

ROAD AND TRACK 2100 VOLUME 1

SPORTS CAR

The operator uses Driving (Automobile) with computerized controls. It burns 16.785 gallons of alcohol per hour. A full load of fuel is \$15. Visibility is excellent.

Subassemblies: Body +3, 4 Wheels +1.

P&P: 350-kW wheeled drivetrain. 320-kW ceramic engine. Two rechargeable E cells with 40 kWh total capacity.

Fuel: Ultralight self-sealing 30-gallon alcohol fuel tank (Fire 7), 2.5 hours. Two rechargeable E cells with 40 kWh total capacity. Batteries power electronics and “boosts” drivetrain when necessary.

Occupancy: 1 RCS, 1 RS. **Cargo:** 5 cf.

Armor	F	RL	B	T	U
All:	3/5	3/5	3/5	3/5	3/5

Equipment

Body: Small Complexity 6 computer with backup; radio with 1,000 mile range; 4 1.5-mile range PESA [F/R/L/B]; 2-man environmental control; 2 crashwebs.

Statistics

Size: 14'¥6¥4' **Payload:** 674 lbs. **Lwt.:** 1.445 tons

Volume: 165 cf. **Maint.:** 91 hours. **Price:** \$47,295.

HT: 12. **HP:** 263 **Whl:** 30 each.

gSpeed: 270/280* **gAccel:** 12 **gDecel:** 15 **gMR:** 1.75 **gSR:** 5

Ground Pressure High. 1/6 Off-Road Speed

* Performance when drivetrain augmented by battery power.

Design Notes

WVMDS design. Midsize body. Body has a medium frame and foamed alloy structure. Wheels are Midsize with all-wheel steering, improved suspension, improved brakes, and smartwheels. Armor is carbon composite. Ground pressure is 3,613 on Earth.

PASSENGER VAN

The operator uses Driving (Automobile) with computerized controls. Visibility is good. Although designed to comfortably seat six people, the rear seats can hold up to six individuals in cramped and uncomfortable conditions (and only have the benefit of seatbelts rather than the full crashweb). For additional cargo room the rear seats can be folded up and stowed, freeing up 15 cf for each seat moved out of the way.

Subassemblies: Body +3, 4 Wheels +1.

P&P: 50-kW wheeled drivetrain. Ten rechargeable E cells with 200 kWh total capacity.
100 sf solar cells (8 kW on Earth).

Fuel: Batteries power all systems for 4 hours.

Occupancy: 1 RCS, 1 RS, 4 NS. **Cargo:** 35 cf.

Armor	F	RL	B	T	U
<i>All:</i>	3/5	3/5	3/5	3/5	3/5

Equipment

Body: Small Complexity 6 computer with backup; radio with 1,000 mile range; 4 1.5-mile range PESA [F/R/L/B]; 6-man environmental control; 6 crashwebs.

Statistics

Size: 15'¥7¥6' *Payload:* 1,900 lbs. *Lwt.:* 2.083 tons

Volume: 275 cf. *Maint.:* 110 hours. *Price:* \$32,955.

HT: 12. *HP:* 375 *Whl:* 45 each.

gSpeed: 80 *gAccel:* 4 *gDecel:* 15 *gMR:* 1.25 *gSR:* 4

Ground Pressure High. 1/6 Off-Road Speed

Design Notes

WVMDS design. Large body. Body has a medium frame and steel structure. Wheels are Large with all-wheel steering, improved brakes and aluminum structure. Armor is carbon composite. Ground pressure is 3,471 on Earth.

HIGH-PERFORMANCE MOTORCYCLE

This is a high-performance recumbent design wither operator enclosed inside an aerodynamic shell. The operator uses Driving (Motorcycle) with computerized controls. Visibility is good.

Subassemblies: Body +1, 2 Wheels -1.

P&P: 25-kW wheeled drivetrain. Four rechargeable E cells with 80 kWh total capacity.

Fuel: Batteries power all systems for 3.2 hours.

Occupancy: 1 CCS. **Cargo:** 1.5 cf.

Armor	F	RL	B	T	U
<i>All:</i>	2/3	2/3	2/3	2/3	2/3

Equipment

Body: Tiny and cheap Complexity 4 computer ;4 1.5-mile range PESA [F/R/L/B]; 1-man environmental control; crashweb.

Statistics

Size: 7'x2'x3' *Payload:* 230 lbs. *Lwt.:* 0.29 tons

Volume: 27.5 cf. *Maint.:* 217 hours. *Price:* \$8,485.

HT: 12. *HP:* 45 *Whl:* 8 each.

gSpeed: 165 *gAccel:* 7 *gDecel:* 15 *gMR:* 2.25 *gSR:* 3

Ground Pressure Moderate. 1/4 Off-Road Speed

Design Notes

WVMDS design. Tiny body. Body has a light frame and aluminum structure. Wheels are Tiny with all-wheel steering, improved suspension, and improved brakes. Armor is foamed alloy. Ground pressure is 2,639 on Earth. No access space for drivetrain.

Smartwheels: Increase cost to \$10,485 and gMR to 2.5. Maint 195 hours.

OFF-ROAD MOTORCYCLE

This is a high-performance recumbent design wither operator enclosed inside an aerodynamic shell. The operator uses Driving (Motorcycle) with mechanical controls. There is no option for computer control. Visibility is good.

Subassemblies: Body +3, 2 off-road Wheels +1.

P&P: 15-kW all-wheel drive drivetrain. 15-kW hydrogen combustion engine.

Fuel: 8-gallon hydrogen fuel tank (Fire 11), 2.1 hours.

Occupancy: 1 XCCS (cycle), 1 XCS (cycle). **Cargo:** None.

Armor	F	RL	B	T	U
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All: 3/10 3/10 3/10 3/10 3/10

Equipment

Body: None.

Statistics

Size: 5'¥2¥3' *Payload:* 205 lbs. *Lwt.:* 483 lbs.

Volume: 3.6 cf. *Maint.:* 338 hours. *Price:* \$3,495.

HT: 12. *HP:* 39 *Whl:* 15 each.

gSpeed: 125 *gAccel:* 6 *gDecel:* 15 *gMR:* 1.5 *gSR:* 2

Ground Pressure High. 1/4 Off-Road Speed

Design Notes

Structure is aluminum with a non-robotic heavy frame. Armor is aluminum. Wheels have improved brakes and tires are puncture-resistant. Volume/areas are 3 cf/13 sf on body and 0.6 cf/5 sf for the wheels. Ground pressure is 3,189 on Earth. No access space for drivetrain.

SCOOTER

The operator uses Driving (Motorcycle) with computerized controls. Visibility is excellent.

Subassemblies: Body -3, 2 Wheels -4.

P&P: 1-kW wheeled drivetrain. Rechargeable battery with 2 kWh total capacity.

Fuel: Batteries power all systems for 2 hours.

Occupancy: Cycle station. *Cargo:* None.

Armor **F** **RL** **B** **T** **U**

All: 2/2 2/2 2/2 2/2 2/2

Equipment

Body: Tiny and cheap Complexity 4 computer.

Statistics

Size: 1'¥3¥2' *Payload:* 200 lbs. *Lwt.:* 235 lbs.

Volume: 0.3 cf. *Maint.:* 1,010 hours. *Price:* \$390.

HT: 8. *HP:* 4 *Whl:* 1 each.

gSpeed: 45 *gAccel:* 2 *gDecel:* 15 *gMR:* 1.25 *gSR:* 2

Ground Pressure Very High. 1/8 Off-Road Speed

Design Notes

Structure is aluminum with a robotic medium frame. Armor is foamed alloy. Volume/areas are 0.2 cf/2.5 sf on body and 0.1 cf/2.25 sf for the wheels. Ground pressure is 7,837 on Earth. No access space for drivetrain.

AIRBOARD

The operator uses Piloting (Vertol) with computerized controls. Visibility is excellent.

Subassemblies: Body -1, 2 retractable Skids -3.

P&P: 320-lb. lift light turbofan. 100-lb. thrust light turbofan.

Fuel: Ultralight self-sealing 6-gallon jet fuel fuel tank (Fire 12), 57 minutes.

Occupancy: Harness. **Cargo:** None.

Armor	F	RL	B	T	U
<i>All:</i>	3/5	3/5	3/5	3/5	3/5

Equipment

Body: Tiny and cheap Complexity 4 computer.

Statistics

Size: 6'x3'x0.5' **Payload:** 239 lbs. **Lwt.:** 318 lbs.

Volume: 3.3 cf. **Maint.:** 190 hours. **Price:** \$11,070.

HT: 12. **HP:** 6 **Skids:** 1 each.

aSpeed: 185 **aAccel:** 6 **aDecel:** 24 **aMR:** 6 **aSR:** 3

Stall Speed 0

Design Notes

Structure is aluminum with a robotic foamed alloy light frame with very good streamlining. Armor is metal matrix composite. Structure is sealed. Volume/areas are 3 cf/13 sf on body and 0.3 cf/2 sf for the skids. No access space for turbofans.

Lifting Body: Somewhat more efficient models use a more efficient body styling so that the lift engines can be turned off once the board reaches 105 mph. Increase cost to \$11,370. Reduce aSR to 2.