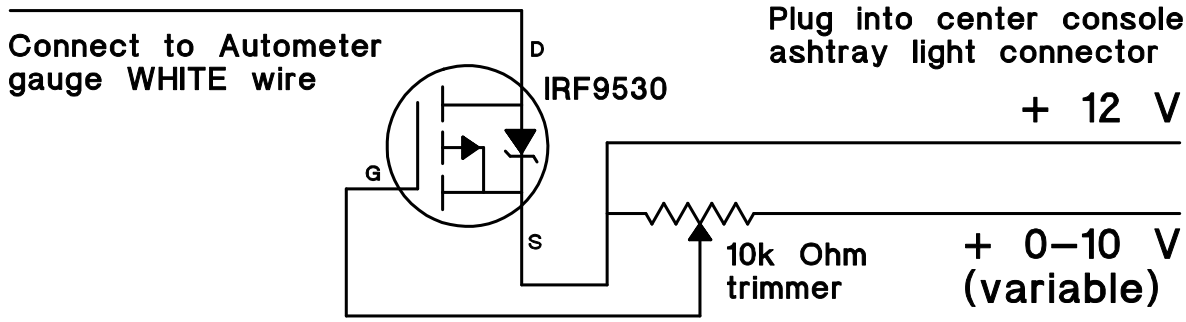


Notes:

1. The trimmer controls the switching point of the transistor. You need to adjust it until the light on the AM gauges matches your factory gauges. Other P-Channel power MOSFETs might work.
2. You may need to heat sink the IRF9530 depending on the load your AM gauges put on it. I have Sport Comp-II which use LED lighting and there is virtually no load so no heat sink required.
3. DANGER WILL ROBINSON!! All the leads of the IRF9530 and the heat sink tab on the chip itself are at POSITIVE voltages. It is IMPERATIVE that you heat shrink or tape everything so it cannot short out to ground. If you need to heat sink the chip, make sure that everything is insulated from contact with any metal parts on your chassis. If you allow anything to short, it WILL fry some of your wiring harness - THIS IS NOT GOOD!
4. After getting it working, run it at different illumination levels and make sure nothing is getting hot before buttoning up.

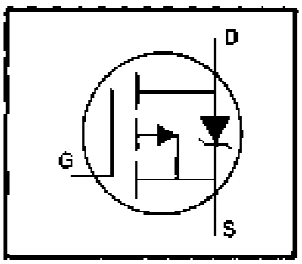
International
IOR Rectifier

PD-9.320G

IRF9530

HEXFET® Power MOSFET

- Dynamic dv/dt Rating
- Repetitive Avalanche Rated
- P-Channel
- 175°C Operating Temperature
- Fast Switching
- Ease of Paralleling
- Simple Drive Requirements



V_{DSS} = -100V

$R_{DS(on)}$ = 0.30Ω

I_D = -12A

Description

Third Generation HEXFETs from International Rectifier provide the designer with the best combination of fast switching, ruggedized device design, low on-resistance and cost-effectiveness.

The TO-220 package is universally preferred for all commercial-industrial applications at power dissipation levels to approximately 50 watts. The low thermal resistance and low package cost of the TO-220 contribute to its wide acceptance throughout the industry.