**Owner's Manual** 

# **CRAFTSMAN**°

# **GARDEN TRACTOR**

23.0 HP, 50" Mower Electric Start 6 Speed

Model No. 917.275033





This product has a low emission engine which operates differently from previously built engines. Before you start the engine, read and understand this Owner's Manual.

# **CAUTION:**

Read and follow all Safety Rules and Instructions before operating this equipment. For answers to your questions about this product, Call:

#### **1-800-659-5917** Sears Craftsman Help Line 5 am - 5 pm, Mon - Sat

SEARS, ROEBUCK AND CO., HOFFMAN ESTATES, IL 60179 U.S.A. Visit our Craftsman website:www.sears.com/craftsman

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### WARRANTY

#### LIMITED TWO YEAR WARRANTY ON CRAFTSMAN RIDING EQUIPMENT PARTS

For two (2) years from the date of purchase, if this Craftsman Riding Equipment is maintained, lubricated and tuned up according to the instructions in the owner's manual, Sears will repair or replace, free of charge, any parts found to be defective in material or workmanship. Warranty service is available free of charge by returning your Craftsman riding equipment to your nearest Sears Service Center. In-home warranty service is available but a trip charge will apply. This warranty applies only while this product is in the United States.

This Warranty does not cover:

- Expendable items which become worn during normal use, such as blades, spark plugs, air cleaners, belts and oil filters.
- Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps, or glass.
- Repairs necessary because of operator abuse, including but not limited to, damage caused by towing objects beyond the capability of the riding equipment, impacting objects that bend the frame or crankshaft, or over speeding the engine.
- Repairs necessary because of operator negligence, including but not limited to, electrical and mechanical damage caused by improper storage, failure to use the proper grade and amount of engine oil, failure to keep the deck clear of flammable debris, or the failure to maintain the equipment according to the instructions contained in the owner's manual.
- Engine (fuel system) cleaning or repairs caused by fuel determined to be contaminated or oxidized (stale). In general, fuel should be used within thirty (30) days of its purchase date.
- Riding equipment used for commercial or rental purposes. A product is "used for commercial purpose" if is used for any purpose other than single family household dwellings or in usage where profit is made.

#### LIMITED 90 DAY WARRANTY ON BATTERY

For ninety (90) days from date of purchase, if any battery included with this riding equipment proves defective in material or workmanship and our testing determines the battery will not hold a charge, Sears will replace the battery at no charge. Warranty service is available free of charge by returning your Craftsman riding equipment to your nearest Sears Service Center. In-home warranty service is available but a trip charge will apply. This warranty applies only while this product is in the United States.

# TO LOCATE THE NEAREST SEARS SERVICE CENTER OR TO SCHEDULE IN-HOME WARRANTY SERVICE, SIMPLY CONTACT SEARS AT 1-800-4-MY-HOME

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

Sears, Roebuck and Co., D/817 WA, Hoffman Estates, IL 60179

# SAFETY RULES

**IMPORTANT:** This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

Look for this symbol to point out important safety precautions. It means CAUTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.

**CAUTION:** In order to prevent accidental starting when setting up, transporting, adjusting or making repairs, always disconnect spark plug wire and place wire where it cannot contact spark plug.

**CAUTION:** Do not coast down a hill in neutral, you may lose control of the tractor.

**CAUTION:** Tow only the attachments that are recommended by and comply with specifications of the manufacturer of your tractor. Use common sense when towing. Operate only at the lowest possible speed when on a slope. Too heavy of a load, while on a slope, is dangerous. Tires can lose traction with the ground and cause you to lose control of your tractor.

**WARNING:** Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

#### I. GENERAL OPERATION

- Read, understand, and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers.

- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the guard in place.
- Slow down before turning.
- Never leave a running machine unattended. Always tum off blades, set parking brake, stop engine, and remove keys before dismounting.
- Turn off blades when not mowing.
- Stop engine before removing grass catcher or unclogging chute.
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.
- Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower-related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.
- Keep machine free of grass, leaves or other debris build-up which can touch hot exhaust / engine parts and bum. Do not allow the mower deck to plow leaves or other debris which can cause buildup to occur. Clean any oil or fuel spillage before operating or storing the machine. Allow machine to cool before storage.

#### **II. SLOPE OPERATION**

Slopes are a major factor related to loss-ofcontrol and tipover accidents, which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

# SAFETY RULES

# 1. A S 1.

#### DO:

- Mow up and down slopes, not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. *Tall grass can hide obstacles*.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability.
- Use extra care with grass catchers or other attachments. These can change the stability of the machine.
- Keep all movement on the slopes *slow* and *gradual*. Do not make sudden changes in speed or direction.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.

#### DO NOT:

- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- Do not mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- *Do not* mow on wet grass. Reduced traction could cause sliding.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not use grass catcher on steep slopes.

### **III. CHILDREN**

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. *Never* assume that children will remain where you last saw them.

- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and *down* for small children.

- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

#### **IV. SERVICE**

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
  - Use only an approved container.
  - Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
  - Never refuel the machine indoors.
  - Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- Never run a machine inside a closed area.
- Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently. Adjust and service as required.

# SAFETY RULES



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- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers or children even with the blades off.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.
- Mow up and down slopes (15° Max), not across.

- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- If machine stops while going uphill, disengage blades, shift into reverse and back down slowly.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.

#### **PRODUCT SPECIFICATIONS**

| Gasoline          | 3.5 Gallons      |           |
|-------------------|------------------|-----------|
| Capacity          | Unleaded         |           |
| and Type:         | Regular          |           |
| Oil Type          | SAE 10W30        | )         |
|                   | (above 32°F      | -)        |
| (API-SF-SJ):      | <b>SAE 5W-30</b> |           |
| -                 | (below 32°F      | 5)        |
| Oil Capacity:     | W/ Filter:       | 4.5 Pints |
|                   | W/O Filter:      | 4.0 Pints |
| Spark Plug:       | Champion I       | RC12YC    |
| (Gap: .030")      |                  |           |
| Ground Speed      | Lo:              | Hi:       |
| (MPH):            | 0.7              | 1.7       |
|                   | 1.4              | 3.3       |
|                   | 2.3              | 5.4       |
| Reverse:          | 0.9              | 2.1       |
| Tire Pressure:    | Front:           | 14 PSI    |
|                   | Rear:            | 10 PSI    |
| Charging          |                  |           |
| System:           | 15 Amps @        | 3600 RPM  |
| Battery:          | Amp/Hr:          | 35        |
| -                 | Min. CCA:        | 280       |
|                   | Case size:       | U1R       |
| Blade Bolt Torque | e: 27-35 Ft. L   | _bs.      |

**CONGRATULATIONS** on your purchase of a new tractor. It 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 a Sears or other qualified service center. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

Please read and retain this manual. The instructions will enable you to assemble and maintain your tractor properly. Always observe the "SAFETY RULES".

### **REPAIR AGREEMENT**

A Repair Agreement is available on this product. Contact your nearest Sears store for details.

#### **CUSTOMER RESPONSIBILITIES**

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your tractor.
- Follow the instructions under "Maintenance" and "Storage" sections of this owner's manual.

WARNING: This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brushcovered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest Sears service center (See REPAIR PARTS section of this manual).

# UNASSEMBLED PARTS



# ASSEMBLY/PRE-OPERATION

Your new tractor has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. To ensure safe and proper operation of your tractor all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to insure proper tightness. Review the video cassette before you begin.

#### **TOOLS REQUIRED FOR ASSEMBLY**

A socket wrench set will make assembly easier. Standard wrench sizes you need are listed below.

- (1) 9/16" wrench
- (1) Pliers
- (1) 1/2" wrench
- (1) Utility knife
- (1) 3/4" socket with drive ratchet

(1) Tire pressure gauge

When right or left hand is mentioned in this manual, it means, from your point of view, when you are in the operating position (seated behind the steering wheel).

### TO REMOVE TRACTOR FROM CARTON

#### **UNPACK CARTON**

- 1. Remove all accessible loose parts and parts boxes from carton.
- 2. Cut, from top to bottom, along lines on all four corners of carton, and lay panels flat.
- 3. Remove mower and packing materials.
- 4. Check for any additional loose parts or cartons and remove.

#### **BEFORE REMOVING TRACTOR** FROM SKID

#### ATTACH STEERING WHEEL

- 1. Remove hex bolt, lock washer and large flat washer from steering shaft.
- 2. Position front wheels of the tractor so they are pointing straight forward.
- 3. Slide the steering sleeve over the steering shaft.
- 4. Align tabs and press steering sleeve extension into bottom of steering wheel.
- 5. Position steering wheel so cross bars are horizontal (left to right) and slide onto steering wheel adapter.
- 6. Secure steering wheel to steering shaft with hex bolt, lock washer and large flat washer previously removed. Tighten securely.
- 7. Snap steering wheel insert into center of steering wheel.
- 8. Remove protective materials from tractor hood and grill.



**IMPORTANT:** Check for and remove any staples in skid that may puncture tires where tractor is to roll off skid.

#### CHECK BATTERY

1. Lift hood to raised position. NOTE: If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in Maintenance section of this manual for charging instructions).



#### **INSTALL SEAT**

Adjust seat before tightening adjustment knob.

- 1. Remove adjustment knob and flat washer securing seat to cardboard packing and set aside for assembly of seat to tractor.
- 2. Pivot seat upward and remove from the cardboard packing. Remove the cardboard packing and discard.
- 3. Place seat on seat pan so head of shoulder bolts are positioned over the large slotted holes in pan.
- 4. Push down on seat to engage shoulder bolts in slots and pull seat towards rear of tractor.
- 5. Pivot seat and pan forward and assemble adjustment knob and flat washer loosely. Do not tighten.
- 6. Lower seat into operating position and sit in seat.
- 7. Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- 8. Get off seat without moving its adjusted position.
- 9. Raise seat and tighten adjustment knob securely.



**NOTE:** You may now roll or drive your tractor off the skid. Follow the appropriate instruction below to remove the tractor from the skid.

#### TO ROLL TRACTOR OFF SKID (See Operation section for location and function of controls)

- 1. Press lift lever plunger and raise attachment lift lever to its highest position.
- 2. Release parking brake by depressing clutch/brake pedal.
- 3. Place gearshift lever in neutral (N) position.
- 4. Roll tractor forward off skid.

#### TO DRIVE TRACTOR OFF SKID (See Operation section for location and function of controls)

**AWARNING:** Before starting, read, understand and follow all instructions in the Operation section of this manual. Be sure tractor is in a well-ventilated area. Be sure the area in front of tractor is clear of other people and objects.

- 1. Be sure all the above assembly steps have been completed.
- 2. Check engine oil level and fill fuel tank with gasoline.
- 3. Sit on seat in operating position, depress clutch/brake pedal and set the parking brake.
- 4. Place gear shift lever in neutral (N) position.
- 5. Press lift lever plunger and raise attachment lift lever to its highest position.
- 6. Start the engine. After engine has started, move throttle control to idle position.
- 7. Depress clutch/brake pedal into full "BRAKE" position and hold. Move gearshift lever to 1st gear.
- 8. Šlowly release clutch/brake pedal and slowly drive tractor off skid.
- 9. Apply brake to stop tractor, set parking brake and place gearshift lever in neutral position.

10. Turn ignition key to "STOP" position. Continue with the instructions that follow.

#### INSTALL MOWER AND DRIVE BELT

Be sure tractor is on level surface and mower suspension arms are raised with attachment lift control. Engage parking brake.

- 1. Cut and remove ties securing antisway bar and belts. Swing anti-sway bar to left side of mower deck.
- Slide mower under tractor with deflector shield to right side of tractor.
   IMPORTANT: Check belt for proper

routing in all mower pulley grooves.

- 3. If equipped, turn height adjustment knob counterclockwise until it stops.
- 4. Lower mower linkage with attachment lift control.
- 5. Install belt into electric clutch pulley groove.
- 6. Place the suspension arms on inward pointing deck pins. Retain with double loop retainer spring with loops up as shown.
- Install front plate assembly to tractor suspension brackets and retain with single loop retainer springs as shown.
- 8. Position front plate assembly between front mower brackets. Raise deck and plate assembly to align holes and insert flanged pins. Secure pins with double loop retainer springs between the plate and mower brackets.

**NOTE:** To assist in locating hole in flanged pin, the hole in pin is inline with notch on head of pin. If necessary, move mower side-to-side to give space between plate and mower brackets. **IMPORTANT:** Check belt for proper routing in all mower pulley grooves.

- 9. Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.
- 10.If equipped, turn height adjustment knob clockwise to remove slack from mower suspension.
- 11. Raise deck to highest position.
- 12. Assemble gauge wheels as shown using long shoulder bolts, 3/8 washers, and 3/8-16 center locknuts. Tighten securely.
- 13. Adjust gauge wheels before operating mower as shown in the Operation section of this manual.

#### **CHECK TIRE PRESSURE**

The tires on your tractor were overinflated at the factory for shipping purposes. Correct tire pressure is important for best cutting performance.

 Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" section of this manual.



#### **CHECK MOWER LEVELNESS**

For best cutting results, mower should be properly leveled. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.

#### CHECK FOR PROPER POSITION OF ALL BELTS

See the figures that are shown for replacing motion, mower drive, and mower blade drive belts in the Service and Adjustments section of this manual. Verify that the belts are routed correctly.

#### **CHECK BRAKE SYSTEM**

After you learn how to operate your tractor, check to see that the brake is properly adjusted. See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual.

### ✓ CHECKLIST

Before you operate your new tractor, we wish to assure that you receive the best performance and satisfaction from this Quality Product.

Please review the following checklist:

- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- All tires are properly inflated. (For shipping purposes, the tires were overinflated at the factory).
- ✓ Be sure mower deck is properly leveled side-to-side/front-to-rear for best cutting results. (Tires must be properly inflated for leveling).
- Check mower and drive belts. Be sure they are routed properly around pulleys and inside all belt keepers.
- Check wiring. See that all connections are still secure and wires are properly clamped.

While learning how to use your tractor, pay extra attention to the following important items:

- ✓ Engine oil is at proper level.
- ✓ Fuel tank is filled with fresh, clean, regular unleaded gasoline.
- Become familiar with all controls, their location and function. Operate them before you start the engine.
- Be sure brake system is in safe operating condition.

# OPERATION

These symbols may appear on your tractor or in literature supplied with the product. Learn and understand their meaning.



DANGER, KEEP HANDS AND FEET AWAY

FREE WHEEL (Automatic Models only)

#### **KNOW YOUR TRACTOR**

# READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR TRACTOR

Compare the illustrations with your tractor to familiarize yourself with the locations of various controls and adjustments. Save this manual for future reference.



Our tractors conform to the safety standards of the American National Standards Institute.

ATTACHMENT CLUTCH SWITCH: Used to engage the mower blades, or other attachments mounted to your tractor. LIGHT SWITCH POSITION: Turns the headlights on and off.

THROTTLE CONTROL: Used to control engine speed.

**CLUTCH/BRAKE PEDAL:** Used for declutching and braking the tractor and starting the engine.

**CHOKE CONTROL**: Used when starting a cold engine.

HEIGHT ADJUSTMENT KNOB: Used to adjust the mower cutting height. GEARSHIFT LEVER: Selects the speed and direction of the tractor. **RANGESHIFT LEVER:** Allows high (H) and low (L) speed for all forward and reverse gears.

ATTACHMENT LIFT LEVER: Used to raise and lower the mower deck or other attachments mounted to your tractor. LIFT LEVER PLUNGER: Used to release attachment lift lever when changing its position.

**IGNITION SWITCH:** Used for starting and stopping the engine.

**AMMETER:** Indicates battery charging (+) or discharging (-).

**PARKING BRAKE:** Locks clutch/brake into the brake position.



The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend standard safety glasses or a wide vision safety mask worn over spectacles.

#### HOW TO USE YOUR TRACTOR TO SET PARKING BRAKE

Your tractor is equipped with an operator presence sensing switch. When engine is running, any attempt by the operator to leave the seat without first setting the parking brake will shut off the engine.

- 1. Depress brake pedal all the way down and hold.
- 2. Pull parking brake lever up and release pressure from brake pedal. Pedal should remain in brake position. Make sure parking brake will hold tractor secure.



#### STOPPING

**MOWER BLADES -**

To stop mower blades, move attachment clutch switch to disengaged position.

**GROUND DRIVE -**

- To stop ground drive, depress clutch/ brake pedal all the way down.
- Move gearshift lever to neutral (N) position.

**ENGINE -**

• Move throttle control to slow position. **NOTE:** Failure to move throttle control to slow position and allowing engine to idle before stopping may cause engine to "backfire".

 Turn ignition key to "STOP" position and remove key. Always remove key when leaving tractor to prevent unauthorized use. • Never use choke to stop engine. **IMPORTANT:** Leaving the ignition switch in any position other than "STOP" will cause the battery to discharged, and go dead.

**NOTE:** Under certain conditions when tractor is standing idle with the engine running, hot engine exhaust gases may cause "browning" of grass. To eliminate this possibility, always stop engine when stopping tractor on grass areas.

**ACAUTION:** Always stop tractor completely, as described above, before leaving the operator's position.

#### TO USE THROTTLE CONTROL

Always operate engine at full throttle.

- Operating engine at less than full throttle reduces the battery charging rate.
- Full throttle offers the best mower performance.

#### **TO USE CHOKE CONTROL**

Use choke control whenever you are starting a cold engine. Do not use to start a warm engine.

• To engage choke control, pull knob out. Slowly push knob in to disengage.

#### TO MOVE FORWARD AND BACK-WARD

The direction and speed of movement is controlled by the gearshift lever.

- 1. Start tractor with clutch/brake pedal depressed and gearshift lever in neutral (N) position.
- 2. Move gearshift and range shift levers to desired position.
- 3. Slowly release clutch/brake pedal to start movement.

**IMPORTANT:** Bring tractor to a complete stop before shifting or changing gears. Failure to do so will shorten the useful life of your transaxle.

#### TO ADJUST MOWER CUTTING HEIGHT

The cutting height is controlled by turning the height adjustment knob in desired direction.

- Turn knob counterclockwise () to lower cutting height.

The cutting height range is approximately 1-1/2" to 4-1/2". The heights are measured from the ground to the blade tip with the engine not running. These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

#### TO ADJUST GAUGE WHEELS

Gauge wheels are properly adjusted when they are slightly off the ground when mower is at the desired cutting height in operating position. Gauge wheels then keep the deck in proper position to help prevent scalping in most terrain conditions.

**NOTE:** Adjust gauge wheels with tractor on a flat level surface.

- 1. Adjust mower to desired cutting height.
- 2. Lower mower with lift control. Remove rear retainer spring and clevis pin which secure each gauge wheel.
- 3. Lower gauge wheels to ground. Raise gauge wheels slightly to align holes in bracket and gauge wheel bar and insert clevis pins. Gauge wheels should be slightly off the ground.
- 4. Replace retainer springs into clevis pins.



#### **TO OPERATE MOWER**

Your 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 engine.

- 1. Select desired height of cut.
- 2. Lower mower with attachment lift control.

3. Start mower blades by engaging attachment clutch control.

TO STOP MOWER BLADES disengage attachment clutch control. **ACAUTION:** Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the deflector shield in place.



#### TO OPERATE ON HILLS

**ACAUTION:** Do not drive up or down hills with slopes greater than 15° and do not drive across any slope. Use the slope guide at the back of this manual.

- Choose the slowest speed before starting up or down hills.
- Avoid stopping or changing speed on hills.
- If slowing is necessary, move throttle control lever to slower position.
- If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.
- Move gearshift lever to 1st gear and range shift lever to low (L) position. Be sure you have allowed room for tractor to roll slightly as you restart movement.
- To restart movement, slowly release parking brake and clutch/brake pedal.
- Make all turns slowly.

#### **TO TRANSPORT**

- Raise attachment lift to highest position with attachment lift control.
- When pushing or towing your tractor, be sure gearshift lever is in neutral (N) position.
- Do not push or tow tractor at more than five (5) MPH.

NOTE: To protect hood from damage when transporting your tractor on a truck or a trailer, be sure hood is closed and secured to tractor. Use an appropriate means of tying hood to tractor (rope, cord, etc.).

#### TOWING CARTS AND OTHER ATTACH-MENTS

Tow only the attachments that are recommended by and comply with specifications of the manufacturer of your tractor. Use common sense when towing. Too heavy of a load, while on a slope, is dangerous. Tires can lose traction with the ground and cause you to lose control of your tractor.

#### BEFORE STARTING THE ENGINE CHECK ENGINE OIL LEVEL

The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.

- 1. Check engine oil with tractor on level ground.
- Unthread and remove oil fill cap/ dipstick; wipe oil off. Reinsert the dipstick into the tube and rest oil fill cap on the tube. Do not thread the cap onto the tube. Remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See "OIL VISCOSITY CHART" in the Maintenance section of this manual).
- To change engine oil, see the Maintenance section in this manual.

#### ADD GASOLINE

• Fill fuel tank to bottom of filler neck. Do not overfill. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life). Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

**CAUTION:** Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame. **IMPORTANT:** When operating in temperatures below32°F(0°C), use fresh, clean winter grade gasoline to help insure good cold weather starting. CAUTION: 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 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 tank or permanent damage may occur.

#### **TO START ENGINE**

When starting the engine for the first time or if the engine has run out of fuel, it will take extra cranking time to move fuel from the tank to the engine.

- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- 2. Place gear shift lever in neutral (N) position.
- 3. Move attachment clutch to disengaged position.
- 4. Move throttle control to fast position
- 5. Pull choke control out for a cold engine start attempt. For a warm engine start attempt the choke control may not be needed.

NOTE: Before starting, read the warm and cold starting procedures below.

6. Insert key into ignition and turn key clockwise to start position and release key as soon as engine starts. Do not run starter continuously for more than fifteen seconds per minute. If the engine does not start after several attempts, push choke control in, wait a few minutes and try again. If engine still does not start, pull the choke control out and retry.

WARM WEATHER STARTING (50° F and above)

7. When engine starts, slowly push choke control in until the engine begins to run smoothly. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly. • The attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above. COLD WEATHER STARTING (50° F and

below)

- 7. When engine starts, slowly push choke control in until the engine begins to run smoothly. Continue to push the choke control in small steps allowing the engine to accept small changes in speed and load, until the choke control is fully in. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.
- The attachments can be used during the engine warm-up period and may require the choke control be pulled out slightly.

**NOTE:** If at a high altitude (above 3000 feet) or in cold temperatures (below 32 F) the carburetor fuel mixture may need to be adjusted for best engine performance. See "TO ADJUST CARBURETOR" in the Service and Adjustments section of this manual.

#### **MOWING TIPS**

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has already been cut. Have the cut area to the right of the tractor. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished.



- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.

# MAINTENANCE

| FIL<br>AS<br>RE | MAINTENANCE SCHEDUL<br>L IN DATES<br>YOU COMPLETE<br>GULAR SERVICE   | E  | EFORE | EACHUS<br>WERY B | HOURS<br>HOURS | SHOURS<br>WERY S | NERY E | SHOUL<br>SHOUL | RS<br>SEASON<br>SEFORE | SERVI | CE DA | TES |
|-----------------|--|----|-------|------------------|----------------|------------------|--------|----------------|------------------------|-------|-------|-----|
|                 | Check Brake Operation  | ~  | V     |                  |                |                  |        |                |                        |       |       |     |
|                 | Check Tire Pressure  | 11 | 1     |                  |                |                  |        |                |                        |       |       |     |
| т               | Check Operator Presence and<br>Interlock Systems   | ~  |       |                  |                |                  |        |                |                        |       |       |     |
| R               | Check for Loose Fasteners  | ~  |       |                  |                | ▲                |        | 1              |                        |       |       |     |
| A               | Sharpen/Replace Mower Blades   |    |       | 13               |                |                  |        |                |                        |       |       |     |
| F               | Lubrication Chart  |    |       | 1                |                |                  |        | V              |                        |       |       |     |
| i i             | Check Battery Level  |    |       | 1                | [              |                  |        |                |                        |       |       |     |
| Ř               | Clean Battery and Terminals  |    |       | ~                |                |                  |        | V              |                        |       |       |     |
|                 | Check Transaxle Cooling  |    |       | ~                |                |                  |        |                |                        |       |       |     |
|                 | Check V-Belts  |    |       |                  |                | 1                |        |                |                        |       |       |     |
|                 | Check Engine Oil Level   | V  | 1     |                  |                |                  |        |                |                        |       |       |     |
|                 | Change Engine Oll (with oil filter)  |    |       |                  | 1,2            |                  |        | ~              |                        |       |       |     |
| E               | Change Engine Oil (without oil filter)   |    |       | 12               |                |                  |        | V              |                        |       |       |     |
| Ň               | Clean Air Filter   |    |       | 1/2              |                |                  |        |                |                        | 1     |       |     |
| Ģ               | Clean Air Screen   |    | 1     | 12               |                |                  |        |                |                        |       |       |     |
| I<br>M          | Inspect Muffler/Spark Arrester   |    |       |                  | V              |                  |        |                | 1                      |       |       |     |
| F               | Replace OII Filter (If equipped)   |    |       |                  |                | 1.2              |        |                |                        | -     |       |     |
| -               | Clean Engine Cooling Fins  |    |       |                  |                | 1 2              |        | 1              |                        |       |       |     |
|                 | Replace Spark Plug   |    |       |                  |                | 1                | ~      |                |                        |       |       |     |
|                 | Replace Air Filter Paper Cartridge   |    |       |                  |                | 1/2              |        |                |                        |       |       |     |
|                 | Replace Fuel Filter  | 1  | 1     | 1                |                |                  | V      | 1              |                        |       |       |     |
| 1-0             | - Change more often when operating under a heavy load or 3 - Replace blades more often when mowing in servity soli |    |       |                  |                |                  |        |                |                        |       |       |     |

In high ambient temperatures

2 - Service more often when operating in dirty or dusty conditions.

#### **GENERAL RECOMMENDATIONS**

The warranty on this tractor does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain tractor as instructed in this manual. Some adjustments will need to be made periodically to properly maintain your tractor.

All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

 Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

#### **BEFORE EACH USE**

- 1. Check engine oil level.
- 2. Check brake operation.
- 3. Check tire pressure.
- Check operator presence and interlock systems for proper operation.
- 5. Check for loose fasteners.

- Not required if equipped with maintenance-free battery.

5 - Tighten front axle pivot bolt to 35 ft.-lbs. maximum. Do not overtighten.

#### LUBRICATION CHART



- ① SAE 30 or 10w30 motor oil
- ② General Purpose Grease
- ③ Refer to Maintenance "ENGINE" Section
- ④ Spray silicone lubriant (Move Boots to) Lubricate)

**IMPORTANT:** Do not oil or grease the pivot points which have special nylon bearings. Viscous lubricants will attract dust and dirt that will shorten the life of the self-lubricating bearings. If you feel they must be lubricated, use only a dry, powdered graphite type lubricant 18<sup>sparingly.</sup>

### TRACTOR

Always observe safety rules when performing any maintenance. BRAKE OPERATION

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted. (See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual).

#### TIRES

- Maintain proper air pressure in all tires (See "PRODUCT SPECIFICATIONS" section of this manual).
- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

#### **OPERATOR PRESENCE SYSTEM**

Be sure operator presence and interlock systems are working properly. If your tractor does not function as described, repair the problem immediately.

- The engine should not start unless the brake pedal is fully depressed and attachement clutch control is in the disengaged position.
- When the engine is running, any attempt by the operator to leave the seat without first setting the parking brake should shut off the engine.
- When the engine is running and the attachment clutch is engaged, any attempt by the operator to leave the seat should shut off the engine.
- The attachment clutch should never operate unless the operator is in the seat.

#### **BLADE CARE**

For best results mower blades must be kept sharp. Replace bent or damaged blades.

#### **BLADE REMOVAL**

- 1. Raise mower to highest position to allow access to blades.
- 2. Remove hex bolt, lock washer and flat washer securing blade.
- 3. Install new or resharpened blade with trailing edge up towards deck as shown.

**IMPORTANT:** To ensure proper assembly, center hole in blade must align with star on mandrel assembly.

- Reassemble hex bolt, lock washer and flat washer in exact order as shown.
- 5. Tighten bolt securely (27-35 Ft. Lbs. torque).

IMPORTANT: Blade bolt is grade 8 heat treated.



\*A Grade 8 heat treated bolt can be identified by six lines on the bolt head.

#### TO SHARPEN BLADE

**NOTE:** We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

Care should be taken to keep the blade balanced. An unbalanced blade will cause excessive vibration and eventual damage to mower and engine.

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, you will need a 5/8" diameter steel bolt, pin, or a cone balancer. (When using a cone balancer, follow the instructions supplied with balancer.)

**NOTE:** Do not use a nail for balancing blade. The lobes of the center hole may appear to be centered, but are not.

 Slide blade on to an unthreaded portion of the steel bolt or pin and hold the bolt or pin parallel with the ground. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.



#### BATTERY

Your tractor has a battery charging system which is sufficient for normal use. However, periodic charging of the battery with an automotive charger will extend its life.

- · Keep battery and terminals clean.
- Keep battery bolts tight.
- · Keep small vent holes open.

• Recharge at 6-10 amperes for 1 hour. **NOTE:** The original equipment battery on your tractor is maintenance free. Do not attempt to open or remove caps or covers. Adding or checking level of electrolyte is not necessary.

TO CLEAN BATTERY AND TERMINALS Corrosion and dirt on the battery and terminals can cause the battery to "leak" power.

- 1. Remove terminal guard.
- 2. Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
- 3. Rinse the battery with plain water and dry.
- 4. Clean terminals and battery cable ends with wire brush until bright.
- 5. Coat terminals with grease or petroleum jelly.
- 6. Reinstall battery (See "REPLACING BATTERY" in the SERVICE AND ADJUSTMENTS section of this manual).

#### **TRANSAXLE COOLING**

Keep transaxle free from build-up of dirt and chaff which can restrict cooling. CHECK TRANSAXLE OIL LEVEL

- 1. Block up rear axle securely.
- 2. Remove left rear wheel by removing hub bolts.
- 3. Remove filler plug from transaxle. Oil level must be even with plug threads. If necessary, fill with SAE 30 motor oil, API SF-SJ. Replace filler plug.
- 4. Reassemble wheel to hub.



#### **V-BELTS**

Check V-belts for deterioration and wear after 100 hours of operation and replace if necessary. The belts are not adjustable. Replace belts if they begin to slip from wear.

#### ENGINE LUBRICATION

Only use high quality detergent oil rated with API service classification SF-SJ. Select the oil's SAE viscosity grade according to your expected operating temperature.



Change the oil after every 50 hours of operation or at least once a year if the tractor is not used for 50 hours in one year.

Check the crankcase oil level before starting the engine and after each eight (8) hours of operation. Tighten oil fill cap/ dipstick securely each time you check the oil level.

#### TO CHANGE ENGINE OIL

Determine temperature range expected before oil change. All oil must meet API service classification SF-SJ.

- Be sure tractor is on level surface.
- Oil will drain more freely when warm.
- Catch oil in a suitable container.
- 1. Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- 2. Remove yellow cap from end of drain valve and install the drain tube onto the fitting.

Oil Drain Valve



- 3. Unlock drain valve by pushing upward slightly and turning counterclockwise.
- slightly and turning counterclockwise. 4. To open, pull down on the drain valve.
- After oil has drained completely, close and lock the drain valve by pushing upward and turning clockwise until the pin is in the locked position as shown.
- 6. Remove the drain tube and replace the cap onto to the end of the drain valve.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" section of this manual.
- 8. Use gauge on oil fill cap/dipstick for checking level. Insert dipstick into the tube and rest the oil fill cap on the tube. Do not thread the cap onto the tube when taking reading. Keep oil at "FULL" line on dipstick. Tighten cap onto the tube securely when finished.

#### **ENGINE OIL FILTER**

Replace the engine oil filter every season or every other oil change if the tractor is used more than 100 hours in one year.

#### **AIR FILTER**

Your engine will not run properly using a dirty air filter. Clean the foam pre-cleaner after every 25 hours of operation or every season. Service paper cartridge every 100 hours of operation or every season, whichever occurs first.

Service air cleaner more often under dusty conditions.

1. Loosen knob and remove cover.

**TO SERVICE PRE-CLEANER** 

- 2. Slide foam pre-cleaner off cartridge.
- 3. Wash it in liquid detergent and water.
- 4. Squeeze it dry in a clean cloth. Allow it to dry.
- 5. Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.

TO SERVICE CARTRIDGE

 Replace a dirty, bent, or damaged cartridge.

**NOTE:** Do not wash the paper cartridge or use pressurized air, as this will damage the cartridge.

- 6. Remove nut and cartridge plate.
- 7. Reinstall the pre-cleaner (cleaned and oiled) over the paper cartridge.
- 8. Check rubber seal for damage and proper position around stud. Replace if necessary.
- 9. Reassemble air cleaner, cartridge plate, and nut.
- 10. Reinstall air cleaner cover and secure by tightening knob.



#### **CLEAN AIR SCREEN**

Air screen must be kept free of dirt and chaff to prevent engine damage from overheating. Clean with a wire brush or compressed air to remove dirt and stubborn dried gum fibers.

**CLEAN AIR INTAKE/COOLING AREAS** To insure proper cooling, make sure the

grass screen, cooling fins, and other external surfaces of the engine are kept clean at all times.

Every 100 hours of operation (more often under extremely dusty, dirty conditions), remove the blower housing and other cooling shrouds. Clean the cooling fins and external surfaces as necessary. Make sure the cooling shrouds are reinstalled. NOTE: Operating the engine with a blocked grass screen, dirty or plugged cooling fins, and/or cooling shrouds removed will cause engine damage due to overheating.

#### MUFFLER

Inspect and replace corroded muffler and spark arrester (if equipped) as it could create a fire hazard and/or damage. SPARK PLUG(S)

Replace spark plug(s) at the beginning of each mowing season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" section of this manual.

#### **IN-LINE FUEL FILTER**

The fuel filter should be replaced once each season. If fuel filter becomes clogged, obstructing fuel flow to carburetor, replacement is required.

- 1. With engine cool, remove filter and plug fuel line sections.
- 2. Place new fuel filter in position in fuel line with arrow pointing towards carburetor.
- Be sure there are no fuel line leaks and clamps are properly positioned.
- 4. Immediately wipe up any spilled gasoline.



#### **CLEANING**

- Clean engine, battery, seat, finish, etc. of all foreign matter.
- Keep finished surfaces and wheels free of all gasoline, oil, etc.
- Protect painted surfaces with automotive type wax.

We do not recommend using a garden hose to clean your tractor unless the electrical system, muffler, air filter and carburetor are covered to keep water out. Water in engine can result in a shortened engine life.

# SERVICE AND ADJUSTMENTS

# WARNING: TO AVIOD SERIOUS INJURY, BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:

- 1. Depress clutch/brake pedal fully and set parking brake.
- 2. Place gearshift lever in neutral (N) position.
- 3. Place attachment clutch in "DISENGAGED" position.
- 4. Turn ignition key "OFF" and remove key.
- 5. Make sure the blades and all moving parts have completely stopped.
- 6. Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

#### TRACTOR

#### **TO REMOVE MOWER**

- 1. Place attachment clutch in "DISEN-GAGED" position.
- 2. Turn height adjustment knob to lowest setting.
- 3. Lower mower to its lowest position.
- 4. Remove retainer spring holding antiswaybar to chassis bracket and disengage anti-swaybar from bracket.
- 5. Remove four retainer springs from front plate assembly and remove plate.
- Remove retainer springs from suspension arms at deck and disengage arms from deck.
- 7. Řaise attachment lift to its highest position.
- 8. Slide mower forward and remove belt from electric clutch pulley.
- 9. Slide mower out from under right side of tractor.

#### TO INSTALL MOWER

Follow procedure described in "INSTALL MOWER AND DRIVE BELT" in the Assembly section of this manual.

#### **TO LEVEL MOWER HOUSING**

Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

#### SIDE-TO-SIDE ADJUSTMENT

- Raise mower to its highest position.
- Measure height from bottom edge of mower to ground level at front corners of mower. Distance "A" on both sides of mower should be the same.
- If adjustment is necessary, make adjustment on one side of mower only.
- To raise one side of mower, tighten lift link adjustment nut on that side.



- To lower one side of mower, loosen lift link adjustment nut on that side.
- **NOTE:** Each full turn of adjustment nut will change mower height about 3/16".
- Recheck measurements after adjusting.



#### FRONT-TO-BACK ADJUSTMENT

**IMPORTANT:** Deck must be level side-toside. If the following front-to-back adjustment is necessary, be sure to adjust both front links equally so mower will stay level side-to-side.

To obtain the best cutting results, the mower housing should be adjusted so the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

Check adjustment on right side of tractor. Measure distance "F" directly in front of and behind the mandrel at bottom edge of mower housing as shown.

- Before making any necessary adjustments, check that both front links are equal in length.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower housing, loosen nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.
- To raise front of mower housing, loosen nut "H" from trunnion on both front links. Tighten nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.

**NOTE:** Each full turn of nut "G" will change distance "F" by approximately 3/8".

· Recheck side-to-side adjustment.



BOTH FRONT LINKS MUST BE EQUAL IN LENGTH





#### TO REPLACE MOWER DRIVE BELT

#### MOWER DRIVE BELT REMOVAL

- 1. Park tractor on a level surface. Engage parking brake.
- 2. Remove screws from L.H. mandrel cover and remove cover.
- 3. Roll belt over the top of L.H. mandrel pulley.
- 4. Remove belt from electric clutch pulley.
- 5. Remove belt from idler pulleys.
- 6. Remove any dirt or grass clippings which may have accumulated around mandrels and entire upper deck surface.
- 7. Check primary idler arm and two idlers to see that they rotate freely.
- 8. Be sure spring is securely hooked to primary idler arm and bolt in mower housing.

#### MOWER DRIVE BELT INSTALLATION

- 9. Install belt in both idlers. Make sure belt is in both belt keepers at the idlers as shown.
- 10. Install new belt onto electric clutch pulley.
- 11. Roll belt into upper groove of L.H. mandrel pulley.
- 12. Carefully check belt routing making sure belt is in the grooves correctly and inside belt keepers.
- 23<sup>13. Reassemble L.H. mandrel cover.</sup>



# TO REPLACE MOWER BLADE DRIVE BELT

Park the tractor on level surface. Engage parking brake.

- 1. Remove mower drive belt (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).
- 2. Remove mower (See "TO REMOVE MOWER" in this section of this manual).
- 3. Remove screws from R.H. mandrel cover and remove cover. Unhook spring from bolt on mower housing.
- 4. Carefully roll belt off R.H. mandrel pulley.
- 5. Remove belt from center mandrel pulley, idler pulley, and L.H. mandrel pulley.
- 6. Remove any dirt or grass which may have accumulated around mandrels and entire upper deck surface.
- 7. Check secondary idler arm and idler to see that they rotate freely.
- 8. Be sure spring is hooked in secondary idler arm and sway-bar bracket.
- 9. Install new belt in lower groove of L.H. mandrel pulley, idler pulley, and center mandrel pulley as shown.
- 10. Roll belt over R.H. mandrel pulley. Make sure belt is in all grooves properly.
- 11. Reconnect spring to bolt in mower housing and reinstall R.H. mandrel cover.

- 12. Reinstall mower to tractor (See "INSTALL MOWER AND DRIVE BELT" in the Assembly section of this manual).
- 13. Reassemble mower drive belt (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).



#### TO ADJUST ATTACHMENT CLUTCH

The electric clutch should provide years of service. The clutch has a built-in brake that stops the pulley within 5 seconds. Eventually, the internal brake will wear which may cause the mower blades to not engage, or, to not stop as required. Adjustments should be made by a Sears or other qualified service center.

1. Make sure attachment clutch and ignition switches are in "OFF" position.

Adjust the three nylon locknuts until space between clutch plate and rotor measures .012" at all three slot

locations cut in the side of brake plate. **NOTE:** After installing a new electric clutch, run tractor at full throttle and engage and disengage electric clutch 10 cycles to wear in clutch plate.



#### **TO ADJUST BRAKE**

Your tractor is equipped with an adjustable brake system which is mounted on the left side of the transaxle.

If tractor requires more than six (6) feet stopping distance at high speed in highest gear on a level dry concrete or paved surface, then brake must be adjusted.

- 1. Depress clutch/brake pedal and engage parking brake.
- 2. Measure distance between brake operating arm and nut "A" on brake rod.
- 3. If distance is other than 1-3/4", loosen jam nut and turn nut "A" until distance becomes 1-3/4". Retighten jam nut against nut "A".
- 4. Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than six (6) feet in highest gear, further maintenance is necessary. Contact a Sears or other qualified service center.

#### With Parking Brake "Engaged"



#### TO REPLACE MOTION DRIVE BELT

Park the tractor on level surface. Engage parking brake. For ease of service there is a belt installation guide decal on bottom of left footrest. It is not necessary to remove mower.

#### **BELT REMOVAL -**

1. Engage parking brake (creates slack in belt).

- Remove mower drive belt from electric clutch pulley only (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).
- 3. Roll motion drive belt off transaxle pulley.
- Roll belt off clutching idler pulleys, then off engine pulley and front V-idler pulley.
- Pull belt out of all belt keepers.

#### **BELT INSTALLATION -**

- 1. Place V part of belt into grooves on engine pulley and front V-idler, making sure to route belt inside of belt keepers.
- 2. Put belt coming from V-idler above midspan belt keeper, then onto clutching idler pulleys as shown.
- 3. Make sure V part of belt engages Vidler.
- 4. Place belt around transaxle pulley, beginning at top. V part of belt should engage transaxle pulley.
- 5. Place long lower section of belt through loop in midspan belt keeper.
- 6. Check to be sure belt is on proper side of all belt keepers.
- 7. Reinstall mower drive belt onto electric clutch pulley.

**IMPORTANT:** Check Brake Adjustment.

Clutching Flat Idler Clutching Idler Belt Above Belt Keeper Engine Pulley V-Idler Keeper  $\pm$ Belt Keeper Transaxle Belt Pulley Twists Engine Belt

Pulley Keeper -V-Idier As Viewed from Bottom

#### TO ADJUST STEERING WHEEL ALIGN-MENT

If steering wheel crossbars are not horizontal (left to right) when wheels are positioned straight forward, remove steering wheel and reassemble with crossbar horizontal. Tighten securely. FRONT WHEEL TOE-IN ADJUSTMENT Front wheel toe-in is required for proper steering operation. Toe-in was set at the factory and adjustment should not be necessary. If parts in the front axle or steering mechanism have been replaced or damaged, check toe-in and adjust if 25<sup>necessary.</sup>

#### TO CHECK TOE-IN -

- 1. Position front wheels straight ahead.
- 2. Measure distance between wheels at front and rear of tires (dimensions "A" and "B").
- Front dimension "A" should be 1/8" to 1/4" less than rear dimension "B".

#### TO ADJUST TOE-IN -

- 1. Loosen jam nuts at adjustment sleeves on tie rod.
- 2. Adjust tie rod until dimension "A" is 1/8" to 1/4" less than dimension "B".
- 3. Tighten jam nuts securely.

#### FRONT WHEEL CAMBER

The front wheel camber is not adjustable on your tractor. If damage has occurred to affect the front wheel camber, contact a Sears or other qualified service center.



#### TO REMOVE WHEEL FOR REPAIRS

#### FRONT WHEEL -

- 1. Block up axle securely.
- 2. Remove axle cover, retaining ring and washers to allow wheel removal.
- 3. Repair tire and reassemble.
- 4. Replace washers and snap retaining ring securely in axle groove.
- 5. Replace axle cover.

**REAR WHEEL -**

- 1. Block rear axle securely.
- 2. Remove five (5) hub bolts to allow wheel removal.
- 3. Repair tire and reassemble. Replace and tighten hub bolts securely.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.



# TO START ENGINE WITH A WEAK

**AWARNING:** Lead-acid batteries generate explosive gases. Keep sparks, flame and smoking materials away from batteries. Always wear eye protection when around batteries.

If your battery is too weak to start the engine, it should be recharged. (See "BATTERY" in the MAINTENANCE section of this manual).

If "jumper cables" are used for emergency starting, follow this procedure:

**IMPORTANT:** Your tractor is equipped with a 12 volt system. The other vehicle must also be a 12 volt system. Do not use your tractor battery to start other vehicles.

TO ATTACH JUMPER CABLES -

- Connect one end of the RED cable to the POSITIVE (+) terminal of each battery(A-B), taking care not to short against tractor chassis.
- Connect one end of the BLACK cable to the NEGATIVE (-) terminal (C) of fully charged battery.
- 3. Connect the other end of the BLACK cable (D) to good chassis ground, away from fuel tank and battery.

TO REMOVE CABLES, REVERSE ORDER -

- 1. BLACK cable first from chassis and then from the fully charged battery.
- 2. RED cable last from both batteries.



#### **REPLACING BATTERY**

**CAUTION:** Do not short battery terminals by allowing a wrench or any other object to contact both terminals at the same time. Before connecting battery, remove metal bracelets, wristwatch bands, rings, etc. Positive terminal must be connected first to prevent sparking from accidental grounding.

- 1. Lift hood to raised position.
- 2. Remove terminal guard.
- 3. Disconnect BLACK battery cable then RED battery cable and carefully remove battery from tractor.
- 4. Install new battery with terminals in same position as old battery.
- 5. Reinstall terminal guard.
- First connect RED battery cable to positive (+) battery terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt and keps nut. Tighten securely
- 8. Close terminal access doors.
- 9. Close hood.



#### TO REPLACE HEADLIGHT BULB

- 1. Raise hood.
- 2. Pull bulb holder out of the hole in the backside of the grill.
- 3. Replace bulb in holder and push bulb holder securely back into the hole in the backside of the grill.
- 4. Close hood.

### INTERLOCKS AND RELAYS

Loose or damaged wiring may cause your tractor to run poorly, stop running, or prevent it from starting.

 Check wiring. See electrical wiring diagram in the Repair Parts section.

#### TO RÉPLACE FUSE

Replace with 30 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

#### TO ADJUST ATTACHMENT LIFT SPRING

- 1. While holding spring bushing with wrench, loosen jam nut.
- Turn adjustment bolt clockwise to extend spring and reduce lift effort for heavier attachments.
- Turn adjustment bolt counterclockwise for lighter attachments.

2. Retighten jam nut against spring bushing.

**IMPORTANT:** Do not adjust for maximum spring tension when using light attachments such as a mower. Adjust lift lever spring to aid in lifting attachment. Do not overpower spring. When removing attachment, always adjust spring tension to its lowest position.

#### TO REMOVE HOOD AND GRILL AS-SEMBLY

- 1. Raise hood.
- 2. Unsnap headlight wire connector.
- 3. Stand in front of tractor. Grasp hood at sides, tilt toward engine and lift off of tractor.
- 4. When replacing hood, be sure to reconnect the headlight wire connector.



#### ENGINE

Maintenance, repair, or replacement of the emission control devices and systems, which are being done at the customers expense, may be performed by any non-road engine repair establishment or individual. Warranty repairs must be performed by an authorized engine manufacturer's service outlet. TO ADJUST THROTTLE CONTROL

#### CABLE

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The throttle control has been preset at the factory and adjustment should not be necessary. Check adjustment as described below before loosening cable. If adjustment is necessary, proceed as follows:

1. With engine not running, move throttle control lever to fast position.

Check that speed control lever is against stop screw. If it is not, loosen casing clamp screw and pull throttle cable until lever is against screw. Tighten clamp screw securely.



#### TO ADJUST CHOKE CONTROL

The choke control has been preset at the factory and adjustment should not be necessary. check adjustment as described below before loosening cable. If adjustment is necessary, proceed as follows:

- 1. With engine not running, move choke control (located on dash panel) to full choke position.
- 2. Remove air cleaner cover, filter and cartridge plate to expose carburetor choke (See "AIR FILTER" in the Maintenance section of this manual).
- Choke should be closed. If it is not, loosen casing clamp screw and move choke cable until choke is completely closed. Tighten casing clamp screw securely.
- 4. Reassemble air cleaner.

Closed for Full Choke



#### **TO ADJUST CARBURETOR**

The carburetor has been present at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, proceed as follows: In general, turning the adjusting needles in (clockwise) decreases the supply of fuel to the engine giving a leaner fuel/air mixture. Turning the adjusting needles out 28 necessary adjustments.

(counterclockwise) increases the supply of fuel to the engine giving a richer fuel/ air mixture.

**IMPORTANT:** Damage to the needles and the seats in carburetor may result if screw is turned in too tight.

**PRELIMINARY SETTING -**

- 1. Be sure you have a clean air filter, and the throttle control cable is adjusted properly (see "TO ADJUST THROTTLE CONTROL CABLE" in the Service and Adjustments section of this manual).
- 2. With engine off turn idle fuel adjusting needle in (clockwise) closing it finger tight and then turn out (counterclockwise) 1 turn.

FINAL SETTING -

 Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/motion control lever in neutral (N) position.

**NOTE:** The high idle is set at the factory and cannot be adjusted.

- 2. Idle speed setting With throttle control lever in slow position, engine should idle at 1200 RPM. If engine idles too slow or fast, turn idle speed adjusting screw in or out until correct idle is attained.
- 3. Idle fuel needle setting With throttle control lever in slow position, turn idle fuel adjusting needle in (clockwise) until engine speed decreases and then turn out (counterclockwise) approximately 3/4 turn to obtain the best low speed performance.
- 4. Recheck idle speed. Readjust if necessary.

#### **ACCELERATION TEST -**

5. Move throttle control lever from slow to fast position. If engine hesitates or dies, turn idle fuel adjusting needle out (counterclockwise) 1/8 turn. Repeat test and continue to adjust, if necessary, until engine accelerates smoothly.

High speed stop is factory adjusted. Do not adjust-damage may result. **IMPORTANT:** Never tamper with the engine governor, which is factory set for proper engine speed. Overspeeding the engine above the factory high speed setting can be dangerous. If you think the engine-governed high speed needs adjusting, contact Sears or other qualified service center, which has proper equipment and experience to make any

# STORAGE

Immediately prepare your tractor for storage at the end of the season or if the tractor will not be used for 30 days or more.

**ACAUTION:** Never store the tractor 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.

#### TRACTOR

Remove mower from tractor for winter storage. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- 1. Clean entire tractor (See "CLEANING" in the Maintenance section of this manual).
- Inspect and replace belts, if necessary (See belt replacement instructions in the Service and Adjustments section of this manual).
- 3. Lubricate as shown in the Maintenance section of this manual.
- 4. Be sure that all nuts, bolts and screws are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- 5. Touch up all rusted or chipped paint surfaces; sand lightly before painting.

#### BATTERY

- Fully charge the battery for storage.
- After a period of time in storage, battery may require recharging.
- To help prevent corrosion and power leakage during long periods of storage,
- battery cables should be disconnected and battery cleaned thoroughly (see "TO CLEAN BATTERY AND TERMI-NALS" in the Maintenance section of this manual).
- After cleaning, leave cables disconnected and place cables where they cannot come in contact with battery terminals.
- If battery is removed from tractor for storage, do not store battery directly on concrete or damp surfaces.

#### **ENGINE**

#### **FUEL SYSTEM**

**IMPORTANT:** It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel hose, or tank during storage. Also, 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.

- 1. Drain the fuel tank.
- 2. Start the engine and let it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- · Use fresh fuel next season.

**NOTE:** Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not drain the gas tank and carburetor if using fuel stabilizer. **ENGINE OIL** 

Drain oil (with engine warm) and replace with clean engine oil. (See "ENGINE" in the Maintenance section of this manual). **CYLINDER(S)** 

- 1. Remove spark plug(s).
- 2. Pour one ounce of oil through spark plug hole(s) into cylinder(s).
- 3. Turn ignition key to start position for a few seconds to distribute oil.
- 4. Replace with new spark plug(s).

#### OTHER

- Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust. Rust and/or dirt in your gasoline will cause problems.
- If possible, store your tractor indoors and cover it to give protection from dust and dirt.
- Cover your tractor with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your tractor to rust.

**IMPORTANT:** Never cover tractor while engine and exhaust areas are still warm.

# TROUBLESHOOTING CHART: See appropriate section in manual unless directed to Sears service center

| PROBLEM                             | CAUSE  | CORRECTION   |
|-------------------------------------|--|--|
| Will not start                      | <ol> <li>Out of fuel.</li> <li>Engine not "CHOKED"<br/>properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> </ol> | <ol> <li>Fill fuel tank.</li> <li>See "TO START ENGINE"<br/>in Operation section.</li> <li>Wait several minutes<br/>before attempting to start.</li> <li>Replace spark plug.</li> <li>Clean/replace air filter.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and<br/>carburetor, refill tank with<br/>fresh gasoline and replace<br/>fuel filter.</li> </ol> |
|                                     | <ol> <li>8. Loose or damaged wiring.</li> <li>9. Carburetor out of adjustment.</li> <li>10. Engine valves out of</li> </ol>  | <ol> <li>Check all wiring.</li> <li>See "To Adjust Carburetor"<br/>in Service Adjustments<br/>section.</li> <li>Contact a Sears or other</li> </ol>  |
|                                     | adjustment.  | qualified service center.  |
| Hard to start                       | <ol> <li>Dirty air filter.</li> <li>Bad spark plug.</li> <li>Weak or dead battery.</li> </ol>  | <ol> <li>Clean/replace air filter.</li> <li>Replace spark plug.</li> <li>Recharge or replace<br/>battery.</li> </ol>   |
|                                     | <ol> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> </ol>   | <ol> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill<br/>with fresh gasoline.</li> </ol>  |
|                                     | <ol> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> </ol>  | <ol> <li>Check all wiring.</li> <li>See "To Adjust Carburetor"<br/>in Service Adjustments<br/>section.</li> </ol>  |
|                                     | 8. Engine valves out of<br>adjustment.   | 8. Contact a Sears or other<br>qualified service center.   |
| Engine will not<br>turn over        | <ol> <li>Clutch/brake pedal not<br/>depressed.</li> <li>Attachment clutch is<br/>engaged.</li> <li>Weak or dead battery.</li> </ol>  | <ol> <li>Depress clutch/brake<br/>pedal.</li> <li>Disengage attachment<br/>clutch.</li> <li>Recharge or replace<br/>battery.</li> </ol>  |
|                                     | 4. Blown fuse.   | 4. Replace fuse.   |
|                                     | 5. Corroded battery terminals.   | 5. Clean battery terminals.  |
|                                     | 7. Faulty ignition switch.   | <ul> <li>Check all wiring.</li> <li>Check/replace ignition<br/>switch.</li> </ul>  |
|                                     | 8. Faulty solenoid or starter.   | 8. Check/replace solenoid or starter.  |
|                                     | <ol> <li>Faulty operator presence<br/>switch(es).</li> </ol>   | 9. Contact a Sears or other<br>qualified service center.   |
| Engine clicks but<br>will not start | <ol> <li>Weak or dead battery.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty solenoid or starter.</li> </ol>  | <ol> <li>Recharge or replace battery.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace solenoid or<br/>starter.</li> </ol>  |

#### **TROUBLESHOOTING CHART:** See appropriate section in manual unless directed to Sears service center

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| PROBLEM  | CAUSE   | CORRECTION   |
|--|---|--|
| Loss of power  | <ol> <li>Cutting too much grass/too<br/>fast.</li> <li>Throttle in "CHOKE"<br/>position.</li> <li>Build-up of grass, leaves<br/>and trash under mower.</li> <li>Dirty air filter.</li> <li>Low oil level/dirty oil.</li> <li>Faulty spark plug.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Water in fuel.</li> <li>Water in fuel.</li> <li>Spark plug wire loose.</li> <li>Dirty/clogged muffler.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of<br/>adjustment.</li> <li>Engine valves out of<br/>adjustment.</li> </ol> | <ol> <li>Set in "Higher Cut" position/<br/>reduce speed.</li> <li>Adjust throttle control.</li> <li>Clean underside of mower<br/>housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change<br/>spark plug.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with<br/>fresh gasoline.</li> <li>Drain fuel tank and carbure<br/>tor, refill tank with fresh<br/>gasoline and replace fuel<br/>filter.</li> <li>Connect and tighten spark<br/>plug wire.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor"<br/>in Service Adjustments<br/>section.</li> <li>Contact a Sears or other<br/>qualified service center.</li> </ol> |
| Excessive<br>vibration   | <ol> <li>Worn, bent or loose blade.</li> <li>Bent blade mandrel.</li> <li>Loose/damaged part(s).</li> </ol>   | <ol> <li>Replace blade.<br/>Tighten blade bolt.</li> <li>Replace blade mandrel.</li> <li>Tighten loose part(s).<br/>Replace damaged parts.</li> </ol>  |
| Engine continues<br>to run<br>when operator<br>leaves seat with<br>with attachment<br>clutch engaged | 1. Faulty operator-safety<br>presence control system.   | 1. Check wiring, switches and connections. If not contact a Sears or other qualified service center.   |
| Poor cut - uneven  | <ol> <li>Worn, bent or loose blade.</li> <li>Mower deck not level.</li> <li>Buildup of grass, leaves,<br/>and trash under mower.</li> <li>Bent blade mandrel.</li> <li>Clogged mower deck vent<br/>holes from buildup of<br/>grass, leaves, and trash<br/>around mandrels.</li> </ol>   | <ol> <li>Replace blade. Tighten<br/>blade bolt.</li> <li>Level mower deck.</li> <li>Clean underside of mower<br/>housing.</li> <li>Replace blade mandrel.</li> <li>Clean around mandrels to<br/>open vent holes.</li> </ol>  |

#### TROUBLESHOOTING CHART: See appropriate section in manual unless directed to Sears service center

| Mower blades will       | 1. Obstruction in clutch                                   | 1. Remove obstruction.  |
|-------------------------|--|---|
|                         | <ol> <li>Worn/damaged mower</li> <li>drive belt</li> </ol> | 2. Replace mower drive belt.  |
|                         | 3. Frozen idler pullev.                                    | 3. Replace idler nulley   |
|                         | 4. Frozen blade mandrel.                                   | 4. Replace blade mandrel.   |
| Poor grass<br>discharge | 1. Engine speed too slow.                                  | 1. Place throttle control in<br>"FAST" position.                                    |
|                         | 2. Travel speed too fast.                                  | 2. Shift to slower speed.   |
|                         | 3. Wet grass.  | 3. Allow grass to dry before mowing.  |
|                         | 4. Mower deck not level.                                   | 4. Level mower deck.  |
|                         | 5. Low/uneven tire air                                     | 5. Check tires for proper air   |
|                         | 6. Worn, bent or loose blade.                              | 6 Beplace/shamen blade  |
|                         |  | Tighten blade bolt.   |
|                         | 7. Buildup of grass, leaves                                | 7. Clean underside of mower   |
|                         | and trash under mower.                                     | housing.  |
|                         | 9 Blades improperly installed                              | <ol> <li>Replace mower drive belt.</li> <li>Reinstell blades sharp adde.</li> </ol> |
|                         | o. Diades impropeny installed.                             | down.   |
|                         | 10. Improper blades used.                                  | 10. Replace with blades listed  |
|                         | 11 Classed mewer deals year                                | in this manual.   |
|                         | holes from buildup of grass                                | open vent holes   |
|                         | leaves, and trash around                                   | open vent holes.  |
|                         | mandrels.  |   |
| Headlight(s) not        | 1. Switch is "OFF".  | 1. Turn switch "ON".  |
| working                 | 2. Bulb(s) or lamp(s) burned out.                          | 2. Replace bulb(s) or lamp(s).  |
| (if so equipped)        | 3. Faulty light switch.                                    | 3. Check/replace light switch.  |
|                         | 4. Loose or damaged wiring.                                | 4. Check wiring and connec-   |
|                         | 5. Blown fuse.   | 5. Replace fuse.  |
|                         |  |   |
| Battery will not        | 1. Bad battery cell(s).                                    | 1. Heplace battery.   |
| onarge                  |  | tions.  |
|                         | 3. Faulty regulator  | 3. Replace regulator.   |
|                         | (if so equipped).  |   |
|                         | 4. ⊢aulty alternator.                                      | 4. Heplace alternator.  |
| Engine "backfires"      | 1. Engine throttle control not                             | 1. Move throttle control to   |
| when turning            | set at "SLOW" position                                     | "SLOW" position and allow   |
|                         | stopping engine  | to lale for 30 seconds before   |
|                         |  |   |
|                         |  |   |

TRACTOR -- MODEL NUMBER 917.275033

#### SCHEMATIC



# **REPAIR PARTS**

#### TRACTOR--MODEL NUMBER 917.275033

#### ELECTRICAL



#### ELECTRICAL

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| KEY | PART     |                               |
|-----|----------|-------------------------------|
| NO. | NO.      | DESCRIPTION                   |
| 1   | 144927   | Battery                       |
| 2   | 74760412 | Bolt Hex Head 1/4-20 x 3/4    |
| 8   | 7603J    | Tray, Battery                 |
| 10  | 145211   | Bolt 1/4-20 x 7.5 Zinc        |
| 11  | 150109   | Hold down Battery Dash Mount  |
| 12  | 145769   | Nut Push Nylon 1/4"           |
| 16  | 176138   | Switch Interlock Push-In      |
| 21  | 175688   | Harness Socket Light W/Bulb   |
| 25  | 150775   | Cable, Battery                |
| 26  | 108824X  | Fuse                          |
| 27  | 73510400 | Nut Keps Hex 1/4-20 Unc       |
| 28  | 170697   | Cable, Ground                 |
| 29  | 160784   | Switch, Plunger               |
| 30  | 175566   | Switch, Ign                   |
| 33  | 140403   | Key, Ignition                 |
| 40  | 170238   | Harness Ign.                  |
| 42  | 154336   | Cover, Terminal               |
| 45  | 122822X  | Ammeter                       |
| 50  | 174652   | Switch, PTO                   |
| 52  | 141940   | Protection Wire Loop          |
| 79  | 175242   | Bulbholder Asm. Incan descent |
| 81  | 109748X  | Relay Asm.                    |

**NOTE:** All component dimensions given in U.S. Inches 1 inch = 25.4 mm

# TRACTOR--MODEL NUMBER 917.275033 CHASSIS AND ENCLOSURES



# TRACTOR--MODEL NUMBER 917.275033

#### **CHASSIS AND ENCLOSURES**

| KEY | PART       |                               | KEY              | PART           |                                      |  |
|-----|------------|-------------------------------|------------------|----------------|--------------------------------------|--|
| NO. | NO.        | DESCRIPTION                   | NO.              | NO.            | DESCRIPTION                          |  |
| 1   | 175465     | Rall, Frame RH                | 58               | 175315         | Bracket Asm., Fender                 |  |
| 2   | 175282     | Drawbar, Gt                   | 60               | 17060620       | Screw Thdrol. 3/8-16 x 1-1/4         |  |
| 4   | 73680700   | Nut, Crownlock Hex 7/16-14UNC | 63               | 19131614       | Washer 13/32 x 1 x 14 Ga.            |  |
| 5   | 163976X428 | Dash YTGT 2 Cyl               | 67               | 156973         | Guide, Belt Gear Drive               |  |
| 6   | 157882     | Dash, Lower Vgt One Piece     | 68               | 17490508       | Screw Thdrol. 5/16-18 x 1/2          |  |
| 7   | 17720408   | Screw, Thd Cut 1/4-20 x 1/2   | 70               | 177679         | Belt Keeper VGT Ground Drive         |  |
| 8   | 145166     | Support, Battery              | 84               | 142992         | Stop, Over Center Mower              |  |
| 14  | 175259X558 | Hood Asm                      | 85               | 144911         | Bracket, Support Transaxle           |  |
| 16  | 121794X    | Cover, Access                 | 86               | 74780716       | Bolt Fin Hex 7/16-14 UNC x 1         |  |
| 17  | 17060612   | Screw 3/8-16 X .75            | 88               | STD551143      | Washer, Lock Hvy Hicl Spr 7/16       |  |
| 18  | 174515X558 | Grille                        | 91               | 175464         | Rail, Frame Lh                       |  |
| 19  | 19131312   | Washer 13/32x13/16x12 Ga.     | 122              | 161464         | Screw Hex Wshd 8-18 x 7/8            |  |
| 20  | STD523710  | Bolt, Fin Hex 3/8-16 x 1      | 130              | 164863         | Screw HWHD Hi-Lo #13-16 x 3/4        |  |
| 21  | STD541437  | Nut Crownlock 3/8-16 Unc      | 137              | 74780716       | Bolt Fin Hex 7/16-14 x1 Gr. 5        |  |
| 24  | 179717X558 | Footrest, RH                  | 138              | 163975X428     | CupholderYTGT                        |  |
| 28  | 179716X558 | Footrest, LH                  | 139              | 171873         | Bolt Shoulder 5/16-18 T              |  |
| 30  | 145051X014 | Saddle, Sikscr Vgt            | 140              | 163806         | MagnetYTGT                           |  |
| 31  | 161419     | Brace, Supt 1-pc VGT Strg     | 141              | 163805         | Striker Plate YTGT                   |  |
| 32  | 161327     | Bracket, Pivot Chassis Lh     | 142              | 161897         | Bracket Dash Rh                      |  |
| 33  | 161326     | Bracket, Pivot Chassis Rh     | 144              | 161900         | Bracket Dash Lh                      |  |
| 34  | 177018     | Plate Asm Engine Chassis      | 148              | 164655         | Extrusion Bumper                     |  |
| 35  | 19111116   | Washer 11/32x11/16x16 Ga.     | 150              | 161237         | Duct Heat Hood                       |  |
| 36  | 17060512   | Screw 5/16-18 x 3/4           | 152              | 177956         | Shield Browning                      |  |
| 37  | 179772X558 | Fender                        | 153              | 179761         | Light Box Asm W/Lens                 |  |
| 39  | 175278     | Bracket, Axle Front           | 157_             | 161840         | Lens Bar                             |  |
| 42  | 72140608   | Bolt, Carriage 3/8-16 x 1     | 158              | 17670608       | Screw Thdrol. 3/8-16 x 1/2           |  |
| 43  | 136939     | Bracket, Spnsn Front Lh       | 159              | 17000612       | Screw Hex Wsh Thdr. 3/8-16 x 3/4     |  |
| 44  | 136940     | Bracket, Spnsn Front Rh       | 160              | 17060508       | Screw 5/16-18 X 1/2                  |  |
| 45  | 154913     | Bracket Asm., Susp Chassis Rh | 162              | 142432         | Screw Hex 1/4-1/2 Unc                |  |
| 47  | 17490608   | Screw 1 ndrol 3/8-16 x 1/2    | NOT              |                | ent dimensions siven in it C. inches |  |
| 50  | 175476     | Bracket, Chassis Front        | NUL              | E: All compone | ent dimensions given www.o. inches   |  |
| 56  | 154914     | Bracket Asm., Susp Chassis Lh | 1 inch = 25.4 mm |                |                                      |  |

#### **GROUND DRIVE**



#### TRACTOR -- MODEL NUMBER 917.275033

#### **GROUND DRIVE**

| KEY<br>NO. | PART<br>NO. | DESCRIPTION                   | KEY<br>NO.    | PART<br>NO. |
|------------|-------------|-------------------------------|---------------|-------------|
| 3          | 7563R       | Washer, Thrust, Axle          | 38            | 150035      |
| 4          | 17490508    | Screw Thdrol 5/16-18 x 3/4    | 39            | 743210      |
| 5          | STD541437   | Nut, Crownlock 3/8-16         | 40            | 178575      |
| 6          | STD561210   | Pin, Cotter                   | 41            | 739310      |
| 7          | 149176      | Wheel, Hub Assembly           | 42            | 8883R       |
| 8          | 12000034    | Klip, Ring                    | 46            | 145170      |
| 9          | 140080      | Bolt, Hub                     | 47            | 138228      |
| 10         | 142509      | Disc, Brake                   | 48            | 72110       |
| 11         | 136927      | Yoke, Brake Disc              | 50            | 131494      |
| 12         | 73750800    | Nutlock 1/2-20 Unf            | 51            | STD54       |
| 13         | 139419      | Washer, Special               | 52            | 139123      |
| 14         | 138901      | Bushing                       | 54            | 161590      |
| 15         | STD551037   | Washer 13/32x13/16 x 16 Ga.   | 55            | 105706      |
| 16         | 143012      | Set, Screw 1/4-28 x 3/4       | 56            | 137153      |
| 17         | 126909X     | Spring                        | 57            | 141756      |
| 18         | 137104      | Lever, Brake                  | <del>59</del> | 122253      |
| 19         | 136926      | Cam, Brake Disc               | 60            | 122268      |
| 21         | 23260412    | Screw, Flat Head 1/4-28 x 3/4 | 61            | 137524      |
| 22         | 633A109     | Gearshift, Lever Assembly     | 62            | STD55       |
| 23         | 106932X     | Knob                          | 63            | 74760       |
| 24         | 136925      | Support, Puck Brake           | 64            | 15475       |
| 25         | 136923      | Puck, Brake Top               | 65            | 179613      |
| 26         | 137552      | Spring, Return                | 66            | 14029       |
| 27         | 17490528    | Screw, Hex Wsh Thd.           | 67            | 19131       |
|            |             | 5/16-18 x 1-3/4               | 68            | 5142H       |
| 28         | 73350600    | Nut. Hex Jam 3/8-16           | 69            | 13632       |
| 29         | 137213      | Brake, Rod                    | 117           | 73900       |
| 30         | 19131616    | Washer 13/32 x 1 x 16 Ga.     | 150           | 9858M       |
| 34         | 71673       | Cap, Plunger                  |               | 17474       |
| 35         | 137648      | Rod. Parking Brake            |               |             |
| 36         | 149412      | Spring, Drive Ground          |               |             |
| 37         | 121749X     | Washer 25/32 x1-1/4 x 16 Ga.  | NOT           | E: All co   |

| ). | NO.       | DESCRIPTION                      |
|----|-----------|----------------------------------|
|    | 150035    | Nyliner                          |
|    | 74321016  | Screw, Fin. #10-24 x 1           |
|    | 178575    | Actuator, Interlock Switch       |
|    | 73931000  | Nut, Centerlock #10-24           |
|    | 8883R     | Cover, Pedal                     |
|    | 145170    | Retainer, Spring                 |
|    | 138228    | Clutch Rod                       |
|    | 72110612  | Bolt, Carr. 3/8-16 x 1-1/2 Gr. 5 |
|    | 131494    | Pulley, Idler, Flat              |
|    | STD541437 | Nut, Crownlock 3/8-16 UNC        |
|    | 139123    | Pulley, Idler, Grooved           |
|    | 161590    | Clutch, Arm Assembly             |
|    | 105706X   | Bearing, Idler                   |
|    | 137153    | V-Belt                           |
|    | 141756    | Bracket, Shift Rod, Hi-Lo        |
|    | 122253X   | Shift Rod, Hi-Lo                 |
|    | 122268X   | Spring Clip, Connecting Link     |
|    | 137524    | Pulley, Transaxle                |
|    | STD551143 | Washer, Lock 7/16                |
|    | 74760720  | Bolt, Fin Hex 7/16-14 x 1-1/4    |
|    | 154752    | Shaft, Clutch/Brake Pedal        |
|    | 179613    | Bolt, Shoulder                   |
|    | 140296    | Washer, Hardened                 |
|    | 19131312  | Washer, Flat                     |
|    | 5142H     | Pin, Roll                        |
|    | 136327    | Hub, Cover                       |
| 7  | 73900600  | Nut, Lock Fig. 3/8-16 Unc        |
| 0  | 9858M1    | Key, Woodruff                    |
|    | 174742    | Transaxle Asm                    |

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

### STEERING ASSEMBLY



#### TRACTOR -- MODEL NUMBER 917.275033

# STEERING ASSEMBLY

| KEY<br>NO. | PART<br>NO. | DESCRIPTION  |
|------------|-------------|--|
| 1          | 150044¥428  | Wheel Steering                                     |
| ,<br>,     | 178557      | Ayle Asm Front                                     |
| 3          | 6855M       | Fitting, Grease                                    |
| ă          | 161849      | Spindle Asm. LH                                    |
| 5          | 161848      | Spindle Asm., RH                                   |
| ě          | 6266H       | Bearing, Race Thrust Harden                        |
| 7          | 121748X     | Washer 25/32 x 1-5/8 x 16 Ga.                      |
| 8          | 12000029    | Ring, Klip #T5304-75                               |
| 9          | 121232X     | Cap, Spindle                                       |
| 10         | 74781044    | Bolt, Fin Hex 5/8-11 x 2-3/4                       |
| 11         | 136518      | Spacer Bearing Axle Front                          |
| 12         | 73901000    | Nut, Lock Flange 5/8-11 Unc                        |
| 13         | 121749X     | Washer 25/32 x 1-1/4 x 16 Ga.                      |
| 14         | STD551137   | Washer, Lock Hvy Hicl Spr 3/8                      |
| 15         | STD541537   | Nut, Lock Center 3/8-24 UNF                        |
| 16         | 145103      | Shaft Asm., Steering                               |
| 17         | 137347      | Rod Asm., Tie Ball J Ball Vgt (Inc. Key No. 36-40) |
| 18         | 175572      | Draglink, Ball Joint Solid Vgt                     |
| 19         | 156011      | Support Asm., Steering Vgt                         |
| 20         | 163887X428  | Boot, Steering                                     |
| 21         | 159945      | Adapter, wheel Steering                            |
| 22         | 155105      | Busning, Strg. Bik                                 |
| 23         | 152927      | Screw  |
| 25         | STD523/10   | Bolt, Fin Hex 3/8-16 X 1 Gr. 5                     |
| 26         | 159946X428  | Cap, wheel Steering                                |
| 2/         | 3300H       | Dealing, Col. Sug.<br>Scrow $2/9-16 \times 2/4$    |
| 20         | 10402012    | Bosting Flance                                     |
| 20         | 1042000     | Bushing Nulliner Shon                              |
| 32         | 10111610    | Washer 11/32 v 1 v 10 Ga                           |
| 33         | 10040500    | Washer Lock Hwy Hici Spr. 5/16                     |
| 34         | 74780512    | Bolt Hex Hd 5/16-18 x 3/4                          |
| 35         | 138059      | Gear Sector Steering                               |
| 36         | 137156      | TieBod   |
| 37         | 73360600    | Jam Nut BH Thread                                  |
| 38         | 109850X     | Joint Asm, Ball BH Thread                          |
| 39         | 73700600    | Jam Nut LH Thread                                  |
| 40         | 109851X     | Joint Asm. Ball LH Thread                          |
| 41         | 155246      | Bracket Switch Interlock VGT 97                    |
| 42         | 17490508    | Screw Thdrol 5/16-18 x 1/2 Tyt                     |
| 44         | 160135X428  | Extension, Steering                                |
| 45         | 19132411    | Washer 13/32 x 1-1/20 x 11 Ga.                     |
|            |             |  |

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm ENGINE



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#### TRACTOR -- MODEL NUMBER 917.275033

ENGINE

| PART       | DESCRIPTION   | KEY   | PART  | DESCRIPTION   |
|------------|---|---|---|---|
| NU.        | DESCRIPTION   | NU.   | NU.   | DESCRIPTION   |
|            | Engine (See Breakdown) Kohler   | 37  | 123487X   | Clamp Hose  |
|            | Model No. CV674-75544   | 39  | 17490636  | Screw TT 3/8-16 x 2-1/4 UNC   |
| 149723     | Muffler   | 40  | 17490664  | Screw TT 3/8-16 x 4 UNC   |
| 121361X    | Pulley V-Idler  | 41  | 126197X   | Washer 1-1/2 OD x 15/32 ID x  |
| 177748     | Keeper Asm. Belt Engine   |   |   | .250  |
| 175287     | Bushing   | 42  | STD551143   | Washer Lock 7/16  |
| 170056     | Clutch Electric   | 43  | 179953  | Bolt Hex 7/16 - 20 X 3.75 Ga 5  |
| 143996     | Pulley Engine VGT Elect Clutch  | 47  | 175288  | Bushing   |
| 151346     | Tank Fuel Rear  | 62  | 146629  | Shield Heat Muffler   |
| 109227X    | Pad Spacer  | 69  | 24-041-02   | Gasket  |
| 106082X    | Pad Spacer  | 70  | 175545  | Tube Exhaust LH   |
| 161493     | Cap Asm Fuel W/Gauge  | 71  | 175546  | Tube Exhaust RH   |
| 177328X428 | Control Throttle  | 74  | 162295  | Elbow Street Brass  |
| 164863     | Screw HWHD Hi-Lo #13-16 x 3/4   | 80  | M73030800   | NutFlange   |
| 175441X428 | Control Choke   | 81  | 148456  | Plug Drain Oil Easy   |
| STD551237  | Washer Ext Tooth 3/8  | 82  | 148315  | Plug Oil Drain Easy   |
| 73920600   | Nut Keps 3/8 - 24 UNF   | 83  | 171877  | Bolt 5/16-18 UNC x 3/4 W/ Sems  |
| 3645J      | Bushing   | 84  | 17060624  | Screw 3/8-16 x 1-1/2  |
| 139277     | Stem Tank Fuel  |   |   |   |
| 7834R      | FuelLine  |   |   |   |
| 137180     | Spark Arrester Kit  | NOT   | E: All compon   | ent dimensions given in U.S. inches   |
| 10010500   | Washer Split  |   | 1 inch = $2$  | 5.4 mm  |
|            | PART<br>NO.<br>149723<br>121361X<br>177748<br>175287<br>170056<br>143996<br>151346<br>109227X<br>106082X<br>161493<br>177328X428<br>164863<br>175441X428<br>STD551237<br>73920600<br>3645J<br>139277<br>7834R<br>137180<br>10010500 | PARTNO.DESCRIPTIONEngine (See Breakdown) Kohler<br>Model No. CV674-75544149723Muffler121361XPulley V-Idler177748Keeper Asm. Belt Engine175287Bushing170056Clutch Electric143996Pulley Engine VGT Elect Clutch151346Tank Fuel Rear109227XPad Spacer106082XPad Spacer161493Cap Asm Fuel W/Gauge177328X428Control Throttle164863Screw HWHD Hi-Lo #13-16 x 3/4175441X428Control ChokeSTD551237Washer Ext Tooth 3/873920600Nut Keps 3/8 - 24 UNF3645JBushing139277Stem Tank Fuel7834RFuel Line137180Spark Arrester Kit10010500Washer Split | PART         KEY           NO.         DESCRIPTION         NO.            Engine (See Breakdown) Kohler<br>Model No. CV674-75544         39           149723         Muffler         40           121361X         Pulley V-Idler         41           177748         Keeper Asm. Belt Engine         42           170056         Clutch Electric         43           143996         Pulley Engine VGT Elect Clutch         47           151346         Tank Fuel Rear         62           109227X         Pad Spacer         69           106082X         Pad Spacer         70           161493         Cap Asm Fuel W/Gauge         71           177328X428         Control Throttle         74           164863         Screw HWHD Hi-Lo #13-16 x 3/4         80           17541X428         Control Choke         81           STD551237         Washer Ext Tooth 3/8         82           73920600         Nut Keps 3/8 - 24 UNF         83           3645J         Bushing         84           139277         Stem Tank Fuel         7834R           7180         Spark Arrester Kit         NOT           10010500         Washer Split         NOT | PART         KEY         PART           NO.         DESCRIPTION         NO.         NO.            Engine (See Breakdown) Kohler<br>Model No. CV674-75544         39         17490636           149723         Muffler         40         17490664           121361X         Pulley V-Idler         41         126197X           177748         Keeper Asm. Belt Engine         42         STD551143           170056         Clutch Electric         43         179953           143996         Pulley Engine VGT Elect Clutch         47         175288           151346         Tank Fuel Rear         62         146629           109227X         Pad Spacer         69         24-041-02           106082X         Pad Spacer         70         175545           161493         Cap Asm Fuel W/Gauge         71         175546           177328X428         Control Throttle         74         162295           164863         Screw HWHD Hi-Lo #13-16 x 3/4         80         M73030800           175441X428         Control Choke         81         148456           STD551237         Washer Ext Tooth 3/8         82         148315           73920600         Nut Keps 3/8 - 24 UNF |

.

#### SEAT ASSEMBLY



| ne i | FARI      |                               | RE 1 | rani          |  |
|------|-----------|-------------------------------|------|---------------|--|
| NO.  | NO.       | DESCRIPTION                   | NO.  | NO.           | DESCRIPTION                              |
| 1    | 180598    | Seat                          | 16   | 123740X       | Spring, Cprsn                            |
| 2    | 180166    | Bracket, Plvot Seat           | 17   | 123976X       | Nut, Lock 1/4 Lge Fig Gr. 5              |
| 3    | 140675    | Strap, Fender                 | 18   | 19171912      | Washer 17/32x1-3/16x12 Ga.               |
| 5    | 145006    | Clip, Push In, Hinged         | 19   | 166369        | Knob, Seat                               |
| 6    | STD541437 | Nut, Crownlock 3/8-16 Unc     | 20   | 124238X       | Cap, Spring Seat                         |
| 7    | 124181X   | Spring, Seat Cprsn            | 21   | 171852        | Bolt, Shoulder 5/16-18                   |
| 8    | 171877    | Bolt 5/16-18Uncx 3/4 w/Sems   | 22   | STD541431     | Nut, Crownlock 5/16-18 Unc               |
| 10   | 180186    | Pan, Seat                     |      |               |  |
| 12   | 121246X   | Bracket, Mounting Switch      |      |               |  |
| 13   | 121248X   | Bushing, Snap                 | Not  |               | and all and a local data to 11.0 Jackson |
| 14   | 72050412  | Bolt, Carriage 1/4-20 X 1-1/2 | NOT  | E: All compon | ent dimensions given in U.S. incres      |
| 15   | 121249X   | Spacer, Split                 |      | 1 inch = 25   | 5.4 mm                                   |

DECALS



| KEY<br>NO. | PART<br>NO. | DESCRIPTION              | key<br>No. | PART<br>NO. | DESCRIPTION               |
|------------|-------------|--------------------------|------------|-------------|---------------------------|
| 1          | 177375      | Decal, Dash Panel        | 14         | 160397      | Decal, V-Beit Schematic   |
| 2          | 164085      | Decal, Dash              | 15         | 181500      | Decal, Repl Parts         |
| 3          | 171702      | Decal, Hood, RH          | 17         | 149516      | Decal, Battery Drge/Poi   |
| 4          | 171703      | Decal, Hood, LH          | 18         | 164065      | Decal, Insert Strg        |
| 5          | 177415      | Decal, Hood Side Panel   | 19         | 138047      | Decal, Battery            |
| 6          | 133644      | Decal, Maintenance       | 23         | 174969      | Reflector, Taillight LH   |
| 8          | 177416      | Decal, Engine            | 24         | 174970      | Reflector, Taillight RH   |
| 9          | 163204      | Decal, Fender, Craftsman |            | 138311      | Decal, Handle Lift Height |
| 10         | 156439      | Decal, Fender Danger     |            |             | Adjust (Lift Handle)      |
| 11         | 181249      | Decal, Clutch/Brake      |            | 179768X428  | Pad, Footrest LH          |
| 12         | 146047      | Decal, V-Belt Drive      |            | 179769X428  | Pad. Footrest RH          |
|            |             | Schematic                |            | 182935      | Manual, Owner's (Eng)     |
| 13         | 164884      | Decal, Blower Housing    | • •        | 182936      | Manual, Owner's (Span)    |

#### **WHEELS & TIRES**



| key<br>No. | PART<br>NO. | DESCRIPTION                        |
|------------|-------------|------------------------------------|
| 1          | 59192       | Cap, Valve, Tire                   |
| 2          | 65139       | Stem, Valve                        |
| 3          | 106228X427  | Rim Assembly, Front                |
| 4          | 8134H       | Tube, Front (Service Item Only)    |
| 5          | 106230X     | Tire, Front                        |
| 6          | 278H        | Fitting, Grease (Front Wheel Only) |
| 7          | 9040H       | Bearing, Flange (Front Wheel Only) |
| 8          | 104757X428  | Cap, Axle (Front Wheel Only)       |
| 9          | 105588X     | Tire, Rear                         |
| 10         | 7154J       | Tube, Rear (Service Item Only)     |
| 11         | 106277X428  | Rim Assembly, Rear                 |
| 12         | 6856M       | Fitting, Grease                    |
|            | 144334      | Sealant, Tire (10 oz. Tube)        |

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm LIFT ASSEMBLY



#### TRACTOR -- MODEL NUMBER 917.275033

#### LIFT ASSEMBLY

| KEY<br>NO. | PART<br>NO. | DESCRIPTION                     | KEY<br>NO. | PART<br>NO.   | DESCRIPTION                         |
|------------|-------------|---------------------------------|------------|---------------|-------------------------------------|
| 1          | 121006X     | Rod Asm., Lever                 | 29         | 150233        | Trunnion, Infin Height              |
| 2          | 180045      | Shaft Asm., Lift Vgt            | 30         | 110807X       | Nut, Special                        |
| 3          | 159189      | Lever Asm., Lift Rh             | 31         | 19131016      | Washer 13/32 x 5/8 x 16 Ga.         |
| 4          | 12000022    | E-Ring Truarc #5133-87          | 32         | 137150        | Spring, Compression Inf Hat         |
| 5          | 19292016    | Washer 29/32 x 1-1/4 x 16 Ga.   | 33         | STD560907     | Pin, Cotter 3/32 x 1/2              |
| 6          | 71110624    | Bolt, Fin Hex 3/8-16 unc x1-1/2 | 34         | 137167        | Rod, Adj Lift                       |
| 7          | 175830      | Grip, Handle Fluted             | 35         | 138057        | Knob, Inf 3/8-16 Unc                |
| 9          | 175831      | Button, Plunger                 | 38         | 155097        | Pointer, Height Indicator           |
| 10         | 2876H       | Spring 2-1/8"                   | 39         | 123935X       | Plug, Hole                          |
| 11         | 146704      | Link Lift                       | 40         | 17060516      | Screw 5/16-18 x 1                   |
| 12         | 163552      | Retainer, Spring                | 41         | 73540600      | Nut, Crownlock 3/8-24               |
| 13         | 139868      | Arm, Suspension Vgt             | 42         | 19112410      | Washer 11/32 x 1-1/2 x10 Ga.        |
| 14         | 169865      | Bearing                         | 43         | 123934X       | Scale, Indicator Height             |
| 15         | 73680600    | Nut Crownlock 3/8-16 Unc        | 70         | 145212        | Nut Hex Flange Lock                 |
| 16         | 674A247     | Spring Asm. Assist Lift         | 72         | 110452X       | Nut Push Phos & Oil                 |
| 17         | 73350600    | Nut Hex Jam 3/8-16 Unc          | 73         | 73350600      | Nut Hex Jam 3/8-16 UNC              |
| 18         | 143363      | Bracket Spring Assist           | 75         | 175805        | Plate Asm Susp Front                |
| 19         | 19131316    | Washer 13/32 x 13/16 x 16 Ga.   | 76         | 175560        | Pin Flange                          |
| 20         | 5328J       | Bolt Adjust Spring Assist       | 78         | 175689        | Trunnion                            |
| 21         | 74760616    | Bolt Fin Hex 3/8-16 Unc x 1     | 80         | 126684X       | Washer Shim 1/4 x 5/8 x .062        |
| 23         | STD624008   | Retainer, Spring                |            |               |                                     |
| 24         | 73350800    | Nut. Jam Hex 1/2-13 Unc         | NOT        | E: All compon | ent dimensions given in U.S. inches |
| 26         | 73800800    | Nut, Crownlock 1/2-13 Unc       |            | 1 Inch = 25.  | 4 mm                                |

**MOWER DECK** 



#### TRACTOR--MODEL NUMBER 917.275033

#### MOWER DECK

| KEY<br>NO. | PART<br>NO. | DESCRIPTION                     | KEY<br>NO.              | PART<br>NO.   | DESCRIPTION                        |  |
|------------|-------------|---------------------------------|-------------------------|---------------|------------------------------------|--|
| 1          | 181606      | Mower Deck Weldment 50          | 37                      | 137166        | Stiffener, Arm Idler               |  |
| 2          | STD541413   | Nut, Crownlock 5/16-18          | 38                      | 173979        | Keeper. Beit Idler                 |  |
| 3          | 72110506    | Bolt. Carriage 5/16-18 x 3/4    | 39                      | 131494        | Pulley, Idler Flat                 |  |
| 4          | 7631J       | Runner, MowerLH                 | 40                      | 174375        | Pulley, Driven                     |  |
| 5          | 138457      | Bracket Asm., Sway Bar          | 42                      | STD533107     | Bolt, Carriage 5/16-18 Unc x 3/4   |  |
| 6          | STD624008   | Retainer, Spring                | 43                      | 136460        | Arm, Idler Secondary               |  |
| 7          | 178024      | Bar, Sway Deck                  | 44                      | 165723        | Spacer, Retainer                   |  |
| 8          | 850857      | Bolt 3/8-24 x 1.25 Gr. 8        | 45                      | STD541437     | Nut, Crownlock 3/8-16 Unc          |  |
| -          |             | Patched                         | 46                      | 74760628      | Bolt, Fin Hex 3/8-16 Unc x 1-3/4   |  |
| 9          | STD551137   | Washer, Lock Hvv 3/8            | 47                      | 137200        | Cover, Mandrel RH                  |  |
| -          |             | Unplated                        | 48                      | 137729        | Screw, Thd Roll 1/4-20 x 5/8       |  |
| 10         | 140296      | Washer, Hard Blade Mower        | 49                      | 136574        | Cover, Mandrel LH                  |  |
|            |             | Vented                          | 50                      | 137272        | Arm, Idler Primary                 |  |
| 11         | 137380      | Blade (3 Required)              | 51                      | 137273        | Spring, Secondary                  |  |
| 13         | 137553      | Shaft Asm., W/Lower Brg         | 52                      | 175080        | Pulley, Idler V Groove             |  |
| 14         | 137152      | Housing, Mandrel 50" Vent       | 53                      | 180807        | Shield, Idler                      |  |
| 15         | 110485X     | Bearing, Ball Mandrel           | 54                      | 148763        | V-Belt, Mower Primary              |  |
| 16         | 174493      | Stripper, Mower Vented          | 55                      | 144959        | V-Belt, Mower Secondary            |  |
| 17         | 106735X     | Rod. Hinge                      | 56                      | 138687        | Spring, Primary                    |  |
| 18         | 19111016    | Washer 11/32 x 5/8 x 16 Ga.     | 57                      | 136577        | Bar Asm., Wheel Gauge              |  |
| 19         | 105304X     | Cap. Sleeve                     | 58                      | 133957        | Wheel, Gauge                       |  |
| 20         | 123713X     | Spring, Torsion Deflector       | 59                      | 137644        | Bolt, Shoulder                     |  |
| 21         | 137607      | Bracket, Deflector              | 60                      | 139031        | Pin, Clevis                        |  |
| 22         | 110452X     | Nut. Push                       | 61                      | 136573        | Bracket, Wheel Gauge               |  |
| 23         | 110509X     | Shield, Deflector Mower         | 62                      | 133943        | WasherHardened                     |  |
| 24         | 136320      | Bunner, BH                      | 63                      | 72110504      | Bolt Carriage 5/16 x 1/2           |  |
| 25         | 19111216    | Washer 11/32 x 3/4 x 16 Ga.     | 64                      | 19121414      | Washer 3/8 x 3/4 x 14 Ga           |  |
| 27         | STD551037   | Washer 13/32 x 13/16 x 16 Ga.   | 65                      | 151831        | Pullev Idler Flat Mower            |  |
| 28         | 132823      | Spacer, Spring Stop Idler       | 66                      | 156009        | Keeper, Belt Idler 44/50"          |  |
| 30         | 173984      | Screw Thdrol Rolling Washer     | 67                      | 73930600      | Nut. Centerlock 3/8-16             |  |
|            |             | Head                            | 99                      | 72110614      | Bolt. Carriage 3/8-16 x 1-3/4 Gr.5 |  |
| 31         | 178342      | Nut. Fla Top Lock Cntr 9/16     | 116                     | 73680500      | Nut Crown Lock 5/16-18             |  |
| 32         | 153535      | Pulley, Mandrei                 |                         | 143651        | Mandrel Assembly (Includes         |  |
| 33         | 129963      | Washer, Spacer Mower            |                         |               | Key Nos. 8-10, 13-15, 31 and 33)   |  |
| ••         |             | Vented                          |                         | 181689        | Replacement Mower, Complete        |  |
| 34         | 72140610    | Bolt, Carriage 3/8-16 x 1-1/4   |                         |               |                                    |  |
| 35         | 72110616    | Bolt, Carriage 3/8-16 x 2       | NOT                     | E: All compoi | nent dimensions given in U.S.      |  |
| 36         | 72110608    | Bolt, Carriage 3/8-16 x 1 Gr. 5 | inches 1 inch = 25.4 mm |               |                                    |  |

TRANSAXLE



### TRACTOR--MODEL NUMBER 917.275033

#### TRANSAXLE

| KEY | PART     |   | KEY | PART            |  |
|-----|----------|---|-----|-----------------|--|
| NO. | NO.      | DESCRIPTION                               | NO. | NO.             | DESCRIPTION                              |
| 1   | 4197R    | Axle Shaft                                | 52  | 8119M           | Needle Bearing                           |
| 2   | 12000034 | Retaining Ring                            | 53  | 4220R           | Thrust Bearing Race                      |
| 3   | 4199R    | Final Drive Gear                          | 54  | 4209R           | 3rd Reduction Pinion, Low                |
| 4   | 4216R    | Differential Gear                         | 55  | 4213R           | 4th Reduction Gear                       |
| 5   | 4215R    | Differential Pinion                       | 56  | 4442R           | 3rd Reduction Pinion Spacer              |
| 6   | 4217R    | Differential Carrier                      | 57  | 4195R           | 2nd Reduction Gear Shaft                 |
| 7   | 174728   | Axle Thrust Washer                        | 58  | 4214R           | Final Drive Pinion                       |
| 8   | 74020652 | Bolt, Hex Head 3/8-24 x 3-1/4             | 59  | 4194R           | 1st Reduction Gear Shaft                 |
|     |          | (1" Thread Length)                        | 60  | 7528R           | 1st Reduction Shaft Spacer               |
| 9   | 7392M    | Steel Ball                                | 61  | 4208R           | 3rd Reduction Plnion High                |
| 10  | 137261   | Spring Shift Fork Detent                  | 62  | 4207R           | 2nd Reduction Gear                       |
| 11  | 4985R    | Shift Fork, High-Low Range                | 63  | 7398H           | Needle Bearing                           |
| 12  | 6266H    | Thrust Bearing Race                       | 64  | 4203R           | Low Speed Gear and 2nd                   |
| 13  | 4212R    | 4th Reduction Pinion                      |     | _               | Reduction Pinion Cluster                 |
| 14  | 137125   | Shaft, Brake                              | 65  | 4204R           | Reverse Gear                             |
| 15  | 6276H    | Snap Ring, Crescent Type                  | 66  | 2898J           | Key, Hi-Pro 1/8 x 17/32                  |
| 16  | 633A63   | High-Low Range Gears                      | 67  | 12000033        | Klip Ring                                |
| 17  | 8118M    | Needle Bearing                            | 68  | 4205H           | Intermediate Speed Gear                  |
| 18  | 8740H1   | Sintered Iron Bearing                     | 69  | 4206H           | High Speed Gear                          |
| 19  | 122238X  | Shift Fork Shaft, High-Low                | 70  | 1370H           | Thrust Bearing Race                      |
| ~~  |          | Range                                     | /1  | 633A69          | Intermediate and High Speed              |
| 20  | 4218H    | Differential Pinion Spacer                | 70  | 100100          | Cluster Pinions                          |
| 21  | 6252H1   | Differential Pinion Busning               | 72  | 139120          | Input Snatt                              |
| 22  | 7810H    | Chift Fords D L                           | 73  | 42016           | Low Speed Pinion                         |
| 23  | 020211   | STILL FOIK, N.H.                          | 74  | 11600           | E-TWIN<br>Revenue Idler Geer             |
| 24  | 739311   | Vil Seal<br>Sintered Iron Beering         | 75  | 11000           | Needle Rearing                           |
| 20  | 120111   | Shift Early Shaft                         | 70  | 11670           | SealingWasher                            |
| 20  | 109111   | Shift Fork J H                            | 80  | 73360700        | Nut Hay Jam 7/16-20                      |
| 27  | 4000m    | Shift Shaft High-Low Bange                | 81  | 6270H           | Oil Seal                                 |
| 20  | 6260H    | Oil Sool                                  | 82  | 136984          | Reverse Idler Shaft                      |
| 30  | 5855H    | Pressure Belief Valve                     | 84  | 5384.1          | Gearshift Lever, Bent                    |
| 31  | 174731   | Gearcase Beverse Idler Shaft              | 85  | 2978.1          | Gearshift Cap                            |
| 0.  |          | and Bearings, R.H.                        | 86  | 633A85          | Gearshift Ball Cover and Pin             |
|     |          | (Includes Key No.'s 17.18, 25,            | 87  | 8739H1          | Shift Lever Guide Ball, Keyed            |
|     |          | 33, 50, 63, 77 and 82)                    | 88  | 4924H           | Spring                                   |
| 32  | 6277H    | Dowel Pin                                 | 89  | 19151516        | Washer 15/32 x 15/16 x 16 Ga             |
| 33  | 4225R    | Needle Bearing                            | 90  | 110542X         | Shift Mechanism Seal                     |
| 34  | 7396H    | Thrust Bearing Race                       | 91  | 19181511        | Washer 9/16 x 15/16 x 12 Ga              |
| 35  | 4198R    | 4th Reduction Gear Shaft                  | 92  | 75J             | Gearshift Gate and                       |
| 36  | 4200R    | 4th Reduction Gear Spacer                 |     |                 | Reinforcement                            |
| 37  | 7395H    | Thrust Bearing Race                       | 93  | 6274H           | Shift Ball Cover Gasket                  |
| 38  | 160789   | Gate, Lower, Shift                        | 94  | 76020412        | Cotter Pin 1/8 x 3/4                     |
| 39  | 174729   | Gearcase and Bearings, L.H.               | 96  | 159783          | Screw, Hex, Washer, HD.                  |
|     |          | (Includes Key                             | 97  | 633A109         | Gearshift Lever Assembly                 |
|     |          | Numbers 18, 25, 49, 50 (2), 51<br>and 52) | 98  | 174742          | Transaxle, 6 Speed,<br>Complete Assembly |
| 40  | 13320400 | Pipe Piug 1/2-14 N.P.T.                   | NOT | E: All componen | t dimensions given in U.S. inches        |
| 41  | 17580520 | Bolt, Hex 5/16-18 UNC x 1-1/4             |     | 1 inch = 25.4   | mm                                       |
| 45  | 6271H    | Oil Seal                                  |     |                 |  |
| 46  | 13060200 | Pipe Plug 1/4-18 N.P.T.                   |     |                 |  |
| 49  | 4895H    | Needle Bearing                            |     |                 |  |
| 50  | 4222R    | Needle Bearing                            |     |                 |  |
| 51  | 1529R    | Needle Bearing                            |     |                 |  |

## TRACTOR--MODEL NUMBER 917.275033 KQHLER ENGINE-MODEL NUMBER CV674, TYPE NUMBER 75544



#### TRACTOR -- MODEL NUMBER 917.275033

#### KOHLER ENGINE-MODEL NUMBER CV674, TYPE NUMBER 75544

#### HEAD/VALVE/BREATHER

CRANKCASE

| KEY<br>NO. | PART<br>NO. | DESCRIPTION                   | KEY<br>NO. | PART<br>NO.     | DESCRIPTION       |
|------------|-------------|-------------------------------|------------|-----------------|-------------------|
| 1          | 24-033-03-S | Kit, breather cover w/        | 1          | 24-032-01-S     | Seal, oil front   |
|            |             | gasket (Includes 2, 3)        | 2          |                 | Crankcase         |
| 2          | 24-041-23-5 | Gasket, breather              | ~          |                 | USE: MINIDIO      |
| 3          | 24-096-59-S | Cover, breather               | 3          | 24-294-13-5     | Fitting           |
| 4          | M-645020-S  | Screw, hex. flange            | 4          | 24-380-13-5     | Pin, dowel loc    |
| _          |             | M6x1.0x20 (4)                 | 5          | 24-067-13-5     | Connecting Ho     |
| 5          | X-75-23-S   | Plug, allen hd. 1/8"          | ~          | 24-06/-14-5     | Connecting Ho     |
| 6          | 25-351-01-S | Litter, valve (4)             | 6          | 24-8/4-09-5     | Piston w/Ring     |
| 7          | 24-755-66-S | Kit, valve train (Includes 8, |            | ~ ~ ~ ~ ~ ~ ~ ~ | (includes 7, 8)   |
|            |             | 11, 12)                       |            | 24-8/4-10-5     | Piston W/Hing     |
| 8          | 24-411-05-S | Rod, push (4)                 |            | 24-874-11-5     | Piston W/Hing     |
| 9          | 24-041-40-S | Gasket, cylinder head (2)     | _          | 24-8/4-15-5     | Kit, piston w/ri  |
| 10         | 24-318-70-5 | Head assembly, #2 cylinder    | 7          | 24-108-08-5     | Hing Set (Std.    |
| 11         | 25-186-01-S | Arm, rocker (4)               |            | 24-108-09-S     | Ring Set (.25)    |
| 12         | 24-599-01-S | Pivot, rocker arm (4)         |            | 24-108-10-5     | Hing Set (.50)    |
| 13         | M-640034-S  | Screw, hex. flange            | 8          | 24-018-01-S     | Hetainer, pisto   |
|            | <b>-</b>    | M6x1.0x34 (4)                 | 9          | 12-422-09-S     | Shim, camsha      |
| 14         | 24-072-09-S | Stud, cylinder head           |            | 12-422-13-S     | Shim, camsha      |
|            |             | M8x1.25x20, M10x1.5x33,       |            | 12-422-07-S     | Shim, camsha      |
|            |             | 105 mm long (8)               |            | 12-422-08-S     | Shim, camsha      |
| 15         | 24 468 16-S | Washer, flat 8 mm (8)         |            | 12-422-10-S     | Shim, camsha      |
| 16         | 24 100 10-S | Nut, hex. flange M8x1.25      |            | 12-422-11-S     | Shim, camsha      |
|            |             | (2)                           |            | 12-422-12-5     | Shim, camsha      |
| 17         | 24-755-74-S | Kit, valve cover - plain      | 10         | 24-012-10-S     | Camshaft          |
|            |             | (Includes 18, 19)             | 11         | 52-139-09-S     | Plug, cup         |
| 18         | 24-153-16-S | O-Ring                        | 12         | M-545010-S      | Screw, hex. fl    |
| 19         | 24-086-32-S | Screw, shoulder (4)           |            |                 | M5x0.8x10 (2      |
| 20         | 24-445-01-S | Strap, lifting                | 13         | 24-018-04-S     | Retainer, reed    |
| 21         | 24-016-01-S | Valve, exhaust (Std.) (2)     | 14         | 24-402-05-S     | Reed, breathe     |
|            | 24-016-02-S | Valve, exhaust (.25) (2)      | 15         | 12-153-01-S     | O-Ring, lower     |
| 22         | 24-017-01-S | Valve, intake (Std.) (2)      | 16         | 24-126-19-S     | Bracket, oil fill |
|            | 24-017-02-S | Valve, intake (.25) (2)       | 17         | 12-123-04-S     | Tube, oil fill    |
| 23         | 24-032-05-S | Seal, valve stem (2)          | 18         | M-545016-S      | Screw, hex. fl    |
| 24         | 235011-S    | Retainer, spring (4)          |            |                 | M5x0.8x16         |
| 25         | 24-089-02-S | Spring, valve (4)             | 19         | 12-153-02-S     | O-Ring, upper     |
| 26         | 12-173-01-S | Cap, valve spring (4)         | 20         | 24-038-04-S     | Dipstick asser    |
| 27         | 12-755-03-S | Kit, retainer (4)             |            |                 | 21, 22)           |
| 28         | 24-318-67-S | Head assembly, #1 cylinder    | 21         | 24-755-46-S     | Kit, oil fill cap |
| 29         | 24-755-76-S | Kit, valve cover - breather   | 22         | 12-153-03-S     | O-Ring, dipsti    |
|            |             | (Incl.18, 19, 30)             | 23         | 24-018-09-S     | Ring, retainer    |
| 30         | 25-313-02-S | Grommet, rubber               | 24         | M-931010-S      | Washer, nyloi     |
| 31         | 24-755-57-S | Kit. breather separator       | 25         | 28-032-09-S     | Seal, governo     |
| • •        |             | (Includes 30, 32-35)          | 26         | 24-468-15-S     | Washer (botto     |
| 32         | M-545016-S  | Screw, hex. flange            | 27         | 24-144-33-S     | Shaft, govern     |
|            |             | M5x0.8x16 (2)                 |            |                 |                   |
| 33         | 24-445-02-S | Strap, breather               | NOT        | E: All compor   | ent dimensions    |
| 34         | 24-126-44-S | Bracket, breather             | inche      | s 1 inch = 25.  | 4 mm              |
| - •        |             | separator                     |            |                 |                   |
| 35         | 24-112-12-8 | Spacer                        |            |                 |                   |
| 36         | 24-294-06-5 | Fitting                       |            |                 |                   |
| 37         | 24-326-13-5 | Hose, breather                |            |                 |                   |
| 38         | 24-326-14-5 | Hose, breather                |            |                 |                   |
| 39         | 25-237-14-S | Clamp, hose (2)               |            |                 |                   |
|            |             |                               |            |                 |                   |

|        |             | Crankcase                                |
|--------|-------------|--|
|        |             | (USE: Miniblock 24 782 14)               |
|        | 24-294-13-S | Fitting                                  |
|        | 24-380-13-S | Pin, dowel locating (6)                  |
|        | 24-067-13-S | Connecting Rod (Std.) (2)                |
|        | 24-067-14-S | Connecting Rod (.25) (2)                 |
|        | 24-874-09-S | Piston w/Ring Set (Std.) (2)             |
|        |             | (Includes 7, 8)                          |
|        | 24-874-10-S | Piston w/Ring Set (.25) (2)              |
|        | 24-874-11-S | Piston w/Ring Set (.50) (2)              |
|        | 24-874-15-S | Kit, piston w/ring set (.08)             |
|        | 24-108-08-S | Ring Set (Std.) (2)                      |
|        | 24-108-09-S | Ring Set (.25) (2)                       |
|        | 24-108-10-S | Ring Set (.50) (2)                       |
|        | 24-018-01-S | Retainer, piston pin (4)                 |
|        | 12-422-09-S | Shim, camshaft (A.B.)                    |
|        | 12-422-13-S | Shim, camshaft (A.B.)                    |
|        | 12-422-07-S | Shim, camshaft (A.R.)                    |
|        | 12-422-08-S | Shim, camshaft (A.B.)                    |
|        | 12-422-10-S | Shim, camshaft                           |
|        | 12-422-11-S | Shim, camshaft (A B)                     |
|        | 12-422-12-5 | Shim camshaft (A B)                      |
| 1      | 24-012-10-5 | Camshaft                                 |
| ,<br>  | 52-139-09-S |  |
| ,      | M-545010-S  | Screw bey flande                         |
| •      | 10-0-0010-0 | M5v0 8v10 (2)                            |
| ł      | 24-018-04-5 | Retainer read (2)                        |
|        | 24-402-05-5 | Reed breather (2)                        |
|        | 12-153-01-5 | O-Bing lower oil fill tube               |
|        | 24-126-10-5 | Bracket oil fill tube                    |
| ,      | 12.122 04.9 | Tube oil fill                            |
|        | 12-123-04-3 | Sorow box flange                         |
|        | WP345010*3  | MENO ANTA                                |
|        | 10 150 00 0 |  |
| Į.     | 12-153-02-5 | Directicly accomptly (Included           |
| ,      | 24-038-04-5 | Dipstick assembly (includes              |
| 1      | 04 755 40 O | 21, 22)<br>Ka sil (ill son (instudes 00) |
|        | 24-/55-46-5 | Kit, oli tili cap (includes 22)          |
| 2      | 12-153-03-5 | U-Hing, alpstick                         |
| 5      | 24-018-09-S | Hing, retainer                           |
| ŀ      | M-931010-S  | washer, nylon (top)                      |
| 2      | 28-032-09-S | Seal, governor cross shaft               |
| Ś      | 24-468-15-S | wasner (bottom)                          |
| ,<br>, | 24-144-33-S | Shatt, governor cross                    |
|        |             |  |

nt dimensions given in U.S. mm

# TRACTOR -- MODEL NUMBER 917.275033



#### TRACTOR--MODEL NUMBER 917.275033

#### KOHLER ENGINE-MODEL NUMBER CV674, TYPE NUMBER 75544

#### IGNITION/CHARGING

| KEY<br>NO. | PART<br>NO. | DESCRIPTION  |
|------------|-------------|--|
| 1          | 54-755-15-S | Kit, grass screen<br>(Includes 2-4,and 24 113<br>18-S) |
| 2          | M-403025-S  | Screw, hex. cap M4x0.7x25                              |
| 3          | X-25-92-S   | Washer, plain 5/16" (4)                                |
| 4          | 24-112-04-S | Spacer, grass screen (4)                               |
| 5          | 25-086-47-S | Bolt, shoulder (4)                                     |
| 6          | 24-157-03-S | Fan  |
| 7          | 12-086-14-S | Screw, hex. flange                                     |
|            |             | M10x1.5x46   |
| 8          | 12-468-03-S | Washer, plain 3/8"                                     |
| 9          | X-42-15-S   | Kev  |
| 10         | 24-025-04-S | Flywheet   |
| 11         | 25-403-03-S | Rectifier-regulator                                    |
| 12         | X-25-92-S   | Washer, plain 3/16" (2)                                |
| 13         | 24-086-18-S | Screw, phillips hd. 11-16x7/<br>8 (2)                  |
| 14         | 236602-S    | Connector (3 contact)                                  |
| 15         | 54-755-09-S | Kit, 15 amp stator<br>(Includes 24 126 71-S)           |
| 16         | 12-132-06-S | Spark Plug (2)   |
| 17         | M-548025-S  | Screw, hex. cap M5x0.8x25 (2)                          |
| 18         | 48-154-02-S | Člip, cable  |
| 19         | X-25-63-S   | Washer, plain 1/4"                                     |
| 20         | 24-584-01-S | Module, ignition (2)                                   |
| 21         | M-545020-S  | Screw, hex flange<br>M5x0.8x20 (4)                     |
| 22         | 235173-S    | Clip, cable  |
| NOT        | ILLUSTRATED |  |

| LLUGINAILD  |                            |
|-------------|----------------------------|
| 24-126-71-S | Bracket, stator wire       |
| X-22-11-S   | Washer, lock 1/4"          |
| 24-176-82-S | Hamess, wiring             |
|             | Lead, black (rectreg. 6* - |
|             | 12 gauge                   |
| 24-518-12-S | insulated grip barrel      |
|             | eyelets)                   |
| 24-113-18-S | Decal, grass screen        |
| 25-454-03-S | Tie, wire (3)              |
|             |                            |

#### **BLOWER HOUSING & BAFFLES**

| KEY<br>NO. | PART<br>NO. 1 | DESCRIPTION                    |
|------------|---------------|--------------------------------|
| 1          | 24-027-20-S   | Housing, blower (Includes 2-4) |
| 2          | 24-100-01-S   | Nut, plastic (3)               |
| 3          | 25-139-16-S   | Plug, button 9/16"             |
| 4          | 24-100-02-S   | Nut, plastic (2)               |
| 5          | M-545020-S    | Screw, hex, flange             |
| -          |               | M5x0.8x20 (4)                  |
| 6          | M-545016-S    | Screw, hex, flange             |
| -          |               | M5x0.8x16 (3)                  |
| 7          | M-551016-S    | Screw, hex, flange             |
| •          |               | M5x0.8x16                      |
| 8          | M-645016-S    | Screw, hex, flange             |
| -          |               | M6x1.0x16 (6)                  |
| 9          | 24-146-16-S   | Plate, backing - # 2 side      |
| 10         | 24-146-20-5   | Plate, backing - # 1 side      |
| 11         | 24-063-20-5   | Baffle, cylinder barrel-# 2    |
| ••         | 2.000 20 0    | side                           |
| 12         | 24-063-14-S   | Baffle valley - #2 side        |
| 13         | 24-063-58-5   | Baffle cylinder barrel-# 1     |
|            |               | side                           |
| 14         | 24-063-23-5   | Baffle vallev - #1 side        |
| 15         | M-545010-S    | Screw bey flance               |
|            |               | M5x0.8x10 (2)                  |

#### **NOT ILLUSTRATED**

| 24-096-66-S<br>24-086-06-S | Cover,<br>Screw,<br>4" (2) | control<br>phillips | hd. | 11-16x3/ |
|----------------------------|----------------------------|---------------------|-----|----------|
|----------------------------|----------------------------|---------------------|-----|----------|

#### **AIR INTAKE/FILTRATION**

| KEY<br>NO. | PART<br>NO. | DESCRIPTION                         |
|------------|-------------|-------------------------------------|
| 1          | 24-164-06-S | Manifold, intake                    |
| 2          | M-651055-S  | Screw, hex. flange<br>M6x1.0x55 (4) |
| 3          | 24-041-01-S | Gasket, intaké manifold (2)         |
| 4          | 24-041-14-S | Gasket, air cleaner base            |
| 5          | 24-094-18-S | Base, air cleaner                   |
| 6          | 24-041-13-S | Gasket, fuel spitback cup           |
| 7          | 24-109-09-S | Cup, fuel spitback                  |
| 8          | 24-083-03-S | Element, air cleaner                |
| 9          | 24-083-05-S | Precleaner, element                 |
| 10         | 231032-S    | Seal, breather                      |
| 11         | 24-096-01-S | Cover, inner air cleaner            |
| 12         | 12-100-01-S | Wina Nut                            |
| 13         | 24-096-73-S | Cover, air cleaner                  |
| 14         | 54-755-01-S | Kit, knob with seal                 |
|            |             | (Includes 15 & 16)                  |
| 15         | 25-341-03-S | Knob. cover                         |
| 16         | 24-153-20-S | O-Ring                              |
| 17         | 24-063-51-S | Baffle, spitback cup                |

**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm

## TRACTOR--MODEL NUMBER 917.275033 KOHLER ENGINE-MODEL NUMBER CV674, TYPE NUMBER 75544



#### TRACTOR -- MODEL NUMBER 917.275033

#### KOHLER ENGINE-MODEL NUMBER CV674, TYPE NUMBER 75544

#### STARTING SYSTEM

| KEY<br>NO. | PART<br>NO. | DESCRIPTION                               |
|------------|-------------|---|
| 1          | M-839080-S  | Screw, hex. flange<br>M8x1.25x80 (2)      |
| 2          | 25-098-08-S | Starter, solenoid shift<br>(Includes 4-7) |
| 3          | M-841080-S  | Nut, hex. flange M8x1.25                  |
| 4          | 25-435-04-S | Kit, solenoid                             |
| 5          | 25-755-33-S | Kit, pinion drive (Includes               |
| 6          | 25-141-05-S | Ring                                      |
| 7          | 25-221-01-S | Kit, brush                                |
| ENGI       | NE CONTROL  | S   |
| KEY        | PART        |   |
| NU.        | NU.         | DESCRIPTION                               |
| 1          | 24 211 03-S | Bolt, round head square neck              |
| 2          | 24-090-33-S | Lever, governor                           |
| 3          | M-641060-S  | Nut, hex. flange M6x1.0                   |
| 4          | 24-089-01-S | Spring, linkage                           |
| 5          | 25-158-08-S | Bushing, linkage retaining                |
| 6          | 24-079-04-5 | Linkage, throttle                         |
| 2          | 25-158-11-5 | Busning, throttle linkage                 |
| 8          | M-545016-5  | M5x0.8x16                                 |
| 9          | M-547050-S  | Nut, hex. lock M5x0.8                     |
| 10         | 24-089-03-S | Spring, choke return                      |
| 11         | 24-126-56-S | Bracket, control                          |
| 12         | M-645016-S  | Screw, hex. flange<br>M6x1.0x16 (4)       |
| 13         | 12-237-01-S | Clamp, cable (2)                          |
| 14         | 24-086-43-S | Screw, hex. flange<br>M5x0.8x16 (2)       |
| 15         | 24-090-07-S | Lever, throttle actuator                  |
| 16         | X-20-1-S    | Washer, lock 1/4"                         |
| 17         | M-541050-S  | Nut, hex. flange M5x0.8                   |
| 18         | 24-468-01-S | Washer, plain 5.5 mm (3)                  |
| 19         | 24-089-45-S | Spring, governor                          |
| 20         | M-446030-S  | Nut, nex M4x0.7                           |
| 21         | 24-090-13-S | Lever, throttle control                   |
| 22         | M-545020-S  | Screw, nex. tiange                        |

| KEY<br>NO. | PART<br>NO. | DESCRIPTION                              |
|------------|-------------|--|
| 1          | 24-199-07-S | Pan, oil assembly<br>(Includes 2-10)     |
| 2          | M-645025-S  | Screw, hex. flange                       |
| 3          | M-631005-S  | Washer, plain 6 mm (2)                   |
| 4          | 24-393-08-S | Oil pump assembly<br>(Includes 5)        |
| 5          | 24-123-05-S | Tube, oil pickup                         |
| 6          | 24-162-26-S | Screen, oil                              |
| 7          | 24-043-12-S | Kit, governor gear w/pin<br>(Includes 8) |
| 8          | 12-380-01-S | Pin, governor regulating                 |
| 9          | 52-448-02-S | Tab, Tocking                             |
| 10         | 12-144-02-S | Shaft, governor gear                     |
| 11         | 24-153-08-S | O-Ring                                   |
| 12         | X-75-32-S   | Plug, hex. ctsk. 3/8"                    |
| 13         | 24-136-01-S | Nipple, oil fiiter                       |
| 14         | 52-050-02-S | Filter, oil                              |
| 15         | 52-032-08-S | Seal, oil (PTO end)                      |
| 16         | 24-086-17-S | Screw, hex. flange<br>M8x1.25x45         |
| 17         | 24-086-16-S | Screw, hex. flange<br>M8x1.25x45 (9)     |
| 18         | X-75-10-S   | Plug, sq. hd. solid 3/8"<br>N.P.T.F.     |

**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm

#### OIL PAN/LUBRICATION

M5x0.8x20 23 24-089-51-S Spring, throttle limiter 24 24-090-05-S Lever, choke 25 41-468-03-S Washer, spring 1/4" 26 M-403025-S Screw, hex. cap M4x0.7x25 27 24-079-05-S Linkage, choke

# TRACTOR--MODEL NUMBER 917.275033 KOHLER ENGINE-MODEL NUMBER CV674, TYPE NUMBER 75544



## TRACTOR -- MODEL NUMBER 917.275033 KOHLER ENGINE-MODEL NUMBER CV674, TYPE NUMBER 75544

#### CRANKSHAFT

| KEY<br>NO. | PART<br>NO.                           | DESCRIPTION                                   |
|------------|---------------------------------------|---|
| 1.<br>2.   | 24-014-72-S<br>52-139-09-S            | Crankshaft (includes 2)<br>Plug, cup          |
| EXHA       | UST                                   |   |
| KEY<br>NO. | PART<br>NO.                           | DESCRIPTION                                   |
| 1.<br>2.   | 24-041-02-S<br>25-072-04-S            | Gasket, exhaust (2)<br>Stud, M8x1.25x33 (4)   |
|            | PA-75544<br>24 782 14<br>24 755 108-8 | Replacement Engine<br>Miniblock<br>Gasket Set |

#### FUEL SYSTEM

| KEY<br>NO.                              | PART<br>NO.   | DESCRIPTION   |
|---|---|---|
| 1.                                      | 24-853-61-S   | Kit, carburetor w/gaskets<br>(Includes 2-4)   |
| 2.<br>3.                                | 24-041-15-S<br>24-053-61  | Gasket, carburetor<br>Carburetor assembly (For<br>information only not<br>available separately)<br>(Service with Kits 24 757<br>36-S, 24 757 38-S)                      |
| 4.<br>5.<br>6.<br>7.<br>8.<br>9.<br>10. | 24 041 14-S<br>M-629095-S<br>M-641060-S<br>47-154-01-S<br>52-353-22-S<br>25-237-14-S<br>24-086-12-S | Gasket, air cleaner base<br>Stud, M6x1.0x95 (2)<br>Nut, hex. flange M6x1.0 (2)<br>Clip, cable<br>Line, fuel 12"<br>Clamp, hose (6)<br>Screw, hex. cap.<br>M6x1.7x18 (2) |
| 11.<br>12.<br>13.<br>14.<br>15.         | 24-393-16-S<br>24-100-01-S<br>24-353-03-S<br>15-353-04-S<br>24-050-02-S                             | Pump, fuel - pulse<br>Nut, plastic (2)<br>Line, fuel 10-5/8"<br>Line, fuel 11-1/2"<br>Filter, fuel  |

#### NOT ILLUSTRATED

| <br>24 757 36-S | Kit, choke repair  |
|-----------------|--------------------|
| <br>24 757 38-S | Kit, gasket repair |

**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm

# SERVICE NOTES

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# SERVICE NOTES

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# SERVICE NOTES

### SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



- 2. Hold page before you so that its left edge is vertically parallel to a tree trunk or other upright structure.
- 3. Sight across the fold in the direction of hill slope you want to measure.
- 4. Compare the angle of the fold with the slope of the hill.

# Get it fixed, at your home or ours!

For repair of major brand appliances **In your own home...** no matter who made it, no matter who sold it!

> 1-800-4-MY-HOME<sup>®</sup> Anytime, day or night (1-800-469-4663) (U.S.A. and Canada)

www.seers.com

www.sears.ca

For repair of carry-in products like vacuums, lawn equipment, and electronics, call for the nearest Sears Parts and Repair Center.

1-800-488-1222 Anytime, day or night (U.S.A. only)

www.sears.com

For the replacement parts, accessories and owner's manuals that you need to do-it-yourself, call Sears PartsDirect<sup>SM</sup>!

1-800-366-PART (1-800-366-7278) 6 a.m. – 11 p.m., 7 days a week (U.S.A. only)

#### www.seers.com/partsdirect

To purchase or inquire about a Sears Service Agreement or Sears Maintenance Agreement:

#### 1-800-827-6655 (U.S.A.) 1-800-3

1-800-361-6665 (Canada)

7 a.m. – 5 p.m., CST, Mon. – Sat

9 a.m. - 8 p.m. EST, M - F, 4 p.m. Sat.

Para pedir servicio de reparación a domicilio, y para ordenar piezas: **1-888-SU-HOGAR<sup>SM</sup>** (1-888-784-6427) Au Canada pour service en français: **1-800-LE-FOYER<sup>MC</sup>** (1-800-533-6937) www.sears.ca



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