

# FAQs on High Intensity Discharge headlights and Light Emitting Diodes

RSA

## What are high intensity discharge headlights (HID) and light emitting diode (LED) headlamp bulbs?

HIDs or Xenon bulbs	have a slightly bluish tint and are much brighter than regular halogen headlights.
LED bulbs	have a lifespan and energy efficiency which are several times greater than halogen bulbs. LED lamps are more focused, emit brighter light and are generally found in high end cars.

**Is it legal to use LED bulbs as headlights in Ireland?** Yes. Once they are type approved and fitted to compatible vehicles and the light beam does not dazzle other road users.

**Is it legal to retrofit HID headlights and LED bulbs?** Retrofitted HIDs and LED headlamp bulbs i.e. those not fitted by the manufacturer are not always compatible with the vehicle or headlight. Contact manufacturer or authorised distributor. For testing methods and reasons for failure see [NCT](#) or [CVRT](#) Manuals.

**What is checked at roadworthiness testing?** The roadworthiness tests check the alignment of a vehicle's lights to ensure they are level. However, it is the driver's responsibility to ensure that their vehicle is roadworthy, so it is important to check regularly that all your lights are working and properly aligned.

**If I retrofit HID headlights on my car will it fail the NCT?** In order to pass the NCT:

- the retrofitted HID kit i.e. the lamp and bulb must be type approved
- the vehicle to which it is being fitted must be compatible for HID lamp usage i.e. the vehicle is approved to have a HID kit fitted.
- the vehicle's original manufacturer will be able to clarify if your vehicle is compatible for a HID kit.

*An approved headlamp kit retrofitted to an incompatible vehicle will result in NCT failure. The same applies to an unapproved kit retrofitted to a compatible vehicle. HID bulbs retrofitted into regular halogen headlamps is also classed as a reason for failure at NCT.*

**What is a type approved HID system?** On new vehicles HID headlights will be factory fitted and approved to European type approval regulations (EU) 2018/858 i.e. they had to meet an acceptable safety or quality standard before sale across Europe. Such HID systems include a headlamp which is specially designed to accommodate extra bright HID bulbs, automatic headlamp levelling and headlamp cleaning devices. Headlights which are not level or dirty can temporarily blind oncoming motorists and deliver poor side vision.

**What are the regulations on standards for car headlights?** In addition to European type approval regulations (EU) 2018/858, they would have to meet an acceptable safety or quality standard before sale across Europe, they would also have to comply with [S.I. No. 189 of 1963](#) of the Road Traffic Lighting of Vehicles regulations 1963.

**My car was factory fitted with HIDs but they do not self-level.**

**Will it fail the NCT?** There will be circumstances especially with older vehicles where HID headlights are fitted by the manufacturer yet no self-levelling devices either manual or automatic are evident.

- If a vehicle with factory fitted HID headlights has self-levelling built into the suspension, then this can be considered to fulfil the function of headlamp self-levelling.
- In cases where a self-levelling system is not in place the owner must present evidence from the original manufacturer that the vehicle was fitted with HID bulbs or headlamps *when originally manufactured* and that a self-levelling system was not part of this specification.