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Lighting upgrades

So what do you really need?

Since about the mid-90's manufacturer's standard vehicle lighting has improved greatly over the older systems. However, because every vehicle is essentially built to a price and market niche, only the top models are likely to have the best lighting available and even that will tend to favour cosmetic appearance over practicality.

As in many similar situations, the starting point for considering upgrades is an objective appraisal of what is needed for the intended driving conditions. Let's face it, many of the available upgrades are essentially cosmetic accessories and not everyone wants something that looks like a rally car that got lost in the city. Also, if most driving is done on main roads, expressways and major highways, the standard lighting is usually adequate, though a minor tweak of the wattage, or conversion to a different lamp will more than suffice. In such conditions, ability to burn the paint off the back of the vehicle in front is not considered to be socially acceptable, however desirable.

If driving in on "B" or bush roads, however, effective lighting takes on an entirely new meaning. Anyone who does this regularly will know the perils of having a fallen tree, a big 'roo, a wombat, or even a cow in the road ahead and the sooner the danger is seen, the better chance of evasive action.

Lights ain't lights

Wiring a pair of 150W lights into the existing loom is a recipe for burning out the wiring, killing the battery or both. Lights *must* be installed with separate fuses and relays to perform effectively and safely. Also, the switching must be arranged so the lights can be turned on only when the main beam is activated, so this involves locating a switched wire in the loom to power the relay. However tempting it may be to have the lights wired to work on low or high beam, this is illegal, as well as potentially dangerous. You do not want the spots to turn on when the vehicle is travelling in traffic. The location of the various wires will vary from vehicle to vehicle and guessing at a solution may cause more trouble than paying the cost of professional installation. Also, light alignment is another consideration. One light pointing into the trees while the other highlights the potholes is interesting, but not desirable. If in doubt, leave fitting to the professionals.

Spots, pencils, floods, fogs and other toys

Starting with fog lights, the use of these is illegal other than in appropriate conditions. They need completely separate wiring, in this case (only) with the ability to turn on with *low beam*. The fitted position should be as low to the ground as possible to minimise glare.

Pencil beams and spots are excellent for long-range vision but are not of much use for general illumination close up. Conversely, floods will provide good close-up illumination, but not much range. An effective compromise is to fit one of each, suitably aligned for maximum effectiveness. Of course, if space permits and you don't mind the vehicle looking like something out of Mad Max, fit both spots and floods. Why not a laser or 60 mm machine gun too?

Lamp choices

The simplest and cheapest upgrade will be new bulbs, with a wide range of choices. A pair of halogen bulbs will cost around \$30 each, or on some models, a replacement sealed-beam assembly at around \$80 each could be an effective solution.

A complete sealed beam



If supplementary lights are desired, the options and prices are almost limitless. Most variants will accept different bulb types like quartz halogen in wattages ranging from 80 to over 150.

Seeking expert advice from specialists familiar with your model of vehicle is strongly recommended. The Graeme Cooper team includes experienced drivers who have tackled everything including the outback, mountains, beaches, snow, ice, mud and country roads.



NARVA 150W kit



IPF Extreme Sport



Hella 150 Series