

Wrightspeed X1 - prototype



The **Wrightspeed X1** is an Ariel Atom sports car heavily modified to use an all-electric powertrain. The Atom was chosen for its light weight and efficient design. The electric motor and inverter are sourced from AC Propulsion, makers of the TZero concept car, while the batteries are low weight, high energy density lithium ion provided from A123 Systems. As with the Atom the transmission is a Honda unit, but stripped of its shifting mechanism and other parts to provide only the second gear speed, allowed by the wide speed and torque range available from the electric motor.

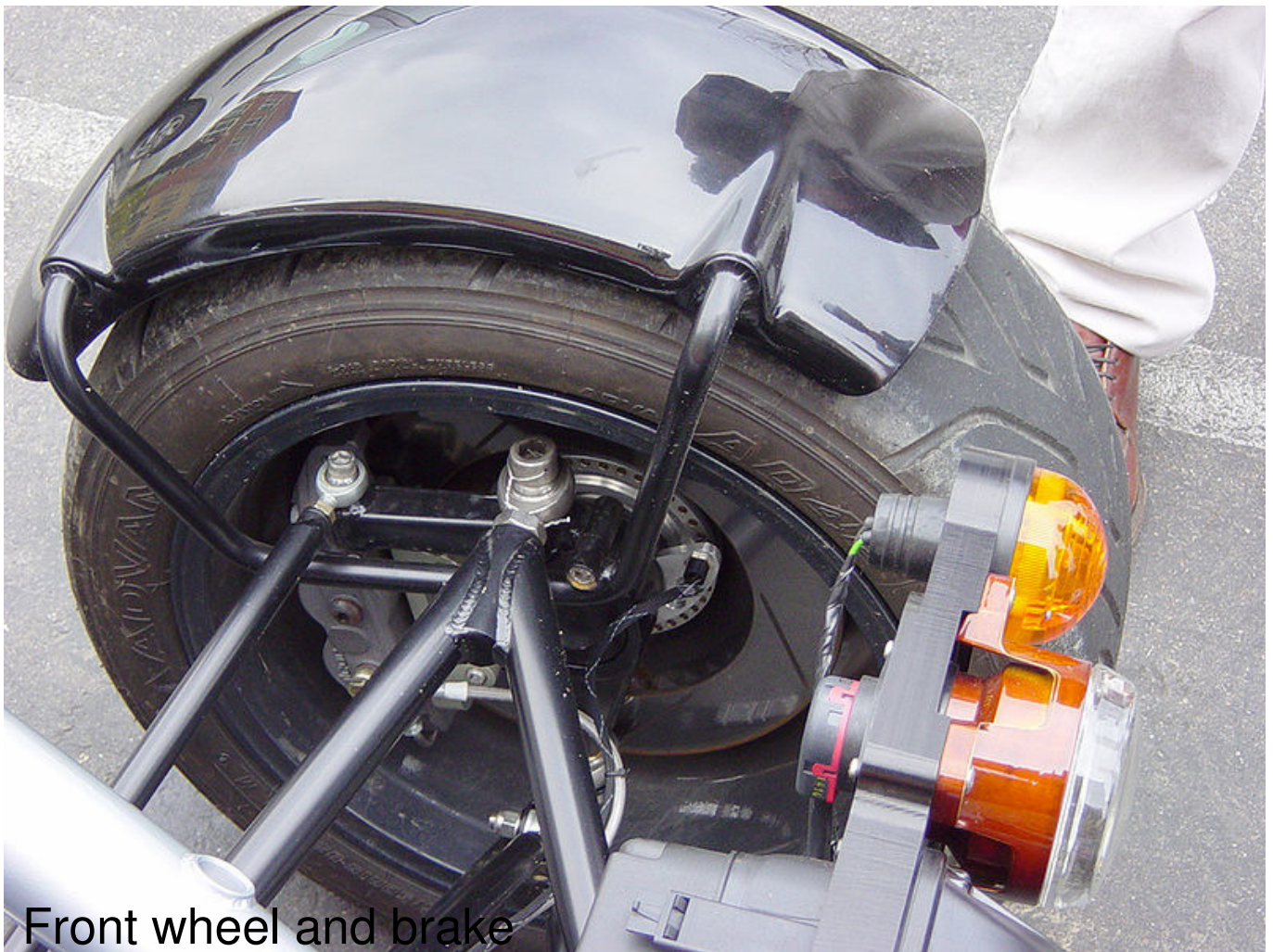
Built by San Francisco-based New Zealand engineer Ian Wright, the X1 created a stir when it bested several sports cars in a drag race, including a Carrera GT (though with a rolling start, a disadvantage for the gas burning vehicles), all while being filmed by local news station KRON 4. Despite the impressive performance, the vehicle is intended only as a proof of concept. Future production is planned; however, according to the website, "... the production car will be quite different, since it will meet the safety standards, which the prototype does not. It will, however, be at least as quick as the prototype." [1]. Mr. Wright was an early employee of electric-car company Tesla Motors, but soon left to pursue his own ideas.



Ian Wright next to the X1

Performance

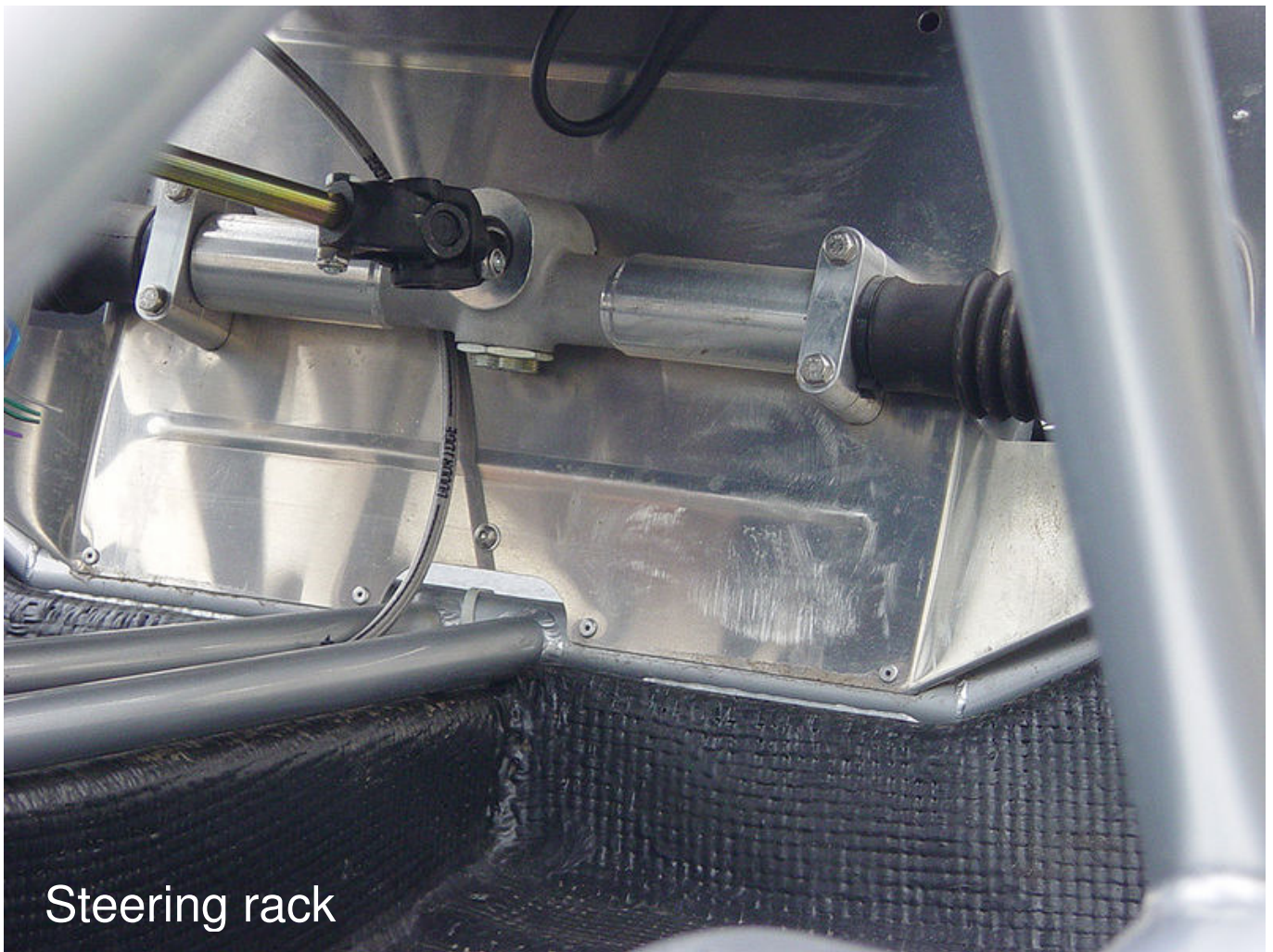
- 0–100 km/h (0-62 mph) ~ 3.0 seconds
- Standing quarter mile (400 m) ~ 11.5 seconds
- Top speed 180 km/h (112 mph) (electronically limited)
- Range >160 km (>100 miles) in urban use
- Charger: onboard conductive. Input 100-250V 50 or 60 Hz. Current: user adjustable up to 80A
- Energy consumption 125 WHr/km (200 WHr/mile) in urban use, equivalent to 1.4 L/100 km (170 mpg) (8920 WHr/L or 33,705 WHr/gallon)



Front wheel and brake



Springs and shock absorber



Steering rack



Cockpit



Rear suspension



Rear view

X1 Prototype

Manufacturer	Wrightspeed
Production	None, prototype only
Class	Roadster
Body style(s)	Open wheel roadster
Layout	Rear mid-engine, rear-wheel drive
Platform	Ariel Atom
Engine(s)	3-phase, 4-pole AC Induction
Transmission(s)	Single gear ratio 8.25:1 (no clutch)
Wheelbase	2345 mm / 92.3 in
Length	3410 mm / 134.25 in
Width	1798 mm / 70.8 in
Height	1195 mm / 47.0 in
Curb weight	697 kg / 1536 lb
Fuel capacity	none (25 kWh Li-Ion Accumulator)
Related	Ariel Atom, tzero
Designer	Ian Wright

For more details from the manufacturer, see: <http://www.wrightspeed.com/specs.html>

Quelle / URL: http://en.wikipedia.org/wiki/Wrightspeed_X1

Source: <http://www.wrightspeed.com/specs.html>

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