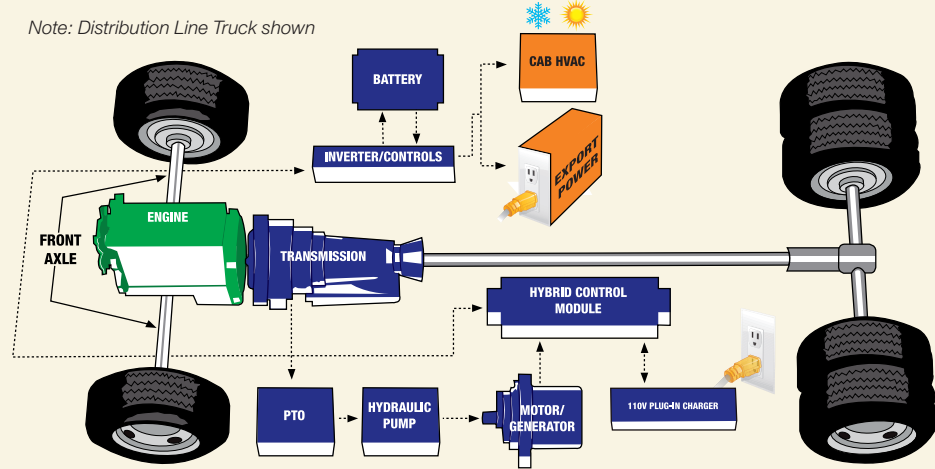


Aerial Devices | Line Distribution and Trouble Truck Systems

Note: Distribution Line Truck shown



Specifications

| | Distribution Line Truck | Trouble Truck |
|--|--|--|
| Recharge system | 110V-20 Amp | 110V-15 Amp |
| Duty cycle | 100% continuous operation | 100% continuous operation |
| Battery type | AGM lead acid (35) | AGM lead acid (4) |
| Operating range | 0-120° F | 0-120° F |
| "Engine On" recharger | 5-minute recharge = 15-minute unit operation (factory pre-set) | Recharges from truck alternator |
| Driveline interface | Industry standard Power Take Off (PTO) mounting | Industry standard Power Take Off (PTO) mounting |
| System hydraulic pump | Industry standard hydraulic pump | Industry standard hydraulic pump |
| Motor generator cooling | Integrated into Aerial Device hydraulic system | Integrated into Aerial Device hydraulic system |
| Ground clearance | Standard chassis ground clearance | Standard chassis ground clearance |
| System weight | Approx. 2,200 lbs. max. | Approx. 700 lbs. max. |
| Cabin HVAC (optional) | All electronic 7,000 btu cooling 5,100 btu heating | All electronic 7,000 btu cooling 5,100 btu heating |
| Exportable power (optional) | 3.8 kW inverter | 3.8 kW inverter |
| Fiber Enable Retro Kit (optional) | Fiber enable, additions required for OR controls, installation; must be a TEREX boom, 120" CA with 2,200 lbs. available payload capacity | N/A |

- Hybrid system allows full hydraulic operation of aerial device with no noticeable difference to operator
- Hybrid system does not interface or interfere with PTO output power, engine stop/start, 2-speed or driveline
- In the unlikely event of hybrid system malfunction, chassis system can be started with start/stop button
- In the unlikely event of OEM chassis failure, hybrid system will operate aerial device rails
- Hybrid system has a chassis battery management system integrated into a hybrid battery system for operation of standard chassis accessories such as marker lights, strobe lights, radio and engine starting
- Hybrid system will integrate a 3.8 kW watt inverter for exportable power (optional)
- Hybrid system adds no more than 2,200 lbs. to a distribution line truck or 700 lbs. to a trouble truck
- Hybrid system will not affect standard ground clearance



Distribution Line Vehicle



Trouble Truck

HYBRID SYSTEMS



SAVE FUEL REDUCE EMISSIONS ELIMINATE JOBSITE NOISE

The HyPower™ Hybrid system by Terex is a plug-in hybrid electric vehicle system that allows utility truck operators to save up to 1.5 gallons of fuel per hour while reducing emissions and noise pollution. The system operates the aerial lift without running the engine to save fuel, reduce emissions, and eliminate noise in residential areas.

Versatile

The Terex® HyPower™ system is self-contained, so it works on virtually any chassis—even older trucks can use this hybrid technology to save fuel and reduce emissions. The system does not interface with the truck engine and transmission, reducing the associated wear and tear.

110V convenience

Recharge during “off-peak” hours through a standard 110V, 20-amp outlet in just eight hours (six hours to recharge and two hours to “condition” the batteries for best life) or in five minutes with the engine running.

Three-way interface for precise control

A controlling interface communicates between the chassis, unit and hybrid system, monitoring:

- Interlocks: park brake set, transmission in neutral, outriggers extended
- Engine: off/on, RPM
- PTO switch: hybrid/conventional operation
- PTO: engaged/disengaged

The system controller can start and stop the truck engine to recharge the system while maintaining uninterrupted hydraulic boom and tool controls to operator.

Less for more

The HyPower™ system:

- Saves .7 to 1.5 gallons of fuel per hour compared to conventional chassis
- Does not interfere with the chassis or chassis drive train
- Installs on any gas or diesel stock chassis
- Functions independently to maintain truck’s mechanical integrity
- Installs easily with just a few standard tools, even on existing fleets
- Takes advantage of off-peak grid power at lower rates
- Recharges from any standard 110V, 20-amp outlet through on-board portable charger
- Uses Absorbent Glass Mat (AGM) batteries, a class of Valve Regulated Lead Acid (VRLA) battery in which electrolytes are absorbed into a fiberglass mat
- Operates at temperatures from 0–120° F
- Offers optional cab HVAC (heating, ventilation, cooling) system
- Handles ground tools with optional 3.8 KW electric circuit; standard charge circuit maintains chassis batteries



Cleaner for lighter carbon footprint

Terex estimates that the HyPower™ hybrid system can reduce diesel fuel by up to six gallons each work day, which would offset 11 metric tons of CO₂ each year. (Based on 250 working days/year.)

The easy-to-implement, environmentally compatible technology offers:

- Fewer components
- An automatic system for seamless operation
- Standard PTO, pump

Simple solution specific for the utility industry

Compared to “launch assist” and other plug-in hybrid electric vehicle technologies, the HyPower™ system is simpler. Launch assist systems are better suited for stop-and-go applications such as mass transit and sanitation. The HyPower™ system is superior for utility vehicles that spend many stationary working hours.



The optional HVAC system (top photo) for cabin heating and cooling is easily operated and adjusted by the on-deck control panel (bottom photo).

Exportable power outlets allow for 3.8 KW of additional power for ground tools and other requirements.