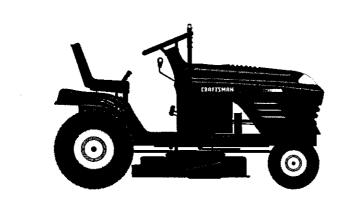
# **Owner's Manual**

# **CRAFTSMAN**°

# 16.5 HP ELECTRIC START 42" MOWER AUTOMATIC LAWN TRACTOR

**EZ**<sup>3</sup>

Model No. 917.271642



Safety

- Assembly
- Operation
- Maintenance
- Repair Parts

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

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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 taking 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.

### 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 taking 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.

### 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 turn 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 mowerrelated injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

# **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 more it.

- 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.

# SAFETY RULES

area.

storing.

before restarting.

when necessary.

with the engine running.

Never run a machine inside a closed

attachment bolts, tight and keep

Never tamper with safety devices.

equipment in good condition.

Keep nuts and bolts, especially blade

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

Stop and inspect the equipment if you

strike an object. Repair, if necessary,

Grass catcher components are subject

allow objects to be thrown. Frequently

to wear, damage, and deterioration,

which could expose moving parts or

check components and replace with manufacturer's recommended parts,

Mower blades are sharp and can cut.

Check brake operation frequently.

Adjust and service as required.

Wrap the blade(s) or wear gloves, and

use extra caution when servicing them.

Never make adjustments or repairs

# 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.
- - 215
- 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.

# SAFETY RULES

- 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.

ALook 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.

A 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.

**AWARNING:** 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.** 

# **PRODUCT SPECIFICATIONS**

GASOLINE CAPACITY AND TYPE:	1.25 GALLONS UNLEADED REGULAR
OIL TYPE (API-SF-SJ):	SAE 30 (ABOVE 32°F) SAE 5W-30 (BELOW 32°F)
OIL CAPACITY:	3.0 PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RC12YC
GROUND SPEED (MPH):	) FORWARD:5.2 REVERSE: 2.7
TIRE PRESSURE	: FRONT: 14 PSI REAR: 12 PSI
CHARGING SYSTEM:	3 AMPS BATTERY 5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 25 MIN. CCA: 190 CASE SIZE: U1R
BLADE BOLT TORQUE:	27–35 FT. LBS.

**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".

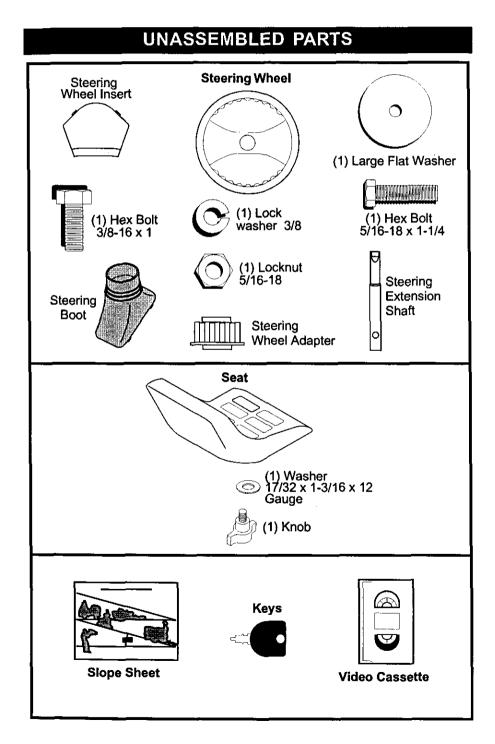
### **REPAIR AGREEMENT**

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 maintain-
- ing, 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).



# ASSEMBLY

Your new tractor has been assembled at the factory with 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
- (2) 1/2" wrench (1) Utility knife
- (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

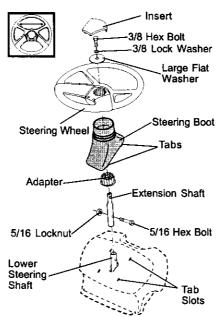
- 1. Remove all accessible loose parts and parts cartons from carton.
- Cut, from top to bottom, along lines on all four corners of carton, and lay panels flat.
- Check for any additional loose parts or cartons and remove.

# BEFORE REMOVING TRACTOR FROM SKID

### ATTACH STEERING WHEEL

ASSEMBLE EXTENSION SHAFT AND BOOT

- Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 5/16 hex bolt and locknut. Tighten securely.
- Place tabs of steering boot over tab slots in dash and push down to secure.
- INSTALL STEERING WHEEL
- Position front wheels of the tractor so they are pointing straight forward.
- Remove steering wheel adapter from steering wheel and slide adapter onto steering shaft extension.
- Position steering wheel so cross bars are horizontal (left to right) and slide inside boot and onto adapter.



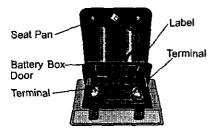
- Assemble large flat washer, 3/8 lock washer, 3/8 hex bolt and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

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

### HOW TO SET UP YOUR TRACTOR CHECK BATTERY

1. Lift seat pan to raised position and open battery box door.

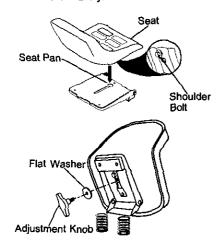
NOTE: If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in Maintenance section of this manual for charging instructions).



#### **INSTALL SEAT**

Adjust seat before tightening adjustment knob.

- 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.
- Place seat on seat pan so head of shoulder bolt is positioned over large slotted hole in pan.
- Push down on seat to engage shoulder bolt in slot and pull seat towards rear of tractor.
- Pivot seat and pan forward and assemble adjustment knob and flat washer loosely. Do not tighten.
- Lower seat into operating position and sit in seat.
- Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- Get off seat without moving its adjusted position.
- 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)

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place freewheel control in freewheeling position to disengage transmission (See "TO TRANSPORT" in the Operation section of this manual).
   Roll tractor forward off skid.
- Roll tractor forward off skid.
   Remove banding holding deflector
- shield up against tractor.

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

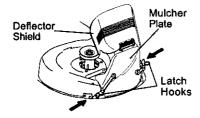
A WARNING: Before starting, read, understand and follow all instructions in the Operation section of this manual. Be sure tractor is in a well-ventilated area. Be sure the area in front of tractor is clear of other people and objects.

- Be sure all the above assembly steps have been completed.
- 2. Check engine oil level and fill fuel tank with gasoline.
- 3. Place freewheel control in "transmission engaged" position.
- Sit on seat in operating position, depress clutch/brake pedal and set the parking brake.
- 5. Place motion control lever in neutral (N) position.
- Press lift lever plunger and raise attachment lift lever to its highest position.
- Start the engine. After engine has started, move throttle control to idle position.
- 8. Release parking brake.
- Slowly move the motion control lever forward and slowly drive tractor off skid.
- Apply brake to stop tractor, set parking brake and place motion control lever in neutral position.
- 11. Turn ignition key to "OFF" position.
- Continue with the instructions that follow.

# INSTALL MULCHER PLATE

### (If previously removed)

- 1. Raise and hold deflector shield in upright position.
- Place front of mulcher plate over front of mower deck opening and slide into place, as shown.
- Hook front latch into hole on front of mower deck.
- 4. Hook rear latch into hole on back of mower deck.



**CAUTION:** Do not remove deflector shield from mower. Raise and hold shield when attaching mulcher plate and allow it to rest on plate while in operation.

# TO CONVERT TO BAGGING OR DISCHARGING

Simply remove mulcher plate and store in a safe place. Your mower is now ready for discharging or installation of optional grass catcher accessory.

NOTE: It is not necessary to change blades. The mulcher blades are designed for discharging and bagging also.

#### CHECKTIRE 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 DECK LEVELNESS

For best cutting results, mower housing 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 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 and enjoy 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.
- Before driving tractor, be sure freewheel control is in drive position.

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.
- ✓ It is important to purge the transmission before operating your tractor for the first time. Follow proper starting and transmission purging instructions (See "TO START ENGINE" and "PURGE TRANSMISSION" in the Operation section of this manual).

# **OPERATION**

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

T,

REVERSE

OIL PRESSURE



ENGINE ON









ENGINE OFF

CHOKE





FORWARD





FAST



1

UNLOCKED



MOWER LIFT

SLOW



FUEL







1

LOCKED

MOWER HEIGHT PARKING BRAKE

HIGH

KEEP AREA CLEAR



ATTACHMENT CLUTCH ENGAGED

IGNITION

REVERSE NEUTRAL

....

LOW

PARKING BRAKE



ATTACHMENT CLUTCH DISENGAGED



DANGER, KEEP HANDS AND FEET AWAY



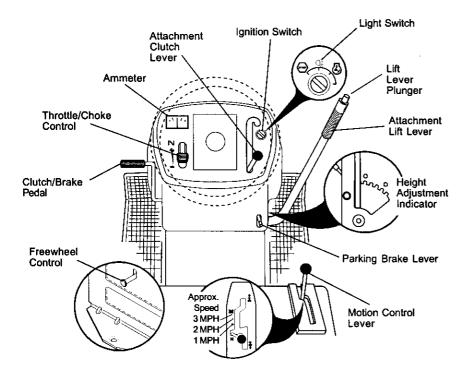
SLOPE HAZARDS

FREE WHEEL (Automatic Models only)



#### KNOWYOURTRACTOR 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.

AMMETER - Indicates charging (+) or discharging (-) of battery. ATTACHMENT CLUTCH LEVER - Used

to engage the mower blades, or other attachments mounted to your tractor. ATTACHMENT LIFT LEVER - Used to raise, lower, and adjust the mower deck or other attachments mounted to your tractor.

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

MOTION CONTROL LEVER - Selects the speed and direction of tractor.

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

LIFT LEVER PLUNGER - Used to release attachment lift lever when changing its position.

LIGHT SWITCH - Turns the headlights on and off.

PARKING BRAKE LEVER - Locks clutch/ brake pedal into the brake position. THROTTLE/CHOKE CONTROL - Used for starting and controlling engine speed. FREEWHEEL CONTROL -

Disengagages transmission for pushing

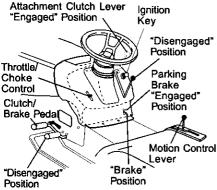


The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety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

### 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 clutch/brake pedal into full "BRAKE" position and hold.
- Place parking brake lever in "EN-GAGED" position and release pressure from clutch/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 lever to "DISENGAGED" position.

#### **GROUND DRIVE -**

- To stop ground drive, depress clutch/ brake pedal into full "BRAKE" position.
- Move motion control lever to neutral (N) position.

**IMPORTANT:** The motion control lever does not return to neutral (N) position when the clutch/brake pedal is depressed.

#### **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 "OFF" 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 "OFF" will cause the battery to be discharged, (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 empty

#### 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 bagging and mower performance.

#### **TO MOVE FORWARD AND BACKWARD**

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

- Start tractor with motion control lever in souther (1) and its an
- neutral (N) position. 2. Release parking brake and clutch/ brake pedal.
- Slowly move motion control lever to desired position.

#### TO ADJUST MOWER CUTTING HEIGHT

The position of the attachment lift lever determines the cutting height.

- Grasp lift lever.
- Press plunger with thumb and move lever to desired position.

The cutting height range is approximately 1-1/2 to 4". 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.

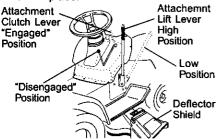
#### TO OPERATE MOWER

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.

- Select desired height of cut. 1.
- Start mower blades by engaging 2. 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.

- 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 motion control lever to neutral (N) position.

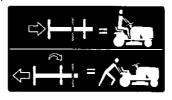
**IMPORTANT:** The motion control lever does not return to neutral (N) position when the clutch/brake pedal is depressed.

- To restart movement, slowly release parking brake and clutch/brake pedal.
- Slowly move motion control lever to slowest setting.
- Make all turns slowly.
   TO TRANSPORT

When pushing or towing your tractor, be sure to disengage transmission by placing freewheel control in freewheeling position. Free wheel control is located at the rear drawbar of tractor.

- Raise attachment lift to highest 1. position with attachment lift control.
- 2. Pull freewheel control out and down into the slot and release so it is held in the disengaged position.
- Do not push or tow tractor at more than two (2) MPH.
- To reengage transmission, reverse above procedure.

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.).



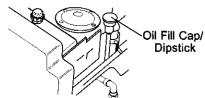
#### TOWING CARTS AND OTHER ATTACH-MENTS

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 around.
- Remove oil fill cap/dipstick and wipe 2. clean, reinsert the dipstick and screw cap tight, wait for a few seconds, 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. 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. **IMPORTANT:** When operating in

temperatures below 32°F(0°C), use fresh, clean winter grade gasoline to help insure good cold weather starting.

WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain 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.

A CAUTION: Fill to bottom of gas tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame. 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.

- Be sure freewheel control is in the 1. transmission engaged position.
- Sit on seat in operating position, 2 depress clutch/brake pedal and set parking brake.
- Place motion control lever in neutral 3 (N) position.
- Move attachment clutch to "DISEN-4 GAGED" position.

5. Move throttle control to choke position. NOTE: Before starting, read the warm

and cold starting procedures below. 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, move throttle control to fast position, wait a few minutes and try again. If engine still does not start. move the throttle control back to the choke position and retry.

WARM WEATHER STARTING (50° F and above)

- 7. When engine starts, move the throttle control to the fast position.
- 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, allow engine to run with the throttle control in the choke position until the engine runs roughly, then move throttle control to fast position. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.

AUTOMATIC TRANSMISSION WARM UP Before driving the unit in cold weather, the transmission should be warmed up as follows:

- 1. Be sure the tractor is on level ground.
- Place the motion control lever in neutral. Release the parking brake and let the clutch/brake slowly return to operating position.
- Allow one minute for transmission to warm up. This can be done during the engine warm up period.
- The attachments can also be used during the engine warm-up period after the transmission has been warmed up.

**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.

#### PURGETRANSMISSION

ACAUTION: Never engage or disengage freewheel lever while the engine is running.

To ensure proper operation and performance, it is recommended that the transmission be purged before operating tractor for the first time. This procedure will remove any trapped air inside the transmission which may have developed during shipping of your tractor. **IMPORTANT:** Should your transmission

IMPORTANT: Should your transmission require removal for service or replacement, it should be purged after reinstallation before operating the tractor.

- Place tractor safely on level surface with engine off and parking brake set.
- Disengage transmission by placing freewheel control in freewheeling position (See "TO TRANSPORT" in this section of manual).
- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to slow position. With motion control lever in neutral (N) position, slowly disengage clutch/ brake pedal.
- Move motion control lever to full forward position and hold for five (5) seconds. Move lever to full reverse position and hold for five (5) seconds. Repeat this procedure three (3) times.

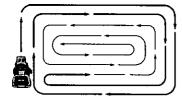
**NOTE:** During this procedure there will be no movement of drive wheels. The air is being removed from hydraulic drive system.

- Move motion control lever to neutral (N) position. Shut- off engine and set parking brake.
   Engage transmission by placing
- Engage transmission by placing freewheel control in driving position (See "TO TRANSPORT" in this section of manual).
- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to half (1/2) speed. With motion control lever in neutral (N) position, slowly disengage clutch/brake pedal.
- gage clutch/brake pedal.
  8. Slowly move motion control lever forward, after the tractor moves approximately five (5) feet, slowly move motion control lever to reverse position. After the tractor moves approximately five (5) feet return the motion control lever to the neutral (N) position. Repeat this procedure with the motion control lever three (3) times.

Your tractor is now purged and now ready for normal operation.

#### **MOWING TIPS**

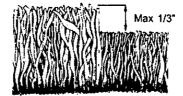
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to 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.

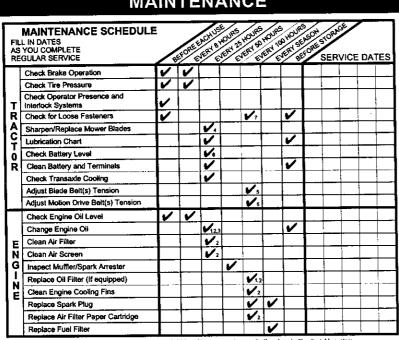


#### **MULCHING MOWING TIPS**

**IMPORTANT:** For best performance, keep mower housing free of built-up grass and trash. Clean after each use.

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried and the newly cut area will not be exposed to the direct sun.
- For best results, adjust the mower cutting height so that the mower cuts off only the top one-third of the grass blades. For extremely heavy mulching, reduce your width of cut on each pass and mow slowly.
- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.





# MAINTENANCE

Change more often when operating under a heavy load or in high embient temperatures. Service more often when operating in dirty or dusty conditions. It equipped with oil filter, change oil every 50 hours. Replace bledes more often when mowing in sandy soil.

#### 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.

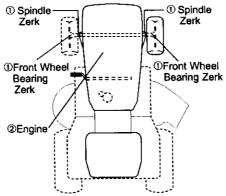
Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

# **BEFORE EACH USE**

- 1. Check engine oil level.
- 2. Check brake operation.
- З. Check tire pressure.
- Check operator presence and 4. interlock systems for proper operation.
- 5. Check for loose fasteners.

 5 - If equipped with adjustable system.
 6 - Not required if equipped with maintenance-free bat
 7 - Tighten front axie pivol boll to 35 ft.-lbe, maximum.
 Do not overlighten. ince-free battery

# LUBRICATION CHART



①SAE 30 or 10w30 MOTOR OIL

**@REFER TO Maintenance "ENGINE" SECTION** 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 sparingly.

#### 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 clutch/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.

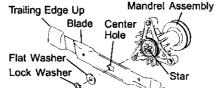
#### **BLADE REMOVAL**

- 1. Raise mower to highest position to allow access to blades.
- 2. Remove hex bolt, lock washer and flat washer securing blade.
- 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.



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

#### TO SHARPEN BLADE

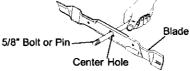
**NOTE:** We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

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. Open battery box door.
- 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.
- Reinstall battery (See "REPLACING BATTERY" in the SERVICE AND ADJUSTMENTS section of this manual).

#### 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.

#### TRANSAXLE COOLING

The transmission fan and cooling fins should be kept clean to assure proper cooling.

Do not attempt to clean fan or transmission while engine is running or while the transmission is hot. To prevent possible damage to seals, do not use high pressure water or steam to clean transaxle.

- Inspect cooling fan to be sure fan blades are intact and clean.
- Inspect cooling fins for dirt, grass clippings and other materials. To prevent damage to seals, do not use compressed air or high pressure sprayer to clean cooling fins.

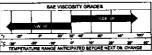
#### TRANSAXLE PUMP FLUID

The transaxle was sealed at the factory and fluid maintenance is not required for the life of the transaxle. Should the transaxle ever leak or require servicing, contact your nearest authorized service center/department.

# 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.

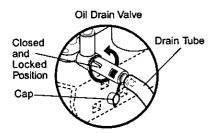


**NOTE:** Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil. Change the oil after every 25 hours of operation or at least once a year if the tractor is not used for 25 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.
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- Remove cap from end of drain valve and install the drain tube onto the fitting.
- Unlock drain valve by pushing inward slightly and turning counterclockwise.
- To open, pull out on the drain valve.
   After oil has drained completely, close and lock the drain valve by pushing inward 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.
- Use gauge on oil fill cap/dipstick for checking level. Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.



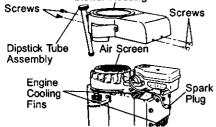
#### CLEAN AIR SCREEN

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.

# **ENGINE COOLING FINS**

Remove any dust, dirt or oil from engine cooling fins to prevent engine damage from overheating.

- Remove screws from blower housing and lift housing and dipstick tube assembly off engine.
- Cover oil fill opening to prevent entry of dirt.
- 3. Use compressed air or stiff bristle brush to thoroughly clean engine cooling fins.
- 4. To reassemble, reverse above procedure. Blower Housing



#### **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. Remove knob(s) and 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.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.

NOTE: If very dirty or damaged, replace pre-cleaner.

- 6. Reinstall pre-cleaner over cartridge.
- 7. Reinstall cover and secure with
- knob(s).

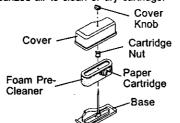
#### TO SERVICE CARTRIDGE

- 1. Remove cartridge nut.
- Carefully remove cartridge to prevent debris from entering carburetor. Clean base carefully to prevent debris from entering carburetor.
- Clean cartridge by tapping gently on flat surface.

NOTE: If very dirty or damaged, replace cartridge.

4. Reinstall cartridge, nut, precleaner, cover and secure with knob(s).

IMPORTANT: Petroleum solvents, such as kerosene, are not to be used to clean the cartridge. They may cause deterioration of the cartridge. Do not oil cartridge. Do not use pressurized air to clean or dry cartridge.



#### MUFFLER

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

Replace spark plugs 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.
- Place new fuel filter in position in fuel line with arrow pointing towards carburetor.
- 3. Be sure there are no fuel line leaks and clamps are properly positioned.
- Immediately wipe up any spilled gasoline.

Clamp Clamp **Fuel Filter** 

#### 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

- CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:
   Depress clutch/brake pedal fully and set parking brake.

  - Place motion control lever in neutral (N) position.
     Place attachment clutch in "DISENGAGED" position.
  - 4. Turn ignition key "OFF" and remove kev.
  - 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

Mower will be easier to remove from the right side of tractor.

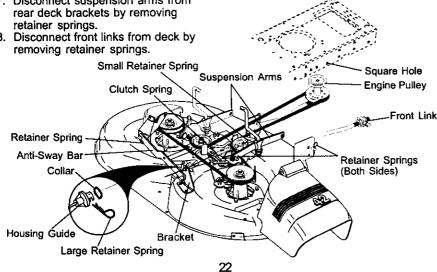
- Place attachment clutch in "DISEN-1. GAGED" position.
- Move attachment lift lever forward to 2. lower mower to its lowest position.
- Roll belt off engine pulley. 3
- Remove small retainer spring, and lift 4. clutch spring off pulley bolt.
- 5. Remove large retainer spring, slide collar off and push housing guide out of bracket.
- Disconnect anti-swaybar from chassis 6. bracket by removing retainer spring.
- 7. Disconnect suspension arms from rear deck brackets by removing
- 8. Disconnect front links from deck by removing retainer springs.

9. Raise lift lever to raise suspension arms. Slide mower out from under tractor.

**IMPORTANT:** If an attachment other than the mower deck is to be mounted on the tractor, remove the front links and hook the clutch spring Into square hole in frame.

#### TO INSTALL MOWER

- 1. Raise attachment lift lever to its highest position.
- Slide mower under tractor with 2. discharge guard to right side of tractor.
- Lower lift lever to its lowest position. З. 4. Install mower in reverse order of
- removal instructions.



#### TO LEVEL MOWER HOUSING

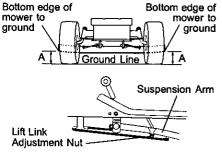
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT

- Raise mower to its highest position.
  At the midpoint of both sides of mower, measure height from bottom edge of
- mower to ground. Distance "A" on both sides of mower should be the same or within 1/4" of each other.
- If adjustment is necessary, make adjustment on one side of mower only.
  To raise one side of mower, tighten lift
- Ink adjustment nut on that side.
  To lower one side of mower, loosen lift
- 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 1/8".
Recheck measurements after adjust-

ing.



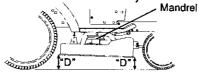
FRONT-TO-BACK ADJUSTMENT IMPORTANT: Deck must be level side-to side. If the following front-to-back adjustment is necessary, be sure to adjust both front links equally so mower will stay level side-to-side.

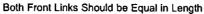
To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

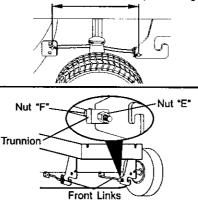
Check adjustment on right side of tractor. Measure distance "D" directly in front and behind the mandrel at bottom edge of mower housing as shown.

 Before making any necessary adjustments, check that both front links are equal in length. Both links should be approximately 10-3/8".

- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower loosen nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nuts "F" against trunnion on both front links.
- To raise front of mower, loosen nut "F" from trunnion on both front links.
   Tighten nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nut "F" against trunnion on both front links.
  Recheck side-to-side adjustment.







# TO REPLACE MOWER BLADE DRIVE BELT

The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

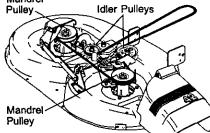
#### **BELT REMOVAL -**

- Remove mower from tractor (See "TO REMOVE MOWER" in this section of this manual).
- Work belt off both mandrel pulleys and idler pulleys.
- 3. Pull belt away from mower.

#### **BELT INSTALLATION -**

- Install new belt in reverse order of removal.
- Make sure belt is in all pulley grooves and inside all belt guides.
- Install mower in reverse order of removal instructions.

#### Mandrel

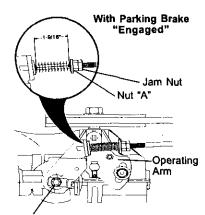


#### **TO ADJUST BRAKE**

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

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted.

- 1. Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-9/16", loosen jam nut and turn nut "A" until distance becomes 1-9/16". Retighten jam nut against nut "A".
- 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.

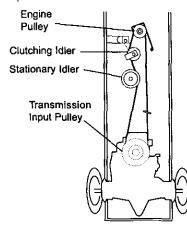


Do Not touch this nut. If further brake adjustment is necessary contact your nearest authorized service center/department

#### TO REPLACE MOTION DRIVE BELT

Park the tractor on level surface. Engage parking brake. For assistance, there is a belt installation guide decal on bottom side of left footrest.

- Remove mower (See "TO REMOVE MOWER" in this section of this manual.)
- 2. Remove belt from stationary idler and clutching idler.
- Pull belt slack toward rear of tractor. Carefully remove belt upwards from transmission input pulley and over cooling fan blades.
- Pull belt toward front of tractor and remove downward from around engine pulley.
- Install new belt by reversing above procedure.



#### TRANSAXLE MOTION CONTROL LEVER NEUTRAL ADJUSTMENT

The motion control lever has been preset at the factory and adjustment should not be necessary.

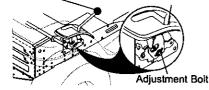
- 1. Loosen adjustment bolt in front of the right rear wheel, and lightly tighten.
- Start engine and move motion control lever until tractor does not move forward or backward.
- Hold motion control lever in that position and turn engine off.
- 4. While holding motion control lever in place, loosen the adjustment bolt.
- Move motion control lever to the neutral (N) (lock gate) position.
- 6. Tighten adjustment bolt securely.

**NOTE:** If additional clearance is needed to get to adjustment bolt, move mower deck height to the lowest position. After above adjustment is made, if the tractor still creeps forward or backward while motion control lever is in neutral position, follow these steps:

- 1. Loosen the adjustment bolt.
- 2. Move the motion control lever 1/4 to 1/2 inch in the direction it is trying to creep.
- 3. Tighten adjustment bolt securely.
- 4. Start engine and test.
- 5. If tractor still creeps, repeat above steps until satisfied.

Motion Control Lever

Neutral Lock Gate



#### TRANSMISSION REMOVAL/REPLACE-MENT

Should your transmission require removal for service or replacement, it should be purged after reinstallation and before operating the tractor. See "PURGE TRANSMISSION" in the Operation section of this manual.

#### 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 per instructions in the Assembly section of this manual.

#### FRONT WHEEL TOE-IN/CAMBER

The front wheel toe-in and camber are not adjustable on your tractor. If damage has occurred to affect the front wheel toein or camber, contact a Sears or other qualified service center.

#### **TO REMOVE WHEEL FOR REPAIRS**

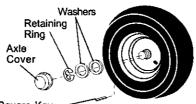
1. Block up axle securely.

- Remove axle cover, retaining ring and washers to allow wheel removal (rear wheel contains a square key - Do not lose).
- 3. Repair tire and reassemble.

**NOTE:** On rear wheels only: align grooves in rear wheel hub and axle. Insert square key.

- Replace washers and snap retaining ring securely in axle groove.
- 5. Replace axle cover.

**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.



Square Key (Rear Wheel Only)

#### TO START ENGINE WITH A WEAK BATTERY

A CAUTION: 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 negative grounded system. The other vehical must also be a 12 volt negative grounded system. Do not use

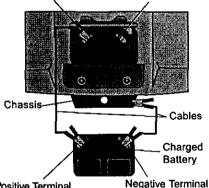
your tractor battery to start other vehicles.

#### TO ATTACH JUMPER CABLES -

- Connect each end of the RED cable to the POSITIVE (+) terminal of each battery, taking care not to short against chassis.
- Connect one end of the BLACK cable to the NEGATIVE (-) terminal of fully charged battery.
- Connect the other end of the BLACK cable 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. Positive Terminal Negative Terminal



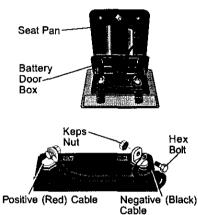
Positive Terminal

# REPLACING BATTERY

**ACAUTION:** 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.

- Lift seat pan to raised position and open battery box door.
- Disconnect BLACK battery cable first then RED battery cable and carefully remove battery from tractor.
- Install new battery with terminals in same position as old battery.
- First connect RED battery cable to positive (+) terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt and keps nut. Tighten securely.
- 6. Close battery box door.



#### 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.

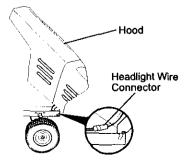
 Check wiring. See electrical wiring diagram in the Repair Parts section. TO REPLACE FUSE

Replace with 20 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

### TO REMOVE HOOD AND GRILL AS-SEMBLY

#### 1. Raise hood.

- 2. Unsnap headlight wire connector,
- Stand in front of tractor. Grasp hood at sides, tilt toward engine and lift off of tractor.
- 4. To replace, reverse above procedure.

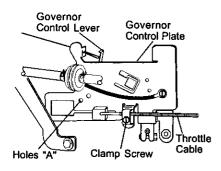


### ENGINE

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** 

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:

- With engine not running, move throttle control lever from slow to choke position. Slowly move lever from choke to fast position.
- Check that holes "A" in governor control lever and hole in governor plate line-up. If holes "A" are not aligned, loosen clamp screw and move throttle cable until holes are aligned. Tighten clamp screw securely.



#### TO ADJUST CARBURETOR

**NOTE:** The carburetor on this engine is low emission. It is equipped with an idle fuel adjusting needle with a limiter cap, which allows some adjustment within the limits allowed by the cap. Do not attempt to remove the limiter cap. The limiter cap cannot be removed without breaking the adjusting needle.

The carburetor has been preset 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 idle mixture valve in (clockwise) decreases the supply of fuel to the engine giving a leaner fuel/air mixture. Turning the idle mixture valve out (counterclockwise) increases the supply of fuel to the engine giving a richer fuel/air mixture. IMPORTANT: Damage to the needle valve and the seat in carburetor may result if screw is turned in too tight.

PRELIMINARY SETTING -

- 1. Air cleaner assembly must be assembled to the carburetor when making carburetor adjustments.
- Be sure the throttle control cable is adjusted properly (see above).

#### FINAL SETTING -

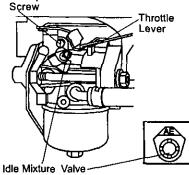
- Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/motion control lever in neutral (N) position.
- Move throttle control lever to slow position. With finger, rotate and hold throttle lever against idle speed screw. Turn idle speed screw to attain 1750 RPM.
- While still holding throttle lever against idle speed screw, turn idle mixture valve full travel clockwise then counterclockwise until engine runs rough. Turn valve to a point midway between those two positions. Release throttle lever.

#### ACCELERATION TEST -

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

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 a Sears or other qualified service center, which has proper equipment and experience to make any necessary adjustments.

# Idle Speed



with Limiter

# 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.

**CAUTION:** 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.

- 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.
- 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 deposites from forming in essential fuel system parts such as carburetor, fuel hose, or tank during storage. Also, experiance indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of and 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

PROBLEM	CAUSE	CORRECTION
Will not start	<ol> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine floaded</li> </ol>	<ol> <li>Fill fuel tank.</li> <li>See "TO START ENGINE" in Operation section.</li> <li>Welt secure minutes before</li> </ol>
	<ol> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Distancia fittar.</li> </ol>	<ol> <li>Wait several minutes before attempting to start.</li> <li>Replace spark plug.</li> <li>Clear transport of fitter</li> </ol>
	<ol> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> </ol>	<ol> <li>Clean/replace air filter.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and carbure tor, refill tank with fresh gasoline and replace fuel filter.</li> </ol>
	<ol> <li>8. Loose or damaged wiring.</li> <li>9. Carburetor out of adjustment.</li> </ol>	8. Check all wiring.
	10.Engine valves out of adjustment.	10. Contact a Sears or other qualified service center.
Hard to start	<ol> <li>Dirty air filter.</li> <li>Bad spark plug.</li> <li>Weak or dead battery.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> </ol>	<ol> <li>Clean/replace air filter.</li> <li>Replace spark plug.</li> <li>Recharge or replace battery.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill 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" in Service Adjustments section.</li> </ol>
	8. Engine valves out of adjustment.	8. Contact a Sears or other qualified service center.
Engine will not turn over	<ol> <li>Clutch/brake pedal not depressed</li> <li>Attachment clutch is</li> </ol>	<ol> <li>Depress clutch/brake pedal.</li> <li>Disengage attachment</li> </ol>
	<ul> <li>engaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty ignition switch.</li> </ul>	clutch. 3. Recharge or replace battery. 4. Replace fuse. 5. Clean battery terminals. 6. Check all wiring. 7. Check/replace ignition
	8. Faulty solenoid or starter.	switch. 8. Check/replace solenoid or starter.
	<ol> <li>Faulty operator presence switch(es).</li> </ol>	9. Contact a Sears or other qualified service center.
Engine clicks but 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 starter.</li> </ol>
Loss of power	<ol> <li>Cutting too much grass/too fast.</li> <li>Throttle in "CHOKE" position.</li> </ol>	<ol> <li>Set in "Higher Cut" position/ reduce speed.</li> <li>Adjust throttle control.</li> </ol>
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# **TROUBLESHOOTING CHART**

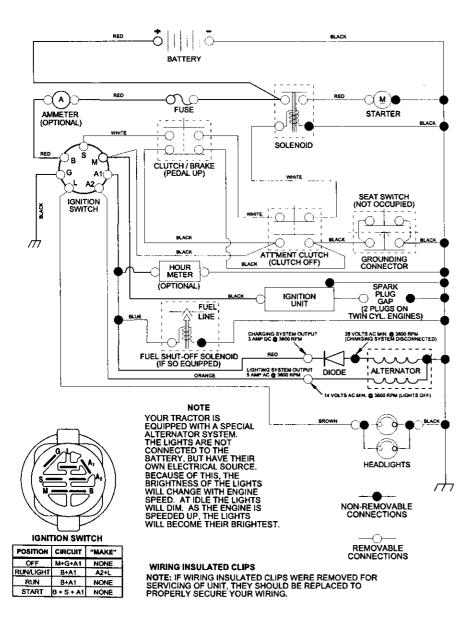
PROBLEM	CAUSE	CORRECTION
Loss of power (continued)	<ol> <li>Build-up of grass, leaves and trash under mower.</li> <li>Dirty air filter.</li> <li>Low oil level/dirty oil.</li> <li>Faulty spark plug.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Water in fuel.</li> <li>Water in fuel.</li> <li>Spark plug wire loose.</li> <li>Dirty/clogged muffler.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol>	<ol> <li>Clean underside of mower housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change spark plug.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact a Sears or other qualified service center.</li> </ol>
Excessive 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. Tighten blade bolt.</li> <li>Replace blade mandrel.</li> <li>Tighten loose part(s). Replace damaged parts.</li> </ol>
Engine continues to run when operator leaves seat with attachment clutch engaged	<ol> <li>Faulty operator-safety presence control system.</li> </ol>	<ol> <li>Check wiring, switches and connections. If not corrected, contact a Sears or other qualified service center.</li> </ol>
Poor cut - uneven	<ol> <li>Worn, bent or loose blade.</li> <li>Mower deck not level.</li> <li>Buildup of grass, leaves, and trash under mower.</li> <li>Bent blade mandrel.</li> <li>Clogged mower deck vent from build-up of grass, leaves, and trash around mandrels.</li> </ol>	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Level mower deck.</li> <li>Clean underside of mower housing.</li> <li>Replace blade mandrel.</li> <li>Clean around mandrels to open vent holes.</li> </ol>
Mower blades will not rotate	<ol> <li>Obstruction in clutch mechanism.</li> <li>Worn/damaged mower drive belt.</li> <li>Frozen idler pulley.</li> <li>Frozen blade mandrel.</li> </ol>	<ol> <li>Remove obstruction.</li> <li>Replace mower drive belt.</li> <li>Replace idler pulley.</li> <li>Replace blade mandrel.</li> </ol>

# TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Poor grass discharge	<ol> <li>Engine speed too slow.</li> <li>Travel speed too fast.</li> <li>Wet grass.</li> <li>Mower deck not level.</li> <li>Low/uneven tire air pressure.</li> <li>Worn, bent or loose blade.</li> <li>Buildup of grass, leaves and trash under mower.</li> <li>Mower drive belt worn.</li> <li>Blades improperly installed.</li> <li>Improper blades used.</li> </ol>	<ol> <li>Place throttle control in "FAST" position.</li> <li>Shift to slower speed.</li> <li>Allow grass to dry before mowing.</li> <li>Level mower deck.</li> <li>Check tires for proper air pressure.</li> <li>Replace/sharpen blade. Tighten blade bolt.</li> <li>Clean underside of mower housing.</li> <li>Replace mower drive belt.</li> <li>Reinstall blades sharp edge down.</li> <li>Replace with blades listed</li> </ol>
	11. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.	in this manual. 11.Clean around mandrels to open vent holes.
Headlight(s) not working (if so equipped)	<ol> <li>Switch is "OFF".</li> <li>Bulb(s) burned out.</li> <li>Faulty light switch.</li> <li>Loose or damaged wiring.</li> <li>Blown fuse.</li> </ol>	<ol> <li>Turn switch "ON".</li> <li>Replace bulb(s).</li> <li>Check/replace light switch.</li> <li>Check wiring and connections.</li> <li>Replace fuse.</li> </ol>
Battery will not charge	<ol> <li>Bad battery cell(s).</li> <li>Poor cable connections.</li> <li>Faulty regulator (if so equipped).</li> <li>Faulty alternator.</li> </ol>	<ol> <li>Replace battery.</li> <li>Check/clean all connections.</li> <li>Replace regulator.</li> <li>Replace alternator.</li> </ol>
Loss of drive	<ol> <li>Freewheel control in "disengaged" position.</li> <li>Motion drive belt worn, damaged, or broken.</li> <li>Air trapped in transmission during shipment or servicing.</li> </ol>	<ol> <li>Place freewheel control in "engaged" position.</li> <li>Replace motion drive belt.</li> <li>Purge transmission.</li> </ol>
Engine "backfires" when turning engine "OFF"	<ol> <li>Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine.</li> </ol>	<ol> <li>Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.</li> </ol>

### TRACTOR -- MODEL NUMBER 917.271642

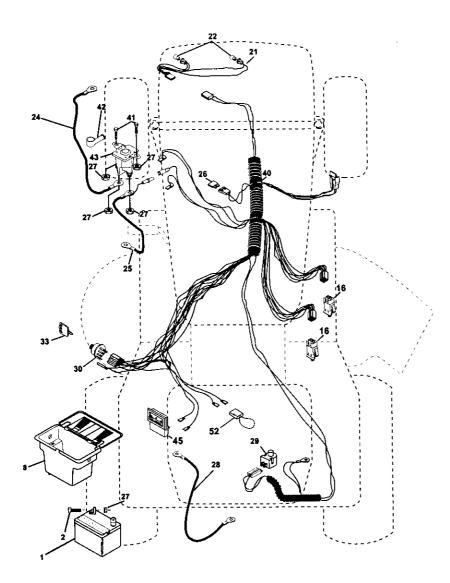
#### SCHEMATIC



# **REPAIR PARTS**

# TRACTOR - - MODEL NUMBER 917.271642

ELECTRICAL



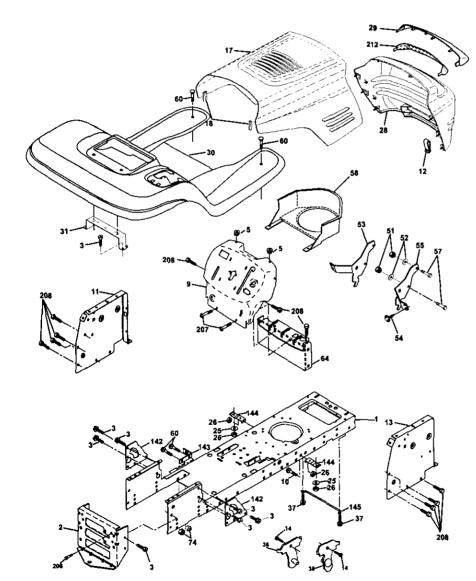
# TRACTOR -- MODEL NUMBER 917.271642

# ELECTRICAL

1         144925         Battery 12 VOLT 25 AMP           2         74760412         Bolt Hex Hd 1/4-20unc x 3/4           8         156417         Case Battery           16         153664         Switch, Interlock Push-In           21         166182         Harness Asm Light W/4152j           22         4152J         Bulb Light #1156           24         4799J         Cable Battery 6 Ga 11" red           25         146147         Cable Battery 6 Ga 11" red           26         175158         Fuse 20 AMP           27         73510400         Nut Keps Hex 1/4-20 Unc           28         4207J         Cable South Ign           33         140403         Key Ign           40         170217         Harness Ign           41         71110408         Bolt Bik. Fin Hex 1/4-20 Unc x 1/2           33         140403         Key Ign           40         170217         Harness Ign           41         71110408         Bolt Bik. Fin Hex 1/4-20 Unc x 1/2           33         155141         Solenoid           43         175141         Solenoid           45         121433X         Armeter Rectangular 6 Amp	•	PART NO.	DESCRIPTION
52 141940 Protection Wire Loop	2 8 16 122 4 26 27 28 29 33 34 14 23 5	74760412 156417 153664 166182 4152J 4799J 146147 175158 73510400 4207J 121305X 175566 140403 170217 71110408 131563 175141 121433X	Bolt Hex Hd 1/4-20unc x 3/4 Case Battery Switch, Interlock Push-In Harness Asm Light W/4152j Bulb Light #1156 Cable Battery 6 Ga 11" red Cable Battery 6 Ga w/16 wire red Fuse 20 AMP Nut Keps Hex 1/4-20 Unc Cable Ground 6 Ga 12" black Switch Plunger Nc Gray Switch Plunger Nc Gray Switch Ign Key Ign Harness Ign Bolt Blk. Fin Hex 1/4-20 Unc x 1/2 Cover Terminal Red Solenoid Ammeter Rectangular 6 Amp

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

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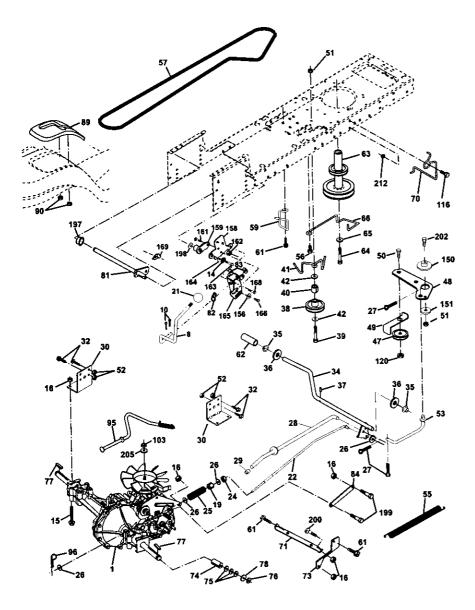


# TRACTOR - - MODEL NUMBER 917.271642 CHASSIS AND ENCLOSURES

# TRACTOR -- MODEL NUMBER 917.271642 CHASSIS AND ENCLOSURES

KEY NÖ.	PART NO.	DESCRIPTION
1	174619	Chassis
2	176554	Drawbar
3	17060612	Screw 3/8-16 x 3/4
5	155272	Bumper Hood/Dash
9	168337X013	
10	STD533710	Bolt, Carriage 3/8-16 x 3/4
11	155927	Panel, Dash, L.H.
12	145660	Clip Tinnerman Grille P/L
13	172107X010	
14	17490608	Screw Thdrol 3/8-16 x 1/2
17	144983X558	
18	126938X	BumperHood
25	19131312	Washer 13/32 x 13/16 x 12 Gauge
26	STD541437	Nut
28	156725X558	
29	155217X599	
30	164918X558	
31	139976	Bracket, Fender Support
37	17490508	Screw Thdrol 5/16-18 x 1/2
38	169834	Pivot Bracket Assembly, Rear
51	73800400	Nut Lock w/insert 1/4-20 UNC
52 53	19091416 145201	Washer 9/32 x 7/8 x 16 Ga.
53 54	145201	Bracket Grille Pickoff LH Screw Hex Wshd 8-18 x 7/8
54 55	145202	Bracket Grille Pickoff RH
55 57	STD522507	Bolt, Fin Hex 1/4-20 UNC x .75
60	72140606	Bolt Rdhd Sgnk 3/8-16 UNC x 3/4
64	154798	DashLower STLT
74	STD541437	Nut Crownlock 3/8016 UNC
142	165867	Plate Reinforcement STLT
143	154966	Bracket Swaybar Chassis
144	154207	Bracket Pnt Footrest STLT
145		Rod Pivot Chassis/Hood
206	170165	Bolt Shoulder 5/16-18 TT
207	17670508	Screw Thdrol 5/16-18 x 1/2 Tvtt
208	17670608	Screw Thdrol 3/8-16 x 1/2
212	165919	Insert Lens
	5479J	Plug, Button

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4  $\mbox{mm}$ 



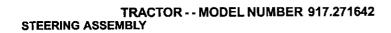
TRACTOR -- MODEL NUMBER 917.271642 GROUND DRIVE

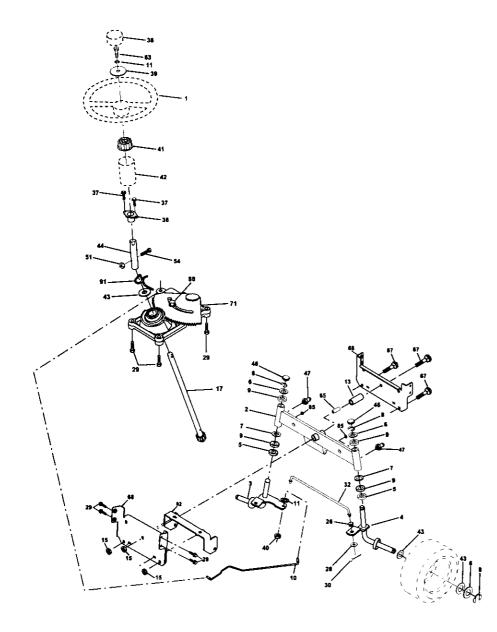
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n.

### GROUND DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1		Transmission (See Breakdown)	66	154778	Keeper, Belt Engine Hydro
		Hydro Gear Model 322-0510	70	134683	Guide, Belt, Mower Drive RH
8	165866	Rod, Shift	71	169183	Strap, Torque, Lh
10	STD561210	Pin, Cotter 1/8 x 1	73	169182	Strap, Torque, Rh
14	STD551125	Washer Lock 1/4	74	137057	Spacer, Axle
15	74490544	Bolt Hex Fighd 5/16-18 Gr. 5	75	121749X	Washer 25/32 x 1-1/4 x 16 Ga.
16	73800500	Nut, Lock Hex w/ins 5/16-18 UNC	76	12000001	Ring, E
19	73800600	Nut Lock Hex w/Ins 3/8-16	77	123583X	Key, Square
21	130564	Knob	78	121748X	Washer 25/32 x 1-5/8 x 16 Ga.
22	169498	Rod, Brake	81	165596	Shaft Asm Cross
24	73350600	Nut	82	165711	Spring, Torsion
25	106888X	Spring, Rod, Brake	83	19171216	Washer 17/32 x 3/4 x 16 Ga.
26	19131316	Washer 13/32 x 13/16 x 16 Ga.	84	169843	Link Transaxle
27	STD561210	Pin, Cotter 1/8 x 3/4	89		Console, Shift
28	175765	Rod, Parking Brake	90	124346X	Nut Self-Thd Wshd 1/4
29	71673	Cap, Parking Brake	95	170201	Control Asm Bypass Hydro
30	174973	Bracket, Transmission	96	STD624003	Spring, Retainer 1"
32	74760512	Bolt Hex 5/16-18 UNC x 3/4	103	73940800	Nut, Hex Jam Toplock 1/2-20
34	175578	Shaft, Foot Pedal	140	72140608	
35	120183X	Bearing, Nylon Washer	116 120	73900600	Bolt Rdhd Sq Neck 3/8-16 x 1 Nut Lock Fig 3/8-16
36	19211616			175456	Spacer Retainer
37	1572H	Pin, Roll	150 151	19133210	Washer 13/32 x 2 x 10
38	165936	Pulley, Composite, Flat Bolt	156	166002	Washer 5/16 x 1.0 x 1.25
39	74760648		158	165589	Bracket Shift Mount
40 41	175461 175556	Spacer, Split Keeper, Belt, Idler	150	165494	Hub Tapered Flange Shift
41	19131312	Washer 13/32 x 13/16 x 12 Ga.	161	72140406	Bolt Rdhd Sgnk 1/4-20 x 3/4 Gr. 5
47	127783	Pulley, Idler, V-Belt	162	73680400	Nut Crownlock 1/4-20 Unc
48	154407	Bellcrank Clutch Grnd Drustl	163	74780416	Bolt Hex Fin 1/4-20 x 1
49	123205X	Retainer, Belt	164	19091010	Washer 5/8 x .281 x 10 Ga.
50	STD523715		165	165623	Bracket Pivot Lever
51	STD541437		166	166880	Screw 5/16 x 1.0 x .125
52	STD541431	Nut Crownlock 5/16-28	168	165492	Bolt Shoulder 5/16-18 x .561
53	105710X	Link. Clutch	169	165580	Plate Fastener Cross Shaft
55	105709X	Spring, Return, Clutch	197	169613	Nyliner Snap-In
56	17060616	Screw 3/8-16 x 1.0	198	169593	WasherNyliner
57	140294	V-Belt, Drive	199	169612	Bolt Shoulder 5/16-18 Unc
59	169691	Keeper, Belt, Center	200	72140508	Bolt RdHd Sgnk
61	17060612	Screw 3/8-16 x 3/4			5/16-18 Unc x 1
62	8883R	Cover, Pedal	202	72110612	Bolt Carr. Sh 3/8-16 x 1-1/2 Gr. 5
63	175410	Pulley, Engine	205	19171616	Washer 17/32 x 1 x 16 Ga.
64	71170764	Bolt Hex 7/16 x 4 Gr. 5	212	145212	Nut Hex Flange Lock
65	10040700	Washer			
			NOT	E: All compon	ent dimensions given in U.S. inches
				h = 25.4 mm	



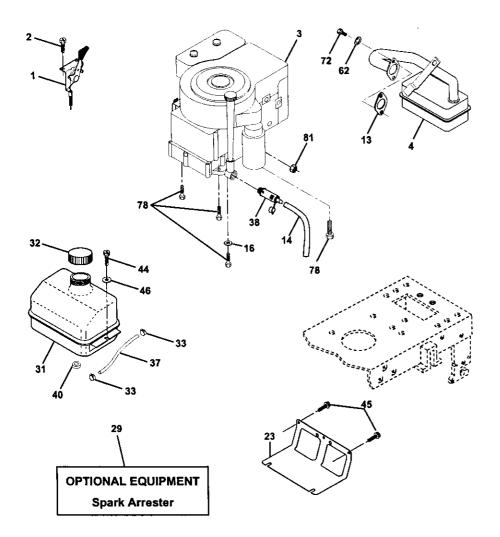


# TRACTOR - - MODEL NUMBER 917.271642 STEERING ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	139768	Steering Wheel
2	154427	Axle Assembly STMP Dropped STL
3	169840	Spindle Assembly, L.H.
4	169839	Spindle Assembly, R.H.
5	6266H	Bearing, Race, Thrust, Hardened
6	121748X	Washer 25/32 x 1-5/8 x 16 Gauge
7	19272016	Washer 27/32 x 1-1/4 x 16 Gauge
8	12000029	Ring, Klip
9	3366R	Bearing, Steering Column
10	175121	Draglink
11	STD551137	Washer, Lock
13	136518	Spacer Bearing Axle Front
15	145212	Nut, Hex Flange Lock
17	177876	Shaft Assembly, Steering
26 28	126847X	Bushing, Link, Drag
20 29	19131416 17060612	Washer 13/32 x 7/8 x 16 Gauge Screw 3/8-16 x 3/4
29 30	STD561210	Pin Cotter
30	130465	Rod, Tie
36	155099	Bushing, Steering
37	152927	Screw
38	139769	Insert, Steering Wheel
39	19133812	Washer 13/32 x 2-3/8 x 12 Gauge
40	STD541537	Nut Lock Center 3/8-24 Unf
41	100711L	Adaptor, Steering Wheel
42	145054X428	
43	121749X	Washer 25/32 x 1-1/4 x 16 Gauge
44	153720	Extension Shaft Steering LR.LT
46	121232X	Cap, Spindle
47	6855M	Fitting, Grease
51	STD541431	Nut Lock Hex w/ins. 5/16-18 UNC
54	74780520	Bolt Fin Hex 5/16-18 UNC x 1-1/4
63	STD523710	Bolt, Fin Hex 3/8-16 UNC x 1 Gr 5
65	160367	Spacer Brace Axle
67	72140618	Bolt RDHD Sqnk 3/8-16 x 2-1/4
68	169827	Axle, Brace
71	175146	Steering Asm.
82	169835	Bracket Susp. Chassis Front
85	133835	Fastener Christmas Tree
88	175118	Bolt Shoulder 7/16-20
91	175553	ClipSteering

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

## ENGINE

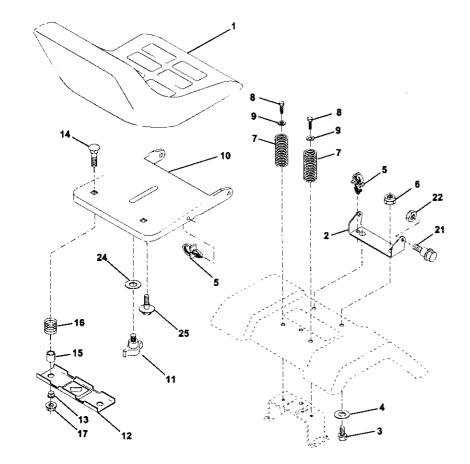


#### ENGINE

#### TRACTOR -- MODEL NUMBER 917.271642

#### KEY PART DESCRIPTION NO. NO. 170545 Control Throt/Ch 1 2 3 Control Throt/Ch Screw Hex Thd Cut 1/4-20x5/8 T Engine (See Breakdown) Briggs Model 310707-0136-E1 Muffler Exhaust B&S Lt Gasket 1 313 Id Tin Plated Tube Drain oil easy Washer Lock Ext Tooth 3/8 Shield Browning/Debris Guard Arrestor Spark 17720410 .... 4 13 137352 165291 148456 STD551237 14 16 23 29 31 32 33 37 38 40 44 55 46 62 72 78 81 169837 137180 109202X Arrestor Spark Tank Fuel 1 25 Fr Cap Asm Fuel Sears Vented 109202X 158990 123487X 137040 148315 124028X 17490412 17060612 19091416 STD551131 71070512 17060620 Cap Asm Fuel Sears Vented Clamp Hose Blk Line Fuel 20" Plug drain oil easy Bushing Snap Nyl Blk Fuel Line Screw Hexwsh Thdroi 1/4-20x3/4 Screw 3/8-16 x 3/4 Washer 9/32 X 7/8 X 16ga Washer Lock Hvy Hicl Spr 5/16 Screw Hexhd Cap 5/16-18x3/4 Screw 3/8-16x1-1/4 Nut Flange 1/4-20 Starter Nut 17060620 73510400

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



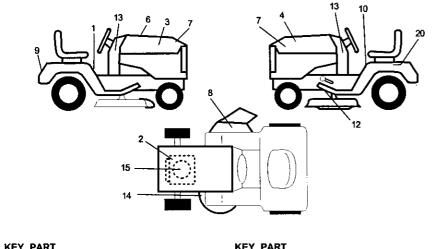
# TRACTOR - - MODEL NUMBER 917.271642 SEAT ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	140122	Seat 3350 Blk/blk Craftsman
2	140551	Bracket Pnt Pivot Seat (blk)
3	71110616	Bolt Fin Hex 3/8-16unc X 1
4	19131610	Washer 13/32 X 3/4 X 10 Ga
5	145006	Clip Push In Hinged
6	STD541437	Nut Hex Lock w/ins 3/8-16 Unc
7	124181X	Spring Seat Cprsn 2 250 Blk Zi
8	17000616	Screw 3/8-16 X 1
9	19131614	Washer 13/32 X 1 X 14 Ga
10	174894	Pan Pnt Seat (blk )
11	166369	Knob Seat Adj Wingnut
12	121246X	Bracket Pnt Mounting Switch

	KEY	PART	
	NO.	NO.	DESCRIPTION
1	13	121248X	Bushing Snap Blk Nyl 50 Id
1	4	72050412	Bolt Rdhd Sht Nk 1/4-20x1-1/2
1	15	134300	Spacer Split 28 X 96 Zinc
1	16	121250X	Spring Corsn 1 27 Blk Pnt
1	17	123976X	Nut Lock 1/4 Lge Fig Gr 5 Zinc
2	21	171852	Bolt Shoulder 5/16-18 Unc-2A
2	22	STD541431	Nut Hex Lock w/Ins 5/16-18
2	24	19171912	Washer 17/32 X 1-3/16 X 12 Ga.
2	25	127018X	Bolt Shoulder 5/16-18 X 62

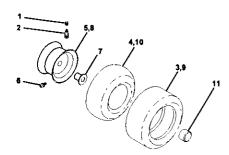
NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm





KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	156811	Decal, Oper. Instr.	13	177259	Decal, Dash Panel
2	171761	Decal, Replacement	14	160396	Decal, V-Belt Schematic
3	171696	Decal, Hood, R.H.	15	176677	Decal, Engine
4	171697	Decal, Hood, L.H.	20	149516	Decal Battery Dngr/Psn Eng
6	133644	Decal, Customer Maintenance		169210	Decal, By-Pass
7	177253	Decal Hood Side LT1000	• •	138311	Decal, Lift Handle
8	172331	Decal, Deck		165800X428	Pad Footrest LH STLT
9	163204	Decal, Fender, Craftsman		165799X428	Pad Footrest RH STLT
10	156439	Decal, Fender Danger		178528	Owner's Manual, English
12	146046	Decal, V-Belt Drive Schematic		178529	Owner's Manual, Spanish

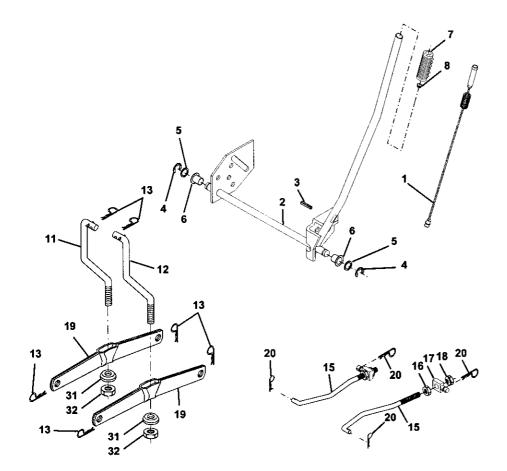
WHEELS & TIRES



KEY NO.	PART NO.	DESCRIPTION
1	59192	Cap Value Tire
2	65139	Stem Value
2 3	106222X	Tire F Ts 15 X 6 0 - 6 Service
4	59904	Tube Inner Front #35060
5	106732X427	Rim Asm 6"front White Service
6	278H	Fitting Grease
7	9040H	Bearing Flange
8	106108X427	Rim Asm 8"rear White Service
9	106268X	Tire R Ts 18x9 5-8 Service
10	7152J	Tube Rear 9 5 X 8 Service
11	104757X428	Cap Axle Blk 1 50 X 1 00
••	144334	Sealant, Tire (10 oz. tube)

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

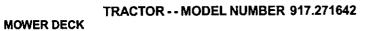
#### TRACTOR - - MODEL NUMBER 917.271642 LIFT ASSEMBLY

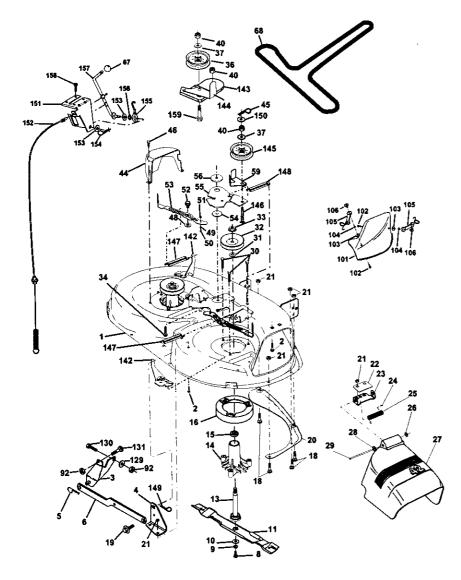


LIFT ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 11 2 3 5 6 7 8 11 2 3 5 16 7 8	159460 159471 105767X 1200002 19211621 120183X 125631X 122365X 139865 139865 STD624008 173288 73350800 130171 73808800	Washer Asm Inner Spring W/Plunger Shaft Asm. Lift Pin Groove E Ring #5133-62 Washer 21/32 x 1 x 21 Ga. Bearing Nylong Grip Handle Fluted Button Plunger Read Link Asm Lift L.H. Link Asm Lift R.H. Retainer Spring Link Front Nut Jam Hex 1/2-13 Unc Trunnion Bik Zinc Nut Lock w/Wsh 1/2-13 Unc
19 20 31 32	139868 163552 169865 73540600	Arm Suspension Mower Retainer Spring Bearing, Pvt. Lift Nut Crownlock 3/8-24

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

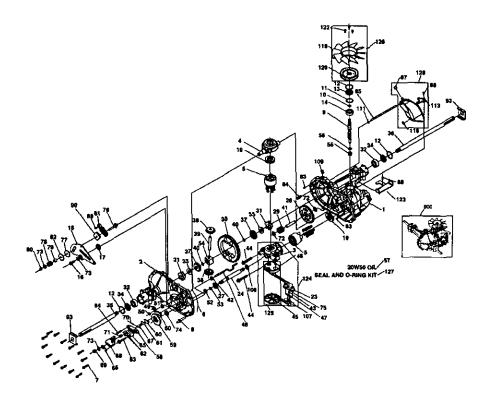




# MOWER DECK

	PART			PART	
NO.	NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
1	165892	Mower Deck Assembly, 42"	53	131845	Arm Assembly, Pad, Brake
2	STD533107	Bolt	54	133943	Washer, Hardened
3	138017	Bracket Assembly, Sway Bar, Front	55	155046	Arm, Idler
4	165460	Bracket Sway Bar 38/42" Deck	56	165723	Spacer, Retainer
	STD624008	Retainer Spring	59	141043	Guard, TUV Idler
5 6	130832	Arm, Suspension, Rear	67	149846	Knob Custom Oval
š	850857	Bolt, Hex 3/8-24 x 1.25 Gr. 8	68	144959	V-Belt
ğ	STD551137	Washer, Lock	92	STD541437	Nut
10	140296	Washer, Hardened	101	136420	MulcherCover
11	134149	Blade, Mulching	102	71081010	Screw
13	137645	Shaft Assembly, Mandrel,	103	19061216	Washer #10
		Vented (Includes Key	104	STD551110	Washer, Lock
		Number 12)	105	160793	Latch Assembly, Bagger
14	128774	Housing, Mandrel, Vented	106	2029J	Nut, Weld
15	110485X	Bearing, Ball, Mandrel	12 <del>9</del>	19131312	Washer 13/32 x 13/16 x 12 Ga.
16	174493	Stripper, Vented Mower Deck	130	STD523710	Bolt, Fin Hex 3/8-16 UNC x 1
18	72140505	Bolt, Carriage 5/16-18 x 5/8			Gr. 5
19	132827	Bolt, Shoulder	131	STD533710	Bolt, Rdhd Sqnk 3/8-16UNC x 1
20	159770	Baffle, Vortex	142	165890	Arm Spring Brake Mower
21	STD541431	Nut Crownlock 5/16-18 UNC	143	157109	Bracket Arm Idler 42"
22	134753	Stiffener Bracket	144	158634	Keeper Belt 42" Clutch Cable
23	131267	Bracket, Deflector	145	165888	Pulley Idler Flat
24	105304X	Cap, Sleeve	146	171977	Bolt Carriage Idler
25	123713X	Spring, Torsion, Deflector	147	131335	Spring Extension
26	110452X	Nut, Push	148	169022	Spring Return Idler
27	130968X428	Shield, Deflector	149	165898 19091216	Retainer Spring Yellow Zinc Washer 9/32 x 3/4 x 16 Ga.
28	19111016	Washer 11/32 x 5/8 x 16 Ga.	150 151	169670	Bracket Clutch
29	131491	Rod, Hinge	152	169676	Cable Clutch 42 In
30	157722	Screw Thdrol Washer Head	152	169676	Washer Flat 3/8* Type B
31	129963	Washer, Spacer	154	169675	Spring Retainer
32	153535	Pulley, Mandrel	154	169671	Spring Retention Lever
33	137266	Nut, Toplock, Flanged	156	169672	Spacer
34	STD533717	Bolt	157	169669	Rod Clutch
35	133835	Fastner, Christmas Tree	158	17720410	Screw Hex Thd Cut 1/4-20 x 5/8
36	131494	Pulley, Idler, Flat	159	72140614	Bolt Rdhd Sgn 3/8-16 Unc x 3/4
37	STD551037	Washer 13/32 x 13/16 x 16		130794	Mandrel Assembly (Includes
		Gauge		1307.54	Key Numbers 8-10, 13-15, 31
40	STD541437	Nut Crownlock 3/8-16 UNC			and 32)
44	140088	Guard, Mandrel, L.H.		169583	Mower Deck, Complete
45	STD624003	Retainer			(Standard Deck, Order
46	137729	Screw, Thd. Roll 1/4-20 x 5/8			Separately Mulcher Plate and
48	133944	Washer, Hardened			Gauge Wheel Components, Key
49	174284	Roller Assembly, Cam Follower			Nos. 101-106 and 111-121)
50	131340	Bolt, Shoulder #10-24 Grade 5			
51	STD541410	Locknut			ent dimensions given in U.S.inches
52	139888	Bolt, Shoulder 5/16-18 UNC	1 inct	n = 25.4 mm	

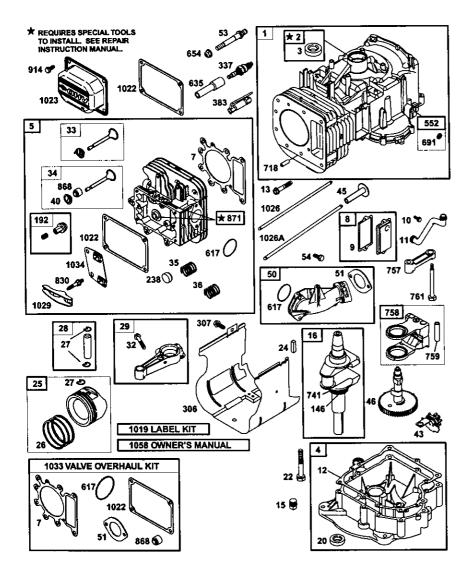
## TRACTOR - - MODEL NUMBER 917.271642 HYDRO TRANSAXLE - - MODEL NUMBER 322-0510

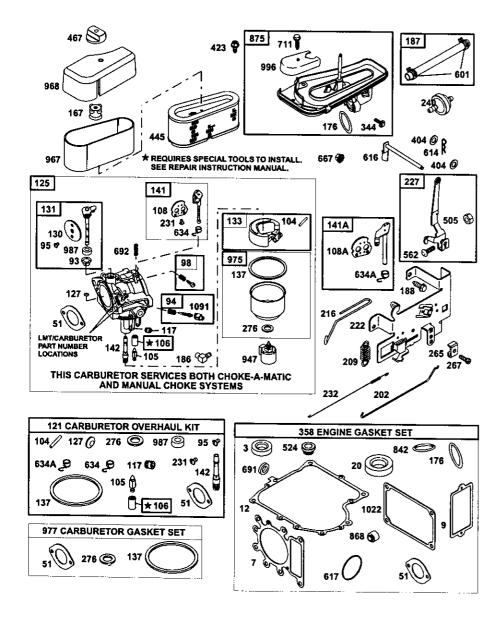


## TRACTOR - - MODEL NUMBER 917.271642 HYDRO TRANSAXLE - - MODEL NUMBER 322-0510

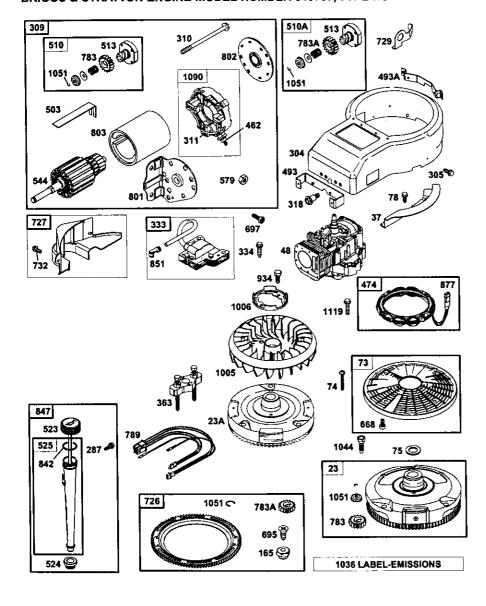
			KEV	DADT	
	PART NO.	DESCRIPTION	NO.	PART NO.	DESCRIPTION
no.	NQ.	DESCRIPTION	NQ.	NQ.	DESCRIPTION
1	170351	Main Housing, Assembly	60	142883	Brake Puck
2	170352	Side Housing, Assembly	61	142882	Puck Plate
3	170353	Center Section, Assembly	62	170409	Brake Actuating Pin
4	170354	Swashplate, Trunion Machined	63	170410	HFHCS 1/4-20X2 W/Patch,
5	169898	Block - Assembly			Special Flange
6	170355	Sealant	64	142892	Bolt, 1/4-20 X 1 W/Patch
7	170356	Hex Flange Screw 1/4-20 X 1.25	65	170411	Spacer
8	170357	Stud, 5/16-24 Hex Double End	66	170412	Spring, Brake Arm Bias
9	170358	Shaft, Input	67	170413	SQ. HD. BOLT 5/16-24-Ribbed
10	170359	Ring - Retaining	68	170414	Arm, Brake
11	170360	Spacer	69	170415	Slotted Hex Nut 5/16-24
12	169870	Ring-Retaining	70	170416	Cotter Pin 3/32 X 3/4
13	170361	Seal, Lip .67 X 1.58 X .276	71	170417	Compression Spring Brake Anti-
14	173158	Ball Brg 17MM ID X 40MM OD X			Drag
		12MM	72	170418	Washer, HT .5 I.D. X 1 O.D. X
16	170362	Hex FLlange Head Screw 5/16-			.032
	110002	24 X 0.75	73	142884	Flat - Washer 11/32 I.D. X 7/8
17	170363	Lip Seal 18 X 32 X 7		146004	O.D.
18	170364	Arm, Control	74	170419	Oil Seal .625 X 1.0 X .25
19	173159	Bearing, 30X52X13 Thrust	75	170420	
23	170365	Check Plug Assembly, Washer	15	170420	Check Plug Assembly, .027,
24	170366	Shaft, Motor1	76	170421	Washer Stud. E/16-24 Eriction Book
27	170367				Stud, 5/16-24 Friction Pack
28	170368	Gear - Pinion, 13T 10T/48T GEAR	77 78	170422	Puck, .330 X 1.50 X .0975
29				142969	Spring, Helicl Comp
30	170369	Gear, 10T Jackshaft	79	142980	Spacer
31	170370	60T Bull Gear	80	150778	Hex Lock Nut 5/16-24
	170371	Sleeve Bearing .75 X 1.575 X .625		170.000	UNJF(Nylon Insert)
32	170389	Sleeve Bearing	81	170423	Wedge, Friction Pack
	4 40004	(Outboard).75X1.750X.625	82	170424	Clip, Washer .316X1.50X.1046
33	142991	Washer, 3/4 ID X 1-1/2 OD X	~~		(Plated)
	170000	.13THK	83	161168	Pin, Standard Headless
34	170390	Lip Seal Axle Seal	84	170425	Fitting, 5/16 Sae 5/32 Tube
35	170391	Shaft, Axle .75 X 11.39 (Key,R.H.)	85	170426	Hose, Expansion Tank
36	170392	Shaft, Axle .75 X 16.99 (Key,L.H.)	87	173160	Cap, Vent
37	150792	Miter Gear (SPLINED)	88	170428	Bolt, Self Tapping 10-32 X 1/2
38	150793	Miter Gear 15T (0.5 ID)	90	170430	Puck, Inner Wedge
39	150809	Shaft	93	170431	Spring Clip - Housing Thrust
40	170393	Ring, Spiral Retaining	107	170432	Deflector
41	170394	Pin, Jackshaft	108	170433	Washer, Motorshaft
42	170395	Magnet, Rling			.71IDX1.15ODX.030THK
43	170396	Spring, Bypass	109	170434	Plug, Sae #6
44	150797	Hydro mtg Screw 3/8-24 X 2.5	111	170435	O-ring .07 x .301 I.D.
		Long	113	170437	Bracket, Support Expansion Tank
45	170397	Flitter	116	170438	Slilicon Sponge
46	170398	Base, Filter	119	173161	Fan
47	170399	Actuator, Bypass	120	17044	Pulley
48	170400	Rod, Bypass Actuator	122	173162	#12 T.F. Screw-lindented Hex
49	170401	Arm, Bypass			Washer Head
50	170402	Retaining Ring .250 External	123	173163	Bracket Belt Keeper
51	170403	Seal, Lip .741 X .250 X .250 TC	124	170444	Center Section-Filter-Bypass
52	170404	Flat Washer, 5/8 ID X 1.0 OD X			Assembly
		.05 THK	125	170445	Filter Assembly
53	170405	Retaining Ring	126	173164	Fan - Pulley Service Aassembly
54	170406	Bearing, Center Block	127	170447	Seal - O-ring Kit
55	142977	Spring - Helical Compression	128	173165	Kit, Expansion Tank
56	142978	Washer	900	171613	Transaxle, complete
57	150798	20W-50 OIL72.8 oz			
58	170407	Brake Yoke	NOT	E: All compoi	nent dimensions given in U.S. inches
59	170408	Rotor, Brake		h = 25.4 mm	<b>4</b> • • • • • • • • • • • • • • • • • • •







#### TRACTOR - - MODEL NUMBER 917.271642 BRIGGS & STRATTON ENGINE-MODEL NUMBER 310707, TYPE NUMBER 0136-E1



TRACTOR - - MODEL NUMBER 917.271642 BRIGGS & STRATTON ENGINE-MODEL NUMBER 310707, TYPE NUMBER 0136-E1

### TRACTOR - - MODEL NUMBER 917.271642 BRIGGS & STRATTON ENGINE-MODEL NUMBER 310707, TYPE NUMBER 0136-E1

	DIDT			<b>6.5</b>		
KEY	PART	DESCRIPTION	KEY			DESCRIPTION
NO. 1	NO. 690156	DESCRIPTION Cylinder Assembly	NO. 105	NO. 231855	a	DESCRIPTION Valve-Float Needle
2	399265	Bushing/Seal Kit	105	690577		Seat-Inlet
3	291675	<ul> <li>Seal-Oil</li> </ul>	108	690464	ø	Valve-Choke (Manual Choke)
	494238	Sump-Engine		692344		Valve-Choke (Choke A Matic)
4 5 7	690188	Head-Cylinder	117	692408	ø	let Main (Standard)
7		++ Gasket-Cylinder Head		692411	Ð	Jet, Main (Standard) Jet, Main (High Altitude)
8	495735	Breather Assembly	121	690191		Carburetor Overhaul Kit
ğ	27803	Gasket-Breather	125	690194		Carburetor
ĭo	691666	Screw (Breather Assembly)	127	695005	ø	Plug-Welch
11	691328	Tube-Breather	130	691750	~	Valve-Throttle
12	271916	<ul> <li>Gasket-Crankcase (.015</li> </ul>	131	494379		Throttle Shaft Kit
•=		Thick, Std.)	133	494381		Float-Carburetor
	271997	Gasket-Crankcase (.005	137	281165		Gasket-Float Bowl
		Thick)	141	495097		Choke Shaft Kit (Manual
	271996	Gasket-Crankcase (.009				Choke)
		Thick)	141A	495931		Choke Shaft Kit (Choke A
13	690360	Screw (Cylinder Head, 3-9/				Matic)
		16")	142	692412	ø	Nozzle-Carburetor
15	94239	Plug-Oil Drain	146	94196		Key-Timing
16	690136	Crankshaft	165	693148		Nut (Ring Gear)
20	291675	<ul> <li>Seal-Oil</li> </ul>	167	281051		Air Cleaner Stud Seal
22	95187	Screw (Crankcase Cover)	176	281106		O-Ring Seal (Air Cleaner
23	693557	Flywheel (Steel Ring Gear)				Base)
23A	492326	Flywneel (Plastic Ring Gear)	186	493496		Connector-Hose
24	222698	Key-Flywheel	187	298049		Line-Fuel (Cut to Required
25	692271	Piston Assembly (Std.)				Length)
	692272	Piston Assembly (.010 O.S.)	188	94929		Screw (Control Bracket)
	692273	Piston Assembly (.020 O.S.)	192	492160		Adjuster- Rocker Arm
26	692274	Piston Assembly (Std.) Piston Assembly (.010 O.S.) Piston Assembly (.020 O.S.) Piston Assembly (.030 O.S.) Ring Set-Piston (Std.) Ring Set-Piston (.010 O.S.) Ring Set-Piston (.020 O.S.) Ring Set-Piston (.020 O.S.)	202	262767		Mechanical Governor Link
20	690162	Ring Set- Piston (Std.)	209	260695		Spring- Governor
	690164 690166	Ring Set-Piston (1010-0.5.)	216	262766		Link-Choke Brocket Control
	690168	Ring Set-Piston (1020 0.3.)	222 227	694042		Bracket-Control
27	691299	Ring Set- Piston (.030 O.S.) Lock-Piston Pin	231	691374 691636	a	Lever-Governor Control
28	498319	Pin Assembly- Piston (Std.)	232	262785	ø	Screw (Choke Valve)
20	498320	Pin Assembly-Piston (.005	238	262836		Spring-Governor Link Cap- Valve
	130020	0.S.)	240	394358		Filter-Fuel
29	692419	Rod-Connecting (Std.)	265	221535		Clamp-Casing
	499940	Rod-Connecting (.020 U.S.)	267	695134		Screw (Casing Clamp)
32	692852	Screw (Connecting Rod)	276	692255		Sealing Washer
33	495856	Valve-Exhaust	287	94903		Screw (Dipstick Tube)
34	495857	Valve- Intake	304	690844		Housing-Blower
35	691279	Spring- Valve (Intake)	305	690969		Screw (Blower Housing)
36	691279	Spring- Valve (Exhaust)	306	690499		Shield, Cylinder
37	690456	Guard-Flywheel	307	94930		Screw (Cylinder Shield)
40	224641	Retainer- Valve	309	693551		Motor-Starter (For Steel Ring
43	490815	Governor-Oil Slinger				Gear Only)
45	690564	Tappet- Valve		497595		Motor-Starter (For Plastic Ring
46	692421	Camshaft				Gear Only)
48	692706	Short Block				
50	690193	Manifold-Intake	RPM	Settings:		Low Speed: 1900-2100
51	273650	Gasket-Intake				High Speed: 3000-3200
53	690227	Stud (Carburetor)				
54 73	691148	Screw (Intake Manifold)	•		n E	ingine Gasket Set, Ref Number
73	494439	Screen- Rotating	a	358. Included i		and strates Over the set 164 Def
74	691057 225136	Screw (Rotating Screen)	ø			arburetor Overhaul Kit, Ref
78	94896	Washer (Flywheel)	+	Number 1		
93	690602	Screw (Flywheel Guard) Bushing-Throttle Shaft	‡			arburetor Gasket Set, Ref
94	498030	Valve-Idle Adjustment	+	Number9]		alua Overbaul Kit. Ref Number
95	691636	Ø Screw (Throttle Valve)	Ŧ	1033.	11 V	alue Overhaul Kit, Ref Number
98	495800	Kit-Idle Speed		1000.		
104	690525		NOT	E: All con	nno	nent dimensions given in U.S.
				es 1 inch a		

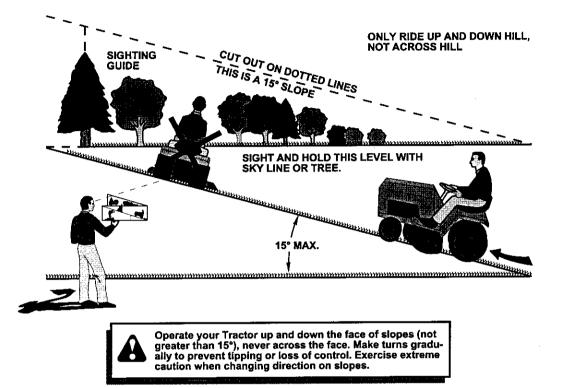
### TRACTOR - - MODEL NUMBER 917.271642 BRIGGS & STRATTON ENGINE-MODEL NUMBER 310707, TYPE NUMBER 0136-E1

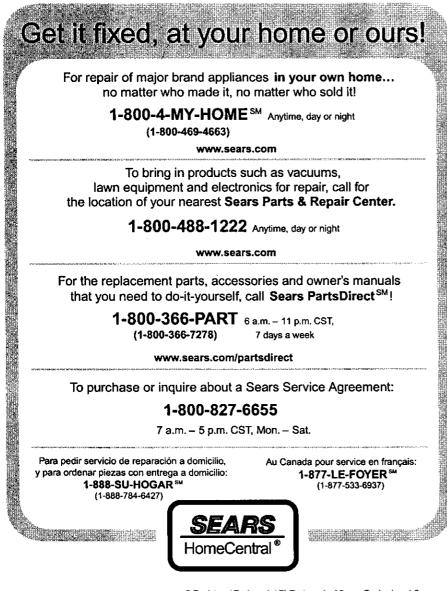
KEY PART	KEY PART
NO. NO. DESCRIPTION	NO. NO. DESCRIPTION
310 690323 Screw (Starter Motor)	759 691239 Pin-Counterweight
311 497608 Brush Set	761 691096 Screw (Counterweight)
318 692127 Screw (Mounting Bracket)	783 693713 Gear-Pinion (For Steel Ring
333 495859 Armature-Magneto	Gear Only)
334 94731 Screw (Magneto Armature)	783A 693058 Gear-Pinion (For Plastic Ring
337 491055 Sparkplug	Gear Only)
344 693675 Screw (Casing Clamp)	789 695050 Harness- Wiring
358 690189 Engine Gasket Set	801 497626 Cap-Drive
363 19203 Flywheel Puller	802 497607 Cap-End
383 89838 Wrench-Spark Plug	803 497604 Housing-Starter
404 94927 Washer (Governor Crank)	830 691095 Stud (Rocker Arm)
423 692129 Screw (Air Cleaner Base)	842 270920 Dipstick/Tube Seal
445 496894 Filter- A/C Cartridge	
462 225137 Washer (Starter Cable) 467 493903 Knob-Air Cleaner	851 692424 Sparkplug Terminal 868 499236 •+ Seal-Valve
474 393474 Alternator	
	871 262835 Bushing-Guide
493 690493 Bracket-Mounting (Front)	875 693686 Base- Air Cleaner
493A 690494 Bracket-Mounting (Rear)	877 393456 Wire-Alternator
503 691532 Strap-Starter	914 690969 Screw (Rocker Cover)
505 691251 Nut (Governor Control Lever)	934 94627 Screw (Fan Retainer)
510 693699 Drive-Starter (Use With Steel	947 497672 Solenoid-Fuel
Ring Gear Only)	967 272403 Filter-Pre Cleaner
510A 497606 Drive-Starter (Use With Plastic	968 281104 Cover- Air Cleaner
Ring Gear Only)	975 495933 Bowi-Float
513 398003 Clutch-Drive	977 690192 Gasket Set-Carburetor
523 495230 Dipstick	987 691326 Ø Seal-Throttle Shaft
524 281370 · Dipstick Tube Seal	996 690678 Carburetor Shield
525 496113 Dipstick Tube	1005 281400 Fan-Flywheel
544 497603 Armature-Starter	1006 690452 Retainer-Fan
552 491986 Bushing-Gov. Lever	1019 690180 Label Kit
562 691119 Bolt (Governor Control Lever)	1022 272475 ++ Gasket-Rocker Cover
579 92278 Nut (Starter Cable)	1023 691192 Cover-Rocker
601 95162 Clamp-Hose	1026 494432 Rod-Push (Intake)
614 93306 Pin-Cotter	
616 495157 Crank-Governor	1026A 495136 Rod-Push (Exhaust) 1029 224554 Arm-Rocker
	1033 690190 Valve Overhaul Kit
	1034 690822 Guide-Push Rod
(Manual Choke)	1036 694497 Label-Emissions
634A 690802 Ø Seal-Spring Assy. (Choke A	1044 94673 Screw (Flywheel)
Matic)	1051 263080 Ring-Retainer
635 280872 Boot- Spark Plug	1058 274271 Owner's Manual
654 94010 Nut (Carburetor)	1090 497605 Retainer-Brush
667 94010 Nut (Air Cleaner Brace)	1091 691333 Cap-Limiter
668 691500 Spacer	1119 93621 Screw (Alternator)
691 491323 • Seal-Governor Shaft	311707-0028-E1Replacement Engine
692 690572 Spring-Detent	· •
695 693109 Screw (Ring Gear)	RPM Settings: Low Speed: 1900-2100
697 690372 Screw (Drive Cap)	High Speed: 3000-3200
711 690703 Screw (Carburetor Shield)	····3···
718 230192 Locating Pin	<ul> <li>Included in Engine Gasket Set, Ref</li> </ul>
726 399676 Gear- Ring (Aluminum-	Number 358.
Services Plastic Ring Gear	Ø Included in Carburetor Overhaul Kit, Ref
Only)	Number 121.
727 490324 Cover- Starter Drive	‡ Included in Carburetor Gasket Set, Ref
729 691224 Clip-Wire	Number977.
732 94903 Screw (Starter Drive Cover)	
741 691284 Gear-Timing	<ul> <li>Included in Value Overhaul Kit, Ref Number 1033.</li> </ul>
757 213998 Link-Counterweight	Number 1055.
758 692423 Counterweight	
CONTRACTOR CONTRACTOR	NOTE: All component dimensions given in U.S.
	inches 1 inch = 25.4 mm

# SERVICE NOTES

# SERVICE NOTES

## SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION





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