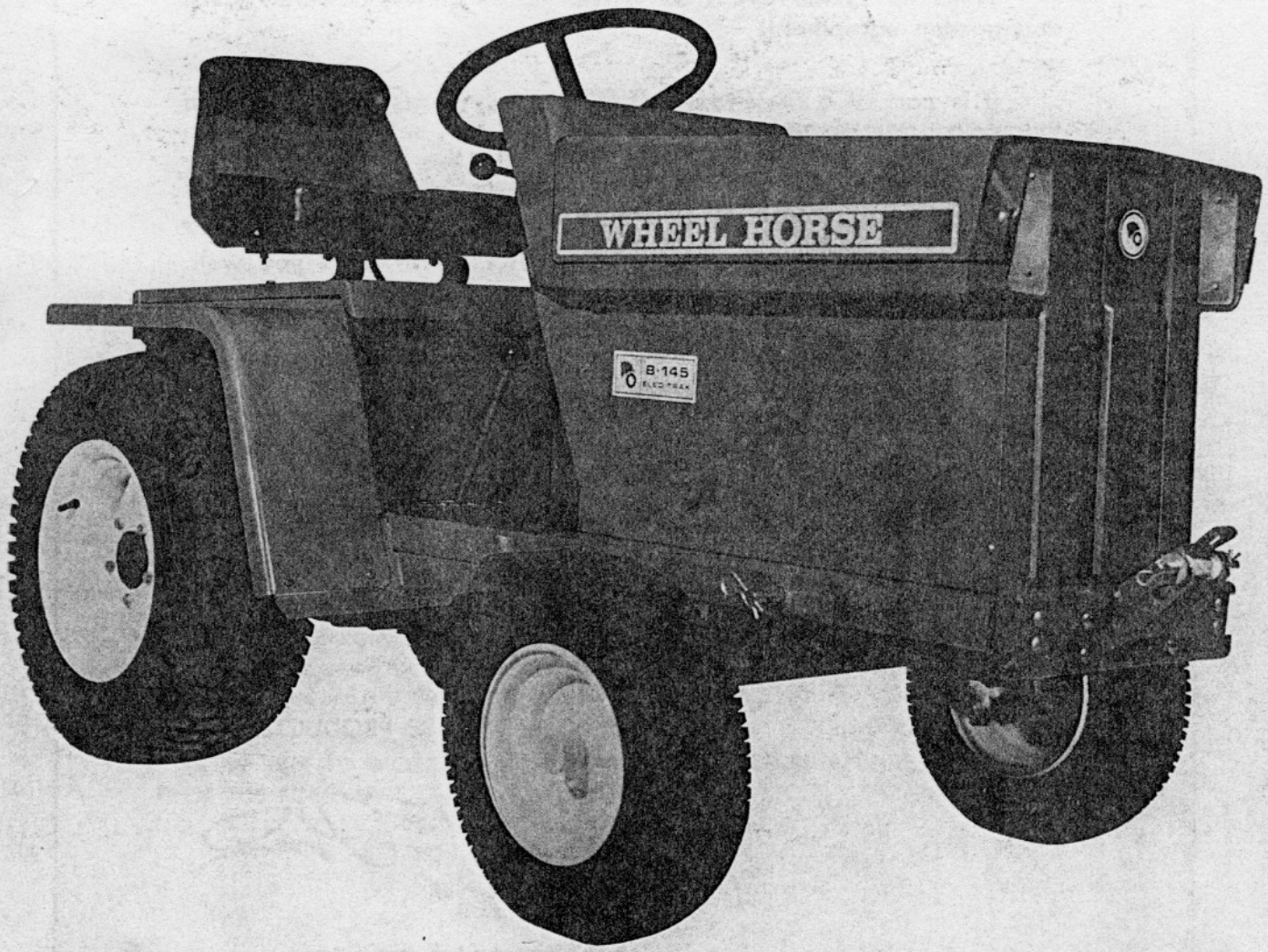
1975 OWNERS MANUAL

for

B·145 ELEC-TRAK

FACTORY ORDER NUMBER 1-0720
AND
42" MOWER
FACTORY ORDER NUMBER 5-1700



WHEEL HORSE
lawn & garden tractors

803439

Welcome to the world of Wheel Horse battery-powered lawn and garden equipment!

It is part of a new world of respect for our environment. With today's concern about pollution and shortages of some fuels, we are justly proud of our new B-145 Elec-Trak. It is the result of 29 years of experience in building lawn and garden equipment.

We are confident your new Wheel Horse will serve you well. Because it is battery powered, it runs cleaner, quieter and more efficiently.

We look forward to your comments and suggestions as to how we can improve our new B-145. For your convenience we've enclosed a special postage-paid report form. Please take a minute to give us your reactions to our new model!

Remember, we are sincerely interested in your continued satisfaction with our products.

Sincerely,

WHEEL HORSE PRODUCTS, INC.

C. E. Pond

Chairman of the Board

FACTORY ORDER NUMBERS

Factory order numbers and serial numbers are necessary to order parts. The serial number is on a plate inside the battery compartment. Motor numbers are on each motor. The transmission number is on the transmission.

For your convenience and ready reference, enter these numbers in the spaces below:

	Factory Order Number	Serial Number
Tractor	_____	_____
Traction Motor	_____	_____
Transmission	_____	_____

NEW PRODUCT REGISTRATION

Your new Wheel Horse equipment should be registered with the factory. Make sure your dealer completes all three (3) copies of the New Product Registration card and the factory copy is mailed to:

Wheel Horse Products, Inc.
515 West Ireland Road
South Bend, Indiana 46614

Retain your copy in a safe place for future reference as it contains important factory order number and serial number information.

PARTS MANUAL

A separate parts manual is available for your Wheel Horse equipment. To obtain a parts manual, enclose a check or money order for $1.00 for each manual and mail to the address above.

BE SURE TO INCLUDE THE FACTORY ORDER NUMBER AND SERIAL NUMBER OF THE EQUIPMENT.

CONTENTS

LIST OF ILLUSTRATIONS

LIST OF ILLUSTRATIONS (Continued)

GENERAL SAFETY SUGGESTIONS

Recommended by Outdoor Power Equipment Institute

SAFE OPERATION PRACTICES — RIDING VEHICLES

1. READ THE OWNER'S MANUAL PRIOR TO OPERATING YOUR LAWN AND GARDEN EQUIPMENT — KNOW THE CONTROLS AND HOW TO STOP QUICKLY.
2. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction.
3. Do not carry passengers. **Keep children and pets a safe distance away.**
4. Clear work area of objects which might be picked up and thrown.
5. Disengage all attachment clutches and shift into neutral before attempting to start engine (motor).
6. Disengage power to attachments and stop engine (motor) before leaving operator position.
7. Disengage power to attachment(s) and stop engine (motor) before making any repairs or adjustments.
8. Disengage power to attachments when transporting or not in use.
9. Take all possible precautions when leaving vehicle unattended; such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
10. Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes; never across the face.
11. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
12. Stay alert for holes in terrain and other hidden hazards.
13. Use care when pulling loads or using heavy equipment.
    a. Use only approved drawbar hitch points.
    b. Limit loads to those you can safely control.
    c. Do not turn sharply. Use care when backing.
    d. Use counterweight(s) or wheel weights when suggested in owner's manual.
14. Watch out for traffic when crossing or near roadways.
15. When using any attachments never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
16. Keep vehicle and attachments in good operating condition and keep safety devices in place.
17. Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.
18. When using vehicle with mower:
    (1) Mow only in daylight or in good artificial light.
    (2) Never make a cutting height adjustment while engine (motor) is running if operator must dismount to do so.
    (3) Shut engine (motor) off when unclogging chute.
    (4) Check blade mounting bolts for proper tightness at frequent intervals.
19. Check grass catcher bags frequently for wear or deterioration. Replace with new bags for safety protection.

⚠ CAUTION ⚠

1. KEEP ALL SHIELDS IN PLACE.
2. BEFORE LEAVING OPERATOR'S POSITION:
   A. SHIFT TRANSMISSION TO NEUTRAL
   B. SET PARKING BRAKE
   C. SHUT OFF MOTORS
   D. REMOVE IGNITION KEY.
3. KEEP PEOPLE AND PETS A SAFE DISTANCE AWAY FROM MACHINE.
4. DISCONNECT POWER CORD WHEN SERVICING MOWER.

INTRODUCING THE B-145 BATTERY POWERED TRACTOR

The new Wheel Horse B-145 Elec-Trak has been designed to be a positive addition to your home and its environment. Thanks to its "Electric Energy System" there are no irritating exhaust fumes. Battery power means a quieter machine, one that won't disturb the neighbors. The B-145 is dependable, because fewer parts mean fewer things to go wrong. Only minimum maintenance is required.

Please take time to read this owner's manual thoroughly. It has been carefully written to allow you to operate your new B-145 Elec-Trak with complete ease and safety. Preventive maintenance is outlined to help you keep problems from occurring.

⚠ CAUTION ⚠

This symbol marks important instructions relating to your personal safety. To avoid the possibility of injury, read and follow such instructions carefully.

When the manual refers to the left or right side of the B-145, it means your left and right when sitting in the driver's seat, facing forward.

SPECIFICATION CHART

General

Width	35 inches
Length (overall)	69 inches
Height (overall)	42 inches
Weight	852 lbs.
Turning Radius (inside)	47 inches
Frame	Steel
Accessory Outlet	Standard
Brake	Disc
Front Tires	4.80 x 8
Rear Tires	8.50 x 12
Seat	Two piece
Power Pack	36 volt HD
Speed Control	Hand Control
Speed Positions	3 forward, 2 reverse
Transaxle	4 Speed Ranges
Transaxle Oil Capacity	3 U. S. Pints
Lift	Electric

WHEEL HORSE PRE-DELIVERY CHECKLIST

B-145 ELEC-TRAK

The pre-delivery operations and checks on this list should have been performed and signed for by your dealer prior to delivery. If, for any reason, there is an indication that your tractor has not been checked, make sure the following operations are performed before starting it.

The B-145 comes completely assembled except for the installation of the steering wheel and the initial filling and charging of the batteries. Parts to be installed are found in the separate parts box in the delivery package. These parts are:

Qty.	Description	Qty.	Description
1	Steering Wheel	6	5/16 Washers
1	Steering Wheel Insert	2	5/16-18 Nuts
1	Dowel Pin	1	Convenience Hitch
2	Main Switch Keys	1	1/2-13 x 1 1/4 Bolt
1	Owners Manual	1	1/2 Lockwasher
1	New Product Registration Card	1	1/2-13 Nut
1	Seat, with Springs	1	20 Amp Fuse (Spare)
4	5/16-18 x 1 1/4 Bolts	1	40 Amp Fuse (Spare)

☐ INSTALL STEERING WHEEL

1. Install fiber washer on steering shaft. Install 3" spacer on steering shaft. Install the steering wheel. Line up the hole in the wheel hub with the hole in the steering shaft.
2. Secure the steering wheel with the roll pin, centering the pin in the wheel hub so it is the same distance from each end of the hole.
3. Snap steering wheel insert into place.

☐ INSTALL CONVENIENCE HITCH

Using the 1/2-13 x 1 1/4 bolt, 1/2" lockwasher, and 1/2-13 nut, attach the convenience hitch to the rear of the unit.

☐ INSTALL SEAT

Lay the seat on the seat pan and align the mounting holes. Insert the seat switch wires through the large hole in the seat pan. Insert two 5/16-18 x 1 1/4 bolts and two 5/16 washers, through the rear holes in the seat springs and into the rear holes in the seat pan. Tighten the bolts. Lift the seat pan and attach the front of the seat springs using two 5/16-18 x 1 1/4 bolts, four 5/16 washers, and two 5/16-18 nuts. Connect the plug for the seat switch.

☐ SERVICE BATTERIES

⚠ CAUTION ⚠

Electrolyte and battery fluid are poisonous and can be injurious to eyes, skin and clothing. In the event of an accident, flush immediately with a solution of one part baking soda to four parts water. Notify physician immediately. If baking soda is not immediately available, flush affected area with water. Notify physician immediately.

1. **NOTE:** Never install electrolyte with the batteries in the tractor. Use only electrolyte with a specific gravity of 1.265.
2. Remove the special Wheel Horse batteries from the tractor. Begin by removing all terminal covers and battery hold downs. Disconnect the negative battery cable from battery B5, then disconnect the remaining cables. **Note the positions of all cables.** (See Fig. 1).
   Remove the batteries from their compartments.
3. Remove battery caps and fill each cell until the electrolyte is barely 1/4 inch above the top of the separators. **Do not overfill.** Replace the caps.
4. To reinstall the batteries, first lay the tray so that the drain holes line up. Place the spacers as required. Put the batteries in place and make a tight connection as shown in Fig. 1. Check the power pack for voltage. A reading of 36 volts D.C. should be produced from the positive post on

battery B2, to the negative post on battery B5. (See Fig. 1). If 36 volts is not read, recheck the battery wiring. (See Fig. 1). Coat all terminals with battery grease. Install terminal covers and battery hold downs. Charge the batteries, referring to ELECTRICAL SYSTEM SECTION, "Charging the Batteries".

⚠ CAUTION ⚠

Keep loose battery cables from shorting to other connections or the tractor itself.

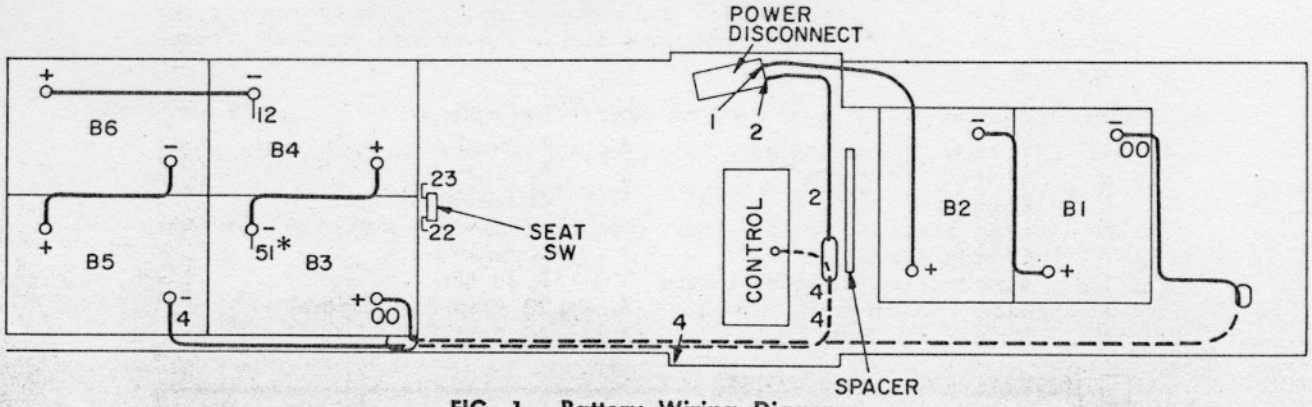


FIG. 1. Battery Wiring Diagram

☐ CHECK WIRING

1. Visually check all wiring for loose connections and tighten as required. Check the routing of all wires to make sure they will not interfere with any moving part, causing a short.

☐ TEST LIFT

1. Test the tractor lift with attachment mounted. Test for movement both up and down.

☐ TEST LIGHTS

1. Test the "ON" and "OFF" switch for both the headlight and dash light.

☐ CHECK SPEED CONTROL

1. With the range selector in neutral, check forward and reverse for the proper number of speeds as indicated in the specification chart. **Note:** The power use gauge should not be in the red zone in any operating speed, although initial motor starting will normally deflect the meter to full scale momentarily. Cold weather may cause high current until the tractor runs for a short period of time.

☐ CHECK TIRE INFLATION

1. The tires have been over-inflated for shipping. Reduce the pressure as follows:

Front Tires	15 PSI
Rear Tires	10 PSI

☐ LUBRICATION

1. Grease the spindles, front wheels and pivot pin. Oil the brake pedal shaft and lift assembly.

Work performed on _____
Date

Dealer signature _____
Authorized Wheel Horse Dealer

⚠ CAUTION ⚠

The preceding section covering pre-delivery inspection should have been completed by a Wheel Horse dealer. Failure to complete the pre-delivery inspection on your new Wheel Horse B-145 Elec-Trak prior to its first use may affect the warranty.

FAMILIARIZE YOURSELF WITH THE INSTRUMENTS AND CONTROLS AS SHOWN BELOW:

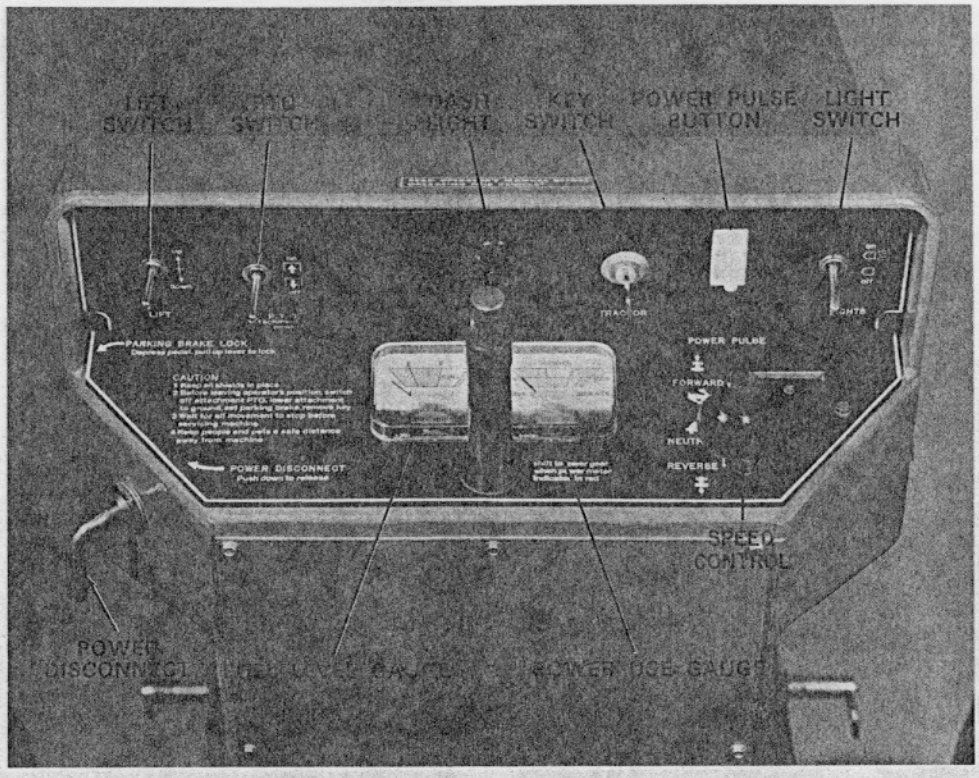


FIG. 2. Major Instruments and Controls

READ CAREFULLY FOR DETAILED OPERATING PROCEDURE:

SPEED CONTROL LEVER (Fig. 3)

Control of speed in the forward and reverse motion is made with one lever. Moving the speed control from neutral toward the front of the tractor increases forward speed. Moving the lever toward the rear from neutral increases speed. (See Fig. 3). The full forward speed control position provides maximum torque and the highest efficiency in use of power.

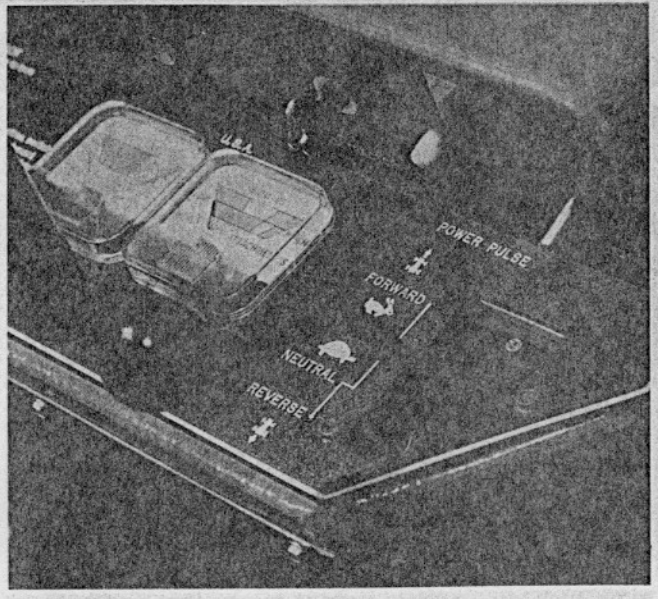


FIG. 3. Speed Control Lever

BRAKE PEDAL AND PARKING BRAKE (Fig. 4)

The B-145 is equipped with a disc-type brake fixed on the transaxle. This brake is used for normal stopping, as well as a parking brake. To set the parking brake, fully depress the brake pedal and pick up on the rear of the parking brake lever until it engages the forward edge of the footrest. The brake pedal should now remain in its depressed position. The parking brake is released by reapplying pressure on the brake pedal and moving the rear end of the parking brake lever downward to its stop. (See Fig. 4).

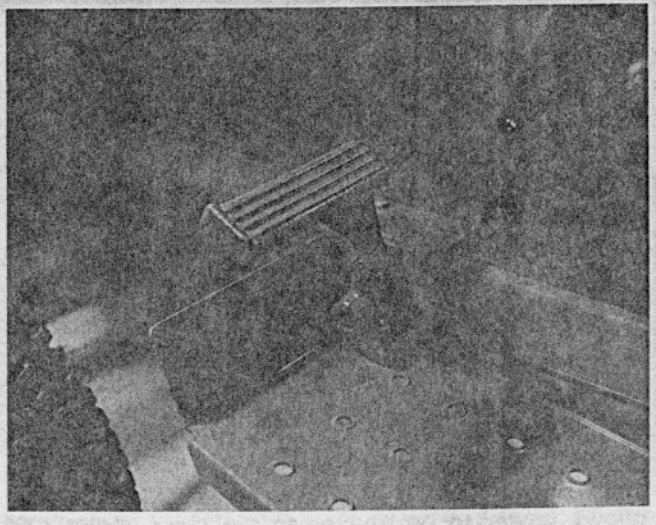


FIG. 4. Brake Pedal and Parking Brake

The brake pedal activates a switch which cuts off the drive motor circuit when the pedal is fully depressed. The tractor speed control is inoperative with the parking brake set. To restore drive motor power, release the brake pedal and move the speed control lever.

NOTE: The brake pedal must be released enough to reset the drive shut-off switch. Proper adjustment activates the drive shut-off switch ¼ inch above the bottom of brake pedal travel.

LIFT SWITCH (Fig. 5)

The B-145 is equipped with a front electric lift. The lift strap threading procedure shown in Fig. 6 should be followed to insure proper operation of the lift.

With an attachment properly mounted, the lift switch lever is held upward to raise the attachment and downward to lower it. (See Fig. 5). Spring loading returns the switch to its center "OFF" position upon release. **Do not continue to power the lift after its raised limit has been reached.** Such abuse will trip the circuit breaker in the lift or will blow the protective fuse. To give attachments freedom to follow the ground contour, allow a small amount of slack in the strap during operation by holding the lift switch down for about one to two seconds after the implement stops its downward movement.

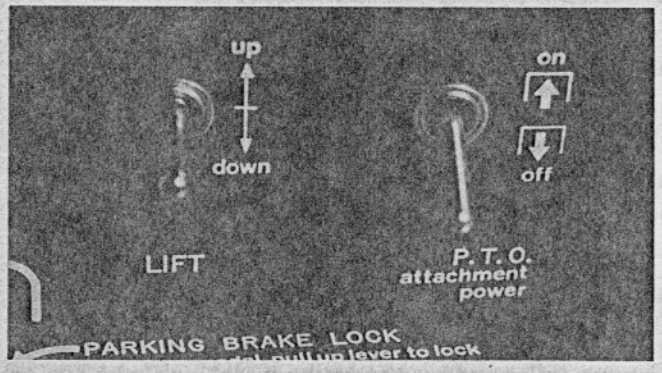


FIG. 5. Lift Switch

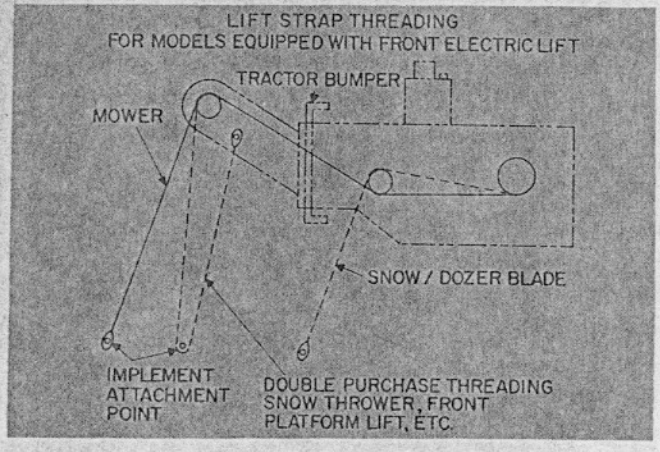


FIG. 6. Lift Strap Threading

KEY SWITCH (Fig. 7)

The "OFF" position disconnects all tractor electrical circuits with the exception of the charger, lift, lights, and accessory receptacle. The clockwise "ON" position allows power to be applied to the drive motor and PTO receptacle.

FIG. 7. Key Switch

⚠ CAUTION ⚠

Always take the key with you when leaving the tractor unattended, even if for a few minutes. Don't give children or unauthorized persons any opportunity to operate the machine.

PTO (POWER-TAKE-OFF) (Fig. 8 & 9)

The dash mounted PTO switch controls motorized attachments. Power is delivered through the PTO receptacle located just under the left edge of the hood toward the front of the tractor. (See Fig. 8).

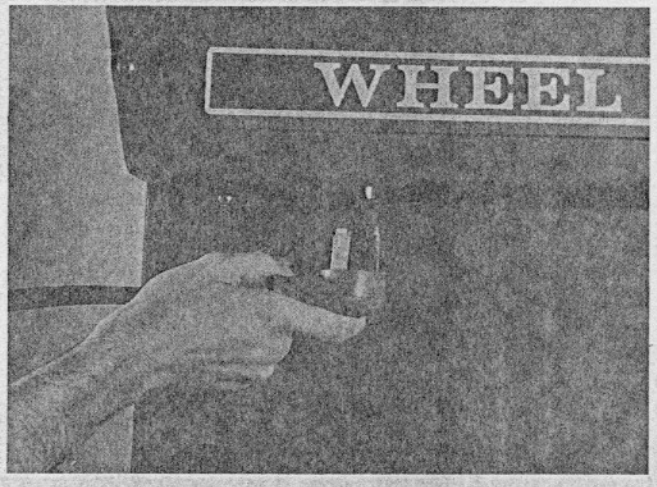


FIG. 8. PTO Receptacle

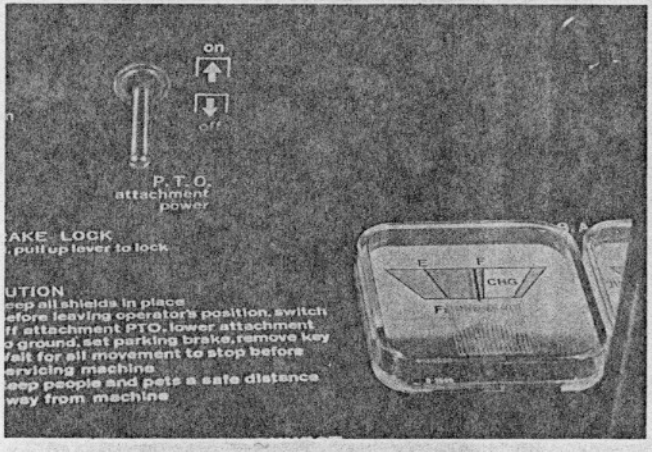


FIG. 9. PTO Switch

PTO operated equipment is turned on by preparing the tractor for normal operation (Key on, operator seated). The PTO switch is then moved to "ON" momentarily and then released. Upon release, the switch automatically returns to its center "ON" position. To stop such equipment, simply return the switch to its "OFF" position. (See Fig. 9).

RANGE SELECTOR (Fig. 10)

The Range selector lever determines one of four speed-torque ranges according to the pattern shown in Fig. 10. "D2" is the fastest, "D1" is a bit slower with increased torque. "L" is still slower with greater torque, and "LL" is used for slowest speeds, where maximum torque is required. The LL position is accessible by shifting through the L position.

Range selection is made with a quick positive hand motion, but only after drive motor rotation is stopped.

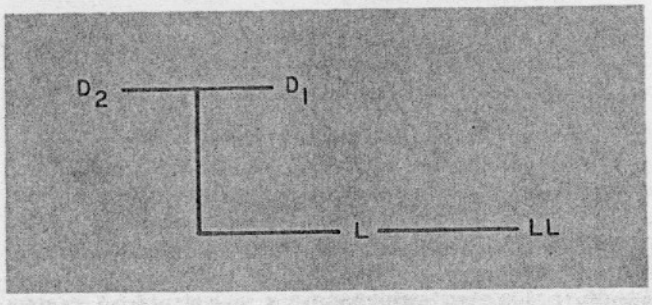


FIG. 10. Range Selector Diagram

Designation	Use
LL — Low-Low (Up to 1.5 mph)	Heavy Snowthrowing Tilling Ground Engaging Attachments
L — Low (Up to 3.75 mph)	Light Snowthrowing Hauling (Heavy Loads) Grounding Engaging Attachments Gravel or Dirt Dozing
D_1 — Drive One (Up to 6.5 mph)	Heavy Mowing Hauling (Medium G Loads) Raking and Seeding Snow Plowing (Dozer Blade)
D_2 — Drive Two (Up to 9.0 mph)	Transporting Snow Plowing High Speed Mowing Hauling (Light Loads)

NOTE: When the range selector gears do not move or mesh easily, a momentary application of drive power will reposition gears and allow shifting. Do this by moving the speed control forward momentarily. Do not force gear changes if any interference is indicated. Be careful to have tractor path clear of objects or people in case movement occurs during this operation.

POWER PULSE BUTTON (Fig. 11)

For convenience, a power pulse button is located on the control panel, (See Fig. 11). This button provides additional drive motor torque for unusual starting situations which may occur. For example, while mowing, forward motion may be interrupted for maneuvering during an uphill climb. To regain forward speed, the speed control would normally be returned to neutral and then moved forward to the drive position. If this practice is followed with the range selector in D1 or D2, and the starting load is high, forward motion may not result unless the power pulse button is momentarily depressed while the speed control is in this position. This switching overrides protective circuitry and provides a smooth start-up on hills. **It must only be used for starting during unusual situations.** Whenever repeated use of the power pulse button is resuired, the next lower speed range should be used.

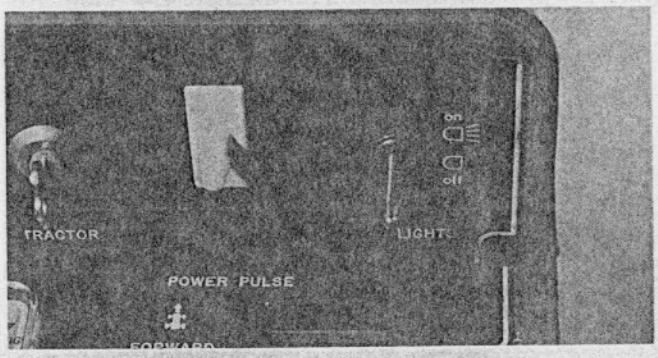


FIG. 11. Power Pulse Button

The power pulse button is only depressed momentarily to obtain motion, and should never be depressed for more than a few seconds. It should also be noted that the same hill could be climbed without the use of a power pulse button if the tractor were not stopped midway on the hill.

⚠ CAUTION ⚠

The power pulse button should only be used as suggested and no attempt should be made to abuse it or defeat its purpose, or equipment damage may result.

LIGHTS

Operation of the tractor lights is independent of the key switch and power disconnect, so that the lights can be used at night for lighting work areas or servicing front mounted attachments with the power safely turned off. In addition to lighting the dash panel, the dash light serves as a reminder that the headlights are on.

FUEL LEVEL GAUGE (Fig. 12)

On the fuel level gauge, the green zone between the (E) Empty and (F) Full represents range of the power pack. Readings in this zone are fractional portions of full range remaining. (See Fig. 12).

When the charger is in operation and nearing completion of its cycle, the CHG indicates the power pack is being charged. This assures you of proper charger operation. After the charging cycle is com-

pleted, the indication should be F or higher to be interpreted as full. Use of heavy work attachments or high loads on the tractor will cause the indicator needle to drop below F as the heavy drain period begins. The fuel level gauge will always read lower during heavy power usage. When the gauge consistently reads below empty, the load should be reduced until the indicator needle returns to the green area or the tractor is recharged enough to permit further operation.

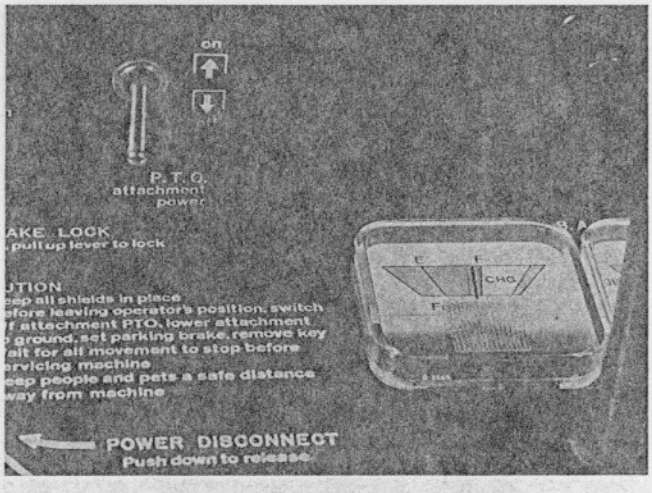


FIG. 12. Fuel Level Gauge

While the right red zone represents overcharge, the left one represents overdischarge. If either of these zones are indicated after charging, check the trouble-shooting chart at the back of this manual. If proper operation is not restored by the suggestions there, disengage the power disconnect and consult your authorized Wheel Horse dealer.

POWER USE GAUGE

Proper use of the power use gauge can extend the tractor range per charge considerably. Reference should be made to the upper scale when performing relatively light work, such as mowing, transporting, hauling and sweeping, but the lower scale should be used for heavier operations. Continued operation with an indication in the red on the high section of the appropriate scale should be avoided. Prolonged operation with this indication will result in more rapid discharge of the power pack, and is usually due to improper choice of speed-torque range or a jammed attachment. Whenever possible, the speed control should be maintained in the full forward position.

During normal operation, if the power use gauge indicator remains in the green or lower yellow zone of the appropriate scale, proper gear selection has been made with the range selector and maximum range per recharge should be realized.

ACCESSORY RECEPTACLE (Fig. 13)

The accessory receptacle is located on the left side of the tractor, under the edge of the hood, to the rear of the PTO outlet as shown in Fig. 13. Accessories connected to this outlet will function so long as the power disconnect switch is engaged, and batteries are charged.

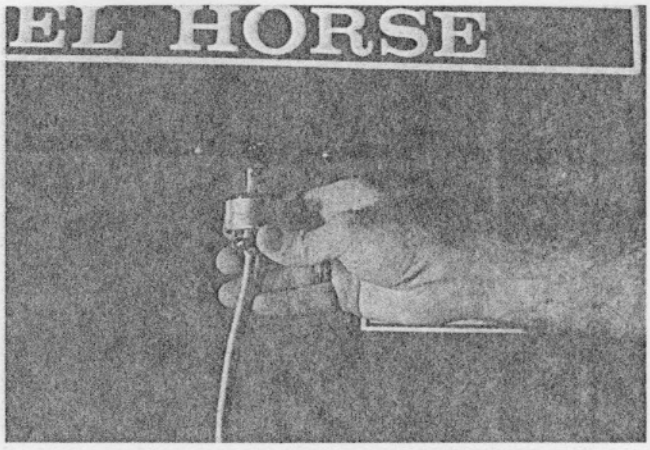


FIG. 13. Accessory Receptacle

ELECTRICAL SYSTEM

The B-145 gets its power from its "Electric Energy System". Six special Wheel Horse six volt batteries supply power to both the drive motor, which moves the tractor, and the PTO receptacle. To refuel the tractor, the batteries must be recharged.

⚠ CAUTION ⚠

Under no circumstances should automotive electrical equipment such as lights, horns, or any grounded frame device be attached to the tractor. The tractor frame is not grounded and such devices could cause damage to the control system and prove a potential safety hazard if used.

CHARGING THE BATTERIES

The B-145 is designed to refuel itself and always be ready for use, if the charger is plugged in and the charger dial is turned to the appropriate "START" position. It should always be plugged into a standard 115 volt grounded outlet when not in use.

⚠ CAUTION ⚠

1. **Check to see if your 115 volt outlet is a grounded type.**
2. **Or, as an alternative, you may use an adapter if your electrical outlet is internally grounded.**

If in doubt, consult a qualified electrician.

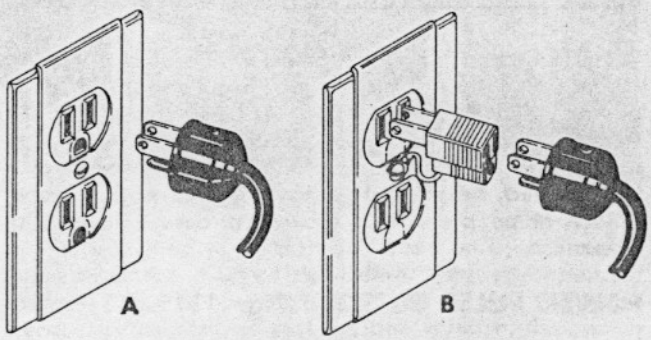


FIG. 14. Approved Electrical Outlets — Standard Grounded & Adapter Ground

⚠ CAUTION ⚠

Use of an improperly grounded outlet could result in electrical shock.

CHARGER STARTING POSITIONS (Fig. 15)

The amount of charging a power pack needs depends on three things:

1. The accumulative number of hours of operation since the last charge.
2. The temperature of the batteries.
3. The age of the batteries.

The charger dial starting positions are lettered "A" through "J". Position "A" is a very long charging period; position "J" is about half as long. The best indicator of the power pack's charging requirements is the amount of water to be added. If water must be added after one to three charges, the charger should be started at the next letter **below** that of the previous charge, for example, from "C" down to "D". The charger setting should not be varied more than one letter at a time, and two or more charges should be made before determining the need to use a new knob setting.

As the batteries age and go through more charging cycles, the charging period can be decreased. Typical homeowner use allows a full charge to occur if started in the "A" to "D" position during the first to second year and "D" to "F" position after the second or third year of use.

As temperatures decrease, the charge time must be increased. For example, a power pack discharged to the same level will require as much as 50% more charge time for full recovery at 30°F than at 70°F. In very cold weather the "A" position should be used for all charging.

When in doubt, it is better to overcharge (charge too long) than to undercharge, as long as there is not a high loss of water during charging.

NOTE: A deeply discharged power pack requires the charger to draw approximately 7-amperes from the 115 volt receptacle. To prevent 15-ampere household fuses or circuit breakers from "opening" and interrupting power, it may be necessary to disconnect other appliances, tools or lights from the circuit.

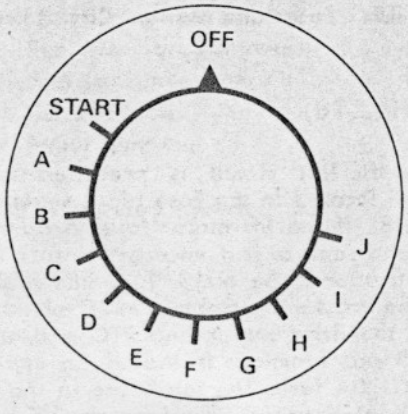


FIG. 15. Charger Starting Positions

When the charger control timer has stopped, the charger shuts off automatically. When the tractor is needed, however, the charger may be turned off and unplugged any time during or after the charging cycle.

NOTE: The power pack should not be charged in an area where the temperature is above 110°F. to prevent overheating and possible damage to the batteries.

⚠ CAUTION ⚠

When servicing the batteries or any other part of the electrical system, or if the batteries must be removed for any reason, remove personal metal objects: rings, bracelets, etc., to avoid the possibility of electrical shock.

POWER PACK

Charge and add water to the batteries as outlined in this manual. Keep the tops of the batteries clean. Remove accumulations of dirt, grass clippings and so forth to assure optimum electrical system performance. An occasional wiping with wet paper towels is sufficient.

SERVICING THE BATTERIES (Fig. 16)

During the late stages of the charging cycle there is a bubbling action or gassing process which allows some water in the electrolyte solution to evaporate. During this procedure only water is lost, so it is only necessary to add water to bring the electrolyte level up to the proper point. Distilled water, or tap water of low to average mineral content, is satisfactory for this purpose.

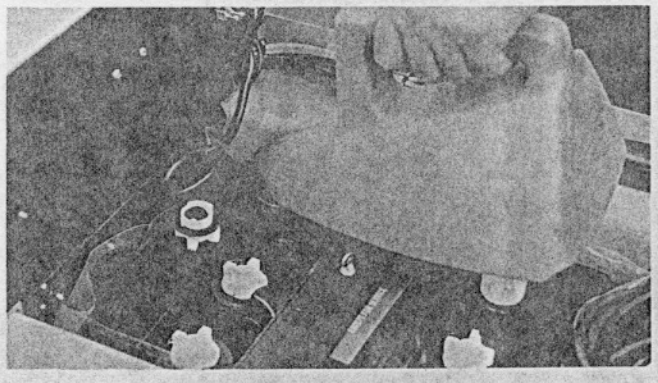


FIG. 16. Power Pack Watering

Water should be added only after the power pack is charged. The only exception to this rule is if the water level should fall below the top of the plates. Sufficient water should be added to bring the electrolyte level just above the plates. The system should then be charged and additional water added if necessary.

⚠ CAUTION ⚠

Electrolyte and battery fluid are poisonous and can be injurious to eyes, skin and clothing. In the event of an accident, flush immediately with a solution of one part baking soda to four parts water. Notify physician immediately. If baking soda is not immediately available, flush affected area with water. Notify physician immediately.

Any electrolyte running out of the top of the cells is an obvious sign of overfilling. It is important that the electrolyte level be maintained ¼ to ⅜ inch above the plates and **never** above the indicator ring. Overfilling can result in dilution of the electrolyte which reduces the capacity and life of the batteries. Overfilling can also cause corrosion when spillage of electrolyte occurs.

Under normal conditions it will only be necessary to check the electrolyte approximately once per month. Use of the tractor in higher temperature locations or under very heavy use may require more frequent checks. After several years of use it may be necessary to add water more often.

⚠ CAUTION ⚠

During the charging process hydrogen gas is formed. Always open the battery compartment cover and charge batteries only in well ventilated areas. Do not charge near flames. Do not smoke near the tractor during the charging process.

⚠ WARNING! ⚠

Only special Wheel Horse batteries may be used as replacements. Failure to follow this warning may negate the battery warranty.

ELECTRICAL SYSTEM PROTECTION

POWER DISCONNECT (Fig. 17)

The power disconnect is an emergency device which disconnects all electric power to the vehicle. It disengages power when you push the end of the lever downward. (See Fig. 17). Should any electrical malfunction occur, disengage this unit immediately and check the troubleshooting chart before consulting your dealer.

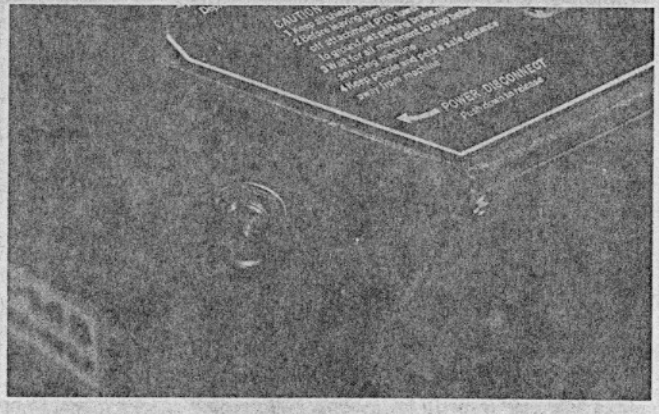


FIG. 17. Power Disconnect

⚠ CAUTION ⚠

All servicing of the tractor should be done with the power disconnect disengaged. Charging of the power pack requires the power disconnect to be engaged.

The power disconnect is engaged by pushing the lever in before it is rotated upward. It is locked in this position by rotating counter-clockwise ¼ turn.

CIRCUIT BREAKERS (Fig. 18)

Circuit breakers are used to protect the drive, lift, and charger circuits from damaging overloads. These devices operate on both high current and high temperatures since potentially severe conditions could damage the circuits or components, and they remove power to the circuits under such conditions.

After a short interval of time, these breakers either automatically reclose or can be manually reset so that operation can be restored by following the normal starting procedure.

Continued tripping is a signal to reduce the load, or to search for a fault such as jamming or perhaps an electrical problem that requires dealer service.

The automatic circuit breakers are located at or within the motors. Manual reset circuit breakers are used on some of the attachments, while the automatic type is used on others. See the specific attachment manuals for additional information.

The circuit breaker located on the control panel next to the fuse block is used to protect the charging circuit, as well as the accessory receptacle. This manual reset circuit breaker operates on over-current conditions in a similar manner to the motor breakers, but, **when tripped, must be reset by pushing the red reset button.** (See Fig. 18).

⚠ WARNING! ⚠

The tractor power pack connot be charged if this circuit breaker is open.

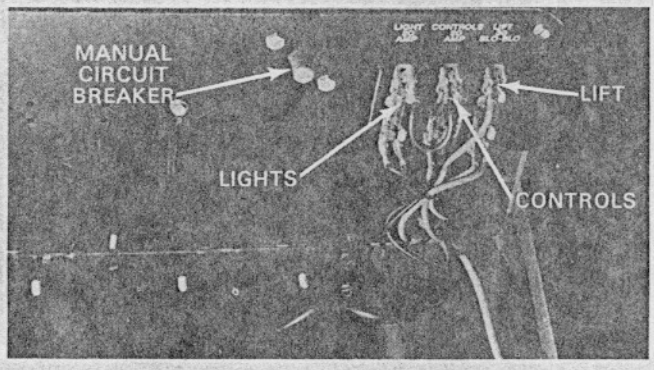


FIG. 18. Fuses and Manual Circuit Breaker

FUSES (Fig. 18)

The electric lift circuit is protected by a 3AG 30ASB fuse located in the fuse block under the hood. (See Fig. 18). If the lift motor fails to operate, check this fuse and replace it if necesary with one of identical specifications. The center fuse in the same block protects the tractor control and PTO circuitry. If this fuse fails, the drive motor and PTO operated attachments will not function. It should be replaced only with a 3AG20A fuse. The third fuse in the block protects the light circuitry. This fuse should also be replaced with 3AG20A fuses when necessary.

STARTING AND OPERATION

TO START:

1. Disconnect the charger cord and place it around the cord wrap in the compartment.
2. For safety reasons, the tractor will not start unless the operator is in the seat and the speed control lever is in neutral.
3. Turn the tractor key to "ON".
4. Move the range selector to the desired position (D2, D1, L, or LL).
5. Release the parking brake.
6. Move the speed control lever slightly in desired travel direction. Increase movement for higher speed.

TO STOP:

1. Return the speed control to neutral and/or depress the brake pedal.
2. Set the Parking Brake.

NOTE: Quick stops can be made by fully depressing the brake pedal without returning the speed control to neutral. Full depression of the brake pedal switches the drive motor off. Before this motor will restart, the speed control must be returned to neutral and the brake released. Movement of the speed control will then restore operation.

TO CHANGE DIRECTION:

1. Stop the tractor by returning the speed control to neutral and/or depressing the brake pedal.
2. Release the brake pedal.
3. Move the speed control slightly in the direction desired. Higher speed results from moving the lever further in that direction.

⚠ CAUTION ⚠

Climb steep hills at low speed. Don't attempt steep climbs at high speed.

ATTACHMENT CAPABILITIES

The following Wheel Horse attachments are available to increase the usefullness of your new tractor:

	Factory Order No.
42 Inch Rear Discharge Mower	5-1700
Side Discharge Conversion Kit	8-1600
48 Inch Dozer Blade	6-0700
42 Inch Snow Thrower	6-0740
Tiller	7-1270
110 Volt AC Rotary Inverter	8-6951
Aerator	7-2412
31 Inch Lawn Sweeper	7-2513
38 Inch Lawn Sweeper	7-2522
Lawn Roller	7-2312
Utility Wagon	7-2112
Dump Cart	7-2212
Harrow	7-1612

MAINTENANCE

LUBRICATION (Fig. 19 & 20)

The design of your new Wheel Horse Elec-Trak reduces lubrication requirements tremendously. The electric motors are permanently lubricated and there are no clutches, idler pulleys or mower bearings to be greased. Several high friction points do require periodic lubrication to prolong life and give maximum operating satisfaction.

After every 100 operating hours, or every six months, the transaxle filler plug should be removed and the fluid level checked. (See Fig. 19). The oil level should be to the bottom edge of the filler hole. If necessary, replenish with SAE EP90. The front spindles, the front wheel bearings, and the front axle main pivot pin should be greased with a hand grease gun using a #2 multi-purpose grease. (See Fig. 20). Pump the gun until dirt and old grease are flushed out and wipe all surfaces clean.

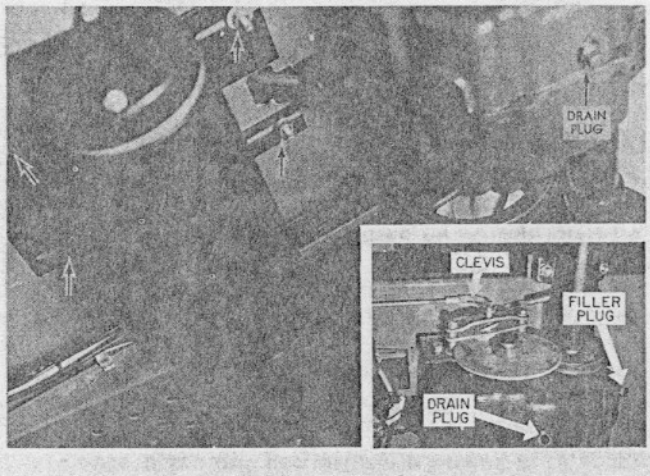


FIG. 19. Brake, Transaxle, and Motor Mounting

All linkages and bearings should be oiled with a heavy duty #30 machine oil. Major points to be oiled regularly include:

1. Brake pedal shaft and linkage connections.
2. Hood and seat hinges.
3. Attachment mounting pins.
4. Front lift spool and gears.

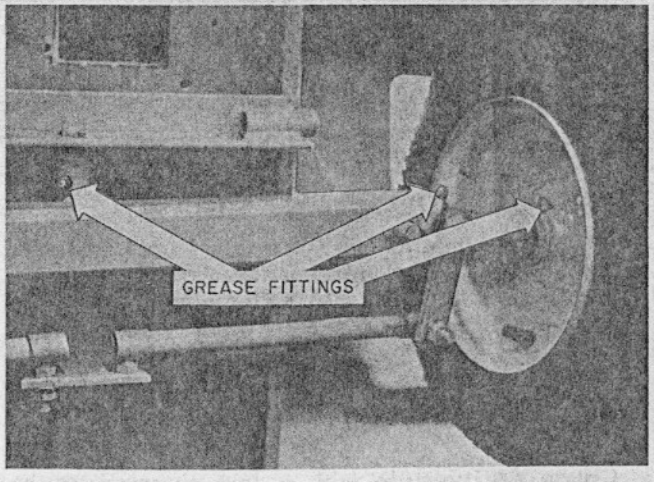


FIG. 20. Front End Grease Fittings

Prevent dirt and dust accumulation by wiping away all excess oil. The foregoing lubrication intervals are meant to be a guide only. If the tractor is subjected to abnormal environmental conditions or greater than average use, the frequency of lubrication, as well as other preventive maintenance measures, should be adjusted accordingly.

SERVICE AND ADJUSTMENTS

⚠ CAUTION ⚠

Before making any adjustment, turn main key switch off and remove the key from the switch.

VISUAL INSPECTION

Periodic inspection of the tractor is an important preventive maintenance measure. Make it a habit to visually check for loose fastening devices or any evidence of abnormal operation. Inside storage or covering of the tractor plus regular cleaning and polishing of exterior surfaces will keep the tractor in good condition. Adjustments, inspections and maintenance procedures should be performed at regular intervals to assure trouble-free economical operation.

DRIVE ASSEMBLY

Power is transmitted from the drive motor to the transaxle through a heavy duty, direct coupled belt. All belts should be kept free of grease, oil, and electrolyte and dressings. Check belts occasionally for tightness to assure best performance. If the belt becomes contaminated, it should be wiped with a clean cloth. Any belt slippage is due to a wet belt or loose adjustment. If a belt becomes wet and slips, temporarily select lower speed range, meaning a higher torque, until the belt dries, and then resume normal operation.

BELT ADJUSTMENT

When the belts have been properly adjusted, a 10 pound force will deflect the belt approximately ¼ inch. If increased tension is required, proceed as follows:

1. Loosen the four carriage bolts holding the motor plate. Insert a ¼ inch wedge under the forward part of the motor plate, and retighten bolts finger tight. (See Fig. 19).
2. With belts in place, force the motor mounting plate away from the transaxle as far as possible. Tighten the two carriage bolts nearest the transaxle.
3. Remove the ¼ inch wedge, and tighten the remaining two carriage bolts.
4. Recheck belt tension.

WHEELS AND TIRES

Proper tire inflation pressure is an important factor in determining tire life. Pressure should be checked and corrected, if necessary, on a monthly basis according to the following table:

Tire Inflation

	Soil	Hard Surface
Front	10-15 PSI	15-28 PSI
Rear	8-10 PSI	10-24 PSI

Gauge tire pressure with a low pressure gauge. Use of chains requires the lowest pressures for smoothest ride and maximum traction. Stumps, holes, and sharp objects should be avoided, and any cuts occuring in the tire should be repaired immediately or tire life will be reduced. The rear wheels are factory assembled in their narrow tread configuration. (See Fig. 21). For greater safety when operating on hillsides, tread width may be increased by reversing the wheels on the hubs. Remove and reinstall wheels like changing an auto tire.

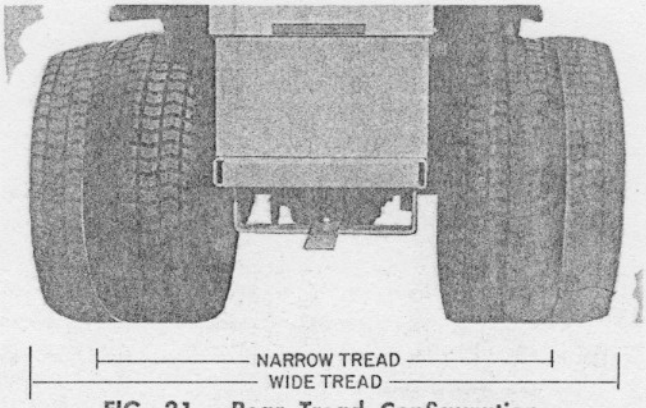


FIG. 21. Rear Tread Configuration

BRAKE AND PARKING BRAKE ADJUSTMENT

A fully depressed brake pedal or an engaged parking brake should prevent the tractor from rolling on average hillsides. If the brake does not perform satisfactorily, see the following adjustment procedure: (See Fig. 19 insert).

1. Block the front wheels and move the range selector to neutral.
2. Jack tractor under rear axle with safety approved jack.
3. Remove the rear wheel on the brake side of the transaxle.
4. Remove the cotter pin from the brake clevis pin.
5. Remove the brake clevis pin.
6. Rotate the brake clevis to shorten the brake linkage. Shorten until the brake drags (test by manually rotating the brake disc); then, back off ½ turn at a time until brake drag is eliminated. The clevis and clevis pin must be temporarily reinstalled to check brake drag.
7. Reinstall the clevis, clevis pin, and cotter pin on the brake actuating lever.
8. Reinstall the wheel and test the brake function; remove the jack.

BRAKE SWITCH ADJUSTMENT (Fig. 22)

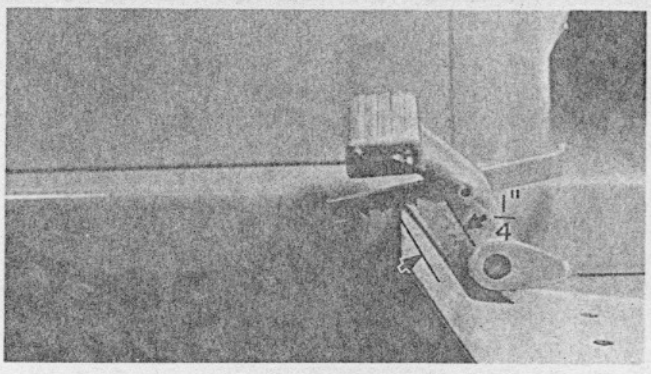


FIG. 22. Brake Switch Adjustment

Proper brake switch adjustment causes the drive motor to shut off when the brake is depressed to ¼ inch from its bottom stop. (See Fig. 22). If adjustment is necessary, locate the brake switch mounted on the other side of the frame immediately to the right of the brake pedal. Notice that the switch is actuated when its lever arm is deflected as the brake pedal is depressed. During this actuation, the lever arm rides on a shoulder bolt mounted on a slotted pawl. It is this bolt that must be repositioned in the slot to adjust the drive motor/brake cut-off point. After adjustment is made, check the cut-off point and readjust if necessary.

STEERING ASSEMBLY

The front axle and steering system of the Elec-Trak tractor are extremely rugged. Toe-in and steering gear and linkage are carefully adjusted at the factory and should require no additional adjustments in normal service, barring improper operation. If service does become necessary, contact your authorized Wheel Horse dealer.

USE OF CHAINS (Fig. 23)

The use of chains on the rear tires will be found helpful on loose or soft surfaces, particularly when using a snow thrower which, when lifted, counter balances some of the weight off the rear wheels. When chains are used, locate the rear wheels on the hubs so that they are at the widest spacing. The wheel rims can be bolted to the hubs with most of the width of the tire to the inside, under the fender; or can be flipped over with more of the width on the outside, leaving approximately 4 inches space between the tire and the tractor frame. This wide track also improves stability for snow removal service. If wheels are removed to obtain wide setting, assemble chains while the wheel is off. If wheels are already set wide, chains may be assembled in the normal manner with the wheels left in place. Do not allow excess chain to rub or contact the tractor body or frame.

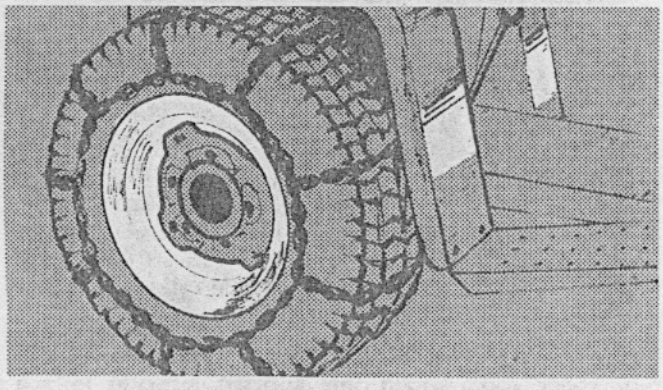


FIG. 23. Use of Chains

STORAGE

When storing the tractor follow these guidelines:

1. Fully charge the power pack by setting the charger knob to the appropriate starting position, and letting the charger operate until it shuts off.

2. Add water to each battery cell to the proper level only.

3. The tractor may be stored in the cold, provided the power pack is charged. A discharged power pack can freeze in cold temperatures unless recharged immediately after use. The following table illustrates the relationship between the amount of charge and the freezing temperature of electrolyte.

Amount of Charge	Freezing Temperature of Electrolyte
100%	−80°F
75%	−42°F
50%	−16°F
25%	− 2°F
10%	+ 7°F

Self-discharge of a fully charged power pack is practically non-existent below 40°F, and the tractor can be stored for several months without attention when not used.

4. If stored in a warm area above 40°F, the electrolyte should be checked with a hydrometer once a month. Recharge the power pack if the electrolyte specific gravity is below 1.200.

5. Wipe oil on any tractor parts that may be affected by rust.

REMEMBER: The charge retention (without using additional electricity for recharging) of the batteries can be extended considerably if the tractor is stored in a very cool place. Lower temperature slows self-discharge. At temperatures below 40°F virtually no self-discharge occurs.

⚠ CAUTION ⚠

At temperatures below 32°F, the full charge state must be maintained to prevent cell electrolyte from freezing which may result in permanent damage to the batteries.

MOWER SECTION

42" ROTARY MOWER

FACTORY ORDER NUMBER 5-1700

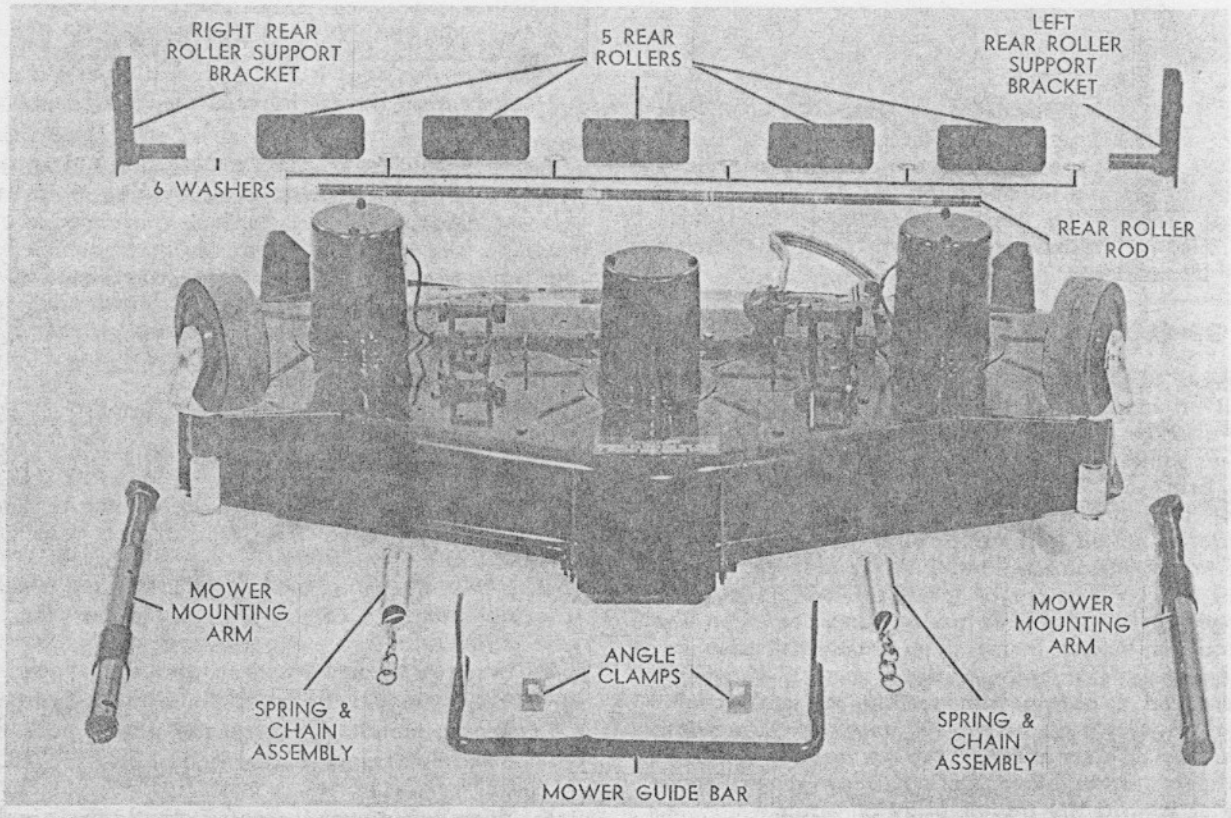


FIG. 24. 42" Mower Package (5-1700)

ASSEMBLY

REAR ROLLER ASSEMBLY (Fig. 25)

Remove mower and parts from the carton and identify parts as shown in Fig. 24. Invert the mower deck. The mower is designed with an adjustable cutting height that can be set at 1½, 2, 2½, 3, 3½ and 4 inches. Select the cutting height best suited to your needs (2 to 3 inches is most often recommended).

Locate the two rear roller support brackets. Using the thumb screw, lockwasher and washer (that are preinstalled in the mower deck) install the left rear roller support bracket to the mower deck. DO NOT TIGHTEN.

The mower deck offers 5 height adjustment holes in which the guide pin of the rear roller support bracket can be installed. (See Fig. 25). The top hole sets the mowing height at 1½". The bottom hole sets the mowing height at 4". Select the desired cutting height and tighten the thumb screw.

Locate the Rear Roller Rod, 6 washers and 5 rollers. Insert the Rear Roller Rod into the Left Rear Roller Support Bracket that is now attached to the mower deck. Install the 5 rollers onto the rod so that there is one washer on each side of outside rollers, and one washer between each roller.

Slip the right rear roller support bracket over the rear roller rod. Attach this support bracket to the mower deck using the preinstalled thumb screw, lockwasher, and washer. Before tightening the thumb screw, be sure the cutting height adjustment is the same as the left bracket.

Return the mower deck to it's normal upright position.

MOWER MOUNTING ARMS

Locate the two mower mounting arms. Using the ⅝" bolts and nuts, (preinstalled in the mower deck) mount these arms to the brackets provided for them on the mower deck.

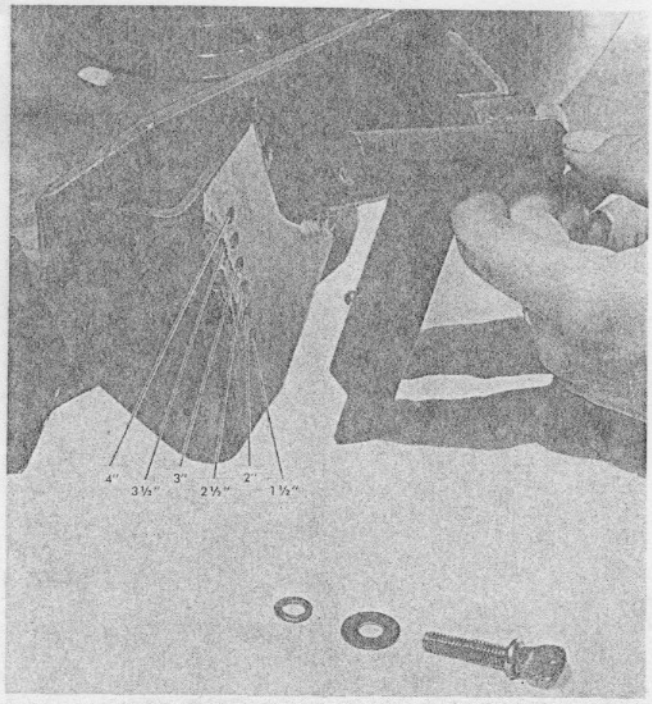


FIG. 25. Rear Roller Adjustment

SPRING AND CHAIN ASSEMBLY (Fig. 26)

Locate the two spring and chain assemblies. Attach the springs to the mounting brackets provided for them on the mower deck. (See Fig. 26).

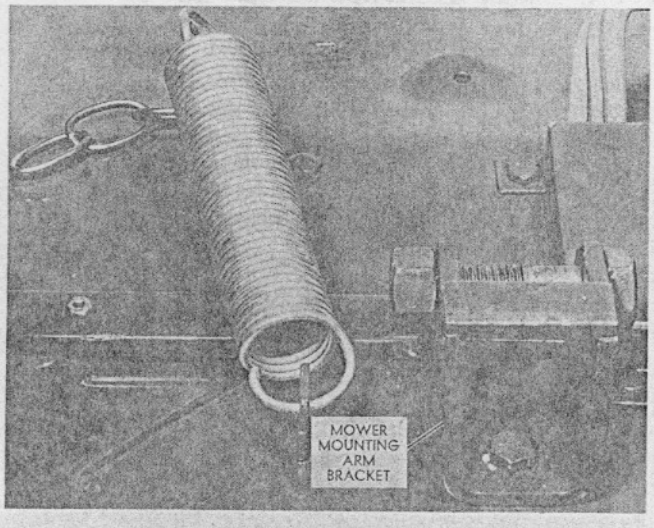


FIG. 26. Spring and Chain Mounting

FRONT CASTER WHEELS (Fig. 27 & 28)

Remove the spring pin from the front left caster wheel shaft. (See Fig. 27). Allow the metal washer and the nylon bushings to drop off the shaft.

Remove the caster wheel, being careful not to remove the bottom nylon bushing.

The 5 nylon spacers are used to set the mowing height of the front of the mower. Each spacer represents a ½ inch difference in cutting height. Installing all 5 spacers ABOVE the mower deck bracket sets the mowing height at 1½ inches. Installing all 5 spacers BELOW the mower deck sets the mowing height at 4 inches.

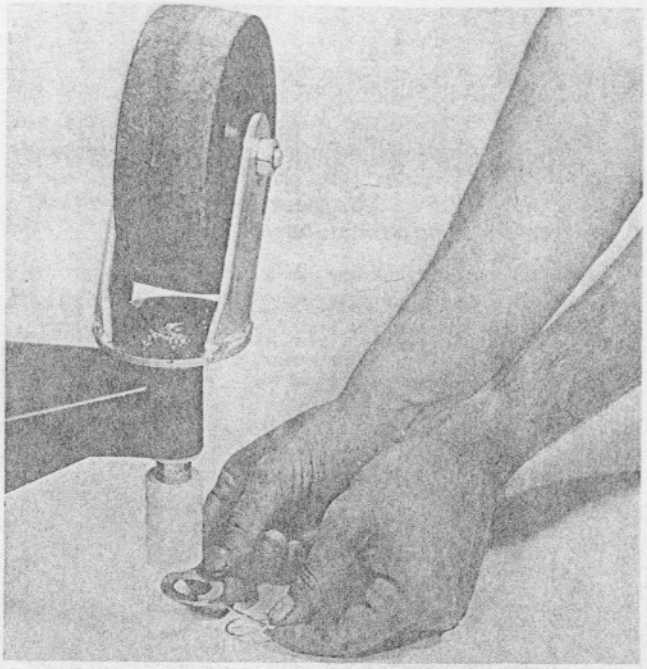


FIG. 27. Caster Wheel Removal

Install the proper amount of spacers to go BELOW the mower deck bracket onto the caster wheel shaft.

Reinstall the caster wheel shaft from the bottom into the mower deck bracket. The caster wheel should now be on the bottom. Install the remaining spacers on the caster wheel shaft. Reinstall the metal washer and the spring pin. (See Fig. 28).

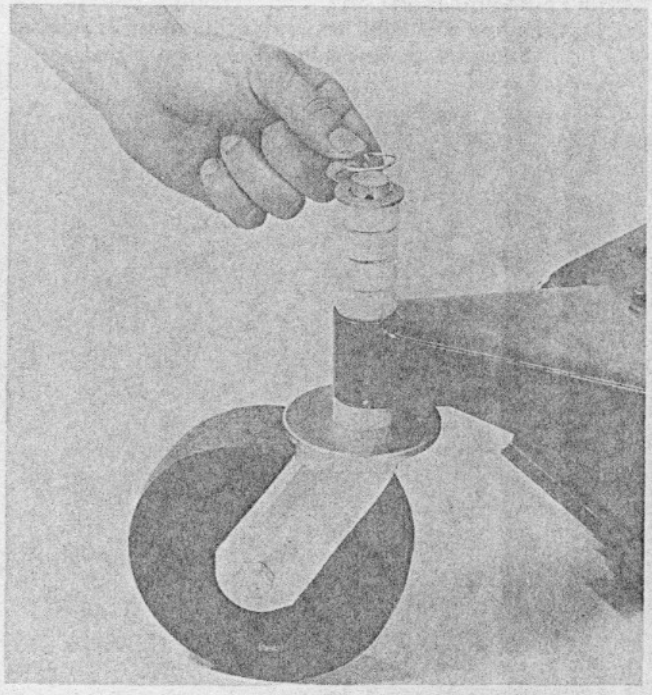


FIG. 28. Caster Wheel Installation

Repeat this procedure for the right caster wheel. Make sure both wheels have the same amount of spacer above and below the mower deck bracket, and the height adjustment is the same for front and rear.

INSTALLATION

MOWER GUIDE (Fig. 29 & 30)

Locate the "U" shaped mower guide and the two angled clamps supplied with it. Hold the mower guide so the two rectangular tabs point toward the rear of the tractor. (See Fig. 29). Insert one of the tabs into the A frame slot approximately ½ inch.

Push the Mower Guide sideways and insert the second tab into it's respective frame slot. Push the Mower Guide against the front bumper of the tractor.

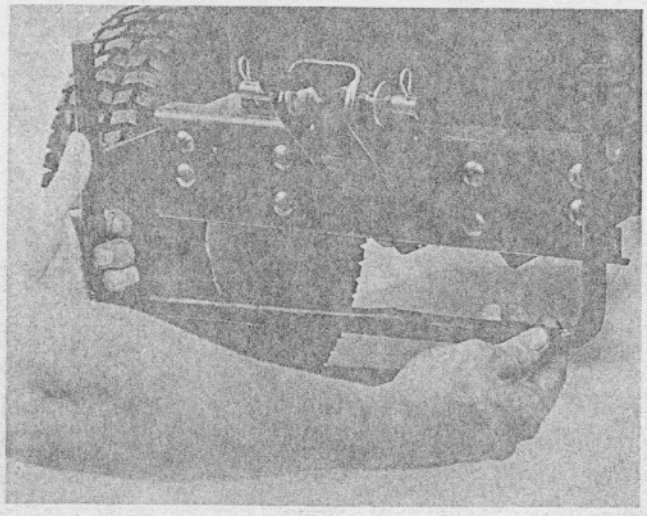


FIG. 29. Front Mower Guide Installation

Remove the upper right carriage bolt from the tractor bumper. Insert the bolt through one of the Angled Clamps. Reinstall the bolt so the angled clamp will hold the mower guide in place. (See Fig. 30).

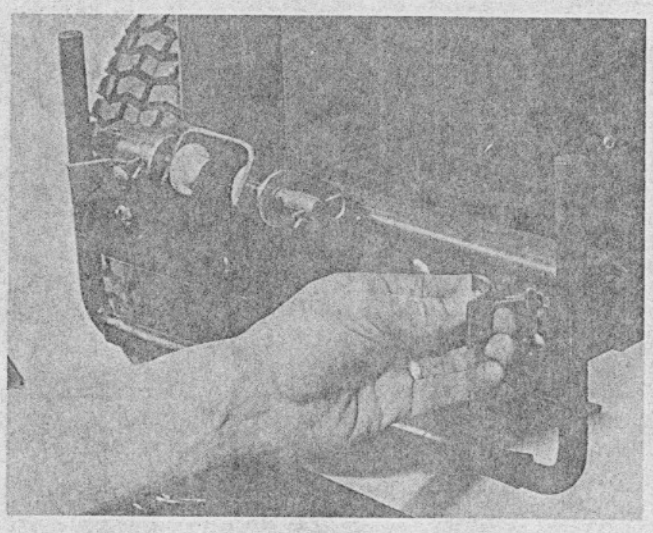


FIG. 30. Mower Guide Clamp Installation

Repeat this procedure for the upper left bumper bolt.

MOWER ARMS (Fig. 31)

Center the mower in front of the tractor with the caster wheels in front and the mower arms toward the rear. Adjust the mower so there is approximately 4½" between the front tire and the mower deck.

Using the preinstalled clevis and hairpin cotter pins (supplied with the tractor), install the left Mower Arm. (See Fig. 31). Install the right Mower Arm.

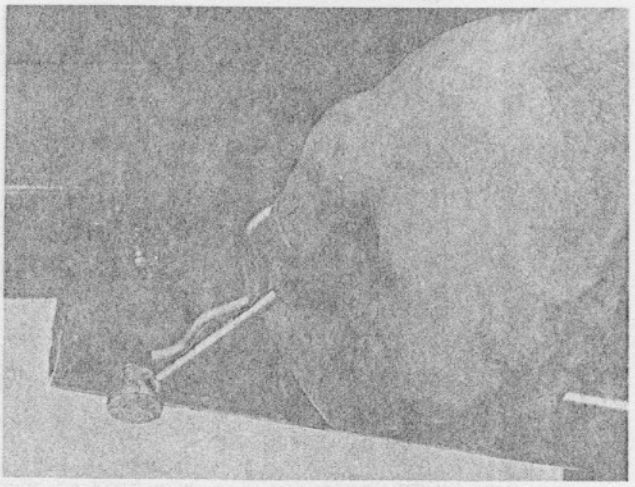


FIG. 31. Attach Mower Arms

LIFT STRAP (Fig. 32 & 33)

Thread the lift strap (Fig. 32) under roller (a) and over roller (b) so that it can be attached to the mower (c).

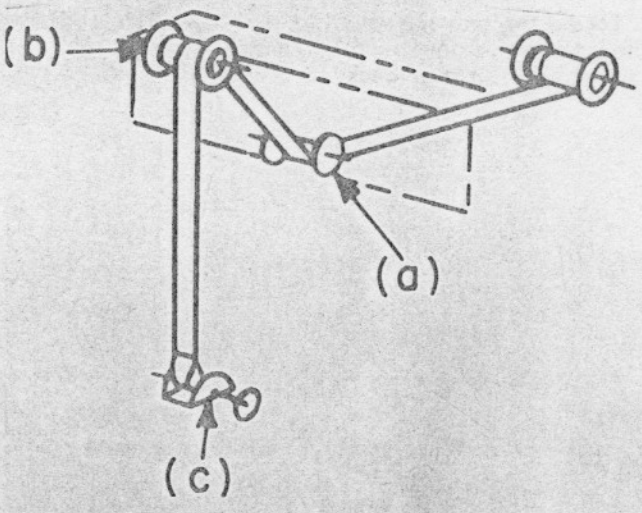


FIG. 32. Lift Strap Threading

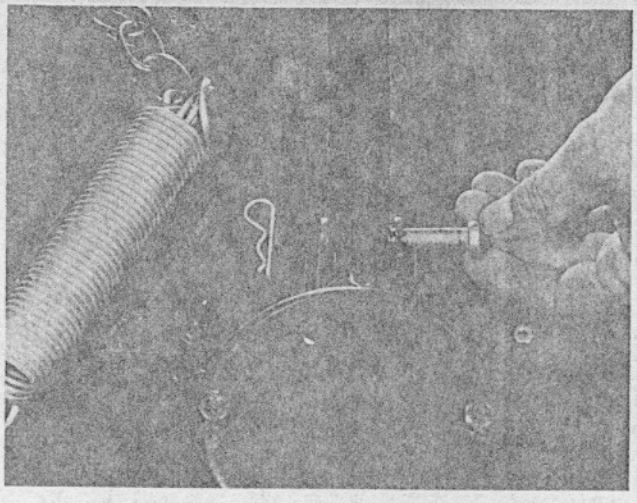


FIG. 33. Attach Lift Strap

Lower lift strap until the strap touches the mower deck. Remove the preinstalled hairpin cotter pin and clevis pin from the lift bracket on the mower deck. Center the lift strap into the bracket and reinstall the clevis and hairpin cotter pin. (See Fig. 33).

HELPER SPRINGS (Fig. 34)

Using the tractor's electric lift, raise the mower to a horizontal position.

Remove the hairpin cotter pin and retaining washer from the left side of the front lift axle. Install the helper spring chain and reinstall the retaining washer and hairpin cotter pin (See Fig. 34).

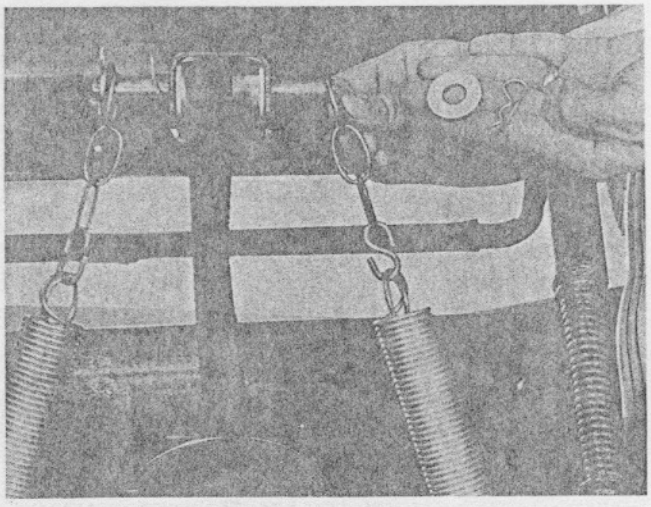


FIG. 34. Helper Spring and Chain

Follow the same procedure for the right side.

NOTE: The helper spring assembly can be adjusted to provide additional front wheel traction on rough terrain. Installation of the upper links onto the lift guide axle is used for most conditions. The center and lower links will provide additional front wheel traction (on rough terrain).

PTO POWER CORD (Fig. 35)

Be sure the mower is clear of all objects. Lower the mower to it's cutting or down position. Move the PTO switch to the "OFF" position, turn the Key Switch to the "OFF" position, remove the key and push down on the Power Disconnect Lever BEFORE plugging the PTO Power Cord into the tractor's PTO receptacle. (See Fig. 35).

FIG. 35. PTO Receptacle

After the PTO Power Cord is plugged into the tractor, sit on the seat and engage the Power Disconnect Lever. Turn the key switch to the "ON" position and test the mower by activating the PTO switch.

BE SURE THE MOWER IS CLEAR OF ALL OBJECTS AND PERSONS BEFORE STARTING THE MOWER.

The mower is now ready for use.

REMOVAL

The mower is easily removed from the tractor by first pushing down on the Power Disconnect Lever, then disconnecting the PTO Power Cord, Helper Spring Assemblies, Lift Strap and Mower Arms. For more detailed instructions follow the "INSTALLATION" procedure in a reverse order.

The Mower Guide must be removed only to mount a Snow/Dozer Blade or a Snowthrower.

ADJUSTMENTS

⚠ CAUTION ⚠

Never handle the mower or make adjustments while the power cord is plugged into the PTO receptacle.

The cutting height of the mower may be adjusted from 1½ inches to 4 inches in ½ inch increments. Height adjustment is made as follows:

1. Remove the power cord from the PTO receptacle.
2. Raise the mower by the lift to its "Up" position.
3. Hold one of the front casters and remove its retaining pin.
4. Slide the caster downward free of the support.
5. Reassemble the caster with the desired number of ½ inch spacers below the support and the remaining spacers above the support. Secure with the plain washer and spring pin and adjust the other caster similarly.
6. Adjust the rear roller at each end. The number of holes on the roller adjuster above the guide pin should corespond to the number of spacers used under the caster support. If there are no spacers below (all five spacers on top), each side of the roller adjuster should be secured in the top guide pin hole. Using one spacer below the support requires the adjusters to be set in the second hole from the top, and so on.

MOWER OPERATION

The operator must be seated on the tractor and the key switch turned to "On" before the PTO switch can be turned "On" to start the mower. An electrical interlock prevents mower starting if this procedure is not followed. Once the mower is running, if the operator leaves the seat, or turns the key switch to "Off", another interlock operates which not only interrupts mower power, but also stops blade rotation immediately by a dynamic braking action. To restart, the starting procedure must be repeated. For all normal use, the PTO switch should be used to turn the mower on and off.

For maximum drive motor torque and most efficient use of power, the speed control should be maintained in the recommended position whenever possible. Advancing the speed lever (or pedal) increases the speed on normal terrain, but may cause decreased speed when going uphill, because the motor torque is reduced. The D1 range is best for average to heavy mowing, and D2 may be used for lighter duty, faster mowing.

When mowing on steep hillsides, the travel should be up and down.

⚠ WARNING ⚠

Care should be exercised to avoid sudden starts and stops, which may cause loss of control. The tractor motor will offer some braking action provided the speed control is not returned to neutral. Maximum braking is obtained with the speed control in the drive position, or cruise control. Whenever operation on hillsides is required, the rear tractor wheels should be assembled in the "widetread" position for increased stability. (Refer to your tractor Owners Manual.)

CUTTING

Always mow with sharp blades. The blades can be sharpened in place on the mower. Always disconnect the power cord before working on the mower. After several sharpenings the blades should be checked for balance. Unbalanced blades can shorten the life of the mower motor bearings.

For good appearance of the mowed lawn, it is important to have the mower adjusted correctly for height of cut. (See section on Adjustments.) Unequal adjustments can affect the cutting appearance because the blades will not be level.

After determining that the mower is set for level mowing as described above, the best height of cut should be determined. It is suggested that the use of two spacers below the caster support be tried first. Closer cutting can be obtained with fewer spacers, but care must be used not to scalp uneven parts of the lawn. As the cutting height is increased to more than 2 spacers, some types of grass and turf may begin to show the wheel tracks where the grass is long enough to be rolled down and not spring back up.

If the tractor tracks the lawn or gives a bumpy ride, check the rear tire pressure. The pressure should be 8-10 psi.

GROUND SPEED

Average to heavy mowing should be done in the D1 range. Light mowing may be done in the D2 range if the tractor speed is not too fast. If the cut is not even and clean, the blades should be checked for sharpness or a lower speed or range selector position should be used.

If the mower motor becomes overloaded due to high grass, obstructions, clogging, or jamming, that motor may shut off momentarily. This occurs due to the opening of a circuit breaker which prevents motor damage. After a short interval for cooling, the circuit breaker will reset automatically and the motor will restart. If the breaker continues to interrupt motor power, after loading has been reduced, **remove the power cord from the PTO receptacle** and check the blades for clogged grass.

CLEANING

It is recommended that the mower deck be cleaned after each use to maintain maximum mowing effectiveness and reduce the likelihood of blade clogging. Immediately after each use, expose the underside of the mower by lowering the mower, removing the power cord from the PTO receptacle, and picking up the front edge of the mower using the front roller as a handle. When positioned properly, the mower will stand freely in a nearly vertical position. In this position, cleaning is easily done by scraping the grass from the mower housing.

⚠ CAUTION ⚠

WARNING: Always disconnect power cord from PTO receptacle before handling the mower for any reason.

SERVICE AND MAINTENANCE

BEFORE HANDLING THE MOWER, REMOVE THE POWER CORD PLUG FROM THE PTO RECEPTACLE. Mower deck cleaning and blade sharpening can then be performed safely after lowering the lift to increase lift strap slack and lifting the front edge of the mower. When positioned properly, the mower will stand freely in a nearly vertical position.

CASTER WHEELS

The front caster wheels must swivel easily for good performance in driving the mower, especially when trimming. Be sure to keep the caster spindles clean and free from rust. Any spindle which does not turn freely should be polished using emery cloth and oiled or greased.

REAR ROLLER

The rod on which the rollers are mounted should be greased whenever it becomes noisy, however lack of grease will not affect its operation. To lubricate the rod, remove one of the adjusters and slide all rollers off the free end. Apply grease and reassemble.

BLADE SHARPENING

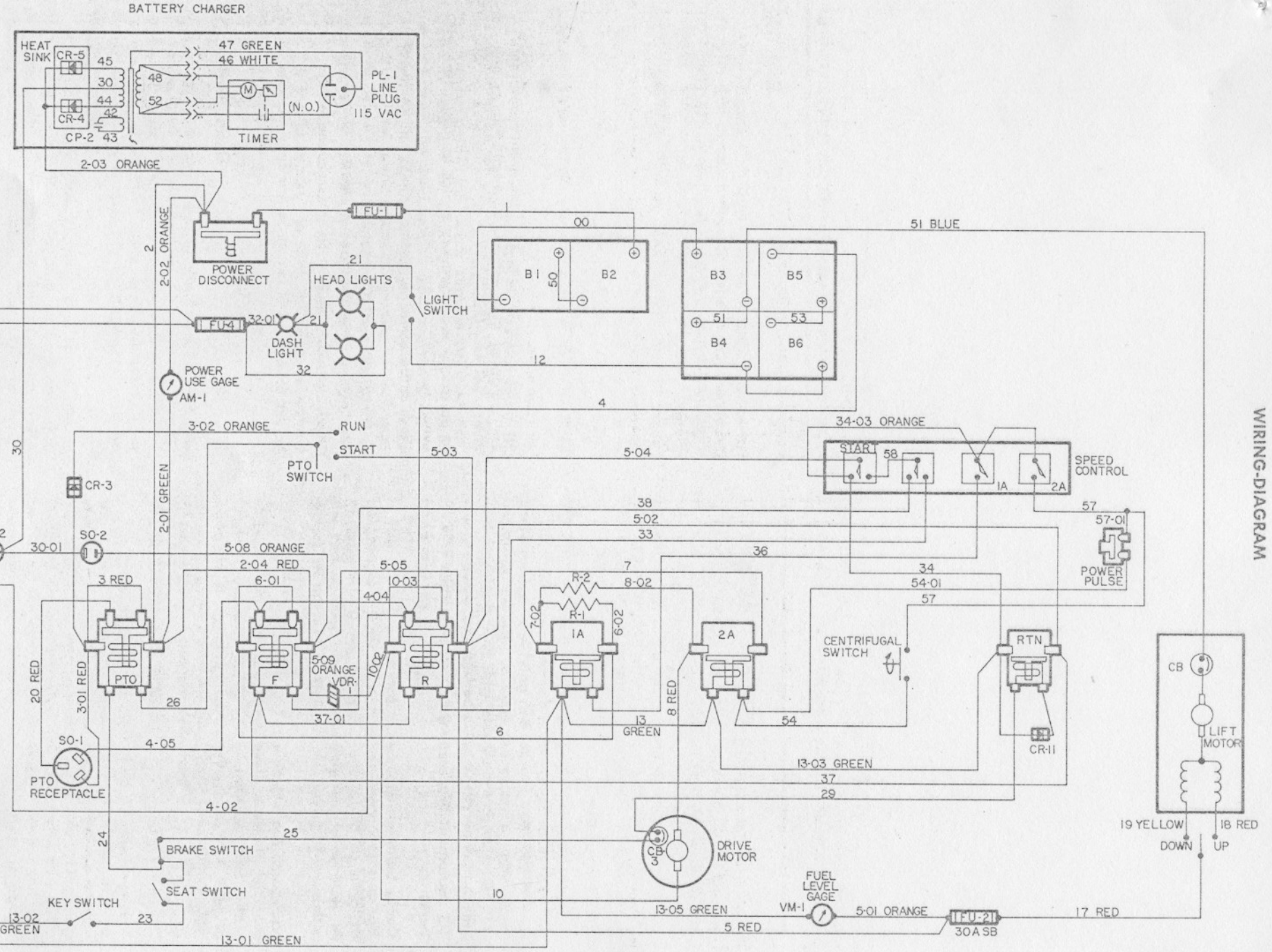
Expose the blades as previously outlined. With the blades mounted, "touching up" may be done with a hand file. If light regrinding is required, care must be taken to grind equal amounts from the cutting edges of any blade to prevent unbalance.

WEAR SLEEVE REPLACEMENT

The black plastic wear sleeves on the mower mounting arms should be periodically inspected and replaced if necessary. The replacement sleeves are low cost and should be replaced in pairs. With the mower removed from the tractor, the old sleeve can easily be slid off the mounting arm and a new one put in its place. Make sure the replacement sleeve is against the ring stop on the arm.

TROUBLESHOOTING CHECKLIST

Indication	Possible Causes
Drive motor does not rotate and Fuel Level Gauge does not indicate.	Control fuse open. Power Disconnect disengaged. Circuit Breaker opened.
Drive motor does not rotate and Fuel Level Gauge indicator is upscale.	Key switch not "ON". Parking brake engaged. Momentarily return speed control to neutral, then restart. Check connections on either brake or seat safety switches.
Reduced tractor range.	Charger not turned to proper "start" setting. Brake dragging. Check adjustment. Check water level in power pack. Check drive belts for slipping. Underinflated tires. Improper range selection (power use gauge reading high). Corroded battery terminals.
Power Pack not charging.	Power disconnect disengaged. Circuit breaker opened. Reset manually. 115-volt line receptacle inoperative due to open household fuse or circuit breaker. Failure to turn charger knob to start position. Corroded battery terminals.
Lights inoperative.	Light fuse open. Bulbs burned out.
Lift inoperative.	Lift fuse open. Lift motor connections loose. Circuit breaker open, wait briefly for automatic reset.
PTO equipment inoperative, but other circuits operative.	Sit on tractor seat, turn key switch to "ON", turn PTO switch to "OFF", then "ON". Check attachment plug-in.
Accessory inoperative.	Power disconnect disengaged. Circuit breaker open. Reset manually. Check accessory plug-in for loose connection.
Inadequate Braking Power.	Adjust brake.


BATTERY CHARGER
HEAT SINK
CR-5
CR-4
CP-2
TIMER
47 GREEN
46 WHITE
PL-1 LINE PLUG 115 VAC
2-03 ORANGE
POWER DISCONNECT
FU-1
HEAD LIGHTS
LIGHT SWITCH
B1
B2
B3
B4
B5
B6
51 BLUE
FU-4
DASH LIGHT
POWER USE GAGE AM-1
3-02 ORANGE
RUN
START
PTO SWITCH
CR-3
CB-2
SO-2
30-01
5-08 ORANGE
2-04 RED
3 RED
6-01
5-05
10-03
4-04
5-03
5-04
34-03 ORANGE
SPEED CONTROL
38
5-02
33
36
7
8-02
R-2
R-1
7-02
6-02
1A
2A
57
57-01
POWER PULSE
34
54-01
CENTRIFUGAL SWITCH
RTN
CR-11
PTO
F
R
5-09 ORANGE
VDR-1
10-02
37-01
26
6
13 GREEN
8 RED
54
20 RED
3-01 RED
SO-1
4-05
PTO RECEPTACLE
13-03 GREEN
37
29
4-02
20A FU-3
24
25
BRAKE SWITCH
SEAT SWITCH
KEY SWITCH
13-02 GREEN
23
10
13-05 GREEN
5 RED
13-01 GREEN
DRIVE MOTOR
FUEL LEVEL GAGE VM-1
5-01 ORANGE
FU-2 30A SB
17 RED
CB
LIFT MOTOR
19 YELLOW
18 RED
DOWN
UP
WIRING-DIAGRAM

1975 NEW PRODUCT WARRANTY

"Wheel Horse Products, Inc. warrants that it will replace without charge any part supplied as an original equipment component of any 1975 or later model garden tractor, lawn tractor, riding mower or serialized attachment, carrying the brand name "Wheel Horse", which proves to be defective due to faulty workmanship or material in manufacture for one year (365 days) after date of purchase by the original owner. The exceptions are: "Wheel Horse" brand batteries which are covered by a separate Battery Warranty. Engines and Peerless Transmissions are covered by their respective manufacturers under their own separate warranty policies.

All service work must be performed by an Authorized Wheel Horse dealer. Transporting the unit to and from the servicing dealer and any state and local taxes are the responsibility of the owner.

The foregoing warranty states the entire obligation of Wheel Horse Products, Inc. and is in lieu of all other warranties whether expressed or implied."

1975 WHEEL HORSE POWER PACK BATTERY WARRANTY

"Wheel Horse Products, Inc. warrants that it will replace without charge any "Wheel Horse" brand battery supplied as original equipment in any 1975 or later Model A-60, A-65, B-145 or C-185 Riding Lawn Mower or Garden Tractor which proves to be defective due to faulty workmanship or material in manufacture within one year (365 days) after date of purchase by the original owner.

After 12 months (365 days) but within 36 months (1095 days) the battery will be replaced upon payment of a Pro Rata usage charge equal to one-thirty-seventh (1/37) of the factory suggested list price for such battery at the time of replacement for each month or substantial portion thereof which has elapsed between the date of the original purchase of the unit and the date of the battery replacement.

Transporting the battery to and from the servicing dealer and any other state and local taxes are the responsibility of the owner.

The foregoing warranty states the entire obligation of Wheel Horse Products, Inc. and is in lieu of all other warranties whether expressed or implied."

PROCEDURE TO OBTAIN SERVICE UNDER YOUR WHEEL HORSE WARRANTY

1. Contact your Authorized Wheel Horse Dealer from whom you purchased your equipment.
2. Or, contact any Authorized Wheel Horse Dealer if for some reason it is impractical for you to contact the dealer from whom you purchased your equipment. If you do not know his name, check the yellow pages of your local telephone book under "Lawn Mowers".
3. Engines (gasoline powered) in your Wheel Horse are warranted separately by their manufacturer.
4. Peerless transmissions and differentials used in A-60, A-65, A-80, B-145, and C-185 models are warranted separately by their manufacturer.
5. In most cases engines and Peerless transmissions and differential warranty will be handled by your Authorized Wheel Horse Dealer. Most of our dealers are authorized service outlets. If he is not, he will advise you where your equipment can be repaired by checking the yellow pages of your local telephone book under "Engines-Gasoline".
6. If further assistance is required, please contact the service department of the applicable manufacturer as shown below:

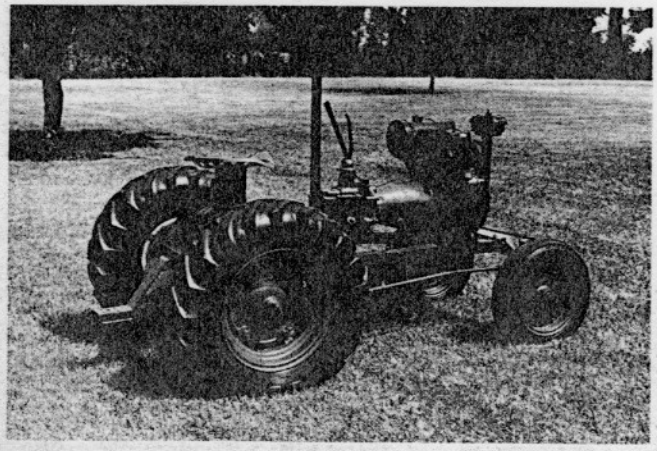
   Tecumseh Products Company
   Grafton, WI 53024
   (414) 377-2700

   The Kohler Company
   Kohler, WI 53044
   (414) 457-4441

   Briggs & Stratton Corp.
   Milwaukee, WI 53201
   (414) 461-1212
7. If you still are unable to get an engine, transmission or differential warranty problem solved, please write to "Customer Service Department" Wheel Horse Products, Inc., 515 West Ireland Road, South Bend, Indiana 46614, giving the following information:
   A. Model and serial number of your tractor, riding mower and/or engine.
   B. Original purchase date.
   C. Dealer from whom you purchased the unit.
   D. Your name, address and telephone number.
   E. Describe your problem as completely as possible.

You will be contacted promptly.

Wheel Horse has been matching lawn and garden needs since 1946.



PERFORMANCE

Thousands of owners each year can attest to our determination to fit the right tractor to the job. We've been building lawn and garden equipment for 29 years. That's why Wheel Horse has grown from a backyard garage shop to a large, modern manufacturing facility. Automated assembly procedures, tight quality control and demanding inspections carry on the uniform quality that began back in 1946.

ENGINEERING

Quality tractors require innovative engineering. Examples are our patented Uni-drive transmission — a cast iron encased unit with heavy-duty parts throughout or our manual attachment clutch that is easily serviced or repaired. All products are engineered for minimum maintenance. We're confident you'll enjoy many trouble-free hours of service with your Wheel Horse tractor.

DEALER SALES AND SERVICE

Rounding out Wheel Horse dependability is a nationwide network of dealers who sell and service our tractors. Should your Wheel Horse need service some day, your authorized Wheel Horse dealer is specially trained to do the job. He stocks genuine Wheel Horse parts and attachments to meet your exacting needs. You'll find him listed in the yellow pages under "Lawn Mowers."

"I've Got a Horse" decals are yours free, just for sending a self-addressed stamped envelope to:

DECALS — WHEEL HORSE PRODUCTS, INC.
515 WEST IRELAND ROAD • SOUTH BEND, INDIANA 46614

WHEEL HORSE
lawn & garden tractors

515 West Ireland Road, South Bend, Indiana 46614

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