

Ariel Atom 3 and Ariel Atom 3S Reference Material

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Ariel Atom Start Sequence

- *Please refer to Dash Button Identification
- *If equipped, turn on Battery Master Switch located at forward driver's side of dash screen
- 1. Flip Ignition/Power-On Toggle Switch up
- 2. Wave Key Fob directly left and forward of the dash surround at RF Antennae
- 3. Depress Clutch pedal and ensure gear selector is in neutral
- 4. Press Starter/Ignition Button

To turn off car

Flip Ignition/Power-On Toggle Switch down

- *Apply Hand Brake
- *If equipped, turn off Battery Master Switch if storing for long periods of time

Notes on the Remote Keyless Immobilizer

- When the immobilizer light is flashing moderately, the anti-theft system is armed. The flashing light will blink rapidly when the ignition is on (the system will still be armed)
- To unarm the system, waive the key fob in range of the transponder antennae (to the left and forward of dash). The light will go off, and the car is then able to start.
- After you shut off the ignition switch the light will stay on solid for 20 seconds
- If the starter button is not depressed within 20 seconds the system will re-arm, and the sequence will need to be repeated.

Storage

- If vehicle is going to be stored for more than a week, cut master switch off. If equipped, plug in CTEK charger to port located on firewall behind passenger seat.
- For winter or extended storage, use a respected fuel stabilizer and follow its instructions. Store vehicle with fresh engine oil.
- If battery dies *DO NOT JUMP/BOOST START* Sensitive electronics can be damaged by over voltage/amperage from boosting battery. Remove battery and trickle charge until voltage is normal.





Ariel Atom 3 and Atom 3S – Recommended Fluids/Capacities

Engine Oil	Mobil 1 0W20			
Honda Oil Filter/Drain Plug Seal Part #	15400-PLM-A02/ 94109-140-00			
Transmission Fluid	Honda Manual Transmission Fluid			
Brake Fluid	DOT 3 or 4			

Capacities

Oil (AA3)	5 Quarts
Oil (AA3S)	5.5 Quarts
Transmission	1.8 Quarts
Coolant (AA3)	2.5 Gallons
Coolant (AA3S)	3 Gallons
Intercooler System	1.75 Gallons
Fuel	40 Litres

Recommended Tire Pressure

Front	18 psi
Rear	20 psi

Ariel Atom 3 and Atom 3S - Recommended Maintenance Schedule

Service at the indicated	Miles x1000	1	7.5	15	22.5	30	37.5
distance or time - whichever	km x1000	1.6	12	24	36	48	60
comes first*	Months	6	12	24	36	48	60
Replace Engine Oil and Filter			•	•	•	•	•
Inspect and Clean Air Filter				•		•	
Complete Inspection and Torqu	ue of Fasteners**		•	•	•	•	•
Replace Brake Fluid			•	•	•	•	•
Check Brake Component Wear	and Condition	•	•	•	•	•	•
Replace Engine Coolant							•
Replace Spark Plugs							•
Replace Transmission Oil							•
Check and Adjust Valve Lash							•
Replace Fuel Filter							•
Inspection/Check Over of Major Components							
Rod Ends and Steering Rack Sus pension Components Drive Axels Brake Hoses and Lines All Fluid Levels and Conditions Cool ant Hoses and Connections Fuel Lines and Connections Drivetrain Mounts Wheel Bearings							
*Items are condition based on usage. Performace driving will shorten service times/intervals.							



**Refer to Torque Value Sheet



Dash Button Identification



Race Technology Dash2

Your Ariel Atom 3/3S is equipped with a Race Technology Dash2 display unit. You will find a few useful segment from their online help section attached. If you need more information on the dash unit please refer to http://www.race-technology.com/wiki/index.php/Hardware/DASH2

Quick Facts about your Dash:

- 1. Oil Pressure is displayed on the Home screen. The reading will either be a "1" or "0". "1" means that everything is ok. The reading comes directly from the ECU with a sensor that provides Oil Pressure. Should the Dash display "0" you should shut the engine off.
- 2. Fuel measurement. This is shown on the home screen in a numerical fashion. 40 is Full & 0 is empty. The numbers relate to liters of fuel in the tank. The fuel tank holds 40 liters.
- 3. Gear Position is shown on the right side of the Dash; 1,2,3,4,5,6
- 4. Shift Lights. The car is equipped with shift lights that will illuminate on the top of the Dash.

Atom 3

- a. Green Lights = 5600 rpm >>> 6000 rpm
- b. Yellow Lights = 6400 rpm >>> 6800 rpm
- c. Red Lights = 7200 rpm >>> 7600 rpm
- d. Rev Limit/Fuel Cut = 7600 rpm

Atom 3S

- a. Green Lights = 5500 rpm >>> 5900 rpm
- b. Yellow Lights = 6300 rpm >>> 6700 rpm
- c. Red Lights = 7100 rpm >>> 7500 rpm
- d. Rev Limit/Fuel Cut = 7500 rpm





Operating the DASH2

During normal operation, the DASH2 will display the selected information to the driver and monitor all inputs for alarm conditions. In-vehicle control of the DASH2 functions is via a logical menu structure and four buttons: MENU, SELECT, UP, and DOWN. These allow the user to alter displayed units, switch between data screens, change button functions, and set or configure many other options. When in menu system display mode the actual function of the MENU/SELECT/UP/DOWN buttons is fixed, but their function during normal display mode can be programmed, for example, to provide shortcuts to frequently used features. The MENU button is used to switch between normal display and menu system display. This is the only button whose function cannot be changed. Figure 4 illustrates the structure of the menu system. The following sections describe the details and operation of each function.

Resetting the trip meter

To reset the trip meter, one of the programmable buttons (UP, DOWN, or SELECT) must be configured to perform the reset function. To set up a button to do this, see the section Programming soft buttons and assign a button to the "Trip reset" function. When this button is pressed in normal display mode the bottom section of the display will then read "trip reset". Press any button to return to normal display mode with the trip meter reading zero.

Full Dash Manual can be found at: https://www.race-technology.com/wiki/index.php/Hardware/DASH2-NEW

Proper Lifting Points of the Ariel Atom

Atom owners come from many different backgrounds and have varying degrees of mechanical experience. Some want to do simple maintenance on their own, while others may leave it to the experts. Regardless of how in depth you want to get into the maintenance of your Atom, knowing where to position your jack to lift it is an essential task that everyone should know. So let us show you the best spots to lift your Atom for some simple maintenance. **Make sure to use a low profile jack that will clear the Atom's chassis**

Lifting the rear of the car:





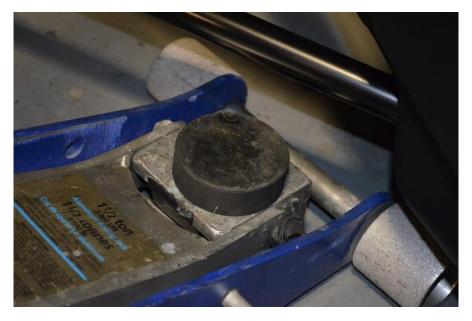
Be sure to position the jack on the left hand side of the car near the transmission on the rear most tube on the chassis. We place a thick cloth or towel folded over on the chassis to prevent scuffing the finish. (Cont.)





Lifting the front:

To lift the front on your Atom you should acquire a spacer to make sure the jack does not interfere with the body panels such as the puck style shown below.



Position the jack center of the wishbone on the chassis tube in the front. Be sure you have enough space to clear the front body panel with the jack once you begin lifting the car.

Note: A taller spacer may be required to clear the body panel on the Atom 3 (pictured right)

While the steps may seem basic, we hope that this helps to make the ownership of your Atom even more enjoyable and easier to care for.









AA3 - RECOMMENDED TORQUE SETTINGS

DRIVETRAIN, SUSPENSION & STEERING			
COMPONENT	TORQUE		
	lb.ft	N.m	
Wheel Nut(s)	70	95	
Driveshaft Nut(s)	180	245	
Rod Ends, 5/8"	88	120	
Suspension Fasteners, Inboard, 1/2"	45	61	
Suspension Fasteners, Full Height, 3/8"	33	45	
Suspension Fasteners, Half Height, 3/8"	18	24	
Capture Washer, Bell Crank	16	22	
Steering Rack Fasteners, 1/4"	10	14	
Fender Stay Fasteners, Full Height, 3/8"	33	45	
Fender Stay Fasteners, Half Height, 3/8"	18	24	
Engine Sump Plug	29	39	
Gearbox Oil Filler Plug	32	44	
Gearbox Oil Drain Plug	29	39	
Engine Oil Filter	16	22	
Exhaust Manifold to Cylinder Head	33	45	
Exhaust Manifold to Test Pipe	33	45	
Test Pipe to Exhaust Silencer	33	45	
Half Shaft ASM	33	45	
Rear Engine Mount to Engine	45	61	
Rear Engine Mount to Chassis	45	61	
O / S Engine Mount to Engine	33	45	
O / S Engine Mount to Chassis	45	61	
Front V Engine Mount to Engine	45	61	
Front V Engine Mount to Chassis	45	61	

BRAKING & SAFETY			
COMPONENT	TORQUE		
	lb.ft	N.m	
Alcon Caliper Bleed Screw	12	16	
Alcon Caliper Brackets 12mm Fastener*	45	61	
Alcon Caliper Brackets 10mm Fastener*	33	45	
Alcon Caliper Front/ Rear 10mm Fastener*	33	45	
Wilwood Caliper Bleed Screw	7	10	
Wilwood Caliper 12mm Fastener*	60	82	
Wilwood Caliper 10mm Fastener*	40	54	
Parking Brake Caliper Bracket 10mm Fastener*	40	54	
Parking Brake Caliper 10mm Fastener	40	54	
Roll Bar Cockpit 10mm Fastener	40	54	
Roll Bar 1/2" Rear Pickup Point Fastener	80	109	
Seatbelt Eyelits 10mm	47	64	

^{*} Nordloc washers are single use only and must be replaced when assembly torque is broken





ATOM 3.5 FUSE BOX

FUSEBOX 1

B1 – 30A - FUEL PUMP RELAY MAXI FUSES

B2 - 30A - OXYGEN/STARTER RELAYS M1 - 40A - IGNITION

B3 – 10A - HAZARD SWITCH M2 – 40A - FUSEBOARD

B4 – 7.5A - IMOBILIZER ECU/OBD-II M3 – 40A - COOLING FAN/HEADLIGHTS

B5 - 10A - COOLING FAN

B6 – 10A - IGNITION SWITCH RELAYS

B7 – 10A - HORN/WATER PUMP A – IGNITION

B13 – 10A - REAR FOG/REVERSE/REAR INDICATOR LAMPS B – DO NOT USE

B14 – 10A - SIDE LIGHTS C – HEADLIGHTS

B15 – 10A - N/S & O/S FRONT LIGHT CLUSTER (MAIN BEAM) D – COOLING FANS

B16 – 10A - HIGH BEAM E – FLASHER MODULE FOR LED LAMPS

F - WATERPUMP RELAY

FUSEBOX 2

D1 - 3A - GEARTRONICS GCU

D2 - 15A - IMMOBILIZER TO ECU PWR

D3 - 15A - INDICATORS

D4 - 10A -OXYGEN SENSOR

D5 - 10A - IMMOBILIZER PWR

D6 - 20A - AUXILIARY

D7 - 10A - BRAKE LIGHT

D8 - 1A - INSTRUMENTS

D9 - 15A - ECU PWR

D10 - 30A - MAIN RELAY

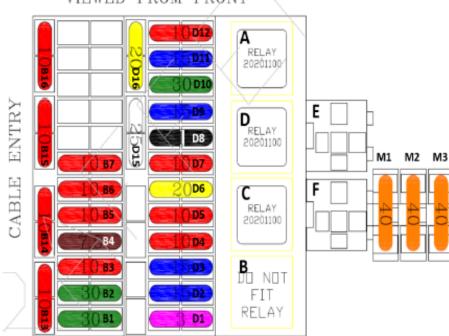
D11 - 15A - STARTER RELAY

D12 - 10A - COOLING FAN RELAY

D15 - 25A - GEARTRONICS AIR COMP

D16 - 20A - 3PIN FAN JUMPER

VIEWED FROM FRONT







Contact Information

If you have any questions about your Ariel Atom, please contact:

Ariel North America 1201 Industrial Park Rd. South Boston, VA 24593 434.575.1257

info@arielna.com www.arielna.com

Full Dealer listing can be found at:

www.arielna.com/make-it-yours/



