Ford and 3M Now Shipping Powered Air-Purifying Respirators to Health Care Workers; New Jersey Orders 500,000 Gowns

- Ford, with design and testing consultation from 3M, and approval from the CDC’s National Institute for Occupational Safety and Health (NIOSH), begins shipping urgently needed powered air-purifying respirators (PAPRs)
- Designed and developed from idea to delivery by Ford and 3M in fewer than 40 days, the Ford-built PAPRs will help meet a surge in demand for personal protective equipment due to COVID-19
- State of New Jersey places order with Ford for 500,000 reusable gowns for health care workers as weekly production reaches 200,000 per week and more than 400,000 have been shipped around the United States

DEARBORN, Mich., and ST. PAUL, Minn., May 6, 2020 – The first Ford-built powered air-purifying respirators, developed in close collaboration with 3M, are on their way to help protect health care workers fighting COVID-19.

Ford and 3M have worked closely with Ford’s automotive supply chain to progress the new PAPR from idea to product in fewer than 40 days.

Ford’s Product Development team moved quickly to design the new PAPR, combining vehicle air conditioning expertise with 3M’s knowledge of medical devices. Hand-drawn concepts of the Ford PAPR were created one day after starting the project. Ford’s engineers also leveraged vehicle seat trim expertise to design the PAPR hood. In parallel, Ford’s Advanced Manufacturing team rapidly prototyped the PAPR using 3D printing, while the Ford Purchasing team worked with suppliers to procure and produce components and the Ford Manufacturing team designed the production process. Assembly lines and production of PAPRs started within three weeks of the initial request.

The PAPR includes a hood and face shield to cover health care professionals’ heads and shoulders, while a high-efficiency (HEPA) filter system provides a supply of filtered air for as long as 8 hours. The air blower system – similar to the fan in the Ford F-150’s ventilated seats – is powered by a rechargeable, portable battery, helping keep the respirator in constant use by first-line defenders.
Approximately 90 paid UAW volunteers have assembled more than 10,000 PAPRs at Ford’s Vreeland facility near Flat Rock, Mich., with the ability to make 100,000 or more.

One of the proud UAW workers is Michele Strong, a team leader volunteering in Ford’s Vreeland facility. Now at almost 43 years with the company, Strong has worked in both Flat Rock Assembly Plant and the Rouge complex. Strong maintains a perfect attendance record – she wasn’t about to stop now.

“I’m proud of all of the vehicles I’ve help build over the years, but this is something totally different,” Strong said. “I’m up for this experience to help the world – to help the situation we’ve got. A lot of friends ask me, ‘Are you really going to do this?’ and I say, ‘Yes. It’s the right thing to do.’”

The 3M and Ford development team worked closely with the U.S. CDC’s National Institute for Occupational Safety and Health (NIOSH) National Personal Protective Technology Laboratory. NIOSH provided timely guidance to encourage the development of PAPRs to help respond to the COVID-19 emergency. Ford has achieved temporary NIOSH approval under its limited-use protocol to respond to the COVID-19 public health emergency.

More than 10 companies from across Ford’s automotive supply chain are providing new and off-the-shelf parts for use in the PAPRs. Components include hood tops for the wearer’s head and shoulders, filters and fans for supplying filtered air, power electronics, switches, foam seals and more.

**Shipping to customers**

Virginia Mason Medical Center in Seattle, Wash., is the first customer to order and take delivery of the Ford-built PAPRs.

“We are very grateful to Ford and 3M for this shipment of air-purifying respirators,” said Steve Schaefer, senior vice president, Support Services, Virginia Mason Medical Center. “This important equipment will help ensure the safety of our patients, doctors, nurses and other members of the Virginia Mason care teams during the COVID-19 pandemic.”

3M will sell and distribute the newly designed Ford Limited-Use Public Health Emergency PAPR through 3M-authorized distributors to maximize speed and efficiency in deploying these technologies to health care workers. Ford-built PAPRs also can be ordered directly from Ford.

3M will provide technical support for health care workers using the new PAPRs. 3M’s authorized distributors moved exceptionally fast to make these products available for order within days.

3M and Ford will donate any profits they earn from the sale of the PAPR to COVID-19 related nonprofit organizations.

**Gown Deliveries Grow**

Washable gown deliveries are rapidly growing as hospitals and medical services seek reusable protection for health care workers. The gowns have been self-tested to federal standards and are washable up to 50 times.

Ford suppliers are now producing 200,000 gowns a week, and more than 400,000 gowns have been shipped by Ford to medical workers around the country.

The state of New Jersey has also placed an order for 500,000 reusable gowns.

**Project Apollo**

Inspired by the go-fast effort in 1970 to help NASA’s disaster-stricken Apollo 13 astronauts, Ford’s Project Apollo team has undertaken a variety of efforts in the fight against COVID-19. The company is making and supplying critically
needed PPE and health care equipment, including more than 12 million face shields, ventilators in collaboration with GE Healthcare, medical masks for its workforce, and washable gowns for hospital and medical workers.

About Ford Motor Company

Ford Motor Company is a global company based in Dearborn, Michigan. The company designs, manufactures, markets and services a full line of Ford cars, trucks, SUVs, electrified vehicles and Lincoln luxury vehicles, provides financial services through Ford Motor Credit Company and is pursuing leadership positions in electrification; mobility solutions, including self-driving services; and connected services. Ford employs approximately 188,000 people worldwide. For more information regarding Ford, its products and Ford Motor Credit Company, please visit www.corporate.ford.com.