HYBRID VEHICLE BATTERIES

Hybrid vehicles use two sources of energy for power. One energy source is an internal combustion engine which uses gas or diesel. The other energy source is a rechargeable battery – most often it is a lithium-ion battery. The power source for the vehicle alternates between gas and electricity. Two examples of vehicles using two power sources include hybrid cars and hybrid lawn mowers.

The energy contained in hybrid vehicle batteries is considerable, ranging from 144 to over 300 volts. Some vehicle manufacturers install power converters to increase the voltage level above these amounts. Education, training and safe work procedures with hybrid vehicle batteries is critical.

Hazards Involved/Arise
- High voltage
- Shock
- Electrocution
- Electrical energy can cause explosion or fire
- Voltage may be present even when vehicle is turned off
- Release of explosive gases and/or liquids if battery is damaged or incorrectly modified
- Manual handling
- Electrical systems may affect medical devices

People Affected
- Automotive repair technicians
- Waste recyclers
- Inexperienced staff
- Emergency responders
- Personal Protective Equipment (PPE) (e.g., insulated gloves rated to protect against electricity)
- Manufacturer’s recommended precautions
- Visual checks of the vehicle to inspect condition of cabling or electrical components