

How To: HID installation guide

Please check your local regulations to determine the suitability and legality of this installation for your vehicle. It should be noted that some HID aftermarket kits may cause problems with the vehicle's electronic system(s) if they are not appropriate for multiplexed vehicles.

This installation was carried out on a 2003 (Series 3) Peugeot 406 Coupe with multiplexed wiring.

While it is possible to instal without removing the light units, it is probably easier to do with the lights removed. This also allows for discrete placement of the ballast and igniter units.

Total time - 4 hours (at easy pace!)

Tools required

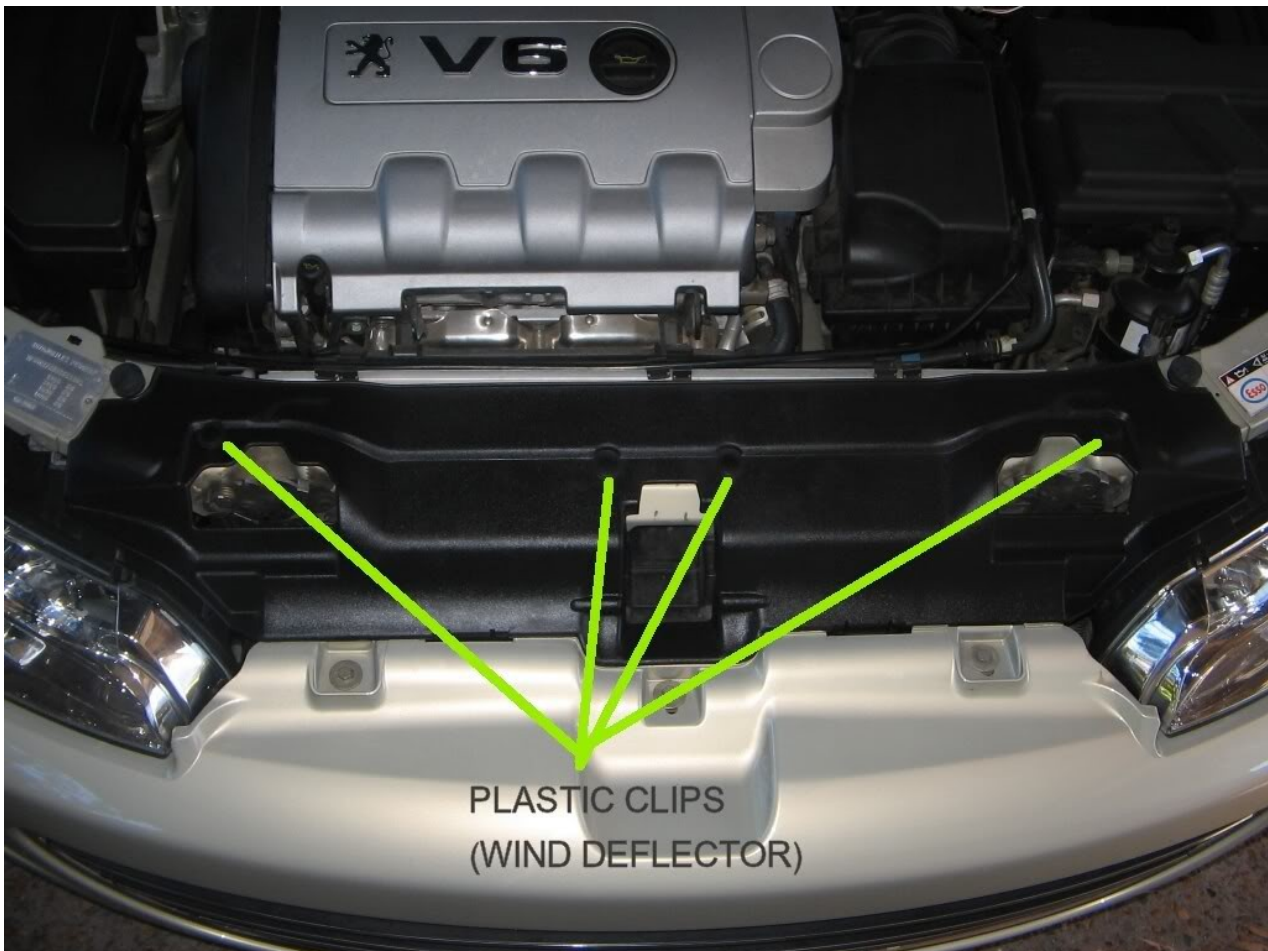
- 10mm socket
- 1/4" drive ratchet
- short extensions (up to approx 2")
- hole saw (1") [check HID kit requirement]
- drill
- screwdrivers (+/-)
- torx driver head (depending on vehicle)



1. Remove the front bumper grille and air dam trim.

Grille - Series 3 Coupe – remove 4 Phillips head screws from front and ease top of grille forwards to release 3 spring clips.

Air dam – lift centre of 4 plastic fixings with flat screwdriver and remove unit.



2. (Optional) Remove pipe clip above front right light (torx driver)

3. Remove power connection to headlamp adjustment motor.

4. Remove bulb access covers (2x).

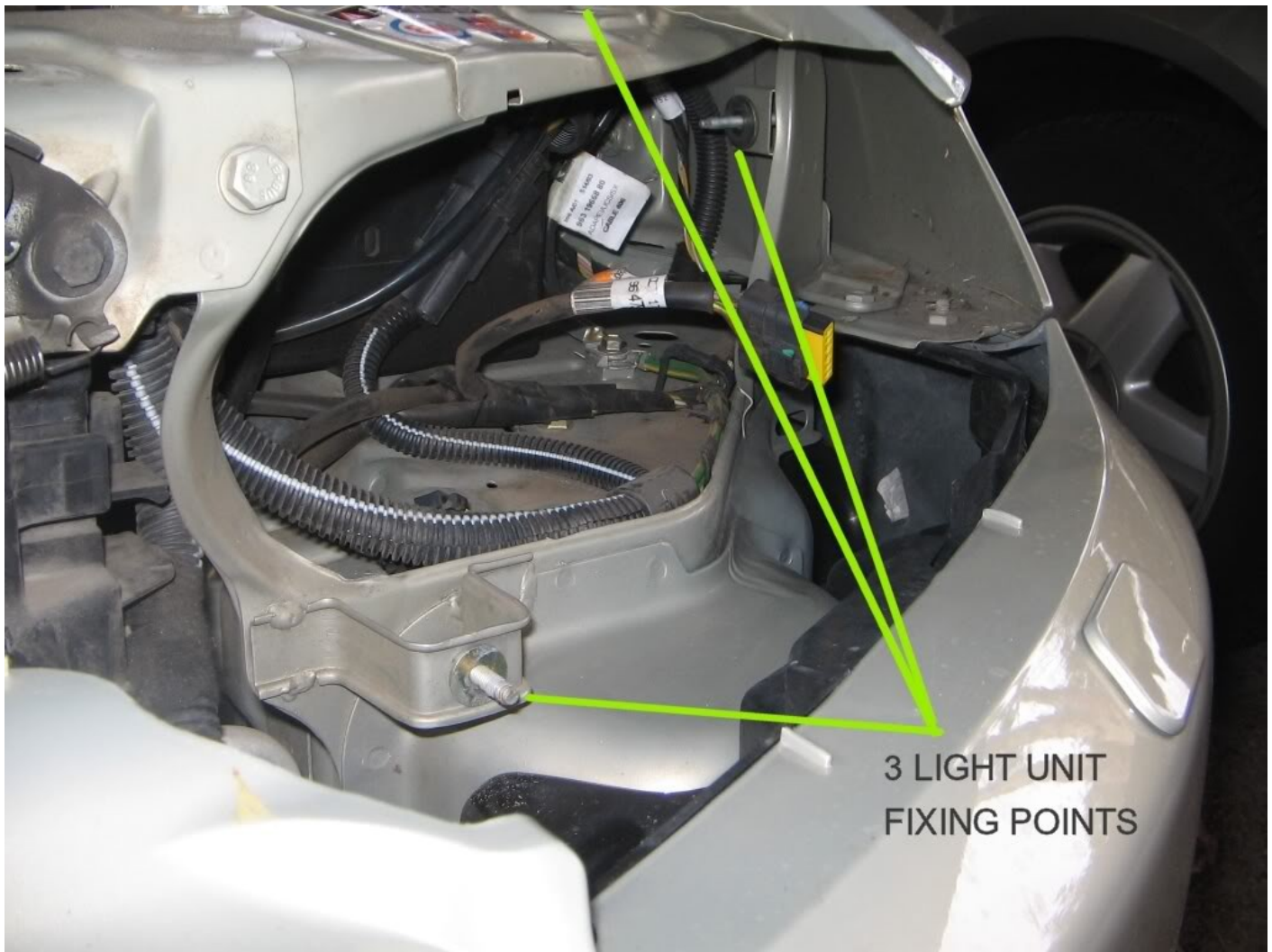
- a) Remove the red plastic locking clip at the top rear by lifting slightly and sliding it backwards. Note the orientation of the clip.
- b) Remove the grey plastic covers by pressing the rear of the clip down and tilting the top backwards slightly. Lift the cover off the two locating tabs below.

5. Mark the top fixing position of the light unit.

Use a marker or tape to locate the top fixing tab on the bodywork. This will enable easy set-up of the lights on re-assembly.

6. Remove the 3 light body fixings.

Remove bottom, side and then top. Re-assemble in reverse order, only doing the final tightening after the correct panel gaps are set. The bottom fixing is best accessed through the front grille.



7. Remove the light body.

Pull the light unit forwards slightly, then rotate the outside towards the centre of the car. Ease it forwards with a slight upward twisting motion. It is tight, but it will come. Be careful not to scratch the top of the clear lens on the point of the side panel. When clear of the bodywork, remove the main wiring connector.

8. Drill the HID wiring access hole.

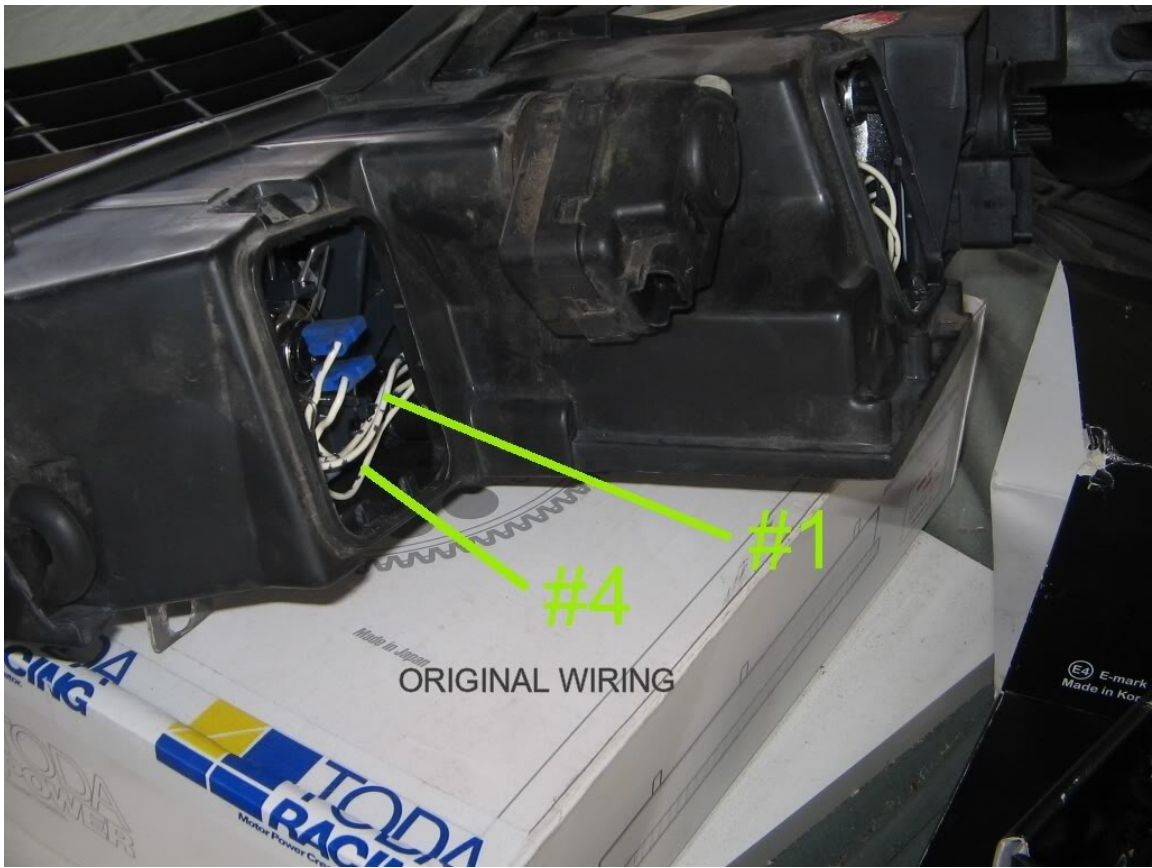
I chose the bottom of the unit as the clearances are greatest there and the area is flat. After the installation it is not possible to see that an aftermarket kit has been installed. It does however mean that it is necessary to remove the unit again for bulb replacement.



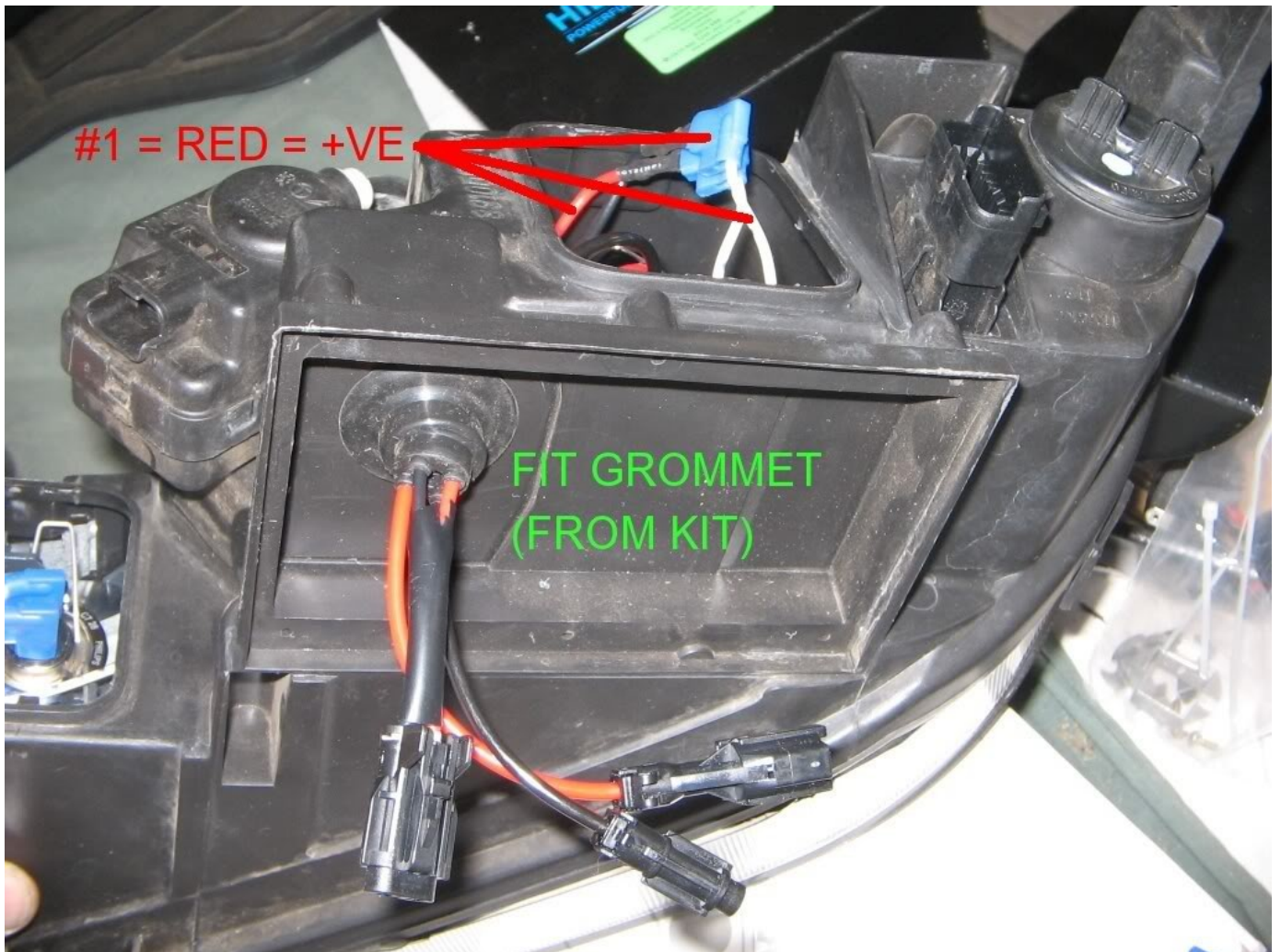
9. Replace the halogen bulb with the HID bulb and wiring.

DO NOT TOUCH ANY PART OF THE GLASS BULB.

The multiplexed wiring is number coded on each wire.



The wiring is almost foolproof as there are 3 different types of male/female connectors that will only fit together one way.



10. Test the installation.

Reconnect the main light connector and the ballast unit and test for operation. Disconnect ballasts and light unit.

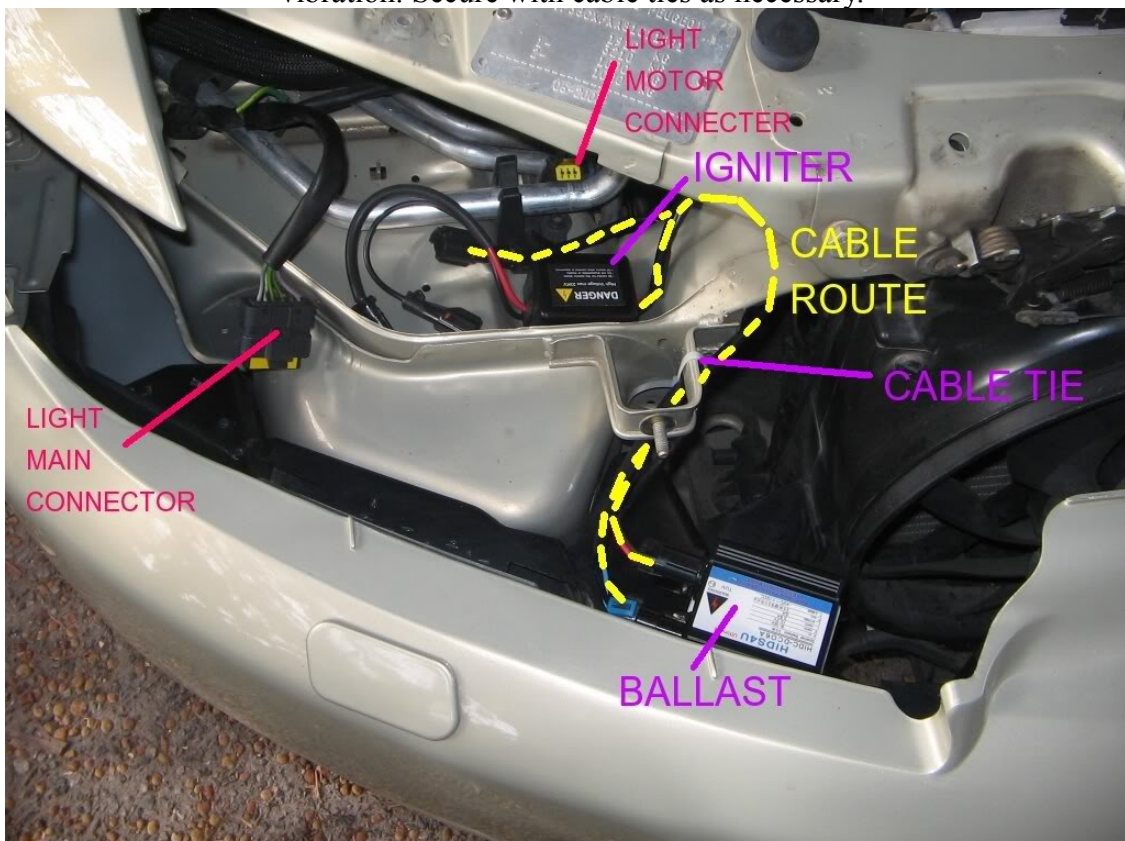


11. Fix ballast units.

Select a location as far from the ECU as convenient, ensuring the leads will be long enough to reach the light when installed. I chose the front inside bumper area as it enabled fixing to plastic rather than drilling holes in metalwork.

Locate the leads and units so that they do not interfere with the reassembly of the light unit.

Ensure that no leads are pinched, kinked or placed in any position that may result in wear of the insulation due to vibration. Secure with cable ties as necessary.



12. Refit the light unit.

Reverse the above procedure, ensuring the HID connections are locked into place. Test again when in position prior to replacing fixings.



Adjust light unit to original position with no fixings tight. Face car towards a wall, adjust and tighten top fixings so that the horizontal cut-off beam on each light is the same level. Tighten remaining fixings and re-check beam pattern.



Replace grille and wind deflector.

Some personal observations and opinions.

There have been no vehicle warning lights or error messages resulting from the installation or operation. I purchased a kit specifically supplied for multiplexed vehicles.

HID Xenon bulbs give off a different colour light to Halogen and Halogen/xenon bulbs. The higher the colour temperature, the less light is visible to the human eye. I chose 5000°K bulbs, which is close to white. When viewed from the front, a blue 'edge' appears as a result of refraction in the projector lens. This is also noticeable from inside the car at the perimeter of the beams and shows up on street signs etc.

On start-up they have a distinct blue hue, which rapidly whitens over about 10 seconds, then more gradually whitening more over the next minute or so. The initial start-up phase gives adequate light, probably somewhere equivalent to a halogen lamp. The intensity increases over the next minute and when fully operational, provides significantly more light than a halogen.

The Phillips Extreme Halogen (+80%) bulbs which are installed in the high beams are yellow by comparison.

At 35-watts, they consume less power and generate less heat than a 55-watt halogen.



