

Technical Trivia

Transmission oil - Accepted general theory is to use a non-detergent oil to prevent foaming. Racers use it because your transmission contains brass synchro rings and the additives attack the brass. (HML)

Calipers - The reason not to take the caliper apart is that you won't be able to get it to seal properly when you put it back together. Lockheed used to make a thing called a brake survival kit. This "survival kit" contained the "o" rings (They had a square cross-section, not round) and re-placement bolts. The bolts were the key parts, as they have to stretch the proper amount and were never to be re-used as they are torqued to 450lbs. (HML)

Windshield installation -Use/4 bolts (Instead of 5/16)to mount the side windshield posts and will allow for a little more adjustment (HML)

Jim French asked Inan of Healey Surgeons **what spares to carry**, her response: Fuel pumps are \$125. Do you have the original one on there or has someone replaced that with an aftermarket US pump in which case, a lot of the plumbing might have been modified, so my SU pump will no longer fit. Normally, you can get where you want to go by hammering on the baulk head to loosen the points of the pump. At this point, it isn't safe to order fuel pumps. There is a manufacturing problem that need to be solved. If you want to carry a spare, let me know and I'll tell you when it is ok to buy them again. As for what to carry...points, condenser, lower radiator hose, front wheel bearing and of course, my business card. (HML) I always carry their catalog. When I see a part for sale and wonder if it is a good deal I have a ready reference for the price, JW

Headlights lose effectiveness over time. Mine were almost twenty years old. I recently changed the sealed beams in the BJ8 to a sealed beam Halogen made by Sylvania. Halogen provides 50% more light versus a new incandescent
Cost was \$9.99 each at Pep Boys. Dramatic difference! (JW)

Brake Light Switch - replacing the brake light switch on a Healey involves removing the switch located in the brake line which is brake fluid pressure operated. I have swapped them real fast with no need to bleed the brakes. Two tips proposed this month include covering the master cylinder reservoir with plastic and having an assistant ever so gently depress the brake pedal while swapping switches to prevent air from entering the system. (Healey Surgeons)

100-M Carbs. Doug Conway Jr. reports that they recently changed the engine on his fathers 100 over to 100-M specs with a dramatic change in power. With 100-M carbs approaching \$1000 a set the Conway's found a better alternative. The 100-M uses the same SU as found on the TR3 and they located a set of TR3 carbs and had Joe Curto rebuild them to 100-M specs. (Doug Conway Jr.)

Two tricks for **feeding the wires through your stator tube**: first, before pulling the wires out, tie a heavy string or light wire to them, so that when you're ready you can pull the new wires back down the column. Second, when you're ready to pull the new wires down the column, place the four bullet leads in a row and tape them so that they can slide down the column easily. HML

The **wire from the distributor to the coil** needs to be connected to the negative or positive coil connection depending on the grounding method, i.e., a negative ground car should have distributor wire to negative coil terminal. If the wires are reversed the car will run but will experience high speed break up and premature point erosion. MGL

The BJ8 Driver's Handbook specs the max **towing capacity** at 1680 LBS or 762 Kg. HML

The earliest **brake fluids** were made from castor oil mixed with alcohol and were compatible with 'natural' rubber used for hydraulic seals - The Castrol brand name was derived from the use of castor oil.. Spridget Mailing list

Checking Gas Gauge sending unit with a OHM Meter - Connect one lead of the multi-meter to the chassis and the other to the sending unit with the gas gauge wire connected and the ignition off. Should be somewhere between 0 ohms (empty) and 70 ohms (full) depending on fuel level. 3 gallons should be around 20 ohms. Connect a grounding wire from the chassis to the gas tank edge. One of the little screws holding the sending unit is a good connection point. If the sender unit is out, don't connect it to anything, test it by itself. Put one lead of the ohm meter on the connection tab and the other lead on the housing of the sender unit. When you move the float arm through full motion range the resistance should go from 70 ohms (full up) to 0 ohms full down). And while you're at it, check that the float actually floats. MGL

Disk Brakes- When replacing disk brakes I always use a product , Permatex Anti-squeal. Available at any automotive store it sells for \$2.49. Apply to the back of the pads and the back of the anti squeal shims. It's the blue stuff that is supplied in many replacement brake pad kits for American cars. Basically an adhesive, it sticks the pad to the caliber piston and keeps the pad from chattering, a major cause of brake noise. Jim Werner

One of the things I saw at Conclave was placing an aftermarket **fuel pump in line** after the SU pump as an auxiliary. Doug Conway Sr. tried it on his 100 and reports it works fine. The aftermarket pumps (\$27) offer a good backup in case of fuel pump failure.

Scott Brown had one and when his SU became clogged he just removed it and ran the auxiliary pump. I run two on the BN4 and never had any problems. JW

Oil Pressure Lines. A recent thread on the internet recommended carrying one as a necessary spare. Never heard of one breaking before but it sounded like a good idea so I threw one in the spares kit. Sure enough it happened to Bill Fryrear. Luckily Bill Richey was behind him and offered his off his trailered Concours car. Remember the oil pressure and fuel lines are just rubber lines that deteriorate with age. The braided line just offers abrasion resistance and they don't last forever. In Bill's case the line was only four years old. On my BJ8 I installed an in line gas filter on a set of four year old Petroflex fuel lines and the lines crumbled when I cut them. The BJ8 now sports regular fuel lines in rubber, not as pretty, but they will be changed at tune up time on a regular basis. JW

The Internet thread on **spares to carry** included a set of generator brushes and a front outer wheel bearing. Sure enough Harry could have used the generator brushes and we have seen cases of wheel bearing failure before so I'll be adding those to my spares kit.

Mike Schneider insulated the **air tube from his fresh air intake** and reported a significant heat reduction in the cockpit by removing the transference of heat generated by the engine compartment. Mike Schneider

Be a passenger in your own car. I came up with a lot of good ideas for heat reduction and cockpit cooling just by riding as a passenger in my own car for the first time. First time I saw the car from the other side of the cockpit. JW

When traveling in a group, limit the CB channels to 1 thru 5. That way you can signal another car using just one hand and if anyone does miss the call to switch you can find the new channel from one of four choices. Mike Schneider

"After the recent discussions about **jumping fuel gauges needles**, it got me thinking, particularly the point about a bad earth I looked at all the possible earth connections, glued in screws (sender to tank), tank straps with rubber strips underneath and the other was the fuel take off and line, neither of these providing a strong earth connection. I have to report that after making up an black earth cable and fitting it to the sender unit base all is ok. At least I get a much less flickering needle and one that moves more progressively when detecting differences. The difference was amazing. (MGL)

Have you ever seen the **mirrors that fit in the side curtain sockets** on a roadster? This type of mirror can be obtained from a Harley Davison Dealer. I got the wide angle mirrors. They are available in both left and right side with long or short arms. I got the short arms. They work great and cost about \$30 each. HML

Marion Brantly showed us a neat way of **carrying spare parts** at Conclave. Marion uses a Tupperware pie container to carry spare parts. Located under the spare tire it fits

neatly inside the tire and is painted flat black to blend in with the boot. Bill Fryrear added that he folds a piece of plastic under the tire. When it comes time to change a tire he can kneel on it and stay clean.

On the **support bracket for the bonnet lock** mechanism (BJ8) there are stamped numbers, what do they mean? We researched this question when writing our restoration book and documented the info there. As nearly as we have been able to determine, this number was stamped on the panels that were removed during assembly in order to get them back on the right car. If your hood and trunk lid are original, they should both have the same number stamped on them, and it should match the number stamped on the lock release support shelf. On the 3000s, they don't match any other number on the car (in contrast to the 100s, at least up through the first series BN4s, where numbers stamped in these locations matched the body number.) HML

Mechanical Tach leaking oil? There is a small oil seal in the tacho drive on the engine block. It will have worn and the inner tacho cable will "worm" the oil up the inner cable.

Turn signal flashing too fast? Bill Wilding has this problem so we asked the internet group for a response. — The flasher unit's rate is determined by current flow. The More current drawn the slower it flashes. If it is flashing too fast this is an indication you have a burned out bulb (Front, rear or dash indicator) or one of these bulbs is the wrong type (e.g., Lower wattage than normal).

You do not have a short in the circuit as this would cause the flasher to go too slow. On the other hand this could be caused by a high resistance connector at the lamp housing or any of the bullet connectors in the wiring to the turn signal lamps. (HML)

One of the frustrations with driving a BJ8 occurs with the top down. The **dash mounted rear view mirror** often reflects the hood cover and not the road behind. First be sure the mirror is correctly positioned. The mirror stem contacts the mirror below center on a BJ8 and can be 180 degrees out resulting in a lower mirror. I recently recovered my dash pad and made two modifications. I traced the base of the mirror onto 1/4" wood and cut two shims equal to the base of the mirror. One I glued under the dash pad where it contacts the car. The other was glued between the top of the dash pad frame (removing the foam) and the mirror. The result is the mirror now sits 1/2 higher. (JW)

Added fuse protection--Several circuits in the Healey are not fused. In case of rear end collision a electrical meltdown could erupt. Also the rear harness tends to abrade as it passes over the rear axle. Here are two tips off the Internet: I was also advised by several to add fusing to the rear running lights as they are not fused. In checking the wiring diagram I found that the front running are not fused either. I decided therefore to fuse the #41 red wire coming off the S1 terminal of the light switch. This line feeds the front, rear and panel lights. Use a 9 amp fuse. Also the rear license lamp is not fused. At the end of BJ8 production an in line fuse was placed in the boot for protection. (HML)