READ SAFETY INSTRUCTIONS BEFORE OPERATING BATTERY CHARGER

SAFETY INSTRUCTIONS Charging a battery can be dangerous due to the gases emitted and possible sparking. Caution and correct procedures must be followed to insure safety.

• EXPLOSIVE GAS RISK– Normal battery operation generates explosive gases. To reduce risk of lead-acid battery explosions. Be sure to read instructions published by battery manufacturer and those of any other equipment to be used near the battery.

• Do not operate charger in rain or snow

• It is not recommended that an extension cord be used in the operation of the battery charger. Only a 14 AWG gauge extension cord no longer than 100 feet and in good working condition will be safe. Note: Use an extension cord in dry weather only.

• To disconnect charger, do not pull by cord. To avoid damage, pull cord assembly by plug only.

• If charger has been damaged or otherwise indicates that it may not work properly, do not use.

• Do not attempt to service or repair a battery charger. If repair or service is needed, take charger to qualified servicemen only.

• Always unplug charger before cleaning or maintenance to avoid electric shock.

• Always operate charger within voice range of another person.
• In case of battery acid contact with eyes, skin or clothing, always have soap and water near working area.

• Always wear clothing and eye protection when operating charger or working near battery.

• While working near battery, avoid touching eyes.

• In case of battery acid contact with skin or clothing, wash immediately with soap and water.

• **If battery acid contacts eye, flood eye immediately with cold water for no less than 10 minutes and seek medical attention immediately.**

• Do not allow flame or spark near area of engine or battery and never smoke while operating battery charger or near engine.

• Avoid dropping any metal objects onto battery. It may cause short-circuits in either battery or connected electrical parts that can potentially create an explosion.

• When working with lead-acid battery, remove all metal jewelry and accessories such as rings and watches. Short-circuit current produced from a lead-acid battery can potentially weld personal metal items such as rings to metal which can result in severe burns.

• Charger is designed for charging lead-acid batteries only. It is not designed or intended for supplying low voltage electrical systems with power outside starter-motor applications. Do not charge cry-cell batteries with charger, it may result in explosion resulting in both personal injury and property damage.

• If battery is frozen, do not charge.

**BATTERY CHARGING PREPARATION** *(things to do before you charge a battery)*

• When removing the battery from the vehicle to charge, remove the ground (black) terminal first. Turning off all the vehicle current drawing accessories will prevent an arc.

• Keep the area around the battery ventilated while the battery is being charged. Use a plastic fan.

• Clean battery terminals are necessary to make a solid contact. Keep any corrosion from the terminals away from your eyes.

• Before charging the battery it must be filled to the full level. Fill with distilled water to the manufacturer’s specified levels.

• If the battery is 12 Volts, set the charger at 12 Volts. If the battery is 6 Volts, set the charger at 6 Volts.

• Read all battery manufacturers specifications for charging. Do you need to remove the caps? Or do you leave the caps on?
Charging a Battery & Clamp connection to batteries

A gases generated from a battery may Explode if ignited from a spark. Sparks are generated when connecting and disconnecting battery clamps.

- Ventilate the area.
- Keep the charger and the battery being charged at least 5' apart.
- Connect the negative clamp to the negative post and the positive battery clamp to the positive post. Positive battery post is marked with a - pos, P, + and should be marked with red. The Negative battery post is marked with a - neg, N, - and should be marked with black.
- Turn off the charger and ventilate before connecting!
- Turn off the charger, unplug and ventilate before disconnecting! It is very important to ventilate before disconnecting as fumes build up during the charging process.

- The battery charger clamps must never touch each other.
- **Charger to Battery connection** - Turn the Charger off - connect the red clamp to the positive battery terminal and the black clamp to the negative battery terminal. Set your settings and then and only then turn the charger on. **When the charging is completed, turn the battery charger off. Ventilate the area and then disconnect the clamps from the terminals.**

- **Charging on the vehicle** - See above except ground the black negative clamp on the car and not the negative post.

- Do not change the cord or plug on the charger. The battery charger must operate with a 3-way grounding plug. The charger is dangerous to operate with out the 3-way grounding plug.

- **REMOVE MARINE (BOAT) BATTERIES BEFORE CHARGING.** This battery charger is not equipped to charge a marine battery on board.

Where to charge a battery

- Your battery charger has a 6' cord. **Set the battery charger at least 5' away from the battery.** FUMES and gases from the battery and SPARKS from a charger are a dangerous combination. Keep them separate.

- Keep the battery charger at least 18" off the floor to help ventilation.

- Do not place the Charger above the battery while charging. Fumes will corrode your charger.

- The area you are charging a battery in must be ventilated.
Operating Instructions for ATD-37460 Automatic 10 amp charger
With 55 amp Engine Start

- **Specifications (settings the charger)**
  - Manual 10 amp charge at 12 volts
  - Manual 2 amp charge at 12 volts
  - Manual 10 amp charge at 6 volts
  - Automatic 10 amp charge at 12 volts
  - Automatic 2 amp charge at 12 volts
  - Automatic 10 amp charge at 6 volts
  - 55 amp Engine start at 12 volts

- **ATD-37460** is an Automatic 10 amp battery charger. This charger will automatically sense the charge level in a battery. The charger can shut-off and turn-on based on the charge level of the battery. The charger will hum when on. **NOTE:** The 10 amp, 6 volt position does not shut-off automatically.

- **The ATD-37460 will assist the battery in starting an engine.**
  - Crank engine for no more than 3 or 4 seconds at a time.
  - Charging the battery for 15 minutes will give the starting process more power.
  - **The charger is equipped with an automatic reset circuit breaker.** Should you over heat the charger by cranking too long, the circuit breaker will trip. Should your charger overheat and the circuit breaker trips wait 10 to 15 minutes for the cooling period. The circuit breaker will then reset.
  - For best results in starting an engine, charge the battery first.

---

Operating Instructions for ATD-37414 Automatic 10 amp charger

- **Specifications (settings the charger)**
  - Automatic 10 amp charge at 12 volts
  - Automatic 2 amp charge at 12 volts
  - Manual 10 amp charge at 6 volts

- **Note:** The battery charger does not shut-off. Discontinue charging after 24 hours.
- The 6 volt, 10 amp manual setting is for charging 6 Volt batteries.
- The 12 volt, 10 amp automatic setting is for charging large lead acid batteries.
- The 12 volt, 2 amp automatic setting is for charging smaller lead acid batteries like those found in motorcycle, lawn tractors & snowmobiles.