year 1974

Sears

owners manual

engine crankeare 2 Quarte

spark plug trype Champion RH187

9042,025

MODEL NO. 917. 25751

Onan Eng. model Number BF-MS23798



SS/16 GARDEN TRACTOR

- Assembly
- Operating
- Maintenance
- Repair Parts

Sears, Roebuck and Co., Chicago, Ill. 60607 U.S.A. and Simpsons Sears Limited, Toronto

GUARANTEE

Your Tractor is guaranteed for one full year. If any defect in material or workmanship should appear during this time, simply contact our nearest Sears store or service center throughout the United States or Canada. We will make all necessary repairs, including parts and labor, at no charge to you. Tractors equipped with batteries: If battery proves defective and will not hold a charge, in exchange for the battery, we will: During the first 90 days-replace battery at no charge. After 90-days-replace battery, charging customer 1/12th of the price of the new battery for each full month from date of sale.

If the tractor is used for commercial or rental purposes, this guarantee applies for thirty days. Guarantee continued on the inside of the back page.

SEARS, ROEBUCK AND CO. - SIMPSON-SEARS LTD.

SAFETY PAYS OFF

IMPORTANT rules for safe operation

TRAINING

 Read the Owners Manual carefully and fully familiarize yourself with the controls and proper use of your tractor as well as any attachment. Be prepared to stop the engine and powered attachment(s) on a second's notice. Only persons well acquainted with these Rules for Safe Operation should be allowed to use your tractor.

Do not allow children or young teenagers to start or operate your tractor.

3. Do not allow anyone in the area while operating your tractor. Keep the children and pets in the back yard while using it in the front yard. Keep a wary eye out for children or passers-by. Disengage the power to all attachments and stop the engine while they are in the vicinity of your tractor. Children, particularly could get in the way of and be injured by the tractor or an attachment.

PREPARATION

4. Do not operate the tractor when barefoot or wearing open sandals. Always wear substantial footwear, preferably steel-toed shoes. Also, do not wear loose fitting clothing that could get caught in moving parts.

 Check your fuel supply before each use. Never remove the gas cap or fill the gasoline tank when the engine is running or while it is hot. When filling the fuel tank, leave space for expansion, do not fill it to the brim and keep in mind that the heat of the sun can cause the gasoline to expand. Wipe off any spilled gasoline before starting the engine. Remember, gasoline is highly flammable and must always be handled with extreme care.

 A tractor and all attachments are precision pieces of equipment, not playthings, therefore extreme caution must be exercised at all times.

 Never attempt to operate a damaged tractor or attachment, always repair any damage before attempting to start or operate your tractor or attachment.

Never attempt to carry any passengers, their safety as well as your safety will be endangered.

9. Before attempting to start the engine of your tractor make sure the gear shift lever is in neutral and the power to all attachments is disengaged, then firmly apply the foot brake and be sure to release the parking brake. The parking brake must always be disengaged when you put the tractor in motion. If the tractor is operated with the parking brake engaged serious damage may result.

10. Each time before leaving the operator's seat, be absolutely sure the power to all attachments is disengaged, the parking brake is engaged, the gear shift lever is in neutral, the engine is shut off, the attachments and all moving parts have completely stopped and the ignition key is removed. Never leave the operator's seat with the engine or any powered attachment running. Always get on or off your tractor from the operator's left-hand side.

rules for safe operation (cont.)

 Always operate your tractor in daylight; dusk or dark - use your lights.

 Operate your tractor at safe speeds on wet or slippery surfaces, where traction is unsure. Never at a speed which could cause a skid.

OPERATION

13. Do not attempt to change the governor setting or overspeed the engine. The governor controls the engine speed and protects the engine from damaging, excessive speeds. Excessive engine speeds are dangerous.

14. When starting your engine on tractors equipped with a pull starter, stand firm and make sure your feet are well away from all powered at-

tachments.

15. Never place your hands or feet in or under any powered attachment or near any moving parts while the tractor or any powered attachment

is running.

16. Always disengage the power to all attachments, set the parking brake, shift into neutral, shut off the engine, make absolutely sure any powered attachment and all moving parts have completely stopped and remove the ignition key each time you dismount your tractor, even for a second. Children, yourself, other persons or

pets may be endangered.

- 17. If your tractor or any attachment should inadvertently strike a foreign object, immediately disengage the power to the attachment, set the parking brake, shift into neutral, shut off the engine, make absolutely sure any powered attachment and all moving parts have completely stopped, remove the ignition key, disconnect the spark plug wire from the spark plug and keep the wire away from the plug to prevent injury or accidental starting, then thoroughly, inspect the tractor or attachment for any damage. Such damage must be repaired before restarting and operating the tractor or attachment.
- 18. If the tractor or any powered attachment should start to vibrate abnormally, place the control lever for powered attachments in the disengaged position, set the parking brake, shift into neutral, shut off the engine, make absolutely sure the powered attachment and all moving parts have completely stopped, remove the ignition key, disconnect the spark plug wire from the spark plug and keep it away from the plug to prevent injury or accidental starting, then check immediately for the cause of this vibration as vibration is generally a warning of trouble.
- 19. Before adjusting, cleaning, repairing or inspecting your tractor or any powered attachment, disengage the power to all attachments, set the parking brake, shut off the engine, make absolutely sure the powered attachments and all moving parts have completely stopped, remove the ignition key, disconnect the spark plug wire and keep it away from the spark plug to prevent injury or accidental starting.

20. Do not run the engine indoors because the engine exhaust fumes contain carbon monoxide which is a tasteless, odorless, deadly poison.

21. Never operate your tractor upon a terrace, slope or incline that is too steep to preserve good stability and control in order to prevent tipping or sideways upsets. Always operate a tractor up and down such an incline, at a slow speed, do not operate it across. Always exercise extreme caution when changing direction on inclines. Never attempt to operate your tractor on steep terraces, slopes or inclines

with more than a 15 degree slope.

22. Do not start or stop suddenly when going up or down a terrace slope or incline. If it is necess ary to stop your tractor upon an incline, do so firmly to prevent the tractor from picking up speed during declutching and before reaching the brake position. Do not shift gears while going up or down inclines. Choose a gear low enough to negotiate the incline without stopping and shifting gears. To reduce the speed of the tractor on an incline move throttle lever to slow.

 Never attempt to operate your tractor or any attachments without the proper shields, guards, plates or other protective devices in place and

fully functioning.

24. Before and while attempting to back up, look carefully to be absolutely sure that children, bystanders, pets, foreign objects or obstacles of any kind are not behind you.

25. Never allow anyone near the tractor or any attachment while they are operating.

- 26. Be sure to exercise special care when operating your tractor around fixed objects in order to prevent the tractor or any attachment from striking them. Never deliberately run a tractor or an attachment into or over any foreign objects.
- 27. Use care when pulling loads. Use only approved drawbar hitch points. Limit loads to those you can safely control. Do not turn sharply. Use counterweight or wheel weight(s) when suggested in the attachment Owners Manual.

 Never shift gears to reverse your direction of travel until the tractor comes to a complete stop.

- 29. Always stay alert to avoid holes in the terrain and other hidden hazards. Tipping or sideways upsets can happen easily in holes or ditches. Use low gear on unfamiliar ground. If the tractor or any attachment becomes stuck in a hole, always disengage the power to all attachments before attempting to free it.
- The use of any precision piece of power equipment requires your full concentration and attention to the job being done in order to prevent injury or damage.
- 31. Always disengage the power to all attachments when not actually in use such as when crossing a gravel drive, sidewalk or roadway or when transporting the tractor.

rules for safe operation (cont.)

 Watch out for traffic when crossing or near roadways.

MAINTENANCE

33. Keep all nuts, bolts and screws tight in order to be sure that the tractor and any attachment is in safe working condition. Be sure the brake and all powered attachment controls are always in proper adjustment and repair. Check the attachment and engine mounting bolts at frequent intervals for proper tightness. Before performing any maintenance, always disengage the power to all attachments, set the parking brake, shift into neutral, shut off the engine, make absolutely sure the powered attachment and all moving parts have completely stopped, remove the ignition key, disconnect the spark plug wire from the spark plug and keep it away from the plug to prevent injury or accidental starting. The only exception to this rule is carburetor adjustment, page 12.

- 34. Keep the engine free from accumulations of grass, leaves or excessive grease as these accumulations are combustible and could result in a fire. Always keep your tractor and all attachments in good operating condition and make sure that all shields, guards, plates and other protective devices are in place. Give your tractor and all attachments the regular maintenance they need and have a competent serviceman make a thorough inspection of them at least once a year.
- 35. Do not store your tractor for prolonged periods (more than 30 days) with gasoline in the tank. Do not store your tractor or a gasoline container inside a building where fumes may reach an open flame or spark, they should be stored in a cool, dry place. Be sure to let the engine cool before storing in any enclosure. Always use an approved gasoline container for storing gasoline and keep your tractor, attachments and gasoline container in locked storage to prevent children from playing and tampering with them.

introduction

This tractor has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest Sears, Roebuck or Simpsons Sears, Ltd. Store. They have well qualified, competent trained technicians and the proper tools to service or repair this unit.

It is important that the operator ALWAYS OB ERVE THE "RULES FOR SAFE OPERATION" as well as other instructions contained in this Manual. We have provided this Manual to help you operate your Tractor with utmost efficiency. We urge you to study this Manual so you will understand your new Tractor thoroughly before operating it. We suggest that you take care of your Manual so that it will be available for future reference should you need it.

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assembly instructions

A letter in paranthesis in the following instructions refers to an arrow in the adjoining Figure (illustration), except when otherwise stated. When R.H. (Right Hand) or L.H. (Left Hand) is used, it should be understood to mean as if one were seated on the Tractor seat facing forward.

1. Remove battery. Cut banding holding Tractor to bottom of crate.

2. Your Tractor has been completely assembled at the factory except, to fill, charge and install the battery. The battery was shipped dry. Instructions are given on page 4 for filling, charging and installation.

Your Tractor was lubricated at the factory however, we suggest you follow the Lube Chart on page 10 before operation. 4. Tires were over-inflated for shipping purposes. Reduce air pressure to 12 lbs. in front tires and 12 lbs. in rear tires. This will improve traction and give you the comfortable ride you will want.

5. A plastic bag of parts was shipped with your Tractor and should be opened at this time. It will contain the fol-

lowing items:

1 - Battery Clamp - Wing Nuts

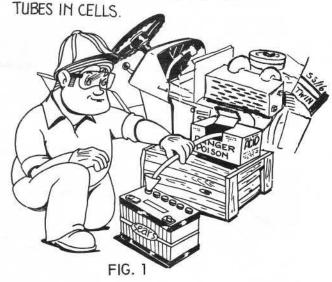
- Battery Bolts

2 - Flat Washers (These items hold battery in position on Tractor. They are used in step 5, page 5).

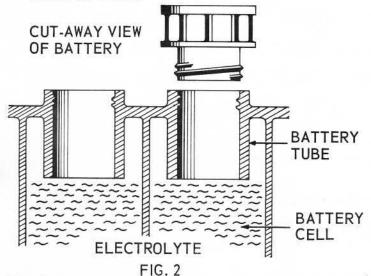
fill and charge battery

CAUTION: DO NOT ASSEMBLE BATTERY TO TRACTOR UNTIL BATTERY HAS BEEN FILL-ED AND CHARGED.

> FILL BATTERY AS SHOWN DO NOT OVERFILL __ CORRECT LEVEL IS BOTTOM OF



 Fill battery with electrolyte and charge battery as outlined in instructions in battery container. NOTE: After filling cells, let battery stand for thirty (30) minutes. Recheck acid level, add more electrolyte if necessary, then charge battery at a rate not exceeding three (3) amperes for about 2½ hours. CORRECT LEVEL IS BOTTOM OF TUBES IN CELLS.



2 - Hex Nuts (They secure ground strap and positive cable to battery. They are used in steps 6 and 7, page 5).

2 - Ignition Keys (We suggest one key be removed from the wire ring and kept in a safe place. Position the second key in the Tractor ignition).

There will be an amount of electrolyte (acid) in the container after battery is filled. This should be disposed of and not used at a later date to refill Tractor or any other battery. Using a common 5 gallon polyethylene garbage can or pail, fill with a minimum of four inches of water. Avoid spillage on person or clothing, add left over electrolyte to water. Then sodium bicarbonate (baking soda) should be added and the mixture stirred or agitated until the addition of bicarbonate no longer causes foaming. Agitate with a wooden or plastic stake or stick only. It will now be safe to dispose of this down a regular sewage system. Since the product is well neutralized, no criticism from authorities should result.

It is preferable, where permissible, to burn the empty acid pak to prevent possible further contact with acid.

installation battery

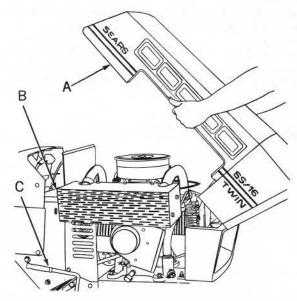
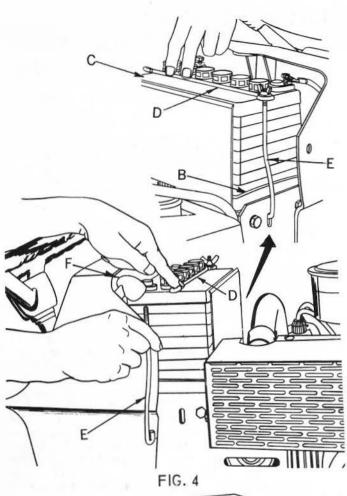
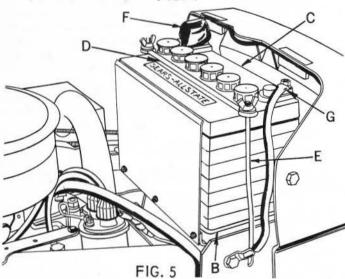


FIG. 3

- 2. To lift hood assembly (A), grasp each side of hood at rear and pull outward and upward. Lift hood to its extreme forward position.
- 3. Remove tape holding plastic tray (B) in tractor.





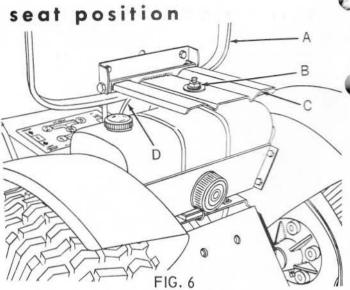
 Place battery (C) in plastic tray (B) with battery terminals to rear of tractor as shown.

5. Assemble battery clamp (D) to one of the two (2) battery bolts (E) with a 5/16 x 3/4 flat washer, and wing nut above clamp as shown. Hook lower end of battery bolt in slot in side of battery support as shown. Place clamp across top of battery, and secure other battery bolt to battery support and clamp with other flat washer, and wing nut. Tighten wing nuts securely.

Tighten wing nuts securely.

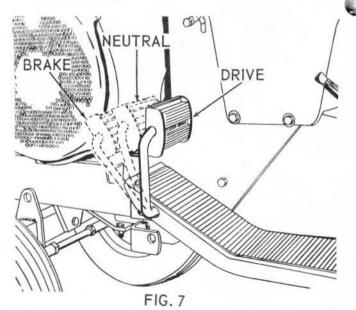
6. Connect cable and cover (F) Fig. 5 to plus (+) terminal battery. Secure with 1/4 hex nut found in plastic bag. Tighten nut securely.

7. Connect ground cable (G) (Fig. 5) to negative (-) terminal of battery. Secure with other ¼ hex nut found in plastic bag. Tighten hex nut securely.



The seat (A), may be moved forward, or backward, to give the most comfortable, and safe operating position. To move the seat, tip seat forward, as shown in Fig. 6. Loosen nut (B) slide seat (A) to desired position. Tighten nut (B) securely. Make sure that seat plate weldment (C), has not twisted out of alignment, with seat spring (D).

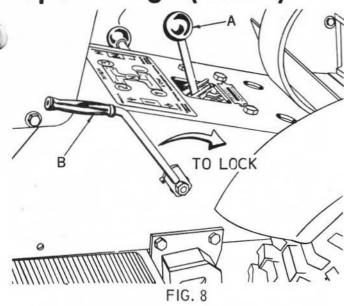
instructions before operating controls



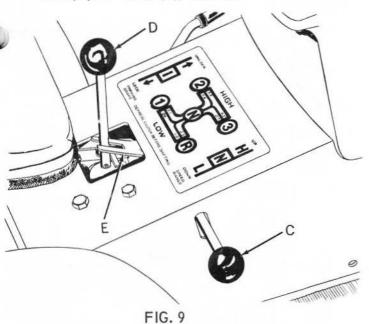
The following controls are used to operate the Tractor:

- Clutch and brake foot pedal is located on the left side foot rest. The foot pedal operates a combination brake and drive clutch. There are three positions of operation on the foot pedal.
 - a. The clutch is in DRIVE position when the pedal is all the way out (when the foot is removed from the pedal).
 - b. The clutch is in NEUTRAL when the pedal is depressed half way or more.
 - c. The BRAKE is on when the pedal is depressed all the way forward.

instructions before operating (cont.)

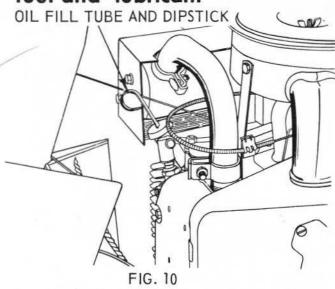


- The transaxle (transmission) gear shift lever (A), is located at front, center of seat.
 The gear shift lever selects the FORWARD, NEUTRAL and REVERSE gears.
- To engage parking brake, pull park brake lever (B), to rear (lock) position. To release parking brake, push lever (B), forward.



4. The high-low range shift lever (C), is located on R.H. side of chassis, just forward of rear fender. The high-low range lever has 3 positions, up for high-range, center for neutral and down for low-range. There are 2 neutral positions in transmission, one on the gear shift lever (D), and one on the high-low range lever (C). Both levers must be engaged for Tractor to operate. Place both levers in neutral for pushing of Tractor or when Tractor is being towed. Refer to "Towing Tractor", page 7.

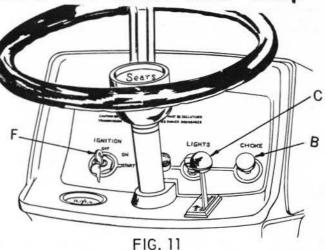
fuel and lubricant



- 1. Raise hood.
- 2. Engine crankcase is shipped with oil ready for use. However, check oil level before starting. If necessary, add oil to bring oil level up to full mark on the dipstick. Dipstick must be pushed down tight for checking oil level, and tractor should be level. NOTE: Do not fill above full mark on dipstick. Use Allstate S.A.E. 30 oil or equivalent for summer use. For winter use, below 32°, use Allstate Multi-grade oil S.A.E. 5W-30, 10W or equivalent. Nothing should be added to the recommended oil. Make sure the oil used is a high quality detergent oil classified "for service MS, SD, SC or SE. Because of recent changes in the classifications, the oil container may show one or a combination of these recommended classifications. CAUTION: Do not overfill crankcase. Do not use service DS oil. Do not mix brands nor grades of motor oil.
- grades of motor oil.
 3. Fill fuel tank with a good grade of fresh, CLEAN, regular gasoline. Wipe off all spilled fuel and oil.

NOTE: Gas tank is located under tractor seat. Tilt seat forward, so fuel can be added to gas tank. Refer to Page 5 Fig. 6.

operating instructions how to start and stop



- Pull out choke control (B), to full choke position to start in cold weather.
- -6 (CONT. ON PAGE 7).

operating instructions (cont.)

2. Advance throttle control lever (C), to about 1/2

throttle.

3. This Tractor is equipped with two safety switches. One switch is located on the gear shift lever (D, Fig. 9, Page 6, at point E). The other switch is located on attachment clutch lever (C, Fig. 3, Page 4). The gear shift lever must be in neutral (center position). The attachment clutch lever must also be in disengaged (out), position for engine to start. Turn key (F, Fig. 11, Page 6), in ignition-starter switch clockwise to engage starter. When engine starts, release key. After engine starts, push in choke control as engine warms up. Let engine warm up before applying load. CAUTION: Do not run starter continuously for more than 30 seconds at a time. If after several attempts, engine does not start, move throttle control (C), to fast position. Wait two minutes and try again.

NOTE: If attachment clutch lever interferes with attachment to be used, remove handle.
CAUTION: First move handle to "OUT" position,

then remove nut and handle. Save for use with at-

tachment for which it is required.

4. To stop engine, turn ignition key in a counterclockwise direction to OFF position. Key should be removed to prevent unauthorized operation.

safe operating

1. Try your Tractor in a large, open space. Learn

to start, stop and reverse.

- 2. Start the engine and put the throttle lever at about 1/3 throttle. Push down on foot pedal, move gear shift lever and range shift lever to speed desired. Release foot pedal slowly, and Tractor will start to move. After foot pedal is fully released (clutch engaged), move throttle lever to fast position. If ground travel is too fast, reduce throttle lever to about ½ throttle or depress foot pedal and shift to a slower ground travel speed. Always select a ground travel speed that will suit attachment being used and not overload the engine.
- 3. Do not shift gears while Tractor is moving.
- 4. To stop Tractor, push foot pedal all the way down and reduce throttle lever to about 1/2 throttle. Disengage power to attachment. Move gear shift lever to neutral, set parking brake lock and re-lease foot pedal. Always check to make sure brake lock will hold Tractor secure. Shut-off and remove key from switch. This will prevent unauthorized operation. Keep key in a safe place out of reach of children. Never leave engine running with Tractor unattended.

5. Do not operate the Tractor in high gear going down hill. Do not turn sharp corners while going down hill. If it is necessary to stop Tractor while going down hill, do so quickly to prevent Tractor from picking up speed during the declutching to brake position.

NOTE: The engine produces considerable braking action when throttled back to idling speed without declutching. This procedure is re-

commended before applying brake.

DO NOT OPERATE TRACTOR ACROSS SLOPES.

DO NOT OPERATE TRACTOR UP OR DOWN SLOPES WITH MORE THAN A 15 DEGREE SLOPE.

- 6. Do not shift gears while going up steep hills. Choose a low enough gear to climb hill without stopping and shifting gears. If it is necessary to stop while going up hill, do so quickly to prevent Tractor rolling backward. Before starting Tractor in motion going uphill, use one of the lowest gears. Reduce engine speed and engage clutch gradually to prevent Tractor from 'rearing up''.
- 7. Upsets can happen easily in ditches. Stay alert for holes or other yard hazards.
- 8. If tractor becomes mired in a hole, try to back out rather than driving forward.

towing tractor

 Place gear shift lever and range shift lever in neutral position. Tractor can then be towed at a reasonable safe speed not faster than 6 miles per hour.

engine pulley grooves to use for your various attachments

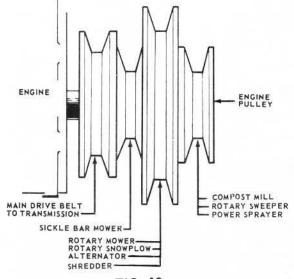
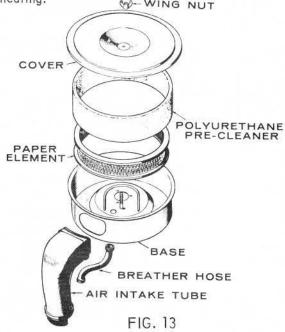


FIG. 12

maintenance instructions air cleaner

CAUTION: If air cleaner becomes too dirty, engine will not receive sufficient air to run properly. Symptoms: Loss of power, flooding, hard to start and overheating.



This engine is equipped with a paper element and a polyurethane precleaner that must be removed, cleaned and oiled every 25 hours of operation, or more under extremely dusty conditions.

- 1. WASH
- 2. SQUEEZE DRY
- 3. COAT WITH OIL
- 4. INSTALL OVER PAPER ELEMENT

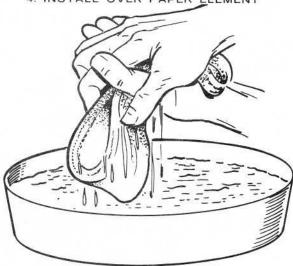
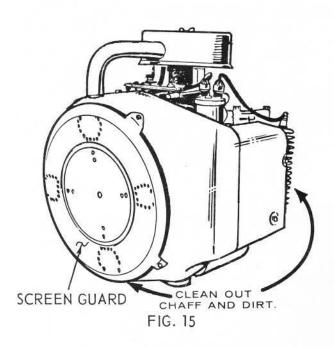


FIG. 14

 To clean pre-cleaner wash in water and detergent referring to Figure 14. Remove excess water by squeezing like a sponge and allow to dry thoroughly. Distribute three tablespoons of SAE 30 engine oil evenly around the pre-cleaner. Knead into and wring excess oil from pre-cleaner.

 Depending on conditions in which the tractor is operating, the inner paper element should be replaced whenever it becomes excessively dirty. CAUTION: NEVER RUN THE ENGINE WITH THE AIR CLEANER REMOVED. DIRT WILL ENTER THE ENGINE AND SCORE THE CY-LINDERS.

cooling system



COOLING SYSTEM: Check and clean cooling fins at least ever, 50 hours. Remove any dust, dirt or oil which may have accumulated. Remove any chaff from stating and stationery blower screen.

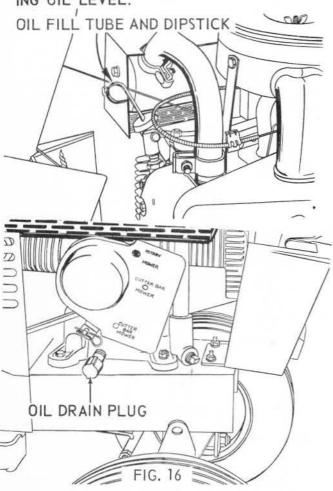
CAUTION: Plugged or clogged cooling fins or blower screens can cause overheating and engine damage.

THIS TRACTOR HAS AN AIR COOLED ENGINE. AIR MUST BE ABLE TO CIRCULATE FREELY AROUND THE ENGINE, THROUGH THE SCREEN GUARD AND GUARD (ROTARY SCREEN), AND OVER THE FINS OF THE CYLINDER BLOCK. KEEP THESE AREAS FREE OF ACCUMULATED DIRT AND TRASH OR THE ENGINE WILL OVERHEAT AND RESULT IN DAMAGE TO ENGINE.

engine lubrication

STOP ENGINE AND WAIT SEVERAL MINUTES BEFORE CHECKING OIL LEVEL.

BE SURE TRACTOR IS ON LEVEL GROUND AND ENGINE IS STOPPED BEFORE CHECKING OIL LEVEL.



 Change oil in crankcase after FIRST 2 HOURS of operation. Engine should be warm when oil is changed.

To drain oil, unscrew oil drain plug at lower R.H. side of engine. Catch oil in suitable container.

 Refill engine crankcase with oil as instructed under "Fuel and Lubricant", page 6. Capacity 4 pints. Check oil level after each 8 hours of operation and add oil, if necessary, to bring to correct level on dipstick.

 After first oil change, oil should be changed after each 25 hours of operation. In extremely dirty or dusty conditions, change oil every 15 hours of operation.

NOTE: THE BEST TIME TO DRAIN OIL IS AT THE END OF A DAY'S OPERATION AT WHICH TIME THE OIL IS HOT AND ALL DIRT AND FOREIGN MATERIAL IS SUSPENDED IN THE OIL.

IMPORTANT: BE EXTREMELY CAREFUL TO PREVENT DIRT OR FOREIGN PARTICLES FROM ENTERING THE ENGINE CRANKCASE OR TRANSMISSION WHEN CHECKING OIL LEVEL OR CHANGING OIL.

transaxle (transmission) Ulubrication

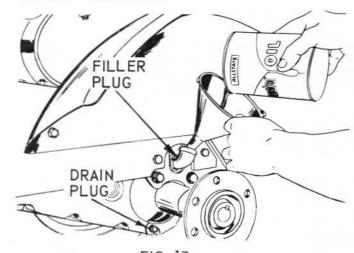


FIG. 17
Rear wheel is removed for illustrating.

Check oil in transaxle every 50 hours of operation.
 To check oil level, remove filler plug from transaxle. Oil level should be even with this plug.

 Change oil in transaxle after 500 hours of operation. To drain, remove drain plug and catch oil in suitable container.

3. To fill transaxle, use 5 qts. of Allstate S.A.E. 30 motor oil for service MM or MS or equivalent. Fill through filler plug as shown.



lubrication chart

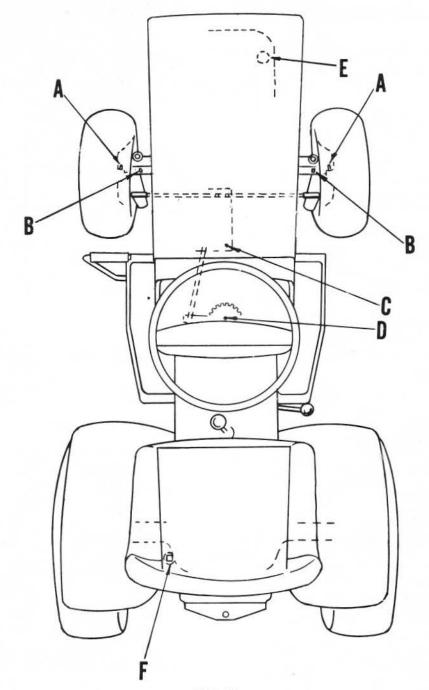


FIG. 18

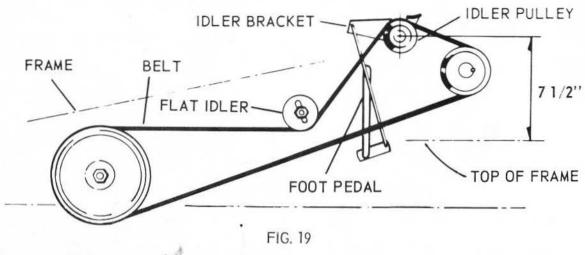
There are only 6 grease fittings on your tractor. Give each grease fitting 2 shots of grease every 5 hours of operation. Use high performance extreme pressure lubricating grease Amdex No. 1. This may be obtained by ordering part number 2557R from your local Sears store or Catalog outlet.

- A Front Wheels (2 fittings, both sides)
 B Front Spindles (2 fittings, both sides)
 C Steering Bell Crank
 D Steering Gear Sector and Arm

- Check oil in engine crankcase at least every 8 hours of operation. Change oil every 25 hours of normal operation. In extremely dirty or dusty conditions, change oil every 15 hours of operation.
- F Check oil in transaxle (transmission) every 50 hours of operation. Change oil in transaxle every 500 hours of op-
- Apply several drops of oil to all pivot points every 5 hours of operation.

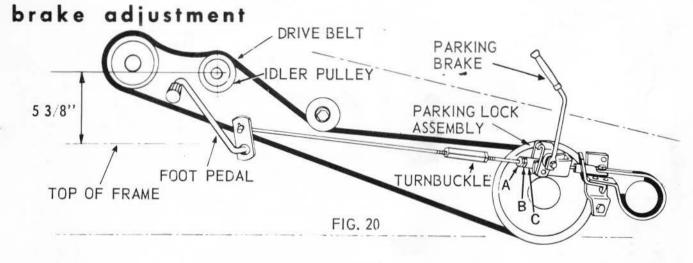
transaxle (transmission) drive belt adjustment

A new belt will stretch after the first few hours of operation, then after initial stretch, adjustment is seldom necessary.



1. Loosen bolt in flat idler and frame, and push idler and bolt down in slot of frame until center of idler pulley on idler bracket (just back of engine), is 7½ inches above frame as shown. Tighten bolt in flat idler and frame securely.

NOTE: Foot pedal should be in vertical or just back of vertical position with clutch engaged. New belts will stretch after a few hours of operation, then after initial stretch, adjustment is seldom necessary. Adjust belt after first 10 hours of operation.



To adjust brake, loosen nut back of turnbuckle and turn turnbuckle (clockwise when standing in front of tractor), one turn at a time until foot pedal has about 4 inches of travel from clutch engaged to full brake position, or center of idler is about 5 3/8 inches above frame as shown.

Tab on idler bracket will deflect belt slightly. Tighten jam nut against turnbuckle to lock turnbuckle in position. Keep brake properly adjusted especially in hilly terrain.

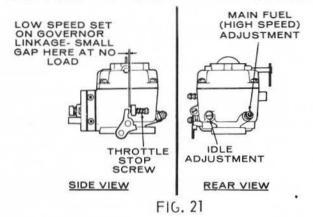
park brake lock adjustment

To tighten parking brake loosen hex nuts (A and B). Rotate parking lock lever to lock position. By hand press foot pedal forward to full brake position. While holding brake pedal forward tighten nut (B), against bushing (C), finger tight. Release foot pedal, and turn nut (B), back against bushing (C), two additional turns. Tighten nut (A), against nut (B), to lock in position. Place high-low lever in neutral position. Pull parking lock lever back (lock) position. Rear wheels of tractor should slide when tractor is pushed.

carburetor adjustment

CAUTION: WHEN FOLLOWING STEPS 1 THRU 5 BELOW, USE EXTREME CARE TO AVOID CONTACT WITH MUFFLER, HEAT SHIELD OR MOVING PARTS TO PREVENT INJURY. ALSO, BELT GUARD MUST BE IN PLACE.

MAIN FUEL AND IDLE VALVE ADJUSTMENT



INITIAL ADJUSTMENT:

The carburetor has a main fuel valve adjusting screw and an idle valve adjusting screw. (Fig. 21), A low speed adjustment screw is shown in (Fig. 22).

 Turn main fuel valve clockwise until it just closes.

CAUTION: Valves may be damaged by turning then in too far.

- Now open main fuel valve 1 turn counterclockwise.
- Close idle valve in same manner and open it 5/8 turn (counterclockwise).
- This initial adjustment will permit engine to start and warm up prior to final adjustment.

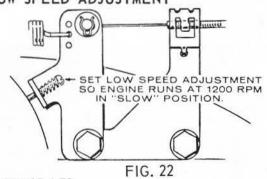
FINAL ADJUSTMENT

- Turn main fuel valve in until engine misses-(lean mixture), than turn it out past the point where engine runs smoothly until engine runs unevenly (rich mixture). Turn valve to mid-point between lean and rich so engine runs smoothly.
- Hold engine at idle position and set low speed adjustment screw (Fig. 22) until a fast idle is obtained (1200 rpm).
- Hold throttle in idle position and turn idle adjustment valve in (lean) and out (rich) until engine idles smoothly.
- Reset low speed adjustment screw so engine idles at 1200 rpm.
- Release throttle-engine should accelerate without hesitation. If engine does not accelerate properly, readjust main fuel valve by turning out slightly.

IMPORTANT: Do not open more than $\frac{1}{2}$ turn beyond maximum power point.

LOW SPEED ADJUSTMENT

4485R-18.6.73



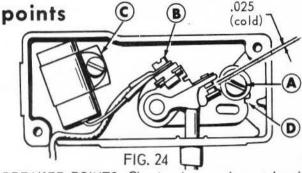
spark plug



SPARK PLUG GAP 0.025" GASOLINE

FIG. 23

SPARK PLUGS: Check, clean and reset spark plugs every 100 operating hours. Replace spark plugs that show signs of fouling or electrode erosion.

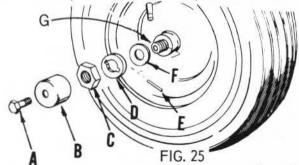


BREAKER POINTS: Check, clean and reset breaker points every 200 operating hours. Replace points if they are pitted or burned. Set point gap to .025 cold when fully open.

tires

Keep tires inflated to 12 pounds of air pressure in front; 12 pounds in rear.

Avoid stumps, stones, deep ruts and other hazards. Cuts in tires should be repaired immediately as neglect decreases the tire life. Keep tires free from oil and grease as both destroy rubber. After using the Tractor for spraying--insect control workwash off any chemicals that may be on the tires.



To remove a front tire and wheel, proceed as follows:

- Block up Tractor rocker bar (front axle) securely or use a Sears Tractor Jack.
- 2. Remove hex bolt (A), and dust cap (B).
- Remove gripco nut (C), wear washer (D), pin (E), and washer (F), from spindle shaft assembly (G).
- After tire is repaired, reverse above procedure for reassembly.

A rear wheel and tire is removed by removing the five hub bolts from wheel and hub. FIRST: Block up rear axle securely or use a Sears Tractor Jack. Sears or your local service station can repair your Tractor tire in the same manner as an automobile tire.

- 12 -

trouble shooting

WILL NOT START

POSSIBLE CAUSE	POSSIBLE REMEDY
Dead battery	Recharge or replace battery.
Attachment clutch lever engaged	Move to "out" position.
Gear shift lever in gear	Shift into neutral position.
No gasoline in fuel tank or carburetor	Fill the tank with gasoline; open fuel shut-off valve. Check fuel line and carburetor.
HARD TO ST	ART
Water in gasoline or old fuel	Drain fuel tank and carburetor. Use new fuel and dry spark plug.
Choked improperly. Flooded engine	Push in choke, open throttle control and crank engine several times to clear out the gas.
Dirty air cleaner	Remove and clean, refer to page 8.
Spark plug dirty or improper gap	Clean, adjust the gap or replace. Refer to page 12.
Defective battery	Replace.
Defective ignition or loose wiring	Check the wiring and spark plug.
ENGINE MISSES OR L	ACKS POWER
Dirty starter air screen	Clean screen over starter, see page 8. Be sure fins on cylinder head and around cylinder are clean.
Partially plugged air cleaner	Remove and clean, refer to page 8.
Low oil level or dirty oil	Check or change oil, see page 9.
Improper carburetor adjustment	Refer to page 12.
Spark plug dirty, wrong gap or wrong type	Clean, reset the gap or replace.
Engine overloaded	Shift to a lower gear or reduce load.
Faulty ignition	Check spark plug and for loose wires. If trouble cannot be corrected, contact Sears.
Oil in gasoline	Drain and refill gasoline tank and carburetor. Oil reduces the efficiency of the engine.
Poor compression	Contact Sears.
ENGINE OVER	HEATS
Dirty starter air screen	Clean screen over starter, see page 8.
Low oil level or dirty oil	Check or change oil, see page 9.
Partially plugged muffler	Remove muffler from engine and clean.
Poor fuel or too lean a mixture	Refer to page 12.
Partially plugged air cleaner	Remove and clean, refer to page 8.
Dirty engine	Clean fins on cylinder head and around cylinder.
NO LIGHT	S
No head lights or tail light with light switch knob pulled out	Turn fuse holder on dashboard counterclockwise-check for burned out fuse.

how to start if battery is low

Connect quick-start battery cables or "jumpers" from your automobile 12 volt battery to the Tractor battery CAUTION: Connect positive (+) terminal to positive (+) terminal. This method of starting is only a means of emergency starting. Have Tractor battery recharged or replaced immediately.

important battery care

Proper attention to the battery is of utmost importance.

The following points are recorded to help remind you to provide attention to the battery and gain full advantage of the usable life built into the battery

and avoid costly replacement.

 Check solution level in battery at least once each week. Add distilled water when required. Correct level is bottom of tubes in cells, refer to page 4. After adding water, run the engine so that the generator charge will mix the solution. DO NOT OVERFILL. Acid spilled from the battery will corrode choke control and throttle control casing and wire, Tractor paint, etc.

Keep the battery clean and dry at all times. Remove any collection of grease, corrosion or

other substance from the battery.

3. Keep battery snug in its holder.

4. Keep vent caps tight and small vent holes in

caps open.

If battery should become discharged or falls below a specific gravity of 1.225, remove battery and have it recharged.

 When recharging, request service station to SLOW CHARGE the battery at a rate of 3 amperes. FAST CHARGING IS NOT RECOMMENDED.

winter care--battery

- If Tractor is not used regularly during winter months, the battery should be removed and stored in a cool, dry place above 50° F.
- Battery should not be placed directly on cement as this will drain the battery.
- If Tractor is used only infrequently during winter months, check battery at least once each thirty days to be sure a full charge is maintained.
- A battery not fully charged can freeze, resulting in the necessity to replace.
- A safe rule is to charge the battery monthly or at least test and recharge if below 1.225 specific gravity.
- Recharge to bring the specific gravity to normal before replacing it in the Tractor after storage.

Please remember the necessity of proper winter care for the battery. Batteries not in use for several months and not kept fully charged, produce a sulphation of the plates which cannot be removed by recharging.

4485R-23.4.73

storage instructions

In the event your Tractor is to be inoperative for periods in excess of 30 days - prepare for storage as outlined in the next column.

- Drain fuel tank and carburetor by allowing the engine to run out of gasoline. Gasoline left in your engine will leave gum deposits and condensation in the carburetor and fuel tank. This makes fuel system inoperative and will result in hard or non-starting of the engine.
- Lubricate cylinders by removing the spark plugs.
 Pour one ounce of clean lubricating oil through
 each spark plug hole into the cylinders. Crank
 the engine slowly to spread oil and replace the
 spark plugs.
- 3. Clean the engine and Tractor of all foreign matter.
- 4. Do not save or store gasoline over winter.

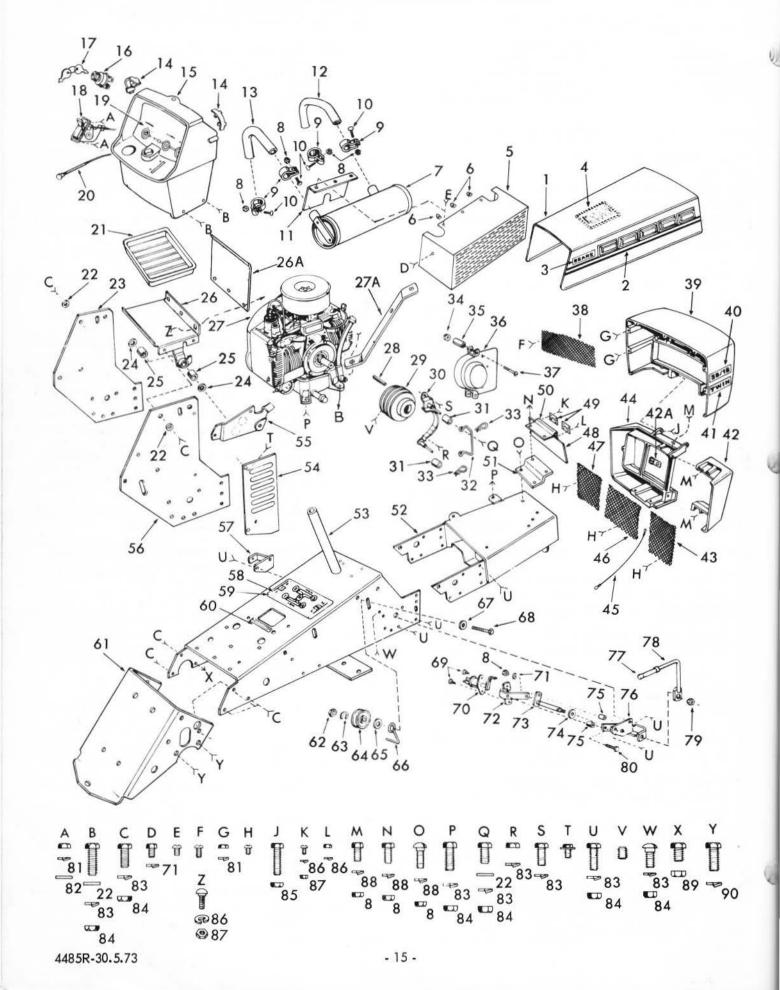
STORE YOUR TRACTOR IN A DRY AND PRO-TECTED PLACE. LEAVING YOUR TRACTOR OUTDOORS, EXPOSED TO THE ELEMENTS, WILL RESULT IN MATERIALLY SHORTENING ITS LIFE.

general

- Just as your automobile needs professional mechanical maintenance from time to time, so does your air cooled engine. Cleaning and adjustment of the carburetor and periodic replacement of the spark plug and ignition points is made necessary by NORMAL use.
- Professional air cooled engine service is as close as your nearest Sears Store.
- A yearly check-up or tune-up by Sears is a good idea to avoid breakdowns or delays.

Sears, Roebuck and Co. or Simpsons-Sears Ltd. in Canada reserves the right to make any changes in design or improvements without imposing any obligation to install the same upon its items heretofore manufactured.

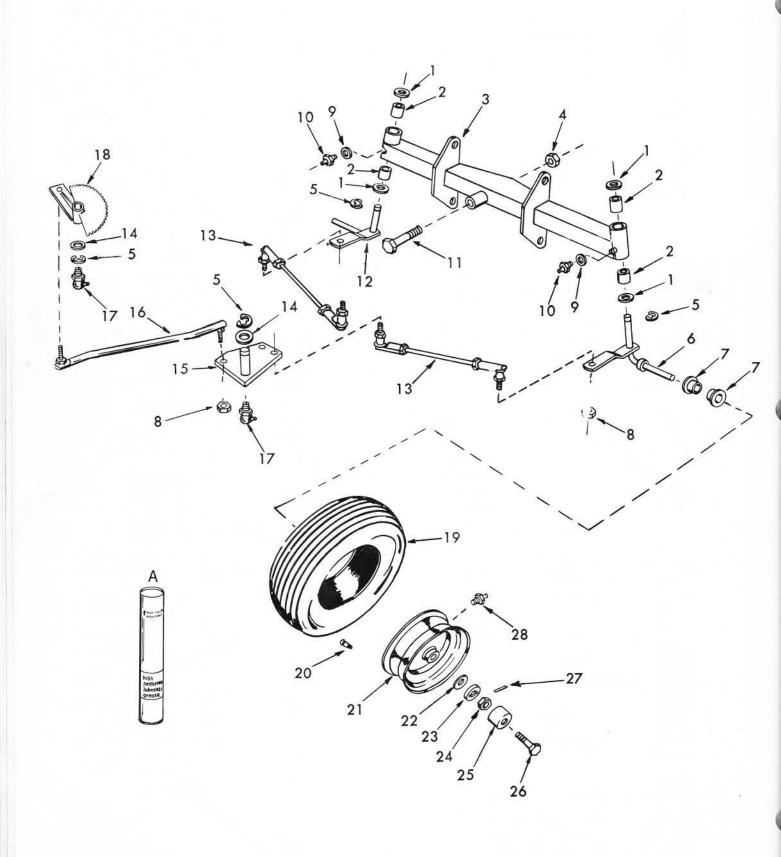
repair parts SS/16 TRACTOR--MODEL NUMBER 917.25751



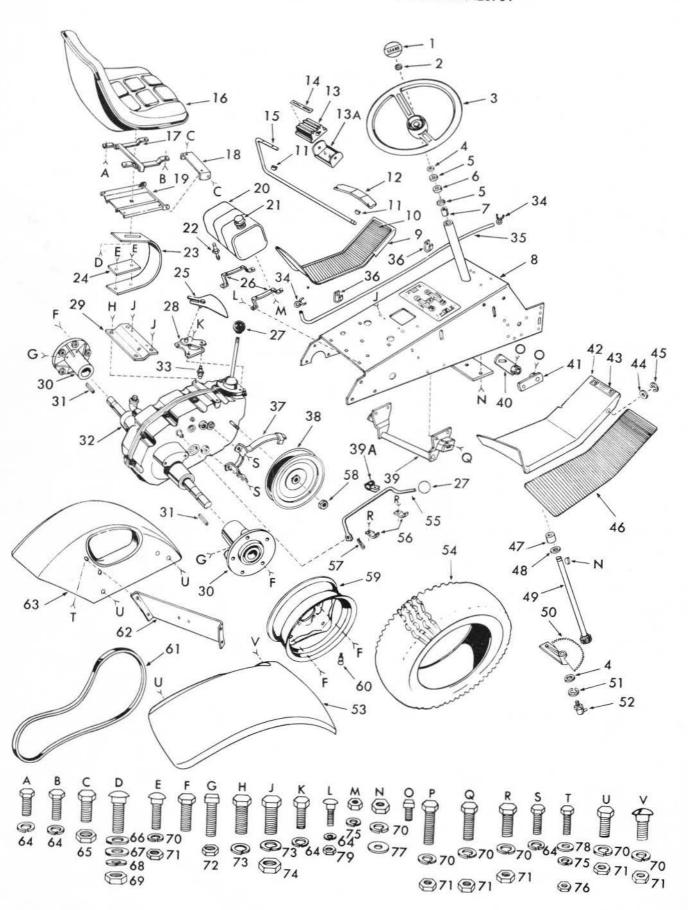
another free manual from www.searstractormanuals.com

repair parts

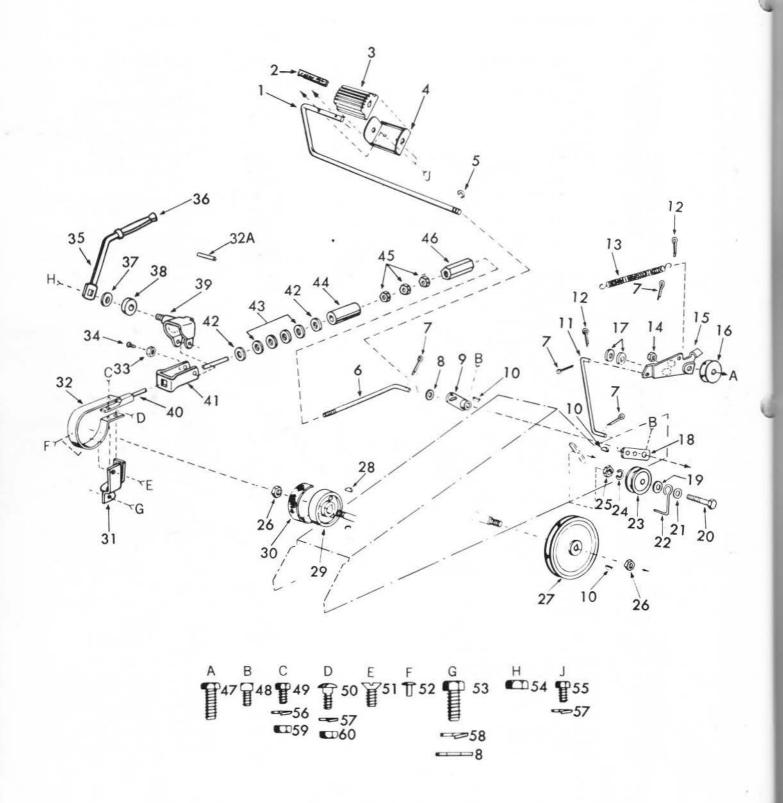
	KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
)	1	634A551	Hood Assembly	57	634A355	Hanger Weldment L.H. Front
	2	3624R	Decal-Hood Strip	58	2702R	Shift Pattern Plate
	2 3 4 5 6 7	3300R	Decal-Sears	59	9521H	Drive Rivet
	4	2017R	Decal (Maintenance Minder)	60	2703R	Model Plate
	5	634A549	Muffler Guard Assembly	61	634A101	Drawbar & Weldnuts
	6	3531R	J-Clip	62	500P	Hex Nut 7/16-14
		2695R	Muffler	63	1001P	Lockwasher 7/16
	8 9	504P 582R	Hex Nut 5/16-18	64 65	6635H 1520P	Flat Idler Washer .469 I.D. x 1 1/8 x
	10	3012P	Clamp-1 3/8 (Includes #8 & 10) Hex Bolt 5/16-18 x 1½	03	1320	11 Ga.
	11	3494R	Heat Shield-Carburetor	66	6479H1	Belt Guide Finger
	12	2697R	Exhaust Manifold-Front	67	1518P	Washer 15/32 x 11/16 x 16 Ga.
	13	2696R	Exhaust Manifold-Rear	68	3262P	Hex Bolt 7/16-14 x 21/2
	14	1998R	Clip-Dashboard	69	5501P	Pan Hd. Phillips Thread Cutting
	15	634A605	Dashboard w/Clips (Includes			Screw #10-24 x 3/8 Type T
			Item #14 Does Not Include	70	2249R	Safety Switch
		2/225	Item #19)	71	1003P	5/16 Lockwasher
	16	2683R	Ignition Switch (Includes	72	634A492	Switch Bracket Assy
	17	755011	Item #17)	73	634A491	Belt Lightener Arm &
	17 18	7552H 2682R	Key Set	74	FOOOLI	ldler Shaft
	19	2680R	Remote Control-Throttle Dashboard Panel	74 75	5999H 1689E	Spring Washer
	20	2754R	Choke Control	76	634A494	Bushing Hanger Weldment-R.H. Front
	21	2686R	Battery Tray	77	4379H	Handle Grip
	22	1513P	Washer 13/32 x 13/16 x 16 Ga.	78	634A493	Blade Clutch Handle Assy
	23	2671R	Bracket-Battery Support L.H.	79	511P	Nylock Nut 3/8-24
	24	1545P	Washer 17/32 x 1 x 16 Ga.	80	3013P	Hex Bolt 5/16-18 x 11/2
	25	2689R	Bearing	81	1002P	Lockwasher 1/4
	26	634A523	Battery Support & Idler	82	1506P	Washer 9/32 x 5/8 x 16 Ga.
			Support w/Bearings	83	1004P	Lockwasher 3/8
b	26A	4104R	Battery Heat Shield	84	501P	Hex Nut 3/8-16
,	27	634A508	Engine 16 H.P. (Twin Cyl)	85	1605H	Locknut 1/4-20
	12000	20232	Model BF-MS2379B	86	1006P	Lockwasher #10
	27A	4394R	Grill Brace	87	505P	Hex Mach. Screw Nut
	28	9396E	Sq. Key ½ x 2		1000D	#10-24
	29	634A104	Engine Pulley w/Set Screws	88	1003P	Lockwasher 5/16
	30	634A527	Belt Guide Weldment	89	5394H	Locknut 3/8-16
	31 32	8704H1 9011H	Spacer Ball Batainan	90	1001P 503P	Lockwasher 7/16
	33	4939M	Belt Retainer	A B	3027P	Hex Nut ¼-20 Hex Bolt 3/8-16 x 1½
	34	347H	Retainer Spring Huglock Nut ¼-20	Č	3023P	Hex Bolt 3/8-16 x 1
	35	8238H	Split Spacer		3008P	Hex Bolt 5/16-18 x ½
	36	634A390	Belt Guide Weldment	D E	3075P	Slotted Truss Hd. Mach.
	37	3154P	Slotted Fillister Hd. Mach.	_		Screw 1/4-20 x 3/8
			Screw 1/4-20 x 21/4	F	5554P	Phillips Pan Hd. Thrd.
	38	2672R	Grill Screen-Upper			Cutting Screw #10-16 x ½
	39	2676R	Grill-Upper	G	503P	Hex Nut 1/4-20
	40	3652R	Decal-Grill Top (SS/16)	Н	5564P	Phillips Pan Hd. Thrd.
	41	3653R	Decal-Grill (Twin)		00/70	Cutting Screw #10-24 x ½
	42	2678R	Grill Side	J	3267P	Hex Bolt 1/4-20 x 11/2 H.T.
	42A	4171R	Insulated Clip	K	3122P	Slotted Truss Hd. Mach. Screw #10-24 x 3/8
	43 44	2673R 2677R	Grill Screen-R.H. Grill-Lower	1	505P	Hex Mach. Screw Nut #10-24
	45	3747R	Grill Cable	М	3010P	Hex Bolt 5/16-18 x 3/4
	46	2794R	Grill Screen-Center		31.59P	Hex Bolt 5/16-18 x 7/8
	47	2674R	Grill Screen-L.H.	NOP Q R S	17P	Carriage Bolt 5/16-18 x 1
	48	634A28	Front Channel Cover &	P	3025P	Hex Bolt 3/8-16 x 11/4
		00 11 120	Weld Bolts	Ö	3022P	Hex Bolt 3/8-16 x 7/8
	49	6485H	Hinge	R	501P	Hex Nut 3/8-16
	50	2752R	Front Channel Cover	S	3023P	Hex Bolt 3/8-16 x 1
			Support	T	5557P	Hex Washer Hd. Thrd. Cut-
	51	2665R	Grill Spacer			ting Screw 1/4-20 x 1/2 Type 1
	52	634A531	Engine Mount Assy.	U	3025P	Hex Bolt 3/8-16 x 11/4
	53	634A543	Chassis Assy w/Bearings	V	4514P	Hex Socket Holless Set
	54	2655R	Cover R.H.	W.	000	Screw 5/16-18 x 5/8
	55	634A518	Idler Bracket Weldment	W	28P	Carriage Bolt 3/8-16 x 1
	56	2670R	Bracket-Battery Support R.H.	X	3021P	Hex Bolt 3/8-16 x 3/4
				Y Z	3035P 53P	Hex Bolt 7/16-14 x 1¼ Carriage Bolt #10-24 x ½
	4485R-30	5 73	- 16 -	_	331	Cultiuge Doll #10-24 X /2
	44001(-00	13170	- 10 -			



KEY	PART	DESCRIPTION
NO.	NO.	
1	1528P	Washer 13/16 x 1½ x 14 Ga.
2	1309H	Bearing
3	634A521	Front Axle with Bearings (Inc. Key No. 2)
4	4764H	Huglock Nut 5/8-11 UNC
5	5000P	E-Ring
6 7	634A277	Spindle Complete-R.H.
7	9040H	Flanged Bearing
8	511P	Nylock Nut, 3/8-24 UNF
9	1505P	Washer 9/32 x ½ x 14 Ga.
10 11	6855M 2699R	Grease Fitting Hex Bolt
12	634A278	Spindle Complete-L.H.
13	1808R	Tie Rod and Joints
14	1552P	Washer 49/64 x 11/4 x 16 Ga.
15	634A98	Steering Bell Crank Weldment
16	9318H	Drag Link and Joints
17	6842M	Grease Fitting
18	634A95	Steering Gear Sector and Arm
19	2169R	Front Tire-Tubeless
20	795R	Tire Valve
21	2892R	Front Wheel
22	1562P	Washer $25/32 \times 1\frac{1}{2} \times 16$ Ga.
23	8785H	Wear Washer
24	4831H	Elastic Nut ¾-16 UNF
25	8763H	Dust Cap-Outer
26	3008P	Hex Bolt 5/16-18 x ½
27	8798H	Roll Pin 5/32 x 1
28	6856M	Grease Fitting 14-28 Taper Thread
A	2557R	Amdex No. 1 E.P. Grease (Not furnished with your Tractor)

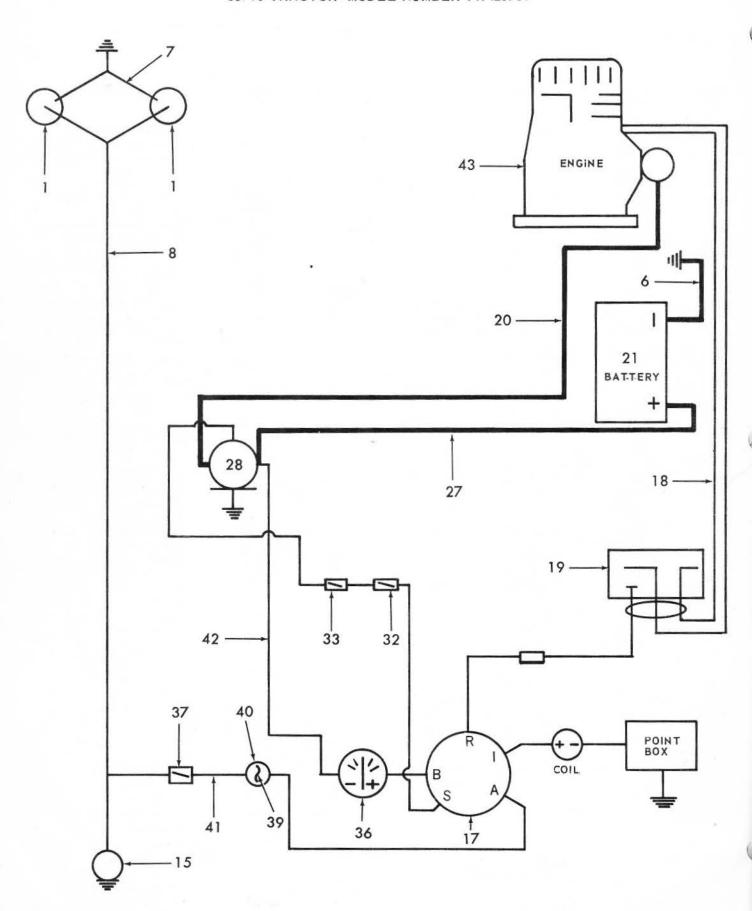


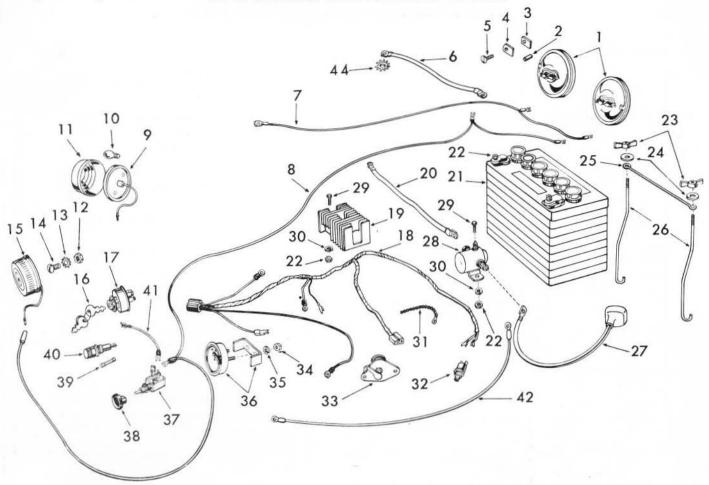
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	2701R 5003P 2700R 1552P 9007H 5949H 6468H 634A543 634A281 8787H 9858M1 9008H 1062R 1244R 2648R 3566R 634A532 2663R 634A533 2693R 9769H 815R 9712H 8141H 634A534 2650R 6364H	Steering Wheel Cap E-Ring Steering Wheel Washer 49/64 x 11/4 x 16 Ga. Cap Rubber Bushing Bearing Chassis Ass'y w/Bearings Foot Rest w/Bolts L.H. Foot Rest Pad L.H. Woodruff Key 3/16 x 5/8 Spring Foot Pedal Foot Pedal Plate Foot Pedal Shaft Seat Seat Bracket Weldment Bracket Seat Pivot Seat Plate Weldment Fuel Tank Fuel Gauge Fuel Line Fitting Seat Spring Seat Spring Reinforcement Neutral Safety Arm Ass'y Bracket-Fuel Tank Control Knob	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77	5000P 6842M 2657R 794R 6477H 6442H 2511P 9204H 2893R 795R 2692R 2656R 2656R 2658R 1003P 5394H 1578P 1000P 502P 1004P 501P 500P 1001P 500P 1002P 503P 1513P	E-Ring Grease Fitting Fender R.H. Rear Tire 23 x 9.50-12 Range Shift Rod Shift Rod Bracket Cotter Pin 3/16 x 1 Locknut ½-20 Rear Wheel Tire Valve V-Belt (Ground Drive) Bracket-Tail Light Fender L.H. Lockwasher 5/16 Locknut 3/8-16 Washer ¾ x 1 1/8 x 11 Ga. Washer 17/32 x 1½ x 11 Ga. Lockwasher ½ Hex Nut ½-13 Lockwasher 3/8 Hex Nut 3/8-16 Hex Jam Nut 3/8-16 Lockwasher 7/16 Hex Nut 7/16-14 Lockwasher ¼ Hex Nut ¼-20 Washer 13/32 x 13/16 x
28 29 30 31 32	634A535 6459H 8778H 8327H 633A38	Neutral Safety Support Ass'y Transmission Bracket Wheel Hub-Rear Sq. Key 1/4 x 3 Transmission (Transaxle)	78 79 A B	1506P 504P 3009P 3010P	16 Ga. Washer 9/32 x 5/8 x 16 Ga. Hex Nut 5/16-18 He x Bolt 5/16-18 x 5/8 Hex Bolt 5/16-18 x 3/4
33 34 35 36 37 38	2329R 9772H 2694R 2751R 634A22A 6461H2	Less Brake Drum Neutral Safety Switch Hose Clamp Fuel Line Clip-Fuel Line Belt Guide Transmission (Transaxle)	CDEFGHJ	3022P 25P 20P 1304H 4524P 3034P 3034P	Hex Bolt 3/8-16 x 7/8 Carriage Bolt ½-13 x 1¼ H.T. Carriage Bolt 3/8-16 x 1 Hub Bolt Sq. Hd. Set Screw 3/8-16 x 1¼ Hex Bolt 7/16-14 x 1 Hex Bolt 5/16-18 x 1
39 39A 40 41 42	634A362 2521R 634A33A 626A31A 634A282	Pulley Hanger-Rear Insulated Clip Brake Arm Ass'y Steering Arm Ass'y Foot Rest w/Bolts R.H.	KLMZO	3010P 15P 503P 501P 4501P	Hex Bolt 5/16-18 x 3/4 Carriage Bolt 5/16-18 x 5/8 Hex Nut 1/4-20 Hex Nut 3/8-16 Sq. Hd. Set Screw C.P. 5/16-18 x 1/2
43 44 45 46 47 48 49 50	2267R 1527P 5001P 8788H 4766H 1553P 640A30 634A95	Decal (Attach. Clutch) Washer 21/32 x 7/8 x 16 Ga. E-Ring Foot Rest Pad R.H. Bearing Washer 57/64 x 1¼ x 16 Ga. Steering Shaft & Pinion Steering Gear Sector & Arm	P Q R S T U V	3025P 3023P 3022P 3010P 3003P 3021P 19P 4485R	Hex Bolt 3/8-16 x 1¼ Hex Bolt 3/8-16 x 1 Hex Bolt 3/8-16 x 7/8 Hex Bolt 5/16-18 x ¾ Hex Bolt ¼-20 x ¾ Hex Bolt 3/8-16 x ¾ Carriage Bolt 3/8-16 x ¾ Owners Manual



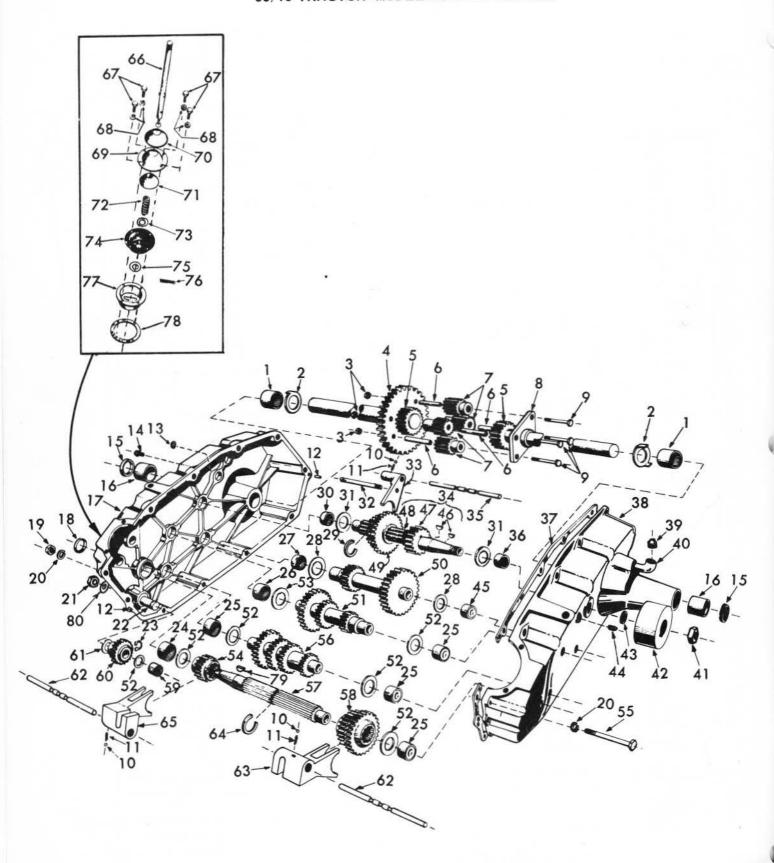
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	2648R	Foot Pedal Shaft	33	9071H	Huglock Nut 1/4-28
2 3 4 5 6 7 8 9	1244R	Foot Pedal Plate	34	3244P	Hex Bolt 1/4-28 x 5/8 H.T.
3	1062R	Foot Pedal	35	626A341	Parking Lock Handle Assembly
4	8765H	Foot Pedal Bracket	36	4379H	Handle Grip
5	5001P	E-Ring	37	5999H	Spring Washer
6	2202R	Brake Rod-Front	38	2221R	Parking Brake Spacer
/	2505P	Cotter Pin 1/8 x 3/4	38A	175H	Roll Pin
8	1513P	Washer 13/32 x 13/16 x 16 Ga.	39	634A489	Lock Bracket Assembly
.9	634A33A	Brake Arm Assembly	40	626A365	Brake Rod Assembly
10	9858M1 .	Woodruff Key 3/16 x 5/8	41	2197R	Parking Brake Yoke
11	2645R	Clutch Rod	42	1557P	Washer 13/32 x 13/16 x 11 Ga.
12	2514P	Cotter Pin ¼ x 1	43	2263R	Spring Washer
13	6486H	Spring	44	2201R	Bushing
14	548P	Hex Jam Lock Nut 3/8-24 UNF	45	501P	Hex Nut 3/8-16 UNC
15 16	634A518	ldler Bracket Weldment	46	6417H	Turnbuckle
10	634A86	Idler, Bolt and Nut (Inc. Key No's. 14 and 47)	47	3052P	Hex Bolt 3/8-24 UNF x 1 Pltd.
17	1545P	Washer 17/32 x 1 x 16 Ga.	48	4501P	Sq. Hd. Set Screw C.P. 5/16-
18	626A31A	Steering Arm Assembly			18 × ½
19	1520P	Washer .469 I.D. x 1-1/8 x	49	3159P	Hex Bolt 5/16-18 x 7/8
		11 Ga.	50	11P	Sq. Neck Carriage Bolt
20	3262P	Hex Bolt 7/16-14 x 21/2			1/4-20 x 5/8
21	1518P	Washer 15/32 x 11/16 x 16 Ga.	51	3164P	Flat Hd. Machine Screw
22	6479H1	Belt Guide Finger			Undercut 3/8-16 x 3/4
23	6635H	Flat Idler	52	2004P	Rivet, Brass Tubular
24	1001P	Lockwasher 7/16			#4 × ¼
25	500P	Hex Nut 7/16-14	53	3022P	Hex Bolt 3/8-16 x 7/8
26	9204H	Lock Nut ½-20 UNF	54	511P	Nylock Nut 3/8-24 UNF
27	6461H2	Transmission (Transaxle)	55 56 57 58	3003P	Hex Bolt 1/4-20 UNC x 3/4
20-000	I MORE SHOWN A	Pulley	56	1003P	Lockwasher 5/16
28	2228M	Woodruff Key 3/16 x 3/4	57	1002P	Lockwasher ¼
29	7648H1	Brake Drum	58	1004P	Lockwasher 3/8
30	7645H	Brake Lining	59	1685H	Locknut 5/16-18
31	634A168	Brake Bracket Assembly	60	503P	Hex Nut 1/4-20
32	634A167	Brake Band and Lining			

SS/16 TRACTOR--MODEL NUMBER 917.25751

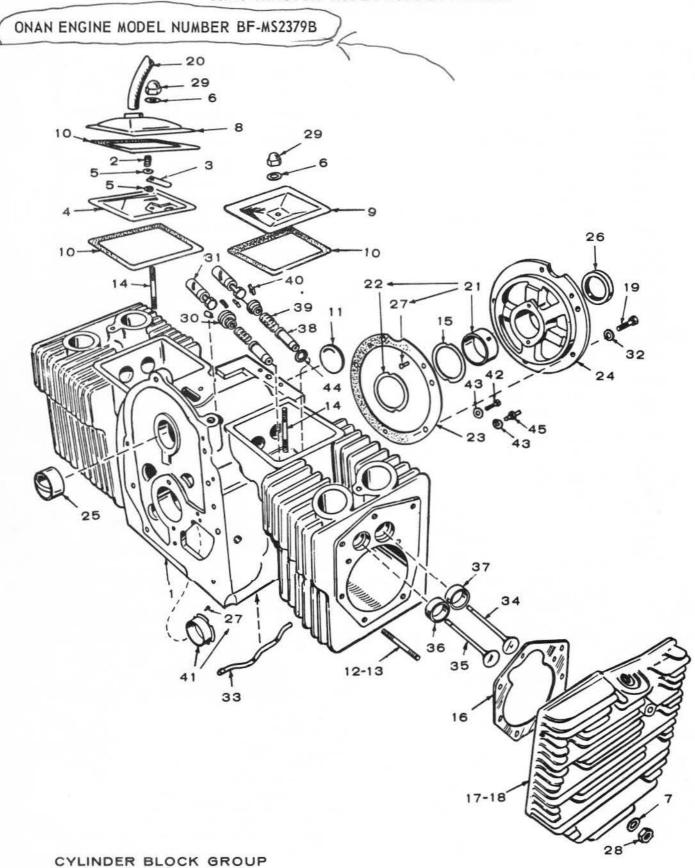




KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION	
1	7034H	Headlight	23	3748M	Wing Nut 1/4-20	
2	9197H	Hose (On Grill-Headlight	24	1509P	Washer $5/16 \times 3/4 \times 16$ Ga.	
3	8784H1	Locating Pins) Rubber Spacer	25 26	5110H 2685R	Battery Clamp Battery Bolt	
3 4 5	8768H 5554P	Mounting Clip Phillips Pan Hd. Thread	27	634A490	Battery Cable & Cover	
		Cutting Screw #10-16 x ½	28	103R	Solenoid	
6	2753R	Battery Cable (Neg. To Ground)	29 30	3115P 1002P	Hex Bolt ¼-20 x 5/8 Lockwasher ¼	
7	2894R	Ground Wire-Headlight	31	2777R	Tie	
8	3773R	Lead Wire (Light Switch To Headlight & Tail Light)	32 33	2329R 2249R	Neutral Safety Switch Safety Switch (Mower	
9	8293H	Housing (Tail Light)	VII.6		Clutch)	
10	8291H	Bulb #1895 2 Candle Power	34	543P	Hex Nut #10-32	
11	8292H	Lens (Tail Light)	35	1006P	Lockwasher #10	
12	505P	Hex Mach. Screw Nut #10-24	36	6987H2	Ammeter	
13	1404P	External Tooth Lockwasher #10	37	5735H	Light Switch (Includes Item #38)	
14	3073P	Slotted Truss Hd. Mach.	38	9267H	Knob Light Switch	
		Screw #10-24 × ½	39	2212R	Fuse	
15	8089H	Tail Light	40	2211R	Fuse Holder	
16	7552H	Key Set	41	2228R	Electrical Wire (Fuse to	
17	2683R	Ignition Switch (Includes Item #16)	1000		Light Switch)	
18 19	2687R 2684R	lgnition Wire Harness Regulator	42	2688R	Electrical Wire (Solenoid to Ammeter)	
20	2226R	Battery Cable (Solenoid To Starter)	43	634A508	Engine 16 H.P. (Twin Cyl.) Model BF-MS2379A	
21 22	5111H3 503P	Battery Hex Nut 1/4-20	44	1402P	External Lockwasher	



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	3039R	Needle Bearing	40	4003P	90 Street Elbow 1/2 14 N.P.T.
2	6256H	Axle Thrust Washer	41	9204H	Lock Nut 1/2 - 20
3	7810H	Gripco Nut 3/8 - 24	42	7648H1	Brake Drum
4	8662H	Final Drive - Gear	43	6271H	Oil Seal
5	633A34	Axle Shaft and Gear	44	4001P	Pipe Plug ¼ - 18 N.P.T.
2 3 4 5 6 7	6252H1	Bushing - Differential Pinion	45	8117H	Needle Bearing
7	8657H	Differential Pinion	46	2228M	Woodruff Key 3/16 x 3/4 H.T.
8	6263H1	Differential Carrier	47	8659H	4th. Reduction Pinion
9	3056P	Hex Bolt 3/8 - 24 x 31/4 1" Thread	48	6221H	3rd. Reduction Gear Shaft
		Length	49	633A14	High - Low Range Gears and Hub
10	7392M	Steel Ball	50	633A33	4th. Reduction Shaft and Gear
11	6272H	Spring - Shift Fork Detent	51	633A31	2nd. Reduction Shaft and Gear
12	6277H	Dowel Pin	52	1370H	Thrust Bearing Race
13	6269H	Oil Seal	53	7395H	Thrust Bearing Race
14	5855H	Pressure Relief Valve	54	6231H	Low Speed Pinion
15	4910H	Oil Seal	55	3087P	Hex Bolt 5/16 x 11/2 Grade 5 H.T.
16	992R1	Sintered Iron Bearing	56	633A30	Speed Change Gears & Shaft
17	633A28A		57	6218H	Input Shaft
		Bearings R.H.	58	633A11	Intermediate and High Speed Pinions
18	6270H	Oil Seal	59	7397H	Needle Bearing — Caged
19	504P	Hex Nut 5/16 - 18	60	633A24	Reverse Idler Gear & Bearing
20	1007P	Lock Washer 5/16 Extra Heavy	61	7392H	Reverse Idler Thrust Washer
21	541P	Hex Jam Nut 7/16 - 20	62	6216H	Shift Fork Shaft
22	7384H	Reverse Idler Shaft	63	6261H	Shift Fork - L.H.
23	5001P	E Ring	64	4926H	Snap Ring Cresent Type
24	4894H	Needle Bearing	65	6262H	Shift Fork R.H.
25	4895H	Needle Bearing	66	6213H1	Gear Shift Lever — Straight
26	7398H	Needle Bearing	67	3010P	Hex Bolt 5/16 - 18 x ¾
27	8117M	Needle Bearing	68	1003P	Lock Washer 5/16
28	7396H	Thrust Bearing Race	69	6254H1	Gear Shift Ball Cover
29	6276H	Snap Ring Cresent Type	70	4869H1	Gear Shift Cap
30	8118M	Needle Bearing	71	6259H	Shift Lever Guide Ball - Plain
31	6266H	Thrust Bearing Race	72	4924H	Spring
32	6215H	High — Low Range Shift Shaft	73	1544P	Washer 15/32 x 59/64 x 16 Ga.
33	6260H	Shift Fork, High — Low Range	74	6273H	Shift Mechanism Seal
34	633A32	3rd. Reduction Shaft and Gear	75	1525P	Washer 9/16 x 15/16 x 12 Ga.
		(Inc. Key No's. 46,47 and 48)	76	2505P	Cotter 1/8 x ¾
35	6217H	High - Low Range Shift Fork Shaft	77	633A19	Gear Shift Gate & Reinforcement
36	8119M	Needle Bearing	78	6274H	Gasket - Shift Ball Cover
37	6275H	Gasket Gear Case	79	9858M1	Woodruff Key
38	633A27	Gear Case and Bearings L.H.	80	1167R	Sealing Washer
39	4002P	Pipe Plug ½ 14 N.P.T.		633A38	Transaxle Assembly Less Brake Drum



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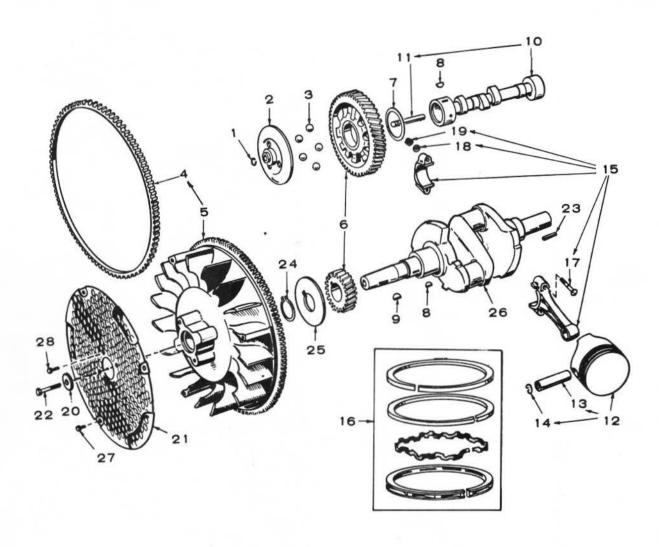
Cylinder Block Group

REF. NO.	PART NO.	PART DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	110-1943 123-1174 123-1175 123-1173 526-0018 526-0063 526-0122 110-1878 110-1879 110-1921 517-0048 520-0424 520-0759 520-0757 104-0776 110-1920 110-1924	Cylinder Block Assembly Spring Valve Baffle Flat Washer (¼'' Steel) Flat Washer (¼'' Copper) Flat Washer (5/16'' Steel) Cover (L.H.) Cover (R.H.) Gasket *Expansion Plug Stud (5/16'' x 2-5/16'') Stud (5/16'' x 2-1/16'') Stud (¼'' x 2-1/16'') *Shim (.005'') Gasket Cylinder Head (R.H.)
18	110-1925	Cylinder Head (L.H.)
19 20	800-0051 123-1176	*Hex Cap Screw (3/8-16 x 11/4'') Breather Tube
21	REAR BEARING KIT	
	101-0420 101-0420-02	*Standard .002'' Undersize
22 23 24 25	104-0575 101-0415 101-0407 101-0367	*Bearing Thrust Washer *Gasket *Bearing Plate (Less Bearing) *Camshaft Bearing (Precision)
26 27	509-0041 516-0072	*Oil Seal *Stop Pin
28 29 30	110-0445 866-0001 110-0893	Hex Nut (5/16-24) Acorn Nut (½-20) Retainer
31 32	115-0006 850-0050	Tappet *Lock Washer (3/8'')
33	120-0706	*Oil Tube
34 35	110-1808 110-1809	Intake Valve Exhaust Valve
36	EXHAUST VALVE SEA	
37	110-0245-02 INTAKE VALVE SEAT 110-0197	.002'' Oversize
38	110-0197-02 110-1935	.002'' Oversize *Valve Guide
39	110-0539	Valve Spring
40 41	110-0639 FRONT BEARING KIT	Retaining Lock
41	101-0432	*Standard
42	101-0432-02 806-0027	.002'' Undersize Hex Head Cap Screw (3/8-16 x ¾'')
43	526-0066	Flat Washer (3/8'' Copper)
44 45	110-0068 520-0820	Gasket (Used with Intake Valve Guide Only) Stud (3/8-16)

^{*-}Included in Cylinder Block Assembly.

⁻Use one only with rear bearing on units with flange type front bearing.

repair parts SS/16 TRACTOR--MODEL NUMBER 917.25751 ONAN ENGINE MODEL NUMBER BF-MS2379B



CRANKSHAFT, FLYWHEEL, CAMSHAFT AND PISTON GROUP

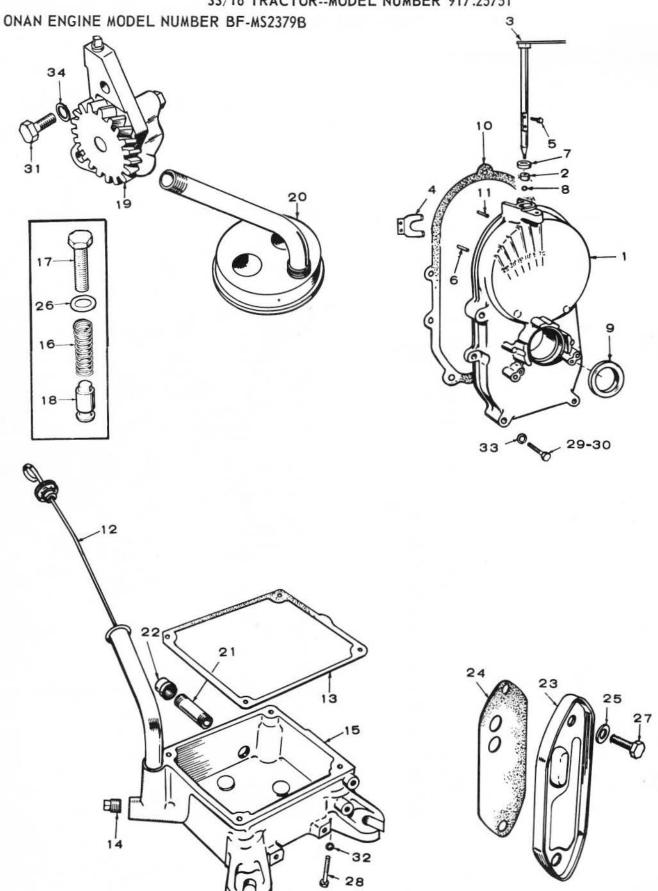


ONAN ENGINE MODEL NUMBER BF-MS2379B

Crankshaft, Flywheel, Camshaft and Piston Group

REF. NO.	PART NO.	PART DESCRIPTION
1	150-0078	Snap Ring
2	150-0612	Governor Cup
3	510-0015	Fly Ball
4	104-0779	Ring Gear
2 3 4 5	134-2432	Flywheel Assembly (Includes
6	105-0353	Ring Gear & Rotor) Timing Gear Set (Includes Camshaft and Crankshaft Gears)
7	105-0004 .	Thrust Washer
8	515-0001	Woodruff Key (1/8" x 1/2")
9	515-0002	Woodruff Key (3/16'' x 3/4'')
10	105-0388	Camshaft and Center Pin Assembly
11	150-0075	Center Pin
12		
12	PISTON AND PIN (Incl	
	112-0123	Standard
	112-0123-05	.005" Oversize
	112-0123-10	.010" Oversize
	112-0123-20	.020'' Oversize
	112-0123-30	.030" Oversize
	112-0123-40	.040'' Oversize
13	PISTON PIN	2 2 2
	112-0122	Standard
	112-0122-02	.002'' Oversize
14	518-0311	Retaining Ring
15	114-0225	Rod Assembly
16	RING SET	
	113-0159	Standard
	113-0159-05	.005" Oversize
	113-0159-10	.010'' Oversize
	113-0159-20	.020'' Oversize
	113-0159-30	.030" Oversize
	113-0159-40	.040'' Oversize
17	114-0228	Bolt (Special)
18	526-0017	Flat Washer (Special)
19	870-0277	Locking Nut (5/16-24)
20	850-0055	Lock Washer (7/16'')
21	134-2384	Guard
22	104-0170	Hex Head Cap Screw (7/16-14 x 4'')
23	515-0123	Key (¼'' x ¼'' x 2'')
24	518-0014	Retaining Ring
25	104-0043	Washer
26		Crankshaft
	104-0763	
27	821-0010	Locking Screw (4-20 x ½'')
28	821-0014	Locking Serew (5/16-18 x ½'')

repair parts
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GEAR COVER, OIL BASE AND OIL PUMP GROUP

SS/16 TRACTOR--MODEL NUMBER 917 25751

ONAN ENGINE MODEL NUMBER BF-MS2379B

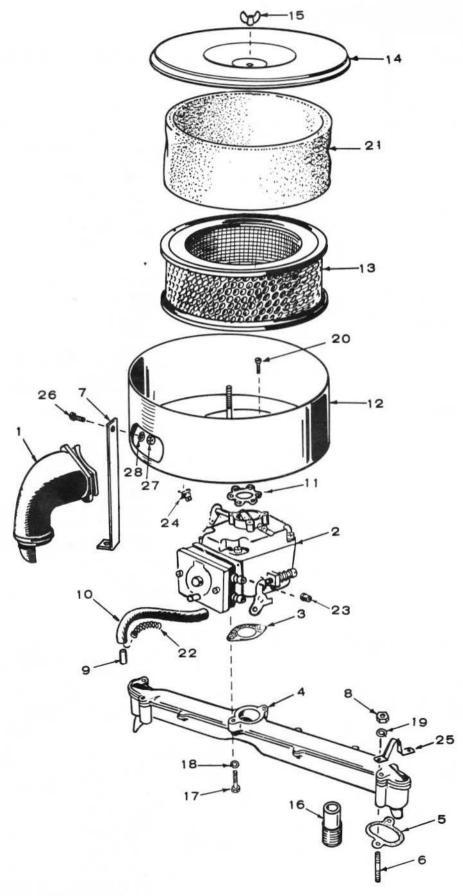
Gear Cover, Oil Base and Oil Pump Group

REF. NO.	PART NO.	PART DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	103-0396 510-0105 150-1349 150-1187 815-0046 516-0130 509-0008 510-0014 509-0040 103-0408 516-0011 123-1138 102-0693 505-0056 102-0741 120-0140 801-0050 120-0398 120-0491 120-0413 505-0002 505-0158 122-0259 122-0321 526-0065 526-0066	Gear Cover Assembly *Bearing (Upper) *Shaft and Arm Assembly *Yoke *Screw (8-32 x 3/8'') *Pin (3/16'' x 7/8'') *Oil Seal *Bearing *Seal Gasket Pin (5/16'' x 1-1/8'') Cap and Indicator Gasket Pipe Plug (½'') Oil Base Spring (Oil By-Pass) Hex Head Screw (3/8-24 x 1'') Valve (Oil By-Pass) Oil Pump Assembly (Complete) Intake Assembly Pipe Nipple (½'' x 3'') Pipe Cap (½'') Cover Gasket Flat Washer (5/16'' Copper)
27 28 29 30 31 32 33 34	800-0028 800-0056 800-0032 800-0034 800-0007 850-0050 850-0045 850-0040	Flat Washer (3/8'' Copper) (Oil By-Pass) Hex Head Cap Screw (5/16-18 x 1'') Hex Head Cap Screw (3/8-16 x 2½'') Hex Head Cap Screw (5/16-18 x 1¾'') Hex Head Cap Screw (5/16-18 x 2¼'') Hex Head Cap Screw (¼-20 x 1'') Lock Washer (3/8'') Lock Washer (5/16'') Lock Washer (½'')

^{*-}Included in Gear Cover Assembly.

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FUEL SYSTEM GROUP

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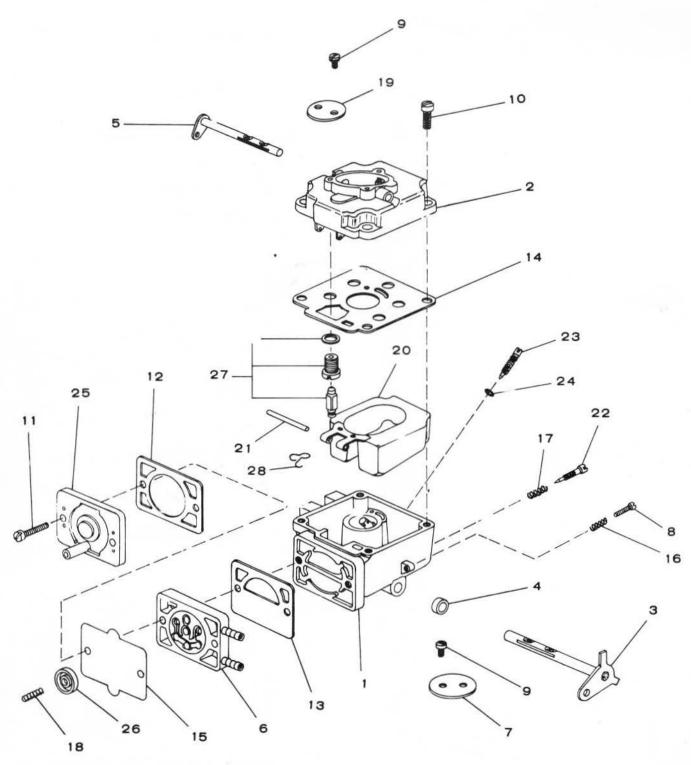
ONAN ENGINE MODEL NUMBER BF-MS2379B

Fuel System Group

REF. NO.	PART NO.	PART DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	140-1169 142-0531 145-0438 154-1468 154-1446 520-0758 140-1198 862-0015 149-1299 503-0644 140-1215 140-1213 140-1216 140-1168 865-0019 505-0755 800-0008 850-0040 850-0045 815-0377 140-1218 149-1308 149-1321 518-0328 403-1021 800-0003 862-0001	Air Intake Tube Carburetor Assembly (Complete) Gasket Intake Manifold Gasket Stud (5/16-18 x 2½'') Support Hex Nut (5/16-18) Vacuum Tube Vacuum Hose Gasket Housing Element Cover Wing Nut (¼-20) Half Nipple (1'' x 3'') Hex Head Cap Screw (¼-20 x 1¼'') Lock Washer (¼'') Lock Washer (5/16'') Round Head Screw (10-32 x 3/8'') Pre-Cleaner Support Spring Cap Clip Lifting Bracket Hex Head Cap Screw (¼-20 x ½'') Hex Nut (¼-20)
28	853-0013	Lock Washer (1/4'')

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CARBURETOR PARTS GROUP

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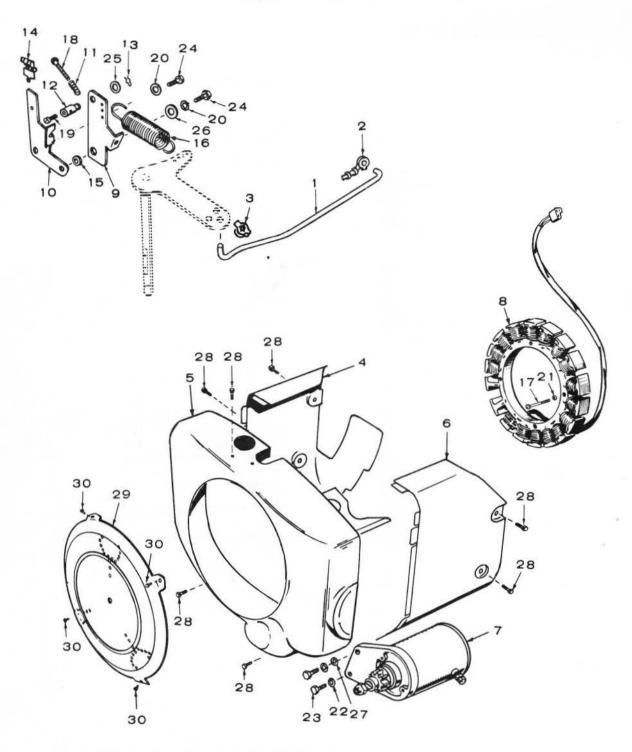
Carburetor Parts Group

REF. NO.	PART NO.	PART DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	142-0532 142-0523 142-0534 142-0535 142-0536 142-0537 142-0538 142-064* 142-0334 142-0540 142-0541 142-0542 142-0543 142-0543 142-0544 142-0545 142-0546 142-0547 142-0548 142-0548 142-0549 142-0550 142-0550 142-0551 142-0553 142-0553 142-0556 142-0556 142-0557	Lower Body Assembly Sleeve *Throttle Shaft Assembly Shaft Packing Choke Shaft Assembly *Valve Plate Assembly Throttle Fly Screw *Screw Screw Screw Gasket Gasket Gasket *Diaphragm Spring *Spring *Spring Choke Fly Float and Lever Assembly *Float Lever Shaft *Idle Needle Power Needle Assembly O-Ring Cover *Plate *Float Valve Assembly Clip *Gasket Set (Includes 142-535 Packing) Repair Kit

^{*-}Included in Repair Kit

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GOVERNOR, STARTER, CHARGING ALTERNATOR
AND BLOWER HOUSING GROUP

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ONAN ENGINE MODEL NUMBER BF-MS2379B

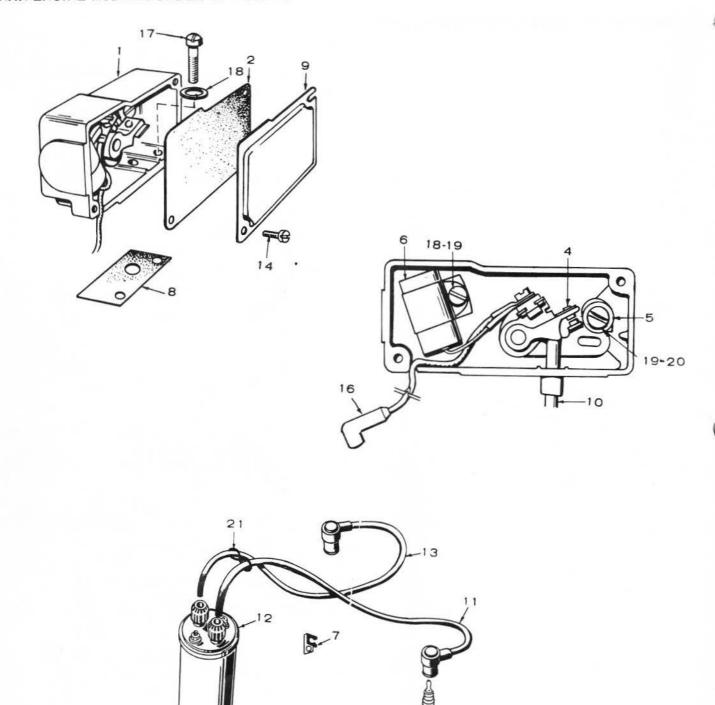
Governor, Starter, Charging Alternator and Blower Housing Group

REF. NO.	PART NO.	PART DESCRIPTION
1 2 3 4 5 6 7	150-1350 518-0004 870-0278 134-2382 134-2393 134-2383 191-0933	Control Rod Clip Push Nut (3/16'') Cylinder Air Housing (L.H.) Blower Housing Cylinder Air Housing (R.H.) Starting Motor Assembly (For
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	191-0885 150-1345 150-1343 142-0035 152-0155 516-0059 518-0176 150-1269 150-1214 813-0108 812-0066 815-0104 850-0040 850-0030 850-0045 800-0028 821-0010 526-0006 526-0214 526-0113 815-0261 134-2606 815-0378	Compenents See Separate Group) Charging Alternator Starter Arm Bracket Spring Swivel Cotter Pin Clip Bushing Spring Round Head Screw (10-32 x 1½'') Round Head Screw (6-32 x ¾'') Round Head Screw (8-32 x 5/16'') Lock Washer (¼'') Lock Washer (¼'') Lock Washer (#10) Lock Washer (5/16'') Hex Head Cap Screw (5/16-18 x 1'') Hex Head Cap Screw (½-20 x ½'') Flat Washer (#12) Flat Washer (#12) Flat Washer (5/16'') Hex Head Cap Screw (½-20 x 7/16'') Screen Guard (Stationary) Self Tapping Screw (#14 x ½'')

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IGNITION GROUP

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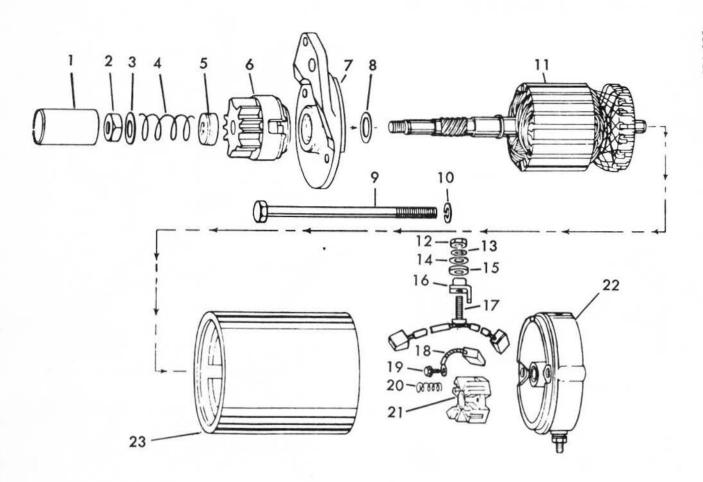
ONAN ENGINE MODEL NUMBER BF-MS2379B

Ignition Group

REF. NO.	PART NO.	PART DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	160-1158 160-1148 503-0365 160-1154 526-0003 312-0069 167-0188 160-1150 160-1149 160-1151 167-1548 166-0535 167-1463 815-0358 167-0241 336-2132 815-0373 850-0040 850-0025 815-0358 509-0035	Breaker Box Assembly *Gasket Clamp *Point Set *Flat Washer (#8) *Condenser Clip Gasket *Cover Plunger Cable (21'') Coil Cable (19'') *Pan Head Screw (8-32 x 3/8'') Spark Plug *Lead Assembly Screw (¼-20 x 5/8'') Lock Washer (¼'') *Lock Washer (#8) *Pan Head Screw (8-32 x 3/8'') ''O'' Ring (11/16'' O.D.)

^{*-}Included in Breaker Box Assembly.

Starter Parts Group



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	191-1034	1	Cover, Dust
2	191-1045	1	Nut, Stop
3	191-1046	1	Washer, Stop Nut
4	191-1035	i	Spring, Anti-Drift
5	191-1047	i	Spacer, Dust Cover
6	191-1036	i	Drive Assembly
7	191-1037	i	Cap Assembly, Drive End
8	191-1038	i	Washer, Armature Thrust
2 3 4 5 6 7 8	191-1048	ż	Screw, Hex Cap-Through
		-	Starter
10	850-0040	2	Washer, Lock
11	191-1039	ī	Armature
12 thru 21	Not Sold Separately Order #22 191-1040	·	Armotore
22	191-1040	1	Cap Assembly (Includes
	191-1041	1	Key #12 thru 21) Kit, Brush, Spring & Stud
23	Net Sald Second		(Key #17, 18 & 20)
25	Not Sold Separately Order		
	191-0933		Starting Motor Complete

Sears

owners manual

SEARS SERVICE IS AT YOUR SERVICE WHEREVER YOU LIVE OR MOVE IN THE U.S.A.

Revision 4485R-18.6.73 The Model Number will be found on a plate attached to the rear of the Chassis Channel and to the front of the seat. Always mention the Model Number when requesting service or repair parts for your Garden Tractor.

All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. or SIMPSONS-SEARS LIMITED. When ordering parts by mail, selling prices will be furnished on request or parts will be shipped at prevailing prices and will be billed accordingly.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOL-LOWING INFORMATION AS SHOWN IN THIS LIST.

- 1. The PART NUMBER
- 2. The PART DESCRIPTION
- 3. The MODEL NUMBER 917.25751
- 4. The NAME OF ITEM-Garden Tractor

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Across town or across the country, wherever you live or move in the U.S.A., Sears Service follows you, providing trustworthy, competent service technicians using only Sears specified factory parts.



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