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|---|---|---|
| <b>Engine (bottom end):</b>   | <b>Head:</b>  | <b>To Do:</b>   |
| BP4W 1.8L Block   | FM Inconel Intake/Exhaust Valves +1 Over                                  | Steering- bent tie rod? alignment?                          |
| Supertech Pistons 84mm 9:1  | Supertech Light Double Springs  | Oil cooler line leak  |
| Wiseco XX Rings (0.0198"/0.0208" gaps)  | Fab9 Bronze Valve Guides  | Brake lines check rub                                       |
| ACL Race Bearings .02" Over   | OEM Valve Seals   | Address melted catch can line                               |
| Boundary Oil Pump, Stage 1  |   | Spark plug gaps   |
| Fluidampner Crank Pulley  | <b>Fueling/Ignition w/ Return Conversion:</b>                             | Exhaust clearances- check trans and rear                    |
|   | Flow Force 64Occ EV14 Injectors   | Timing cover bolt   |
| <b>Turbo:</b>   | DW200 Fuel Pump   | Full bolt check   |
| Garrett 2560R V-Blnd In/Out   | Bosch R8 Coils (coil on plug conversion)                                  | Heat sleeving for all turbo and catch can lines             |
| Turbosmart Wastegate, Gen V Comp 40mm   | Spark Plugs NGK BKR7E-11 Gap to 0.044"                                    | Coil wiring bunched up between firewall/engine              |
| Turbosmart BOV, Race Port Gen V   | Radium Fuel Rail (return setup)   |   |
| MAC Electronic Boost Controller   | Aeromotive Adj Fuel Pressure Regulator 44psi, 1:1 REF                     |   |
| PTP Turbo Blanket   |   |   |
| TDO Tubular Manifold  | <b>Chassis/Suspension/Brakes:</b>   |   |
| TDO Downpipe, 3" Recirc   | V8Roadsters DSD Coilovers 12K/7K (672/392 inlbs)                          |   |
| TDO Exhaust 3" w/ Magnaflow 12578   | Extended LBJ's  |   |
| DEI Titanium Wrap on DP   | Racing Beat 1.25" Hollow Front Sway Bar                                   |   |
|   | Racing Beat Front End Links   |   |
| <b>Trans/Diff Related:</b>  | BroFab Front/Rear Hubs w/ ARP Studs                                       |   |
| JO Motorsports Sspd Trans- Race Build   | SuperMiata Poly Bushing Kit   | <b>Wire Gauge General Guidelines (HPA):</b>                 |
| Supermiata Sport Clutch- Puck Disc  | AWR Front Sway Bar Reinforcement Brackets                                 | 14ga- Fuel Pump, Fans                                       |
| SS Clutch Line, Full Length   | Joenblod Series 500 15X9 Wheels   | 18ga- Power & Ground to Coils                               |
| Redline Diff Fluid 2022   | Falken RT660 Tires, 200tw   | 22ga- Injectors & most sensors (incl's power/signal/ground) |
| GRacing Short Shifter   | Motorsport Hardware Titan Lugnuts, Alloy Steel (2022)                     |   |
| Miataroadster Short Shifter, Tall/Angled  | Cobalt Strut Brace  | Amphenol Duramate 47 Way Bulkhead Connector                 |
| Poly Diff Bushings  | Garage Star Poly Diff Mounts  |   |
| Torsen 4.1 Type 1 [1]   | R-Theory Frame Rail Reinforcement   | <b>Notes:</b>   |
|   | 949 SS Brake Lines  | Triangle Net- Drivers Right                                 |
| <b>Misc Engine:</b>   | Mazda Motorsports Front Subframe Plates                                   | Engine Harness (planning)                                   |
| Megasquirt MS3PNPPRO  | F4 Fabrication PPF/Diff Brace   | Engine Harness (construction)                               |
| Stock Harness (depinned/removed unused components)  |   | Injector Harness- Eliminate PNP Connections                 |
| AWR Engine Mounts, 95 Durometer   | <b>Aero Related:</b>  |   |
| TDO Performance Catch Can   | NLR Wang 64" w/ CFD V2 End Plates [2]                                     |   |
| Supermiata QMax Coolant Reroute   | NLR Splitter [3]  |   |
| Flying Miata Crossflow Radiator   | NLR Air Dam   |   |
| Advanced Autosports Oil Pressure Sensor Relocation  | Rear Bumper Cut   |   |
| Power Steering Delete, Depowered  |   |   |
| Cam Sensor- Unlimited Miata w/ Shielded Harness   |   |   |
| Crank Sensor- Unlimited Miata w/ Shielded Harness   |   |   |
| Setrab M20 x 1.5 Oil Filter Sandwich Plate w/ Thermostat  |   |   |
| Setrab Oil Cooler 50-616-7612   |   |   |
|   |   |   |
| <b>Interior &amp; Safety:</b>   |   |   |
| Doryoku Front Bash Bar  | <b>New Parts:</b>   |   |
| 5X Racing Drop Pan, Driverside  | CONN-200112 Amphenol Duramate 47 Way Bulkhead Connector Kit               |   |
| MiataCage Rollcage (material/welding/paint)   | CONN-101260 Amphenol Duramate 90° Backshell Size 24                       |   |
| Sparco Enduro 2" 6pt Harness  | CONN-101255 Amphenol Duramate Threaded Straight Backshell Size 24         |   |
| Window Net  | Bump Steer Spacers  |   |
| NRG Short Hub   | Advanced Autosports Kill Switch (passenger side, reachable from exterior) |   |
| NRG Quick Release Gen 2.5   |   |   |
| Sparco Steering Wheel   |   |   |
| Sparco Sprint Seat  |   |   |
| Sparco Seat Mount   |   |   |
| CCP Race Top Hardtop  |   |   |
| Aero Catch Hood Latches   |   |   |
| R-Theory Hood Vents   |   |   |
| Fender Vents  |   |   |
| Half Dash, Guttered/Flocked   |   |   |
|   |   |   |
| <b>Done:</b>  |   |   |
| Timing belt, tensioners, pulley, cog, keyway, crankseaver 2021  |   |   |
| Original Motor-Compression Test (dry) 2021: 1-170, 2-175, 3-165, 4-170  |   |   |
| Clutch Master/Slave 2023  |   |   |
| Built Engine 1st start 04/01/23- Brought up to temp a couple times prior to tuning. Not driven.   |   |   |
|   |   |   |
| <b>Current Spares:</b>  |   |   |
| Stock NB 5spd Transmission x3   |   |   |
| Torsen 4.1 Type II x1 (braced)  |   |   |
|   |   |   |
|   |   |   |
| Crank Pulley/Wobble Info: <a href="https://docs.google.com/document/d/1WSG1mQe2d6mRuKkQ5dG7kO3qjGVP8dFBVdNU-VFTI/edit">https://docs.google.com/document/d/1WSG1mQe2d6mRuKkQ5dG7kO3qjGVP8dFBVdNU-VFTI/edit</a> |   |   |
| Cooling Tips: <a href="https://supermiata.com/na-nb-cooling-system-performance.aspx">https://supermiata.com/na-nb-cooling-system-performance.aspx</a>   |   |   |
|   |   |   |
| 4-5" front pinch weld height- Bronson 4.25/4.5"   |   |   |
| Zero rake with driver and fuel  |   |   |
| (Exocet - .7-10mm negative rake, rear lower)  |   |   |
| Front camber: -3.2° ~ 4.2° depending on pyrometer readings  |   |   |
| Caster: ~ 4.0° or max available once you reach camber targets   |   |   |
| Front total toe: 0  |   |   |
| Rear camber : Road course -2.8°. Autocross -2.5°  |   |   |





























[1] Unknown mileage, etc

First fluid change in 2021 there were a few metal chunks (pieces of teeth). Runs fine, nothing in more recent oil changes.

[2] Setup: 2.5deg aoa. No gurney installed.

Options:

1/2" Gurney Flap

[3] Setup: 4.5" height

3"-4" height (from the top) optimal.  
Rounded bottom leading edge.