My Modifications

All are done on a positive ground BN6. Adjust as necessary for other models.

- Fused Fuel Pump
- Installation of a Fuel Pump Inertia Switch
- Third Brake Light.
- Conversion of rear reflectors to brake lights
- Installation of a Mechanical Brake Switch
- Installation of a 6-gang Fuse block
- **Pertronix Ignition Installation** (Link Click on it)
- Installation of Tow Eyes and Tie Down Hooks
- Installation of a PCV Valve
- Installation of Brake and Clutch Pedal Extensions
- Installation of an Oil Drip Box
- Installation of a coolant recovery system
- Installation of a Heater Cold Air Duct Fastener.

Correct as of December 9, 2011

All Parts are from suppliers found on [www.healey6.com](http://www.healey6.com) – Links page and/or at the end of this article
Fused Fuel Pump

Revisions to Wiring

Original Wiring

1. Remove the white wire at the fuel pump and clip off the circle fastener.
2. Install a male spade clip to the white wire removed from the fuel pump.
3. Remove the Boot Floor.
4. Run a Red wire through the wiring harness grommet on the left of the boot. Easiest is to push it through from the boot.
5. Attach a female spade clip to the white wire that was clipped from the pump and attach it to the Red wire using a male spade clip.
6. Clip the Red wire in the trunk area to the proper length and attach to the in-line fuse using the proper set of spade clips.
7. Attach the other end of the in-line fuse assembly to one lead of the Inertia Switch.
8. Install the body of the Inertia Switch to the bulkhead making sure that it is in a position that does not interfere with the closing of the boot deck moveable lid.
9. Attach a Red wire to the other lead of the Inertia Switch lead.
10. Run this line through the grommet as before, install a circle clip on the Red wire and install it on the proper lead of the fuel pump.
11. Dress all wires and plug components of the Inertia Switch together.
12. Note – the pump circuit grounds through the pump body to the frame.

Revised wiring including a 10 amp fuse and an inertia switch

- Fuse Block
- White Wire
- Fuel Pump
- Ground
- Fuse Box
- 10 Amp (in line)
- Inertia Switch
- Fuel Pump

- Original Wiring
- Revised wiring including a 10 amp fuse and an inertia switch
Fuel Pump Inertia Switch Installation

Photo of Inertia Switch Moss Part number 900-240
Brake Switch Circuit

Revisions to wiring are in Blue Boxes

10 amp Fuse (outside of new Fuse Block)

Existing Pressure Switch

Flasher Relay Terminal 5

Third Brake Light

10 Amp Fuse (In Line)

Mechanical Brake Switch

For my convenience, each lamp is grounded to a separate bolt on the cockpit surround instead of the wiring shown here.

Brake Light comes with Yellow wire for ground and Black for power.

New Black wires connected to ground

See wiring changes for fuse block

See narrative on next page for changes in dotted line boxes.
Third Brake Light 1A Auto Parts number 1ALTL00343

1. Route a Red wire from the Flasher Relay post #5 and run it along side of the Fresh Air Duct. Cable Tie down.
2. Route the wire through a fire wall grommet nearest to the left fender.
3. Snake the wire under the wiper motor and then down the inside the left kick wall panel.
4. Route the wire under the Furflex molding in the door surround and up to the rear of the drivers side door to the rear package shelf.
5. Connect an in-line fuse leaving enough slack to relocate the end of this assembly. Connect the Black wire from the Third Brake Light to the end of the Red Wire.
6. Connect a Black wire to the Yellow wire on the Third Brake Light and ground it by connecting it to a cockpit surround bolt.
7. Cable tie all lines and cover all connections with electrical tape.
Third Brake Light, Wiring reflectors and Mechanical Brake Switch (Continued)

For reflectors - Interlight Socket BA15D (2 Required) Bulb 20w 12V MR11 BA15D:

1. Remove the reflectors and drill out the rubber backing by one inch. Trial fit and drill more as required.
2. Fit the light assembly (adjusting the rubber cutout as required careful to not cut through the flange)
3. Assemble the reflector elements and install on the car.
4. Run a ground wire on each side through the channel to the spare tire shelf.
5. Attach a ground wire to the cockpit surround bolt – each to its own side.
6. Run a hot lead from each reflector through the channels and join with the Third Brake Light wire and then to the in-line fuse.

Note – The wiring for the Third Brake Light and the Blinking Stop Switch is for a positive ground car. The Third Brake Light Strip is polarity sensitive.

For a negative ground car, the Black wire on the Light strip goes to ground and the Yellow wire on the Light strip goes to power.
The reflector lights are not polarity sensitive unless LED’s are used.
Parts used for Brake Light Conversion

Bulb 20w 12V MR11 BA15D

Interlight Socket BA15D

Third Brake Light 1A Auto Parts number 1ALTL00343
Mechanical Brake Switch
Watson’s Street Works Switch #L08

Installation Notes:
1. Use a 1 ½ inch “L” bracket available at Home Depot to attach the Mechanical Brake Switch with the following modifications.
   A. The holes on one leg must be widened or elongated to match the holes in the switch bracket.
   B. Paint the bracket body color if you desire.

2. Drill a pilot hole on the frame of the Fresh Air Ventilator Door to accommodate a ¾” long ¼” diameter self-tapping bolt head screw.

3. Adjust the swing arm of the switch so that it is fully up when installed. (When the brake pedal is depressed, the arm will fall because of an internal spring thereby closing the electrical circuit illuminating the brake lights.)

Wiring:
1. Run a Red wire from the switch through a firewall grommet as in the installation of the Third Brake Light and connect it to the fused side of terminal 2 on the new fuse block (see that drawing)

2. Run a Black wire from the switch through the same grommet to Terminal 5 of the Flasher Relay as in the installation of the Third Brake Light.

See photos on the following slides which are in installation order.
Watson’s Street Works
Mechanical Brake Light Switch #L08
“L” Bracket as purchased

Assembly installed on Ventilator Door Surround. You should be sure to open the door as you install this or it may prevent the door from opening.
Close up of the relay box showing the **Red** wire from the Third Brake Light and the **Black** wire from the Mechanical Brake Light Switch attached to Terminal 5. I used Ring clips for security. Colors vary to indicate the circuit.
New Fuse Block

Wiring as shown on following slides.
Use your own imagination for your car.

• **Brown** horn wires wired as in the original fuse block except that a 25 amp American fuse is used instead of a 50 amp British fuse.

• **White** OD wire located and wired on the fuse side of the block.

• Other two **White** wires located and wired on the common side of the block.
  
  • It is not necessary to fuse the fuel pump at this location as it is fused in the boot (see that slide)

• **Green** wires from the original bunch are wired to separate fuses and located by trial and error and/or a continuity tester.
New fuse Block Wiring

Brown Horn In

Brown/Green Horn Out

Fuelpump (fused separately)

Feed from Ignition

Brass Common Strip

1 - 25 Amp

2 - 10 Amp

3 - 10 Amp

4 - 10 Amp

5 - 10 Amp

6 - 10 Amp

7 - 20 Amp

Fuel Gauge/Heater

Flasher Can

Mechanical Brake Switch

Pressure Brake Switch

Direction Switch

Wiper Motor

White to OD Switch
The mounting holes on this fuse block fit the existing firewall welded nuts.
Tow Eyes and Tie Down Hooks

Tow Eye (Left) and Tie Down Hook (Right)
Before Installation of Tow eyes

Note the welded nuts on the inner side of the frame member opposite of where the bumper bracket is bolted on.
After Installation of Tow Eyes

Note the two bolts

Washers not yet painted to better show the installation.
Before Installation of Tie Down Hooks

Arrow points to the Rear Spring Shackle Pin.

Remove the nut on the Rear Spring Shackle Pin.
After Installation of Tie Down Hook

Install the Tie Down Hook and replace the nut. The Tie Down Hook may need to be modified slightly to fit.
Installation of a PCV Valve on a BN-6

Refer to the Photo Array on the following pages

• Items required:
  • Purolator PV770 PCV Valve
  • Brass Tite 43075 Fuel Line Fitting
  • Assorted Hose Clamps as required
  • 3.8” ID fuel injection hose
• All items are available at local automotive stores.

1. Remove the brass plug near the rear of the intake manifold. This plug will be on the front intake manifold on a tri-carb.

2. Install the “Fuel Line Fitting” where the plug was.

3. Cut existing the breather hose approximate 4 inches from the breather “T” fitting, ream it as required to enable fitting the large end of the PCV Valve into it.

4. Attach the Fuel Injection Hose to the PCV Valve and the Fuel Line Fitting tightening clamps.
Parts Required
Existing Brass plug at the rear of the Intake Manifold

Remove and save the brass washers to use on refitting of the Fuel Line Fitting.
View showing PCV Valve inserted into the existing breather hose.

Undo the Breather Hose at the rear carb, cut to approximately 5 inches, ream as required and fit the PCV Valve into it.
Completed Installation

Front View of The Completed Installation

Side View of The Completed Installation

PCV Valve
Fuel line fitting
Installation of Brake and Clutch Extensions

Before Installation

Extenders as received from the Vendor. Additional hole sets were drilled at \( \frac{1}{2} \)”, 1” and 1 \( \frac{1}{2} \)” for more adjustment possibilities. (Not shown)
Vendors instructions

Pedal instructions:

- Clutch
- Brake
- Gas
- Pedals

Note:
When you look from a side view of the pedals, they should all be at the same level & angle.
Extensions as painted

During Assembly

Final Installation
Oil Drip Pan

See related article at:

These are modifications to the dimensions shown in that article to fit my clutch bell housing. Your dimensions may vary. Measure on your car first.

45 degree angle each side

2 ¼ centered
Drip Box after folding, JB Weld application for seams and painting engine color.
Transmission oil drip pan as installed

Photo will appear here in due course
Installation of a Coolant Recovery System

I purchased a universal coolant recover system from the local auto parts store and followed the instructions on the box with the exception that I did not remove the existing overflow tube. It is still attached to the radiator and only disconnected from the radiator neck. This will allow me to return the system to an original status if I ever desire to do so.

The overflow tube is snaked behind the Heater Cold Air Duct and behind the support pillar and then to the reservoir.

The reservoir is mounted on the pedal box and the supplemental drain is snaked down past the starter motor and tied to the frame using cable ties. A photo of the installation is on the next page and shows the routing of the tube to the reservoir.
Installation of Cold Air Heater Duct Fastener

In order to keep the cold air duct secure I added a fresh air bulkhead flange Moss part Number 363-355 to the hole on the right side of the Cross Brace Upper Panel where the duct is normally loosely placed.
Parts Sources

6-gang Fuse Box Available from Charlie Hart at: hartcg@msn.com cost approximately $50.00. He has many more items. See http://www.healey6.com/Technical/Hart.pdf

Third Brake Light 1A Auto Parts number 1ALTL00343

http://www.1aauto.com/1A/TailLights/Chevrolet/BlazerFullSize/1ALTL00343/660794

Blinking Stop Switch KAHTEC Smart Stop 301-2003-11 (Delay)

http://www.kahtec.com/

Reflector illuminating assembly Interlight Socket BA15D (2 Required) Bulb 20w 12V MR11 BA15D

http://www.interlight.biz/

Fuel Pump Inertia Switch, Part Number 900-240 Moss Motors www.mossmotors.com

Mechanical Brake Switch Watsons Street Works

http://www.watsons-streetworks.com/the-best-brake-switch?filter_name=i08

Tie Down Hooks and Tow Eyes from Bill Bolton TRICARB@aol.com

Pertronix Ignition sets are available from many sources. Be sure to note Polarity and Distributor that is in your car.

PCV Valve parts available at local Automotive Stores
Brake and Pedal Extenders are available from Tom's Import Toys. They sell many more items. [http://tomsimport.com/new/index.asp](http://tomsimport.com/new/index.asp)

Some parts are standard on the Moss Motors Web Site and catalog. These are appropriately annotated in the narratives.

Some vendors may question why you are ordering GM or hotrod parts for an Austin Healey just to make sure that a mistake has not been made. However, several now understand what we are doing. *Many of these parts are available from a number of other sources and can be found on eBay - often at lower prices than that quoted by the above vendors. Search eBay, eBay Motors and Google/Yahoo.*