# owner operation

and

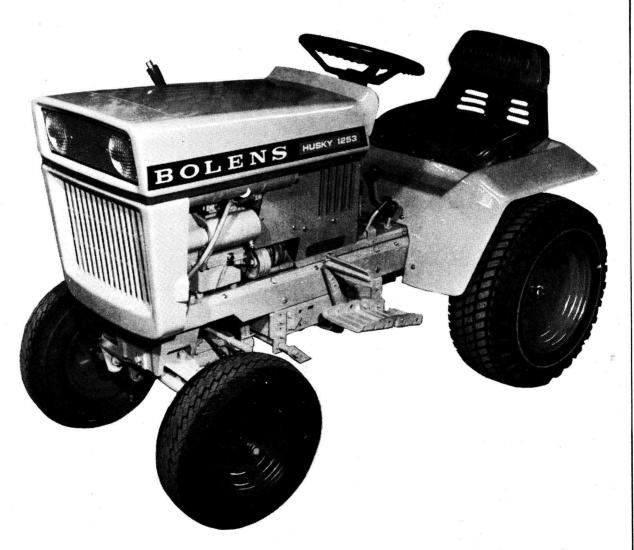
# **HUSKY TRACTOR**

maintenance

manual

**"1253"** 

Model 1253-02





BOLENS

PORT WASHINGTON, WISCONSIN, U.S.A.

# **GENERAL SAFETY PRECAUTIONS**

Preventing accidents is the responsibility of every equipment operator. The following general safety precautions <u>must</u> be fully understood and followed by every operator of this tractor and its attachments. Review them frequently and NEVER TAKE CHANCES. BE CAREFUL BEFORE, DURING AND RIGHT AFTER USE OF ANY POWERED EQUIPMENT. ACCIDENTS CAN BE PREVENTED.

- 1. Mount vehicle, place transmission shift lever in NEUTRAL, depress clutch pedal and set parking brake prior to starting engine. This will prevent starting tractor in gear.
- 2. Do not mount or leave vehicle while it is in motion or in actual operation, nor leave vehicle unattended while engine is running. Injury to the operator or a tractor run-away could occur.
- 3. Always shut off engine, place transmission lever in NEUTRAL and set parking brake whenever vehicle is to be left unattended. Lower all attachments to the ground with P.T.O. lever in OFF position when leaving the unit unattended, to prevent injury to bystanders.
- 4. Attachments must be lowered to the ground when storing tractor, to prevent the attachment from being dropped accidently and causing injury. Put P.T.O. lever in OFF position.
- 5. Do not tow vehicle over 5 miles per hour. Damage to the vehicle could occur.
- 6. When towing or moving the vehicle, place transmission lever in NEUTRAL or damage to the transmission will occur.
- 7. Do not carry passengers. The passengers could fall off vehicle receiving injuries.
- 8. Do not start or operate vehicle in an inside area, unless it is adequately ventilated. Engine exhaust contains carbon monoxide fumes, which are very poisonous.
- 9. Keep tractor and attachments free of excess grease and oil. The unit will operate cooler, be easier to maintain, and safer to operate.
- 10. Engine must be stopped, and P.T.O. disengaged when cleaning, servicing, adjusting, repairing, or installing attachments on tractor. This is necessary to avoid possible injury from moving parts.
- 11. Always disconnect ground (-) battery cable from battery before doing any work on the electrical system. Reconnect it LAST when work is done. This is to prevent shorting of electrical system and accidental burns.
- 12. Study your manual. Know your tractor before operating it. Take time to operate the unit in the safest manner.

- 13. Always follow the manufacturer's operational suggestions.
- 14. Children should not be allowed to operate vehicle at any time. The average child is not capable of coping with the intricacies of operating a power tool.
- 15. Do not allow adults to operate vehicle without proper instructions including all safety instructions. In doing so, you will be sure they know how to operate unit properly and also are aware of all the safety precautions.
- 16. Do not fill gasoline tank when engine is running or hot. Add gas (using funnel) only outdoors and when engine is cool. KEEP SMOKERS AND FLAMES AWAY FROM UNIT WHILE FUELING. This will help eliminate the possibility of fire and/or explosion from spilled gasoline or fumes.
- 17. Store fuel in approved container out of reach of children. Do not store fuel in the house. Gasoline is highly flammable and the fumes highly explosive.
- 18. Never operate tractor with mower, snow caster, or any other attachment having moving parts, when any child or other person is in travel path or discharge area. No other person shall be allowed in or near working areas when equipment is being used. Items or objects such as wire, stones, small toys and etc. can be ejected at high velocity out of the discharge chute.
- 19. Always look back to be certain no one is in the way before using reverse. This will avoid the possibility of running over any bystanders or pets who might be in the area in back of the vehicle.
- 20. Study all attachment manuals thoroughly before using attachments with tractor, to be aware of both the tractor and attachment capabilities when used as a unit, also the safest manner in which to operate them.
- 21. Never wear loose clothing when operating unit. Loose clothing can get caught in moving parts and cause severe injuries.
- 22. Before starting unit check to be sure all grands and safety devices are in place and in working condition and P.T.O. is in "off" position. This will help assure you against possible injury.
- 23. Do not drive this unit on a public thorough a real any time. The operator is risking injury from passage real as Most local ordinances prohibit operating a real such as this on a public thorough fare.
- 24. Do not drive too close to a creek or data also be alert for holes and other hazards. If you would drive any of the above you could lose control of the unit.
- 25. Be careful on steep slopes, reduce speed and avoid sharp turns to prevent tipping or loss of control.

# **ENGINE CAUTIONS**

Do not operate engine at full throttle to hurry warm-up after starting, but idle it a few minutes; this will give the oil a chance to circulate through the engine.

Do not operate the engine at any time with cooling shroud removed; this will prevent proper cooling of engine.

To prevent overheating of the engine, and/or possible damage to the engine, check cooling air screen, fan, and engine cooling fins every 10 hours for debris, dust and dirt and clean thoroughly. Under severe dust or dirt conditions the above should be checked and cleaned at more frequent intervals.

Check and service air cleaner after 10 hours or oftener under severe dust and dirt conditions. Service air cleaner as instructed in engine manufacturer's manual. Failure to keep air cleaner clean would allow abrasive particles to enter the engine causing severe damage. Also, a dirty air cleaner would prevent the proper air fuel mixture causing the engine to overheat and consequent damage to the engine.

After every 8 hours of operation check oil level. For correct grade of oil and proper oil level, see engine manufacturer's manual. If the oil in the crankcase is allowed to remain below the required

level, damage to the engine bearings, cylinder walls, pistons and other moving parts could result from overheating.

After every 50 hours of operation or oftener under severe conditions, the engine crankcase should be drained and refilled with fresh oil. See engine manual for proper specifications and quantity of oil.

On units with a gasoline strainer, the strainer should be inspected frequently. If dirt and water are present in the bowl, the bowl and screen should be removed and cleaned. When reassembling strainer be sure gasket is in good condition; use a new gasket if necessary.

When stopping engine do not stop abruptly, but idle the engine at low RPM for 3 to 5 minutes. The engine will cool down more evenly at idle and minimize the danger of overheating.

#### SPARK PLUG

The spark plug should be cleaned inside and out and regapped every 100 hours or once each year whichever occurs first. Check engine manual for correct gap setting. Replace plug whenever necessary. See engine manual for correct plug specifications.

CAUTION: Blast cleaning of spark plugs in machines that use abrasive grit is not recommended. Spark plugs should be cleaned by scraping or wire brushing and washing with a commercial solvent.

# TO THE OWNER

This is an operational and general maintenance manual only and does not cover major repair. All major repair work must be performed by an authorized BOLENS DEALER or the factory warranty is void. Bolens equipment is carefully engineered to give good performance if properly operated and maintained. Keep your equipment clean and lubricate it as prescribed in this manual. Periodically inspect your unit and perform any upkeep maintenance necessary. Check for loose or missing hardware, needed oil or lubrication, damaged parts, etc.

Your dealer is obligated by the factory to completely assemble and service new equipment prior to first delivery, and thoroughly explain and demonstrate its operation. He will repair or replace any parts which fail due to defective material and/or workmanship during the warranty period, and also provide future repair service and supply genuine factory repair parts.

IN EVENT OF ANY PROBLEM OR PARTS REQUIRED <u>ALWAYS</u> CONTACT YOUR DEALER. DO NOT RETURN PARTS TO THE FACTORY. WE REQUIRE PRIOR FACTORY APPROVAL ON RETURNS, AND APPROVALS ARE ISSUED ONLY TO BOLENS DEALERS OR DISTRIBUTORS.

# TABLE OF CONTENTS

	Page		J
General Safety Precautions  Engine Cautions Serial Number Specifications Controls Pre-Operational Checks Break-In Period	2 · 3 · 4 · 5 · 5 · 6 · 6 · 6 · 6 · 6 · 6 · 6 · 6	Preventive Maintenance Adjustments Free - Wheeling Power Take-Cff (P.T.O.) Lubrication Chart Wiring Diagram Minor Troubleshooting Guide Storing Your Husky Tractor	10 11 12 13 14
Starting The Engine	7	Maintenance Guide	15
Stopping The Engine	7	Lubrication & Maintenance Record	

Page

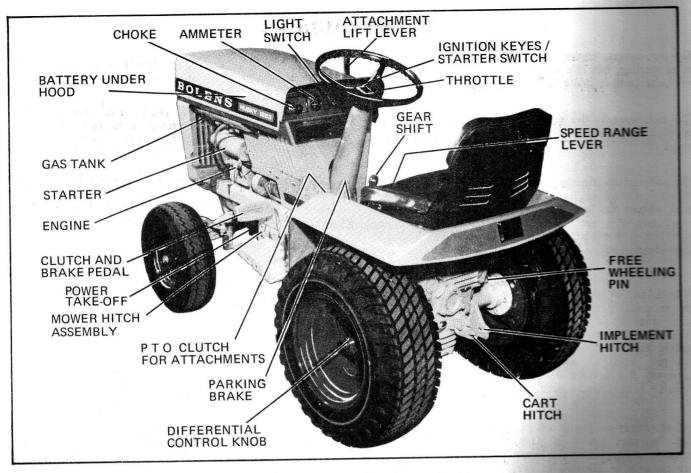


Figure 1

# SERIAL NUMBER

To ensure prompt service when repairs or adjustments are required, your Bolens Dealer must have the following information. For your own personal reference, fill in the spaces provided below.

- 1. Model number of Tractor.
- 2. Serial number of Tractor.
- 3. Model number of engine.
- 4. Serial and Spec. Number of engine..

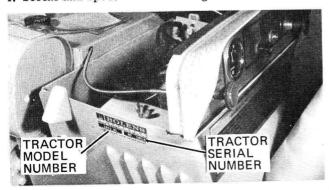


Figure 2

Your Bolens dealer has a master Parts List for your unit. He can identify any parts you may require and furnish genuine factory replacements.

When ordering engine component parts, consult the Engine Manufacturer's Manual, or with an authorized representative of the Engine Manufacturer.

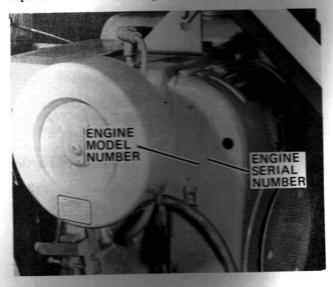


Figure 3

# **SPECIFICATIONS**

SPECIFICATIONS							
Engine	Tecumseh electric starting, 12 HP at 3600 RPM						
Туре	4 cycle-single cylinder - air cooled						
Fuel capacity	5 quarts						
Oil capacity	3 pints.						
Air cleaner	Heavy duty dry type (See Engine Manual)						
Drive	Geared transmission and controlled differential (Transaxle)						
Speed	3 forward and 1 reverse in two ranges for a total of 6 forward and 2 reverse. Lowest speed: less than 3/4 mph. Highest speed: approximately 6 mph.						
Power to attachments	Farm tractor type (PTO) direct drive with universal joints and splined shaft.						
Tires	Extra-wide terra-tires. Front: 16 x 6.50-8. Rear: 23 x 8.50-12. With lawn and garden tread.						
Height	40 inches						
Width	34 inches						
Length	63 inches						
Wheelbase	43 inches						
Turning radius	40 inches						
Ground clearance	7 inches						
Shipping weight	615 pounds						
Standard equip- ment	PTO assembly, controlled differential, two speed ranges, fenders and seat cushion.  Mower Hanger Assembly						
Location of tractor model and serial number	On upper Left Hand side panel, to the left of Battery. See Figure 2.						
Location of engine model and serial number	Tecumseh Engine, right hand side of front engine shroud.						

#### CONTROLS

For efficient operation of the tractor, study the accompanying illustrations (See Figure 4), together with the brief descriptions given here, until you are thoroughly familiar with the location and function of each control.

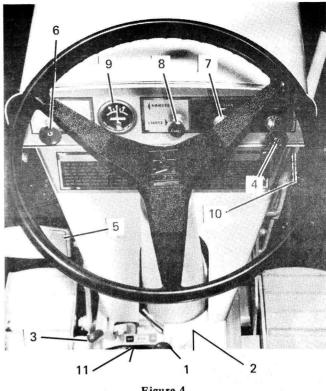


Figure 4

- 1. GEAR SHIFT LEVER 3 speeds ahead, 1 in reverse. See instructions on page 7.
- 2. TWO SPEED RANGE LEVER Provides a total of 6 speeds ahead, 2 in reverse from less than 3/4 mph to approximately 6 mph. See instructions on page 7.
- 3. POWER TAKE OFF CLUTCH (PTO) Always be sure to lock lever in slots provided when P.T.O. is engaged or disengaged.
- 4. THROTTLE Turn knob counterclockwise to unlock. Pull out to increase engine speed, push in to decrease. Turn knob clockwise to lock at desired RPM.

## NOTE

Do not operate tractor below half throttle for prolonged periods of time under load. Damage to the engine would result.

5. CLUTCH-BRAKE PEDAL - To shift gears, depress clutch pedal fully. This disengages the clutch, and fully applies brake. Relax brake tension slightly, and shift gears.

# CAUTION

Never allow gears to clash while shifting. Hasty shifting will result in gear grinding and premature gear failure, and void warranty on the transmission.

6. CHOKE - When starting engine, pull knob out to close the choke, pushing knob gradually in as engine warms up. A warm engine requires less choke when starting.

- 7. IGNITION KEY STARTING SWITCH Turn ignition key to the right to start engine. Release when engine starts. Wait for starter to stop spinning completely before engaging again after a false start. CAUTION: DO NOT HOLD KEY IN START POSITION FOR MORE THAN 30 SECONDS AT ONE TIME. ALLOW TWO MINUTES BETWEEN STARTING ATTEMPTS.
- 8. LIGHT SWITCH Pull knob out to turn lights on, push in to turn them off. NOTE: Key must be turned on before lights will work.
- **9. AMMETER** Indicates rate of charge to or discharge from battery.
- 10. ATTACHMENT LIFT LEVER Push down thumb button to unlock before adjusting height of attachments. Six (6) positions available.

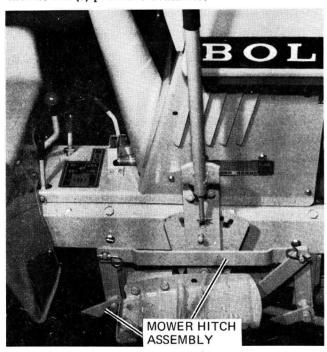


Figure 5

- 11. PARKING BRAKE To apply parking brake, pull knob up and move it to the right. To release, pull knob up and move it to the left.
- 12. MOWER HANGER ASSEMBLY. Factory installed to assure level mower.

# PRE-OPERATIONAL CHECKS

The operator should become familiar with the following pre-operational check list prior to starting or operating the HUSKY.

- 1. Check for proper level of engine oil. See Engine Manufacturer's Manual.
- 2. Refer to battery tag for recommendations on:
- A. Proper water level.
- B. Clean cables.

- C. Clean terminals.
- 3. Check gasoline tank for sufficient gas supply. DANGER. KEEP SMOKERS AND FLAMES AWAY WHEN REFUELING.
- 4. Check and clean engine cooling fins, flywheel screen and air cleaner of dirt and debris frequently, regularly and thoroughly.
- 5. Visually check for loose nuts, screws, and electrical wiring.
- 6. Check for 8 lbs. tire inflation. TIRE INFLATION SHOULD NOT BE LESS THAN 8 LBS.

#### **BREAK-IN PERIOD**

As with a new car your new tractor should receive special attention. In the first few hours of operation it is best to vary the engine speed between 3/4 and full throttle . . . avoid full-throttle driving, quick starts and stops until you've become well acquainted with your tractor. IMPORTANT: THE TRACTOR IS SHIPPED FROM THE FACTORY WITHOUT OIL IN THE ENGINE CRANKCASE. SEE LUBRICATION GUIDE, PAGE 12 AND ENCLOSED ENGINE FOLDER, FOR PROPER GRADE OIL AND QUANTITY TO BE USED.

For your satisfaction:

Both the tractor and engine have been fully tested by the factory and your dealer prior to its delivery. However, so that you may become familiar with your unit before operating it, READ THIS MANUAL carefully . . . if you have any questions that are not answered in the manual, ask your dealer. Keep this manual handy for ready reference. NEVER force any control.

#### STARTING THE ENGINE

IMPORTANT: READ THE SEPARATE, ENCLOSED ENGINE FOLDER TO BECOME ACQUAINTED WITH ITS OPERATION AND MAINTENANCE REQUIREMENTS.

#### **ELECTRIC STARTING**

- 1. Check PTO clutch (should be in OFF position), gear shift (should be in NEUTRAL), and clutch FULLY DEPRESSED.
- 2. Pull choke knob all the way out (to fully close choke). Experience will indicate need for more or less choking due to variations in temperature, grade of fuel, etc.
- 3. Turn throttle knob counterclockwise to unlock if necessary. Pull throttle knob out about half-way until after engine has started, then adjust to desired RPM and lock at this setting, if desired, by turning knob clockwise.

- 4. Insert ignition key and turn to the right to start engine. Release when engine starts. CAUTION: DO NOT HOLD KEY IN START POSITION FOR MORE THAN 30 SECONDS AT ONE TIME. ALLOW TWO MINUTES BETWEEN STARTING ATTEMPTS.
- 5. Choke should be partially opened (knob pushed forward) as soon as engine starts and then gradually pushed all the way forward as the engine warms up. In normal operation, choke knob should be in OPEN (forward) position for best engine efficiency and fuel economy.

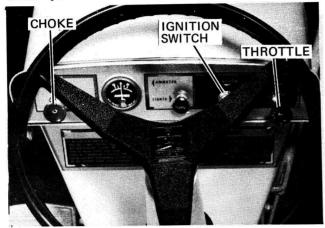


Figure 6

6. To stop engine, turn key OFF (counterclockwise) and place gear shift lever in NEUTRAL, setting brake if necessary. Remove ignition key when tractor is not in use.

#### **EMERGENCY STARTING**

In the event of electrical failure, get in touch with your DEALER for assistance in locating the trouble. Do not attempt to jump across terminals with a jumper wire. Damage to the solid state ignition system could result.

Should the battery be too low on power to start the unit, it is always best to remove it and have it recharged. However, should jumper cables be used the following <u>CAUTIONS</u> must be observed.

- 1. Disconnect the Rectifier Regulator from the electrical system. This is the three wire plastic plug on top of the finned unit located on the side of the engine shroud on the right hand side of the tractor directly below the air cleaner.
- 2. BE CERTAIN jumper cables are connected positive to positive and negative to negative from the booster battery to the battery in the tractor.
- 3. Check P.T.O. safety clutch (Must be in off position) and gear shift (Must be in neutral).
- 4. Follow procedure outlined under starting the engine page 6.

# STOPPING THE ENGINE

1. If the engine has been operating under a heavy load and is hot, do not stop it immediately. Allow the

engine to idle for approximately three to five minutes. This will reduce the engine temperature more quickly and evenly than stopping the engine.

2. Turn ignition switch off.

# **OPERATION**

### THREE-SPEED TRANSMISSION

The HUSKY 1253 features a 3-speed geared transmission plus a second range to give you a wide choice of operating speeds. To prevent damage to the gears, do not shift gears while the tractor is in motion. Avoid clashing gears when shifting. LOW speed range is best for jobs such as tilling, plowing, snow casting or mowing tall or lush grass.

The High-Low speed range change lever is located on the transmission cover just to the right of the shift lever. To change range, depress the clutch and move lever (as directed on adjacent instruction plate), move lever forward to place in low range, move lever back to place in high range. Be sure clutch is depressed when changing speed ranges.

GEAR	LOW SPEED RANGE	HIGH SPEED RANGE
1st 2nd 3rd	3/4 mph* 1-1/4 mph* 2 mph*	2 mph* 3-1/2 mph* 6 mph*

\* Approximate speed at full open throttle. The speed will decrease in each gear as the throttle is adjusted toward idle. Speeds will also vary depending on road or ground condition and load attached to tractor.

#### **IMPORTANT**

ALWAYS START OUT IN THE GEAR IN WHICH YOU INTEND TO DRIVE OR OPERATE. IF YOU WISH TO CHANGE GEARS — BRING THE TRACTOR TO A FULL STOP. DO NOT SHIFT GEARS WHILE TRACTOR IS IN MOTION!

#### CONTROLLED DIFFERENTIAL

By turning the control knob, located on the hub of the left rear wheel as shown in Figure 7, you can vary the degree of differential traction up to nearly straight axle drive. For jobs such as plowing, or snow casting, turn the knob clockwise (as viewed from left side of tractor, facing end of axle) until desired degree of drive to both wheels is obtained. For mowing, or other lighter jobs, be sure to have control knob in standard differential position (that is, turn the control knob counterclockwise until it stops).

This is necessary to avoid gouging or scuffing the tires, which would be caused by having both wheels driving on turns. The differential can be adjusted from the driver's seat.



Figure 7

# CAUTION

- 1. Do not adjust control knob while tractor is in motion.
- 2. NEVER TIGHTEN WITH A WRENCH!

# PREVENTATIVE MAINTENANCE

ENGINE - To obtain long life and trouble free service from your engine, certain normal maintenance must be performed. Follow the instructions outlined in the brochure furnished by the ENGINE MANUFACTURER.

# CAUTION

This engine is equipped with solid state ignition. Always have adjustments made by an authorized dealer to avoid possible electrical damage to ignition system.

BATTERY (Fig. 8) - Keep cables and terminals clean and apply a light coat of petroleum jelly or oil for protection. Check battery bracket for corrosion and keep clean. Check water for proper level. Never loosen hold down clamps until you have removed battery cables from the battery post. Always remove ground (-) cable first. Should it become necessary to remove the battery, when reinstalling it; 1. Place battery clamps flat side toward battery. 2. Hold down rods in notches of battery lugs. 3. Tighten wing-nuts FINGER TIGHT ONLY to avoid possible damage to battery case. IMPORTANT: INSTALL GROUND CABLE LAST.

FUEL TANK (Fig. 9) - Fill with clean, fresh gasoline of regular grade. DO NOT MIX OIL WITH GAS-OLINE! Check to see that vent hole in fuel tank cap is not plugged. BEWARE: Avoid smoking or open flame when refueling.

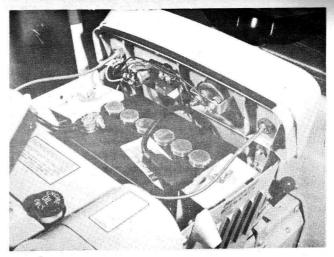


Figure 8

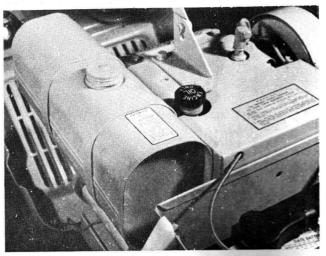


Figure 9

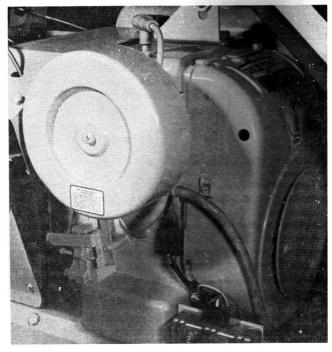


Figure 10

AIR CLEANER (Fig. 10) - Dry Type - Refer to enclosed Engine booklet for instructions.

SPARK PLUG - Clean area around spark plug before removing plug. The correct gap setting is .025 inch. Refer to enclosed Engine booklet for replacement specifications.

PNEUMATIC TIRE PRESSURES - Maintain pressure in tires as recommended here. Ideal pressure will depend upon load carried. Heavier loads require higher inflation. Check pressures with a low pressure gauge having one-pound graduations. Operating with pressures below pressures given here may damage tires.

TIRE	SIZE	PRESSURE (lbs./sq. in.)
FRONT	16 x 6.50-8	8 PSI
REAR	23 x 8.50-12	8 PSI

Tire pressure must be the same on one side as the other, or else the tractor will ride unevenly. Remember, also, that tire pressure, weight of the operator, or a combination of the two will affect the riding height of the tractor and this, in turn, will affect the cutting height of the rotary mower.

# **ADJUSTMENTS**

# BELT ADJUSTMENT AND REPLACEMENT

#### TO REMOVE PTO BELTS

- 1. Loosen belt guides from PTO support and remove PTO belts from pulley.
- 2. Loosen the two capscrews that hold the belt guide to the engine, and remove the guide.
- 3. Use wire hook to pull the drive belt idler pulley away from the belt.
- 4. Remove the drive belts from the engine pulley.
- 5. Remove the PTO belts.

To install PTO belts, reverse the above procedure. Be sure all parts removed are replaced in their original position.

#### TO REMOVE DRIVE BELTS

- 1. Follow step (3) listed previously.
- 2. Remove nut and washers from front end of the drive shaft. (To keep drive shaft from turning while removing nut, hold it with a wrench across T bar welded to back end of drive shaft.)
- 3. Remove the four capscrews and washers that hold bearing support to the mounting plate assembly.
- 4. Remove bearing support by sliding it off front end of drive shaft.

### 5. Remove drive belts.

To install new belts reverse the above procedure.

#### PTO BELT ADJUSTMENT

The PTO belts can be adjusted by loosening the three capscrews that hold PTO support casting to axle support casting. Raise or lower PTO support casting to obtain proper adjustment.

If belts are properly adjusted (as described above) and still drag, check adjustment of lower belt guide. There should be approximately 1/8" clearance between pulley and belt guide all the way around.

# TRANSMISSION DRIVE BELT ADJUSTMENT

The transmission dual drive belts require no adjustment. There is constant belt tension applied at all times.

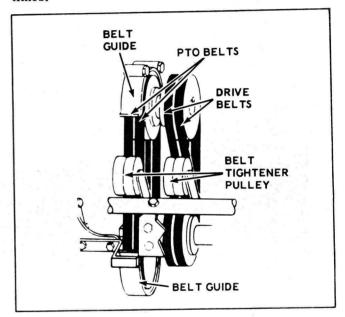


Figure 11

#### CLUTCH-BRAKE PEDAL

As you familiarize yourself with the tractor, you will notice that when you depress the Clutch-Brake Pedal approximately two-thirds, the clutch is disengaged. This Clutch-Brake Pedal position also serves as a brake to stop the vehicle when in gear. Pedal adjustment is set at the factory and should not require frequent attention unless the linkage has been disturbed. Should clutch slippage become evident or brake shoe lining is worn, see your Bolens dealer.

However, to prevent the vehicle from moving when transmission is in NEUTRAL or when shifting into another gear, particularly on inclines, it is necessary to further depress the Clutch-Brake Pedal to apply the Main Transmission Brake.

The Transmission Brake, being the main brake, must be checked frequently and adjusted as follows:

- 1. Depress CLUTCH-BRAKE pedal approximately two-thirds (until rear clutch flange has moved back to touch stationary plate). At that time the adjusting rod has moved up to top of brake rod slot. (See Figure 12.)
- 2. Exert additional pressure on pedal to move brake shown in Figure 12, toward Main Brake drum.
- 3. Brake shoe must contact drum when CLUTCH-BRAKE pedal is approximately 1'' to 1-1/2'' from pedal stop on frame. (See Figure 13.)
- 4. Adjust nuts on adjusting rod to insure adequate brake shoe pressure. (See Figure 12.)

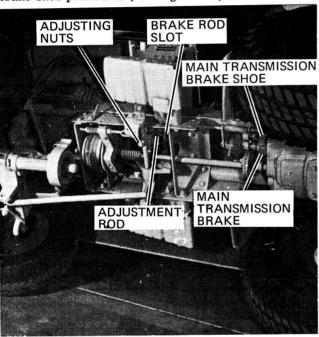


Figure 12

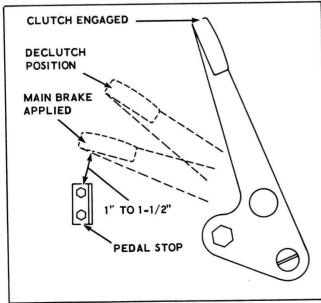


Figure 13

#### NOTE

REGULARLY LUBRICATE ALL BRAKE LINKAGES TO INSURE FREE ACTION.

#### PARKING BRAKE

Always apply Parking Brake whenever leaving tractor unattended or on inclines. Do Not operate tractor with Parking Brake on.

Always use Main Brake and wait for tractor to come to a full stop, when shifting on inclines.

#### SEAT ADJUSTMENT

To adjust seat, remove two nuts from beneath tractor seat and reposition in other holes provided. Replace nuts and tighten to secure seat in new position. Tool box is conveniently located under seat.

#### MOWER HITCH AND LINKAGE

The hitch cross shafts will not interfere with the installation or operation of any other attachments. The cross shafts should not be removed when the mower is removed from the tractor.

If for any reason the hitch cross shafts are removed, they should be reinstalled as per sketches, Figure 16 & 17.

# FREE WHEELING

# CAUTION

Free wheeling is provided solely for maneuvering tractor by hand on level ground. DO NOT USE FREE WHEELING ON SLOPING GROUND because brake is inoperable when in free wheeling!

Free wheeling pin is located on the inside hub of the right rear wheel. Pull pin out for free wheeling or push pin into socket for normal operation, securing pin in either position with spring cotter provided. See (Figure 14).

Turn the differential control knob counterclockwise as far as it will go. DO NOT USE A WRENCH. Location of differential control knob is shown in illustration on page 8. "Counterclockwise" is as viewed from left of tractor facing the end of the axle.

#### NOTE

The controlled differential must be disengaged, as described in the preceding paragraph, in order for tractor to free wheel. If towed at all it must be towed with a tow bar and not over five miles per hour.

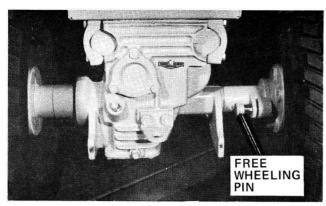


Figure 14

#### REAR AXLE END PLAY

The rear axle may develop end play which should be corrected. Check approximately every 50 hours of operation and adjust if necessary.

ADJUSTMENT PROCEDURE FOR REAR AXLE END PLAY

With both rear wheels off the ground:

- 1. Remove cotter pin and loosen R. H. castellated nut several turns.
- 2. Remove cotter pin from L. H. castle nut (under posi-traction hand wheel), and turn castle nut hand tight. Temporarily install cotter pin and turn wheels to determine if differential gears are binding. Continue this L. H. procedure until a slight binding is detected. At this point back off castle nut to first cotter pin hole and lock castle nut permanently with cotter key. <u>IMPORTANT</u>: This L. H. adjustment must be performed first.

3. Then proceed with R. H. castle nut adjustment, to eliminate all end-play. Recheck for excessive binding before locking R. H. castle nut with cotter pin.

#### NOTE

AXLE NUTS MUST ONLY BE TIGHTENED HAND TIGHT when making this axle end - play adjustment. DO NOT USE A WRENCH.

# POWER TAKE-OFF (P.T.O.)

FAST-SWITCH POWER-LOCK HITCH (NOT BELTS)

Drive shaft delivers power directly from power-takeoff (PTO) to attachment — front, rear and centermounted. (See Figure 15.)

# CAUTION

Always remove universal joint from power-take-off shaft when attachments are removed from tractor. If the joint is not removed and the power-take-off is engaged, damage will result from the whipping action of the free joint, and personal injury could occur.

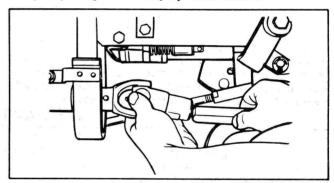
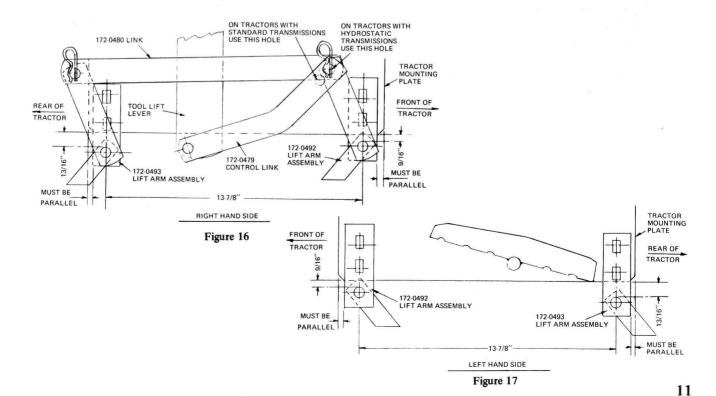
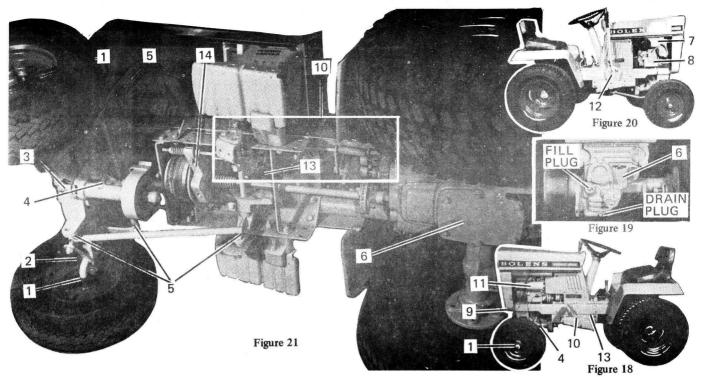


Figure 15



#### LUBRICATION



Proper lubrication and regular maintenance will increase the operating life of your HUSKY tractor. It is suggested that lubrication recommendations in this manual be followed. A lubrication schedule prepared by the operator would be beneficial.

The numerically listed locations on the lubrication chart correspond to those numbers shown on Figures 18, 19, 20 and 21.

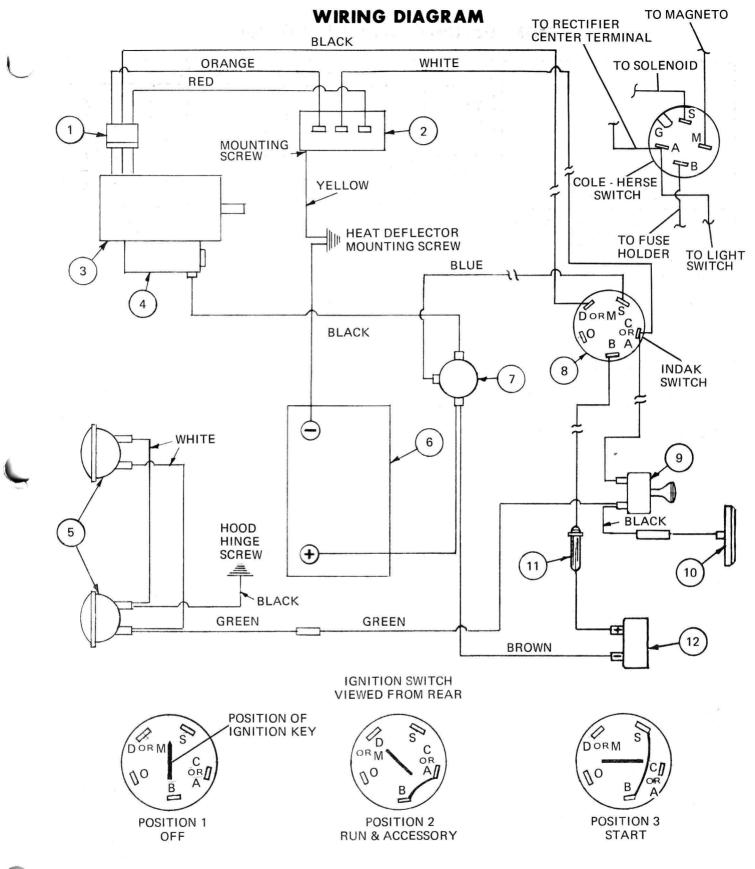
## **LUBRICATION CHART**

LOCATION	TYPE OF LUBRICATION	AMOUNT OF LUBRICATION	FREQUENCY OF LUBRICATION					
1. Front Wheel Ball Bearings	Gun grease	1 or 2 Strokes on gun	8 hrs.					
2. Front Wheel Spindle	Gun grease	1 or 2 Strokes on gun	8 hrs.					
3. Front Axle Pivot	Grease	1 or 2 Strokes on gun	8 hrs.					
4. P.T.O. Pulley	Gun grease	1 or 2 Strokes on gun	8 hrs.					
* 5. Tie Rod Ends and Drag Links	Oil	Coat bearing surface	8 hrs.					
6. Transmission	SAE-90 Fill to plug level		25 hrs.					
7. Air Cleaner	SEE ENGINE MANUFACTURER'S MANUAL							
8. Engine Crankcase	SEE ENGINE MANUFACTURER'S MANUAL							
9. Hood Hinge	NO LUBRICATION REQUIRED							
*10. Brake Linkage	Oil Coat bearing surface		8 hrs.					
11. Starter	NO LUBRICATION REQUIRED							
*12. Attachment Lift Lever	Oil	Coat bearing surface	8 hrs.					
*13. Steering Shaft	Gun Grease	1 or 2 Strokes on gun	8 hrs.					
14. Clutch	Oil	Coat bearing surface	8 hrs.					

\*More frequent if application demands. See your dealer for specified oil for complete refills.

NOTE: A hand type grease gun with a flexible hose is recommended when greasing your unit. This type grease gun can be purchased at most automotive supply stores. Ask for Alemite All Purpose Grease Gun No. 4031 with Flexible Hose Assembly No. 6703A, or similar type. Hi-pressure type grease guns could cause damage to the fittings and bearing seals. Lubricate all linkages, levers and pins not equipped with grease fittings with an oil can once a week or oftener depending on operating conditions. See separate Engine folder for amount and type of oil for various tempera-

tures.



- 1. CONNECTOR
- 2. RECTIFIER-REGULATOR
- 3. ENGINE
- 4. STARTER
- 5. HEAD LIGHTS
- 6. BATTERY

- 7. SOLENOID 1717048
- 8. IGNITION SWITCH
- 9. LIGHT SWITCH
- 10. TAIL LIGHT
- 11. FUSE-HOLDER & FUSE 20 AMP
- 12. AMMETER

# MINOR TROUBLE SHOOTING GUIDE

	FINS			CHE	CK :	FOI	R POS	SSIBLE	CAUS	ES		
IF TRACTOR ACTS IN FOLLOWING MANNER:	DIRTY COOLING FII AND AIR SCREEN	FAULTY IGNITION	FAULTY SPARK PLUG	EMPTY FUEL TANK	BATTERY	CHECK FUSE **	CARBURETOR	IDLE ADJUSTMENT	По	AIR CLEANER	сноке	SEE YOUR BOLENS DEALER
Engine will turn over but won't star	t	х	х	х			X				x	x
Engine will not turn over					X	x			100			x
Starts only after repeated tries		х	х				4		L PAR			x
Stalls in a few seconds							X	х				x
Stalls when hot								х				x
Idles rough		х	х				X	х		X	x	x
Engine overheats	X	X				П	X		x			x

<sup>\*</sup> Also see enclosed Engine Manual for additional troubleshooting information.

# STORING YOUR HUSKY TRACTOR

Always keep your HUSKY tractor in a dry, protected place when not in use to prolong its usefulness and appearance. With year 'round use, it is not necessary to "store" the tractor but when it is not to be used for some time, it should be prepared for storage in the following manner:

- 1. Completely clean all accumulated dirt or trash from all parts, especially engine fins and flywheel screen.
- 2. Wipe oil or a rust preventative on any parts that may rust.
- 3. Drain gas tank and carburetor.
- 4. Remove, clean and regap spark plug and put a small amount of oil (SAE 30) in cylinder head. Consult Engine Manufacturer's Manual.
- 5. Without starting the tractor, turn the engine over a few times to fully lubricate the cylinder walls, valve seats and

valve stems. This can be done by engaging the less strictly. Replace spark plug.

#### 6. Keep tractor covered.

- 7. BATTERY Each week fill each cells tilled water. Keep terminal posts cleared and coat with petroleum jelly or grease. Stored battery must be kept fully charged unit filled to triangle. Store at cool temperature. Check each two months and charge as necessary.
- 8. The air cleaner should be cleaned and selection plastic bag or facsimile, for the duration of the period.
- 9. If tractor is stored with an attachment MUST be lowered to the lever put in OFF position.

<sup>\*\*</sup> Use a 20 amp fuse No. 172-0976 for replacement

# MAINTENANCE GUIDE

	AFTER EVERY 10 HOURS OF OPERATION	AFTER EVERY 25 HOURS OF OPERATION	AFTER EVERY 50 HOURS OF OPERATION
Check battery water level		X**	
Check air in tires (page 9)		Х	
Check engine crankcase oil	X**		
Drain engine crankcase oil and refill			X *
Check SAE-90 gear oil in transmission and add to level of upper filler plug as needed		х	
Check cooling air screen	х		
Lubrication points (see lubrication guide)	х		
Brake adjustment			X **
Rear axle adjustment			X
Air cleaner - service as instructed in separate Engine manual.	X*		

<sup>\*\*</sup> More often under extreme load conditions

# LUBRICATION & MAINTENANCE RECORD

Date Performed	Description of Maintenance	Hours Run
		,



 $\hbox{\tt PORT WASHINGTON, WISCONSIN, U.S.A.}$ 

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