

## TECH DAY WITH DAVE – May 17, 2014

by Don McCann

What a Tech Day it was! This was the Mother of all previous Tech Days. We again had 13 members in attendance on a beautiful day at Dave Weishoff's garage. Dave started with a thorough review of modifications to his 1992 red Miata, which was on a hoist, so we could also see under the car. This turbo-charged Miata now produces over 400 HP at the rear wheels! Here is a list of modifications made by Dave:

### **Suspension upgrades:**

- 94-97 brake upgrade with Hawk HP-Plus pads and stainless lines. DOT 4.0 fluid
- Ground Control coilover setup with 450lbs springs front and 300lbs springs rear with KYB adjustable shocks
- Lowered to 12" front and 12.5" rear
- Running 949 racing Alignment specs
- Advanti 15x9 rims with 22550zr15 Nitto NT01 tires
- FM Butterfly Brace
- Frog Arms
- FM Strut brace
- Front Subframe Brace
- Power Steering delete

### **Interior-Exterior appearance upgrades:**

- Robbins stayfast zippered glass rear window top
- Custom racing seats
- Hard Dog M2 Hardcore Roll Bar and padding
- Willins Super Sport Harnesses
- Momo shifter
- 330mm steering wheel
- Chrome vents, door handles and speaker bezels
- Racing Beat full type 2 body kit with matte red vinyl rap
- Side-marker, badges delete with rear trunk lock relocation
- Cold air parking light ducts

### **Engine and Performance upgrades:**

- Built 1.9L CP 9.0-1 pistons with ceramic coating and skirt coating
- Eagle H-Beam rods fully balanced and blueprinted
- ARP hardware
- ACL Race bearings
- Cometic headgasket
- Supertech Solid Tappit conversion
- Billet oil pump
- FM turbo hard lines
- 1mm oversized valves Inconel exhaust and SS intake
- FM valve springs kit
- Port match, unshroud and polished head
- Port matched and polished turbo manifold
- FMIIR turbo setup with a Garrett 3071R externally waste gated with 45mm hyper gate with married down pipe and Hydra ECM
- GM LS coil conversion run sequentially with 2zz-GE plugs
- Fully ported intake
- Skunk2 Throttle Body 64mm

- Charcoal canister delete
- FM 3" turbo exhaust
- FM big fuel kit Flex Fuel with -Injector Dynamics 1000cc Injectors
- ATI Damper
- MBSB and 01-05 oil pan
- FM Stage 2 clutch kit with 10lbs flywheel
- 01 Torson Rear Diff Swap 3.9 ratio
- FM Cross flow radiator
- FM oil Catch

**Future projects:**

- CTS rear diff with custom gears and level 2 axles
- T5 Trans Swap. BEG kit to be developed
- Goodwin Racing version 4 big brake kit
- FM fans
- Poly suspension bushings
- Tubular subframe (v8roadsters)
- 949Racing big grip kit with 800 front and 500 rear with billet mounts
- APR GTC300 wing
- Trackdog splitter
- SlickAuto mirrors
- SlickAuto front canards
- vented hood
- Seam welding

**WOW!** Although I was writing notes, Dave helped me out with the above list.

Dave then discussed oil (Dave likes AMS), oil filters (Dave likes Purolator Classic), and a disassembled Miata Engine. This was extremely interesting since there was damage to pistons and cylinder walls. He gave us a detailed description of all parts in the engine head and block, and a close look at the pistons. Dave also discussed U-joints and associated problems. We also had a look at brake rotors that were in bad shape.

Jim Thomas's car was next on the hoist. Jim explained the turbo and chassis modifications he made to his 2001 Miata. These modifications bring the HP to about 200 HP.

Finally it was Mark Rein who showed us his 1995 Miata, with modifications. Dave help Mark re-time the engine and set the idle RPM.

We were all very impressed with this Tech Day. Dave is a walking encyclopedia regarding Miata parts, repair and modifications. If you need advice, or work done on your Miata, Dave is the man to see.

I would like to thank Pat Hernandez for sharing his photos with us.

Cheers!!!!