

Bolens[®]

BOYER LAWN & GARDEN EQUIP.
Bolens - Troy-Bilt Power Equip.
Wood & Coal Furnaces, Chainsaws
PO Box 918 N. Webster, IN 46555
(219) 834-2046

Owners Manual

DuraTrac Tractor

Models

5118H
(GT 1800)

5118HS
(GT 1800)

5120H
(GT 2000)



FORM 176-1611 • A (1/91)
SUPERSEDES FORM 4254-2 (1/91)

INTRODUCTION

Thank you for purchasing this piece of **Bolens** equipment. We feel you now own one of the finest pieces of equipment available.

This is a safety, operation and general maintenance manual which does not attempt to cover major repairs. **Bolens** equipment is carefully designed, engineered, and manufactured to give good performance if properly operated and maintained. Review this manual to familiarize yourself with the unit, its features and its operation. Your Warranty Statement is included at the end of this manual. Please read it carefully. Also, please return the completed postpaid owner registration card which is included with this manual. The purpose of this card is to register each unit and owner at the factory for safety purposes.

CONTACT YOUR NEAREST **Bolens** DEALER FOR ANY REPLACEMENT PARTS OR SERVICE NEEDED. DO NOT RETURN PARTS DIRECTLY TO THE FACTORY. THE FACTORY REQUIRES PRIOR APPROVAL ON RETURNS, AND APPROVALS ARE ISSUED ONLY TO **Bolens** DEALERS OR DISTRIBUTORS.

NOTICE

We reserve the right to change specifications, add improvements or discontinue the manufacture of any equipment without notice or obligation to purchasers of that equipment.

Bolens' approval of the use of attachments manufactured by allied manufacturers is limited to assurance that such use will not void **Bolens** warranty on the **Bolens** equipment to which the allied manufactured items are adapted. The responsibility for the design, performance, durability, safety in operation, service repair availability, and warranty obligation for the attachment remain with the allied manufacturer. **Bolens** specifically excludes from its warranty obligation all such manufactured attachments.

Bolens' warranty will be voided if un-approved attachments are adapted to use with **Bolens** equipment and are so used.

NOTE: Illustrations and photos in this manual may not relate exactly to the finished product, due to last minute running changes.

WARNING TO ALL CALIFORNIA AND OTHER POWER EQUIPMENT OPERATORS

Under California law, and under the laws of several other states, you are not permitted to operate an internal combustion engine using hydrocarbon fuels on any forest covered, brush covered, or grass covered land, or on land covered with grain, hay or other flammable agricultural crop, without an engine spark arrestor in continuous effective working order.

The engine on your power equipment, like most outdoor power equipment, is an internal combustion engine that burns gasoline, a hydrocarbon fuel. Therefore, your power equipment must be

equipped with a spark arrestor muffler in continuous effective working order. The spark arrestor must be attached to the engine exhaust system in such a manner that flames or heat from the system will not ignite flammable material. Failure of the owner/operator of the equipment to comply with this regulation is a misdemeanor under California law, and may also be a violation of other state and/or federal regulations, laws, ordinances, or codes. Contact your local fire marshal or forest service for specific information about what regulations apply in your area.

For Engine Service & Repairs:

Please contact your nearest authorized Kohler Service Center if engine service or repair is needed. This listing is in the phone book "Yellow Pages" under "Engines, Gasoline" or "Gasoline Engines." The Service Center will need to know the Model, Type and Code Number of your engine. Your local Kohler Dealer can handle repairs, parts orders and warranty service concerning the

engine alone. If you wish to contact us before seeing the Engine Dealer, or if you have difficulty getting engine service or parts locally, be sure to let us know. See the enclosed Engine Manufacturer's literature for full terms of the Limited Warranty on the engine and other details about the engine.

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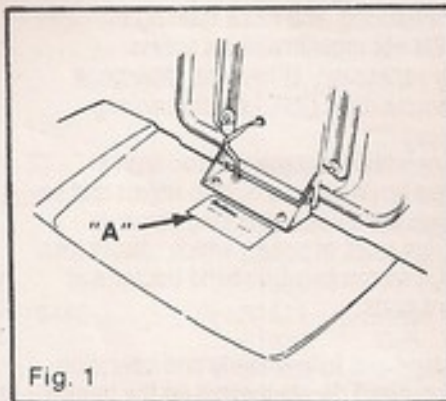
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IDENTIFICATION NUMBERS

To ensure prompt service when repairs or adjustments are required, your Bolens Dealer must have the following information.

Model/Serial Number of tractor located on fender under seat (A, Fig. 1).

Engine Model/Serial/Spec. Numbers. (Located on top of engine on blower housing.)



CAUTION

WE URGE USING ONLY GENUINE BOLENS REPLACEMENT PARTS, WHICH MEET ALL OF THE LATEST REQUIREMENTS. REPLACEMENT PARTS MANUFACTURED BY OTHERS COULD PRESENT SAFETY HAZARDS EVEN THOUGH THEY MAY FIT ON BOLENS PRODUCTS.

ENGINE PARTS

When ordering engine component parts, contact the engine manufacturer or dealer in your area.

GENERAL SAFETY PRECAUTIONS



CAUTION WARNING DANGER

LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS: "ATTENTION!! - BE ALERT!! - YOUR SAFETY IS INVOLVED!!"

PREVENTING ACCIDENTS IS THE RESPONSIBILITY OF EVERY EQUIPMENT OPERATOR. THE FOLLOWING GENERAL SAFETY PRECAUTIONS MUST BE FULLY UNDERSTOOD AND FOLLOWED BY EVERY OPERATOR OF THIS ATTACHMENT. REVIEW THEM FREQUENTLY AND NEVER TAKE CHANCES. BE CAREFUL BEFORE, DURING AND RIGHT AFTER USE OF ANY POWERED EQUIPMENT. ACCIDENTS CAN BE PREVENTED.

• Know the controls of the attachment and tractor and know how to stop quickly. **READ THIS MANUAL.** Also re-read the owner's manual provided with the tractor on which this attachment is to be used. Carefully review the safety section of the tractor owner's manual before using this attachment.

• Do not allow children to operate this unit. Do not allow adults to operate it without proper instruction.

• Do not carry passengers. Keep people away from the working area. In particular, keep children and pets a safe distance away.

• Before starting tractor, all guards and safety devices must be in place and working. Failure to follow this instruction could result in serious injury!

• **BE ALERT!** Give complete attention to the job you are doing. This will minimize the possibility of getting into a dangerous situation.

• Take all possible precautions when leaving the vehicle unattended. Disengage the attachment drive (PTO), lower the attachment to the ground, place the tractor into neutral position, set the parking brake, stop the engine and remove the key. **DO NOT LEAVE THE VEHICLE WHILE IN MOTION, WHILE THE ATTACHMENT IS IN ACTUAL OPERATION, OR THE PTO IS ENGAGED.**

• Unless specified otherwise, before performing any maintenance or adjustments:

- Disengage PTO drive.
- Place tractor into neutral position.
- Set tractor parking brake.
- Stop tractor engine.
- Remove key from ignition.
- Disconnect spark plug wire from tractor engine spark plug and keep it from touching spark plug.

• Keep the vehicle and attachment clean, and in good, safe operating condition.

• Keep all nuts, bolts and screws tight to be certain the equipment is in safe working condition.

GENERAL SAFETY PRECAUTIONS (Continued)



- **BE CAREFUL WHILE IN REVERSE!** A large percentage of accidents involving children occur while backing up. Carefully look behind you before backing, and while running in reverse. Do not mow in reverse unless absolutely necessary. Otherwise, disengage the attachment drive (PTO) before backing.



- Do not operate attachment at too high a speed. You could strike a hidden object and be thrown from the tractor. Bucking can also occur at high rates of speed, which causes loss of control, and can break or bend tractor and attachment parts.



- Understand and follow safety and operation information on all decals located on the tractor and attachment.



- Clear the work area of objects (wire, rocks, etc.) which might be picked up and thrown by the attachment.



- Disengage the PTO and place the tractor into neutral position before attempting to start the tractor.



- Disengage the PTO and stop the tractor engine before leaving the operator's position.



- Do not stop or start suddenly while going uphill or downhill. Mow up and down the face of steep slopes--never across.



- Reduce speed and exercise extreme caution on slopes and in sharp turns to prevent tipping or loss of control. Be especially cautious when changing directions on slopes.



- Be alert for holes, rocks and roots in the terrain and other hidden hazards. Keep well away from drop-offs.



- Use care when pulling loads or using heavy equipment.



- Use only approved drawbar hitch points.
- Limit loads to those you can safely control.
- Do not turn sharply. Use care when backing.
- Use counterweight(s) or wheel weights when suggested in the owner's manual.

- Watch out for traffic when crossing or near roadways.



- Never direct the discharge of material toward bystanders while using attachments, or allow anyone near the vehicle while it is in operation.



- Handle gasoline with care--it is highly flammable.

- Use an approved gasoline container.
- Never remove the fuel cap of, or add gasoline to, a hot or running engine--or an engine that has not been allowed to cool for several minutes after running. Never fill the tank indoors, and always clean up spilled gasoline.
- Open doors if the tractor is to be run in the garage--exhaust fumes are dangerous. Do not run the tractor engine indoors.

- Never store equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark, or where high temperatures could ignite gasoline. Allow the tractor engine to cool before storing in any enclosure.

- To reduce fire hazard, keep the tractor engine free of grass, leaves, or excessive grease.

- The vehicle and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.

- Do not change the engine governor settings or over-speed the engine. Failure to follow this instruction could result in personal injury and/or engine damage which would not be covered by the manufacturer's warranty.

- When using a tractor/mower combination, proceed as follows:

- Mow only in daylight or in good artificial light.
- Never make a cutting height adjustment while the tractor engine is running if the operator must dismount to do so.
- Shut the tractor engine off when unclogging the discharge chute.
- Check the blade mounting bolts for proper tightness at frequent intervals.

- During normal use, the grass catcher bag material is subject to deterioration and wear. It should be checked frequently and replaced when it becomes badly worn or damaged. Replacement bags should conform to the original manufacturer's recommendations or specifications.

- There is a safety interlock switch which should shut down the engine within a few seconds after the operator leaves the seat. If this switch fails to operate, get the unit serviced immediately by an authorized Bolens dealer. Severe injury could result by not following this practice.

ATTACHMENTS AND KITS

Below is a list of attachments and kits that are available for your unit. The information listed is the most current at the time this manual was printed. Check with your nearest Bolens dealer for up-to-date information.

Number	Description	Number	Description
16219	Tire Chains (23 x 10.50)	50146	46" 2-Stage Snowthrower (Req. 30902, 51963 & 51965)
16465	Dump Cart (10.0 cu. ft.)	50254	54" Snow Plow/Grader Blade (Hydraulic Angling) (5120H ONLY)
18032	Front Wheel Weights (pr.)	50914	Storage Cover
18617	8" Time & Hood Extension for 51333	50961	Sleeve Hitch
19220	54" Blade (req. 51965)	51333	33" Rotary Tiller w/Drive Shaft
19222	Mechanical Blade Angling Kit	51611	Front End Loader (Req. Rear Weight)
30902	Rear Wheel Weights (pr.) Cast iron	51930	Cab
30917	PowerPacker Plus for 51042S or 51048S (Req. 30921 or 50922)	51963	Installation Kit for 51146
30921	Cart Grass Collector (Req. 30917)	51965	Push Arm use w/50142, 19220, 51146& 50254)
50922	Two-Bag Grass Collector (Req. 30917)	51964	3 Point Hitch
51042S	42" Side Discharge Rotary Mower	51951	Weight Carrier (Uses 1319 Weights--5 Max.)
51048R	48" Rear Discharge Rotary Mower	34501	GRS Attachment (For 51042S & 51048s)
51048S	48" Side Discharge Rotary Mower		
51060S	60" Side Discharge Rotary Mower		
50142	42" Snowthrower (req. 30902 & 51965)		

SPECIFICATIONS

Bolens reserves the right to make changes in specifications shown herein, add improvements or discontinue the manufactured product at any time without notice or obligation.

Illustrations in this manual may not relate exactly to the finished product due to product improvement and running changes.

ENGINE ... (5118H & 5118HS) 18HP Kohler ... (5120H) 20HP Kohler	TRANSMISSION Hydrostatic Eaton 11	BATTERY SIZE 280cc AMPS
CYLINDERS 2	TRANSAXLE (5118H & 5118HS)	TURNING DIAMETER 69 in (175.3cm) Inside Rear Width 173 in (439.4cm) Curb to Curb
TYPE 4 Cyl. Air Cooled	Bolens Single Speed	GROUND CLEARANCE Front 6-1/2 in. (16.5cm) Rear 7 in (17.8cm)
ENGINE IDLE SPEED 1600-1800 RMP	(5120)..... Bolens Two Speed Speeds..... Infinitely Variable	WEIGHT (5118H & 5118HS) 792 lbs. (360 kgs) (5120H)..... 830 lbs. (376 kgs)
GOVERNOR SETTING 3600 RPM	(5118H & 5118HS) Forward: 0-6.8 mph (0-10.9km/h) Reverse: 0-2.9 mph (0.4.8km/h)	TIRE SIZE Front 16x6.50-8 Rear 23x10.50-12
ENGINE OIL 1.5 Qts. (1.4 L)	(5120H)..... Forward: LO 0-3.3 mph (0-5.3km/h) HI 0-9.0 mph (0.14.5km/h)	WHEELBASE 49 in (124cm) WIDTH 38-1/2 in (97.8cm) LENGTH 76-3/4 in (195cm) HEIGHT 47-3/4 in (121.3cm)
BORE AND STROKE 18 HP 3.12 x 2.75 in (79.4 x 69.8mm)	Reverse..... LO 0-1.5 mph (0-2.4km/h) HI 0-4.3 mph (0-6.9 km/h)	HOURMETER Yes CRUISE CONTROL Yes
20HP 3.12 x 3.06 in (79.4 x 77.7mm)	POWER TO ATTACHMENTS Double Belt Drive From Electric Clutch With Splined Shaft And Universal Joint Drive	HYDRAULIC CONTROL (5118H & 5118HS) ... Single Spool (5120H)..... Two Spool
DISPLACEMENT 18 HP 42.18 cu in (0.691 L) 20 HP 46.98 cu in (0.769 L)	ATTACHMENT DRIVE SPEED PTO 2000 RPM	POWER STEERING (5120H & 5118HS) Standard
ELECTRIC STARTING Yes	HEADLIGHTS Yes	
AIR CLEANER Dry Type w/Pre-cleaner		
FUEL CAPACITY .. 4.3 Gal. (16.3 L)		

CONTROLS

Before operating the tractor, the operator should become familiar with the function and location of each control to ensure proper and efficient operation. The symbols used on these pages and on the controls of the tractor

are INTERNATIONAL SYMBOLS. These symbols are used all over the World on equipment such as this. These symbols are readily identified in all languages. The following listed numbers and accompanying

information correspond to those numbers assigned to the controls indicated in Figure 2.

Location of lights on console may be in a different area depending on the model.

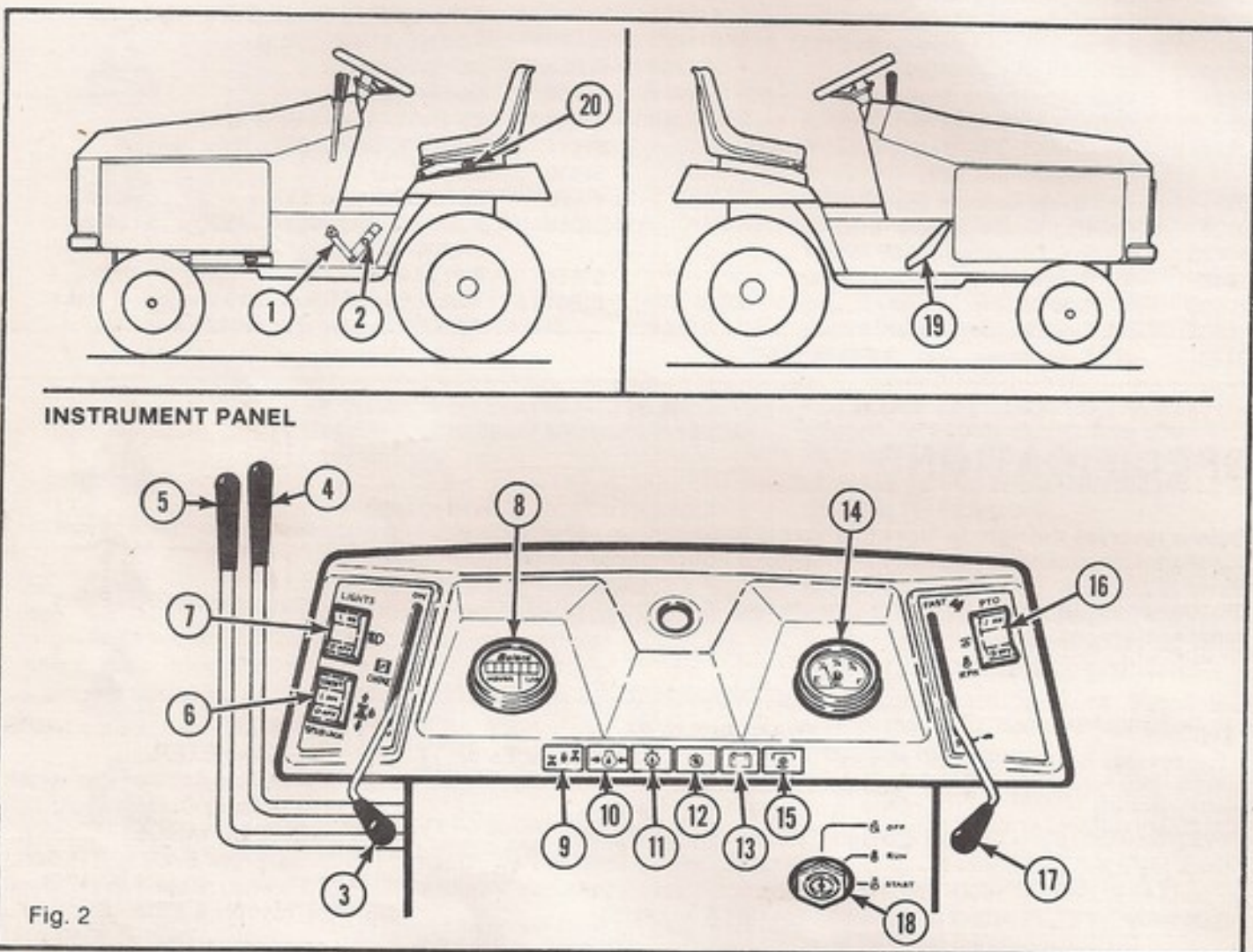


Fig. 2

1. BRAKE/NEUTRAL PEDAL-Depress pedal to apply brake and start engine.

2. PARKING BRAKE LEVER-To engage "brake/neutral pedal", depress brake pedal and lift knob to latch the pedal in the park position. To release the "Parking Brake", depress the brake pedal until the latch is released.

3. CHOKE-Choke lever "UP" towards the "ON" position closes choke for

starting. Choke lever DOWN to "OFF" position opens choke for operation.

4. ATTACHMENT LIFT LEVER-Pull lever back to activate the hydraulic lift attachment. Push lever forward to lower attachments.

5. AUXILIARY HYDRAULIC LEVER-This regulates the auxiliary control cylinders on attachments that are plugged into front hydraulic connections. 5120H ONLY

6. SPEED CONTROL SWITCH-"Off"- "On"- "Reset" positions. Locks the travel speed of the tractor when activated.

7. LIGHT SWITCH-Bottom "OFF"- Center "ON" (Headlights and Sidelights) Top-"ON" (Headlights).

8. HOUR METER-Registers hours of tractor use.

9. SPEED CONTROL LIGHT-Indicates that speed control is activated.

10. OIL PRESSURE LIGHT-Indicates lack of oil pressure in the engine.

11. TRANSMISSION OIL TEMPERATURE LIGHT-Registers when oil temperature in transaxle is too hot.

12. START LIGHT-Indicates that attachment drive is on or brake is off.

13. BATTERY LIGHT-Indicates Low battery voltage.

14. FUEL GAUGE-Registers amount of fuel in tank.

15. PTO LIGHT-Lights up when electric clutch is activated.

16. PTO SWITCH-Engages and disengages power to attachments. Move switch to "ON", to engage clutch and to "OFF" to disengage.

17. THROTTLE-Move throttle lever "UP" for full throttle; "DOWN" for idle.

18. IGNITION/STARTER SWITCH-This is a three position switch: "OFF", "RUN", "START". To start the engine, turn the key to the far right. Release when engine starts. Engine will not start unless attachment drive is "OFF", and brake is "ON". Turn key to "OFF" to stop engine.

19. TRAVEL PEDAL-Depress pedal with toe of foot for forward motion. Depress with heel of foot for reverse motion.

20. TWO SPEED TRANSMISSION-Lever located under seat on the left side. Move lever forward for "LOW" and back for "HIGH" range. (5120H ONLY)

PRE-OPERATIONAL CHECKS

The operator should become familiar with the following pre-operational check list, and perform each check prior to starting or operating the Bolens tractor.

1. Check for proper level of engine oil. Fill crankcase through fill opening (A). The oil level is indicated by marks on the dipstick (B), Figure 3.

Oil Capacity 1.5 qts. (1.4L)

2. Check gasoline tank for sufficient supply. Use a good grade of clean unleaded gasoline with an octane rating of 87 or higher. Leave some room in fuel tank for expansion.

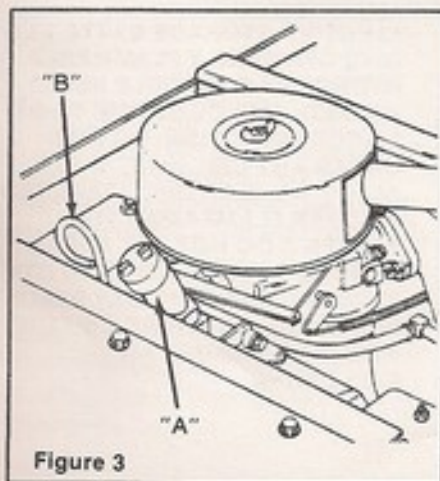


Figure 3

DO NOT MIX OIL WITH GASOLINE



WARNING

DO NOT REFUEL TRACTOR WHILE ENGINE IS RUNNING OR HOT. KEEP SMOKING MATERIALS, SPARKS AND FLAMES AWAY FROM GAS TANK AND FUEL CONTAINER.

Check to see that vent hole in fuel tank cap is not plugged.

3. Inspect battery for proper electrolyte level and clean cables of dirt and corrosion.

4. Check flywheel screen for debris and clean regularly.



WARNING

ENGINE MUST BE STOPPED BEFORE CLEANING.

5. Visually check for loose or missing nuts, screws and damaged parts.

Replace and tighten before starting engine.

6. Check for proper tire inflation.

8 - 10 lbs. rear
12 - 14 lbs front

7. Check seat adjustment for operator comfort. To adjust seat, loosen knobs beneath seat and slide seat forward or back.

PTO CLUTCH BREAK-IN PROCEDURE

With engine running at idle speed, engage and disengage PTO switch 10 or 15 times. Do this before initial use and after extended storage.

Before driving the Bolens tractor, the operator should be familiar with the location and function of all controls.

TIRE PRESSURE

Check for proper tire inflation.

Front: 12 to 14 PSI
(14 PSI with front mount attachments)
Rear: 10 to 12 PSI

OPERATION



Before driving the Bolens tractor, the operator should be familiar with the location and function of all controls.



WARNING

CHILDREN SHALL NOT OPERATE THIS TRACTOR BECAUSE AN AVERAGE CHILD IS NOT ABLE TO COPE WITH THIS POWER TOOL.

NORMAL STARTING

1. THE STARTER WILL OPERATE ONLY WHEN THE PTO SWITCH (A), FIG. 4, IS IN "OFF" POSITION, WHEN BRAKE/NEUTRAL PEDAL IS DEPRESSED.
2. Move choke lever (B), all the way up (choke on). Experience will show a need for more or less choking due to variations in temperature, grade of fuel, etc.
3. Move throttle lever (C), up about halfway.
4. Insert ignition key and turn to the right to start engine. Release when engine starts.



CAUTION

IN THE EVENT OF A "FALSE START" (ENGINE GETS UP SUFFICIENT SPEED TO DISENGAGE STARTER BUT FAILS TO

CONTINUE RUNNING), THE ENGINE MUST BE COMPLETELY STOPPED BEFORE ANOTHER STARTING ATTEMPT IS MADE. FAILURE TO ALLOW ENGINE TO COME TO A COMPLETE STOP CAN CAUSE DAMAGE TO THE STARTING MECHANISM AND ENGINE. LIMIT CRANKING (CONTINUOUS) TO A PERIOD OF 30 SECONDS TO PREVENT OVERHEATING OF THE STARTER. IF CRANKED OVER 30 SECONDS, STARTER SHOULD NOT BE OPERATED AGAIN FOR 60 SECONDS TO ALLOW TIME FOR COOLING.

5. Move choke lever down about halfway as soon as engine starts. Gradually push all the way down as the engine warms up. In normal operation, choke lever should be in "OFF" (down) position for best engine efficiency and fuel economy.

6. Move throttle lever up to full speed when operating tractor.

It is required that the tractor operate at FULL THROTTLE. While operating under heavy load conditions, listen to the engine RPM. If the engine begins to slow down, do not advance the travel pedal. By letting up on the travel pedal, the ground speed will decrease and the engine speed will increase, thereby allowing engine to maintain constant P.T.O. speed.

NOTE

DO NOT DRIVE THE TRACTOR IMMEDIATELY AFTER START UP. LET THE ENGINE RUN A FEW MINUTES TO ALLOW TRANSMISSION OIL TO WARM UP FIRST.

LENGTH OF WARM UP WILL BE DETERMINED BY THE TEMPERATURE.

7. To stop the engine, bring engine back to idle, lock brake/neutral pedal down, place PTO switch in "OFF" position. Let engine idle 30 seconds or more before turning ignition switch off and removing the ignition key.

NOTE

Leaving seat with the PTO switch on and/or with the brake off, will stop

engine, due to interlock switches at the seat and on the break linkage.

NOTE

WHEN MOVING TRACTOR MANUALLY, PUSH THE UNIT SLOWLY TO PREVENT TEMPORARY LOCK-UP OF THE REAR WHEELS. THE CLICKING NOISE IS CONSIDERED NORMAL.

ON TWO SPEED MODELS SHIFT TO NEUTRAL.

EMERGENCY STARTING

In the event of electrical failure, get in touch with your DEALER for assistance in locating trouble.

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 must be observed:



WARNING

ALWAYS SHIELD EYES WHEN WORKING AROUND BATTERIES. THIS BATTERY CONTAINS SULFURIC ACID. AVOID CONTACT WITH SKIN, EYES OR CLOTHING. IN EVENT OF ACCIDENT FLUSH WITH WATER AND CALL A PHYSICIAN IMMEDIATELY.

ELECTRIC STORAGE BATTERIES GIVE OFF HIGHLY FLAMMABLE HYDROGEN GAS WHILE BEING JUMPED, AND CONTINUE TO DO SO FOR SOME TIME. DO NOT UNDER ANY CIRCUMSTANCES, ALLOW AN ELECTRIC SPARK OR AN OPEN FLAME NEAR THE BATTERY. DO NOT SET TOOLS ACROSS THE BATTERY TERMINALS AS THIS MAY RESULT IN A SPARK OR SHORT CIRCUIT WHICH MAY CAUSE AN EXPLOSION.

OPERATION (continued)

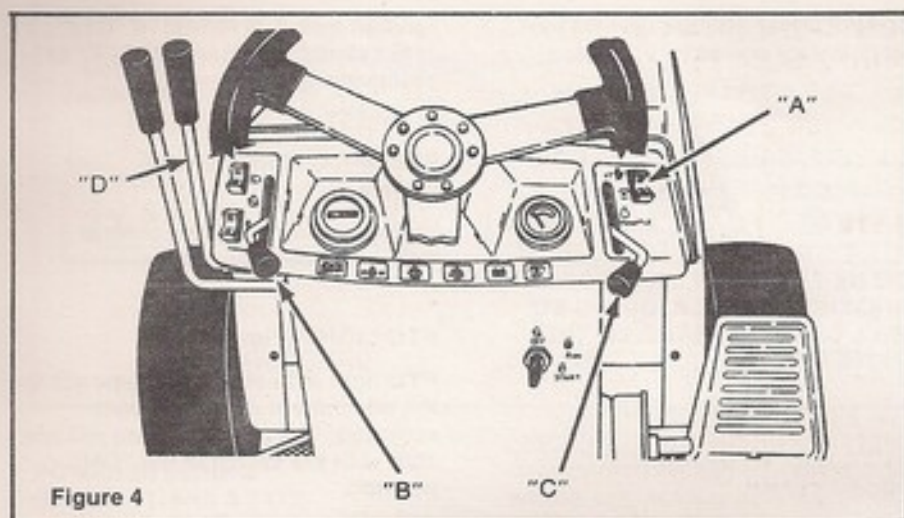


Figure 4

ELECTRIC STORAGE BATTERIES GIVE OFF HIGHLY FLAMMABLE HYDROGEN GAS WHILE BEING JUMPED, AND CONTINUE TO DO SO FOR SOME TIME. DO NOT UNDER ANY CIRCUMSTANCES, ALLOW AN ELECTRIC SPARK OR AN OPEN FLAME NEAR THE BATTERY. DO NOT LAY TOOLS ACROSS THE BATTERY TERMINALS AS THIS MAY RESULT IN A SPARK OR SHORT CIRCUIT WHICH MAY CAUSE AN EXPLOSION.

1. BE CERTAIN jumper cables are connected positive to positive and negative from booster battery to the engine block of the tractor, NOT TO NEGATIVE (-) TERMINAL OF BATTERY.
2. Place PTO switch in "OFF" position and depress brake/neutral pedal.
3. Follow procedure outlined under Normal Starting.
4. After unit is started, remove jumper cables from booster battery first. Then remove cables from the tractor, replace terminal cover over terminals.

PTO DRIVE CLUTCH

Move PTO switch (A), Figure 4, to "ON" to engage attachment drive clutch. Move PTO switch to "OFF" to disengage.



CAUTION

DO NOT ENGAGE PTO WITHOUT AN IMPLEMENT ATTACHED. ALWAYS REMOVE UNIVERSAL JOINTS FROM PTO SHAFT AFTER ATTACHMENT IS REMOVED. SERIOUS DAMAGE WILL RESULT IF UNIVERSAL JOINTS ARE LEFT ON AND PTO IS ENGAGED.

HYDRAULIC ATTACHMENT LIFT

The attachment lift (D), Figure 4, can be maneuvered while vehicle is at rest or in motion. Pull lever back to raise attachments and push forward on lever to lower attachments.

When released, lever will automatically return to NEUTRAL position, except when pushed all the way forward into the FLOAT position. The Float position must be used when the operator wants the attached implement to follow ground contours independently.



CAUTION

BE SURE ATTACHMENT IS COMPLETELY HOOKED UP BEFORE USING HYDRAULIC LIFT. DAMAGE COULD RESULT. MOVE

THE ATTACHMENT THROUGH ITS COMPLETE RANGE SLOWLY TO MAKE SURE IT DOES NOT BIND OR HAVE INTERFERENCE. MAKE NECESSARY ADJUSTMENTS IF REQUIRED.

HYDROSTATIC TRANSMISSION

For maximum performance with attachments, operate engine at full throttle and control speed with hydrostatic foot pedal.

The hydrostatic transmission gives the operator a choice of infinitely variable speeds. Avoid excessive HIGH travel speed whenever possible. Lower travel speeds are best for most jobs such as snowthrowing or mowing tall or lush grass.

If transmission "OIL TEMPERATURE" light (Fig. 7) comes on, this indicates that the fluid in the hydrostatic and hydraulic system is overheated. When this light comes on, shut the tractor off and let the system cool down. When restarting tractor operate at slower speed.

TWO SPEED TRANSMISSION (Model 5120H)

The two speed shift arm (E), Figure 5, MUST be operated with the tractor completely stopped.

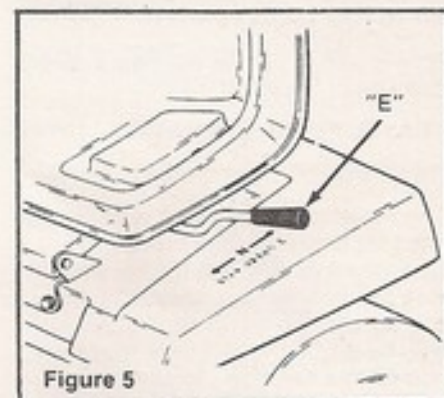


Figure 5

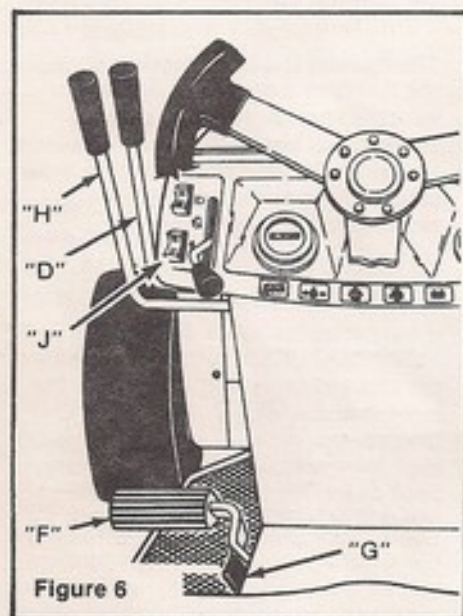
OPERATION (continued)

Use HIGH range (0-9 mph) for transport and mowing.

Use LOW range (0-3.3 mph) for heavy load conditions, such as tilling, snowthrowing, plowing or with ground engaging work.

BRAKE/NEUTRAL PEDAL

Depress brake/neutral pedal (F), Figure 6, to apply the brakes. To hold brake when parked, depress foot pedal to apply the brake, and lift parking lock lever (G) to lock pedal down.



WARNING

ALWAYS LOCK BRAKE/NEUTRAL PEDAL DOWN WHENEVER LEAVING TRACTOR UNATTENDED.

Proper use of brakes will help prevent damage or personal injury.

TRAVEL PEDAL OPERATION

Place foot solidly on pedal.

The travel (control) pedal is generally used for braking while moving. To slow down or stop the tractor while it is in forward motion, gradually apply pressure to the travel control pedal with heel of right foot until tractor comes to a full stop. To slow down or stop the tractor while it is in reverse motion, apply pressure to travel

control pedal with toe of right foot until tractor comes to a full stop.



CAUTION

DO NOT TOW THE TRACTOR WITH ANOTHER VEHICLE. DOING SO WILL CAUSE DAMAGE TO THE DRIVE SYSTEM.

AUXILIARY HYDRAULICS (Model 5120H)

This is a 3 position valve, with the center position being "OFF" or "NEUTRAL". This valve is used only for operating small double acting cylinders on the remote or auxiliary hydraulically controlled attachments. (See "H", Figure 6). Push lever forward or pull back to operate.

AUXILIARY HYDRAULIC CONNECTIONS (Model 5120H)

Refer to front R.H. frame. These are connections for the auxiliary hydraulic controls. To use, clean all dirt and debris from around connections. Push lock collar back towards tractor, remove rubber plugs and insert hydraulic hose end. When not in use, rubber cap plugs must be in place at all times to prevent entry of dirt into hydraulic system.

NOTE

These connections must be kept clean. This is necessary to prevent contamination of the hydraulic fluid and subsequent damage to the hydraulic components.

Only Bolens approved attachments are to be attached to these auxiliary hydraulic connections. Consequential damage to the hydraulic system could result from the use of unapproved attachments, thus voiding warranty.

SPEED CONTROL OPERATION

With tractor running and foot pedal in its desired position, activate speed control switch (J), Figure 6. The foot pedal should remain in the set position until the brake is applied, control switch is turned off or the

ignition switch is moved to "OFF". If brake is applied, push "RESET" to reactivate speed control.

SPEED CONTROL LIGHT (Figure 7)

Indicates that the speed control switch has been turned on.

PTO LIGHT (Figure 7)

PTO light indicates that the power to the attachment drive has been activated. The tractor engine will not start with the switch in the "ON" position.

TRANSMISSION OIL TEMPERATURE LIGHT (Figure 7) (Model 5120H)

This indicates when the hydrostatic transmission and hydraulic system becomes over heated. Check transmission for proper level and debris that might collect on transmission or transaxle. If unit is free of debris and oil is not low, reduce loading on transmission.

ENGINE OIL PRESSURE LIGHT

This light (Figure 7) indicates when the engine oil pressure drops below the safe operating level. If this light comes on, check the crankcase oil level. Add oil if level is low. If the oil level is not low, change the engine oil filter. If the light does not go off after performing the above, see your Bolens dealer.

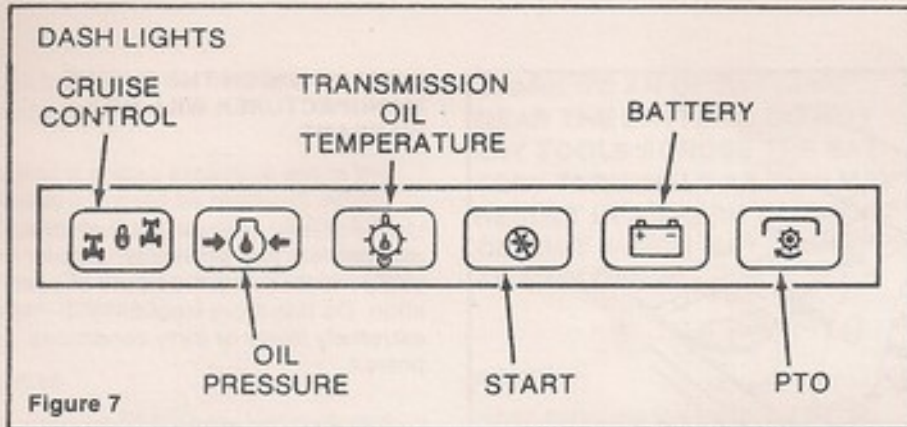
BATTERY LIGHT (Figure 7)

Indicates that the battery voltage is low. If light is still on 2 minutes after start up, check battery connections. If connections are good, check if battery is charging. If the light does not go off after performing the above, see your Bolens dealer.

START LIGHT (Figure 7)

Indicates when the ignition switch is in the start position, and the safety start interlock switches are not activated. (Brake must be on and PTO switch off to start.)

OPERATION (continued)



POWER STEERING (Models 5118HS & 5120)

The power steering system is hydraulically operated.

Because of this, the steering wheel can be turned beyond the normal stopping point when the steering cylinder reaches its maximum extension. The steering wheel may

not return to centered position when wheels are faced directly ahead after a turn.

The steering arm normally makes contact with the frame to limit the turning. This condition may not occur with the power steering system. No adjustment is necessary.

LUBRICATION AND MAINTENANCE



DISCONNECT SPARK PLUG WIRE AND KEEP WIRE AWAY FROM SPARK PLUG BEFORE PERFORMING ANY MAINTENANCE.

A little time spent each day by the operator on preventive maintenance will lead to a longer operating life of the Bolens tractor.

The removal of debris, dirt and grease accumulations are considered normal maintenance practices and can help discover minor difficulties before they become troublesome.

MAINTENANCE CHECKS

Refer to Service instruction Decal under the hood.

LUBRICATION

Refer to Charts on Page 17.

ENGINE

The engine oil level must be maintained in the "safe" operating range at all times. Oil level must be between the "ADD" and "FULL" marks on the dipstick (A), Figure 8. Clean area around dipstick so dirt does not fall into crankcase when dipstick is removed. Check daily and add oil as necessary to maintain proper level -DO NOT OVERFILL. Oil level must not exceed the "FULL" mark.

On a new engine, change oil after the first 5 hours and then as shown in the Lubrication Chart. Drain oil while it is hot for it will then flow more freely and thus carry away more impurities. A drain plug is located under engine.

After completely draining oil, reinstall drain plug, then remove oil filler cap (B) and refill with oil. Refer to Figure 9 for Type and Grade. Check the oil level on the dipstick before adding more. Bring the level up in the safe range but do not exceed the full mark.

AIR SCREEN

Clean flywheel air screen frequently. A dirty air screen and/or engine could cause the engine to overheat and damage the engine.



WARNING

ENGINE MUST BE STOPPED BEFORE CLEANING.

MAINTENANCE (continued)

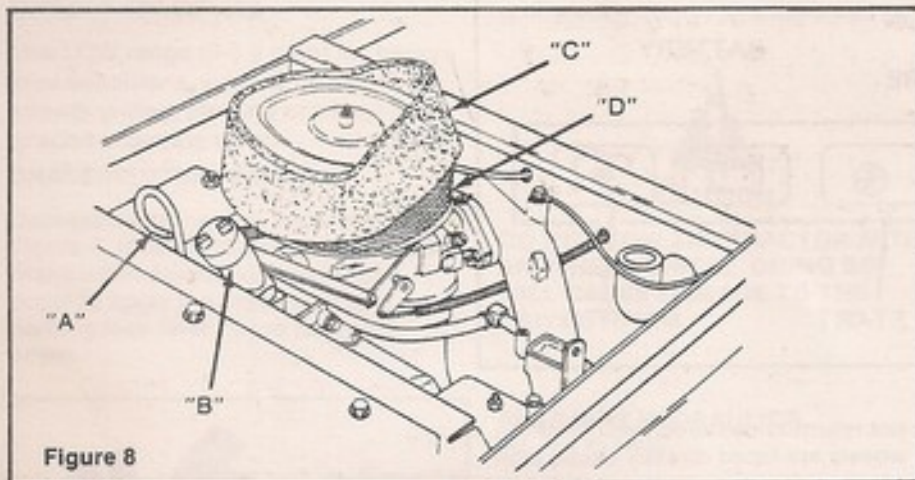


Figure 8

AIR CLEANER DISASSEMBLY

1. Clean off any dirt or debris from around the air cleaner.
2. Remove cover of air filter.
3. Remove Precleaner (C), Figure 8 and Paper element (D).

PRECLEANER

Service Precleaner every 25 hours or more often under extreme dirty or dusty conditions.

Remove foam pre-cleaner by sliding it off the paper cartridge.

Wash foam pre-cleaner in liquid detergent and water.

Wrap foam pre-cleaner in cloth and squeeze dry.

Saturate foam pre-cleaner in engine oil. Squeeze to distribute and remove excess oil.

Install foam pre-cleaner over paper cartridge. Reassemble cover and screw down tight.

AIR FILTER PAPER ELEMENT CLEANING



PETROLEUM SOLVENTS ARE NOT TO BE USED TO CLEAN ELEMENT. THEY MAY CAUSE DETERIORATION OF THE ELEMENT. DO NOT OIL ELEMENT. DO NOT USE PRES-

SURIZED AIR. USE ONLY A KOHLER ELEMENT.

THE IMPORTANCE OF MAINTAINING AN AIR CLEANER IN PROPER CONDITION CANNOT BE OVER-EMPHASIZED!

IMPROPER AIR CLEANER MAINTENANCE CAN CREATE ENGINE

DAMAGE WHICH THE ENGINE MANUFACTURER WILL NOT WARRANT.

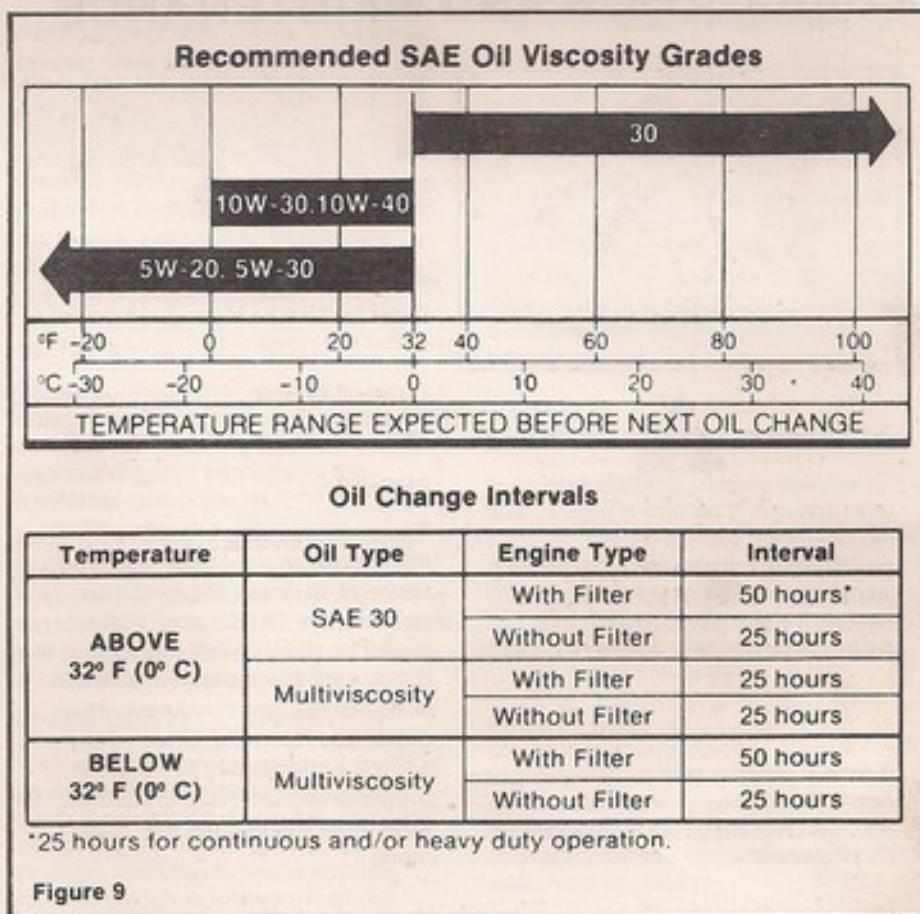
Under normal operating conditions, disassemble and service air cleaner components every 100 hours of operation. Do this more frequently if extremely dusty or dirty conditions prevail.

Use care to avoid dirt falling into engine. The dry type element is cleaned by gently tapping on a flat surface-when doing this, be careful not to damage gasket surfaces on element.

Wipe dirt or dust accumulation from cover, including base plate. Dry type elements should be replaced when no longer serviceable.

FUEL FILTER

There is a fuel filter in the line from



MAINTENANCE (continued)

the fuel tank. This filter is a throw away type.

When it shows excessive dirt in the inside it should be replaced. When replacing the filter, turn off the fuel valve. This valve is directly under the tank. Open valve again after filter has been replaced.

NOTE

Arrows on filter show fuel direction.

CARBURETOR

Carburetor is adjusted at the factory and should not have to be reset. If black exhaust is noted, check the air cleaner first. An "overrich" mixture is usually caused by a poorly serviced, clogging air cleaner element, not an improperly adjusted carburetor.

If readjustment becomes necessary, refer to engine manual supplied.

BATTERY

Keep cables and terminals clean and apply a light coat of petroleum jelly or oil to the terminals and over the bolt stud. Always connect the negative terminal (-) last.



WARNING

ALWAYS SHIELD EYES WHEN WORKING AROUND BATTERIES. THIS BATTERY CONTAINS SULFURIC ACID. AVOID CONTACT WITH SKIN, EYES OR CLOTHING. IN EVENT OF ACCIDENT FLUSH WITH WATER AND CALL A PHYSICIAN IMMEDIATELY.

ELECTRIC STORAGE BATTERIES GIVE OFF HIGHLY FLAMMABLE HYDROGEN GAS WHILE CHARGING, AND CONTINUE TO DO SO FOR SOME TIME AFTER RECEIVING A STEADY CHARGE. DO NOT UNDER ANY CIRCUMSTANCES ALLOW AN ELECTRIC

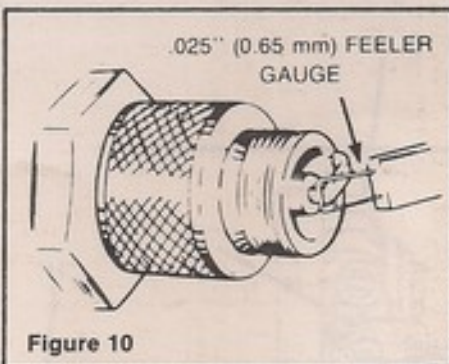
SPARK OR AN OPEN FLAME NEAR THE BATTERY. DO NOT LAY TOOLS ACROSS THE BATTERY TERMINALS AS THIS MAY RESULT IN A SPARK OR SHORT CIRCUIT WHICH MAY CAUSE AN EXPLOSION.

NOTE

When servicing the battery, be sure battery cables are disconnected before attempting removal of the battery from the tractor. Always disconnect negative (-) cable first. When installing the battery, always check the polarity of the battery terminals to be sure the battery is not reversed. The negative terminal (-) is ground.

SPARK PLUG (Fig. 10)

Every 100 hours remove plug, check condition and reset gap at .025 inch (0.65mm) or replace plug if needed. Good operating conditions are indicated if plug has light coating of gray or tan deposit. A dead white, blistered coating could indicate overheating. A black (carbon) coating may indicate an "overrich" fuel mixture caused by clogged air cleaner or improper carburetor adjustment. Do not service plug in poor condition—best results are obtained with a new plug.



NOTE

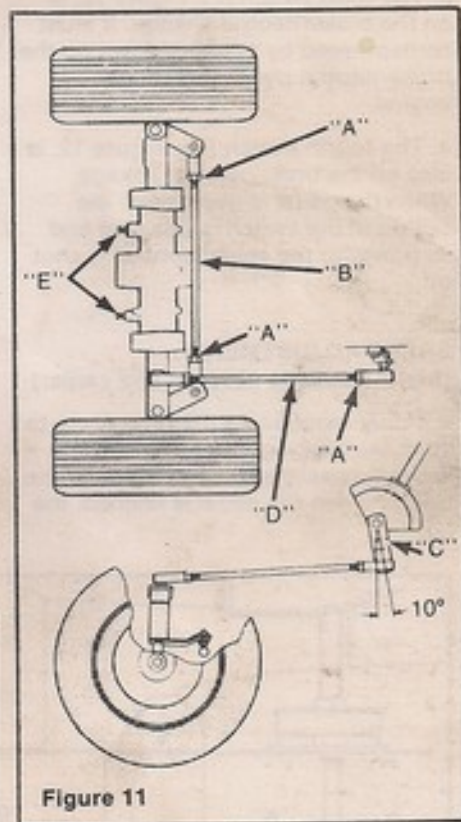
CLEANING OF SPARK PLUGS IN CLEANING MACHINES THAT USE ABRASIVE GRIT IS NOT RECOMMENDED. SPARK PLUGS SHOULD BE CLEANED BY SCRAPING OR WIRE BRUSHING AND WASHING WITH A COMMERCIAL SOLVENT.

FRONT AXLE ADJUSTMENT

An adjustment has been provided on the front axle to cut down on excessive tractor vibration. By adjusting screws (E), Figure 9, pressure can be applied to the front axle. Raise front of tractor and adjust as required. Front axle should pivot with a small amount of drag.

FRONT WHEEL ALIGNMENT (Figure 11)

1. Loosen locknuts (A). Adjust tie rod (B), until wheels are parallel to each other.



(MODEL 5118H ONLY)

2. With arm (C) positioned approximately 10° to the rear, adjust drag link (D) till wheels are parallel to the centerline of the tractor.

INTERLOCK SWITCHES

This unit is equipped with 4 INTERLOCK SAFETY SWITCHES. The function of these safety switches is to insure SAFE START-UP of the unit.

MAINTENANCE (continued)

INTERLOCK SWITCHES

This unit is equipped with 4 INTERLOCK SAFETY SWITCHES. The function of these safety switches is to insure SAFE START-UP of the unit.

1. One interlock switch is incorporated into the PTO Switch. This switch must be off to start the engine.
2. The second switch is positioned inside the seat. If the operator leaves the seat without locking the brake/neutral pedal and turning off the PTO switch, the engine will stop.
3. The third switch (F), Figure 12, is on the brake/neutral linkage. It must be depressed by pushing down on the brake/neutral pedal to start the engine.
4. The fourth switch (G), Figure 12, is also on the brake/neutral linkage. When the pedal is depressed, the button of the switch is released and all power to the speed control is shut off.

BRAKE ADJUSTMENT (Serial Numbers 0299999 and earlier)

If it only requires light foot pressure to latch the parking lock lever or if the brake/neutral pedal does not hold the tractor when the pedal is latched, the

brake/neutral system requires adjustment.

With the brake/neutral pedal released, proceed as follows:

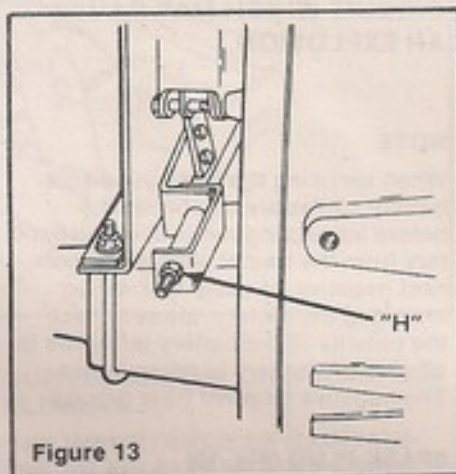


Figure 13

1. Turn hex nut (H), Figure 13 on outside of bracket and nut on inside of bracket until gap of .010 (.25mm) is achieved between brake disc and brake pad.

With brake/neutral pedal fully released, brake disc must rotate freely.

The tractor should not move when the brake/neutral pedal is locked in the

FIRST position of the parking lock lever.

BRAKE ADJUSTMENT (Serial Numbers 0300101 and later)

1. Remove pin (H), Figure 14 and drop brake yoke (J) down.
2. Tighten or loosen bolts (F) on brake caliper **equally** until there is a 1/4" to 1/2" play at the lower hole in brake arm (I). (Tightening bolts (F) lessens amount of play; loosening increases play).
3. Rotate brake yoke (J) until hole for pin (H) lines up with corresponding hole in brake arm with arm pushed forward taking up 1/4" to 1/2" slack set in step 2.
4. Reinstall pin (H) through brake yoke (J) and lower hole in brake arm (I). There will be a slight drag on brake disc (G) after this adjustment is made.

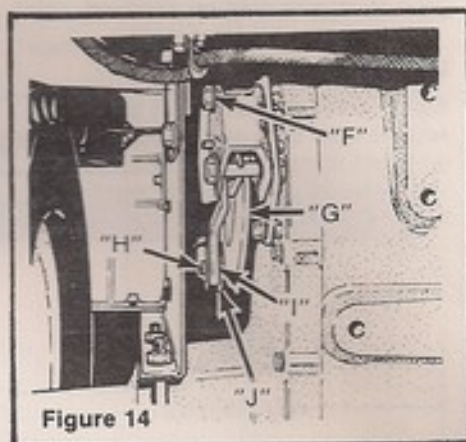


Figure 14

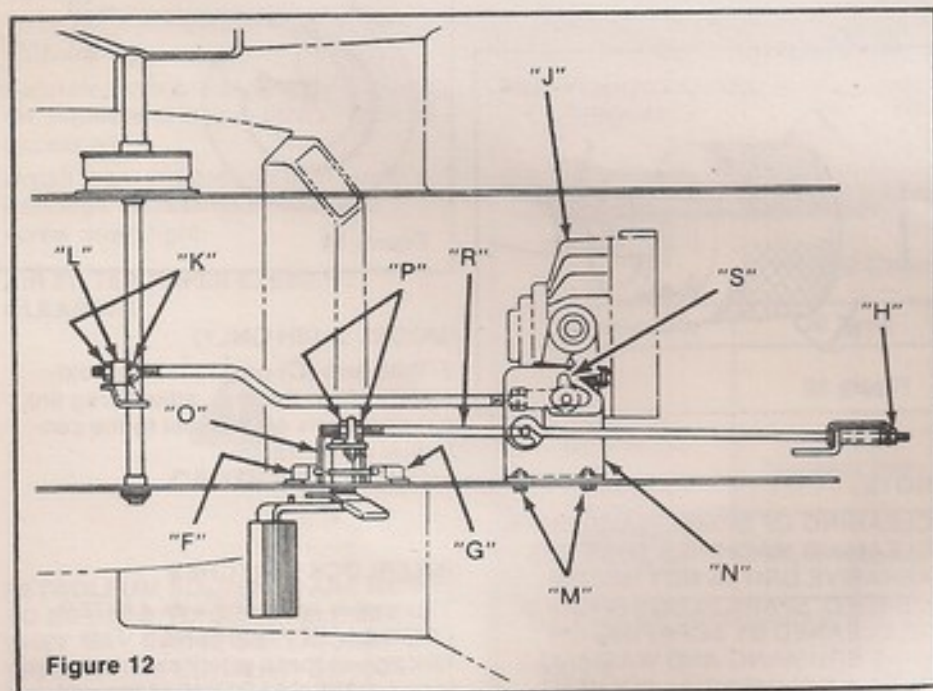


Figure 12

HYDROSTATIC MAINTENANCE

Remove ignition key. Remove all dirt from around transmission filler area. Clean transmission cooling fins (J), Figure 12, periodically. If tractor is operated in a dusty environment, check and clean cooling fins frequently.

With the transmission cold and engine off, check the fluid in transmission. It should be to the level indicated on dipstick located under seat.

Access to the transmission oil filter can be achieved by removing the tractor chassis tunnel or from under the chassis.

MAINTENANCE (continued)

Change oil filter as called out in Maintenance Chart, Page 16. The filter is a throw away type and is located below the console.

HYDROSTATIC PEDAL ADJUSTMENT

The Pedal was adjusted at the factory with tip of pedal approximately 45° forward of the vertical center line. If the operator would prefer to either increase or decrease this angle for his personal comfort, the pedal can be adjusted as follows: (See Figure 12).

1. Loosen hex nuts (K).
2. Adjust hex nuts until desired angle is reached.
3. Retighten hex nuts (K) against rod end (L).

HYDROSTATIC NEUTRAL ADJUSTMENT

The Hydrostatic neutral is adjusted at the factory. If the transmission should need adjustment, the following procedure should be used.

Start engine and release parking brake. If the tractor creeps Forward or Backward, the Neutral position needs adjustment.

Adjust Neutral as follows:

1. Securely block up rear of tractor so the rear wheels clear the ground.
2. Disassemble tractor chassis tunnel by removing the (4) mounting screws.
3. Start the engine and release the brake.
4. Loosen capscrews (M), Figure 12, and move support plate (N) forward if wheels rotate in forward direction, or toward rear if wheels rotate in reverse.
5. Tighten capscrews (M) securing support plate when wheels no longer rotate.
6. Stop engine and lock brake arm against the stop (O), Figure 12.
7. Loosen jam nuts (P), and turn rod (R) until pin enters slot (S) of neutral plate. Adjust until there is a gap of 1/32" between end of slot and pin.

NOTE

INCORRECT ADJUSTMENT MAY CAUSE PIN BREAKAGE.

8. Tighten jam nuts (P).
9. Reinstall tunnel.

MAINTENANCE (continued)

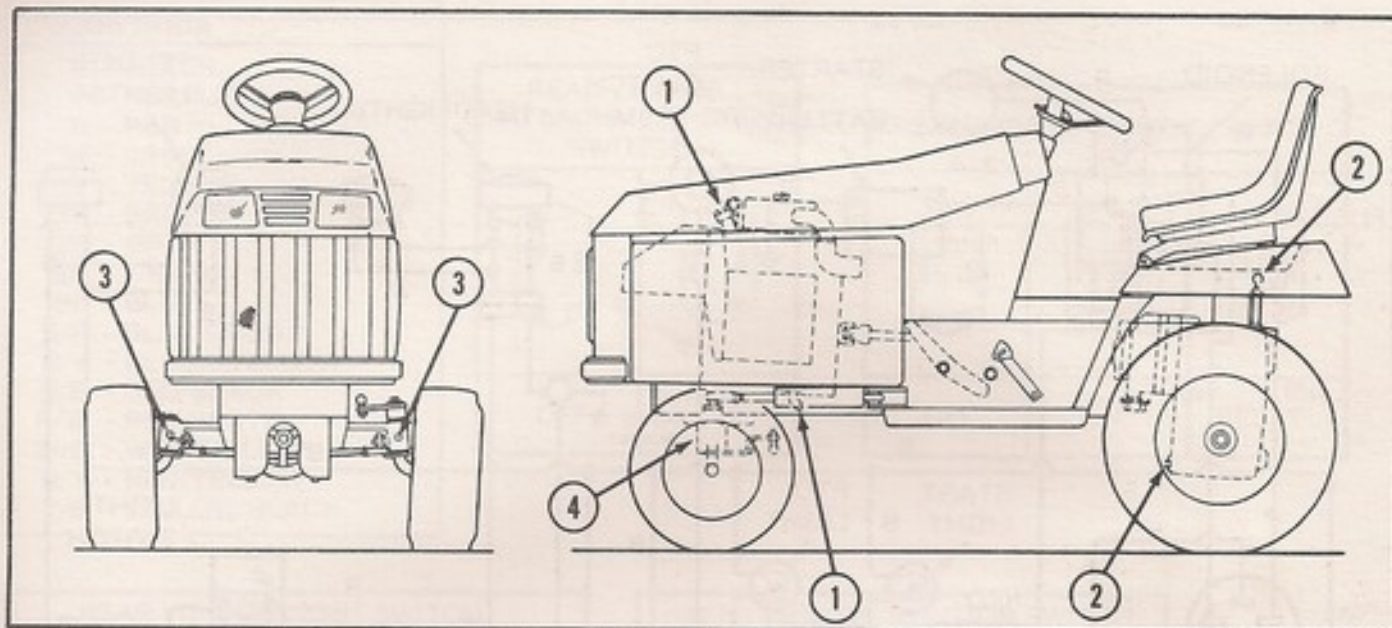
MAINTENANCE CHART

DAILY	Transmission Oil Battery Fluid Engine (Refer to engine manual, "MAINTENANCE PROCEDURES") Air Intake Screen Engine Oil Level	Check Check As Required Check Check
First 5 Hours	Engine Oil & Filter Transmission Oil Filter	Replace Replace
Every 25 Hours	Air Filter Pre-Cleaner Hydrostatic Cooling Fins Tires Brake	Clean Clean Check for wear and air pressure Check wear and adjustment
Every 50 Hours	Engine Oil Engine Oil Filter Engine Cooling Fins	Change Change Clean
Every 100 Hours	Air Filter Element Transmission Oil Filter Fuel Filter Spark Plug Transmission Oil	Replace Replace Change Check Change

MINOR TROUBLESHOOTING CHART

IF TRACTOR ACTS IN FOLLOWING MANNER:	CHECK FOR POSSIBLE CAUSE															
	REFER TO ENGINE MANUAL	CHECK ATTACHMENT DRIVE SWITCH	CHECK CRUISE RELAY, INTERLOCK AND CRUISE SWITCH	CLEAN OFF ENGINE FINS	FLYWHEEL SCREEN (CLEAN)	FAULTY IGNITION*	FAULTY SPARK PLUG	EMPTY FUEL TANK	BATTERY OR START SOLENOID	CARBURETOR	OIL	AIR CLEANER (CLEAN)	CHOKE	CHECK COOLING FINS ENGINE	CHECK INTERLOCK SWITCHES AT BRAKE	SEE YOUR BOLENS DEALER
Engine will turn over but won't start	X					X	X	X		X			X			X
Engine will not turn over	X								X							X
Engine will not turn over. Start light comes on.		X													X	
Starts only after repeated tries	X					X	X			X			X			X
Stalls in a few seconds	X							X		X						X
Stalls when hot	X			X	X	X	X	X		X	X	X				X
Idles rough	X					X	X			X			X			X
Engine overheats	X			X	X	X				X	X	X		X		X
Attachment Drive inoperative		X														
Cruise Control inoperative			X												X	

MAINTENANCE (continued)

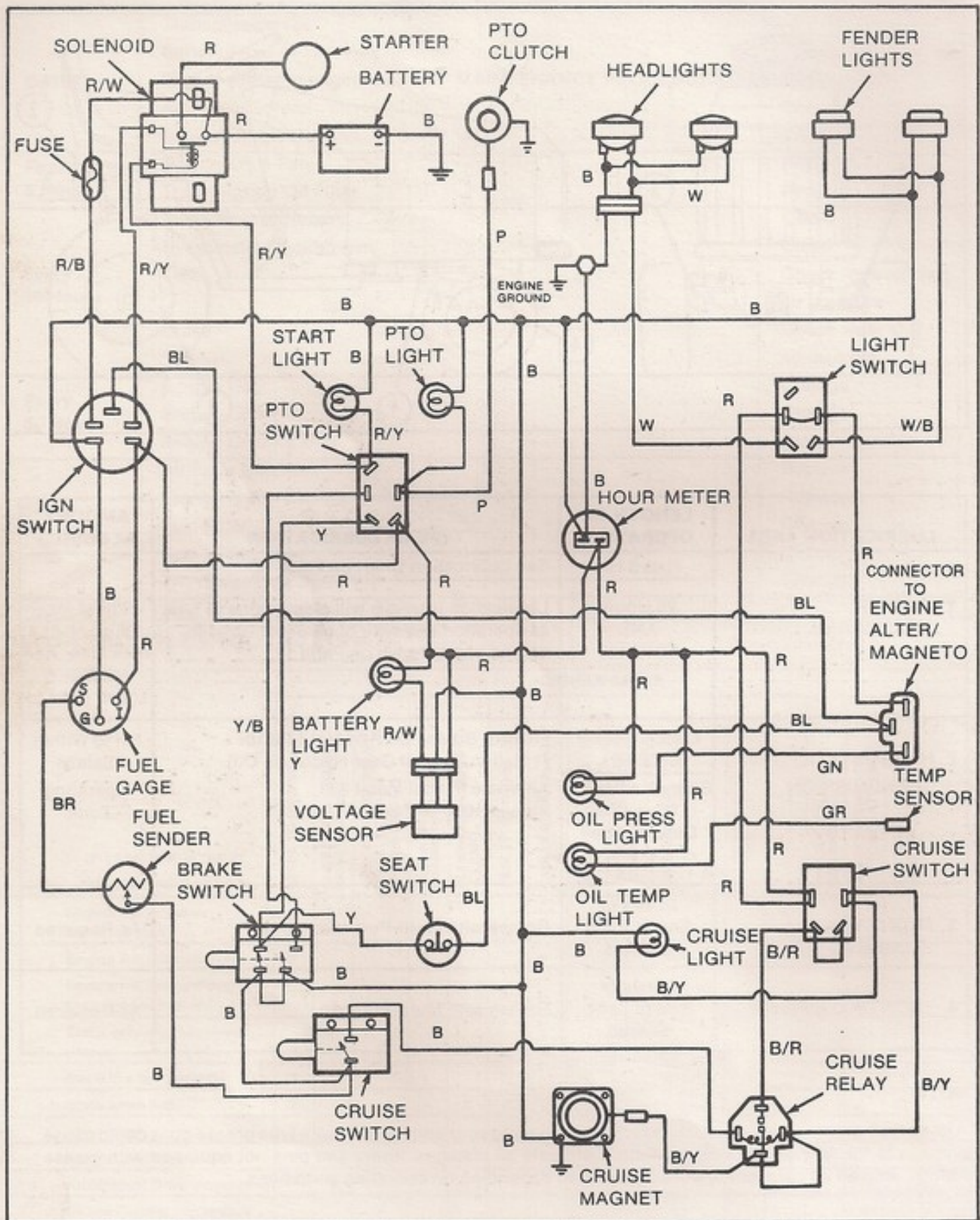


LUBRICATION AREA	LENGTH OF OPERATION	TYPE OF LUBRICATION	AMOUNT REQUIRED
1. ENGINE CRANKCASE	First 5 Hrs	See Lubrication Chart on Page 12	Without Filter 1.5 qt. (1.4 L) With Filter Add Additional 1/2 pt. (0.24 L)
	25 Hours AND 50 Hours	Lubrication intervals will change due to type of operation and type of oil used. Refer to engine chart shown on Page 12.	
2. HYDROSTATIC TRANSMISSION	Check Weekly or 30 Hrs.	Fill with Bolens Oil Part No. 1738157 (1 Gallon Benzoil Gear Hydraulic Oil)	Fill to Within Safety Operating Zone.
	Change when Oil is Discolored, Dirty or After 100 Hrs.	Alternate Fluids: Mobil 423, Amoco 1000 or Texaco TDH	
3. FRONT WHEEL Spindles (2)	25 Hrs or End of Each Season	Grease with Multi-Purpose	As Required
4. FRONT AXLE PIVOT	25 Hrs or End of Each Season	Grease with Multi-Purpose	As Required

NOTE

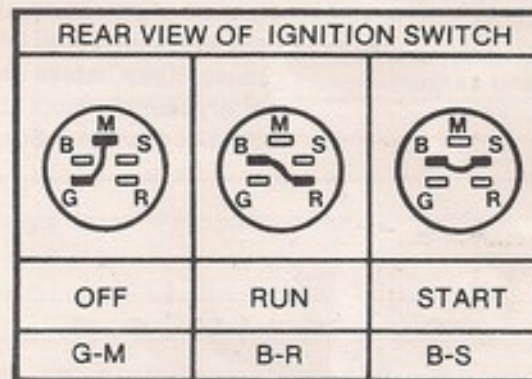
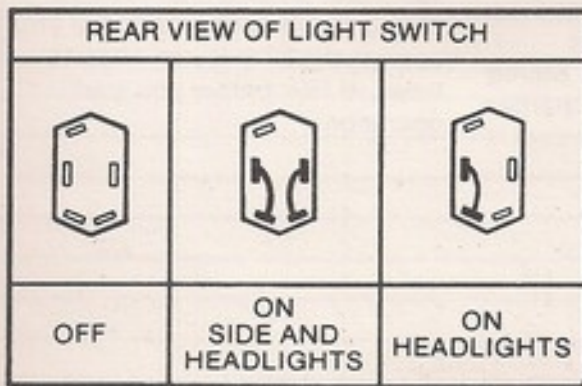
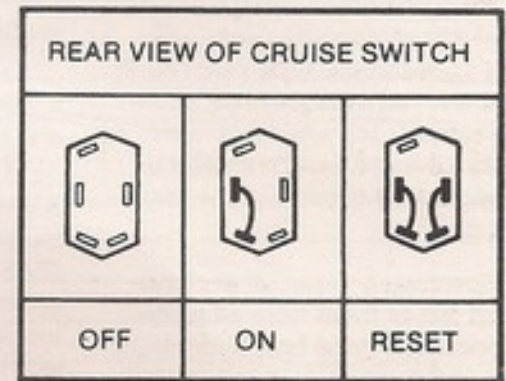
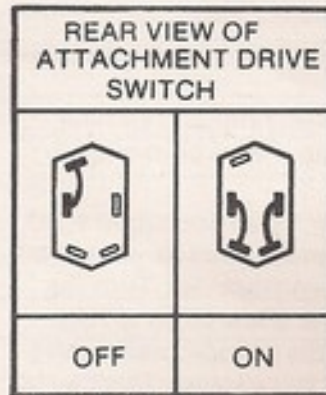
A hand type grease gun is recommended when greasing your unit. Hi-pressure type grease guns could cause damage to the fittings and bearing seals. Lubricate all linkages, levers and pins not equipped with grease fittings, with an oil can once a week. More often depending on operating conditions.

WIRING DIAGRAM



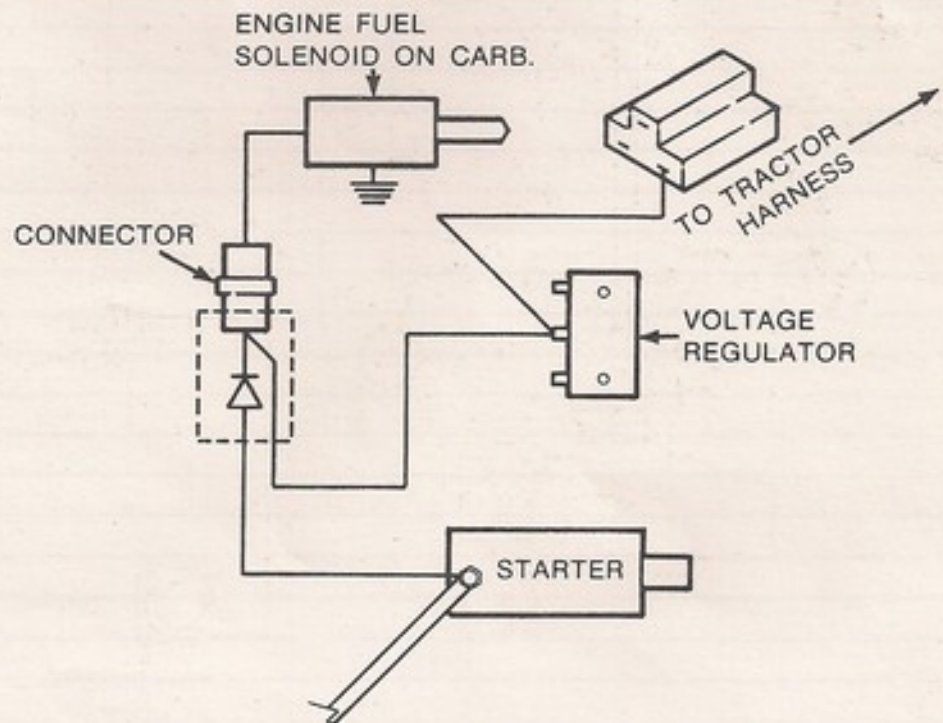
COLOR CODE

- B - BLACK
- P - PURPLE
- R - RED
- W - WHITE
- Y - YELLOW
- BR - BROWN
- GR - GRAY
- GN - GREEN
- BL - BLUE
- B/R - BLACK/RED
- B/Y - BLACK/YELLOW
- R/B - RED/BLACK
- R/W - RED/WHITE
- W/B - WHITE/BLACK
- R/Y - RED/YELLOW
- Y/B - YELLOW/BLACK



Fuel Shut-off Solenoid And Harness Supplied with Kohler Engine

PURCHASE PARTS FROM KOHLER



STORING YOUR BOLENS TRACTOR

Always keep our BOLENS 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, hydrostatic fins and flywheel screens.
2. Wipe oil or a rust preventive on any parts that may rust. Touch up any area where paint has been chipped or worn off on tractor.
3. Drain gas tank and carburetor.
4. Drain oil from crankcase while engine is still hot. Refill with the appropriate oil per lubrication chart.
5. Check fuel filter and air filter and replace if dirty or damaged.
6. Remove, clean and regap spark plug and put a small amount of oil (SAE 30) into cylinder. 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 key starter briefly. Replace spark plug.
7. BATTERY-Keep terminal posts cleaned of corrosion salts and coat with petroleum jelly or grease. Keep cables clean. Stored battery must be kept fully charged with all cells filled. Store at cool temperature, 20°F (-7°C) to 50°F (10°C). Check every two months and charge as necessary.
8. If tractor is stored with an attachment mounted on it, the attachment MUST be lowered to the ground, and the PTO switch in "OFF" position.
9. It is highly recommended that machines be stored inside a building through the winter. If this is not possible, the tractor should be protected from snow and ice with a covering of waterproof material.
10. After an extended storage period it is recommended that you operate the PTO clutch 10 to 15 times, at idle, before you start operation.

LIMITED WARRANTY

I. PRODUCTS COVERED

This warranty applies to all Bolens® branded equipment.

II. PRODUCT WARRANTY: NON-COMMERCIAL RESIDENTIAL THREE YEAR LIMITED WARRANTY

New Bolens equipment is warranted by Garden Way, Inc., to the original retail purchaser only, to be free from defects in material and workmanship, under normal use and service for a period of three (3) years from your date of purchase.

Engines manufactured by Briggs & Stratton, Tecumseh, Kohler and Wisconsin, and transmissions manufactured by Peerless, carry specific warranties for their products. These warranties are delivered with each new Bolens product, or you may call or write us for a free copy of these warranties.

The engines and transmissions mentioned above will be warranted by Garden Way for any extended time within the product's three year warranty period through the authorized repair stations of their respective manufacturers.

EXCLUSIONS — The following items are not covered under the second and third year of this limited warranty: Belts, Hoses, Seats, Batteries, Blades, Filters, Tires, Wheels, Paint and Appearance items, Light Bulbs, and similar items which are normally replaced through periodic maintenance.

III. PRODUCT WARRANTY: COMMERCIAL — INSTITUTIONAL — INDUSTRIAL — RENTAL —

DEMONSTRATOR: ONE YEAR LIMITED WARRANTY

The Commercial, Institutional, Industrial, Rental and Demonstrator Limited Warranty covering defects on material and workmanship will be for a period of one (1) year, from your date of purchase, on Bolens units and Bolens manufactured attachments. This warranty applies to the original purchaser only.

Engines manufactured by Briggs & Stratton, Tecumseh, Kohler and Wisconsin, and transmissions manufactured by Peerless, will also be warranted for this one (1) year period through the authorized repair stations of their respective manufacturers.

IV. GENERAL INFORMATION

Garden Way, Inc.'s obligation under this warranty is limited to the repair or replacement, at its option, by an authorized Garden Way equipment dealer, of any part found to be defective in material or workmanship, without charge for parts and labor.

In order to obtain warranty service, the owner is responsible for:

- 1) Providing proof of purchase documentation, ownership registration or copy of bill of sale.
- 2) Informing any authorized Garden Way equipment dealer of the defect and making the product available for repair. (Charges for pick-up, delivery and service calls are not covered by the warranty.)

This warranty does not cover defects, malfunctions or failures caused by:

- 1) Use of unauthorized accessories or attachments.
- 2) Lack of reasonable and necessary maintenance as specified in the "Operation and Safety Instructions".
- 3) Misuse, accidents or normal wear.

DISCLAIMER OF CONSEQUENTIAL DAMAGES: GARDEN WAY, INC. SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSE OF ANY KIND, INCLUDING BUT NOT LIMITED TO COST OF EQUIPMENT RENTAL, LOSS OF PROFITS OR COST OF HIRING SERVICES TO PERFORM TASKS NORMALLY PERFORMED BY THE EQUIPMENT.

LIMITATION OF IMPLIED WARRANTIES: ANY IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO A PERIOD OF THREE (3) YEARS (ONE (1) YEAR IF PRODUCT IS PURCHASED FOR COMMERCIAL, INSTITUTIONAL, INDUSTRIAL, RENTAL OR DEMONSTRATOR USE) FROM THE DATE OF SALE.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS. THEREFORE, THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Garden Way, Inc.
102 & 9th Avenue
Troy, NY 12180

PHONE: (414) 284-5521
Fax: (414) 284-4319