

Fi@UCSD Ventilator Team

9500 Gilman Drive
La Jolla, CA 92093
(714) 383-7378

Bill of Materials

**Non-invasive ventilator
with geared pump system
Submitted on 03/31/2020**

Description	Qty	Unit price	Total price
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Subsystem 1: Computer

ELEGOO UNO R3 Board ATmega328P ATMEGA16U2	1	\$13.98	\$13.98
Arduino Breadboard 6.5 x 2.1 x 0.38"	1	\$5.95	\$5.95
Breadboard Jumper Wires, Male to Male	15	\$0.06	\$0.86
Breadboard Jumper Wires, Male to Female	5	\$0.06	\$0.30
HiLetgo LCD Display Module compatible with Arduino board	2	\$3.25	\$6.50
SparkFun Electronics COM-09806 - Potentiometer	5	\$0.95	\$4.75
Car Manifold Air Pressure (MAP) Sensor for Toyota Corolla	2	\$12.77	\$25.54

Subsystem 2: Pump

US Plastic Corp. 1/" Polypropylene Standard Check Valve w/ Viton Diaphragm	1	\$0.75	\$0.75
estreetplastics Clear Acrylic Plexiglass Sheet - 3/8" Thick Cast (12"x12")	2	\$8.49	\$16.98
STEPPERONLINE Nema 17 Stepper Motor 37oz. in 12V 0.4A 42x34mm 3D Pinter DIY CNC	2	\$7.50	\$15.00
HFS 12V DC 1/4" NPT Solenoid Valve	2	\$10.99	\$21.98
1/2" NPT Male to 1/4" Hose Barb	4	\$1.80	\$7.20

Subsystem 3: Ventilator + Mask

Electrical taping	1	\$1.18	\$1.18
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Epoxy adhesive	1	\$3.59	\$3.59
Hydrophobic Bacteria Filter Gomco	1	\$5.84	\$5.84
1/4" Barbed Connection Adapters	2	\$0.56	\$1.12
3/4" NPT Male to 1/4" Hose Barb	2	\$3.28	\$6.56
Non Rebreather Elongated Adult Mask w/ 7ft O2 Tubing	2	\$1.58	\$3.16
BVM Adult #5 Mask w/ 7ft O2 Tubing & Reservoir Curaplex	1	\$14.89	\$14.89
Thermovent 600 HME - Patient End Connection 15mm ID x 22mm OD	1	\$3.08	\$3.08
360-Degree Adjustable Drippers	3	\$0.49	\$1.47
96 in. L x 4 in. Dia. Silver/White Vinyl Vent Duct	1	\$9.99	\$9.99

Notes:

Subtotal **\$170.67**
Adjustments **\$0.00**

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