Do Not Kennove

OWNER'S MANUAL



18 H P GARDEN TRACTOR MODEL NUMBER YPGTK 180CE



American Kird Products, Inc.

S.C. HWY. 33, AND OLD CAMERON ROAD P.O. BOX 1687 ORANGEBURG, SC 29116 Congratulations

on your purchase of a Riding Tractor. It has been designed, engineered and manufactured to give you dependability and performance. Should you experience any problem you cannot easily remedy, please contact your nearest authorized service dealer. He has well trained technicians and the proper tools and parts to service or repair this unit.

Please read and retain this manual. Following the "Rules for safe operation", "Assembly", "Operation", and "Maintenance" instructions will help you achieve a long, safe service life for your Riding Tractor.

LIMITED WARRANTY

The Manufacturer warrants to the original consumer purchaser that this product as manufactured is free from defects in materials and workmanship. For a period of two (2) years from date of purchase by the original consumer purchaser, we will repair or replace, at our option, without charge for parts or labor incurred in replacing parts, any part which we find to be defective due to materials or workmanship. This Warranty is subject to the following limitations and exclusions.

- Engine Warranty: All engines on our products have a separate Warranty extended by the individual engine manufacturer. Said warranty must be referred to in the event of a service requirement (see Kohler Owner's Manual included with your tractor).
- Transaxle/Transmission Warranty: Some of our products have a Transaxle/Transmission supplied by other manufacturers. Such Transaxle/Transmissions are warranted by that manufacturer and said Warranty must be referred to in the event of a service requirement.
- Battery Warranty: On products equipped with a Battery, we will replace, without charge to you, any battery which we find
 to be defective in manufacture, during the first year of ownership. Battery must be maintained in accordance with instructions in the product literature.
- The Warranty period for any products used for rental or commercial purposes is limited to ninety (90) days from the date of original purchase.
- 5. This Warranty applies only to products which have been properly assembled, adjusted and operated in accordance with instructions found in the product literature for your product. This Warranty does not apply to any product which has been subjected to alteration, misuse, abuse, improper assembly or installation, delivery damage, or to normal wear of the product.
- 6. Exclusions: Excluded from this warranty are belts, blades, blade adapters, normal wear, normal adjustments, standard hardware and normal maintenance.
- 7. In the event you have a claim under this Warranty, you must return the product to an authorized service dealer.

Should you have any unanswered questions concerning this warranty, please contact:

In U.S.A. contact:
American Yard Products Inc.
Service Department
P.O. Box 1687
Orangeburg, S.C. 29116
Phone: 800-435-3688

In Canada Contact: AYP (Canada) (Inc.) 1040 Jayson Court Mississauga, Ontario L4W 2V5

giving the model number, serial number and date of purchase of your product and the name and address of the authorized dealer from whom it was purchased.

THIS WARRANTY DOES NOT APPLY TO INCIDENTAL OR CONSEQUENTIAL DAMAGES AND ANY IMPLIED WARRANTIES ARE LIMITED TO THE SAME TIME PERIODS STATED HEREIN FOR OUR EXPRESSED WARRANTIES. Some areas do not allow the limitation of consequential damages or limitations of how long an implied Warranty may last, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights, and you may have other rights which vary from locale to locale.

This is a limited warranty within the meaning of that term as defined in the Magnuson-Moss Act of 1975

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LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAU-TIONS. IT MEANS - ATTENTION! BE-COME ALERT! YOUR SAFETY IS IN-VOLVED. CAUTION: LOOK FOR THIS WORD TO POINT OUT IMPORTANT EQUIPMENT PRECAUTIONS.

NOTE: LOOK FOR THIS WORD TO POINT OUT IMPORTANT INFORMATION ABOUT THE OPERATION AND PERFORMANCE OF YOUR TRACTOR.



RULES FOR SAFE OPERATION

NING: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest covered, covered or grass covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or area (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. (See REPAIR PARTS for part er identification).

State of California the above is required by law (Section 4442 of the California Public Resources Code). Other States may have similar Federal laws apply on federal lands.

(now the controls and how to stop quickly. READ THIS)WNER'S MANUAL and instructions furnished with attachnents

)o not allow children to operate the machine. Do not allow dults to operate it without proper instruction.

)o not carry passengers. Do not mow when children and others are around.

Always wear substantial footwear. Do not wear loose fitting slothing that could get caught in moving parts.

(eep your eyes and mind on your tractor, mower, and the trea being cut. Do not let other interests distract you.

On not attempt to operate your tractor or mower when not in he driver's seat.

Always get on or off your tractor from the operator's left hand ide.

lear the work area of objects (wire, rocks, etc.) which might be picked up and thrown.

Disengage all attachment clutches before attempting to start he engine.

Disengage power to attachments and stop the engine before eaving the operator's position.

Disengage power to mower, stop the engine, and disconnect spark plug wire(s) from spark plug(s) before cleaning, making an adjustment, or repair. Be careful to avoid touching hot nuffler or engine components.

Disengage power to attachments when transporting or not in

Take all possible precautions when leaving the vehicle inattended. Disengage the power take-off, lower the attachments, shift into neutral, set the parking brake, stop the engine, and remove the key.

Do not stop or start suddenly when going uphill or downhill. Now up and down the face of slopes (not greater than 15°), never across the face. Refer to page 45,

Reduce speed on slopes and make turns gradually to prevent ipping or loss of control. Exercise extreme caution when changing direction on slopes.

While going up or down slopes, place gear shift control lever n 1st gear position to negotiate the slope without stopping. Never mow in wet or slippery grass, when traction is unsure, or at a speed which could cause a skid.

Stay alert for holes in the terrain and other hidden hazards. Keep away from drop-offs.

Do not drive too close to creeks, ditches, and public highways.

Exercise special care when mowing around fixed objects in order to prevent the blades from striking them. Never deliberately run tractor or mower into or over any foreign objects. Never shift gears until tractor comes to a stop.

Never place hands or feet under the mower, in discharge chute, or near any moving parts while tractor or mower is running. Always keep clear of discharge chute.

Use care when pulling loads or using heavy equipment.

- a. Use only approved drawbar hitch points.
- b. Limit loads to those you can safely control.

- c. Do not turn sharply. Use care when backing.
- Use counterweight or wheel weights when suggested in owner's manual.
- 24. Watch out for traffic when crossing or near roadways.
- 25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the vehicle while in operation.
- 26. Handle gasoline with care it is highly flammable.
 - a. Use approved gasoline containers.
 - b. Never remove the fuel cap of the fuel tank or add gasoline to a running or hot engine or an engine that has not been allowed to cool for several minutes after running. Never fill tank indoors. Always clean up spilled gasoline.
 - Open doors if the engine is run in the garage exhaust fumes are dangerous. Do not run the engine indoors.
- Keep the vehicle and attachments in good operating condition, and keep safety devices in place and working.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
- To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease. Do not clean product while engine is running.
- Except for adjustments, DO NOT operate engine if air cleaner or cover directly over carburetor air intake is removed. Removal of such part could create a fire hazard.
- Do not operate without a muffler, or tamper with exhaust system. Damaged mufflers or spark arresters could create a fire hazard. Inspect periodically and replace if necessary.
- 33. 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 overspeed the engine; severe damage or injury may result.
- 35. When using the vehicle with mower, proceed as follows:
 - a. Mow only in daylight or in good artificial light.
 - b. Shut the engine off when unclogging chute.
 - Check the blade mounting bolts for proper tightness at frequent intervals.
- Do not operate the mower without the entire grass catcher, on mowers so equipped, or the deflector shield in place.
- 37. Disengage power to mower before backing up. Do not mow in reverse unless absolutely necessary and then only after careful observation of the entire area behind the mower.
- 38. Under normal usage the grass catcher bag material is subject to deterioration and wear. It should be checked frequently for bag replacement. Replacement bags should be checked to ensure compliance with the original manufacturer's recommendations or specifications.

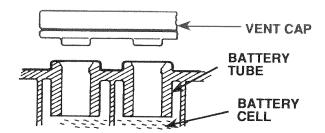


FIGURE 1

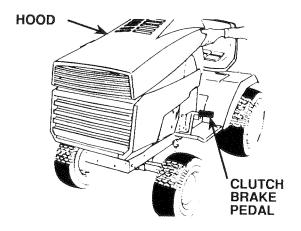
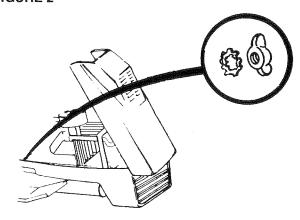


FIGURE 2



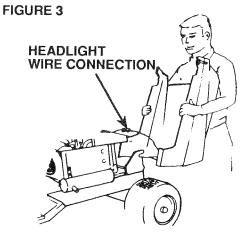


FIGURE 4

ASSEMBLY

To assemble and adjust your tractor you will need:

(2) 7/16" wrenches

(2) 1/2" wrenches

(1) 3/4" wrench

Tire Pressure Gauge

(1) 9/16" wrench

Utility Knife

NOTE: RIGHT HAND (R.H.) AND LEFT HAND (L.H.) ARE DETERMINED FROM OPERATOR'S POSITION WHILE SEATED ON THE TRACTOR.

UNPACKING INSTRUCTIONS

- a. Remove Battery, Steering Wheel, Seat and Seat Pan from carton.
- Cut down four corners of the carton with a utility knife and fold down sides.
- c. Shift unit into neutral.
- d. Disengage Parking Brake.
- e. Carefully guide the tractor backwards off the skid.

WEAR EYE AND FACE SHIELD.



WASH HANDS OR CLOTHING IMMEDIATELY IF ACCIDENTALLY IN CONTACT WITH BATTERY ACID.

DO NOT SMOKE. FUMES FROM CHARGED BATTERY ACID ARE EXPLOSIVE.

1. Prepare Battery

Fill and charge battery (before installing). NOTE: SEF DETAILED INSTRUCTIONS PACKAGED WITH BATTERY VENT CAPS IN BAG OF PARTS.

- Fill battery with battery acid to bottoms of tubes in cells (Fig 1). DO NOT OVERFILL. OVERFILLING WILL RESULT IN DAMAGE TO TRACTOR.
- Check level of battery acid after 30 minutes. Add additional battery acid if necessary. NOTE; TIGHTEN VENT CAPS SECURELY.
- c. Charge battery at a rate of six amperes for one
- d. Neutralize excess battery acid for disposal by adding it to 2 gallons (7 liters) of water in a five gallon (20 liters) plastic container. Stir with a wooden or plastic paddle while adding baking soda until the addition of more soda causes no more foaming.



DO NOT SHORT BATTERY TERMINALS.

BEFORE INSTALLING BATTERY, REMOVEMETAL BRACELETS, WRIST-WATCH BANDS, RINGS, ETC.

2. Install Battery

- a. Lift Hood from rear sides (Fig. 2).
- b. Remove Hood assembly by removing Int./Ext. Tooth Lockwasher and Wing Nuts (Fig. 3).
- c. Disconnect Headlight Wiring Harness (Fig. 4).
- d. Pivot Hood Assembly forward and remove from Tractor (Fig. 4).
- e. Remove Tape from Plastic Tray. Make sure Drain Tube is fastened to Drain Hole in Battery Tray (Fig. 6) and Battery Tray is positioned in hole of Battery Support.

- Place Battery in Plastic Tray (Battery Terminals to rear of Tractor) (Fig. 5).
- Connect Battery Cables using two Hex Bolts, Two Flat Washers, two Lockwashers and two Hex Nuts (shown full size below) found in Bag of Parts.

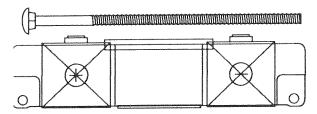




POSITIVE TERMINAL MUST BE CONNECTED FIRST TO PREVENT SPARKS FROM ACCIDENTAL GROUNDING.

- Connect RED Battery Cable to positive (+) Battery Terminal with Hex Bolt, Flat Washer, Lockwasher and Hex Nut (Fig. 5). Tighten securely with two 7/ 16" wrenches.
- Connect **BLACK** Ground Cable to negative (-) Battery Terminal with remaining Hex Bolt, Flat Washer, Lockwasher and Hex Nut (Fig. 5). Tighten securely.
- Secure Battery using: two Wing Nuts, two Battery Bolts and one Terminal Guard (shown below) found in Bag of Parts.





- Using the square hole on one side of the Battery Support (Fig. 5) insert one Battery Bolt, head of Bolt down. Fasten the Battery Bolt to the Terminal Guard using Wing Nut as shown (Fig. 6).
- Assemble the remaining Battery Bolt to other side of Battery Support and fasten Terminal Guard to it with remaining Wing Nut. Tighten Wing Nuts securely by hand (Fig. 6).

NOTE: USE TERMINAL ACCESS DOORS (FIG. 6) FOR:

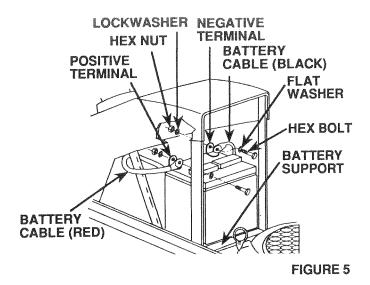
- 1. INSPECTION FOR SECURE CONNECTIONS (TIGHTEN HARDWARE)
- 2. INSPECTION FOR CORROSION
- 3. TESTING BATTERY
- 4. JUMPING (IF REQUIRED)
- 5. CHARGING (IF REQUIRED)
- m. Reinstall Hood Assembly to Tractor and tighten Int./Ext. Lockwasher and Wing Nut. Reconnect Headlight Wiring Harness and close Hood.

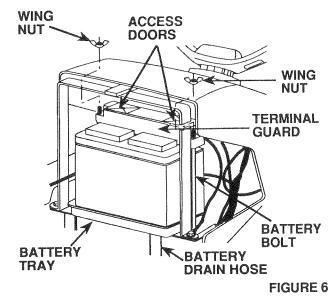
istall Steering Wheel

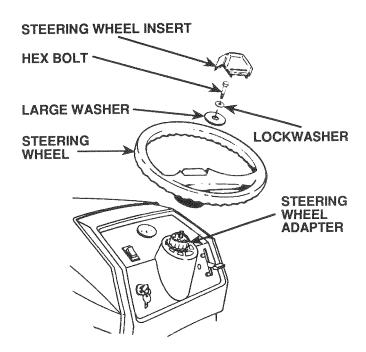
NOTE: POSITION FRONT WHEELS FORWARD.

 Use a 9/16" wrench to remove hex bolt, lockwasher and 2-3/8" diameter washer from Steering Column (Fig. 7)

Position Steering Wheel over Steering Wheel adaptor. Make sure Steering Wheel is aligned with front Wheels.







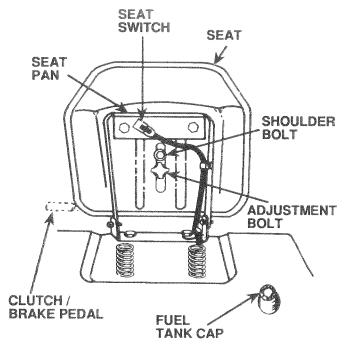


FIGURE 8

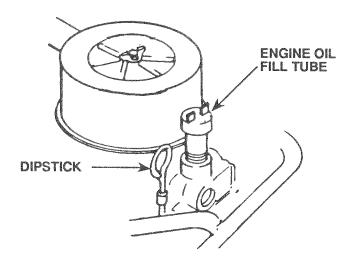


FIGURE 9

- Secure Steering Wheel to Steering Shaft using Hex Bolt, Lockwasher and 2-3/8" diameter Washer (fig. 7).
- d. Snap Steering Wheel Cap in place on Steering Wheel. Steering Wheel Cap found in Bag of Part

4. Install Seat

Seat position should be adjusted forward or backward so that the operator can comfortably reach Clutch/ Brake Pedal and safely operate the Tractor (Fig. 8).

- Place Seat on Seat Pan. Screw Hand Adjustment Knob and Shoulder Bolt into Seat (Fig. 8). Adjustment Knob and Shoulder Bolt found in Bag of Parts.
- Tighten Shoulder Bolt using a 1/2" wrench. Note that the Shoulder Bolt will be loose in the Seat Pan Slot.
- c. Hand tighten Adjustment Knob.
- d. Place Seat in operating position. Sit on the Seat and press Clutch/Brake Pedal all the way down. If operating position is not comfortable, adjust Seat.
- To adjust: Raise Seat. Loosen Adjustment Knob. Slide Seat to desired position. Tighten Adjustment Knob securely.
- A Spark Arrester Muffler (page 29) is available as an accessory part for your Tractor. Check legal requirements in your area.

INITIAL SERVICE

- This Engine has been shipped filled with summer weight oil. See the Kohler Owners Manual included with your Tractor for oil type, checking, and changing procedures.
- Fill Fuel Tank (Fig. 8) with clean, fresh, lead free, lo. lead or regular grade Gasoline. The use of lead free gasoline produces fewer combustion deposits which will result in longer Engine life. Capacity is 3-1/2 gallons (13.2 litres).



DO NOT OVERFILL. FILL TO BOTTOM OF GAS TANK FILLER NECK. WIPE OFF ANY SPILLED FUEL.

CAUTION:

EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OF USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

TO AVOID ENGINE PROBLEMS, THE FUEL SYSTEM SHOULD BE EMPTIED BEFORE STORAGE FOR 30 DAYS OR LONGER DRAIN THE GAS TANK, START THE ENGINE AND LET IT RUN UNTIL THE FUEL LINES AND CARBURETOR ARE EMPTY USE FRESH FUEL NEXT SEASON. SEE STORAGE INSTRUCTIONS FOR ADDITIONAL INFORMATION.

NEVER USE ENGINE OR CARBURETOR CLEANER PRODUCTS IN THE FUEL TAN OR PERMANENT DAMAGE MAY OCCUR.

 Reduce Tire Pressure to 14 PSI (1 Kg/cm²) in Front and 10 PSI (0.7 Kg/cm²) in Rear Tires. (Tires were overinflated for shipping purposes.)

DPERATION

NOW YOUR TRACTOR

EAD THIS OWNER'S MANUAL BEFORE OPERATING OUR GARDEN TRACTOR. If you understand the manine and its operation, you will achieve efficient and peak enformance. While reading the manual, compare the ustrations with your Garden Tractor to familiarize yourself ith the location of various controls and adjustments. Study e operating instructions and safety precautions thorughly to insure proper functioning of your Garden Tractor and to prevent injury to yourself and others. Be sure to pay rict attention to all notes and cautions; they are included r your safety. Save this manual for future reference.



KNOW HOW TO STOP YOUR TRACTOR BEFORE YOU ATTEMPT TO START THE ENGINE.

Stopping Your Tractor

OTE: REMOVE KEY WHEN LEAVING TRACTOR TO REVENT UNAUTHORIZED USE.

- Push Clutch/Brake Pedal into full "BRAKE" position (Fig. 12).
- b. Place Parking Brake (Fig. 10) in "ENGAGED" position and release pressure from Clutch/Brake. Pedal should remain in "BRAKE" position. NOTE: MAKE SURE PARKING BRAKE WILL HOLD TRACTOR SECURE.
- c. Move Gear Shift Lever to "NEUTRAL" position.
- d. Place Attachment Clutch Switch in "DISENGAGED" position (Fig. 11).
- e. Move Throttle Control to "S" (slow) position.
- Turn Ignition Key to "OFF" position. Never use Choke to stop Engine.

Starting The Engine



LEARN TO START, STOP AND RE-VERSE YOUR TRACTOR IN A LARGE, OPEN AREA.

OTE: THIS TRACTOR IS EQUIPPED WITH INTER-OCK SWITCHES TO PREVENT STARTING OF THE RACTOR ENGINE WHILE THE ATTACHMENT CLUTCH OR THE CLUTCH/BRAKE PEDAL IS ENGAGED.



IMMEDIATELY REPLACE SWITCHES THAT ARE NOT IN PROPER WORKING ORDER. DO NOT ATTEMPT TO DEFEAT THE PURPOSE OF THESE SWITCHES.

OTE: THIS TRACTOR IS EQUIPPED WITH AN OPERA-OR PRESENCE SENSING SWITCH. ANY ATTEMPT Y THE OPERATOR TO LEAVE THE SEAT WITH THE NGINE RUNNING AND THE ATTACHMENT CLUTCH NGAGED WILL SHUT OFF THE ENGINE.

- a. Place Attachment Clutch Switch in "DISENGAGED" position (Fig. 11).
- b. Push Clutch/Brake Pedal fully into Brake position (Fig.12).
- c. Place Gear Shift Lever in "N" neutral, start position (Fig. 10).
- d. Place Range Shift Lever in "N" neutral position.
- e. See the Kohler Owners Manual included with tractor for proper starting instructions.



BEFORE DRIVING THE TRACTOR, INSTALL MOWER OR REMOVE FRONT MOWER SUSPENSION BRACKET (FIG. 13)

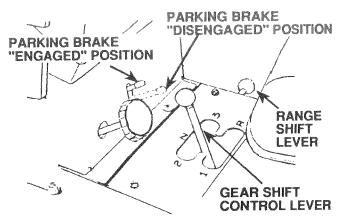
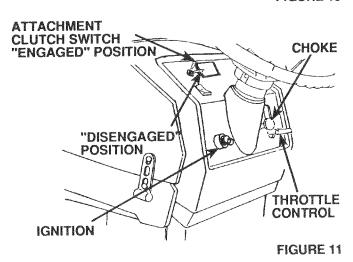


FIGURE 10



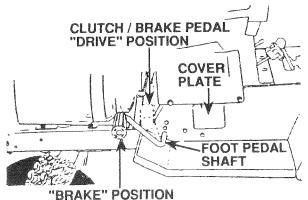


FIGURE 12

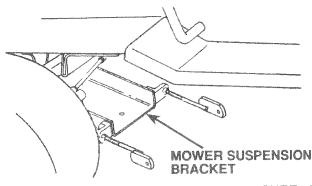


FIGURE 13

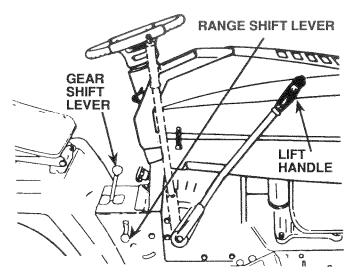


FIGURE 14

FUNCTION	GEARSHIFT	THROTTLE
Normal Mowing	2H* or 3L*	
Heavy Mowing	1H or 2L	
Snow Removal	1L	FAST
Titling Plowing	1	MID THROTTLE
Dozing	1L	
Grading	2L	
Transport	ЗН	SLOW-FAST

FIGURE 15

Indicates Range Shift Lever position:
"H" for High, "L" for Low

TO AVOID INJURY

- Read owner's manual.
- Know location and function of all controls.
- 3. Keep guards, safety shield and switches in place and working.
- 4. Remove objects that can be thrown by blades.
- 5. Do not mow when children and others are around.
- 6. Never carry children or passengers.
- Always look behind machine before backing.
- Do not mow where machine can tip or slip.
- If machine stops going uphill, stop blades and back slowly down.
- Be sure blades and engine have stopped before placing hands or feet near the blades.
- 11. Remove key when leaving machine.

3. Tractor operation

CAUTION: DONOTADD ADDITIONAL WEIGHT TO THE TRACTOR OTHER THAN THE OPTIONAL WHEEL WEIGHTS. EXCESSIVE WEIGHT MAY OVERLOAD AND DAMAGE THE TRANSMISSION.

- With Engine running and warm, place Throttle Control midway between "S" (slow) and "F" (fast) position (Fig. 11).
- b. Move Range Shift Lever to "LO" (low) postion (Fig. 14)
- Move Gear Shift Lever to desired gear (Fig. 10).
- d. Release Clutch/Brake Pedal SLOWLY to start movement (Fig. 12).
- e. If ground travel is too slow, move Throttle Control to "F" (fast) position or push Clutch/Brake Pedal and shift to a different gear.

NOTE: BRING TRACTOR TO COMPLETE STOP BEFORE SHIFTING GEARS. ALWAYS SELECT A GROUND TRAVEL SPEED THAT WILL SUIT THE TERRAIN AND THE ATTACHMENT BEING USED (FIG. 15).



NEVERPLACE YOUR HANDS OR FEET IN OR UNDER ANY POWERED ATTACHMENT OR NEAR ANY MOVING PART WHILE TRACTOR OR ANY POWERED ATTACHMENT IS RUNNING.

DO NOT OPERATE THE MOWER WITH-OUT EITHER THE ENTIRE GRASS CATCHER, ON MOWERS SO EQUIPPED, OR THE DEFLECTOR SHIELD IN PLACE.

- 4. Operating the Tractor On Hills
 - a. Choose the lowest gear BEFORE starting up or down hills.



DO NOT DRIVE UP OR DOWN HILLS WITH SLOPES GREATER THAN 15° AND DO NOT DRIVE ACROSS ANY SLOPE. REFER TO PAGE 45.

- b. Avoid stopping or shifting on hills.
- If slowing is necessary, move Throttle Control lever to middle position.



LEAVE ENOUGH ROOM WHEN STOP-PING AND STARTING TO ALLOW SLIGHT TRACTOR ROLL DOWNHILL AS CLUTCH/BRAKE PEDAL MOVES THROUGH CLUTCH POSITION.

- d. If stopping is absolutely necessary, push Clutch/ Brake Pedal quickly to Brake position and engage Parking Brake (Fig. 10).
- e. To restart your Tractor, make sure Tractor is in 1st gear and that you have allowed room to roll slightly downhill. Disengage Parking Brake and release Clutch/Brake Pedal SLOWLY to start Tractor forward movement.
- Make all turns slowly.
- Transporting Your Tractor
 - a. For transporting your tractor place Gear Shift Lever and Range Shift Lever in "N" neutral positions.

NOTE: DO NOT TOW OR PUSH YOUR TRACTOR MORE THAN SIX MILES PER HOUR.

AINTENANCE

KEEP YOUR TRACTOR RUNNING BETTER AND NGER, PERFORM NECESSARY SERVICE ACRDING TO INDICATED OPERATING HOURS.

BEFORE MAKING ANY INSPECTION, ADJUSTMENT OR REPAIR:

- 1. PUSH TRACTOR CLUTCH/BRAKE PEDAL COMPLETELY INTO BRAKE POSITION.
- 2. MOVE GEAR SHIFT CONTROL LEVER TO NEUTRAL POSTION.



- 3. PLACE PARKING BRAKE IN "ENGAGED" POSITION AND REMOVE FOOT FROM PEDAL.
- 4. TURN OFF ATTACHMENT CLUTCH SWITCH.
- 5. SHUT OFF THE ENGINE.
- 6. MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED.
- 7. DISCONNECT THE SPARK PLUG WIRES FROM THE SPARK PLUGS AND KEEP WIRES AWAY FROM THE SPARK PLUGS TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS.

ch time you start your Tractor

- 1. Check the Indicator Lights (Fig. 16).
 - a. DEPRESS FOOT PEDAL indicates that the Clutch/Brake Pedal must be depressed before Engine will start.
 - b. DISENGAGE ATTACHMENT-indicates that the attachment must be disengaged before the Engine will start.
 - c. CHECK OIL is a low oil pressure warning light.
 - d.BATTERY DISCHARGING -indicates there is insufficient battery charging.

th Every Mowing

- Make sure all Nuts on Bolts are tight and Cotter Pins and Retainer Springs are secure.
- Observe all safety precautions.
- Keep Tractor well lubricated (refer to page 14).
- Check Engine oil level before each operation. Refer to Kohler Owner's Manual for proper procedures (Fig. 17).

st 2 Hours (Two Mowings)

 Change Engine Oil. Refer to Kohler Owner's Manual included with your Tractor for first oil change interval, type of oil, and oil change procedures.



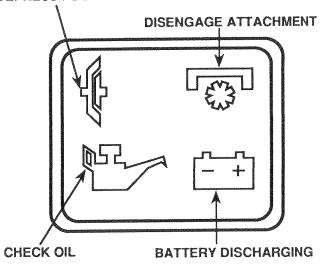


FIGURE 16

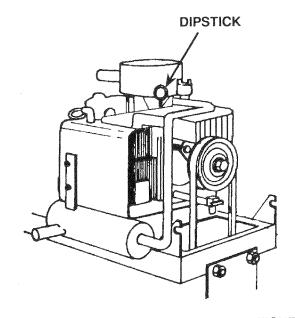


FIGURE 17

Every 25 Hours

(EVERY 15 HOURS IF OPERATING IN VERY DUSTY CONDITIONS)

1. Change Engine Oil

The best time to drain Engine Oil is at the end of a day's operation when all dirt and foreign material is suspended in the hot Oil. Refer to the Kohler Owners Manual provided with your Tractor for proper procedures.

2. Lubricate Steering and Front Wheels

There are four Grease Fittings on your Tractor (Fig. 18). Using a Grease Gun, give each fitting two shots of Extreme Pressure Lubricating Grease.

3. Lubricate Pivot Points

Place several drops of S.A.E. 30 oil at points where parts move against each other, especially:

- a. Front Axle Pivot
- b. Hood Hinges
- c. Foot Pedal Shaft (both ends)
- d. Lift Shaft (both ends)
- e. Steering Plate
- f. Refer to Lubrication Chart, Page 14.

4. Check Battery

- a. Battery acid solution level in each Battery Cell should be even with bottoms of tubes in cells (Fig. 19). Add only distilled or iron-free water if necessary, NOTE: DO NOT OVERFILL. DO NOT ADD ACID.
- b. Keep Battery and Terminals clean. Refer to step 5.
- c. Keep Battery Bolts tight.
- d. Keep Vent Caps tight and small vent holes in Caps open.
- e. Recharge at a rate of 6 amperes for 1 hour.

5. Clean Battery and Terminals

Corrosion and dirt on the Battery and Terminals cause the Battery to "leak" power and hinders the operation of the charger.

- a. Remove Terminal guard (Fig. 20).
- b. Remove the Battery from the Tractor and wash with four tablespoons (60 ml) of baking soda to one gallon (4 litres) of water. NOTE: BE CARE-FUL NOT TO GET THE SODA SOLUTION INTO THE CELLS.
- c. Rinse the Battery with plain water; dry and reinstall on Tractor.
- d.Clean Terminals and Cable ends with a wire brush until bright.Replace Cables.
- e. Coat Terminal Connections with Petroleum Jelly and replace Terminal Guard.



IF BATTERY IS REMOVED, DO NOT OPERATE ENGINE. SPARKING MAY OCCUR.

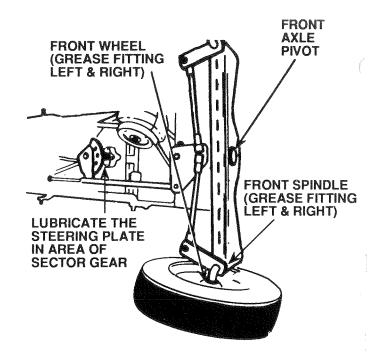
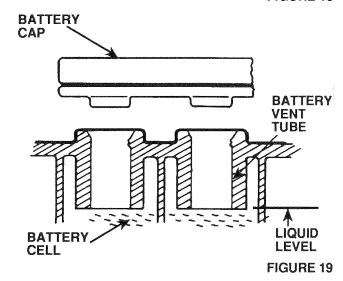


FIGURE 18



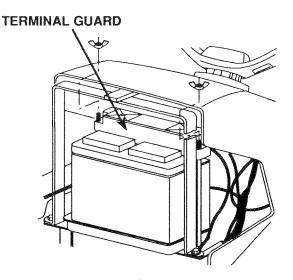


FIGURE 20

8

6. Clean Air Screen

Air Screen (Fig 21) must allow free-flow of air to prevent Engine damage from overheating. Clean with a wire brush or compressed air to remove dirt, stubborn dried gum and fibers.



WEAR SAFETY GLASSES WHEN USING COMPRESSED AIR.

7. Clean Air Filter

Refer to Kohler Engine Owner's Manual included with your Tractor for Air and Pre - Cleaner servicing.

ery 50 Hours

(DEPENDING ON OPERATING CONDITIONS, SERVICING MAY BE REQUIRED MORE FREQUENTLY.)

1. Clean Engine Cooling Fins

Remove any dust, dirt or oil from Engine Cooling Fins to prevent Engine damage from overheating. Air Guide Covers must be removed. Refer to illustrations in Kohler Owner's Manual.

2. Muffler

Do not operate the Tractor without a Muffler or tamper with the Exhaust System. Damaged Mufflers or Spark Arrestors could create a fire hazard. Inspect periodically and replace if necessary. If your Engine is equipped with a Spark Arrestor Screen assembly, Remove every 50 Hours for cleaning and inspection. Replace if damaged.

ery 100 Hours

1. Replace Spark Plugs

Refer to Kohler Engine Owner's Manual included with your Tractor for proper procedures.

- 2. Lubricate Ball Joints
 - a. Move Rubber Boots to expose Ball Joints on Tie Rods and Steering Link (Fig. 22).
 - b. Coat Ball Joints with Silicone Spray Lubricant.
 - c. Reposition Rubber Boots.
- 3. Replace Air Cleaner Paper Cartridge

Refer to Kohler Owner's Manual included with your Tractor.

rery 200 Hours

- 1. Replace In-Line Fuel Filter
 - a. Remove Hose Clamps from Fuel Lines at Fuel Filter (Fig. 23).
 - b. Remove Fuel Filter.
 - c. Place Fuel Filter in position with Fuel Line (arrow on Hose Clamps).
 - d. Reinstall Fuel Lines on either side of Fuel Filter and replace Hose Clamps.



BE SURE THERE ARE NO FUEL LEAKS AND THAT HOSE CLAMPS ARE PROP-ERLY INSTALLED.

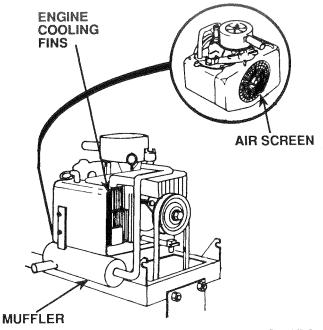


FIGURE 21

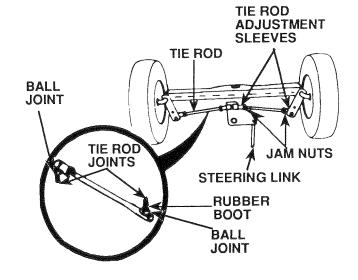
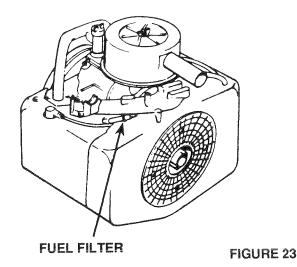


FIGURE 22



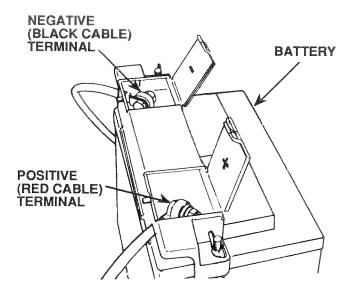


FIGURE 24

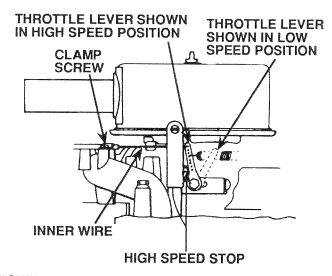


FIGURE 25

REPAIR AND ADJUSTMENT

1. Starting Your Tractor with a Weak Battery

If your Battery is too low to start the Engine, it should be recharged. If "jumper cables" are used for emergency starting, follow this procedure:

NOTE: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED SYSTEM.



LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS WEAR EYE PROTECTION AROUND BATTERY.

- a. Connect each end of the RED Cable to the POSITIVE (+) Terminals of each Battery (taking care not to short against Chassis). (Fig. 24).
- Connect one end of the BLACK Cable to the NEGATIVE (-) Terminal of fully charged Battery.
- c. Connect the other end of the Cable to ENGINE BLOCK or good CHASSIS GROUND on Tractor. NOTE: KEEP AWAY FROM GAS TANK AND BATTERY.
- d. Disconnect Cables in reverse order.
 - 1. Engine Block or Chassis of Tractor.
 - 2. Negative Terminal of fully charged Battery
 - 3. Positive Terminals

CAUTION: DO NOT USE YOUR BATTERY TO START OTHER VEHICLES.

2. Throttle Control Cable Adjustment

Never attempt to change maximum Engine Speed. This is preset at the factory (3400 ±100 RPM) and should only be changed by a qualified service technician who has the necessary equipment.

- Loosen Clamp holding Throttle Cable at Carburetor (Fig. 25).
- Move Throttle Control (on the dashboard) to "Fast" position.
- c. Pull outer Cable until tight (Fig. 25).
- d. Tighten Clamp on outer Cable.



REFER TO "STARTING THE ENGINE", PAGE 5.

3. Carburetor Adjustment

Refer to Kohler Engine Owner's Manual provided with your Tractor for proper procedures.

Notion Drive Belt Removal

The Belt on this Tractor is special for this application. Always replace with the Belt number in the parts list. It is not necessary to remove Mower.

- Raise Hood and disconnect Negative Ground Battery Cable.
- b. Set Parking Brake (to get belt slack).
- Loosen (do not remove) two Engine Pulley Belt Guide Bolts and swivel R. H. side of Belt Guide up. Tighten L.H. bolt to hold Belt Guide in position (Fig. 26).
- d. Roll Belt off Engine Pulley.
- e. Roll Belt off "V" Idler, Flat Idler and Clutching Idler Pulleys (Fig. 27).
- Pull Belt off Clutch Pulley between Pulley and Frame. Pull Belt off Transaxle Pulley.

Notion Drive Belt Replacement

TE: THERE IS A BELT INSTALLATION DECAL UN-L.H. FOOTREST.

- a. Push Belt down from Engine Pulley area. Place back (flat) side of Belt on Flat Idler. (Flat Idler is next to frame).
- Place belt on Clutching Idler and over Clutch Pulley. "V" (narrow) part of Belt should engage Clutch Pulley.
- Place Belt around Transaxle Pulley. "V" part of Belt should engage Transaxle Pulley (Fig. 27).
- d. Make sure "V" part of Belt engages "V" Idler (Fig. 27).
- e. Roll Belt over Engine Pulley.
- Loosen L.H. Engine Pulley Belt Guide Bolt and swivel Belt Guide on to R.H. Bolt. Tighten L.H. and R.H. Bolts securely (Fig. 26).
- g. Release Parking Brake NOTE: WHEN A NEW BELT HAS BEEN INSTALLED, YOU MUST CHECK BRAKE ADJUSTMENT.

Fuse Replacement

Replace with 30 amp automotive - type, plug-in fuse. Fuse is located under Dash and can be purchased at all authorized Service Dealers and most retail stores.

Check Transaxle Oil Level

- Block up Rear Axle (Fig. 28) securely or use a Tractor Jack.
- Remove left rear Wheel by removing Hub Bolts.
- Remove Filler Plug (Fig. 28) from Transaxle. Oil level must be even with Plug threads. See your authorized service center if additional oil is required. Replace Filler Plug.
- Reposition Wheel. Secure with Hub Bolts previously removed.

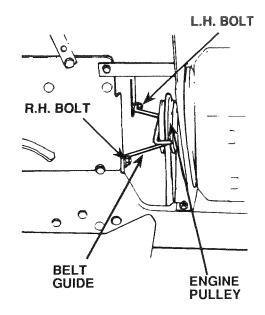


FIGURE 26

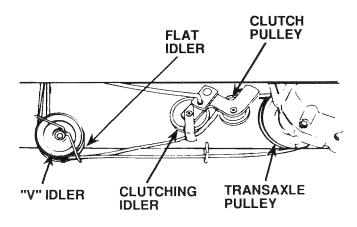


FIGURE 27

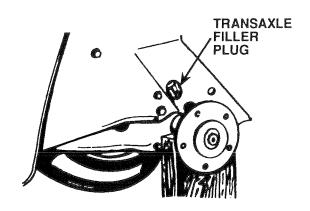


FIGURE 28

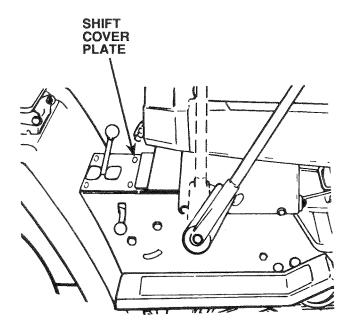


FIGURE 29

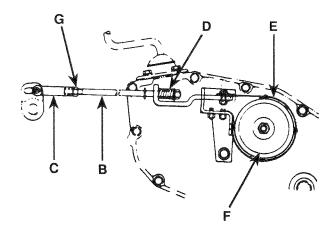
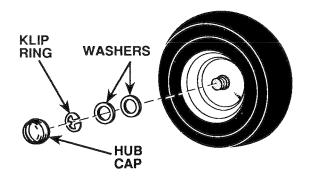


FIGURE 30



Brake Adjustment



IF TRACTOR REQUIRES MORE THAN SIX FEET OF STOPPING DISTANCE IN HIGHEST GEAR ON A LEVEL DRY CONCRETE OR PAVED SURFACE, THEN BRAKE MUST BE ADJUSTED.

- Remove (4) Hex Washer Head Tapping Screws from Shift Cover Plate (Fig. 29) located on top of Tractor Frame. Remove the Cover Plate.
- Loosen Jam Nut (G) on Brake Rod (B) at Clevis (C) (Fig. 30). If you find it difficult to loosen Jam Nut(G), remove Cover Plate in L.H. Frame Rail.
- c. Rotate Brake Rod (B) counterclockwise (►) turning Brake Rod out of Clevis (C) four to six turns.
- d. Start Tractor with Transmission in "N" (neutral) position. Refer to Starting The Engine (page 5).
- e. Depress Clutch/Brake Pedal to the point where the Belt stops moving. Hold Clutch/Brake Pedal in position by engaging Parking Brake. If Belt begins to move after engaging Parking Brake, depress Clutch/Brake Pedal to next notch on Parking Brake.
- f. Shut Engine off. Rotate Brake Rod (B) clockwise () by hand, turning Brake Rod into Clevis (C), until tight. Tighten Jam Nut (G) on Brake Rod (B) at Clevis (C) (Fig. 30).
- g. Reinstall Shift Cover Plate and four (4) Mounting Screws. If Cover Plate in L.H. Rail was removed in step (b), it should be replaced.

Tire Care

- Maintain Tire pressure in Front Tires at 14 PSI (1 Kg/cm²) and in Rear Tires at 10 PSI (0.7 Kg/cm²).
- b. Keep Tires free of gasoline, oil, or insect control chemicals which can destroy rubber.
- Avoid stumps, stones, deep ruts and other hazards that may cause tire damage.
- d. Removing Front Wheel for tire repair (Fig. 31)
 - 1. Block up Front Axle securely.
 - Remove Hub Cap, Klip Ring, and Washers to allow Wheel removal.
 - Repair Tire and reassemble. Replace Washers and snap Klip Ring securely in Axle groove. Replace Hub Cap.
- e. Removing Rear Wheel for Tire repair
 - 1. Block Rear Axle securely.
 - Remove Hub Cap and (5) Hub Botts to allow Wheel removal.
 - 3. Repair Tire and reassemble. Replace and tighten Hub Bolts and Hub Cap securely.



WHEN MOUNTING TIRES, BEADS MUST BE SEATED. OVERINFLATION CAN CAUSE A FATAL EXPLOSION.

ORAGE

Fuel System

It is important to prevent gum deposits from forming in essential fuel system parts such as the carburetor, fuel filter, fuel hose, or tank during storage. Also experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer.

- Drain Fuel Tank and Carburetor by allowing the Engine to run out of Fuel.
- b. Dispose of Gasoline if not to be used.

TE: GASOLINE STORED FOR SEVERAL MONTHS SES ITS VOLATILITY (ABILITY TO BURN EFFECELY).

Engine Oil

Refer to Kohler Engine Owner's Manual included with your Tractor for proper procedures.

3. Cylinders

Refer to Kohler Engine Owner's Manual included with your Tractor for proper procedures.

4. Battery

- Remove Battery if Tractor is not used regularly during winter months. Store in a cool, dry place (above 50°F).
- b. Re-charge each month if necessary.

NOTE: BATTERIES NOT IN USE FOR SEVERAL MONTHS AND NOT KEPT FULLY CHARGED PRODUCE SULPHATE DEPOSITS ON PLATES WHICH CANNOT BE REMOVED BY RECHARGING.

5. General Cleaning

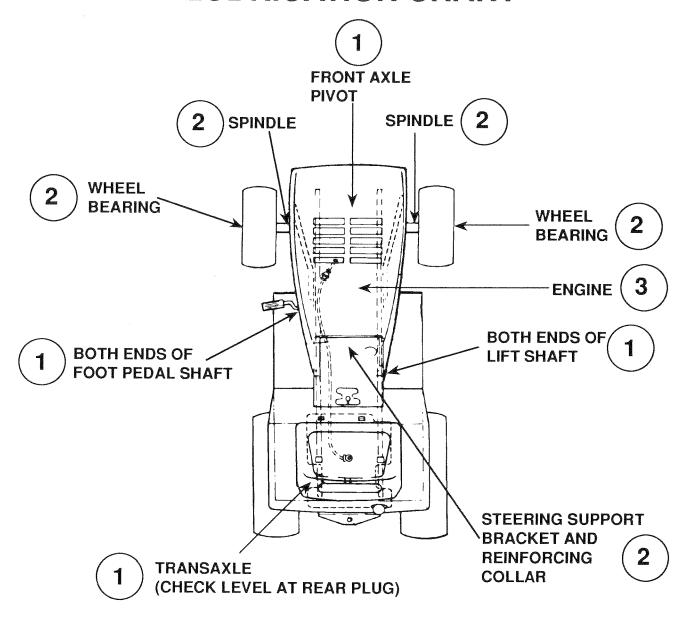
Clean Engine, Battery, Seat, finish, etc. of all foreign matter.

6. Store in a Clean, Dry Area

SERVICE RECORD				RS/C	URS/C	JPS.	JUV	25/	JRS			
FILL IN DATES AS YOU COMPLETE REGULAR SERVICE	AC	MEEDED	JERY JERY	25 H	URS 50 HC 50 HC	JRS 100 VER	120	SEF	RVIC	ΕD	ATE	ES
Change Engine Oil		V										
Lubricate Pivot Points (see page 14)		V										
Check Brake Operation	/											
Clean Air Screen												
Clean Air Filter and Precleaner												
Replace Air Cleaner Paper Cartridge												
Clean Engine Cooling Fins												
Replace Spark Plug												
Check Battery Level												
Check Tire Pressure												
Replace Fuel Filter												
Clean Battery and Terminals												
Check Muffler												
Lubricate Ball Joints				1								
Carburetor Adjustment												
V-Belt Adjustment												

American Yard Products, Inc. reserves the right to make any changes in design or improvements without imposing any obligation to install the same upon it's items heretofore manufactured.

LUBRICATION CHART



- 1 SAE 30 (SD, SE OR SF) MOTOR OIL
- 2 EXTREME PRESSURE LUBRICATING GREASE
- REFER TO ENGINE OIL SPEC'S IN KOHLER ENGINE OWNER'S MANUAL INCLUDED WITH YOUR TRACTOR

OWER INSTALLATION

Remove banding from Suspension Arms and Gauge Wheels. Set Gauge Wheels aside for later assembly. Slide Mower under Tractor, Deflector to right hand side.

Slide Front Suspension Brackets into Mower Brackets. Retain with Release Pins (Fig. 33). Turn Depth Adjustment Knob counterclockwise() until it stops. Push Attachment Lift Lever forward to lower mower linkage.

Slide Studs through Lift Links on both sides of Tractor (Fig. 32). Retain with Washers and Retainer Springs.

Place the Suspension Arms on Brackets on both sides of Frame (Fig.32). Retain with Washers and Retainer Springs.

Turn Depth Adjustment Knob (Fig. 33) clockwise (< √) to remove slack from Mower Suspension.

Roll Mower Drive Belt over Primary Mandrel (Fig. 34). Pull Mower Drive Belt over Front Mower Suspension Bracket (Fig. 35).

Insert Gauge Wheel Bar into Bracket. Retain with Clevis Pin and Retainer Spring (Fig. 36).

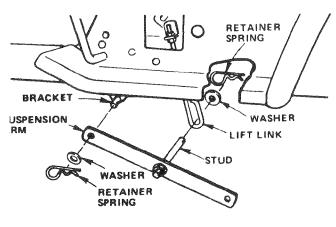


FIGURE 32

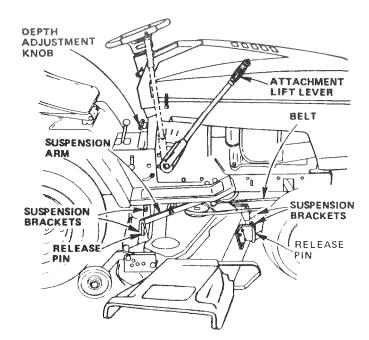


FIGURE 33

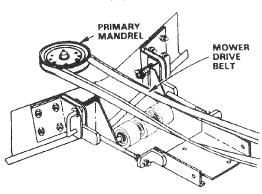


FIGURE 34

MOWER SUSPENSION

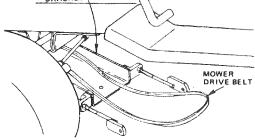
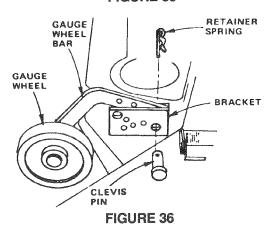


FIGURE 35



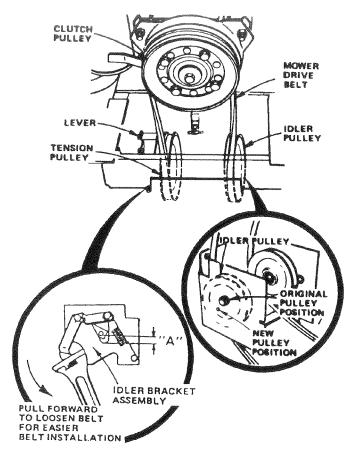
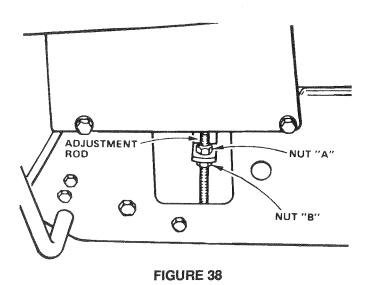


FIGURE 37



DRIVE BELT INSTALLATION

Place Mower Drive Belt over Clutch Pulley and under Idler Pulley and Tension Pulley (Fig. 37). NOTE: PULL LEVER UP TO SWING TENSION PULLEY FOR BELT CLEAR-ANCE. Make sure narrow "V" side of Belt is engaged with each pulley.

BELT ADJUSTMENT

- Lower mower.
- If dimension "A" on Idler Bracket Assembly measures 1/4" or less, Mower Drive Belt must be adjusted (Fig. 37 - Inset).
- Move Attachment Clutch Switch to disengaged position (Fig. 43).
- 4. Remove Bolt, Flat Washers, Lockwasher and Nut from Idler Pulley (Fig. 37 Inset) (original position).
- Place V-Belt and Idler Pulley in "NEW" Pulley position (Fig. 37- Inset). Replace Bolt, Flat Washers, Lockwasher and Nut. Tighten securely.
- Check V-Belt for proper installation on all Pulley Grooves.

MOWER ADJUSTMENT

With the engine stopped, adjust the mower while tractor is parked on level ground or driveway. NOTE: MOWER SHOULD BE IN LOWEST CUTTING POSITION. Make sure tire pressures are correct.

SIDE TO SIDE ADJUSTMENT

- Use a ruler to make sure bottom of curl at REAR of mower deck are the same height from the ground on each side. Measure from points indicated w/arrows (Fig. 41).
- 2. If adjustment is required, snap out Access Cover on L.H. side of tractor above Foot Rest (Fig. 38).
- 3. Move Attachment Lift Lever to full "UP" position (Fig. 39).
- To lower right side of mower, loosen Nut "B" and screw Nut "A" down on Adjustment Rod (Fig. 38).
- 5. To lower left side of mower, loosen Nut "B" and screw Nut "A" up on Adjustment Rod.
- Adjust until both rear mower flanges are the same height from bottom of curl to ground level.
 Tighten Nuts "A" and "B" securely. Snap Access Cover in place.

IONT TO REAR ADJUSTMENT

ve Attachment Lift Lever to full "UP" position (Fig. 39). er leveling side to side, measure Bottom of Curl at R.H. int Flanges at FRONT AND REAR OF MOWER. The 1. Front Flange should measure 3/4" lower than at the 1. REAR flange (Fig. 41). If adjustment is required, follow procedure below.

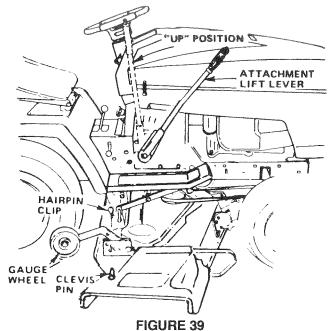
TO RAISE FRONT OF MOWER

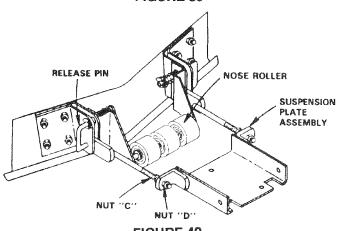
Loosen Nuts "D". Screw Nuts "C" up onto Suspension Arms (Fig. 40). NOTE: SCREW NUTS "C" ON BOTH SUSPENSION ARMS THE SAME NUMBER OF TURNS SO MOWER WILL REMAIN LEVEL. Tighten Nuts "D" securely.

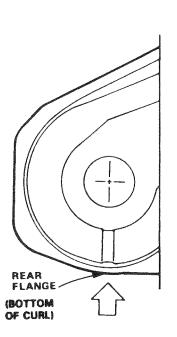
TO LOWER FRONT OF MOWER

Loosen Nuts "C", Screw Nuts "D" down Suspension Arms. NOTE: SCREW NUTS "D" THE SAME NUMBER OF TURNS SO MOWER WILL REMAIN LEVEL. Tighten Nuts "C" securely.

With mower deck at desired height, set Gauge Wheels (Fig. 39) to lowest position without touching the ground. adjustment Lift Lever to set mower at the approximate ting height you need. Use Clevis Pins (Fig. 39) to set use wheels at lowest point without touching the ground.







MOWER DECK - TOP VIEW

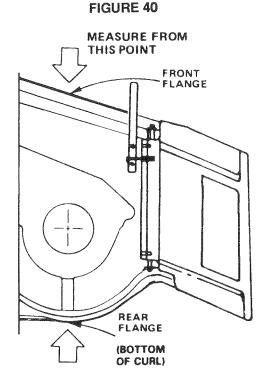


FIGURE 41

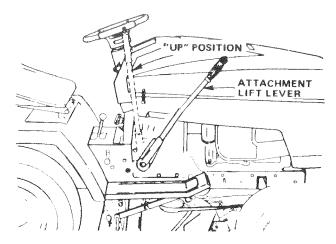
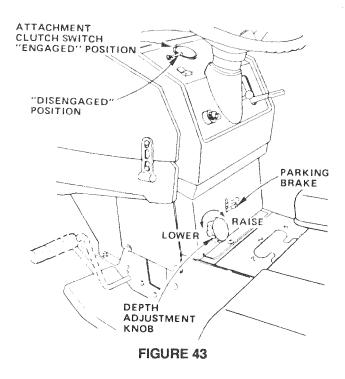


FIGURE 42



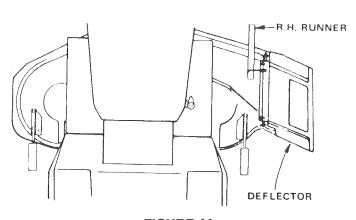


FIGURE 44

MOWER OPERATION

When ready to mow, lower Attachment Lift Lever (Fig. 42) to preferred mower height. Select a gear that allows mowing at full throttle. This allows the mower blades to lift and cut (the grass efficiently.



BEFORE DRIVING THE TRACTOR, INSTALL MOWER OR REMOVE FRONT MOWER SUSPENSION BRACKET.

NOTE: THIS TRACTOR IS EQUIPPED WITH AN OPERATOR PRESENCE SENSING SWITCH. ANY ATTEMPT BY THE OPERATOR TO LEAVE THE SEAT WITH THE ENGINE RUNNING AND THE ATTACHMENT CLUTCH ENGAGED WILL SHUT OFF THE EINGINE.

MOWER ENGAGEMENT

Pull Attachment Clutch Switch (Fig. 43) out and up to engage clutch. There will be an engine hesitation as the clutch engages.

DEPTH ADJUSTMENT

Fine adjustment of mower height is controlled by the Depth Adjustment Knob. Turn clockwise (~1) to raise mower. Turn counterclockwise ((\sim)) to lower mower (Fig. 43).



NEVER REMOVE DEFLECTOR. KEEP HANDS AND FEET FROM UNDER MOWER.

Use the Runner on the right hand side as a guide; the blade cuts approximately an inch outside the runner (Fig. 44).

CAUTION

- 1. Keep all Shields in place
- 2. Before leaving operator's position:
 - a. Shift transmission to neutral.
 - b. Set parking brake.
 - c. Disengage attachment clutch.
 - d. Shut off engine.
 - e. Remove ignition key.



NEVER ENGAGE ("ENGAGE" POSITION) MOWER EXCEPT WHEN SITTING ON TRACTOR SEAT.

TIRE CHAINS CANNOT BE USED WITH THE MOWER HOUSING ATTACHED.



READ THE "RULES FOR SAFE OP-ERATION" CAREFULLY BEFORE OPERATING YOUR MOWER.

- Wait for all movement to stop before servicing machine.
- Keep people and pets a safe distance away from machine.
- 5. Use Attachment Lift Lever to lower mower into cutting position. Average cutting height is approximately 2-1/2 to 2 3/4 inches. Height of cut can be adjusted by means of the Depth Adjustment Knob (Fig. 43). Turn Depth Adjustment Knob clockwise () or counterclockwise () to match preselected Lift Control Lever mowing height.

Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting. When mowing large areas (Fig. 45), start by turning to the right so that the clippings will be discharged away from shrubs, fences, driveways, etc. After two or three rounds, mow in the opposite direction making left hand turns until finished. If grass is extremely tall, it should be mowed twice. The first time cut relatively high. The second time to the desired height. The left hand side of mower should be used for trimming.

OWER MAINTENANCE ISTRUCTIONS

BEFORE MAKING ANY INSPECTION, ADJUSTMENT OR REPAIR: PUSH TRACTOR CLUTCH-BRAKE PEDAL COMPLETELY INTO BRAKE POSITION. MOVE GEAR SHIFT CONTROL LEVER TO "N" NEUTRAL POSITION. PLACE PARKING BRAKE IN "ENGAGED" POSITION. DISENGAGE ATTACHMENT CLUTCH SWITCH (FIG. 43).



SHUT OFF THE ENGINE. MAKE ABSO-LUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED. REMOVE THE IGNITION KEY. DISCONNECT THE SPARK PLUG WIRES FROM THE SPARK PLUGS AND KEEP WIRES AWAY FROM THE PLUGS TO PREVENT INJURY FROM ACCIDEN-TAL STARTING.

ADE CARE

best results, mower blades must be kept sharp. The des can be sharpened with a few strokes of a file or on rinding wheel. We suggest they be sharpened after ry 15 hours of mowing. Do not attempt to sharpen while nower. If you mow in sandy soil check the blades after h two mowings. The sand wears the blade away rapidly. When grinding, care should be taken to maintain blade balance and the blade should be checked for proper balance before reinstallation on mower. Unbalanced or bent blade will cause excessive vibration when running and eventual damage to mower or engine. Replace bent or damaged blades.

To check Blade balance, drive a nail into a beam or wall. Leave about one inch of the straight nail exposed. Place Center Hole of clean Blade over the head of the nail (Fig. 46).

TE CENTER HOLE OF BLADE ON NAIL. IF BLADE IS DPERLY BALANCED, BLADE SHOULD REMAIN IN SITION SHOWN IN FIG. 46. IF EITHER END OF THE IDE MOVES DOWNWARD, BLADE IS NOT BALCED AND MUST BE REPLACED.

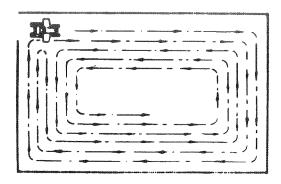


FIGURE 45

To ensure satisfactory operation, it is recommended that before the start of each mowing season, the old blades be discarded and replaced with new blades.

BLADE REPLACEMENT

It is not necessary to remove mower from tractor for blade replacement. Raising the Attachment Lift Lever will permit access to blades.

- 1. Remove the Hex Head Bolt, Lockwasher and Flat Washer (Fig. 47).
- Install new blade with SHARP EDGE DOWN and secure with Flat Washer, Lockwasher and Hex Head Bolt. TIGHTEN SECURELY.



ALWAYS USE GRADE 5 HEAT TREATED BOLTS TO ATTACH BLADES. CHECK BOLTS IN BLADES OCCASIONALLY TO MAKE SURE BOLTS ARE TIGHT. TORQUE BOLTS TO 25 - 35 FT. LBS.

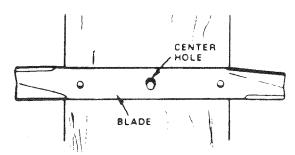


FIGURE 46

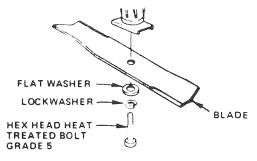


FIGURE 47

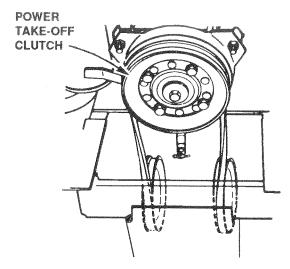


FIGURE 48

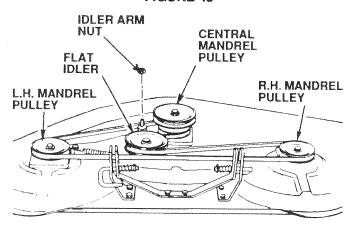


FIGURE 49



A GRADE 5 HEAT TREATED BOLT CAN BE IDENTIFIED BY THREE LINES INDICATED ON THEBOLTHEAD AS SHOWN AS LEFT.

DAILY MAINTENANCE

Make sure all nuts on bolts are tight, cotter pins and retainer springs are secure. Keep blades sharp. Observe all safety precautions. Keep mower will lubricated.

AS NEEDED

Make sure all nuts on bolts are tight and cotter pins are secure. Observe all safety precautions. Keep Tractor well lubricated.

CLEANING MOWER



DISCONNECT SPARK PLUG WIRES TO PREVENT ACCIDENTAL STARTING BEFORE CLEANING.

Water pressure from a garden hose will remove fresh clipping from underside of mower. Clean mower after each mowing.

POWER TAKE - OFF CLUTCH

The Power Take-Off Clutch (Fig. 48) should provide years of service. The Clutch incorporates a built in brake that stops the Pulley almost immediately. Eventually, the internal brake will wear so the mower blades will not stop as recommended. Adjustment should be made by an AYP Service Technician.

OUTER BLADES DRIVE BELT (CENTER TO OUTER MANDRELS)

BELTROUTING DECAL UNDER MOWER DECK COVER.

- 1. Remove Mower from Tractor.
- Remove Top Cover Screws and Nut from Idler Arm Bolt.
- 3. Roll Belt over the top of the R.H. Mandrel.
- 4. Pull Belt off all other Mandrels.
- 5. Remove any dirt and grass which may have accumulated around Mandrels and Idler Arm.
- 6. Check Deck Idler Arm Assembly and Flat Idler to see that they rotate freely (Fig. 49).
- 7. Be sure spring is hooked in Deck Idler Arm Assembly and on bolt in Mower Housing (Fig. 49).
- 8. Install new Belt in groove of L.H. Mandrel Pulley, lower groove of Center Mandrel Pulley and around Flat Idler as shown (Fig. 49).
- 9. From a position at discharge end of mower, roll Idler Belt into groove of R.H. Mandrel Pulley (Fig. 49).
- 10. Rotate Center Mandrel Pulley by hand to make sure Belt is in grooves properly.



BLADES WILL ROTATE WITH CENTER MANDREL SHEAVE.

- 11. Reassemble Top Cover to Deck. Tighten all Screws securely.
- 12. Install Mower to tractor.

MOVING MOWER FROM TRACTOR

Lower Mower using Attachment Lift Lever.

Pull the four (4) Release Pins out of Suspension Brackets (Fig. 50).

Pull back on Attachment Lift Lever and lock into place. Slide Mower forward and remove Belt from Primary Mandrel.

Slide Mower out from under tractor. The Attachment Lift Lever must be in the highest position.

TE:IF AN ATTACHMENT OTHER THAN THE MOWER CK IS TO BE MOUNTED ON THE TRACTOR, THE L.H. D. R.H. SUSPENSION ARM (Fig. 50) SHOULD BE MOVED FROM TRACTOR.

TE: WHEN OPERATING TRACTOR WITHOUT WER, REMOVE IDLER BRACKET FROM FRONT OF ACTOR.

Pull Belt up through Idler Bracket and out of tractor. Use Lever to swing Tension Pulley for Belt removal.

Remove Lockwashers and Nuts from Idler Bracket.

ORAGE

nove mower from tractor for winter storage. When wer is to be stored for a period of time, clean it thorphly, remove all dirt, grease, leaves, etc. Give blades I underside of housing a good coat of grease or rust ventative. Store in a clean, dry area.

TACHMENT LIFT ADJUSTMENT

TE: ONLY INSTALLED ON TRACTORS WITHOUT E ELECTRIC LIFT ASSIST.

to different weights of Attachments, the Attachment. Spring may require adjustment. The adjustment Bolt is ated on rear of tractor top left side (Fig. 51).

Holding Spring Bushing with Wrench, loosen Jam Nut.

Turn Adjustment Belt clockwise (Ct) to extend Spring

Turn Adjustment Bolt clockwise() to extend Spring and reduce lift effort (for heavier Attachment).

Turn Adjustment Bolt counterclockwise () (for lighter Attachments).

Retighten Jam Nut against Spring Bushing.

TE: DO NOT ADJUST FOR MAXIMUM SPRING ISION WHEN USING LIGHT ATTACHMENTS SUCH A MOWER. ADJUST LIFT SPRING TO AID IN LIFTING FACHMENT. DON'T OVER POWER SPRING. WHEN MOVING ATTACHMENT, ALWAYS ADJUST WITH RING TENSION TO ITS LOWEST POSITION.

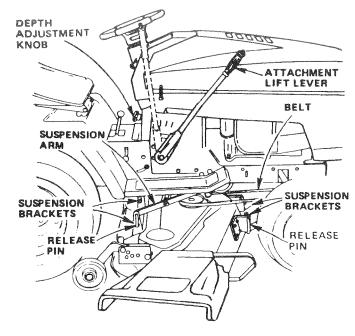


FIGURE 50

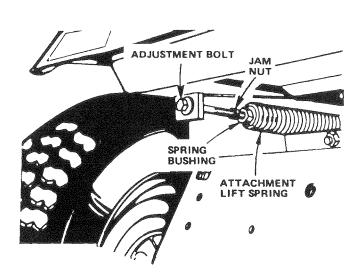


FIGURE 51

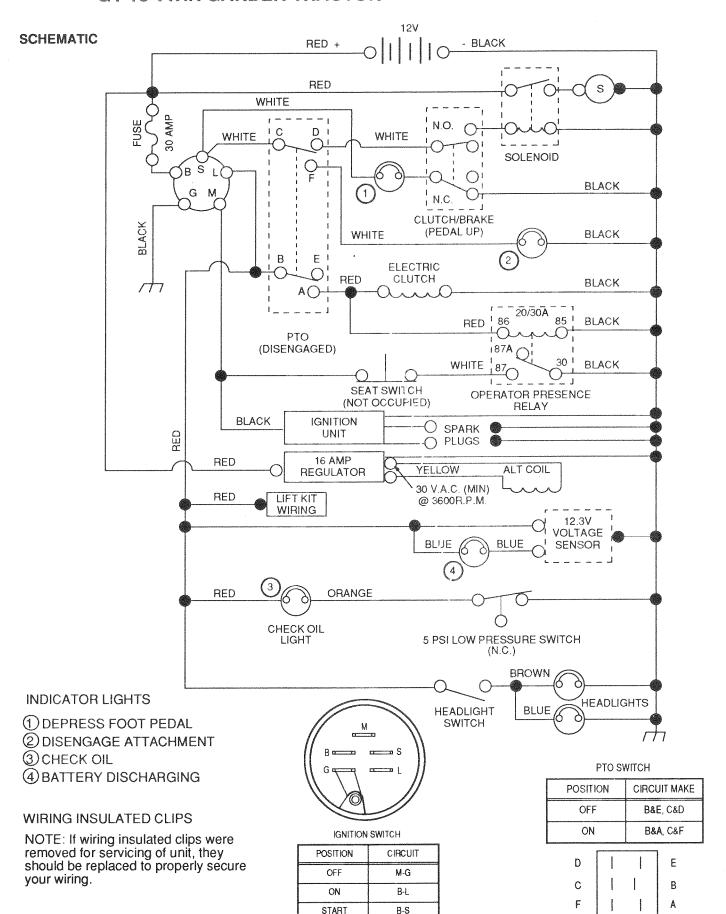
TROUBLE SHOOTING

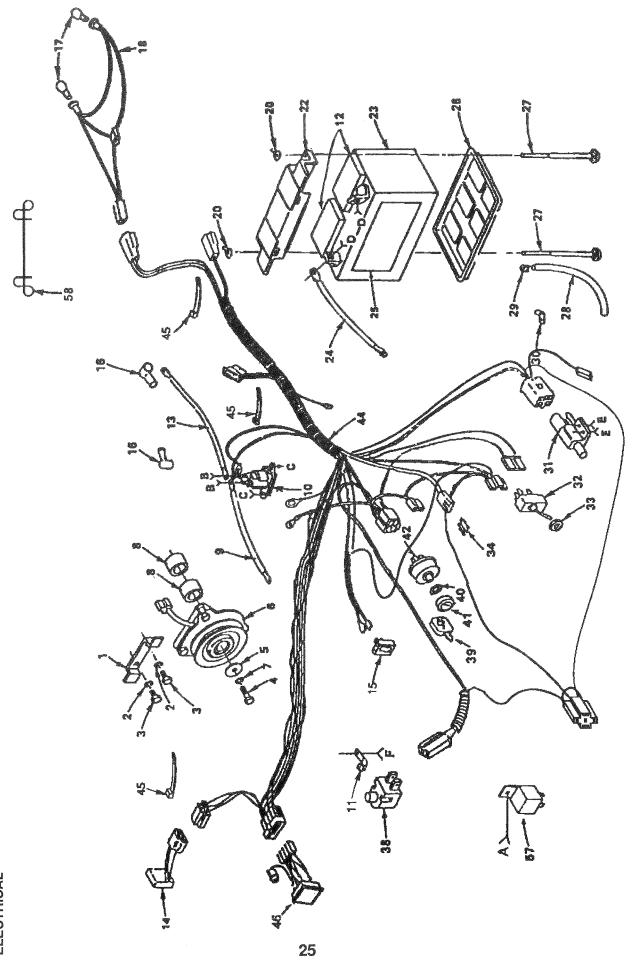
POSSIBLE CAUSE	POSSIBLE REMEDY
NO LIGHTS No Headlights with Light Switch in "ON" position and Engine running	Check wire Connection and Switch Replace Light Bulbs
WON'T CHARGE Blown Fuse Defective Battery or loose Wiring	Check for fault and replace Fuse Repair Wiring or replace Battery
OPERATOR PRESENCE SYSTEM WILL NOT SHUT DOWN ENGINE WHEN OPERATOR LEAVES SEAT NOTE: This Tractor is equipped with an operator presence sensing system. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut down the engine.	Engage Attachment Clutch Check all Wire Connections Check Seat Switch Check Operator Presence Relay Check PTO Switch
INDICATOR LIGHTS LIT	"Check Oil": Check oil level Check oil pump Oil could be too light or diluted "Battery Discharging": Move Throttle Control to fast position "Depress Foot Pedal": Push Clutch/Brake pedal into brake position "Disengage Attachment": Move Attachment Clutch switch to disengaged position

ENGINE TROUBLESHOOTING - Refer to your Kohler Engine Owner's Manual included with Tractor

SERVICE NOTE

GT 18 TWIN GARDEN TRACTOR





18 H P GARDEN TRACTOR

ELECTRICAL

															1/4-20 x 1/2					32 x 1 - 1/2	!					Slope (Enalish)	Slope (French)	/
DESCRIPTION	Switch - P.T.O. Nut - Hex	Fuse - 30 Amp	Nut - Keps No. 10- 32	Switch, Seat	Key.	Nut - Ignition	Bezel, Ignition	Switch - Ignition	Screw-Slot-Pan HD 10-32x1/2	Harness - Ignition	Cable Tie	Light Package	Lockwasher 1/4	Nut, Hex Jam 1/4 - 20	Screw - Hex Washer Hd. Cutting 1/4-20 x 1/2	Bolt - Hex Hd. 1/4 - 20 x 3/4	Washer 9/32 x 5/8 x 16 Ga.	Lockwasher 1/4	Nut-Hex 1/4-20	Screw- Hex Washer Hd, No. 10-32 x 1 - 1/2	Assembly - Relay	Tie, Wire	Lockwasher, Ext. Tooth 3/8	Owner's Manual (English)	Owner's Manual (French)	Sheet - Instruction, Tractor 15° Slope (English)	Sheet - Instruction, Tractor 15° Slope (French)	
KEY PART NO. NO.	32 109626X 33 4022J	34 6347R	35 73951000					42 4406R	43 74641008		15 7192J		47 10090400			50 74760412		4		•			39 11050600	- 124609X	- 124610X	- 101539X	- 101572X	
DESCRIPTION	Stop - Clutch Washer- Lock, 3/8	**	Bolt-Hex 7/16 - 20 x 1 - 1/2 GR5	Washer	Clutch - Electric	Washer - Lock 7/16	Spacer - Clutch	Cable - Battery	Solenoid	Olip - Insulated	Battery Caps	Cable - Starter	Sensor, Low Voltage	Switch - Light	Cover - Terminal	Bulb - Light	Harness - Light Socket	Nut Wing 1/4 - 20	Guard - Terminal	Battery	Cable Ground	Decal, Battery	Tray - Battery	Bolf - Carriage 1/4- 20 x 7- 1/2	Tube- Plastic	Clamp- Hose	Qijo	Switch- Interlock
PART NO.	110882X 10040600	74780612	74610724	108252X	109550X	10040700	106367X	4206J	109081X	4171R	121264X	5115J	109554X	110712X	719J	7662J	110859X	123198X	102476X	121537X	4207J	121549X	7603J	72240460	100541K	109596X	100207K	109553X
Š Š	T (1)	က	4	Ŋ	မ	7	ω	တ	Ç	A	2	<u>ش</u>	7	ਨ	9	17	18	20	22	23	24	22	56	27	58	53	30	31

(a) 55 (b) 55 (c) 54 (d) 60 (d) 64 (e) 60 (e) 65 (f) 65

27

REPAIN PARTS

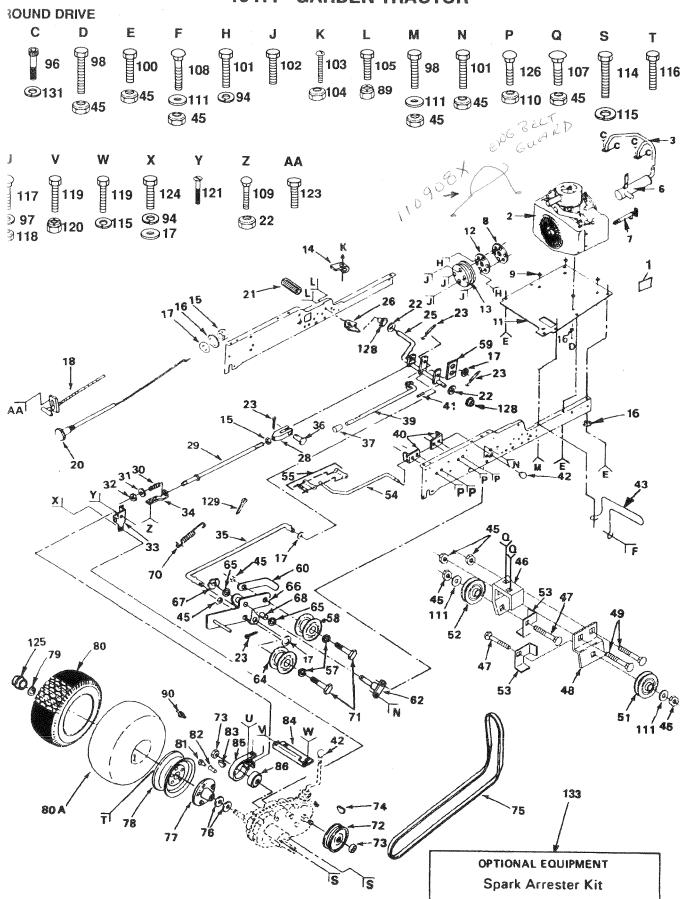
FRAME, FENDER AND DRAWBAR

18 H P GARDEN TRACTOR

DESCRIPTION	Roll 1/4-20 x 3/4 Type T Screw-Hex Washer Hd. Thd. Roll 5/16-18 x 3/4	1ype 1 Washer 11/32 x 3/4 x 12	Ga. Screw-Mach. Cr. Pan No.	10-24 x 1-1/4 Spacer Split No. 2/4	Washer 7/32 x 1/2 x 18 Ga.	Nut-Keps No 10-24	Bolt-Hex 7/16-14 x 1	Screw-Hex Washer Thread	Rolling 3/8 x 16 x 1/2	Bolt-Shoulder	Decal		Retainer, Belt, Lower	her 1	Ga.	Clip, Insulated	Xrob	Bolt Shoulder 5/16-18	Bracket Ass'y Pivot Frame	H.H.	DIACKEL ASS Y PIVOL FIRMINE	Washer-Lock 1/4-20 Int /	Ext. Tooth	Nut Wing 1/4-20	Boit-Hex, 3/8-16 x I-1/4	Bolt-Carr 1/4-20 x 1-1/4	Foam Strip	Spring, Compression	Spacer, Split	Bracket, Switch	Bushing, Snap	Nut-Flange Lock 1/4-20	Nut-Keps1/4-20
PART NO.	17490512	19111212	74981020	72061	19070818	73731000	74760716	17490608		105529X	108813X	123964X	105500X	19131312		4171R	120068X	121144X	110853X	>CU000+	1100027	11030400		, .	74/60620			121250X				123976X	/3510400
Κ Ö	77	78	79	ά	8 6	82	883	82		88	83	8	9	92		92	97	66 6	101	* C	106	103		104 40	550	107	108	109	110	A	7	<u> </u>	4
DESCRIPTION	Pad-Spacer Strap-Fender Fender	Decal-Caution Bracket-Pivot, Seat	Cover, Shirt-Gate Nut, Keps 5/16 - 18	Dash Assembly	Stem-Tank Fuel	Clamp-Hose	Fuel Line Drawbar	Rail-Frame-RH	Footrest-RH.	Decal-Hood RH.	Screw-Hex Washer Thread	Rolling 3/8-16 x 3/4	Bolt-Hex 3/8-16 x 3/4		Washer 9/32 x 3/4 x 16 Ga	Nut-Hex 1/4-20	Bolt-Hex 3/8-16 x 1	Washer 13/32 x 13/16 x 16	Ga.	Screw-Mach. Cr 1hd. 5/16-	10 × 3/4 Nint-Oronaniock E/46 48	Screw-Hex Washer Thd.	Cutting 1/4-20 x 1/2	Bolt-Carriage 5/16-18 x 3/4	SCIEW-UT. Fan. Macn.	Washer, Lock No. 10	Nut-Weld	Screw-Hex Washer Hd Tap	No. 10-16 x 5/8 Type AB	"J" Fastener	Bolt-Shoulder 1/4-20	Nut-Crownlock 1/4-20	screw-nex wasner Ind.
Y PART NO.	4- 4- 4- 4	•	•			123487X				•	17490612					73220400		19131316		/4180512		17240408			/4191008	10071000							21408171
Ä Š	4444	444	44	4 8 0	200	Ω.	522	54	55	56	57	ı	58	29	9	6	63	64	i.	69	99	679		დ დ	20	70	71	72	ľ	133	/4	122	0
DESCRIPTION	Strip, Foam Decal-Hood, GTK18 Panel-Side, L.H.	Decal-Hood, L.H.	Strap Assembly-Hinge, Rear	Strap Assembly-Hinge, Front	Bezel Assembly	Lens	Grill Assembly Strap-Grill	Support-Grill, R.H.	Support-Grill, L.H.	Latch-Hood	Panel-Side, RH.	Support-Battery	Hood	Dashboard	Plug-Dash	Dashplate	Pan-Seat	Seat	Decal, Safety Std.	Decal-Clutch/Brake				Rail-Frame-L.H.	Reflector-Tailiignt Clip-Insulated	Screw, Mach, hd. 5/16 -	18 × 3/4	Spring-Compression	Washer,11/32 x 11/16 x	16Ga	Nut-Push	Bracket-Fender	Cap-ruel Tank-Fuel
PART NO.	109458X 124053X 121888X388	123965X	106/84X	104618X	104613X	106395X	122100X 105419X388	110854X	110855X	109808X	121887X388	7985	121886X388	121312X	8022J	121448X011	124294X	110840X	7000	101892X 108256X	105465Y388	123243X		110893X	106202X 2751B	74180512		124181X	19111116	i i	105531X	105509X	123549X 106020X
Ж Б Б	← ⟨ の ▽	4 rv c	ا و	_	∞	თ :	<u> </u>	<u>2</u>	೮	Ť.	16	<u>_</u>	σ	<u>ტ</u>	20	N	22	33	2 c 4 r	ກິດ	210	5 7 8 7 8				9 6 4	•	35	36				86

EPAIR PARTS

18 H P GARDEN TRACTOR



REPAIR PARTS

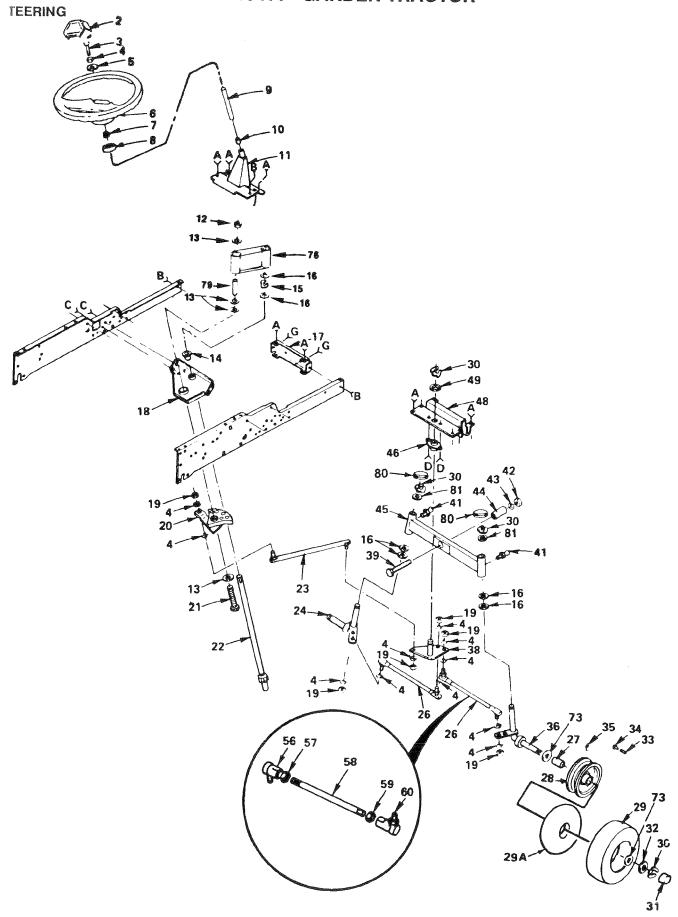
18 H P GARDEN TRACTOR

GROUND DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	123249X	Decal, Engine	67	12000039	Klip Ring
2	M18S	Engine, 18 H.P. Spec. AYP #	68	105706X	Bearing, Idler
		124611X	70	121357X	Spring, Extension
3	110891X	Tube Assembly - Exhaust	71	74760628	Bolt, Hex 3/8-16 x 1-3/4
6	122546X	Muffler - Exhaust	72	120332X	Pulley, Transaxle
7	9767H	Oil Drain Valve	73	9204H	Nut, Lock, 1/2-20
8	110947X	Chaff Guard	74	9858M1	Key - Woodruff 3/16 x 5/8
9	110869X	Spacer	7 5		V-Belt
11	110867X	Base - Engine	76	110883X	Washer, Thrust, Axle
12	104577X	Adapter		7563R	
13	121355X	Pulley - Ground Drive	77	634A692	Bushing Assembly and Wheel Hub
		Actuator- Switch, Interlock	78	106277X361	Rim Assy. Rear
14	5304J		79	12000034	Klip Ring
15	73610600	Nut - Hex, 3/8-24	80	4607R	Tire, Rear
16	11050600	Washer, Lock Ext. Tooth, 3/8	80A	7154J	Tube, Rear(Not furnished with
17	19131316	Washer, 13/32 x 13/16 x 16 Ga.			tractor)
18	121467X	Control, Throttle	81	59192	Cap, Valve
20	121470X	Control, Choke	32	65139	Stem, Valve
21	8883R	Cover, Pedal	83	2228M	Key, Woodruff No. 9(3/16 x 3/4)
22	121749X	Washer, 25/32 x 1-1/4 x 16 Ga.	84	120404X	Bracket, Support, Transaxle
23	76020312	Pin, Cotter, 3/32 x 3/4	85	101122M	Band, Brake
25	104375X	Shaft, Foot Pedal	86	214J	Drum, Brake
26	104601X	Bracket, Interlock	89	73680400	Nut, Crownlock 1/4-20
28	100604K	Yoke	90	6856M	Fitting, Grease
29	5308J	Rod, Brake	94	10040600	Lockwasher, 3/8
30	7241J	Spring, Compression	96	74570512	Screw, Hex Socket Hd. 5/16-16 x 3/
31	19131614	Washer, 13/32 x 1 x 14 Ga.	97	10040400	Lockwasher, 1/4
32	73530600	Nut-Lock, 3/8-24	98	74760620	Bolt - Hex 3/8-16 x 1-1/4 Gr. 5
33	677A637	Bracket, Brake		74760612	Bolt, Hex 3/8-16 x 3/4
34	7229J	Guide, Rod, Brake		74780616	Bolt, Hex Head 3/8-16 x 1 Gr. 5
35	101356L	Rod, Clutch		17190516	Screw, Hex 5/16-18 x 1
36	5102J	Pin, Clevis		74321016	Screw- Fin 10-24 x 1
37	71673	Cap, Plunger		73631000	Nut. Lock No. 10-24
39	109767X	Rod, Parking Brake		74760412	Bolt-Hex Head 1/4-20 x 3/4
40	105598X	Bracket, Rod, Shift			Bolt, Carriage 3/8-16 x 3/4 Gr. 5
41	5142H	Pin, Roll, 3/16 x 1-1/4		72110606	
42	121466X	Knob		72140610	Bolt, Carriage 3/8-16 x 1-1/4
43				72110506	Bolt, Carriage 5/16-18 x 3/4
45 45	108885X	Muffler, Guard		73/380500	Nut, Lock 5/16-18
	73680600	Nut, Lock, 3/8 - 16		19131612	Washer, 13/32 x 1 x 12Ga.
46	121063X	Bracket, V-Pulley, Drive, Mule		74760720	Bolt, Hex 7/16-14 x 1-1/4
47	72110614	Bolt, Carriage, 3/8 - 16 x 1-3/4		10040700	Lockwasher, 7/16
48	122825X	Bracket, Idler, Flat		1304H	Bolt, Hub
49	72140606	Bolt, Carriage, 3/8 - 16 x 3/4	117	72140405	Bolt, Carriage, 1/4-20 x 5/8
51	102403X	Idler, Flat		73220400	Nut-Hex 1/4 - 20
52	101344L	Pulley, Idler		74760716	Bolt-Hex 7/16 - 14 x 1
53	122824X	Keeper, Belt	120	73680700	Nut-Crown I ock 7/16 - 14
54	122253X	Rod - Shift, Hi - Lo	121	74370612	Screw, Mach. Udrcut. Flat Head,
55	122268X	Connecting Link, Spring Clip			3/8-16 x 3/4
57	19131413	Washer, 13/32 x 7/8 x 13 Ga	122	1685H	Nut, Lock 5/16-18
58	104360X	Idler, Flat		17720410	Screw, Hex 1/4-20 x 1/2
59	121358X	Retainer, Spring		74760614	Bolt, Hex 3/8-16 x 7/8
60	121360X	Retainer, Belt		104758X	Cap-Hub, Rear
62	101358K	Bracket Assembly- Clutch		72140506	Bolt-Carriarge 5/16-18 x 3/4
64	121361X	Idler, Grooved		110895X	Nyliner
65	207J	Washer, Hardened		76020816	Pin, Cotter 1/4x 1
66	121356X	Bracket, Clutch W/Bearing (Incl.		10170500	Lockwasher 5/16
		Key No. 68)		120689X	Spark Arrester Kit
		1103 110.001	100	1200037	opain miestei nii

EPAIR PARTS

18 H P GARDEN TRACTOR

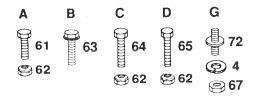


REPAIR PARTS

18 H P GARDEN TRACTOR

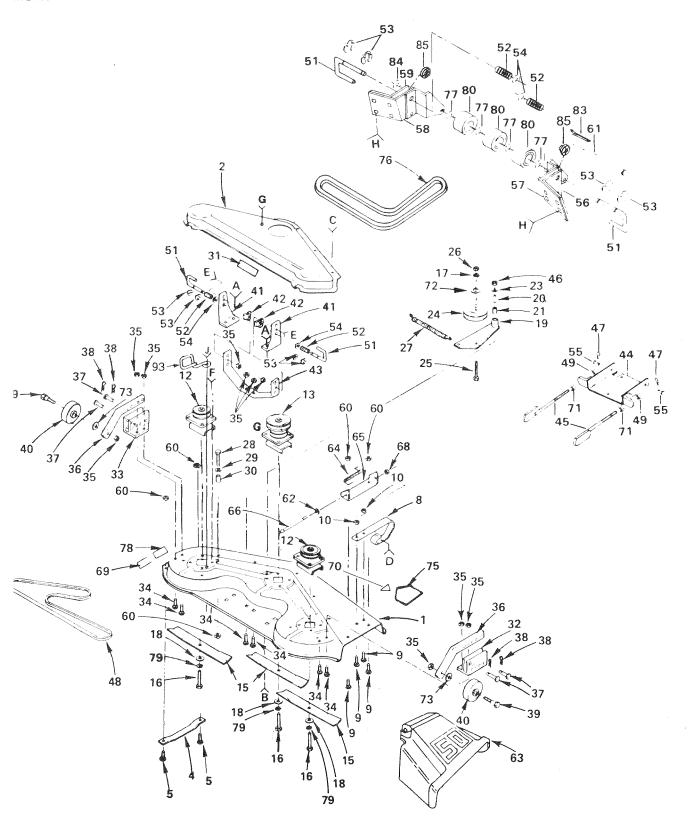
STEERING

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
NO. 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 4 26 27 28 29 A 30 31	NO. 121584X 74780616 10040600 19133808 121472X 100711L 106943X 108540X 9038R 101274N 73680800 19172610 104239X 12000034 6266H 5213J 102439X 73610600 120424X 74780880 104591X 110497X 121168X 121159X 9040H 106228X361 3938R 8134H 12000029 104757X	Insert - Steering Wheel Bolt - Hex 3/8-16 x 1 Gr. 5 Washer - Lock 3/8 Washer 13/32 x 2-3/8 x 8 Ga. Wheel, Steering Adapter, Steering Spacer-Shaft Steering Tube, Shaft Bearing Support Assembly, Steering Nut, Lock 1/2-13 Washer 17/32 x 1-5/8 x 10 Ga. Bearing, Flanged Klip Ring Bearing, Thrust Bracket, Frame Front Bracket, Support, Steering Nut, Hex 3/8-24 Sector Assembly Bolt - Hex 1/2-13 x 5 Gr. 5 Shaft, Steering Link, Drag Spindle, L.H. Rod, Tie (Inc. Key #56-60) Bearing Rim Assembly - 8" Front Tire Tube (not furnished with tractor) Klip Ring Cap, Hub, Front	NO. 34536 389 41 42 43 445 46 48 49 56 57 58 59 60 61 62 63 64 65 77 78 80	NO. 65139 278H 121167X 108137X 74781044 6855M 73221000 10041000 5298J 677H999 5292J 5284J 19292016 121161X 73700600 121162X 73360600 121160X 74760612 73680600 17490612 74780616 74760616 74760615 74780616 74760615 74780616 74780616 74780616 74780616 74780616 74780618 74780618 74780618 74780618 74780618 74780618 74780618 74780618 74780618 74780618 74780618	Stem, Valve Fitting, Grease Spindle, R.H. Bellcrank Assembly Bolt-Hex 5/8-11 x 2-3/4 Gr. 5 Fitting, Grease Nut, Hex 5/8-11 Washer, Lock 5/8 Tube, Pivot, Axle Axle Assembly, Front Bushing, Bellcrank Bracket, Axle Washer 29/32 x 1-1/4 x 16 Ga. Joint-Tie Rod - L.H thread Nut Hex Jam 3/8-24 L.H. Rod-Tie Nut Hex Jam 3/8-24 Joint-Tie Rod-R H. Thread Bolt Hex 3/8-16 x 3/4 Nut- Lock 3/8-16 Screw- Hex Washer Thd. Rolling 3/ 8-16 x 3/4 Bolt-Hex 3/8-16 x 1 Gr. 5 Bolt-Hex 3/8-16 x 1 Nut-Hex 3/8-16 Pin Mounting, Idler Bracket Washer, 25/32 x 1-1/4 x 16 Ga. Collar Weld Ass'y. Tube Dust Cap Cover
32 33	121748X 59192	Washer 25/32 x 1-5/8 x 16 Ga. Cap, Valve	81	121748X	Washer 25/32 x 1-5/8 x 16 Ga.



PAIR PARTS

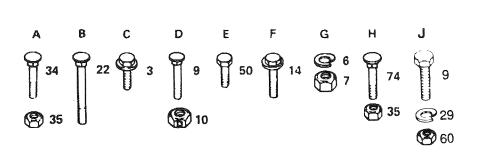
MOWER

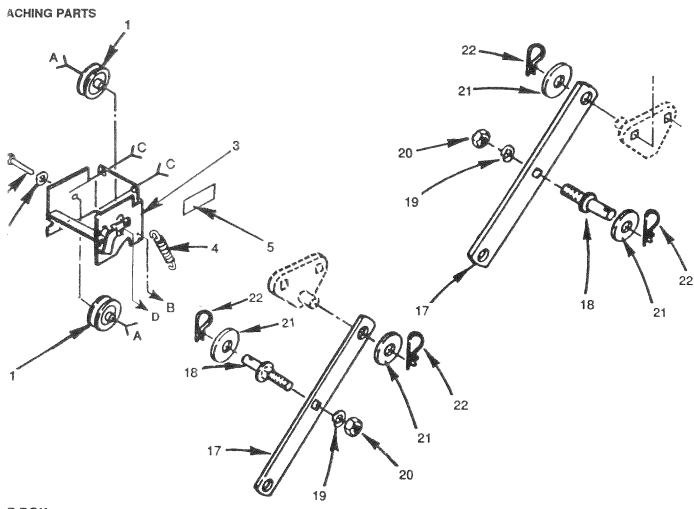


REPAIR PARTS

50" MOWER

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3	121664X 121811X 17490508 7631J	Housing, Mower Cover - Drive, Deck Screw - Hex Washer Thd. Roll 5/16 18 x 1/2 Runner, L.H.	42 43 44 45 46	110237X 105434X 109778X 109771X 73350500	Spacer Brace, Suspension Plate Assy., Mower Suspension Brkt., Suspension Nut - Hex 5/16 - 18
5 6	72110505	Bolt, Carr. 5/16 - 18 x 5/8			
7	10040500 73220500	Washer - Lock, 5/16 Nut - Hex 5/16 - 18	47 48	3146R 3703J	Retainer - Spring V-Belt
8	120449X	Runner, R.H.	49	73680800	Nut, Crownlock 1/2 - 13
9	72140506	Bolt, Carr. 5/16 - 18 x 3/4	50	74760622	Bolt, Hex 3/8 - 16 x 1 - 3/8
10	1685H	Nut, Lock 5/16 - 18	51	105435X	Pin, Release
12 13	121658X 121657X	Mandrel - Secondary	52 53	3720R	Spring
13	17490612	Mandrel - Primary Screw - Hex Washer Thd. Roll 3/8	53 54	12000039 19171612	Ring, Klip Washer 17/32 x 1 x 12 Ga _s
1-4	17430012	16 x 3/4	55	105440X	Pin, Clevis
15	121798X	Blade	56	105458X	Brkt., Outer, R.H.
16	74610624	Bolt - Hex, 3/8 - 24 x 1 - 1/2 Gr. 5	57	109773X	Brkt., Inner, R.H.
17	10040600	Washer - Lock, 3/8	58	110997X	Brkt., Inner, L.H.
18	19132012	Washer 13/32 x 1 - 1/4 x 12 Ga.	59	120000X	Brkt., Outer, L.H.
19 20	674A213 7834J	Arm Assembly, Idler	60	73680500	Locknut 5/16 - 18
20	7835J	Liner - Bearing Bearing	61	109776X	Pin, Pivot
22	72110522	Bolt, Carriage 5/16 - 18 x 2 · 3/4	62 63	19111016 110509X	Washer 11/32 x 5/8 x 16 Ga.
23	19111816	Washer 11/32 x 1-1/8 x 16 Ga.	64	10509X 106734X	Shield, Deflector Spring, Deflector
24	102403X	Pulley, Idler	65	109743X	Bracket, Deflector
25	74760624	Bolt - Hex 3/8 - 16 x 1 - 1/2	66	106735X	Rod, Hinge
26	73220600	Nut - Hex 3/8 - 16	68	110452X	Push Nut
27	104361X	Spring	69	3713J	Decal - Instruction, Caution
28 29	74780520 19111216	Bolt - Hex 5/16 - 18 x 1 - 1/4 Gr. 5 Washer 11/32 x 3/4 x 16 Ga.	70		Decal - Safety Standard (Not serviced)
30	8438J	Spacer Split	71	73220800	Nut - Hex 1/2 - 13
31	123247X	Decal - V-Belt, Dr. Schematic, Mower	72	19131614	Washer 13/32 x 1 x 14 Ga.
32	105448X	Bracket, Ga. Wheel, R.H.	73 74	19171512	Washer 17/32 x 15/16 x 12 Ga.
33	105449X	Bracket, Ga. Wheel, L.H.	74 75	72240608 121349X	Bolt, Carriage 3/8 - 16 × 1 Decal - Warning
34	72240606	Bolt, Carriage 3/8 - 16 x 3/4	76	11088.4X	V-Belt
35	73680600	Nut, Crownlock 3/8 - 16	77	19151610	Washer 15/32 x 1 x 10 Ga.
36	105453X	Bar, Ga. Wheel	78	105185X	Decal - Instruction
37	5565J	Pin, Clevis	79	10030600	Washer - Lock 3/8
38 39	4939M 4898H	Retainer, Spring Bolt, Shoulder	80	109729X	Roller, Nose
40	105455X	Wheel, Gauge	83	76020412	Spring Retainer
41	105433X	Brkt., Suspension	84	19151616	Washer 15/30 x 1 x 16 Ga.
. •		array adoptioning	85 93	120135X 121352X	Spacer Keeper LH.
			55	LIOULA	Neepel Lil.





P BOX

PART NO. 77A451 9133808 20542X 190J 23246X 4760632 9131413 0040600 3220600 4930516 00644K 9111416 3680500 4760636

)2933X

DESCRIPTION

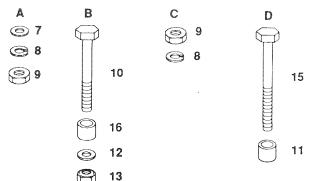
Pulley, Idler
Washer 13/32 x 2-3/8 x 8 Ga.
Bracket, Idler
Spring
Decal, Adjustment
Bolt, Hex 3/8 - 16 x 2
Washer 13/32 x 7/8 x 13 Ga.
Lock Washer 3/8
Nut, Hex 3/8 - 16
Bolt, Hex 5/16 - 18 x 1
Bushing, Handle, Clutch
Washer 11/32 x 7/8 x 16 Ga.
Locknut 5/16 - 18
Bolt, Hex 3/8 - 16 x 2-1/4
Spacer

SUSPENSION ARMS

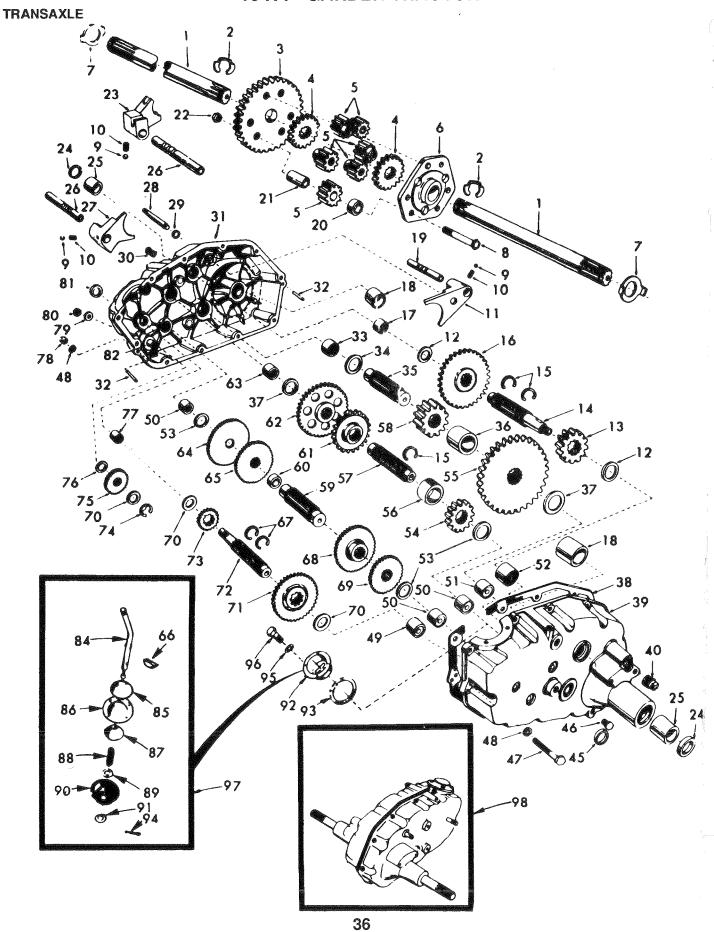
KEY PART NO. NO. 17 105429X 18 105413X 19 10040800 10 73220800 11 19171713 12 9135R

DESCRIPTION

Arm, Suspension Stud, Pivot Center Washer, Lock 1/2 Nut, Hex 1/2 - 13 Washer 17/32 x 1-1/16 x 13 Ga. Retainer Spring



18 H P GARDEN TRACTOR



18 H P GARDEN TRACTOR

NSAXLE

PART NO.	DESCRIPTION	KEY NO.		DESCRIPTION
4197R 12000034	Axle Shaft Retaining Ring	50 51	4222R 1529R	Needle Bearing Needle Bearing
4199R	Final Drive Gear	52	8119M	Needle Bearing_
4216R	Differential Gear	53	4220R	Thrust Bearing Race
4215R	Differential Pinion	54	4209R	3rd Reduction Pinion-Low
4217R 6256H	Differential Carrier Axle Thrust Washer	55 56	4213R 4442R	4th Reduction Gear
74020652	Hex Bolt 3/8-24 x 3-1/4 (1" Thread	57	4195R	3rd Reduction Pinion Spacer 2nd Reduction Gear Shaft
7-1020002	Length)	58	4214R	Final Drive Pinion
7392M	Steel Ball	59	4194R	1st Reduction Gear Shaft
6272H	Spring Shift Fork Detent	60	7528R	1st Reduction Shaft Spacer
4985R	Shift Fork, High-Low Range	61	4208R	3rd Reduction Plnion High
6266H	Thrust Bearing Race	62	4207R	2nd Reduction Gear
4212R	4th Reduction Pinion	63	7398H	Needle Bearing
4196R 6276H	3rd Reduction Gear Shaft	64	4203R	Low Speed Gear and 2nd
633A63	Snap Ring-Crescent Type High-Low Range Gears	65	4204R	Reduction Pinion Cluster Reverse Gear
8118M	Needle Bearing	66	2898J	Key-Hi-Pro) 1/8 x 17/32
8740H1	Sintered Iron Bearing	67	4926H	Snap Ring Crescent Type
122238X	Shift Fork Shaft, High-Low Range	68	4205R	Intermediate Speed Gear
4218R	Differential Pinion Spacer	69	4206R	High Speed Gear
6252H1	Differential Pinion Bushing	70	1370H	Thrust Bearing Race
7810H	Gripco Centerlock Nut 3/8-24	71	633A69	Intermediate and High Speed
4986R	Shift Fork-L.H.	70	0001	Cluster Pinions
7393R 992R1	Oil Seal	72	208J	Input Shaft
6216H	Sintered Iron Bearing Shift Fork Shaft	73 74	4201 R 12000002	Low Speed Pinion E-Ring
6262H	Shift Fork-R.H.	75	1153R	Reverse Idler Gear
122254X	Shift Shaft, High-Low Range	76	7392H	Reverse Idler Thrust Washer
6269H	Oil Seal	77	3990H	Needle Bearing
5855H	Pressure Relief Valve	78	73220500	Hex Nut 5/16-18
122162X	Gearcase, Reverse Idler Shaft and	79	1167R	Sealing Washer
	Bearings-R.H. (Inc. Key No's.	80	73360700	Hex Jam Nut 7/16-20
	17,18, 25, 33, 50, 63, 76, 77 and	81	6270H	Oil Seal
6277H	82) Dowel Pin	82 84	7384H 5384J	Reverse Idler Shaft
4225R	Needle Bearing	85	2978J	Gear Shift Lever - Bent Gear Shift Cap
7396H	Thrust Bearing Race	86	633A85	Gear Shift Ball Cover and Pin
4198R	4th Reduction Gear Shaft	87	8739HI	Shift Lever Guide Ball - Keyed
4200R	4th Reduction Gear Spacer	88	4924H	Spring
7395H	Thrust Bearing Race	89	19151516	Washer 15/32 x 15/16 x 16 Ga
121878X	Gearcase Gasket	90	110542X	Shift Mechanism Seal
122163X	Gearcase and Bearings L.H. (Inc.	91	19181511	Washer 9/16 x 15/16 x 12 Ga
	Key No's. 18, 25, 49, 50 (2),51 and	92	75J	Gear Shift Gate and Reinforcement
13320400	52) Pipe Plug 1/2-14 N.P.T.	93	6274H 76020412	Shift Ball Cover Gasket
6271H	Oil Seal	94 95	10040500	Cotter Pin 1/8 x 3/4 Lockwasher 5/16
13060200	Pipe Plug 1/4-18 N.P.T.	96	74760514	Hex Bolt 5/16 x 18 UNC x 7/8
74780524	Hex Bolt 5/16-18 x 1-1/2 Grade 5	97	633A109	Gear Shift Lever Assy.
10140500	Lockwasher 5/16 Extra Heavy	98	122420X	Transaxle Assembly Less Brake
1895H	Needle Bearing			Drum and Shift Lever

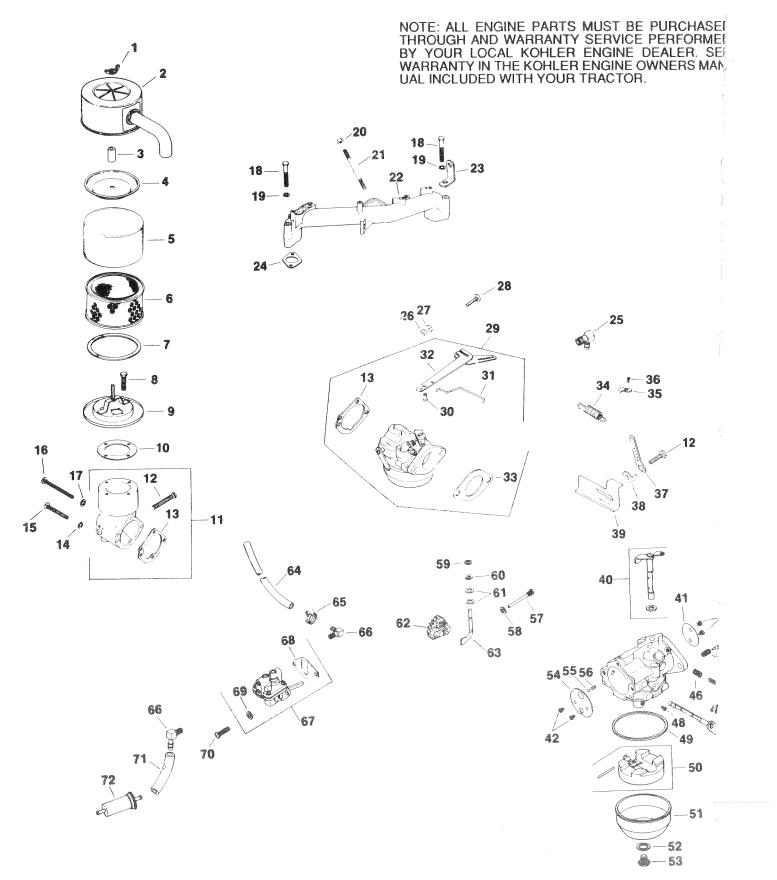
18 H P GARDEN TRACTOR ENGINE -- KOHLER MODEL NUMBER M18S SPEC. 24585

NOTE: ALL ENGINE PARTS MUST BE PURCHASED THROUGH AND WARRANTY SERVICE PERFORMED BY YOUR LOCAL KOHLER ENGINE DEALER. SEE WARRANTY IN THE KOHLER ENGINE OWNERS MAN-UAL INCLUDED WITH YOUR TRACTOR. _10 -8 81 79 . 13 -14 56 57 Y

18 H P GARDEN TRACTOR ENGINE -- KOHLER MODEL NUMBER M18S SPEC. 24585

PART NO.	DESCRIPTION		KEY NO.		DESCRIPTION
11-086-02 220534	Screw 5/16 - 18 x 1-1/2 (18) Washer 5/16 (18)		46	52-012-08	Camshaft
52-015-08	Head, cylinder (2)		47 48	X-280-25 52-096-03	Pin, roll Cover, oil pump
52-041-18 (-583-5	Gasket, head (2)		49	X-67-64	Screw, hex. wash. hd. 10-32 x 7/16
⟨-802-9	Seal, rear oil. Screw, hex. wash. hd. 5/16 - 18 x 1		50	52-393-09	(4) Rotor set
52-041-14	(9)		51	52-144-05	Shaft, oil pump
(-21-1	Gasket, exhaust (2) Washer, lock 5/16 (4)		52 53	52-043-05 52-422-01	Gear, oil pump Spacer (A.R. max. 2)
(-55-6	Screw, Hex. sock. hd. 5/16 - 18 x		54	52-755-50	Kit, oil relief
(-82-2	3/4 (2) Nut, hex. 5/16 - 18 (2)		55	52-030-10 52-030-11	Bearing, sleeve (2) Bearing, sleeve (.010) (2)
2-112-08	Spacer 2 - 1/4" long		Fo	52-030-12	Bearing, sleeve (.020) (2)
(-81-1	Stud 5/16 - 18 x 4 (2) Nut, hex. 1/4 - 20 (2)		56 57	52-141-02 52-139-08	O-Ring Plug 3/4" O.D.
(-25-12	Washer, plain 1/4 (2)		58	52-123-10	Tube, oil pickup
2-096-18 2-055-01	Cover, #2 cylinder valve Gasket, cover (3)		59 60	X-702-1 5 52-237-05	Plug, Cup 5/1 6 Clamp, tube
(-352-39	Stud, #2 cyl. vàlve 1/4 - 20 x 2-1/4		61	X-67-64	Screw. hex. wash. hd. 10-32 x 7/16
2- 75 5-55 [- 75 -23	Kit, closure plate (Includes 19) Plug, hex. ctsk. 1/8 N.P.T.F.		62 63	52-237-02 52-095-03	Clip, spring Housing, oil pickup
5-086-10	Screw, hex. flange 5/16 - 18 x 1-1/2		64	X-75-32	Plug, hex. ctsk. 3/8 N.P.T.F. (2)
2-072-12	(3) Step stud 5/16 -18 x 3/4", 3/8 -16 x		65 66	52-032-10 51-132-02	Seal, front oil Spark plug (2)
0.400.40	5/8", 2" long		67	25-086-15	Screw, hex. wash. hd. 1/4 - 20 x 1
2-468-12 -82-2	Washer, flat 5/16 (12) Nut, hex. 5/16 - 18 (16)		68	52-584-02	(2) Module, ignition
5-086-13 2-158-04	Screw, hex. flange 3/16 - 16 x 3-5/8		69	25-086-16	Screw. hex. wash. hd. 1/4 - 20 x 7/8
2-316-06	Bushing, locating (2) Guide, valve (4)		70	52-313-02	(2) Grommet
30265 2-755-81	Insert, valve seat (4)		71	52-126-08	Bracket, module
1-468-01	Kit, cylinder barrel (Includes 25-27) Washer, plain 5/16 (4)		72 73	X-75-10 25-086-12	Plug, solid sq. hd. 3/8 N.P.T.F. Screw, hex. flange 5/16 - 18 x 2 (2)
-352-33 5-086-11	Stud, 5/16 - 18 x 4-1/8 (2) Screw, Hex. flange 5/16-18 x 3-1/2		74 75	52-099-06	Switch, Oil Pressure
	(6)				Crankcase (Service with Short Block 82-522-1 1)
2-874-11 2-874-12	Piston w/Ring Set (Std.) (2) Piston w/Ring Set (.003) (2)		76 77	52-078-05 X-269-43	Shaft, governor Ring, retaining
2-874-13	Piston w/Ring Set (.010) (2)		78	46-136-02	Pipe nipple 3/4 I.P. x 2-1/2
2- 874-14 2 -874-15	Piston w/Ring Set (.020) (2) Piston w/Ring Set (.030) (2)		79 80	52-173-01 52-154-01	Pipe Cap Clip, tube
30004	Retainer, piston pin (4)		81	X-67-64	Screw 10-32 x 7/16
2-108-09 2-108-10	Ring Set (Std. & .003) (2) Ring Set (.010) (2)			52-123-09 52-038-04	Tube, dipstick
2-108-11	Ring Set (.020) (2)		84	52-326-05	Dipstick Hose, breather
2-108-12 2-067-67	Ring Set (.030) (2) Connecting Rod (Std.) (2)		85	52-096-08	Cover, #1 upper cylinder valve
≥-067-68	Connecting Rod (.010) (2)			52-462-01 52-032-04	Valve, umbrella Seal, breather
≥-014-64	Crankshaft (3-9/16" x 1" tapped P.T.O.)			231419	Filter, breather
2-468-03	Washer, thrust .119/.121 (A.R.)			52-096-22 275220	Cover, #1 lower cylinder valve Stud, #1 cyl. valve 1/4 - 20 x 3-1/4
?-468-04 ?-468-05	Washer, thrust .128/.131 Washer, thrust . 137/.140 (A.R.)			52-041-16	Gasket, Oil Filter
:-016-02	Valve, exhaust (2)			52-181-02 X-55-15	Adapter, Oil Filter Screw, hex. sock. hd. 5/16 - 18 x 1-
:-017-08 :-032-13	Valve, intake (2) Seal, intake valve stem (2)			52-050-02	1/4 (2)
i-089-01	Spring, Valve (4)			52-050-02	Oil Filter NOT LLUSTRATED
-413-01 10011	Rotator, exhaust valve (2) Retainer, valve spring (2)				Lead, Red module to connector (12-1/2" - 18 gauge — insulated
-755-10	Kit, retainer (4)				push on tab — uninsulated push
:-019-02	Tappet (4)			52-518-08	on tab terminals) Lead, Green, Pressure Switch (21"
		39		10 00	- 18 Ga. insulated push on tab -
		~~			uninsulated push on terminals)

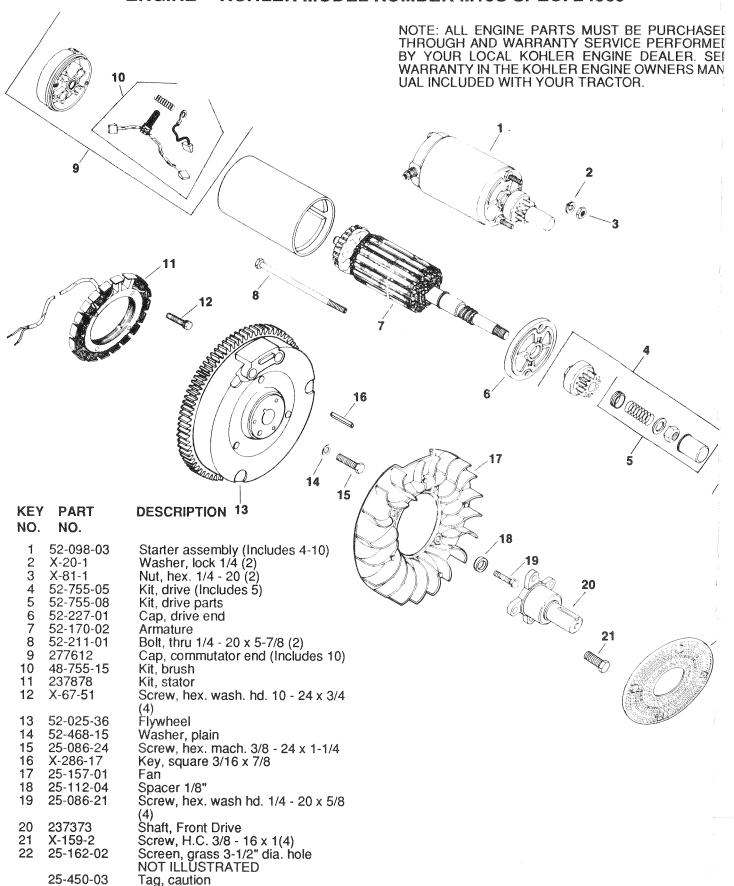
18 H P GARDEN TRACTOR ENGINE -- KOHLER MODEL NUMBER M18S SPEC. 24585



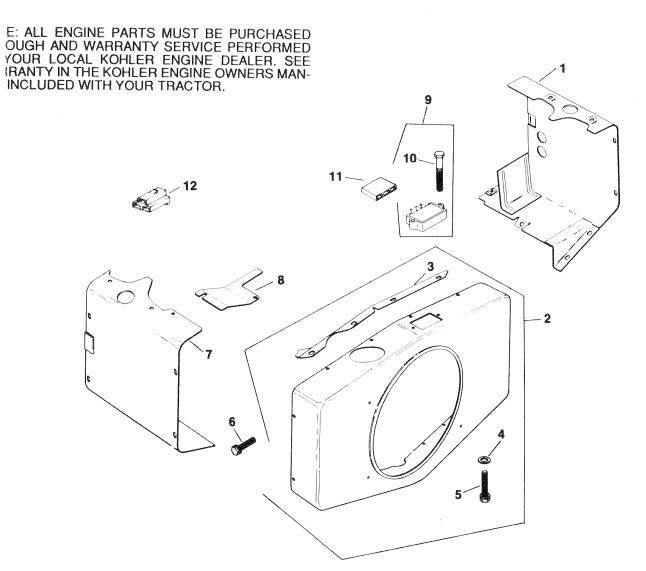
18 H P GARDEN TRACTOR ENGINE KOHLER -- MODEL NUMBER M18S SPEC. 24585

PART NO.	DESCRIPTION	KE NO		DESCRIPTION
X-276-7	Wing nut 1/4 - 20	38	234614	Stop, governor
52-096-36	Cover, air cleaner	39		Stop, high speed
231032	Seal, element cover	40		Shaft, throttle w/seal
52-082-04 45-083-01	Cover, air cleaner element Precleaner	41	25-146-02	Plate, throttle
45-083-02	Element, air cleaner	42 43	25-086-27	Screw, throttle & choke plate (4)
237423	Seal, air cleaner cover	43	25-368-01 25-089-02	Needle, idle
X-67-98	Screw, hex. wash. hd. 10 - 32 x 9/	45	25-086-26	Spring, idle Screw, throttle
	16 (4)	46	25-089-04	Spring, throttle
52-201-06	Base, air cleaner	47	52-090-12	Shaft, choke
277093	Gasket, air cleaner base	48	52-337-06	Jet, main (.055)
52-754-01	Kit, elbow (Includes 12 & 13)	49	25-041-04	Gasket, bowl
52-086-11	Screw, self tap 1/4 - 20 x 5/8	50	25-757-09	Kit, float
25-041-06	Gasket, air intake elbow	51	25-104-01	Bowl, fuel
X-22-9	Washer, lock #10 (2)	52	25-041-03	Gasket, bowl retainer screw
X-50-57	Screw, sltd. pan hd. 10 - 32 x 1-1/2	53	25-100-05	Screw, bowl retainer
X-50-37	(2) Screw, sltd. pan hd. 10 - 32 x 2-1/4	54	25-146-03	Plate, choke
A 30-37	(2)	55 56	25-194-01 25-089-03	Ball, choke friction
X-25-79	Washer, plain #10	57	231355	Spring, choke friction Pin, governor stop
X-6-8	Screw, H.C. 5/16 - 18 x 2-3/4 (4)	58	X-25-12	Washer, plain 1/4
X-21-1	Washer, lock 5/16 (4)	59	X-25-63	Washer, plain 1/4
X-77-2	Nut 5/16 (2)	60	X-269-28	Retainer, governor
X-352-37	Stud 5/16 - 18 x 1 (2)	61	X-25-102	Washer, plain 1/4 (2)
52-164-10	Manifold, intake	62	A-235743-S	Kit, governor gear
52-445-02	Strap, lifting (2)	63	52-078-04	Shaft, governor cross
52-041-09 25-155-02	Gasket, intake manifold (2)	64	52-353-04	Line, fuel 1/4" I.D. x 6-3/4" long
Z5-155-02 X-81-1	Connector, 90° hose	65	X-426-9	Clamp, hose (4)
X-25-72	Nut, hex 1/4 - 20 Washer, plain 1/4	66 67	25-155-02	Connector, 90° hose
52-211-04	Screw, R.H. sq. neck 1/4 - 20 x 1	0/	52-559-01	Pump, fuel assembly (Includes 68 &
52-853-10	Kit, carburetor w/linkage (Includes	68	25-041-05	69) Gasket, fuel pump
	13, 30-33, 40-56)	69	X-25-63	Washer, plain 1/4 (2)
25-158-07	Bushing, linkage (2)	70	47-086-08	Screw, pozidriv T. H. 1/4 - 20 x 5/8
52-079-08	Linkage, governor	. •	000 00	(2)
52-186-06	Arm, governor	71	25-353-03	Line, fuel 1/4" I.D. x 13 - 1/2" Lg.
271030	Gasket, carburetor	72	25-050-01	Filter, fuel
52-091-04	Spring, governor			NOT ILLUSTRATED
235778 X-67-97	Clamp, cable (2)		25-113-07	Decal, air cleaner
52-119-01	Screw, H.C. 10 - 24 x 7/16 (2)		25-757-08	Kit, carburetor repair
76-113-VI	Lever, speed control		52-755-98	Kit, high altitude jet

18 H.P GARDEN TRACTOR ENGINE -- KOHLER MODEL NUMBER M18S SPEC. 24585

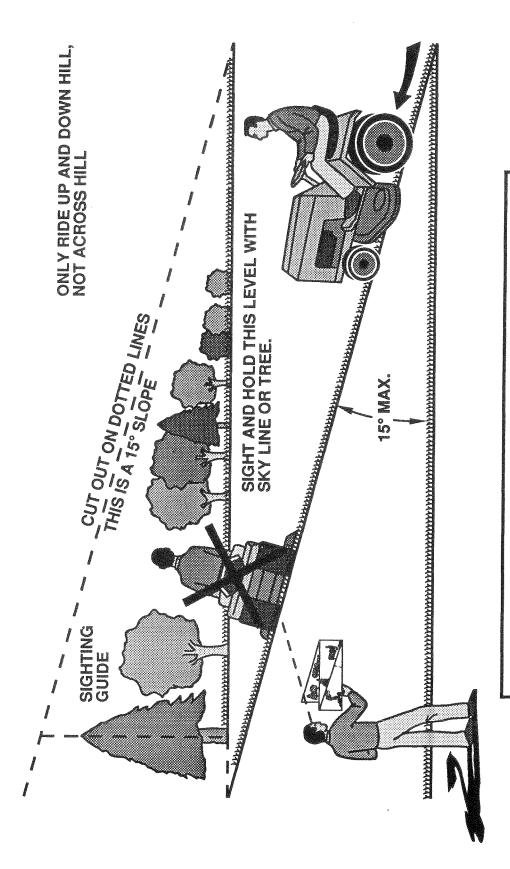


18 H P GARDEN TRACTOR ENGINE KOHLER -- MODEL NUMBER M18S SPEC. 24585



KE\ NO.		DESCRIPTION
4 5	52-124-23 52-755-71 52-217-01 52-468-16 52-086-11 X-67-83	Baffle, #1 cylinder head Kit, blower housing (Includes3-5) Support, Upper housing Washer, plain (2) Screw, self tap 1/4 - 20 x 5/8 (2) Screw, hex. wash. hd. 1/4 - 20 x 7/
8 9 10 11	52-063-21 52-063-01 25-755-03 X-132-5 236602 236473 25-518-21	26 (1 9) Baffle, #2 cylinder head Baffle, #2 cylinder top Kit, Rectifier, Regulator Screw, H.C. 1/4 - 20 x 5/8 (2) Connector, (3 contact) Connector, (3 contact) NOT ILLUSTRATED Lead, Red rectifier-regulator (5" - 14 gauge — uninsulated push on tab terminals)

SERVICE NOTES



Operate your Tractor up and down the face of slopes (not greater than 15°) never across the face. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

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