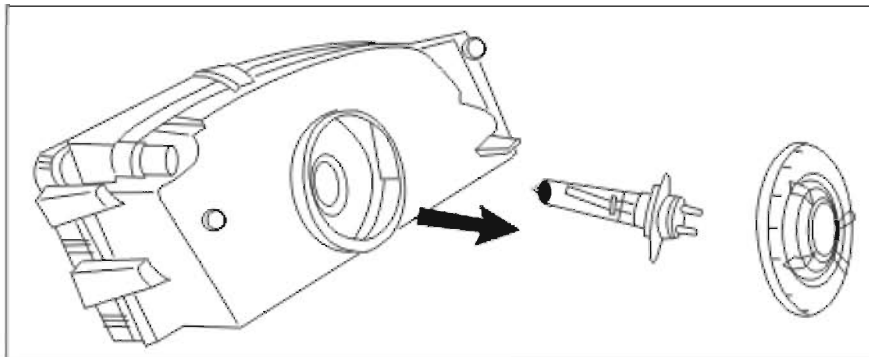
1. Be sure car is not running, and engine is cool.
2. Be sure the vehicle is in park with hand brake applied.
3. Be sure head lamps are turned off.
4. Do not drop, scratch, nor touch bulbs directly with fingers/hands.
5. Check lamp connectors to make sure you have proper contacts before testing lamps for first time

• Installation Process

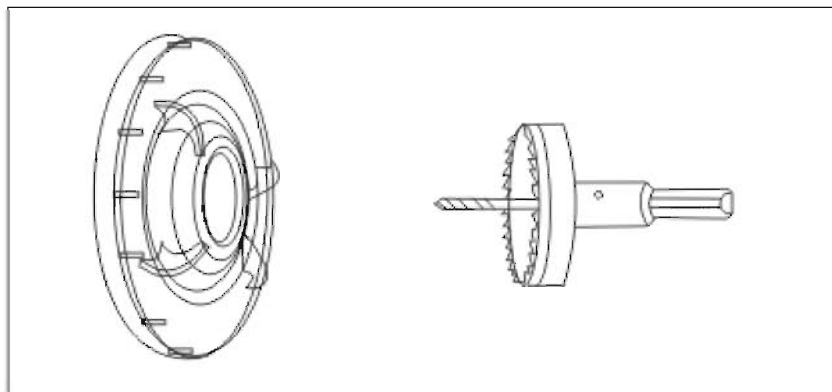
1. Remove head lamp if necessary to reach bulbs from behind. Otherwise the lamps do not require removal if you can install without the risk of accidental breakage.



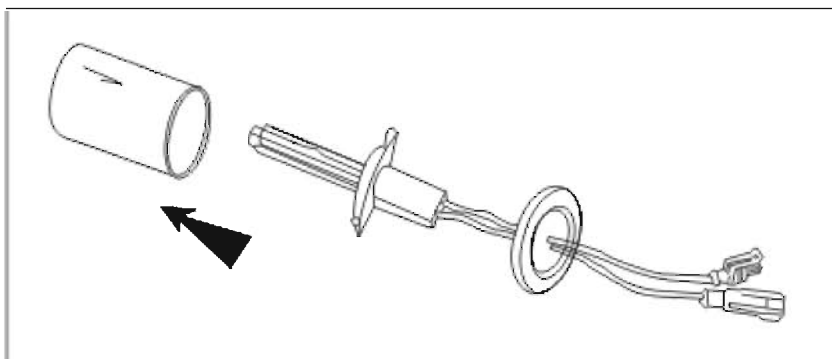
2. Remove rear cover of head lamp if bulbs are covered, and remove halogen bulb.



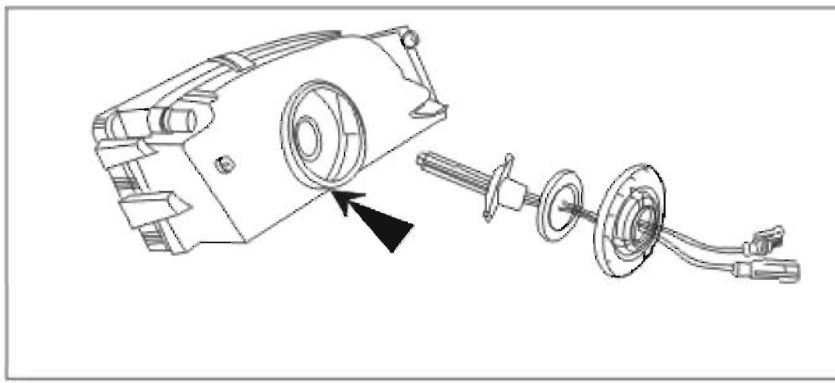
3. Only if necessary, in some applications, a hole may need to be drilled into the rear cover. This is rare, if unsure please ask your vendor first! When a hole is required, be sure to verify the correct size drill bit to the particular type of rubber grommet your bulbs come with.



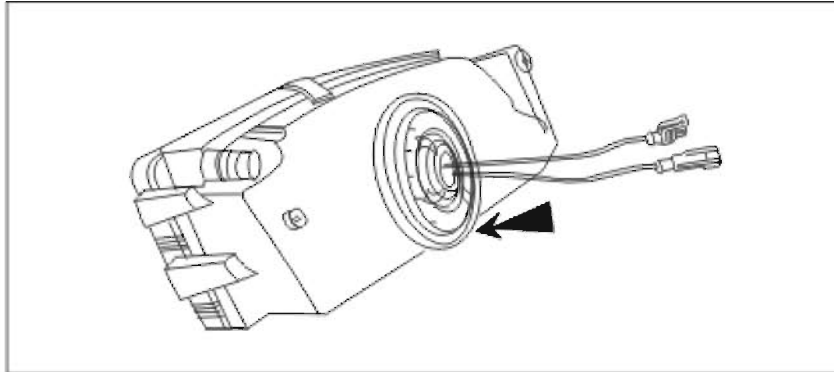
4. Remove HID bulb from plastic packaging. Be careful not to touch the bulb. Remove all packaging materials from the bulb and inspect for any loose foam additional plastic rings. It may be necessary to remove a rubber seal temporarily to remove all packing supplies. Failure to remove extra packaging materials may result in breakage!



5. Put the HID bulb into the head lamp in the same fashion as you removed halogen bulb. If you meet any resistance, do not use excessive force to install, hand pressure is enough. Resistance may occur for the following reasons:
 - a. Check the rubber gaskets or seals on the bulb for possible interference and swap out with those removed from the removed halogen bulb for looser fit.
 - b. Check that the seals are seated fully at the base of the bulb, all plastic shipping materials should be removed
 - c. BiXenon bulbs (H4, H13, HB1, HB2, HB5, 9003, 9004, 9007 and 9008) are two pieces, a mounting flange and the bulb. If necessary the mounting flange can be removed and installed first, locked into place with the factory mechanism, and the bulb inserted last. **BE SURE BULB IS SECURELY TWIST LOCKED INTO POSITION OR DAMAGE CAN RESULT.**
 - d. NEVER pull or put tension on wiring exiting the rear of BiXenon bulbs
 - e. Tabs on the bulbs may be spaced incorrectly or be of the wrong thickness for your application. Check the bulb base and labels to confirm correct bulb type.



6. With some applications, you may need to connect supplied connectors inside head lamp. Most connections however will occur outside the lamps.
7. Replace rear cover with supplied gasket through hole in rubber cover or drilled hole in plastic cover.



8. Connect bulb to ballast. Connect power wire pigtail to ballast and pins or opposite connector to OEM bulb plug. For bixenon kit applications, vehicle specific applications, and optional wiring harness applications these connections will be located on the supplied wiring harness. Please refer to the diagrams in the first pages of the booklet for your application type or refer to the vendor's website for full color diagrams. All 12V connections, the contacts should be protected with electrical grease or similar viscous petroleum, PTFE, silicone or lithium based grease. Do not apply grease to high-voltage AMP (barrel shaped) connections connection between ballast and bulb.
9. All applications using a wiring harness, please note ground connections are critical to system performance. Poor grounds can lead to equipment halting operation or lock-out of ballast operation to protect the vehicle. To ensure proper contact, always mount directly to metal. Existing body bolts are fine to use, and try to avoid sharing stock vehicle grounding points. Sand contact areas on the frame down to bare metal, and before bolting down protect the sanded areas with electrical grease or similar viscous petroleum, PTFE, silicone or lithium based grease. Failure to supply grounds as stated can lead to sudden or chronic performance issues in the future. Remove fuse and relay controller(s) and apply electrical grease to contacts for weather protection.
10. Mount ballasts in the engine bay using supplied equipment, existing body bolts may be used with the brackets. In applicable installations:
 - a. Mount relay controllers in an upright position with wiring exiting towards the ground.
 - b. Mount capacitor links such that the wiring exits towards the ground and mount in an area well protected from water exposure or pack with electrical grease
 - c. Mount resistor links directly to the metal frame when possible to help dissipate heat and do not mount adjacent to any plastics. Resistors will operate hot! Do not touch until fully cooled after operation.
11. Recheck connections and test head lamps.

* If only one lamp lights, or lamps flicker on/off, your vehicle may have sophisticated “bulb out”, “auto-on”, or pulsed voltage output systems in use. The vehicle wiring may also be compromised and be unable to supply proper power for plug and play installation, the ballasts will halt operation to protect the vehicle. Failure to install necessary hardware or software onto vehicles with such systems will result in damage to bulbs and possible ballast lock-out that are not covered under warranty provisions. Please contact vendor for instructions or materials to meet compliance with these systems for normal operation.

WARNING:

- Be sure all connections are complete, as product creates high voltage on start-up. Never hold or touch wiring between ballast and bulb without disconnecting from power.
- Do not look directly at lamp when lit
- In case of vehicle accident, or odd lamp behavior, turn off lamps immediately. Forced operation may result in engagement of ballast lock up or bulb damage.
- Do not modify or dismantle any parts at anytime, there are no user serviceable parts inside and they may pose danger of injury.
- Be certain of correct aiming as not to disturb other drivers. Always check aim after installation of new bulbs or conversion.
- Be sure to turn off lamps when engine is not running, as it will drain your battery like other lamps.
- Where possible, keep the lights off until after the vehicle engine is running

• After Installation

1. Check all connections to be secure and protected from shorting.
2. Check all components to have secure mounting
3. Check all wiring and relays to clear of heavy water splashed up from the road surface or streaming in through hood gaps.
4. Be sure relay controllers are mounted in the upright position with the rubber boot pointing towards the ground.

• Trouble Shooting

- Flickering or low output from lack of input power
 - *Install relay harness or plug and play links with capacitance*
 - *Check battery charge*
 - *Disable daytime running lamps or “auto-on” feature*
 - *Check with your vendor for vehicle specific requirements*
- No light output
 - *Reverse input power at OEM connectors, swap pins to correct polarity*
 - *Check with your vendor for vehicle specific requirements*
- Incorrect high/low operation on bixenon or halogen high beam units
 - *Check connector OEM plug*
 - *Remove and clean ground contact points*
 - *Check with your vendor for vehicle specific requirements*

• **General Care, Use, and Maintenance**

- HID lamp will be hot immediately after use, wait approximately 15 minutes before servicing
- Periodically clean outside of headlight lens
- Avoid flashing HID lamps frequently, as it will decrease life of the lamp
- Inspect vehicle lamp wiring and ground points or harness wiring connections every 6-12 months