| FIFTEENTH CONGRESS OF THE REPUBLI        |                         | OFFICE OF              | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | HE TARY           |
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| OF THE PHILIPPINES First Regular Session | )                       | 10                     | JIL 20                                | ) #11 <i>:</i> 43 |
| SE S. No                                 | 1672                    | <del>- RECEIV</del> ED | . BY . ().                            | ·<br>/            |
| Introduced by Senator I                  | Miriam Defensor Santiag |                        |                                       |                   |

## **EXPLANATORY NOTE**

The Constitution, Article II, Section 5 provides:

The maintenance of peace and order, the protection of life, liberty, and property, and promotion of the general welfare are essential for the enjoyment by all the people of the blessings of democracy.

A High-intensity discharge (HID) lamp is a kind of electrical lamp that makes light by means of an electric arc between tungsten electrodes placed inside a translucent or transparent fused quartz or fused alumina arc tube. When compared with conventional fluorescent and incandescent lamps, HID lamps are shown to have higher luminous efficacy since a bigger proportion of their radiation is in visible light as opposed to heat. The overall luminous efficacy of HID lamps is also higher, meaning that they produce a greater amount of light output per watt of electricity input.

Since the 1990's, HID lamps have found their way in motor vehicle headlamps. This application has met with different responses from the motoring public, who appreciate the improved night time visibility from HID headlamps but object to the glare they can result to. Studies have demonstrated drivers react faster and more accurately to roadway obstacles with good HID headlamps rather than halogen ones. Scientific study of headlamp glare has shown that for any given intensity level, the light from HID headlamps is 40% more glaring than the light from tungsten-halogen headlamps. Internationalized European vehicle regulations require such headlamps to be equipped with lens cleaners and an automatic self-levelling system to keep the beams aimed correctly regardless of vehicle load and attitude. The arc light source in an HID headlamp is fundamentally different in shape, size, orientation and luminosity distribution when

compared to the filament light source found in tungsten-halogen headlamps. For that reason, HID-specific optics are used to collect and distribute the light. HID burners cannot effectively or safely be installed in optics designed to take filament bulbs. This retrofitting results in improperly-focused beam patterns and excessive glare, and has been made illegal in almost all countries. These retrofitted headlamps have been known to cause accidents on the road and have generally inconvenienced those who drive at night.

This bill aims to limit the use of HID headlamps to vehicles with headlamp housings originally designed for HID use, and not those designed for conventional halogen or tungsten types. <sup>1</sup>

MIRIAM DEFENSOR SANTIAGO

<sup>&</sup>lt;sup>1</sup> This bill was originally filed in the Fourteenth Congress, Second Regular Session

|             | FIFTEENTH CONGRESS OF THE REPUBLIC )  OF THE PHILIPPINES )   |  |  |
|-------------|--|--|--|
|             | First Regular Session  10 JJL 20 M1:43  SENATE S. No. 1672   |  |  |
|             | Introduced by Senator Miriam Defensor Santiago   |  |  |
| 1<br>2<br>3 | AN ACT<br>REGULATING THE USE OF HIGH INTENSITY DISCHARGE HEADLAMPS IN MOTOR<br>VEHICLES                |  |  |
| 4<br>5      | Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled: |  |  |
| 6           | SECTION 1. Short Title This Act shall be known as the "High Intensity Discharge                        |  |  |
| 7           | Headlamp Regulation Act."  |  |  |
| 8           | SECTION 2. Definition of terms As used in this Act, the term-  |  |  |
| 9           | (A) "High Intensity Discharge Headlamp" refers to headlamps that produce light through                 |  |  |
| 10          | an electric arc that comes from metallic salts that are vaporized within an arc                        |  |  |
| 11          | chamber;   |  |  |
| 12          | (B) "Headlamp housing or optics designed for HID use" refers to a headlamp system that                 |  |  |
| 13          | consists of a set of type-approved HID headlamps, an automatic headlamp leveling                       |  |  |
| 14          | device, and a headlamp cleaning system;  |  |  |
| 15          | (C) "Office" refers to the Land Transportation Office.   |  |  |
| 16          | SECTION 3. Prohibition of the use of retrofitted HID headlamps. – It shall be unlawful                 |  |  |
| 17          | to use an HID headlamp in a vehicle with headlamp housings or optics not designed for HID use.         |  |  |
| 18          | Only vehicles with housings or optics originally designed for HID use can use HID headlamps.           |  |  |
| 19          | SECTION 4. Penalties The Office is empowered to establish and assess penalties or                      |  |  |
| 20          | fines against the registered owner of a vehicle for violations of this Act. In no circumstance will    |  |  |

any penalty or fine exceed P10,000.00.

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- 1 SECTION 5. Repealing Clause. Any law, presidential decree or issuance, executive
- 2 order, letter of instruction, administrative order, rule or regulation contrary to or inconsistent
- 3 with, the provisions of this Act is hereby repealed, modified, or amended accordingly.
- 4 SECTION 6. Effectivity Clause. This Act shall take effect fifteen (15) days after its
- 5 publication in at least two (2) newspapers of general circulation.
- 6 Approved,