Automotive Brake Light Bulb Comparison

Looking for a brighter brake light bulb to avoid being rear ended by a "dimwit"? Here are a few to consider...

Bulb Number	Filament	Volts	Watts	Amps	Candlepower	Life Expectancy
1034	Low	14.0	8.26	0.59	3	5000
	High	12.8	23.04	1.80	32	200
1157	Low	14.0	8.26	0.59	3	5000
	High	12.8	26.88	2.10	32	1200
2057	Low	14.0	6.86	0.49	2	5000
	High	12.8	26.88	2.10	32	1200
2357	Low	14.0	8.26	0.59	3	5000
	High	12.8	28.54	2.23	40	400
2397	Low	14.0	6.72	0.48	2	5000
	High	12.8	28.54	2.23	40	400

All bulbs listed have the standard base.

The most common bulb used in automotive tail light and brake light applications is the 1157 bulb. With running lights on, the low filament emits 3 candlepower and when the brakes are applied or the turn signals are activated, the high filament emits 32 candlepower. This provides a good contrast between the amount of light emitted on the low and high filaments, an important consideration because the driver behind you has to be able to differentiate between the two levels of light. For most applications, this bulb is adequate and offers a good balance between light emitted and life expectancy.

In some applications, however, the light emitted by the 1157 can be difficult to see, normally due to the design of the tail light lens. On many Ford cars of the 1960s, for example, the backup light was mounted dead center in the middle of the tail light lens. Late sixties Thunderbirds had a decorative strip that housed the backup lights running through the center of the full-width lens, or in the case of the 1969 Thunderbird, a reflector mounted in the center of the lens. This meant that the bulb for the running and brake lights had to emit light around the backup light assembly. The bayonet design of the bulb, which emits light in a 360 degree range, along with the reflective contours of the tail light assembly itself, allowed the light to be evenly distributed around the backup light, which gave a pleasing effect. The light couldn't shine out directly through the lens, but instead had to be reflected out, which worked great most of the time, but not all the time.

Under certain conditions, such as with direct sunlight shining on the tail light lens, it can be difficult to see the brake lights on cars with this design. This is where the 2357 bulb becomes a consideration. It emits the same amount of light on the low filament, and provides 40 candlepower on the high filament instead of 32. This represents a 25% increase in light, which can make a difference. Voltage is the same between the two bulbs, as is amperage on the low filament. The high filament of the 2357 bulb is rated at 2.23 amps vs. 2.10 amps for the 1157, so there's not a big difference there.

Some cars, such as the Ford Thunderbird, Mercury Cougar, and Chrysler Imperial were equipped

with sequential rear turn signals. These systems flash the rear turn signal lights in sequence in the direction of an intended turn. They use either a relay or a special turn signal flasher that senses when all 4 lights are lit (3 rear signal lights plus the front turn indicator light), and when all are lit, it breaks the connection so the sequencing process can start again. To date, Automotive Mileposts has no reports of issues with sequential turn signal systems when 2357 bulbs are used, however we have had one turn signal switch failure on a 1969 Thunderbird equipped with 2357 bulbs. We're not sure if the switch was defective to start with or not, but will continue to monitor that car in the future.

A couple of other issues should be noted. The life expectancy of the 2357 bulb is shorter than that of the 1157. The low filaments have the same life expectancy rating at 5000 hours, but the high filament of the 2357 bulb is much shorter than that of the 1157, with the 2357 rated at 400 hours vs. 1200 hours for the 1157. This should not be a big issue, as brake lights and turn signals are not normally lit for long periods of time, such as when taking a long trip at night, when the low filaments could be lit for hours at a time.

We would also like to caution anyone contemplating use of the new H1157 bulbs, the halogen version of the standard 1157. These bulbs are much hotter than the OEM equipment, and can cause plastic tail light lenses to distort and/or discolor. This is especially true of cars driven in heavy traffic, where brake lights are lit for longer periods of time. Until halogen technology develops a cooler temperature bulb, these are not a good choice for most classic cars, despite the benefit of dramatically brighter brake lights and turn signals.

Another option are the LED bulbs. These use less power and emit a brighter light, but do not distribute that light throughout the tail light assembly. You get a direct, bright light that is concentrated in the line of sight of the LEDs, but the remainder of the tail light will be darker. This might be acceptable on some applications, but on the Fords and Thunderbirds mentioned earlier where design considerations block the light from directly shining through the lens, LEDs would be a very poor choice.

Related information: Check Your Brake Lights! is online at MILEPOSTS Garage - The Online Classic Car Magazine from Automotive Mileposts.

Bulbs
Original equipment bulbs on most pre-'72 cars was as follows:

1034: dual-filament park/turn and brake tail. Clear bulb for use with red rear or amber front lens.

1034A or 1034NA: dual-filament park/turn. Amber bulb for use with clear front lens.

In the early '70s, the 1034 was replaced by the 1157, the 1073/1141 by the 1156. These 1150-series bulbs put out the same amount of light, but draw slightly more current and last quite a bit longer. When changing from 1034s to 1157s, often it was (and is) necessary to replace the turn signal flasher, because the original would flash too fast if used with 1157s. Now it's difficult to find a flasher calibrated for 1034s.

So, what to use for upgrade bulbs? *Well first, here's what NOT to use: 2057s!* People sometimes assume that because it's a higher number, it's a brighter bulb. No. The difference between 1157 and 2057 is in the "minor" (dim parking or tail) filament. On the 2057, the dim filament produces 2 candlepower. On the 1157, the dim filament produces 3 candlepower. The difference doesn't sound like much, but it's very large as a percentage. Both 1157 and 2057 produce 32 candlepower from the bright (brake or turn) filament.

The best bulb you can use in place of 1157 is a 3496.

It draws the same amount of current as 1157, but is much more efficient. It produces 43 candlepower on the bright (brake or turn) filament, and 3.5 candlepower on the dim (tail or parking) filament. It also has a nickel-plated base that is much more corrosion resistant than the plain brass base of an 1157, so it's less likely to stick in the socket.

Interchangeable:

T5 74	2723, 118, 74, 2721, 73, 103, 70, 18, 37, 37LL, 2723LL, 74LL, 2721LL, 73LL 17, 18, 37, 79, 85, 86, 2721
T10 / 921 /194 / T15	T8, T12,T15, 194, 175, 168, #555, 2886X, 194R, 161B, 3652, 193, 658, 2827, 194NA, 161, 558, 168NA, 2825, 194G, 160, 168A, 192, 2821, 194B, 158, W5WB, 579, 168, 2825ST, 168ST, 3652LL, 579LL, 2825LL, 168NALL, 2825L, 2821LL, 168LL, 194ST, 161LL, 194NALL, 2827LL, 158LL, 194LL, 906NA, 917, 906, 916NA, 904NA, 922, 916, 904, 921, 912, 920, 921K, 916LL, 921LL, 912LL, 920LL, 917LL, 906LL, 916NALL, 904LL, 921ST
BA9S BAX9S	51, 1896, 586,1889, 64115, 1895, 6253, 182, 1445, 756, 17053, 64113, 3893, 1893, 363, 216, 1816, 64111, 3886X, 1892, 1815, 53X, 57, 1891, 53, 293, 1895A, 57LL, 53LL, 1445LL, 1895LL, 1893LL, 3893LL, 1891LL, 1816LL
1142 / BA15D	90, 1076, 1056, 1142, 68, 90LL,1004, 1004LL
1156 / BA15S	1141, 2396, 1156, 67, 87, 12088, 1156NA, 97NA, 1095, 93, 97A, 1295NA, 97, 3497, 1073, 1295, 1195, 1156A, 7506, 199, 631, 1156ST, 1073LL, 1156LL, 7506L, 3497LL, 7506ST, 1156ALL, 97LL, 7506LL, 93LL, 631LL, 1141LL, 5008, 5007, 1155, 89, 57X, 105, 1003, 98, 1003LL, 67LL, 89LL, 105LL, 5008LL, 5007LL, 1155LL
1156 / BAU15S	7507AST, 1056, 7507, 5009, 7507LL
1157 / BAY15D	1034, 1178A, 2057A, 2357NA, 2357A, 1157A, 7528, 2057, 1016, 2357, 1196, 1157, 1142, 94, 3496, 2397, 2357ALL, 2057ALL, 7528L, 1157ST, 3496LL, 1034LL, 2397LL, 1157LL, 2057ST, 2357LL, 1157ALL, 2057LL, 7528LL