

LED SUBSTITUTE PROPOSAL

INTRODUCTION:

If a LED Substitute is installed on a lamp, the lamp must be approved with R37 and optionally with LED substitutes.

During the last session in October, GRE pointed out the possible misuse of LED substitutes as retrofits in lamps and/or vehicles that were not type approved for using such light sources.

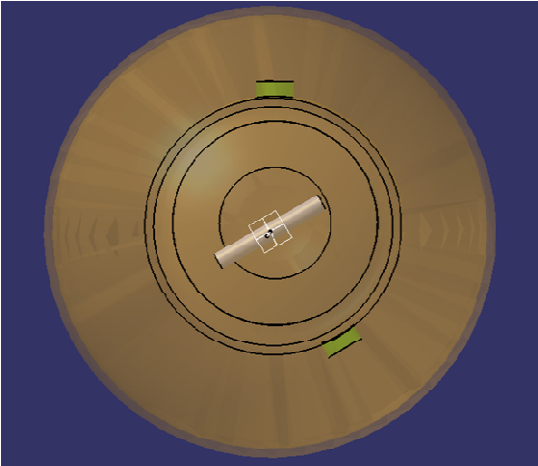
The proposed measures, such as consumer warning on packaging and a website with a list of compatible vehicle models, were considered as not sufficient

A different cap for LED substitutes compatible with filament light sources can solve this issue.

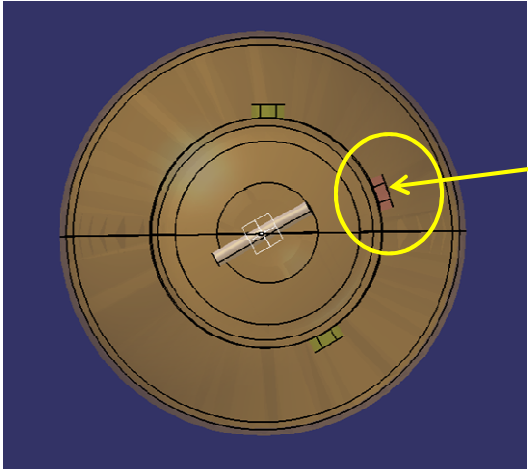


PY21W (BAU15S)

NEW SOCKET FOR PY21W/LED COMPATIBLE WITH PY21W.

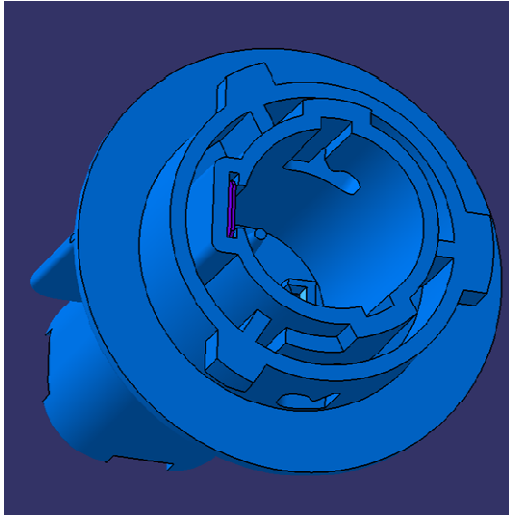


PY21W

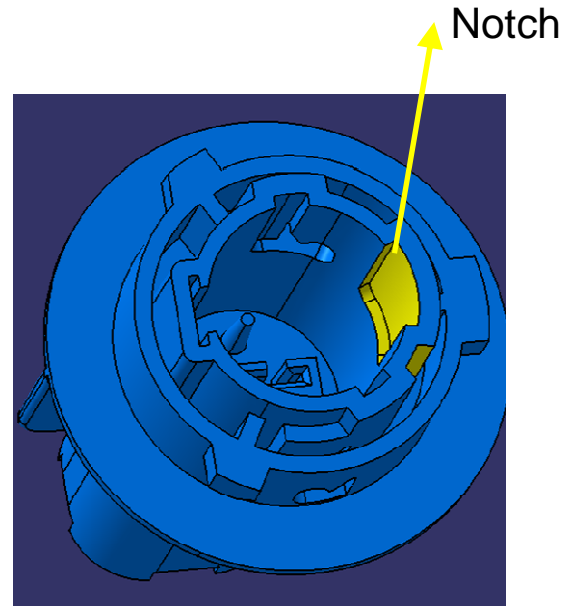


PY21/ LED

BULB HOLDERS



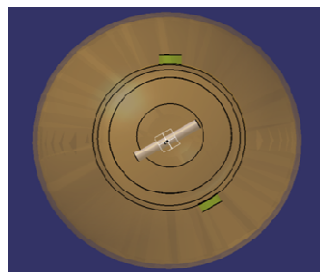
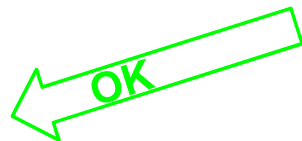
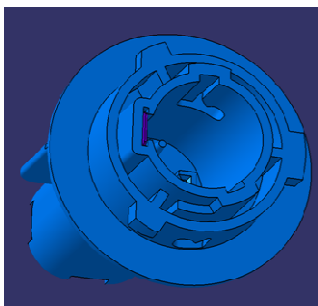
Existing PY21W Bulb holder



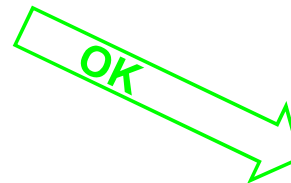
Proposed PY21/LED bulb holder

MOUNTING OF PY21W/LED IN THE BULB HOLDER. SOLUTION COMPATIBLE WITH THE REGULATION REQUIREMENT.

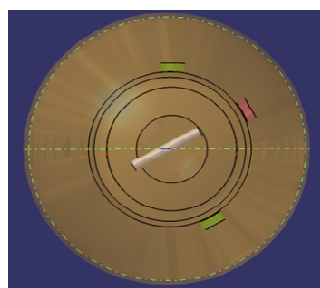
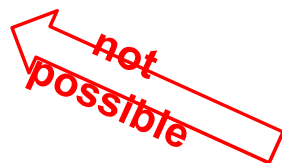
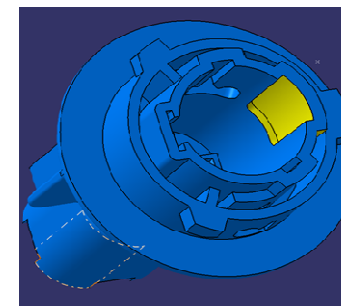
Existing PY21W Bulb Holder



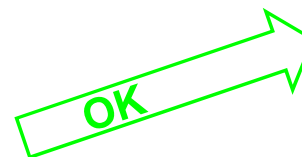
PY21W

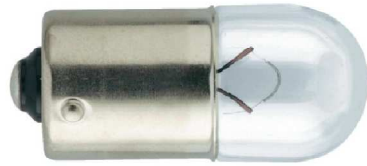


Proposed PY21W – PY21W/LED bulb holder



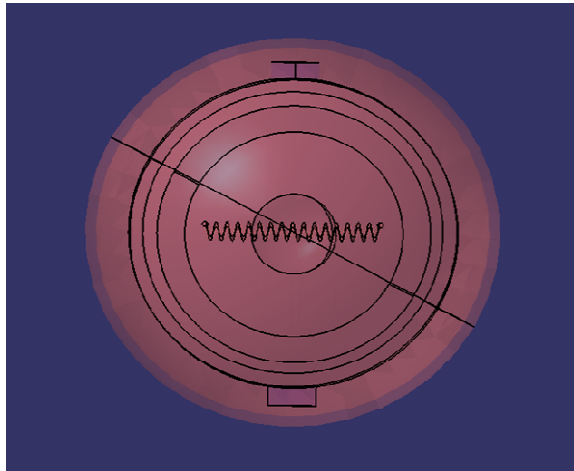
PY21W/LED



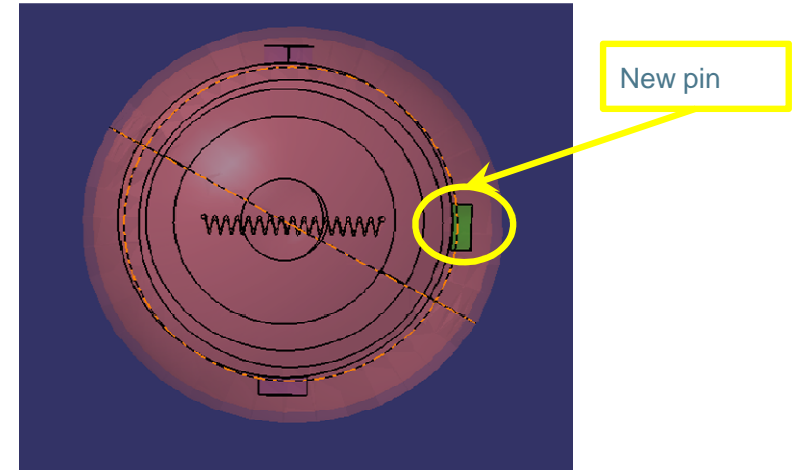


R5W (BA15S)

New socket for R5W/LED compatible with R5W.

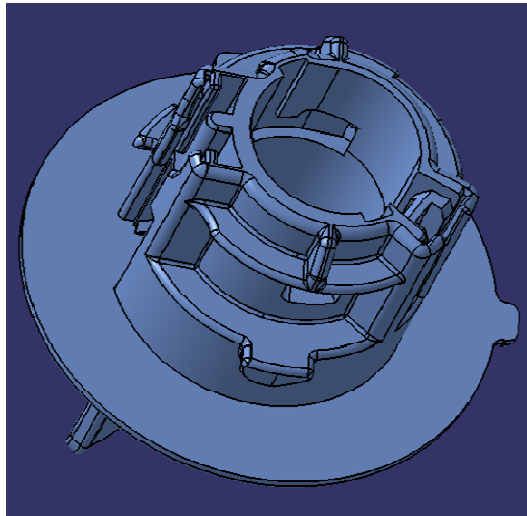


R5W

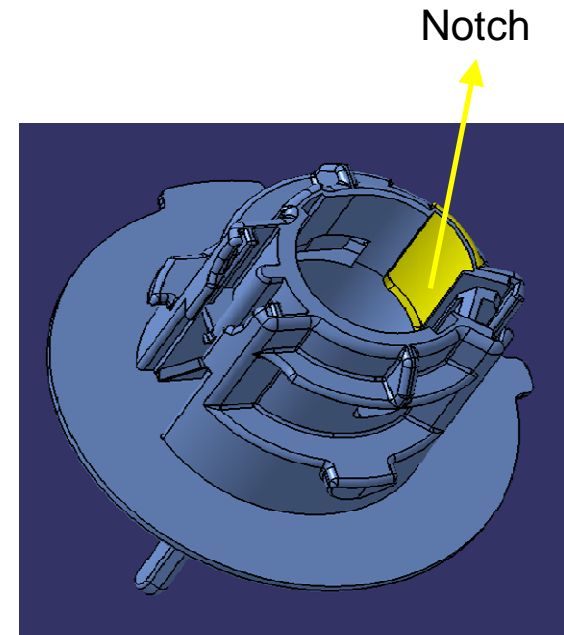


LED substitutes

Bulb holders



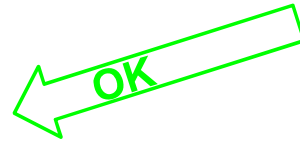
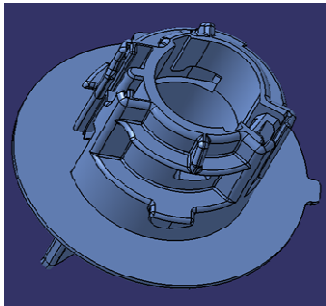
Existing Bulb Holder BA15s



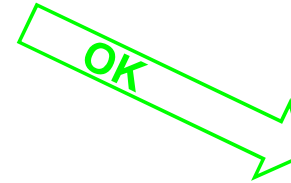
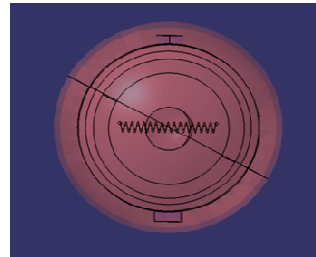
LED substitutes socket BA15s

MOUNTING OF R5W/LED IN THE BULB HOLDER. SOLUTION COMPATIBLE WITH THE REGULATION REQUIREMENT.

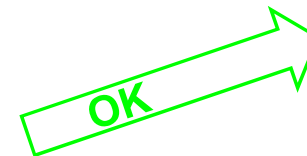
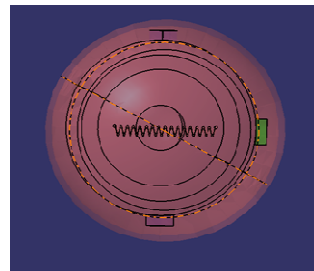
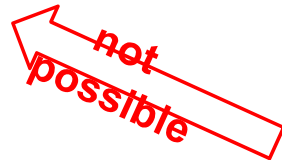
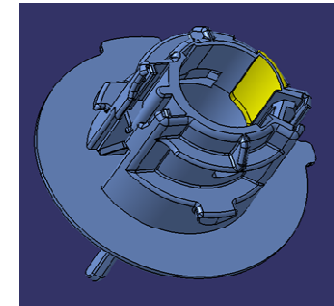
Existing Bulb Holder



R5W



LED substitutes socket



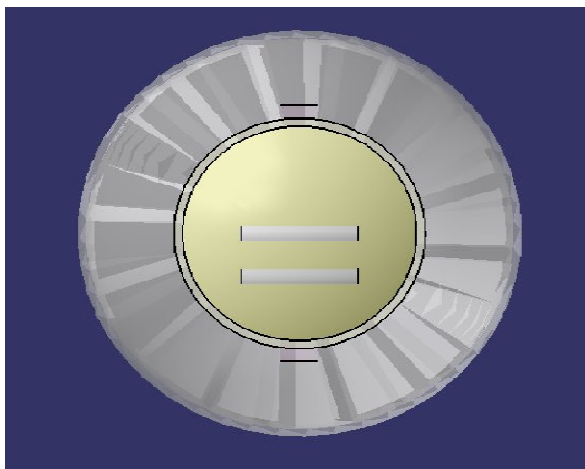
LED substitutes

This keying makes impossible to put LED substitute in existing bulb holder by mistake..

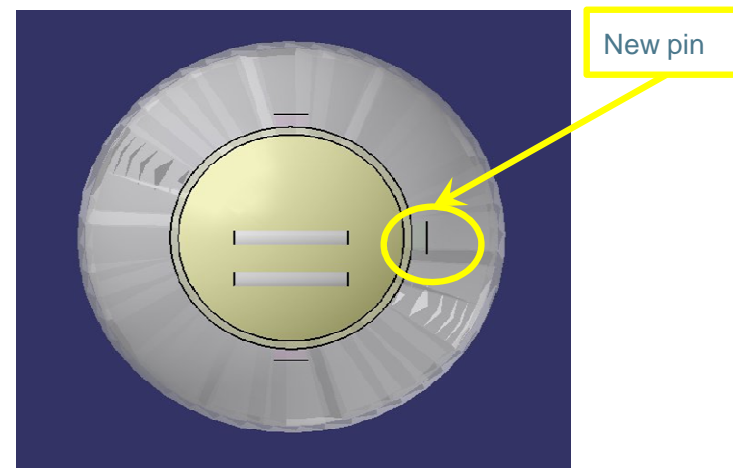


P21/5W (BAY15D)

New socket for P21/5W/LED compatible with P21/5W.

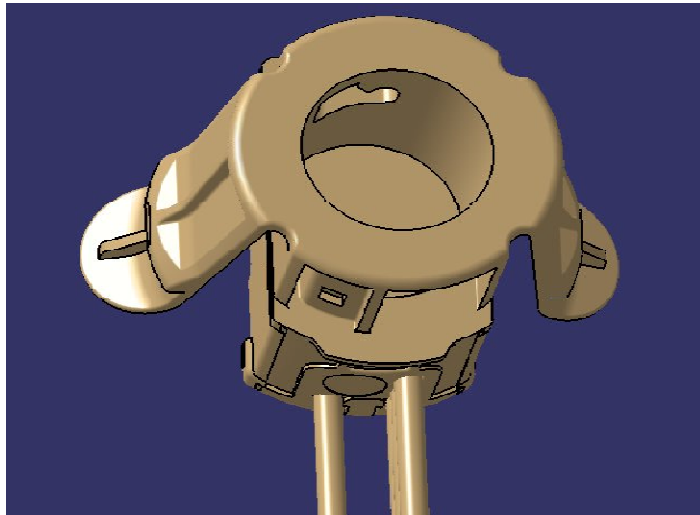


P21-5W

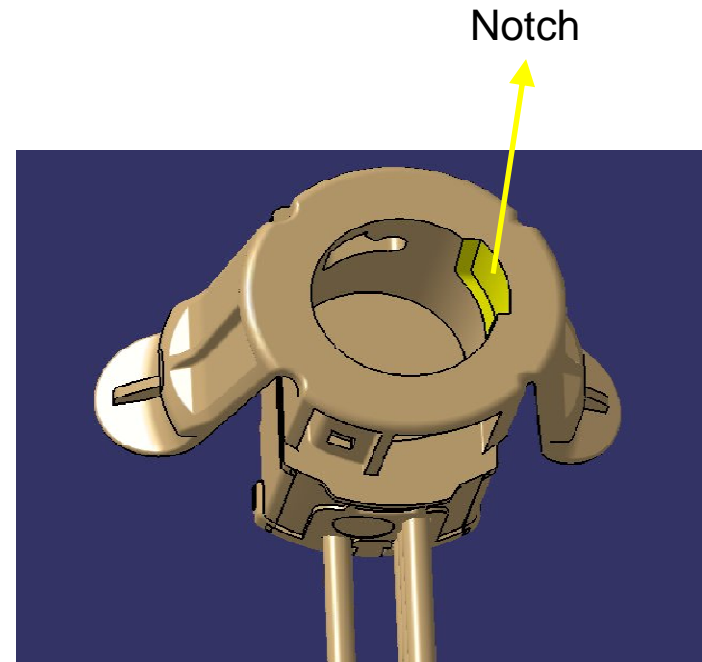


LED substitutes

Bulb holders

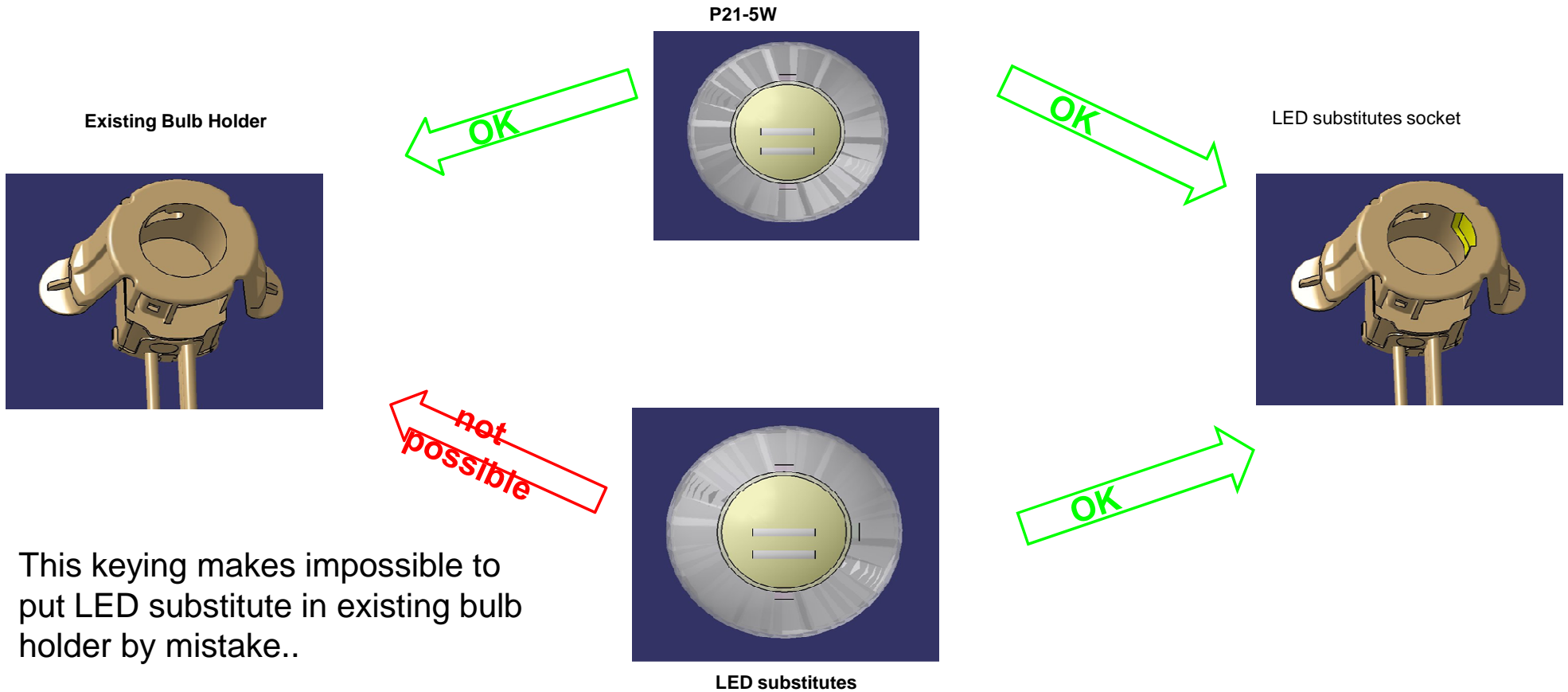


Existing Bulb Holder



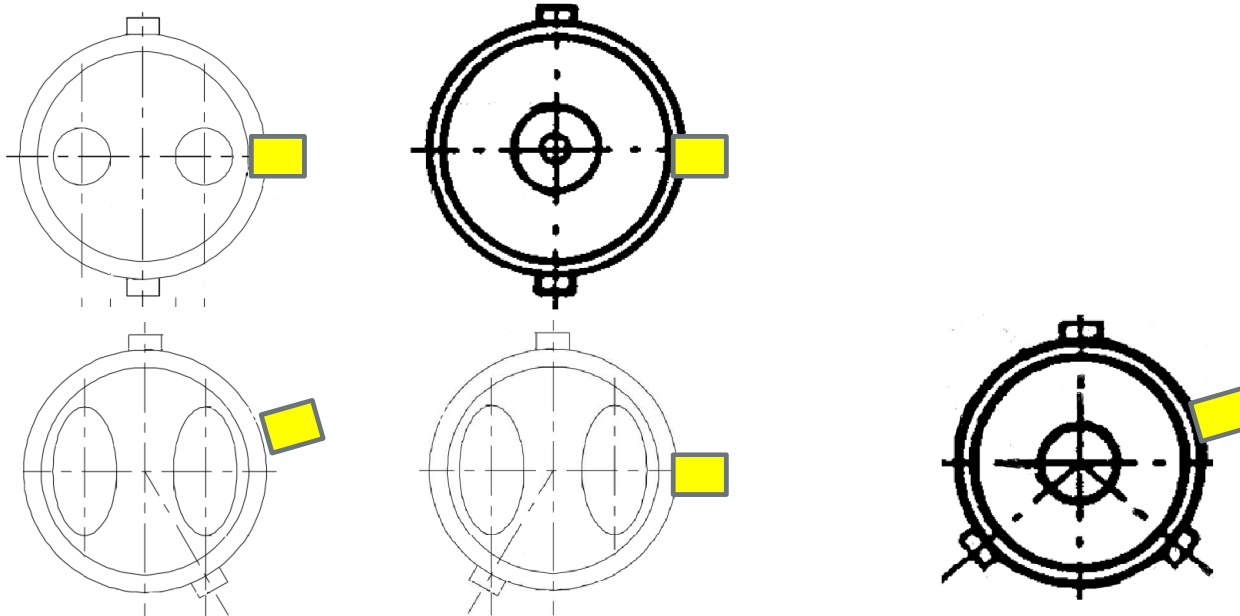
LED substitutes socket

MOUNTING OF P21/5W/LED IN THE BULB HOLDER. SOLUTION COMPATIBLE WITH THE REGULATION REQUIREMENT.



SYNTHESIS

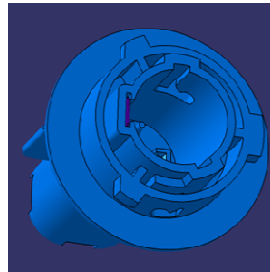
Extract from TFSR-01-09e page 10



The possibility to put the addition pin () in another plan than the one where the existing pins are located should be investigated (see page 17).

R37 and LED SUBSTITUTES in the Lamps each with its specific cap.

If the lamp is approved for filament (R37) use only :

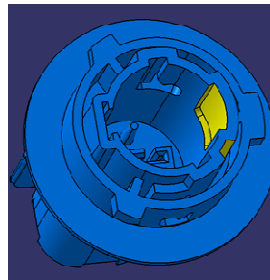


OK



Can not be put in
the lamp

If the lamp is approved for filament (R37) and LED substitute (R128):



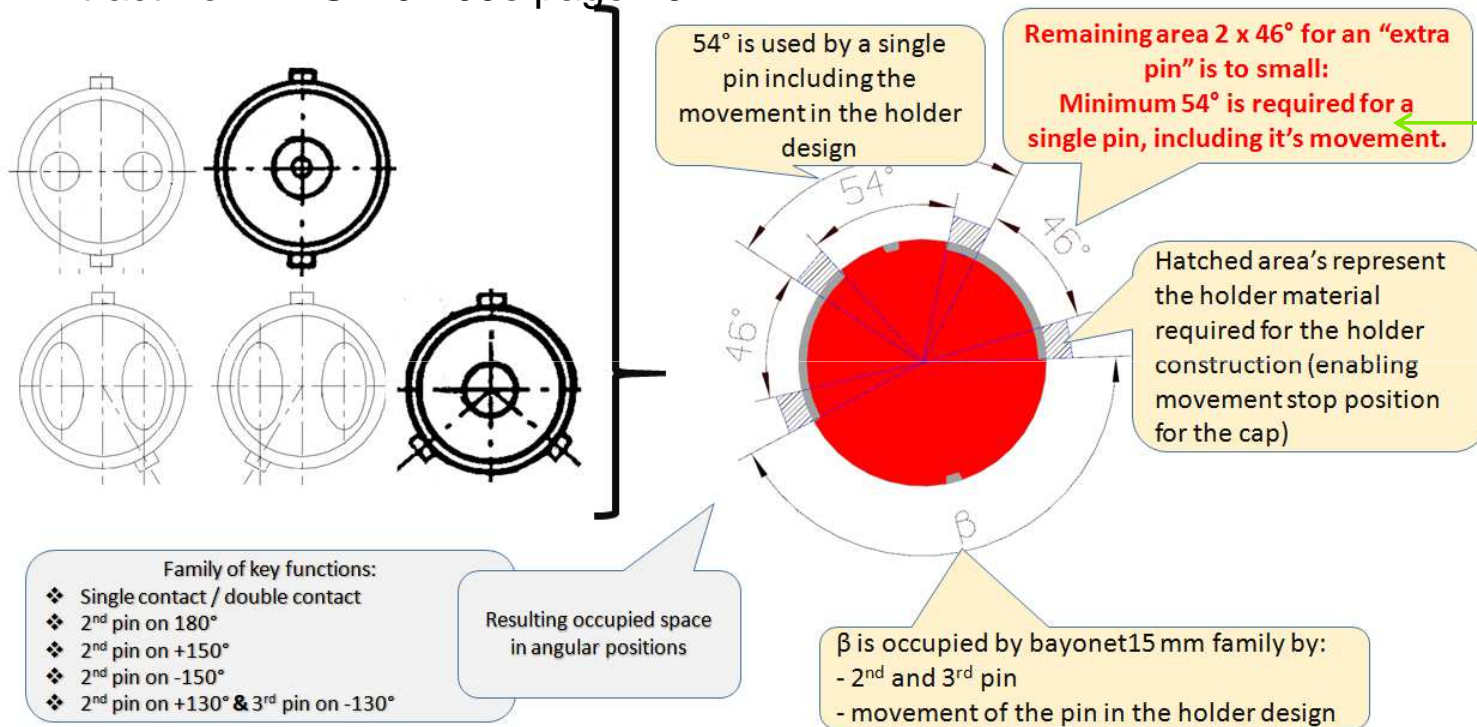
OK



OK

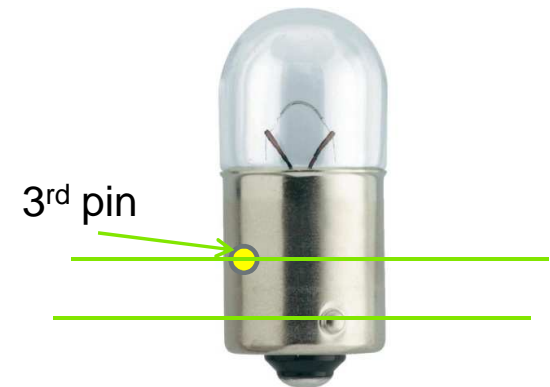
QUESTIONS.

Extract from TFSR-01-09e page 10



For which reason the 3rd pin for preventing incorrect assembly light source/ lamp must be only in these angular sectors?

If any problem remains, the additional pin can be in another plan that the initial ones.





SMART TECHNOLOGY
FOR SMARTER CARS