Austin-Healey

Slo-Mo-Shun

With

Weber Induction

1967
3000 MKIII BJ8

Produced by Mick Nordquist*
Knoxville, Tennessee

Body & Paint: R-Good's Auto Works, Brad Aregood
Engine: Sports Car Craftsman, Paul Dierschow
Electronics and Wiring: TBI Connection, Ric Navarro
Interior Upholstery: Auto Weave, Ron Nelson

Other Significant Contributors:
Ted Ax, Sports Car Craftsman (engine rebuild)
Travis Kling, R-Good's (fabrication work)
Chris Mack, Max-Innovation (exhaust pipes, aluminum dash, access panel, headers, and collectors and X pipe welding)
Jim Skinner, Auto Weave (upholstery work)
Dennis York, R-Good's (fabrication and body work)

Modifications Inspired By: Steve Thomton http://stevesaustinhealey.com

1967 Austin Healey 3000 MkIII BJ8, with Modifications & Personalizations

Name of the Car: Slo-mo-shun

In the early 1950's Seattle was a small, quiet town, albeit a very beautiful one. It would be 10 years before the World's Fair brought national attention to Seattle in 1962 and the iconic Space Needle became the symbol of a dynamic and growing city. It would be several decades later that the Mariners and Seahawks would capture the hearts of nearly everyone who lived there. But when I was a young boy in the early 1950's, Seattle was the "boating capital of the world" and every August the Gold Cup race for unlimited hydroplanes took place on Lake Washington. Unlimited hydroplanes were the fastest competition boats on water at that time and are still very fast today, reaching speeds in excess of 200 miles per hour.

Up until 1950, Detroit dominated the Gold Cup race. That summer, an unlimited hydroplane with a radical new, 3-point design (it rode above the water on two sponsons and the propeller, see photo) entered the Gold Cup. She was based at the Seattle Yacht Club and had the unlikely name of *Slo-mo-shun IV. "Slo-mo"* won all three 30-mile heats on the Detroit River. In those days the Gold Cup race site was determined by the yacht club of the winning boat rather than by the present method of the city with the highest financial bid. Not once in the 46-year history of the event had the Gold Cup winner hailed from any other locale farther west than Minneapolis. The Cup remained in Seattle as *Slo-mo-shun IV* and her sister, *Slo-mo-shun V,* won every race for the next 4 years. Unfortunately, both the IV and V were severely damaged in horrific accidents in 1956; they never raced again, but other Seattle-based hydroplanes (Hawaii Kai III, Miss Bardahl,

Miss Thriftway) defended the cup successfully. Eventually, the IV and V were restored by volunteers at the Hydroplane and Race Museum in Kent, Washington. *Slo-mo-shun V* resides there today; *Slo-mo-shun IV* can be seen at the Seattle Museum of History and Industry.

Our family home was on Lake Washington and as a young boy I saw all of the gold cup races in the 1950's, either live or on TV. At the age of 10 (in 1952) I saw *Slo-mo-shun IV* attempt to set a new water speed record. The course was laid out just down the lake from our home and my father and I found a place on the shore where we could watch the *IV* (below) go down and back the one-mile course. The sound of her Rolls Royce Merlin engine, all 12 pistons revving to their limit, sent chills down my back as *Slo-mo-shun IV* set a new record of 178.497 miles per hour!

It is hard to describe the anticipation and excitement during that time when the unlimited hydroplanes came to Seattle with the hope of winning the Gold Cup race. Every first week in August the sounds of Allison and Rolls Royce Merlin engines (do you know what the word "Merlin" means? **) echoed over the 3-mile oval course. My friends and I always had passes that let us into the pits so we could watch the crews work on the very same engines that propelled the iconic WWII Spitfire airplanes during the Battle of Britain. What a special time!
Slo-mo-shun IV
Even to this day I can still recall the sights, smells, and sounds of the Gold Cup Race.

Slo-mo-shun IV was responsible for bringing unlimited hydroplane racing to Seattle and *Slo-mo-shun V* helped to insure the Cup remained in Seattle. The IV is affectionately known now as "The Grand Old Lady" and because of the wonderful memories I have of her and her sister competing in and winning the Gold Cup 5 times, I decided to honor both of them in my small way by naming my Austin Healey *Slo-mo-shun.*
Slo-mo-shun V

Acknowledgements:

Before I describe the modifications and personalizations to the car, I want to acknowledge some of the individuals who contributed time and advice over the course of the 6-year restoration period. The restoration could not have been done without their help. First and foremost, I owe a

great deal to **Steve Thomton**. I first met Steve when I purchased a set of triple Weber carburetors from him about 12 years ago. He was in the process of restoring his BJ7 as a tribute to Pat Moss, the sister of Sir Stirling Moss. Pat Moss was an outstanding driver of the Big Healeys and won a number of prestigious rallys in the 1960's. Steve's car was restored so the exterior looked exactly like Pat Moss' rally car, but he also included a number of modifications to the engine (including EFI), drive train, suspension and interior that upgraded the car to current performance standards. You can go to Steve's website at **http://stevesaustinhealey.com** and find a detailed description of the restoration process

I also owe a great deal to **Linwood Rose**. I met Lin through Steve and corresponded with him continuously over the course of the restoration period. The amount of knowledge that he has about classic sports cars and Austin Healeys in particular is amazing. He is one of those very bright guys who engage in a great deal of research before undertaking a restoration project. He has several websites that document his work on a number of classic cars, but I was interested most in his site that describes the restoration of his 1960 Austin Healey 3000 MKI BT7, "The Bloody Beast". I strongly urge those of you who are considering a restoration or are involved in one now to check out Lin's website at **http://valvechatter.us/?cat=3**

Ric Navarro was responsible for wiring my car. He did all of the electronic work on Steve's car and also helped Steve convert his engine to EFI. Ric is truly a genius when it comes to electronic applications. He spent hundreds of hours working on my car and was always available to answer questions and offer his advice when I needed it. He is such a humble and sweet individual, very soft spoken, and scary smart! There is no way my car could have been restored to such a high level of modern electronic standards without Ric's expertise. He can be reached at **ric@homeelectronicsprofessionals.com.**

Ted Ax works at Sports Car Craftsman in Arvada, a suburb of Denver. He was responsible for rebuilding the Healey's high performance engine. He did a superb job, but just as important, he too was available to correspond with me when I had questions about the engine. I met Ted when I first traveled to Denver to observe the initial startup of the engine. The test was a total success, but more important to me were Ted's obvious high standards that guided his work and his wonderful sense of humor. I subsequently included him on every visit I made to Denver and consider him a real friend as well as an invaluable source of information, just like Steve, Lin, and Ric. I continue to correspond with him. He can be reached at **ted.ax@comcast.net**

I also want to acknowledge the wonderful body, paint and fabrication work of **Brad Aregood** and his crew at R-Good's Auto Works **info@r-goods.com** as well as **Jim Skinner** at Auto Weave Upholstery **http://autoweaveupholstery.com** who did an incredible job on the interior of the car (as many of the photos attest!). I was so fortunate to have these very talented guys work on the Healey. I would not hesitate to recommend either one of them to anyone who is considering a serious restoration of a classic car. I am so glad that I drove 1300 miles (one way, four times!) so I could put my car in the hands of these superb craftsmen.

Finally, many thanks to our son, **Peter Nordquist**, for all of his enthusiasm, creative ideas and the help he provided to bring *Slo-mo-shun* home in December, 2013. We drove straight through for 22 hours and I can tell you that the middle of Kansas is one cold place at 2:00 in the morning!

Modifications and Personalizations:

My car originally was shipped to Hawaii in 1967 and then brought by the owner to Seattle in the early 1970s. My father purchased the car from him in the mid-70s and gave it to me in 1984. Its original color was Healey Blue but my father had it painted red. I put it in storage for 25 years and eventually decided that I wanted to convert it to a works rally car and restore it from the ground up. All of the body, fabrication and paint work was done by Brad Aregood and the guys at R-Good's Auto Works in Denver, Colorado. I also wanted to install a much more advanced wiring system than the original stock arrangement that was fraught with so many problems. I was very fortunate to have access to the considerable talents of Ric Navarro.

Other personal touches are included in the list below.

Body/Chassis:

1. Works rally side vents with chrome gills and stainless steel mesh inserts. The foot wells were modified to allow side vents to be installed without trimming.

2. Works rally/Sebring front air intake ducts with stainless steel mesh inserts and polished stainless steel trim.

3. Works rally carburetor access panel (see p.4).

4. Works rally two-tire aluminum boot lid (the stock lid also was restored).

5. Factory-style hardtop with rally vent, works cloisonné badges and four chrome quick- release latches to secure top to body. The Hardtop is from Nical Engineering Ltd

www.nicalengineering.co.uk

6. Works rally rear bumperettes (overriders) and NOS Lucas backup lights (see photo below).

7. 7" NOS Lucas spot lights with NOS "Made in England" stone guards, each mounted on chrome fabricated brackets (see p. 8).

8. NOS Shelby Cobra quick-fill fuel cap.

9. 3/8 inch wire mesh front grill with 3000 lightning bolt attached.

10. Twenty-six unused holes in the firewall were filled.

11. Center section over transmission tunnel was reinforced to prevent scuttle shake.

12. Gusseted motor mounts and rear shock mounts.

13. Channel in passenger side outrigger for fuel line.

14. Floor channel and false toe board on passenger side to hide wiring from electronic compartment to front of car (see photo on p. 9)..

15. Special license plate, SLOMOSN, was ordered when the car returned to Knoxville.

16. Gas strut is mounted in boot to hold the lid open. The idea for the modification originated with Alan Bromfield **bluehealey@gmail.com.** The installation was done by Steve Thomton with his own version of the gas shock that can be seen at Auto Gas Springs Stores **http://autogasspringsstore.com/**

Gas Shock Fabricated Fuel Tank

17. A custom fuel tank was fabricated by Rick's Hot Rod Shop in El Paso, TX **www.rickstanks.com**

Interior:

1. 100S after market rally seats from AH Spares **www.ahspares.co.uk**

2. Fabricated aluminum dash by Chris

Mack **www.max- innovation.com**

3. Jaguar E-Type gauges and switches are affixed to the wood dash and console. A custom chrome light bar in the center of the console illuminates the switches above & below it (see photo, p.7).

100S Seats

4. Original set of two Heuer stop watches on passenger side of the wooden dash.

5. Custom 16" steering wheel by Mike Lempert **www.pbase.com/mdlempert/wheels**

6. Center armrest storage compartment (see photo at right). Arm rest rises to reveal compartment.

7. Electrical compartment behind the seats houses all major electrical equipment (see p. 9).

8. Transmission tunnel sectioned 2" and slightly re-contoured to increase interior room.

9. Custom Autosound's Secretaudio radio (200watts) with iPod/USB interface and RF remote.

10. Alpine 200 watt amplifier (see photo of electronics compartment on p. 9. Amplifier is positioned at far right).

11. Custom rear view mirrors attached to front top edge of doors.

12. Speakers are 4 Infinity Kappa series 59.9i, 51/4 two-way 165 watts with two mounted in the kick panels and the other two in a custom leather-covered wooden box above and behind the electronics compartment (see center photo p. 6). Also, two Infinity Reference Series 693.9i, 6x9 speakers are mounted in the rear. All speakers are boxed and ported.

13. Radio display in custom drop down bracket under passenger-side dash below stop watches.

14. Vintage Air Gen II Mini. A/C controls with single vent on console (see photo below) and two

additional vents under dash on driver's and passenger's side of car. Sanden SD 508 compressor Vintage Air - Inventors of Performance Air Conditioning - **www.vintageair.com**

15. **Rostra-Universal-Electronic-Control-250-1223/dp/B007ZCQD9S** in the ashtray.

16. Hazard light (4-way flasher) with switch mounted in arm rest compartment.

17. Wind shield wiper delay control (WC-AHS-N) Roblin Photo Co., **sales@roblinphoto.com**

18. Pedals repositioned with fabricated, custom competition-style aluminum pedal pads.

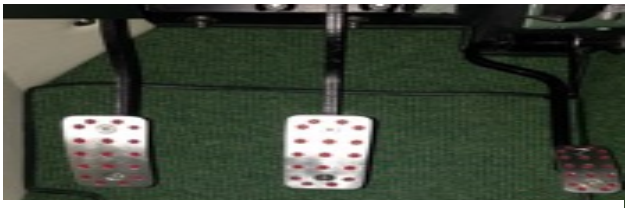
19. Chrome roll bar with shoulder belt 3-point attachment and fire extinguisher mounted.

20. Illuminated WWII B17 bomber compass is mounted in front/center of hardtop ceiling.

21. Sound and heat insulation throughout interior, including doors.

22. Interior door panels are aluminum, upholstered over in leather with custom map storage pockets.

23. Upholstery is Garrett leather 1422 Eggshell Turino. Carpet is German Green wool sq. weave.



Fabricated Pedals

Suspension/Handling:

1. Bilstein gas shocks all around from Putzke at **www.putzkes-fahrspass.com**

2. Custom Bilstein active radius control arms also from Putzke.

3. Adjustable camber rods set at ½ degrees negative.

4. Three quarter inch (3 ¾") front sway bar.

Custom Console

5. Elastomer polyurethane bushings (30% stiffer).

6. Denis Welch Motorsports (DWM) constant radius steering shaft.

7. Front end lowered 3/4".

8. Custom 16” Dunlop racing wheels 4 ½” wide from Rhelm Engineering in England **www.realmengineering.com** The more narrow width (standard is 5 ½”) allows 16” Avon

Turbosteel 165HR16 Universal tires to be mounted on the wheels without sticking outside the wheel well or rubbing against the inside of the wheel well when the steering wheel is turned fully to the left or right.

9. 3-eared knockoffs from Rhelm Engineering (photo at left) has custom billet aluminum centers (made by R-Good’s)

Electronics and Wiring:

All installations were done by Ric Navarro, TBI Connection

1. All of the major electronic equipment such as an Alpine amplifier, relay switches and fuses, Spal control unit for the radiator fan and a vent fan are contained in a custom electronics compartment originally designed by Steve Thomton that is mounted behind the seats (see center photo on p. 6 with top closed & p. 9 with top open).

2. Lucas NOS 7” driving lights with custom stone guards mounted on fabricated custom chrome brackets (shown in photo at right and photo on p.5).

3. Waytek weather pack connectors terminals and heat shrink.

4. Flame resistant wires with high

temperature wrapping.

5. Wiring from the electronic compartment is routed through a custom channel in the floor and behind a false toe board on the passenger side of the car (see photo at right) .

6. Hazard light 4-way flasher with switch is mounted in the armrest compartment.

7. Gauges and light bar on the console are illuminated by LED bulbs.

8. Rear reflectors were converted to stop/turn signals.

9. Jaguar XK 140 license plate light illuminates red when brakes are engaged.

10. Two DC power outlets are located on each side of the console just below the wooden dash.

11. Starter kill switch.

12. Griot's Garage horns.

13. NOS Wipac "Elbo-Lite" map reading light is attached under passenger side front edge of the aluminum dash. It was made in England.

Electronics Compartment

Engine:

1. Cylinders are bored 40 thousands (0.040) over, 3,000 cc (stock is 2,912 cc).

2. Federal Mogul pistons and tri-metal bearings.

3. Cam is 274 duration (#mft68507- 15), valves at .014 intake and .016 exhaust by Dema Elgin **dema@elgincams.com**

4. Race level balancing, including main crankshaft, flywheel, clutch, and harmonic balancer.

5. New DWM aluminum cylinder head, ported and polished, with roller bearing rocker arm **http://www.bighealey.co.uk/**

6. Pro Race harmonic balancer.

7. Lightened BJ8 flywheel to 22 lbs (-19% or 7 lbs removed).

8. Heavy duty DWM oil pump.

9. Full circle rear seal conversion.

10. Spin-on oil filter conversion.

11. Polished alternator, GM 105 amp.

12. 123 distributor (6-R-V-G) from Paradise Parts at **123Ignitionusa.com**

13. Triple aluminum reservoirs for dual brake and clutch lines (see photo above of front engine bay driver's side) are from **Kugel Komponents** (5553701).

14. Triple Weber carburetors (DCOE 45mm) with stacks and filters on each stack from DWM.

15. Tri-carb intake manifolds ported and ceramic coated.

16. Redline electric fuel pump and fuel pressure gauge.

17. Ruddspeed polished aluminum valve cover.

18. Moroso polished aluminum radiator overflow tank.

19. Moroso oil/water filter plumbed to valve cover and crank case vent.

20. Kirk headers ceramic-coated inside and outside **www.kirkracing.com** Collectors and X pipe from Burns Stainless **www.burnsstainless.com**

Ruddspeed Valve Cover

21. Kevlar fuel line with AN polished aluminum fittings.

22. Fuel line runs through passenger-side of the frame.

23. High torque mini-starter.

24. Pegasus fire canister **www.PegasusAutoRacing.com** is mounted on the driver's side of the boot. Three jets under the shroud are aimed at the fuel tank. Three additional jets are located in the engine bay under the

left front fender and are aimed at each of the Weber carburetors. The system can be activated by a switch located under the driver's side of the dash.

Pegasus Fire Canister

25. Stainless steel custom brake and clutch lines.

26. Custom shroud mounted over fan between front of radiator and hood opening (see p.10).

27. Custom dual chrome exhaust tips behind left rear wheel required frame work done by Chris Mack (tips are just visible in photo on title page).

28. DWM dual brake pedal box.

29. O2 gauge from Innovative Motorsports with faux Smiths label.

Faux Smiths O2 Gauge

30. Line runs from vacuum gauge on driver's side of the wooden dash to all 3 carburetors.

Drive train:

1. 5-speed Toyota Tacoma truck transmission.

2. Remote bleed for slave cylinder from18G Motorsports, **MrFinespanner@prodigy.net**

3. 3.54 ring gear from Mike Lempert **http://carsyeah.com/ourportfolio/mike-lempert/**

4. Rebuilt differential with new bearings, ring and pinion gears. The work was done by Sports Car Craftsmen. **sportscarcraftsmen.com**

Paint:

1. Body and hard top color is Aston Martin "Almond" Green (PPG paint code: DBC 400525).

2. Calipers engraved, painted with custom red paint mixed by R-Good's Auto Works to match the red color in the Austin Healey logo.

Mick Nordquist (producer) can be reached at vnordqui@utk.edu
** The word “Merlin” does not refer to the magician in the tales of King Arthur. It actually refers to a bird of prey (raptor) that is a beautiful blue/grey color and is found in England.

“Merlin” Raptor