

# PARTS LIST AND INSTRUCTIONS

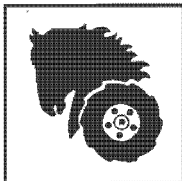
## ROTARY INVERTER

FACTORY ORDER NUMBER **8-6951**



### **CAUTION**

1. Read and understand the **ENTIRE CONTENTS** of this manual before using the inverter.
2. The inverter is designed for use with a 36 volt D.C. (direct current) system, such as the electrical system in the Wheel Horse Elec-Trak tractors. Use with any other power source may cause the unit to malfunction and could also create a **HAZARDOUS CONDITION** for the operator.
3. To prevent the possibility of Electrical Shock, **NEVER USE THE INVERTER IF THE GROUND, THE INVERTER, OR THE TOOL TO BE PLUGGED INTO THE INVERTER IS WET.**
4. **UNDER NO CIRCUMSTANCE** should the inverter be operated while the tractor charger is plugged in. Damage to the equipment and a **HAZARDOUS CONDITION** for the operator could result.
5. The inverter produces 120 volts (A.C.) and should be operated with the same degree of caution given to any normal household 120 volt receptacle.



# **WHEEL HORSE**

**lawn & garden tractors**

## APPLICATION

Some of the A.C. equipment that can be operated from the inverter includes garden tools, heaters or lighting, handcraft tools such as drills and sabre saws, barbecue heaters, rotisseries, radios and kitchen appliances. Frequency sensitive devices such as clocks and timers should not be powered by the inverter.

The Rotary Inverter, may also be used as an emergency power source to operate equipment such as furnaces, refrigerators, and sump pumps. In general, induction motors up to  $\frac{1}{2}$  hp can be operated. If prolonged overloads exist, the inverter will be protected by the operation of it's circuit breaker.

## INSTALLATION AND REMOVAL

Place the Inverter near the Elec-Trak tractor. Disconnect the Power Disconnect Switch located on the left side of the tractor (Fig. 1).



FIG. 1. Tractor Power Disconnect Switch

Connect the inverter to the tractor by connecting the Inverter plug to the "Accessory Receptacle" on the tractor. The Accessory Receptacle is located on the left side of the tractor under the edge of the hood as shown in Fig. 2.

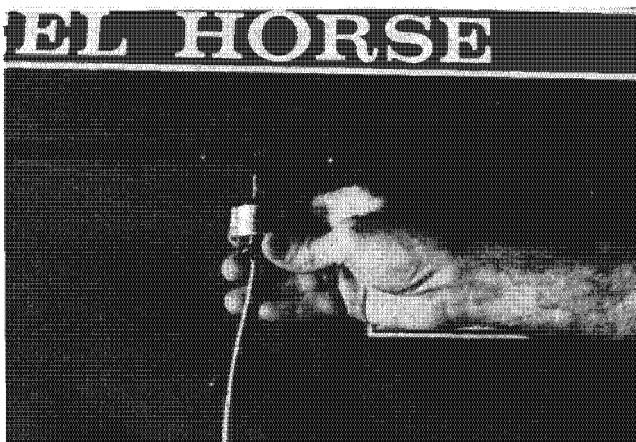


FIG. 2. Tractor Accessory Receptacle

The plug connects to the tractor by pushing the plug into the socket, and turning the plug slightly counter clockwise.

To remove the inverter, simply disconnect the Power Disconnect Switch and unplug the power cord from the tractor. The plug disconnects by turning the plug slightly clockwise.

## OPERATION

The inverter will operate whenever the Power Disconnect Switch is engaged, and the tractor batteries are charged.

**CAUTION**  
The Inverter may "jump" slightly when started.

**CAUTION**  
Under no circumstance should the inverter be operated while the tractor charger is plugged in! Damage to the tractor, and a HAZARDOUS CONDITION for the operator may result.

When the Power Disconnect Switch is engaged, the Inverter will be energized. This can be noted by a normal motor sound. Power is now available at the outlet of the inverter.

**CAUTION**  
To prevent the possibility of Electrical Shock, NEVER USE THE INVERTER IF THE INVERTER, THE GROUND, OR THE TOOL BEING PLUGGED INTO THE INVERTER IS WET!

The voltage of the tractor when fully charged is a normal 36 volts D.C. (direct current). When the Inverter is used for extended periods, the tractor voltage is eventually discharged. With the tractor fully charged, the inverter output voltage will be in a normal range of 105 to 130 volts A.C. (alternating current). When the tractor voltage drops to 32 volts, the output voltage of the inverter drops to a range of 95 to 115 volts A.C. This low voltage will do no harm to the inverter, but operation should be discontinued.

**CAUTION**  
The Inverter is designed for use with a 36 volt D.C. (direct current) system, such as the electrical system found in the Wheel Horse Elec-Trak tractor. Use with any other power source may cause the unit to malfunction and could create a HAZARDOUS CONDITION for the operator.

**CAUTION**  
The Inverter produces 120 volts A.C. (alternating current) and should be operated with the same degree of caution given to any normal 120 volt household receptacle.

The Inverter should be disconnected from the Accessory Receptacle when not in use.

## OVERLOAD PROTECTION

The Inverter is equipped with a manual reset circuit breaker. Under overload conditions the circuit breaker will "trip" to protect the inverter. When this occurs, the Power Disconnect Switch, on the tractor, should be disconnected and any 120 volt A.C. load should be disconnected from the Inverter. Allow the inverter to cool, then reset the circuit breaker by pushing in on the red button located on the side of the inverter, just above the 120 volt outlet. The inverter may now be restarted.

## PARTS LIST FOR ROTARY INVERTER

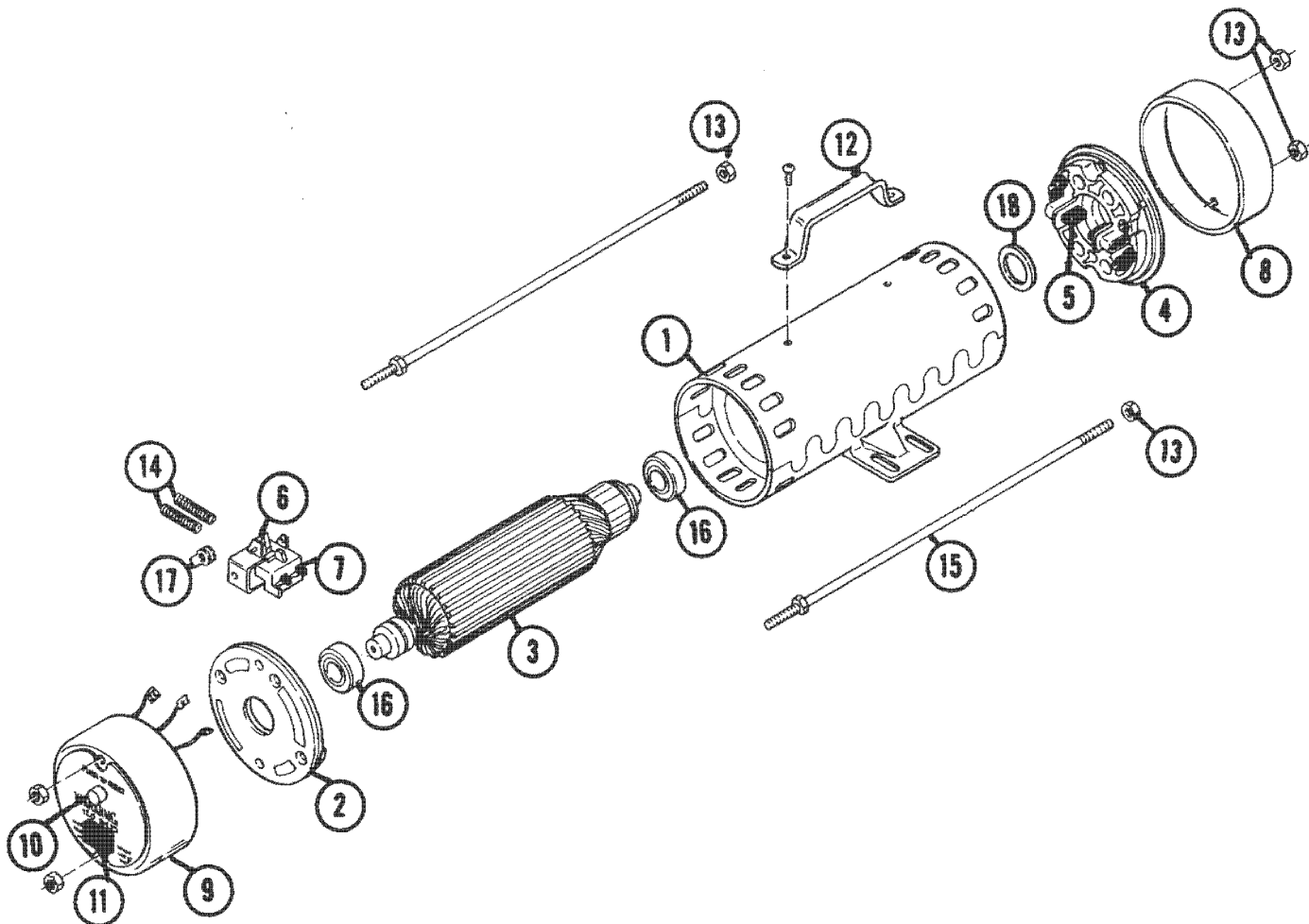
### FACTORY ORDER NUMBER 8-6951

Parts available only through Authorized Dealers.  
When ordering parts always list Part No. and Description.

**(Specifications subject to change without notice.)**

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D.
1	513824	Shell & Magnet Assembly	1
2	513831	Front End Bell Assembly w/o Brush Holder	1
3	513883	Armature Assembly w/Brushes	1
4	513853	Rear End Bell Assembly w/Brushes	1
5	513838	Brush Assembly (D.C.)	2
6	513880	Brush Holder (A.C.)	1
7	513860	Brush Assembly (A.C.)	2
8	513964	Cover (D.C. Side)	1
9	513871	Cover w/Circuit Breaker (A.C. Side)	1
10	517670	Circuit Breaker	1
11	513914	Snap-In Outlet	1
12	513881	Handle	1
13	513292	Nut, 1/4-20	8
14	513839	Spring	2
15	513914	Threaded Rod	2
16	513871	Bearing	2
17	522919	Screw	1
18	513840	Washer	1

### PARTS DRAWING



## CARE AND MAINTENANCE

The inverter should be maintained in good mechanical condition to avoid unnecessary hazards in service. The enclosure should be kept clean and free from dirt and grease and the power cord should be periodically inspected for wear and damage, and should be replaced if necessary. The cord should be kept dry and free from grease and oil.

If used outdoors, the inverter should be protected from moisture, but any protective covering must not obstruct its ventilation.

## SPECIFICATIONS

### Input:

Voltage (nominal) ..... 36 v dc  
Current (no load) ..... 3 amps

### Output:

Voltage (nominal) ..... 120 v ac  
Current (maximum cont.) ..... 10 amps  
Power (maximum cont.) ..... 1000 watts  
Frequency (nominal) ..... 60 Hertz

When not in use, unplug the inverter power cord and store the equipment in a clean, dry place.

If the inverter becomes wet, it should be thoroughly dried before using it again.

Any service that may be required for the inverter should be performed by your Wheel Horse dealer. Unauthorized service may void the warranty and could cause a malfunction or hazardous condition for both the tractor and the operator.