

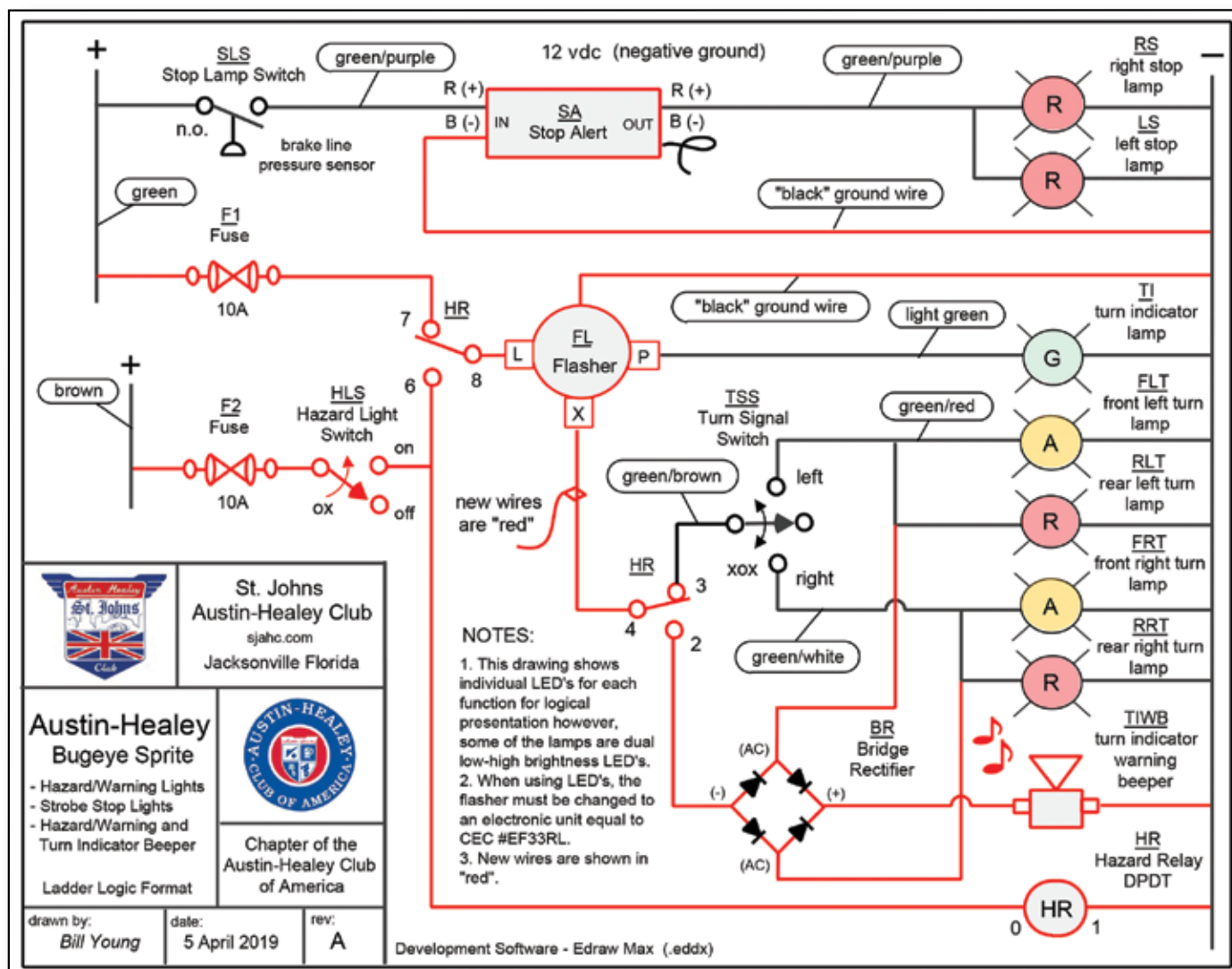
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TECHNICAL SERVICE BULLETIN

Hazard Flashers for your Bugeye

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Not as hard as it looks in this picture.

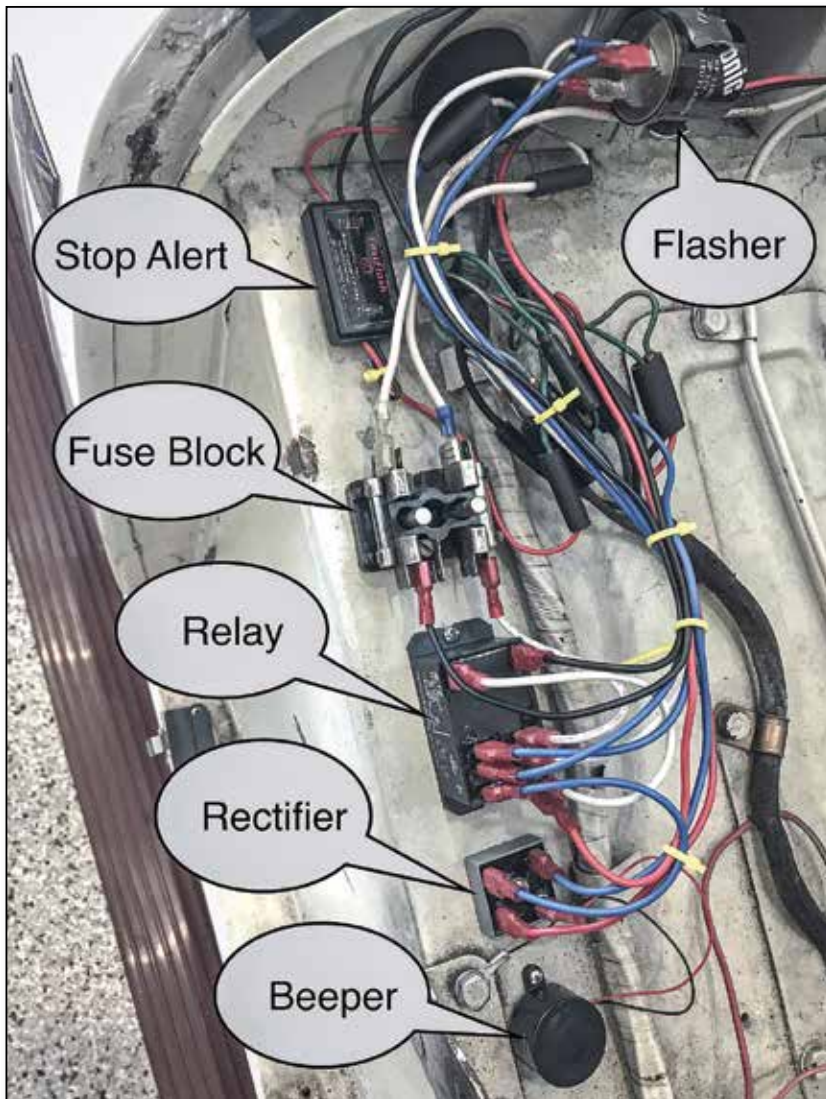
All modern cars have hazard/warning lights, typically a pair of intermittent flashing indicator lamps on the front and back of the vehicle that flash in unison to warn other drivers that the vehicle is a temporary obstruction. They are to warn other road users that you are a temporary hazard. For example, if you have broken down on the side of the road, or perhaps you are changing a tire or being towed, you should have and use hazard/warning lights. Seems to me that the Austin-Healey Bugeye Sprite is a prime candidate for these conditions.

In the previous HEALEY MARQUE I discussed the addition of LED lighting to the Bugeye Sprite. I recommended changing the flasher unit "FL" to the CEC EF33RL electronic unit and

all bulbs to LEDs for the lighting, and adding hazard/warning lights is the next logical step.

There are many ways to add a hazard/warning light operation to the Sprite. This design uses a switchover relay to reconnect and redirect the flasher unit output to the turn lamp assemblies. With this circuit, the hazard/warning lights work independently of the turn lights switch on the steering wheel, and will operate with the ignition key in the "off" position. The design illustrated on the drawing is for a negative ground installation.

Now would be a good time to fuse this circuit using a two-pole fuse block "F1,F2" (Moss #162-500) with 10 amp fuses



(AGC10). Hazard warning lights are added by installing a hazard light switch "HLS" (Moss #162-100), a double pole/double throw relay "HR" (Amazon P&B #T92S11D22-12), and a re-purposed bridge rectifier "BR" (Amazon #KBPC5010) to provide the electrical logic for the flasher circuits. The bridge rectifier is used to direct the 12 VDC to the lamps during hazard/warning operation, and to block the alternate lamps during normal turn signal operation. This bridge rectifier allows for the addition of a beeper. The beeper "TIWB" (Amazon #BZ11) can be installed to alert the driver that the turn signals or the hazard/

warning lights are on. The beeper is loud, so putting a small piece of tape on it lowers the sound.

Most of the installation and wiring can be done on the right side in front of the firewall where the wiring harness intersects with all the lamp wire plug connections. I have the benefit of having my bonnet hinged on the front to be able to easily access this available space. I had converted my Sprite to solenoid-operated electric start allowing me to install the hazard light switch in the hole originally used for the "pull to start" cable.

I found another interesting device, the Stop Alert FashFlash 24 "SA" (Amazon #XP-W24) providing a "strobe effect" for the stop lamps. This device will fast flash three times, slow flash three times, and then go steady every time the brakes are applied. Adding this feature to our cars will give us a bit more safety when driving in today's traffic.

Moss offers a great tool kit with bullet connectors and fittings (#161-751) used to install the new wiring connections for these modifications and additions. I highly recommend this bullet crimper, for it is much easier to use to install bullet connectors on the wires in place of soldering.

The upgrade to high intensity LED lighting and the addition of the four-way hazard/warning light operations will provide an additional degree of safety while motoring about in your Austin-Healey Sprite. **HM**



Hazard light switch installed in place of the original pull-to-start cable knob, to the right of the ammeter in this customized Bugeye.