

**The 1970 Society of Automotive Engineering Standard:
SAE-J588e: Turn Signal Lamps**

Many people who have been driving the same automobile for years eventually experience a feature built into most cars and light trucks—this feature is called turn signal bulb-failure indication.

You have owned the same car for a while. You are going about your every day business, and one day while driving you turn your turn signals on... and now, *one side is not working right*. For most people, the turn signal flashes very fast on one side of the vehicle (say, for example, the right side of the vehicle). You then try the other turn signal (the left side), but it is working normally. Sooner or later, you begin to investigate... then you realize: *Your vehicle has a burned-out signal bulb*.

This 'fast-flash' failure indication is a built-in automotive subsystem that is present to keep you safe. In some cases, the 'fast-flash' is not present, but a 'no flash-always on' or a 'no illumination' situation is present. Change out the burned out turn signal bulb, and everything is back to normal.

SAE-J588e allows that if any signal bulbs are not readily visible to a moving vehicle's operator, ...'there shall be an illuminated indicator to give him a clear and unmistakable indication that the turn signal system is "on ". Except on vehicles or combinations of vehicles using variable load flashers* [heavy-duty trailer flashers], failure that of one or more turn signal lamps should be indicated by a "steady on," "steady off," or by a significant change in the flashing rate of the illumination indicator.' This standard, written into US Federal code, exists to help the regular automobile owner stay safe with respect to always knowing that their turn signals are actually working.

AllQuality's PlanetSafe DRL-2005 Universal DRL / Fog light products are designed with bulb-failure indication in mind. Actually, the AllQuality system allows bulb-failure indication to continuously monitor your vehicles new front DRL / old front and rear turn signal bulbs as before. The car continues to give the driver feedback when one of the front turn signal DRL bulbs burns out, as it would have before addition of this superior crash avoidance product. This non-interference feature that harnesses bulb failure indication for enhanced safety is exclusive to the ACAA DRL-2005 product line (U.S. Pat. No. 7019463 and other U.S. & International patents pending).

[*Trucks, buses, multi-passenger vehicles over 80 inches wide, trucks that tow trailers or other vehicles, and trucks that accept slide-in campers are exempt from SAE- J588e]

Copyright© 2003-2007 AllQuality Custom Auto Accessories - All rights reserved

**The DRL-2005 System Safety Failsafe:
AUTOMATIC SAFETY RECONNECT**

(U.S. Pat. No. 7019463 & other U.S. and International patents pending)

Common sense says that this device should never lose power and knock out such an important vehicular external lighting subsystem such as a vehicle's turn signals.

With proper DRL-2005 installation, this product possesses a built-in failsafe safety system known as Automatic Safety Reconnect (ASR) .



Cars and Trucks, Young and Old, can benefit from state-of-the-art 21st century crash avoidance technology by using the AllQuality PlanetSafe DRL-2005 Universal Turn Signal DRL product

AllQuality's PlanetSafe Turn Signal Bulb-Activated DRL-2005 systems satisfy all of the requirements for 49 CFR Ch 571.108 Lamps, Reflective Devices, and Associated Equipment. The ASR feature is a zero-system-energy state where all factory bulbs are connected to all factory wiring automatically and instantaneously any time the system has either a deliberate or accidental power loss, power off, a module 'blown' fuse event, or an ignition key switch-off event. A low voltage failsafe is also built in to protect turn signal functioning.

At AllQuality, We Don't Make Motor Vehicles...

We Make Motor Vehicles Safer!

For the rest of the story, visit us today:

www.BestDRLs.com

or, Call Us Today Toll-Free: 1-888-549-2153



**And Now for the Legalese...
Safety, the ACAA PlanetSafe DRL-2005,
and National Highway Traffic Safety
Administration Compliance for Turn
Signal Systems and Daytime Running
Light (DRL) Devices**



ALL ALLQUALITY MODULES / SYSTEMS COME WITH THE CERTIFICATE OF COMPLIANCE SHOWN BELOW, IN ACCORDANCE W/ TITLE 49, CHAPTER 301—US MOTOR VEHICLE SAFETY, SEC. 30115:

CERTIFICATE OF COMPLIANCE

This AllQuality Custom Auto Accessories PlanetSafe DRL-2005 Turn Signal Energized Daytime Running Light module, system, and/or product operationally complies with applicable Federal Motor Vehicle Safety Standards 49 CFR Ch 571.108-S5.5.11a and S5.5.11.5 for Turn Signal DRL systems, and does not interfere electrically with 1970 SAE Standard J588e Turn Signal Bulb-Failure Indication for U.S. and Canadian Automobiles and Light Trucks*. Proper Installation is required.

*Note that large commercial trucks/buses are exempt from SAE J588e. Dual-independent system grounding maximizes system safety—Just Do It!

Compare DRL laws with DRL-2005 device operation

(Compare column below ↓ versus column to right →, bullet point by bullet point)

1993 Federal Law allows turn signal bulbs to be used as Daytime Running Lights (DRLs) via FMVSS-108 v.10-S5.5.11—1 thru 5; but there are some conditions:

- ...they (the turn signal bulbs) “may be wired to be automatically activated... in a steady burning state as daytime running lights (DRLs)...
- ...and (are) to be automatically deactivated when the headlamp control is in any “on” position... (S5.5.11-a), and ;
- ...when, “if optically combined with a turn signal lamp, (the bulb) is automatically deactivated as a DRL when the turn signal lamp or hazard warning lamp is activated; ... and automatically reactivated as a DRL when the turn signal lamp or hazard warning lamp is deactivated.” (S5.5.11-5); also:
- ...“each vehicle equipped with a turn signal operating unit shall also have an illuminated pilot (dashboard) indicator... Failure of one or more turn signal lamps shall be indicated...” via bulb out indication and operator pilot indicator warning in accordance with SAE Standard J588e, *Turn Signal Lamps, 9/1970*; exceptions being when heavy duty flashers are used on trucks, buses, semi-tractor trailers, vehicles equipped to tow other vehicles or trailers, etc., then no bulb out indication is necessary. (S5.5.6 & SAE J588e)

The PlanetSafe DRL-2005 Vehicle Light Control System is designed to comply with all DRL / turn signal / hazard warning lighting laws when configured as a Daytime Running Light (DRL) device:

- The front turn signal bulbs on the target vehicle are wired to be automatically activated in a steady burning state as daytime running lights (DRLs) when the vehicle cranks and is running via a single power source, typically the turn signal fuse in the fuse box.
- The new high intensity turn signal bulb activated DRLs are automatically deactivated when the headlamp control is turned to either the parking light or headlight position;
- When a directional lamp/turn signal is activated, the original front turn signal bulb now utilized as a DRL bulb is subsequently deactivated...and directional lamp pulsed signal is instantly and automatically reconnected back to it's original directional lamp bulb, hence the turn signal(s) function as they always have. This happens 'in stereo' when the hazard warning lamps are activated (two pulsed signals independently and simultaneously reconnected back to two directional lamp bulbs)... When the directional lamp and/or hazard warning pulsed signal turns off, the front turn signal bulb(s) are no longer needed for pulsed signaling, and these front turn signal bulb(s) are automatically reactivated as constant burning DRLs; also note that front turn signals are required by law to be amber in color, hence these lights have a yellow output.
- This device works with any onboard bulb-out indication flasher that may be present. As an added bonus, now any bulb-out or burn-out event for the 'new' DRL bulbs, as well as the old turn signal bulbs, (since they are one in the same) is detected and indication of this is fed back to the vehicle operator via the illuminated dashboard indicator, as federal law requires (buses are exempt from bulb out indication requirements, but may still have this feature built-in.)

News Flash: 14 major manufacturers with over 45 models already employ amber collision avoidance safety as OEM systems added at the factory:

Now, you can enjoy the same safety for under \$140 per vehicle...



- 2005 Saab 97X® SUV
- 2005 Chevy Cobalt®
- 2006 Pontiac Solstice®
- 2006 Chevy HHR®
- 1997-2005 Freightliner® C-120
- 2003-05 Lexus® GX-470
- 2003-05 Cadillac® SRX
- 2005 Chevy® Corvette®
- 2003-05 Toyota® 4Runner (Amber DRL's Optional)
- 2004-05 GMC® Canyon Pickup Truck
- 2004-05 Chevy Colorado®
- 2004-05 Peterbilt® 387
- 2005 Cadillac STS®
- 2005 Buick Terraza® MiniVan
- 1997-2004 Oldsmobile Silhouette® MiniVan
- 2003-05 GMC Savana® Full-Size Van
- 2003-05 Chevy Express® Full-Size Van
- 1997-05 Pontiac Montana® /TransVan
- 1997-2005 Chevy Venture Minivan
- 2003-05 Volvo® Full Size Semi VNL-780®
- 2005 Peterbilt® Full Size Semi Tractor Trailer
- 2005-06 Chevy Uplander® Minivan
- 2003-05 Cadillac® CTS
- 2005 Chevy® Corvette®
- 2003-05 Toyota® 4Runner® (Amber DRLs Optional)
- 2004-05 Cadillac XLS®
- 2004 Pontiac Grand Prix®
- 2003-05 Saturn Ion Sedan
- 1997-04 Oldsmobile Alero
- 2003-05 Saturn Ion 3-door
- 1997-04 Chevy Corvette®
- 1997-04 Pontiac Firebird® /TransAm
- 1997-05 Chevy Camaro®
- 1997-04 Buick Regal®
- 2004-05 Chevy Malibu®
- 1997-04 Oldsmobile Intrigue®
- 2005 Thomas Bus SchoolBuses...and more

Turn Signal Bulb Energized Daytime Running Lights are the automotive safety trend of the future. Don't let your fleet or vehicle to be the last one in town to have one of these safety-increasing DRL systems installed in it!

**Daytime Running Lights (DRLs):
They're Not Just for Headlights Anymore...**