

# ALL-TERRAIN CONVERSIONS

## Powered Emergency Exit System

All-Terrain Conversions, LLC is pleased to announce that all new truck and SUV conversions produced after 03/01/18 will come equipped with a powered Emergency Exit System. This system provides an alternative power source to the hydraulic pump's electric motor should the vehicle's primary power fail.

The hydraulic system that we use to raise and lower door, as well as raise, enter, exit and lower the lift is a very powerful and reliable system. The pump uses an electric 12V motor to pressurize and pump fluid through lines and into cylinders that create movement of extending or retracting steel rods at great force. These rods force the guided movement of the door and lift respectively. The 12V motor has always been powered by the alternator when the vehicle is running or the main starting battery when vehicle was not running.



We also provide an extra manual pump and valve manifold, should the vehicle power fail, allowing the door and lift to be moved manually. The manual backup system is still a part of the new system, however we have added a third source of power.

The new powered Emergency Exit System uses a backup 12V battery to automatically power the pump motor when the engine is not running or if the vehicle has a complete electrical failure. This backup battery only powers the pump and cannot be used for any vehicle function. This will allow the unit to operate in an emergency situation even if an accident or fire knocks out the vehicle's electric system.

The pump has been relocated under the vehicle alongside the backup battery to a spot less likely to be damaged by accident or vehicle fire. We have added heat resistant hydraulic hoses to provide an extra level of safety, along with a flame-retardant wire loom to protect wires. While no system could completely guarantee functionality in every situation, this system adds another level of safety that should bring peace of mind to wheelchair users.



Standard operating procedure recommends starting the vehicle prior to running the pump to use the door or lift. IF the engine is not running the new system will no longer run off the vehicle's starting battery as it now pulls its power from the emergency backup battery when the engine is not running. Obviously, this benefits the starting battery by not draining it down if the user fails to start the vehicle prior to using the door or lift systems.

The emergency backup battery is recharged by the alternator while the engine is running. The end-user should test the strength of the backup battery at least once a week by running the system with the engine off. Any hesitation or slow running of the lift on this battery would indicate that it should be immediately replaced. Please note that this battery will not supply any power to the rest of the vehicle should the primary starting battery fail.

This system is now standard on all truck and SUV conversions.