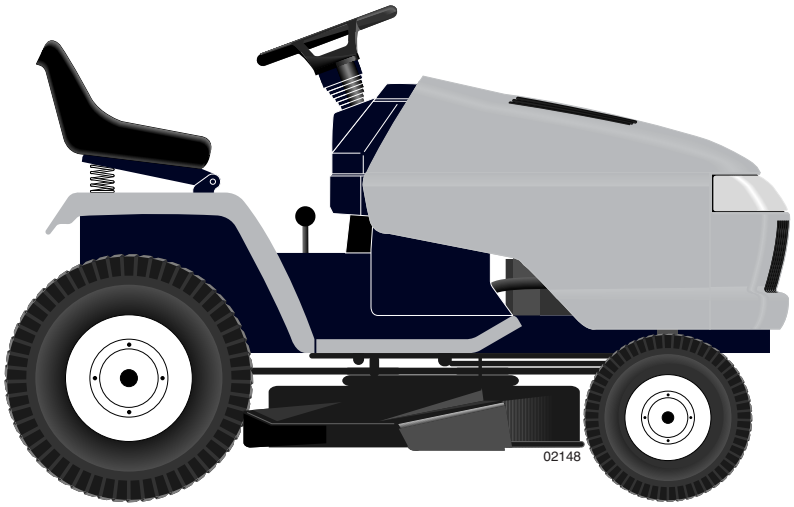
SEARS

OWNER'S MANUAL

MODEL NO. 944.604060

Important:
Read and follow all Safety Rules and Instructions Before Operating This Equipment



CRAFTSMAN®

25.0 HP ELECTRIC START 48" MOWER 6 SPEED TRANSAXLE GARDEN TRACTOR

- Assembly
- Operation
- Maintenance
- Service and Adjustments
- Repair Parts

Sears Canada, Inc., Toronto, Ontario M5B 2B8

SAFETY RULES

SAFE OPERATION PRACTICES FOR RIDE-ON MOWERS

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 mower-related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.
- Keep machine free of grass , leaves or other debris build-up which can touch hot exhaust / engine parts and burn. Do not allow the mower deck to plow leaves or other debris which can cause build-up to occur. Clean any oil or fuel spillage before operating or storing the machine. Allow machine to cool before storage.

II. SLOPE OPERATION

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

DO:

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

DO NOT:

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

III. CHILDREN

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

- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and *down* for small children.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

IV. SERVICE

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

SAFETY RULES

SAFE OPERATION PRACTICES FOR RIDE-ON MOWERS

- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers or children even with the blades off.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.
- Mow up and down slopes (15° Max), not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- If machine stops while going uphill, disengage blades, shift into reverse and back down slowly.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.

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

WARNING: 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: 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.

TABLE OF CONTENTS

PRODUCT SPECIFICATIONS

Gasoline Capacity and type:	5.0 Gallons Unleaded Regular		
Oil Type (API-SF-SJ):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F) Synthetic (below 0°F)		
Your tractor was shipped from the factory with non-synthetic SAE 10W30 motor oil			
Oil Capacity:	W/ Filter: 4.0 Pints W/O Filter: 3.75 Pints		
Spark Plug: (GAP: .040")	Champion QC12YC		
Ground Speed (MPH):	Forward 1st 2nd 3rd Reverse	LO 0.7 1.4 2.3 0.9	HI 1.7 3.3 5.4 2.1
Tire Pressure:	Front: Rear:	14 PSI 10 PSI	
Chargine System:	16 AMPS @ 3600 RPM		
Battery:	AMP/HR: Min. CCA: Case Size:	35 280 U1R	
Blade Bolt Torque:	45–55 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 your nearest authorized service center/department. 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".

MAINTENANCE AGREEMENT

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

CUSTOMER RESPONSIBILITIES

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

WARNING: This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered 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.

A spark arrester for the muffler is available through your nearest authorized service center/department (See REPAIR PARTS section of this manual).

WARRANTY

LIMITED TWO (2) YEAR WARRANTY ON CRAFTSMAN TRACTOR (RIDING EQUIPMENT)

For two (2) years from date of purchase Sears Canada, Inc. will repair or replace at Sears option free of charge parts which are defective as a result of material or workmanship.

FULL ONE (1) YEAR WARRANTY ON BATTERY

For one (1) year 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.

COMMERCIAL OR RENTAL USE

Warranty on Riding Equipment used for commercial or rental purposes is limited to ninety (90) days.

This Warranty does NOT cover:

1. **Pre-delivery set-up.**
2. **Tire replacement or repair caused by punctures from outside objects (such as nails, thorns, stumps, or glass).**
3. **Expendable items which become worn during normal use, such as blades, spark plug, air cleaners and belts.**
4. **Repairs necessary because of operator abuse or negligence, including damaged jackshaft or mandrel and the failure to operate and maintain the equipment according to the instructions contained in the Owner's Manual.**
5. **In Home service.**

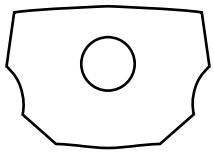
Warranty service is available by returning the Craftsman Riding Equipment to the nearest Sears Service Centre/Department in Canada. This warranty applies only while this product is in use in Canada.

This warranty is in addition to any statutory warranty and does not exclude or limit legal rights you may have but shall run concurrently with applicable provincial legislation. Furthermore, some provinces do NOT allow limitation on how long an implied warranty will last so the above limitations may not apply to you.

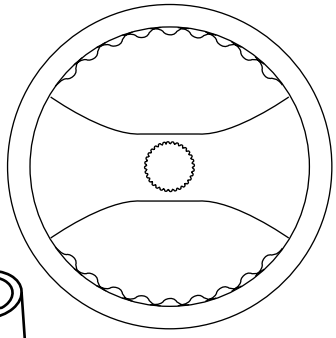
SEARS CANADA, INC., TORONTO, ONTARIO M5B 2B8

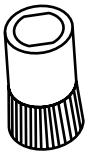
UNASSEMBLED PARTS

Steering Wheel



Steering
Wheel Insert



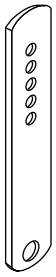


Premium
Steering Adapter

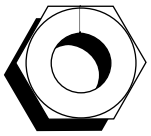
Steering Sleeve

Steering Sleeve
Extension

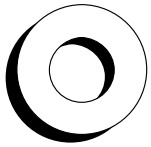
Gauge Wheels



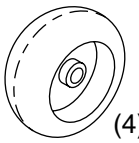
(4) Adjusting
Bars



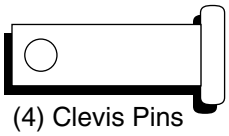
(4) Locknuts
3/8-16



(4) Washers
3/8 x 3/4 x 14 Ga.

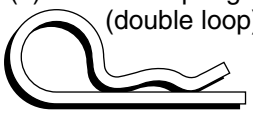


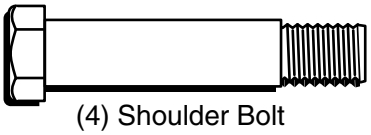
(4) Wheels



(4) Clevis Pins

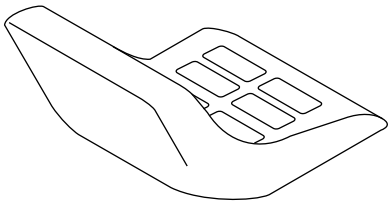
(4) Retainer Springs
(double loop)





(4) Shoulder Bolt

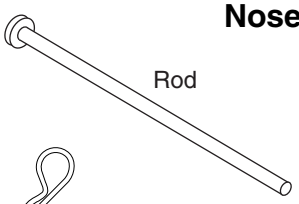
Seat



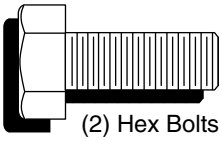
(1) Washer
17/32 x 1-3/16 x 12 Gauge

(1) Knob

Nose Roller

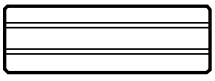


Rod

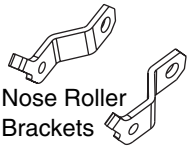


(2) Hex Bolts 5/16-18 x 1

Retainer Spring



Nose Roller

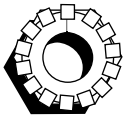


Nose Roller
Brackets

(2) Locknuts
5/16-18

Battery

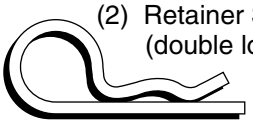
(2) Hex Bolts 1/4-20 x 3/4



(2) Keps
Nuts
1/4-20

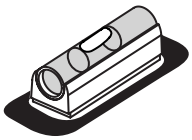
Mower

(2) Flanged Pins



(2) Retainer Springs
(double loop)

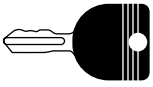
Mower Leveling Wrench



Bubble Level

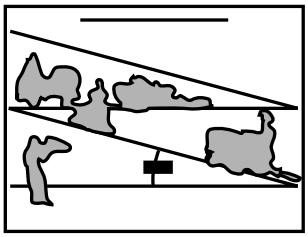
(1) Oil Drain Tube
For Future Use

Keys



(2) Keys

Slope Sheet



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.

TOOLS REQUIRED FOR ASSEMBLY

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

(1) 1/2" wrench
(1) 9/16" wrenches
(1) Pliers
(1) Tire pressure gauge
(1) Utility knife
(1) 3/4" socket w/drive ratchet

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

TO REMOVE TRACTOR FROM CARTON

UNPACK CARTON

- Remove all accessible loose parts and parts cartons from carton.
- Cut along dotted lines on all four panels of carton. Remove end panels and lay side panels flat.
- Remove mower and packing materials.
- Check for any additional loose parts or cartons and remove.

BEFORE REMOVING TRACTOR FROM SKID

ATTACH STEERING WHEEL (See Fig. 1)

- Remove hex bolt, lock washer and large flat washer from steering shaft.
- Position front wheels of the tractor so they are pointing straight forward.
- Slide the steering sleeve over the steering shaft.
- Align tabs and press steering sleeve extension into bottom of steering wheel.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto steering wheel adapter.
- Secure steering wheel to steering shaft with hex bolt, lock washer and large flat washer previously removed. 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.

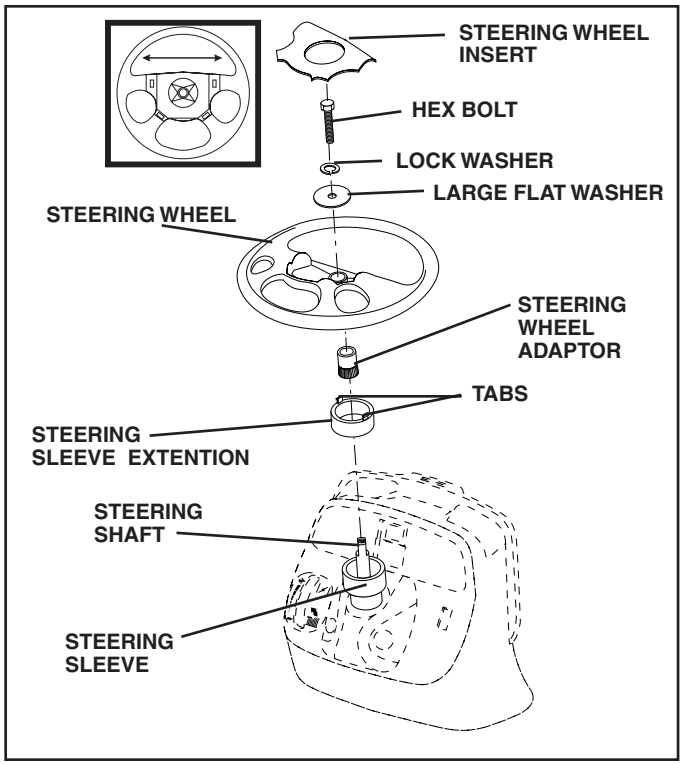


FIG. 1

HOW TO SET UP YOUR TRACTOR

CONNECT BATTERY (See Fig. 2)

CAUTION: Do not short battery terminals by allowing a wrench or any other object to contact both terminals at the same time. Before connecting battery, remove metal bracelets, wristwatch bands, rings, etc.

Positive terminal must be connected first to prevent sparking from accidental grounding.

- Lift hood to raised position.
- Open terminal access doors, remove terminal protective caps and discard.
- 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.
- First connect RED battery cable to positive (+) battery terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt and keps nut. Tighten securely.
- Close terminal access doors.

Use terminal access doors for:

- Inspection for secure connections (to tighten hardware).
- Inspection for corrosion.
- Testing battery.
- Jumping (if required).
- Periodic charging.

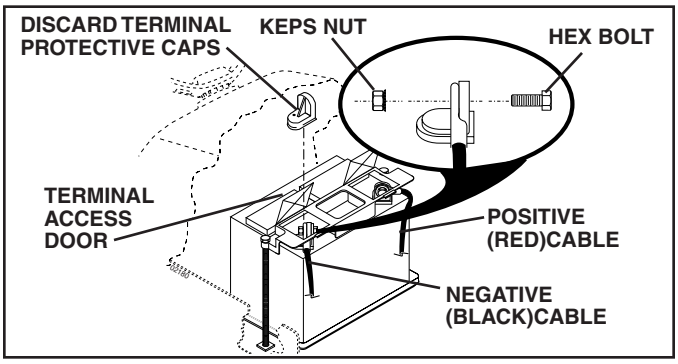


FIG. 2

INSTALL SEAT (See Fig. 3)

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.
- Pivot seat upward and remove from the cardboard packing. Remove the cardboard packing and discard.
- Place seat on seat pan so head of shoulder bolts are positioned over the large slotted holes in pan.
- Push down on seat to engage shoulder bolts in slots 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.

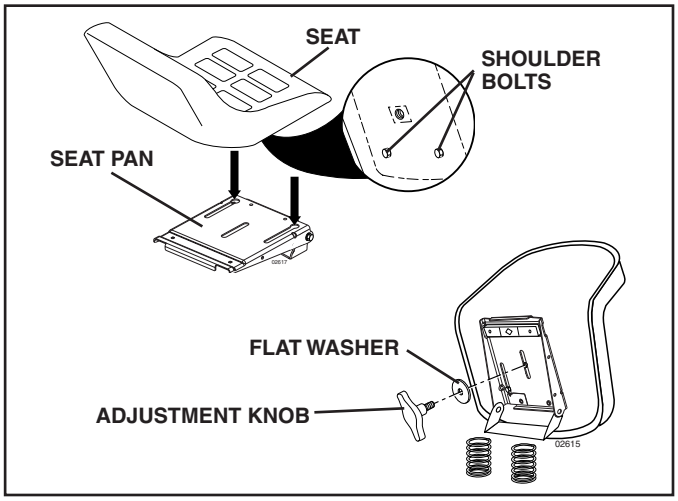


FIG. 3

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 gearshift lever in neutral (N) position.
- Roll tractor forward off skid.

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

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.
- Check engine oil level and fill fuel tank with gasoline.
- Sit on seat in operating position, depress clutch/brake pedal and set the parking brake.
- Place gear shift 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.
- Depress clutch/brake pedal into full "BRAKE" position and hold. Move gearshift lever to 1st gear.
- Slowly release clutch/brake pedal and slowly drive tractor off skid.
- Apply brake to stop tractor, set parking brake and place gearshift lever in neutral position.
- Turn ignition key to "STOP" position.

Continue with the instructions that follow.

ASSEMBLY

ASSEMBLE GAUGE WHEELS TO MOWER DECK (See Fig. 4)

The gauge wheels are designed to keep the mower deck in proper position when operating mower. Be sure they are properly adjusted to ensure optimum mower performance.

- Slide gauge wheel bar down into bracket channel, Be sure that gauge wheel bar aligning holes are on top. Assemble gauge wheels as shown using shoulder bolts, 3/8 washers and 3/8-16 center locknuts and tighten securely.
- For ease of mower to tractor assembly, raise gauge wheels to highest position and retain with clevis pins and spring retainers.
- Adjust gauge wheels before operating mower. See "TO ADJUST GAUGE WHEELS" in the Operation section of this manual.

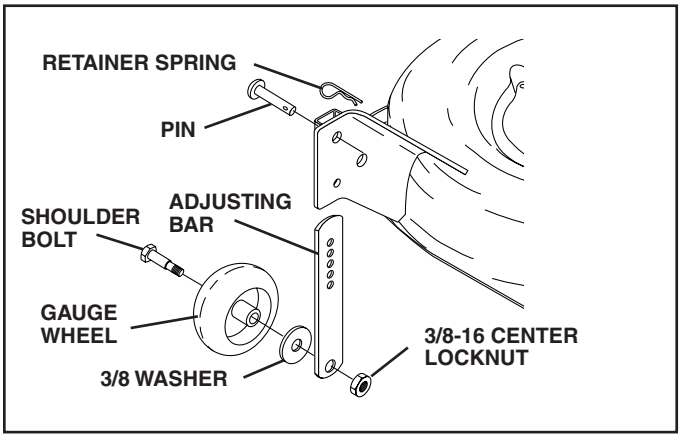


FIG. 4

TO ATTACH NOSE ROLLER (See Fig. 5)

- Assemble brackets "A" and "B" to the inside of mower mounting brackets as shown. Tighten securely.

NOTE: Be sure bracket tabs are positioned in tab holes in mower brackets.

- Position nose roller between brackets and install rod and retainer spring.

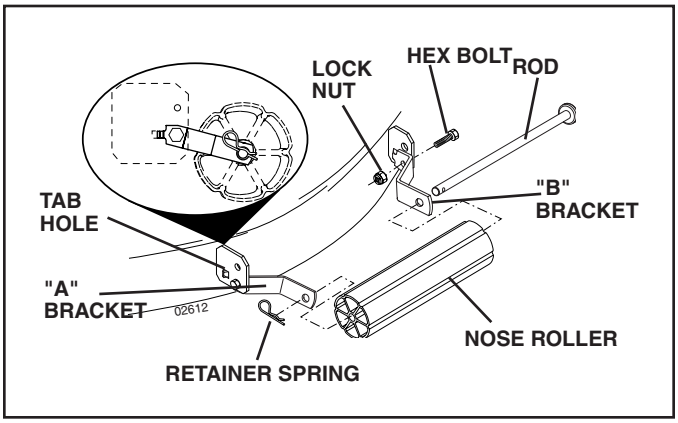


FIG. 5

ASSEMBLY

INSTALL MOWER AND DRIVE BELT (See Figs. 6 and 7)

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

- Cut and remove ties securing anti-sway bar and belts. Swing anti-sway bar to left side of mower deck.
- Slide mower under tractor with deflector shield to right side of tractor.

IMPORTANT: Check belt for proper routing in all mower pulley grooves.

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

NOTE: To assist in locating hole in flanged pin, the hole in pin is inline with notch on head of pin. If necessary, move mower side-to-side to give space between plate and mower brackets.

IMPORTANT: Check belt for proper routing in all mower pulley grooves.

- Engage belt tension rod by pushing rod into locking bracket.

CAUTION: Belt tension rod is spring loaded. Have a tight grip on rod and engage slowly.

- Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.
- If equipped, turn height adjustment knob clockwise to remove slack from mower suspension.
- Raise deck to highest position.
- Adjust gauge wheels before operating mower as shown in the Operation section of this manual.

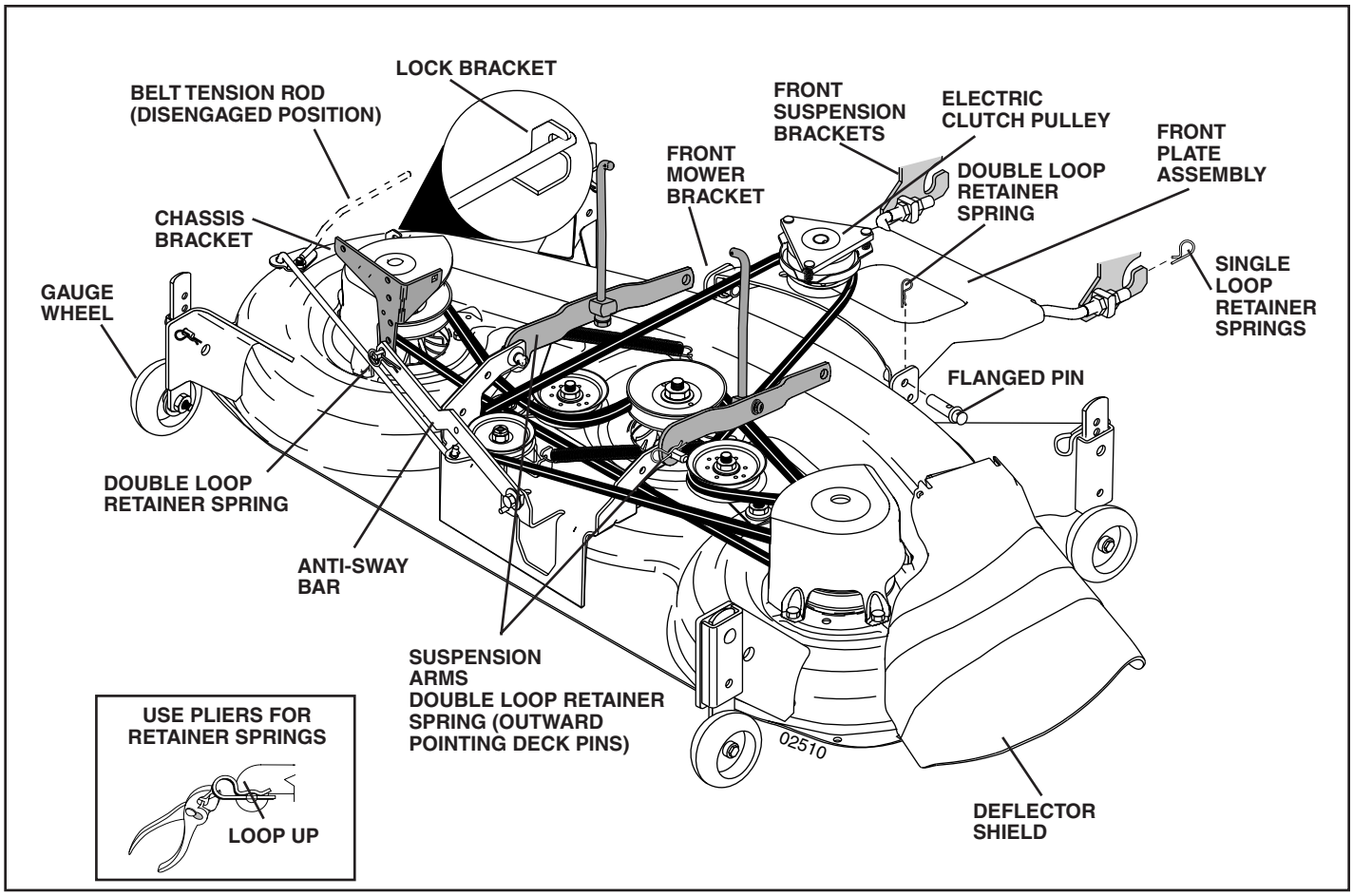


FIG. 6

ASSEMBLY

CHECK TIRE PRESSURE

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

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

CHECK 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.

WHILE LEARNING HOW TO USE YOUR TRACTOR, PAY EXTRA ATTENTION TO THE FOLLOWING IMPORTANT ITEMS:

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

OPERATION

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

REVERSE | NEUTRAL | HIGH | LOW | CHOKE | FAST | SLOW | IGNITION

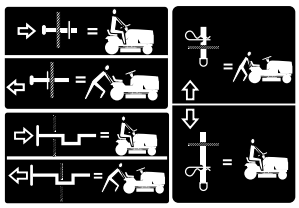
ENGINE OFF | LIGHTS ON | ENGINE ON | ENGINE START | PARKING BRAKE | PARKING BRAKE LOCKED | PARKING BRAKE UNLOCKED

OVER TEMP LIGHT | FUEL | OIL PRESSURE | BATTERY | REVERSE | FORWARD | MOWER HEIGHT | MOWER LIFT

ATTACHMENT CLUTCH ENGAGED | ATTACHMENT CLUTCH DISENGAGED

DANGER, KEEP HANDS AND FEET AWAY

KEEP AREA CLEAR (SEE SAFETY RULES SECTION) | SLOPE HAZARDS



FREE WHEEL
(Automatic Models only)

Failure to follow instructions could result in serious injury or death. The safety alert symbol is used to identify safety information about hazards which can result in death, serious injury and/or property damage.

DANGER indicates a hazard which, if not avoided, **will result in death or serious injury.**

WARNING indicates a hazard which, if not avoided, **could result in death or serious injury.**

CAUTION indicates a hazard which, if not avoided, **might result in minor or moderate injury.**

CAUTION when used **without** the alert symbol, indicates a situation that **could result in damage to the tractor and/or engine.**

HOT SURFACES indicates a hazard which, if not avoided, **could result in death, serious injury and/or property damage.**

FIRE indicates a hazard which, if not avoided, **could result in death, serious injury and/or property damage.**

OPERATION

KNOW YOUR TRACTOR

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

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

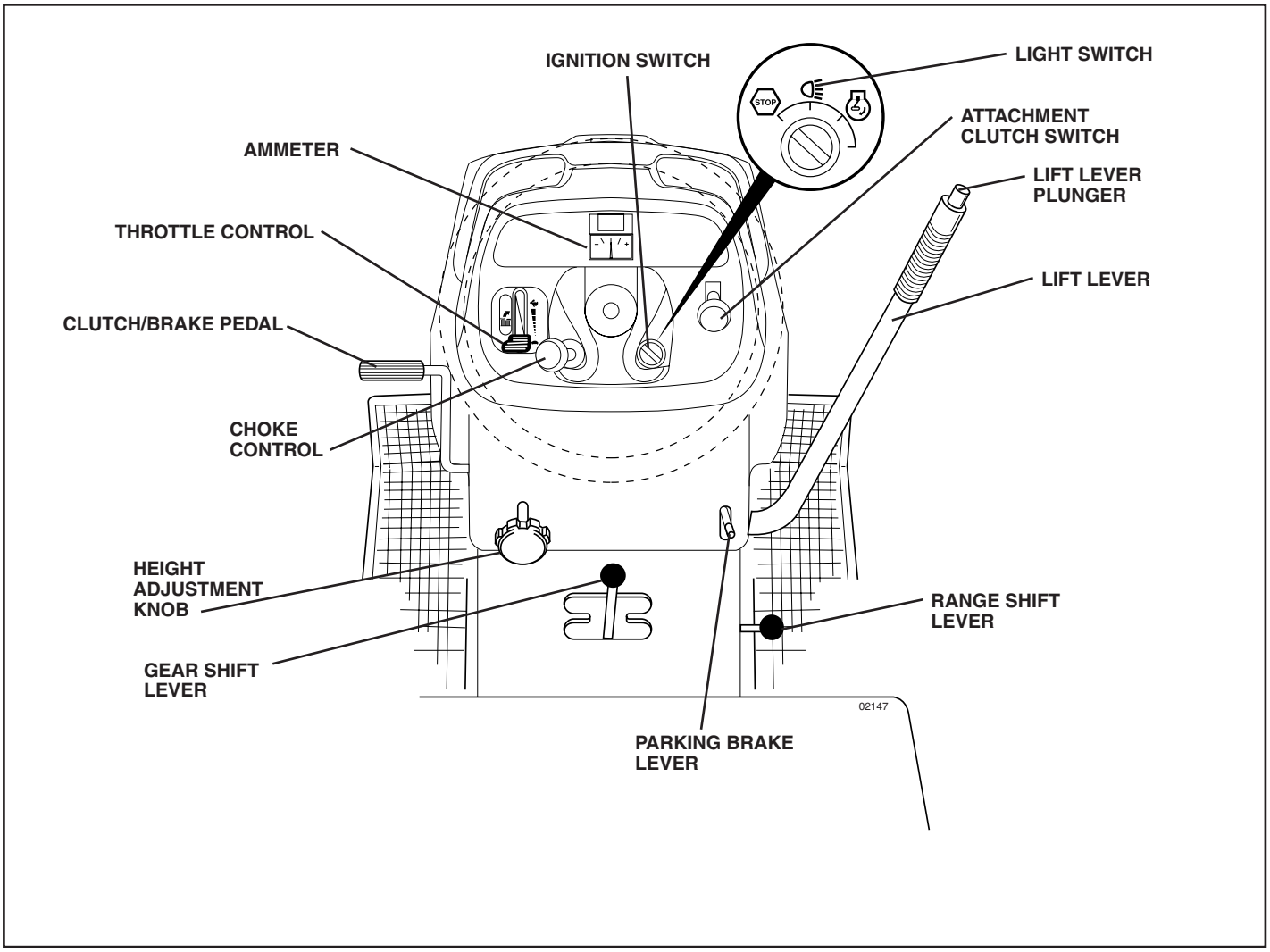


FIG. 7

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

ATTACHMENT CLUTCH SWITCH - Used to engage mower blades or other attachments mounted to your tractor.

LIFT LEVER - Used to raise and lower mower deck or other attachments mounted to your tractor.

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

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

GEARSHIFT LEVER - Selects the speed and direction of tractor.

CHOKE CONTROL - Used when starting a cold engine.

AMMETER - Indocates charging (+) or discharging (-) of battery.

LIGHT SWITCH - Turns the headlights on and off.

THROTTLE CONTROL - Used to control engine speed.

IGNITION SWITCH - Used to start and stop the engine.

PARKING BRAKE LEVER - Locks brake pedal into the brake position.

HEIGHT ADJUSTMENT KNOB - Used to adjust the mower height.

RANGE SHIFT LEVER - Allows high (H) or low (L) speed for all forward and reverse gears.

OPERATION

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 (See Fig. 8)

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.

- Depress clutch/brake pedal into full “BRAKE” position and hold.
- Place parking brake lever in “ENGAGED” position and release pressure from clutch/brake pedal. Pedal should remain in “BRAKE” position. Make sure parking brake will hold tractor secure.

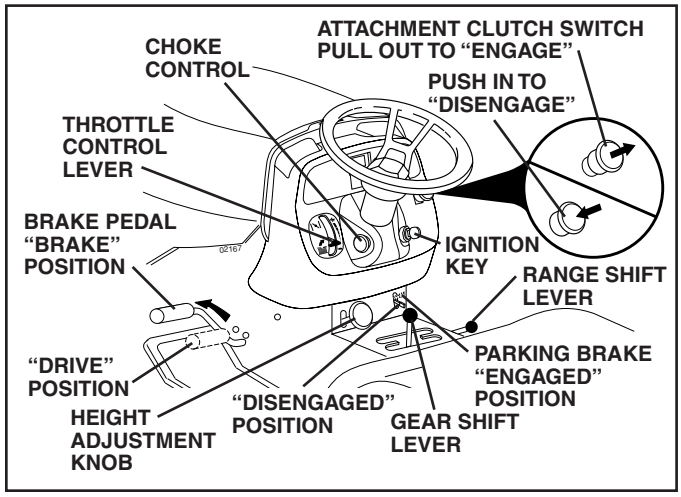


FIG. 8

STOPPING (See Fig. 8)

MOWER BLADES -

- To stop mower blades,move attachment clutch switch to “DISENGAGED” position.

GROUND DRIVE -

- To stop ground drive, depress clutch/brake pedal into full “BRAKE” position.
- Move gearshift lever to neutral (N) position.

ENGINE -

- Move throttle control to slow position.

NOTE: Failure to move throttle control to slow position and allowing engine to idle before stopping may cause engine to “backfire”.

- Turn ignition key to “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.

CAUTION: Always stop tractor completely, as described above, before leaving the operator's position; to empty grass catcher, etc.

TO USE THROTTLE CONTROL (See Fig. 8)

Always operate engine at full throttle.

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

TO USE CHOKE CONTROL (See Fig. 8)

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

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

TO MOVE FORWARD AND BACKWARD (See Fig. 8)

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

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

IMPORTANT: BRING TRACTOR TO A COMPLETE STOP BEFORE SHIFTING OR CHANGING GEARS. FAILURE TO DO SO WILL SHORTEN THE USEFUL LIFE OF YOUR TRANSAXLE.

TO ADJUST MOWER CUTTING HEIGHT (See Fig. 8)

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

- Turn knob clockwise (↷) to raise cutting height.
- Turn knob counterclockwise (↶) to lower cutting height.

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

- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.

- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

TO ADJUST GAUGE WHEELS (See Fig. 9)

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

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

- Adjust mower to desired cutting height (See "TO ADJUST MOWER CUTTING HEIGHT" in the Operation section of this manual).
- Remove retainer spring and clevis pin which secure each gauge wheel bar.
- Lower gauge wheels to ground. Raise gauge wheels slightly to align holes in bracket and gauge wheel bar and insert clevis pin. Gauge wheels should be slightly off the ground.
- Replace retainer spring into clevis pin.
- Be sure all gauge wheels are in the same setting.

IMPORTANT: BE SURE TO READJUST GAUGE WHEELS IF YOU CHANGE THE CUTTING HEIGHT OF THE MOWER DECK.

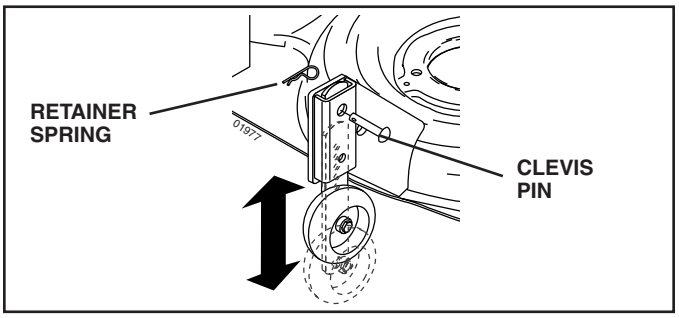


FIG. 9

TO OPERATE MOWER (See Fig. 10)

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. You must remain fully and centrally positioned in the seat to prevent the engine from hesitating or cutting off when operating your equipment on rough, rolling terrain or hills.

- Select desired height of cut.
- Lower mower with attachment lift control.
- Start mower blades by engaging attachment clutch control.
- TO STOP MOWER BLADES - disengage attachment clutch control.

CAUTION: Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the deflector shield in place.

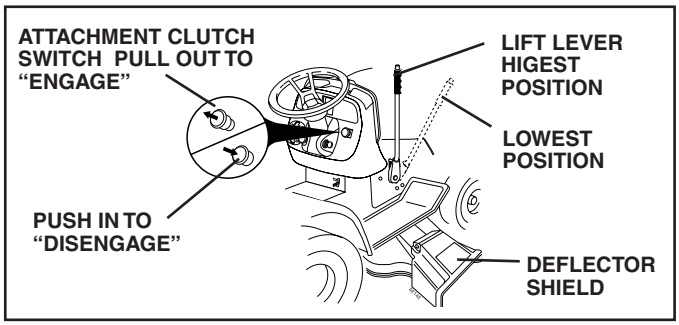


FIG. 10

TO OPERATE ON HILLS

CAUTION: 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 gearshift lever to 1st gear and range shift lever to low (L) position. Be sure you have allowed room for tractor to roll slightly as you restart movement.
- To restart movement, slowly release parking brake and clutch/brake pedal.
- Make all turns slowly.

TO TRANSPORT

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

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

TOWING CARTS AND OTHER ATTACHMENTS

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.

OPERATION

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.

- Check engine oil with tractor on level ground.
- Remove oil fill cap/dipstick and wipe 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 to bottom of filler neck. Do not overfill. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life). Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

CAUTION: Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

IMPORTANT: WHEN OPERATING IN TEMPERATURES BELOW32°F(0°C), USE FRESH, CLEAN WINTER GRADE GASOLINE TO HELP INSURE GOOD COLD WEATHER STARTING.

CAUTION: Alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

TO START ENGINE (See Fig. 8)

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

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

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

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

WARM WEATHER STARTING (50° F and above)

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

COLD WEATHER STARTING (50° F and below)

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

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

OPERATION

MOWING TIPS

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has 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 (See Fig. 11).

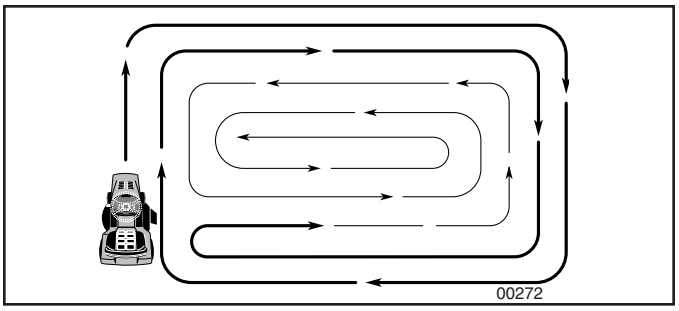


FIG. 11

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

MAINTENANCE

MAINTENANCE SCHEDULE

FILL IN DATES AS YOU COMPLETE REGULAR SERVICE

		BEFORE EACH USE	EVERY 8 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY SEASON	BEFORE STORAGE	SERVICE DATES		
TRACTOR	Check Brake Operation	✔	✔								
	Check Tire Pressure	✔	✔								
	Check Operator Presence and Interlock Systems	✔									
	Check for Loose Fasteners	✔				✔5		✔			
	Sharpen/Replace Mower Blades			✔3							
	Lubrication Chart			✔				✔			
	Check Battery Level			✔4							
	Clean Battery and Terminals			✔				✔			
	Check Transaxle Cooling			✔							
	Check V-Belts					✔					
ENGINE	Check Engine Oil Level	✔	✔								
	Change Engine Oil (with oil filter)				✔1,2			✔			
	Change Engine Oil (without oil filter)			✔1,2				✔			
	Clean Air Filter			✔2							
	Clean Air Screen			✔2							
	Inspect Muffler/Spark Arrester				✔						
	Replace Oil Filter (If equipped)					✔1,2					
	Clean Engine Cooling Fins					✔2					
	Replace Spark Plug					✔	✔				
	Replace Air Filter Paper Cartridge					✔2					
	Replace Fuel Filter						✔				

maint_sch-tractore.new1

1 - Change more often when operating under a heavy load or in high ambient temperatures.
2 - Service more often when operating in dirty or dusty conditions.
3 - Replace blades more often when mowing in sandy soil.
4 - Not required if equipped with maintenance-free battery.
5 - Tighten front axle pivot bolt to 35 ft.-lbs. maximum. Do not overtighten.

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.

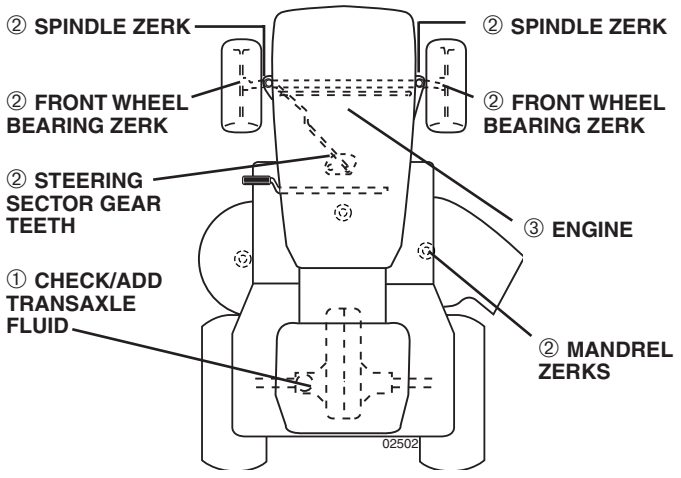
At least once a season, check to see if you should make any of the adjustments described in the Service and Adjustments section of this manual.

- At least 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

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

LUBRICATION CHART



① **SAE 30 motor oil**
② **General Purpose Grease**
③ **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.

MAINTENANCE

TRACTOR

Always observe safety rules when performing any maintenance.

BRAKE OPERATION

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

TIRES

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

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

OPERATOR PRESENCE SYSTEM

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

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

BLADE CARE

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

BLADE REMOVAL (See Fig. 12)

- Raise mower to highest position to allow access to blades.

NOTE: Protect your hands with gloves and/or wrap blade with heavy cloth.

- Remove blade bolt by turning counterclockwise.
- Install new or resharpened blade with stamped "THIS SIDE UP" facing deck and mandrel assembly.

IMPORTANT: TO ENSURE PROPER ASSEMBLY, CENTER HOLE IN BLADE MUST ALIGN WITH STAR ON MANDREL ASSEMBLY.

- Install and tighten blade bolt securely (45-55 Ft. Lbs. torque).

IMPORTANT: SPECIAL BLADE BOLT HEAT TREATED.

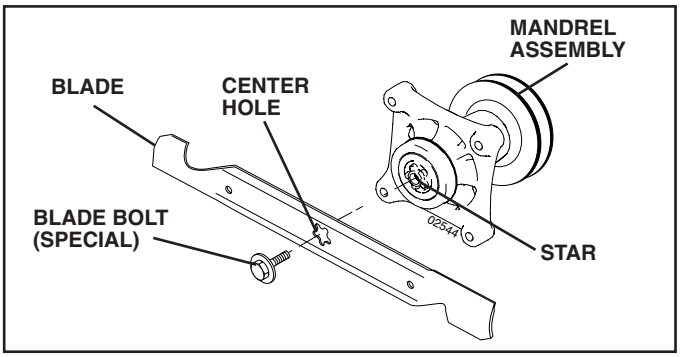


FIG. 12

TO SHARPEN BLADE (See Fig. 13)

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.

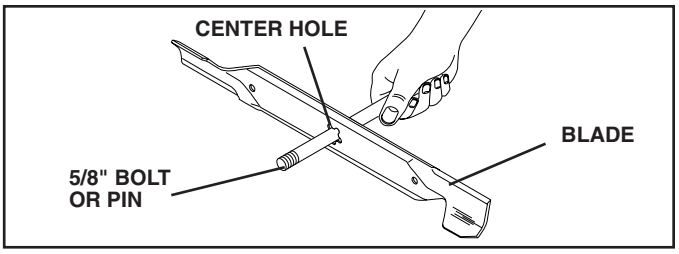


FIG. 13

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.

- Remove terminal guard.
- Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
- Rinse the battery with plain water and dry.
- Clean terminals and battery cable ends with wire brush until bright.
- Coat terminals with grease or petroleum jelly.
- Reinstall battery (See “CONNECT BATTERY” in the Assembly 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

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

CHECK TRANSAXLE OIL LEVEL (See Fig. 14)

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

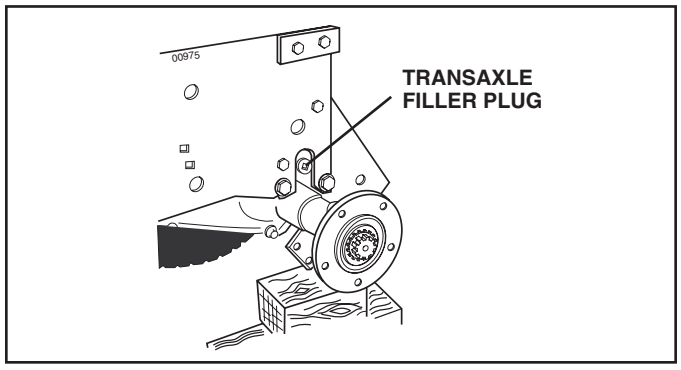


FIG. 14

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. When operating in temperatures below 0º F (-18º C) synthetic oil must be used.

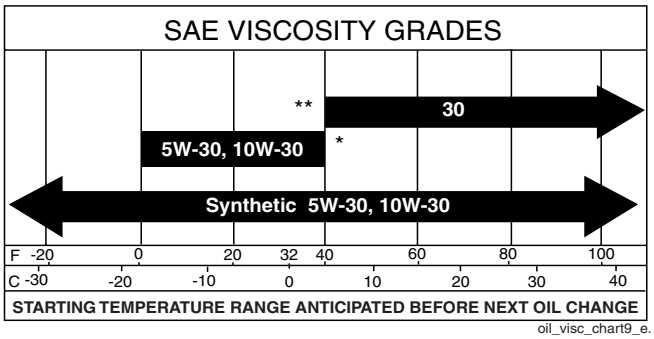


FIG. 15

*** CAUTION:** Air cooled engines run hotter than automotive engines. The use of non-synthetic multi-viscosity oils (5W30, 10W30 etc.) in temperatures above 40º F (4º C) will result in higher than normal oil consumption. When using a multi-viscosity oil, check oil level more frequently.

**** CAUTION:** SAE 30 oil, if used below 40º F (4º C), will result in hard starting and possible engine bore damage due to inadequate lubrication.

NOTE: Synthetic oil meeting ILSAC GF-2, API certification mark and API service symbol (shown at left) with "SJ/CF ENERGY CONSERVING" or higher, is an acceptable oil at all temperatures. **Use of synthetic oil does not alter required oil change intervals.**

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

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

TO CHANGE ENGINE OIL (See Figs. 15 and 16)

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.
- Install the drain tube onto the valve.
- Open drain valve by using a 7/16" (11mm) wrench turning counterclockwise.

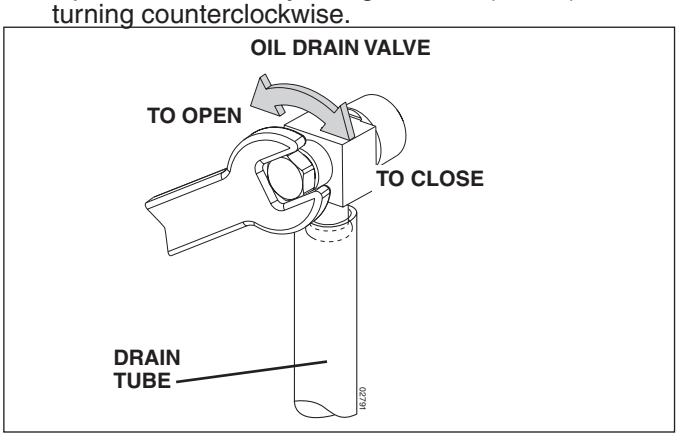


FIG. 16

- After oil has drained completely, close the drain valve turning clockwise. Use the 7/16" (11mm) wrench to apply a small amount of torque to keep it closed. Do not over tighten.
- Remove the drain tube and store in a safe place.
- 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. Tighten cap onto the tube securely when finished.

CLEAN AIR SCREEN

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

CLEAN AIR INTAKE/COOLING AREAS

To insure proper cooling, make sure the grass screen, cooling fins, and other external surfaces of the engine are kept clean at all times.

Every 100 hours of operation (more often under extremely dusty, dirty conditions), remove the blower housing and other cooling shrouds. Clean the cooling fins and external surfaces as necessary. Make sure the cooling shrouds are reinstalled.

NOTE: Operating the engine with a blocked grass screen, dirty or plugged cooling fins, and/or cooling shrouds removed will cause engine damage due to overheating.

AIR FILTER (See Fig. 17)

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.

- Remove cover.

TO SERVICE PRE-CLEANER

- Wash it in liquid detergent and water.
- Squeeze it dry in a clean cloth.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.
- If very dirty or damaged, replace pre-cleaner.

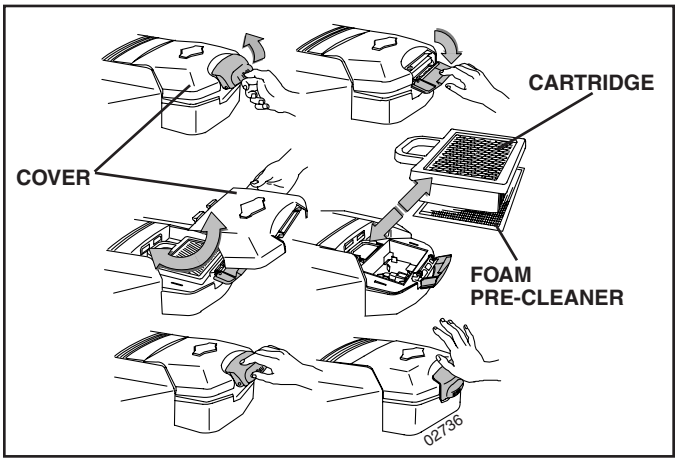


FIG. 17

TO SERVICE CARTRIDGE

- Clean cartridge by tapping gently on flat surface. If very dirty or damaged, replace cartridge.
- Reinstall precleaner cartridge, cover and secure.

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.

ENGINE OIL FILTER

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

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 (See Fig. 18)

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

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

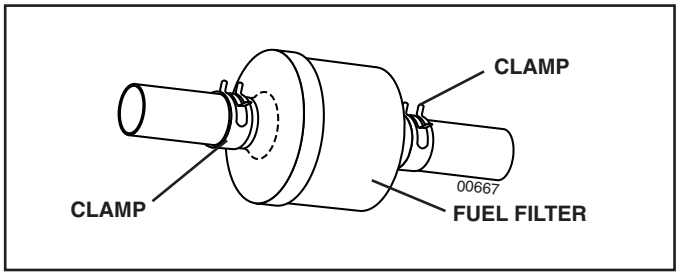


FIG. 18

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 or pressure washer to clean your tractor unless the engine and transmission are covered to keep water out. Water in engine or transmission will shorten the useful life of your tractor. Use compressed air or a leaf blower to remove grass, leaves and trash from tractor and mower.

SERVICE AND ADJUSTMENTS

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

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

TRACTOR

TO REMOVE MOWER (See Fig. 19)

- Place attachment clutch in "DISENGAGED" position.
- If equipped, turn height adjustment knob to lowest setting.
- Lower mower to its lowest position.
- Disengage belt tension rod from lock bracket.

CAUTION: Rod is spring loaded. Have a tight grip on rod and release slowly.

- Remove retainer spring holding anti-swaybar to chassis bracket and disengage anti-swaybar from bracket.
- Remove four retainer springs from front plate assembly and remove plate.
- Remove retainer springs from suspension arms at deck and disengage arms from deck.
- Raise attachment lift to its highest position.
- Slide mower forward and remove belt from electric clutch pulley.
- Slide mower out from under right side of tractor.

TO INSTALL MOWER

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

- Swing anti-sway bar to left side of mower deck.
- Slide mower under tractor with deflector shield to right side of tractor.

IMPORTANT: CHECK BELT FOR PROPER ROUTING IN ALL MOWER PULLEY GROOVES.

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

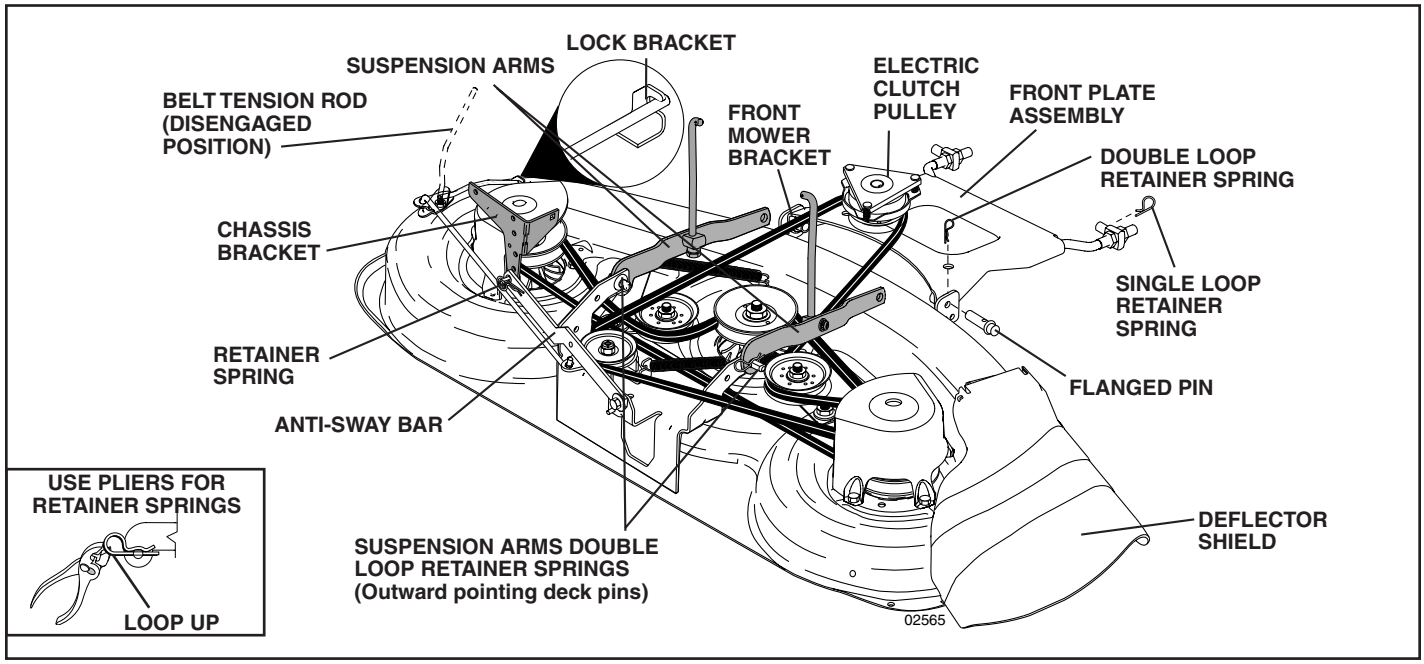


FIG. 19

NOTE: To assist in locating hole in flanged pin, the hole in pin is inline with notch on head of pin. If necessary, move mower side-to-side to give space between plate and mower brackets.

IMPORTANT: CHECK BELT FOR PROPER ROUTING IN ALL MOWER PULLEY GROOVES.

- Engage belt tension rod by pushing rod into locking bracket.

CAUTION: Belt tension rod is spring loaded. Have a tight grip on rod and engage slowly.

- Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.
- If equipped, turn height adjustment knob clockwise to remove slack from mower suspension.
- Raise deck to highest position.

TO LEVEL MOWER HOUSING

Adjust the mower while tractor is parked on level ground such as a carport or garage. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT WITH BUBBLE LEVEL (See Figs. 20 and 21)

NOTE: If necessary, check side-to-side surface below tractor for levelness with a long board and the bubble level.

- Using the lift lever, place mower in position where no part of the mower, including gauge wheels, is touching the ground.
- From left side of tractor, find the level decal on top of mower and place bubble level on decal as indicated.
- Mower is level side-to-side when bubble is between the two lines in the bubble level.
- If adjustment is necessary, under left hand footrest, turn lift link adjustment nut (above yellow cap) in appropriate direction to bring bubble between the lines in the bubble level.
- Remove bubble level from mower and store in a safe place.

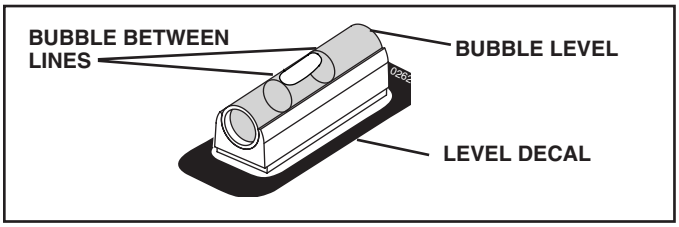


FIG. 20

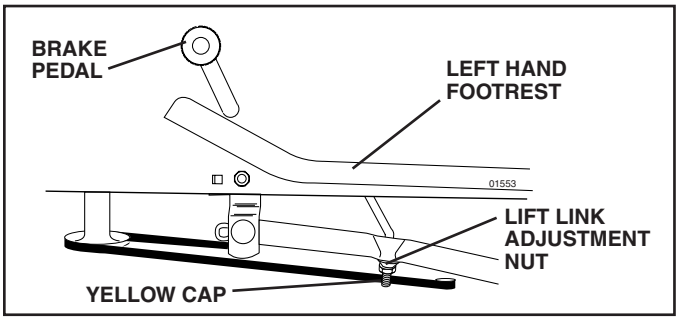


FIG. 21

ALTERNATE SIDE-TO-SIDE ADJUSTMENT METHOD (See Figs. 22 and 23)

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

NOTE: Each full turn of adjustment nut will change mower height about 3/16".

- Recheck measurements after adjusting.

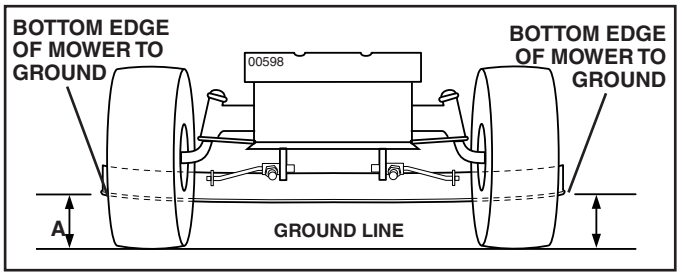


FIG. 22

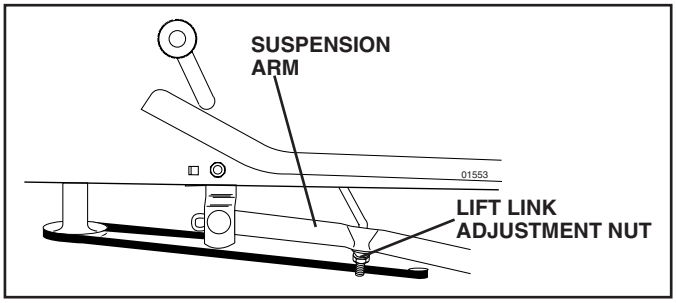


FIG. 23

FRONT-TO-BACK ADJUSTMENT (See Figs. 24 and 25)

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 blades should be adjusted so the front tip is approximately 1/8" to 1/2" lower than the rear tip when the mower is in its highest position.

CAUTION: Blades are sharp. Protect your hands with gloves and/or wrap blade with heavy cloth.

Check adjustment on right side of tractor. Position any blade so the tip is pointing straight forward. Measure distance "B" at front and rear tip of blade.

- Before making any necessary adjustments, check that both front plate links are equal in length.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of blade, loosen nut “C” on both front links an equal number of turns.

NOTE: Each full turn of nut “C” will change dim. “B” by approximately 3/16".

- When distance “B” is 1/8" to 1/2" lower at front than rear, tighten nut “D” against trunnion on both front links.
- To raise front of blade, loosen nut “D” from trunnion on both front links. Tighten nut “C” on both front links an equal number of turns. The two front links must remain equal in length.
- When distance “B” is 1/8" to 1/2" lower at front than rear, tighten nut “D” against trunnion on both front links.
- Recheck side-to-side adjustment.

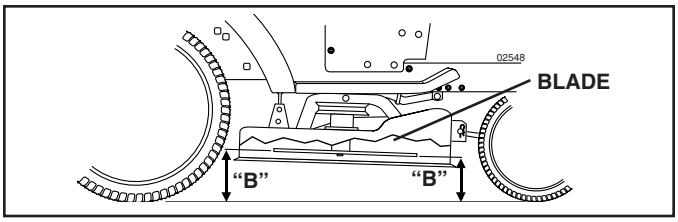


FIG. 24

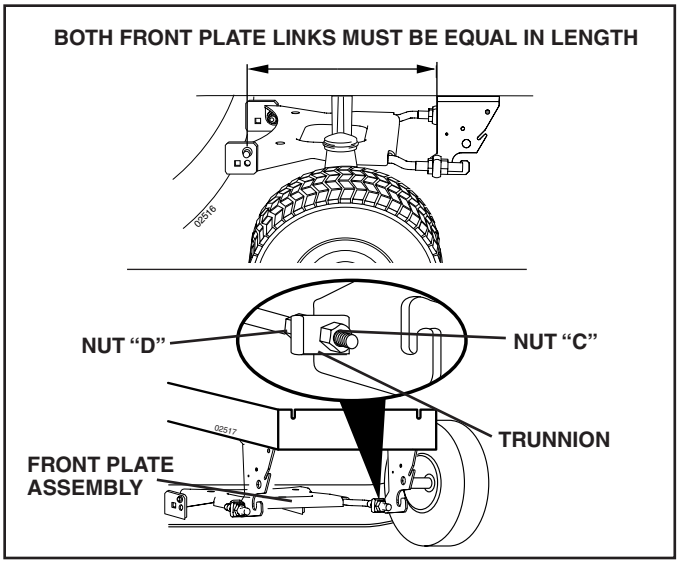


FIG. 25

TO REPLACE MOWER DRIVE BELT

MOWER DRIVE BELT REMOVAL (See Fig. 26)

- Park tractor on a level surface. Engage parking brake.
- Lower mower to its lowest position.
- Disengage belt tention rod from lock bracket.

CAUTION: Rod is spring loaded. Have a tight grip on rod and release slowly.

- Remove screws from R.H. mandrel cover and remove cover.
- Remove any dirt or grass clippings which may have accumulated around mandrels and entire upper deck surface.
- Disconnect R.H. suspension arm from rear deck bracket by removing retainer spring.
- Roll belt over the top of R.H. mandrel pulley carefully.
- Remove belt from electric clutch pulley.
- Remove belt from idler pulleys.
- Check primary idler arm and two idlers to see that they rotate freely.
- Be sure spring is securely hooked to primary idler arm and spring arm.

MOWER DRIVE BELT INSTALLATION (See Fig. 25)

- Install belt in both idlers.
- Install new belt onto electric clutch pulley.
- Roll belt into upper groove of R.H. mandrel pulley carefully.
- Carefully check belt routing making sure belt is in the grooves correctly.
- Reconnect R.H. suspension arm to rear deck bracket with retainer spring.
- Reassemble R.H. mandrel cover.
- Engage belt tension rod by pushing rod into locking bracket.

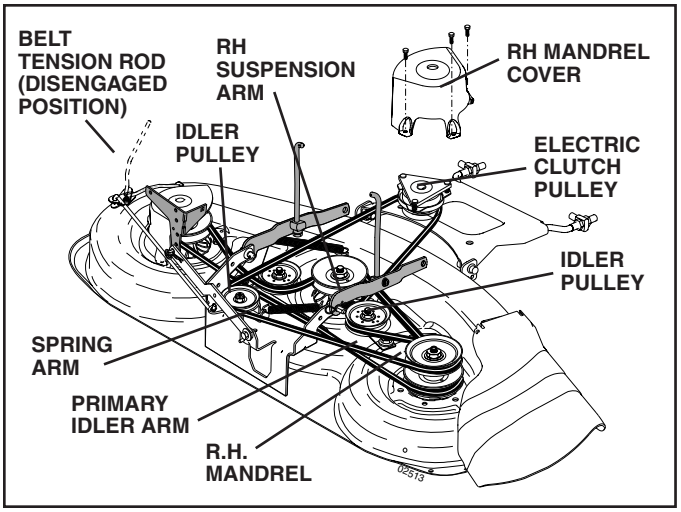


FIG. 26

TO REPLACE MOWER BLADE (SECONDARY) DRIVE BELT (See Fig. 27)

Park the tractor on level surface. Engage parking brake.

- Remove mower (See "TO REMOVE MOWER" in this section of manual).
- Remove screws from R.H. and L.H. mandrel covers and remove covers.

REMOVE MOWER DRIVE BELT

(Refer to "TO REMOVE MOWER DRIVE BELT" illustration in this section of manual).

- Carefully roll belt over the top of R.H. mandrel pulley.
- Remove belt from idler pulleys.
- Check primary idler arm and two idlers to see that they rotate freely.
- Be sure spring is securely hooked to primary idler arm and spring arm.

REMOVE MOWER BLADE (SECONDARY) DRIVE BELT

- Carefully roll belt off L.H. mandrel pulley.
- Remove belt from center mandrel pulley, idler pulley, and R.H. mandrel pulley.
- Remove any dirt or grass which may have accumulated around mandrels and entire upper deck surface.
- Check secondary idler arm and idler pulley to see that they rotate freely.
- Be sure spring is hooked in secondary idler arm and secondary spring arm.

INSTALL NEW MOWER BLADE (SECONDARY) DRIVE BELT

- Install new belt in lower groove of R.H. mandrel pulley, idler pulley, and center mandrel pulley as shown.
- Carefully roll belt over L.H. mandrel pulley. Make sure belt is in all grooves properly.

REINSTALL MOWER DRIVE BELT

(Refer to "TO REMOVE MOWER DRIVE BELT" illustration in this section of manual).

- Install belt into upper groove of R.H. mandrel pulley and around both idlers. Pull belt to front of mower to remove slack.
- Reinstall mandrel covers and securely tighten all screws.
- Carefully check belt routing making sure belt is in all grooves correctly.
- Reinstall mower to tractor (See "TO INSTALL MOWER" in this section of manual).

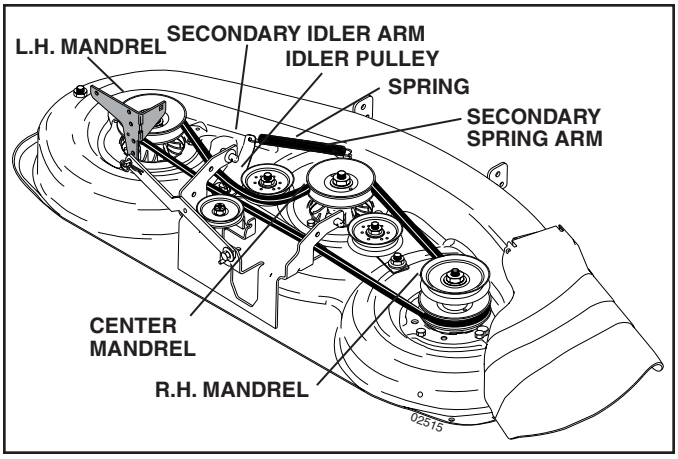


FIG. 27

TO ADJUST ATTACHMENT CLUTCH (See Fig. 28)

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

- Make sure attachment clutch and ignition switches are in "OFF" position.
- Adjust the three nylon locknuts until space between clutch plate and rotor measures .012" at all three slot locations cut in side of brake plate.

NOTE: After installing a new electric clutch, run tractor at full throttle and engage and disengage electric clutch 10 cycles to wear in clutch plate.

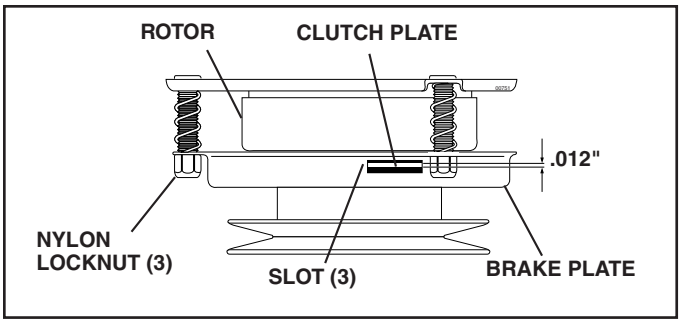


FIG. 28

TO CHECK AND ADJUST BRAKE (See Fig. 29)

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

If tractor requires more than five (5) feet to stop at highest speed in highest gear on a level, dry concrete or paved surface, then brake must be checked and adjusted.

TO CHECK BRAKE

- Park tractor on a level, dry concrete or paved surface, depress clutch/brake pedal all the way down and engage parking brake.
- Place gear shift lever in neutral (N) position.

The rear wheels must lock and skid when you try to manually push the tractor forward. If the rear wheels rotate, the brake needs to be adjusted or the pads need to be replaced.

TO ADJUST BRAKE

- Depress clutch/brake pedal all the way down and engage parking brake.
- Measure distance between brake operating arm and nut “A” on brake rod.
- If distance is other than 1-3/4", loosen jam nut and turn nut “A” until distance becomes 1-3/4". Retighten jam nut against nut “A”.
- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than five (5) feet in highest gear, further maintenance is necessary. Replace brake pads or contact a qualified service center.

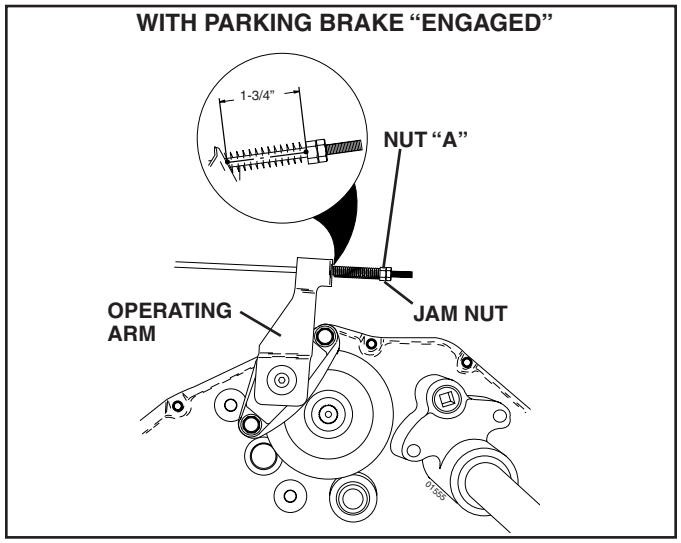


FIG. 29

TO REPLACE MOTION DRIVE BELT (See Fig. 30)

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

BELT REMOVAL -

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

BELT INSTALLATION -

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

IMPORTANT: CHECK BRAKE ADJUSTMENT.

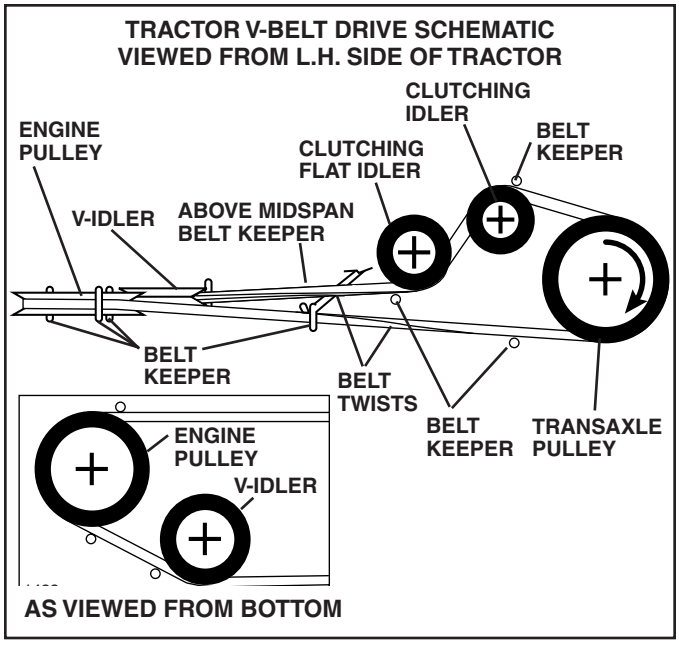


FIG. 30

TO ADJUST STEERING WHEEL ALIGNMENT

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 toe-in or camber, contact your nearest authorized service center/department.

TO REMOVE WHEEL FOR REPAIRS

FRONT WHEEL (See Fig. 31)

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

REAR WHEEL -

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

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

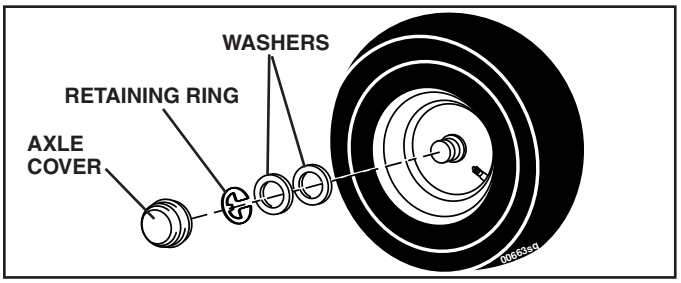


FIG. 31

TO START ENGINE WITH A WEAK BATTERY (See Fig. 32)

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

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

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

IMPORTANT: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT SYSTEM. DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

TO ATTACH JUMPER CABLES -

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

TO REMOVE CABLES, REVERSE ORDER -

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

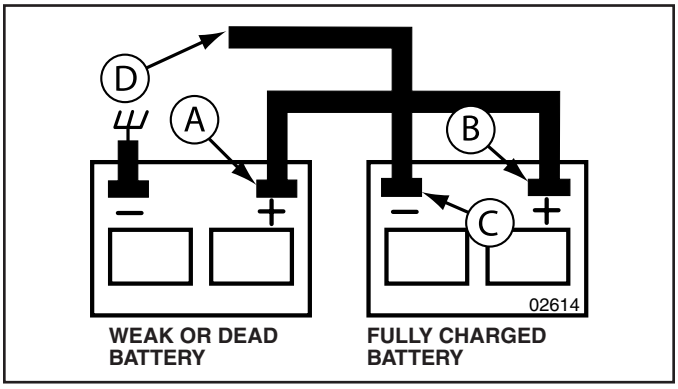


FIG. 32

TO REPLACE HEADLIGHT BULB

- Raise hood.
- Pull bulb holder out of the hole in the backside of the grill.
- Replace bulb in holder and push bulb holder securely back into the hole in the backside of the grill.
- 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 of this manual.

TO REPLACE FUSE

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

TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 33)

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

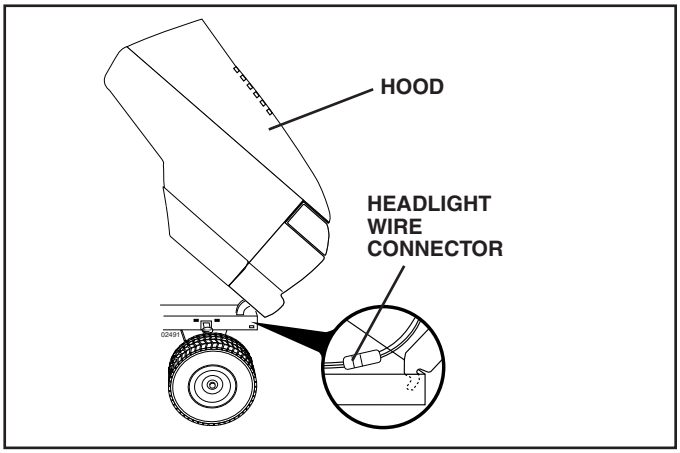


FIG. 33

ENGINE

TO ADJUST THROTTLE CONTROL CABLE (See Fig. 34)

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 to fast position.
- Check that swivel is against stop. If it is not, loosen cable clamp screw and pull cable back until swivel is against stop. Tighten cable clamp screw securely.

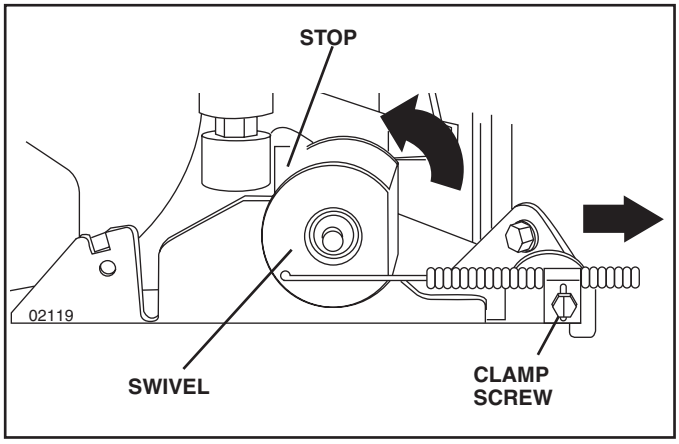


FIG. 34

TO ADJUST CHOKE CONTROL (See Fig. 35)

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

- With engine not running, move choke control (located on dash panel) to full choke position.
- Loosen knob and remove cover assembly from air cleaner.
- Choke should be closed. If it is not, loosen casing clamp screw and move choke cable until choke is completely closed. Tighten casing clamp screw securely.
- Replace air cleaner cover assembly and tighten knob.

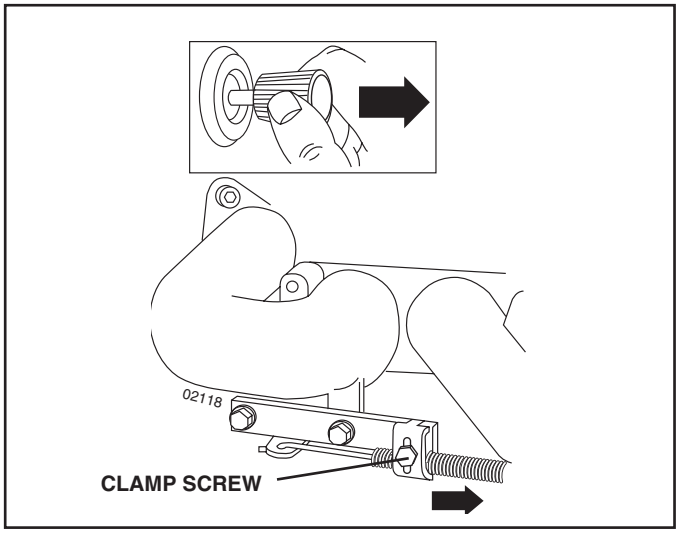


FIG. 35

TO ADJUST CARBURETOR

Your carburetor is not adjustable. If your engine does not operate properly due to suspected carburetor problems, take your tractor to an authorized service center for repair and/or adjustment.

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 YOUR NEAREST AUTHORIZED SERVICE CENTER/ DEPARTMENT, WHICH HAS PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

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.

WARNING: 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).
- 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.
- 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 TERMINALS" in the Maintenance section of this manual).
- After cleaning, leave cables disconnected and place cables where they cannot come in contact with battery terminals.
- If battery is removed from tractor for storage, do not store battery directly on concrete or damp surfaces.

ENGINE

FUEL SYSTEM

IMPORTANT: IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

- Empty the fuel tank by starting 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 empty 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)

- Remove spark plug(s).
- Pour one ounce of oil through spark plug hole(s) into cylinder(s).
- Turn ignition key to "START" position for a few seconds to distribute oil.
- 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 POINTS

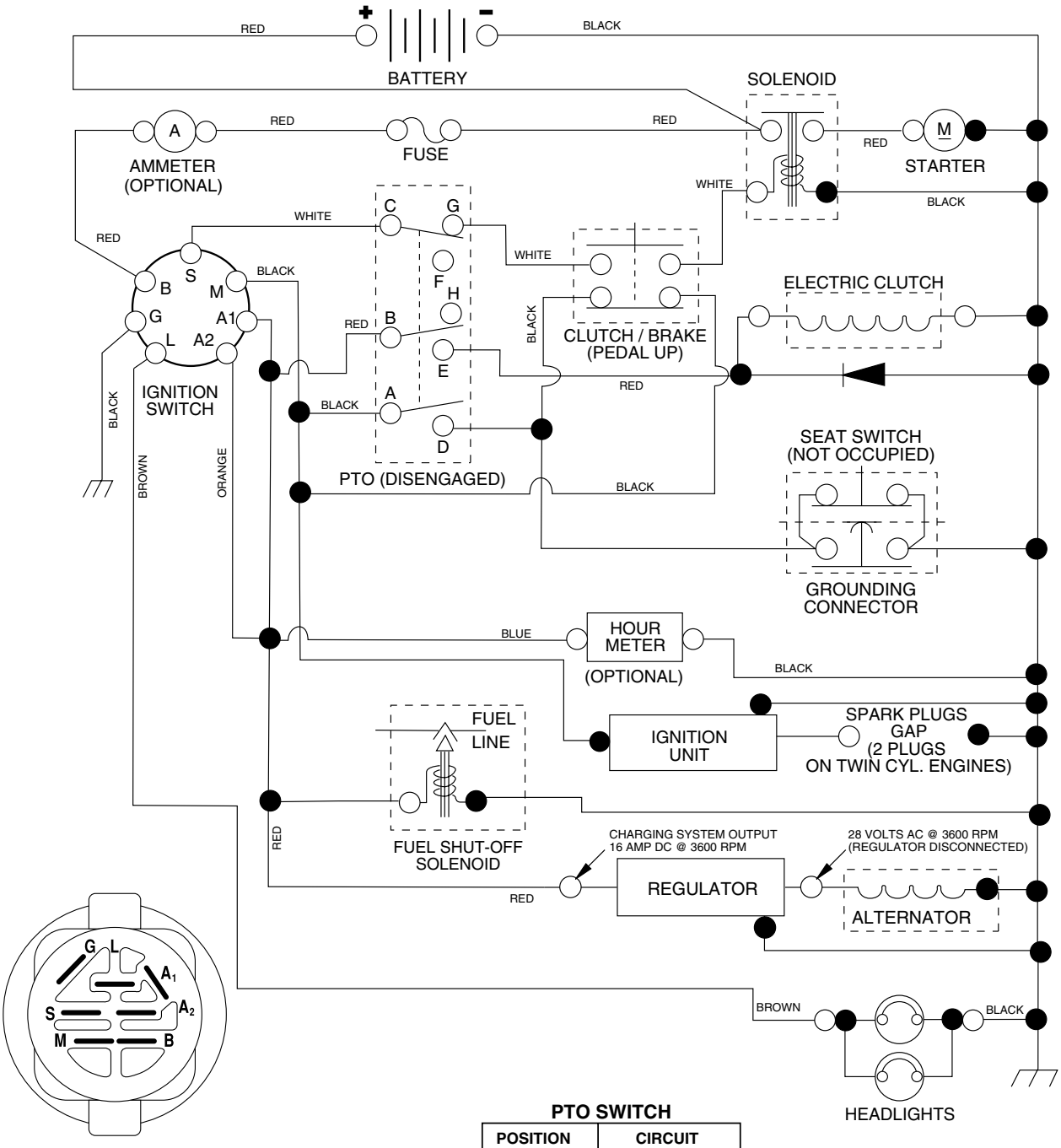
PROBLEM	CAUSE	CORRECTION
Will not start	1. Out of fuel. 2. Engine not “CHOKED” properly. 3. Engine flooded. 4. Bad spark plug. 5. Dirty air filter. 6. Dirty fuel filter. 7. Water in fuel. 8. Loose or damaged wiring. 9. Carburetor out of adjustment. 10. Engine valves out of adjustment.	1. Fill fuel tank. 2. See “TO START ENGINE” in Operation section. 3. Wait several minutes before attempting to start. 4. Replace spark plug. 5. Clean/replace air filter. 6. Replace fuel filter. 7. Empty fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. 8. Check all wiring. 9. See “To Adjust Carburetor” in Service Adjustments section. 10. Contact an authorized service center/department.
Hard to start	1. Dirty air filter. 2. Bad spark plug. 3. Weak or dead battery. 4. Dirty fuel filter. 5. Stale or dirty fuel. 6. Loose or damaged wiring. 7. Carburetor out of adjustment. 8. Engine valves out of adjustment.	1. Clean/replace air filter. 2. Replace spark plug. 3. Recharge or replace battery. 4. Replace fuel filter. 5. Empty fuel tank and refill tank with fresh, clean gasoline. 6. Check all wiring. 7. See “To Adjust Carburetor” in Service Adjustments section. 8. Contact an authorized service center/department.
Engine will not turn over	1. Clutch/brake pedal not depressed. 2. Attachment clutch is engaged. 3. Weak or dead battery. 4. Blown fuse. 5. Corroded battery terminals. 6. Loose or damaged wiring. 7. Faulty ignition switch. 8. Faulty solenoid or starter. 9. Faulty operator presence switch(es).	1. Depress clutch/brake pedal. 2. Disengage attachment clutch. 3. Recharge or replace battery. 4. Replace fuse. 5. Clean battery terminals. 6. Check all wiring. 7. Check/replace ignition switch. 8. Check/replace solenoid or starter. 9. Contact an authorized service center/department.
Engine clicks but will not start	1. Weak or dead battery. 2. Corroded battery terminals. 3. Loose or damaged wiring. 4. Faulty solenoid or starter.	1. Recharge or replace battery. 2. Clean battery terminals. 3. Check all wiring. 4. Check/replace solenoid or starter.
Loss of power	1. Cutting too much grass/too fast. 2. Throttle in “CHOKE” position. 3. Build-up of grass, leaves and trash under mower. 4. Dirty air filter. 5. Low oil level/dirty oil. 6. Faulty spark plug. 7. Dirty fuel filter. 8. Stale or dirty fuel. 9. Water in fuel. 10. Spark plug wire loose. 11. Dirty engine air screen/fins. 12. Dirty/clogged muffler. 13. Loose or damaged wiring. 14. Carburetor out of adjustment. 15. Engine valves out of adjustment.	1. Raise cutting height/reduce speed. 2. Adjust throttle control. 3. Clean underside of mower housing. 4. Clean/replace air filter. 5. Check oil level/change oil. 6. Clean and regap or change spark plug. 7. Replace fuel filter. 8. Empty fuel tank and refill tank with fresh, clean gasoline. 9. Empty fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. 10. Connect and tighten spark plug wire. 11. Clean engine air screen/fins. 12. Clean/replace muffler. 13. Check all wiring. 14. See “To Adjust Carburetor” in Service Adjustments section. 15. Contact an authorized service center/department.
Excessive vibration	1. Worn, bent or loose blade. 2. Bent blade mandrel. 3. Loose/damaged part(s).	1. Replace blade. Tighten blade bolt. 2. Replace blade mandrel. 3. Tighten loose part(s). Replace damaged parts.

TROUBLESHOOTING POINTS

PROBLEM	CAUSE	CORRECTION
Engine continues to run when operator leaves seat with attachment clutch engaged	1. Faulty operator-safety presence control system.	1. Check wiring, switches and connections. If not corrected, contact an authorized service center/ department.
Poor cut - uneven	1. Worn, bent or loose blade. 2. Mower deck not level. 3. Buildup of grass, leaves, and trash under mower. 4. Bent blade mandrel. 5. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.	1. Replace blade. Tighten blade bolt. 2. Level mower deck. 3. Clean underside of mower housing. 4. Replace blade mandrel. 5. Clean around mandrels to open vent holes.
Mower blades will not rotate	1. Obstruction in clutch mechanism. 2. Worn/damaged mower drive belt. 3. Frozen idler pulley. 4. Frozen blade mandrel.	1. Remove obstruction. 2. Replace mower drive belt. 3. Replace idler pulley. 4. Replace blade mandrel.
Poor grass discharge	1. Engine speed too slow. 2. Travel speed too fast. 3. Wet grass. 4. Mower deck not level. 5. Low/uneven tire air pressure. 6. Worn, bent or loose blade. 7. Buildup of grass, leaves and trash under mower. 8. Mower drive belt worn. 9. Blades improperly installed. 10. Improper blades used. 11. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.	1. Place throttle control in “FAST” position. 2. Shift to slower speed. 3. Allow grass to dry before mowing. 4. Level mower deck. 5. Check tires for proper air pressure. 6. Replace/sharpen blade. Tighten blade bolt. 7. Clean underside of mower housing. 8. Replace mower drive belt. 9. Reinstall blades sharp edge down. 10. Replace with blades listed in this manual. 11. Clean around mandrels to open vent holes.
Headlight(s) not working (if so equipped)	1. Switch is “OFF”. 2. Bulb(s) or lamp(s) burned out. 3. Faulty light switch. 4. Loose or damaged wiring. 5. Blown fuse.	1. Turn switch “ON”. 2. Replace bulb(s) or lamp(s). 3. Check/replace light switch. 4. Check wiring and connections. 5. Replace fuse.
Battery will not charge	1. Bad battery cell(s). 2. Poor cable connections. 3. Faulty regulator (if so equipped). 4. Faulty alternator.	1. Replace battery. 2. Check/clean all connections. 3. Replace regulator. 4. Replace alternator.
Engine “backfires” when turning engine “OFF”	1. Engine throttle control not set at “SLOW” position for 30 seconds before stopping engine.	1. Move throttle control to “SLOW” position and allow to idle for 30 seconds before stopping engine.

TRACTOR - - MODEL NUMBER 944.604060

SCHEMATIC



IGNITION SWITCH

POSITION	CIRCUIT	"MAKE"
OFF	M + G + A1	NONE
ON + LIGHTS	B + A1	L + A2
ON	B + A1	NONE
START	B + S + A1	NONE

PTO SWITCH

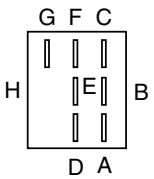
POSITION	CIRCUIT
OFF	C + G, B + H
ON	C + F, B + E, A + D

WIRING INSULATED CLIPS

NOTE: IF WIRING INSULATED CLIPS WERE REMOVED FOR SERVICING OF UNIT, THEY SHOULD BE REPLACED TO PROPERLY SECURE YOUR WIRING.

REMOVABLE CONNECTIONS

NON-REMOVABLE CONNECTIONS

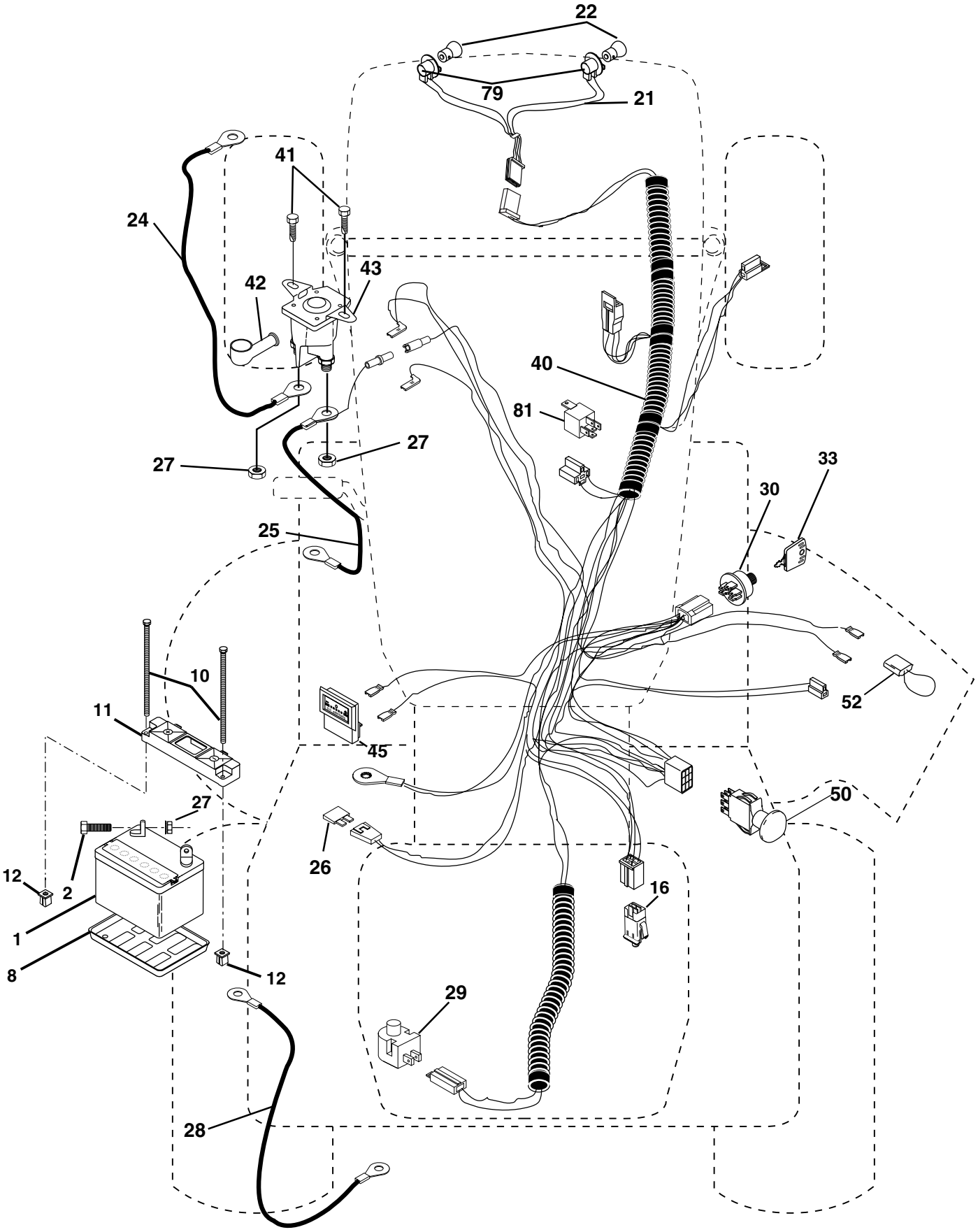


PTO SWITCH CONNECTOR

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

ELECTRICAL



REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

ELECTRICAL

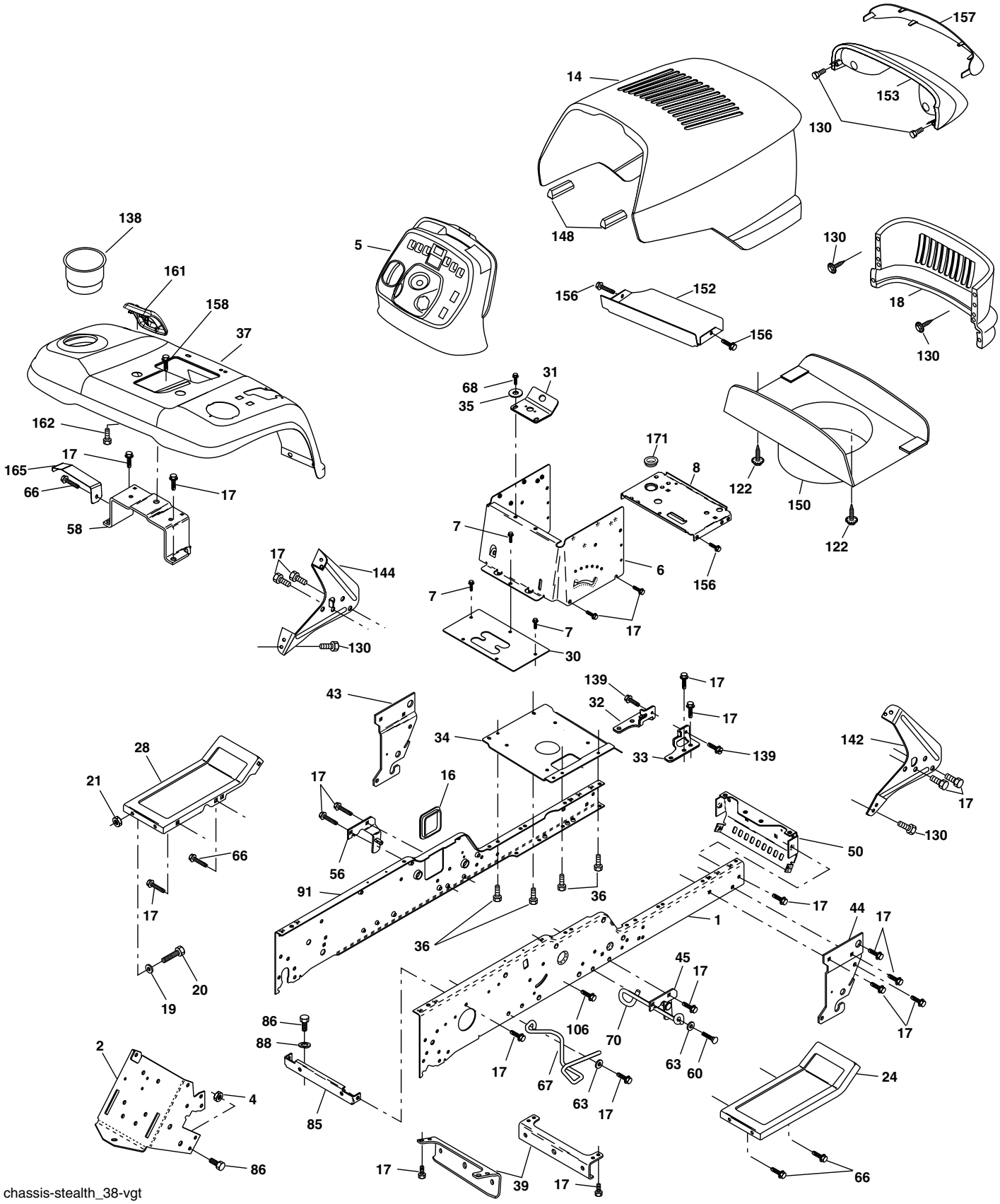
KEY NO.	PART NO.	DESCRIPTION
1	144927	Battery
2	74760412	Bolt Hex Head 1/4-20 x 3/4
8	7603J	Tray, Battery
10	145211	Bolt Btr Frt 1/4-20 x 7.5 zinc
11	150109	Holdown Battery Front Mount
12	145769	Nut Push Nylon 1/4"
16	176138	Switch Interlock Push-In
21	175688	Harness Headlight
22	4152J	Bulb Light
24	185464	Cable Starter
25	146149	Cable, Battery
26	108824X	Fuse
27	73510400	Nut Keps Hex 1/4-20 unc
28	170697	Cable, Ground
29	121305X	Switch, Plunger
30	175566	Switch, Ign
33	140403	Key
40	188032	Harness, Ignition
41	17720408	Screw
42	131563	Cover, Terminal Red
43	178861	Solenoid
45	122822X	Ammeter
50	174652	Switch, PTO
52	141940	Protection Wire Loop
79	175242	Socket, Light Bulb
81	109748X	Relay Asm

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

CHASSIS AND ENCLOSURES



chassis-stealth_38-vgt

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

CHASSIS AND ENCLOSURES

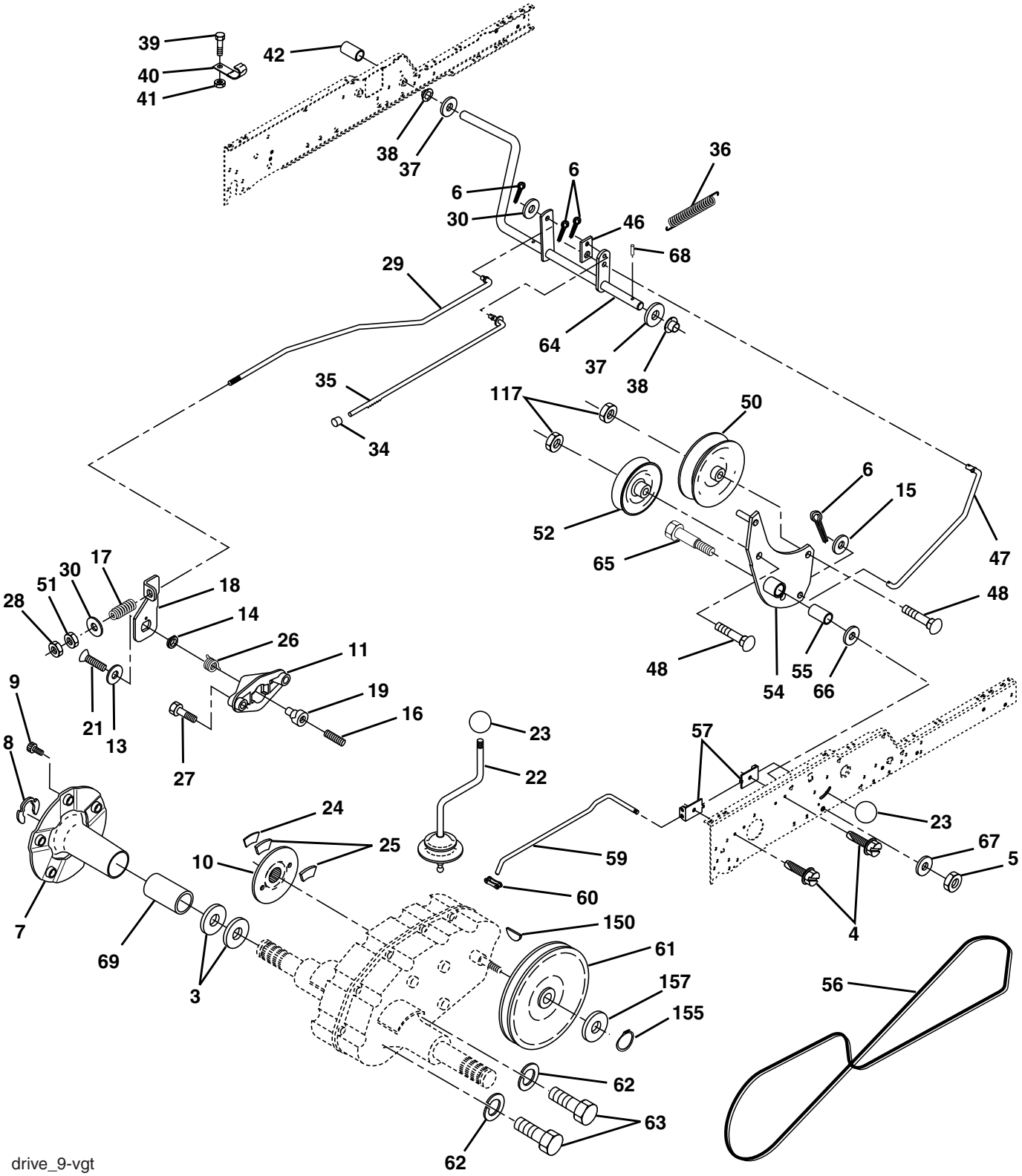
KEY NO.	PART NO.	DESCRIPTION
1	180375	Rail, Frame RH
2	175282	Drawbar, Gt
4	73680700	Nut Crown Lock 7/16-14
5	187934X428	Dash
6	157882	Dash Asm., Lower
7	17720408	Screw, Thd Cut 1/4-20 x 1/2
8	184668	Support, Battery
14	175260X613	Hood Asm., Pnt
16	121794X	Cover, Access
17	17000612	Screw, 3/8-16 x 3/4
18	174515X613	Grille
19	19131312	Washer 13/32 x 13/16 x 12 Ga.
20	STD523710	Bolt, Fin Hex 3/8-16 x 1
21	STD541437	Nut, Crownlock 3/8-16 unc
24	179717X613	Footrest, RH
28	179716X613	Footrest, LH
30	145051X014	Saddle
31	161419	Bracket, Supt 1-pc VGT Steering
32	161327	Bracket, Pivot Chassis LH
33	161326	Bracket, Pivot Chassis RH
35	19111116	Washer 11/32 x 11/16 x 16 Ga.
36	17060512	Screw 5/16-18 x 3/4
37	179772X613	Fender, Pnt.
39	175278	Bracket, Axle Front
43	136939	Bracket, Spnsn Front Lh
44	136940	Bracket, Spnsn Front Rh
45	176018	Bracket Asm., Susp Chassis Rh
50	175476	Bracket, Chassis Front
56	176016	Bracket Asm., Susp Chassis Lh
58	183569	Bracket Asm., Fender
60	17000616	Screw
63	19131614	Washer
66	17490608	Screw
67	156973	Guide Belt
68	17490508	Screw, Thd 5/16-18 x 1/2
70	177679	Belt Keeper Ground Drive
85	144911	Bracket Support Transaxle
86	74780716	Bolt, Fin Hex 7/16-14 unc x 1
88	STD551143	Washer
91	180374	Rail, Frame Lh
106	17580520	Screw
122	161464	Screw Hex Wshd 8-18 x 7/8
130	171875	Screw HWHD Hi-Lo #13-16 x 3/4
138	179125X428	Cupholder YTGT
139	171873	Bolt Shoulder 5/16-18 TT
142	161897	Bracket Dash RH
144	161900	Bracket Dash LH
148	164655	Extrusion Bumper
150	175352	Duct Heat Hood
152	177956	Shield Browning
153	179761	Lens Asm (Includes #157)
156	17000512	Screw 5/16-18 x 3/4
157	161840	Lens Bar Stealth
158	17670608	Screw Thdr 3/8-16 x 1/2
161	179612X428	Console Fuel Window
162	142432	Screw Hex Wsh Hi-Lo 1/4-1/2
165	183554	Bracket Support Tank
171	184672	Bushing Snap

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

GROUND DRIVE



REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

GROUND DRIVE

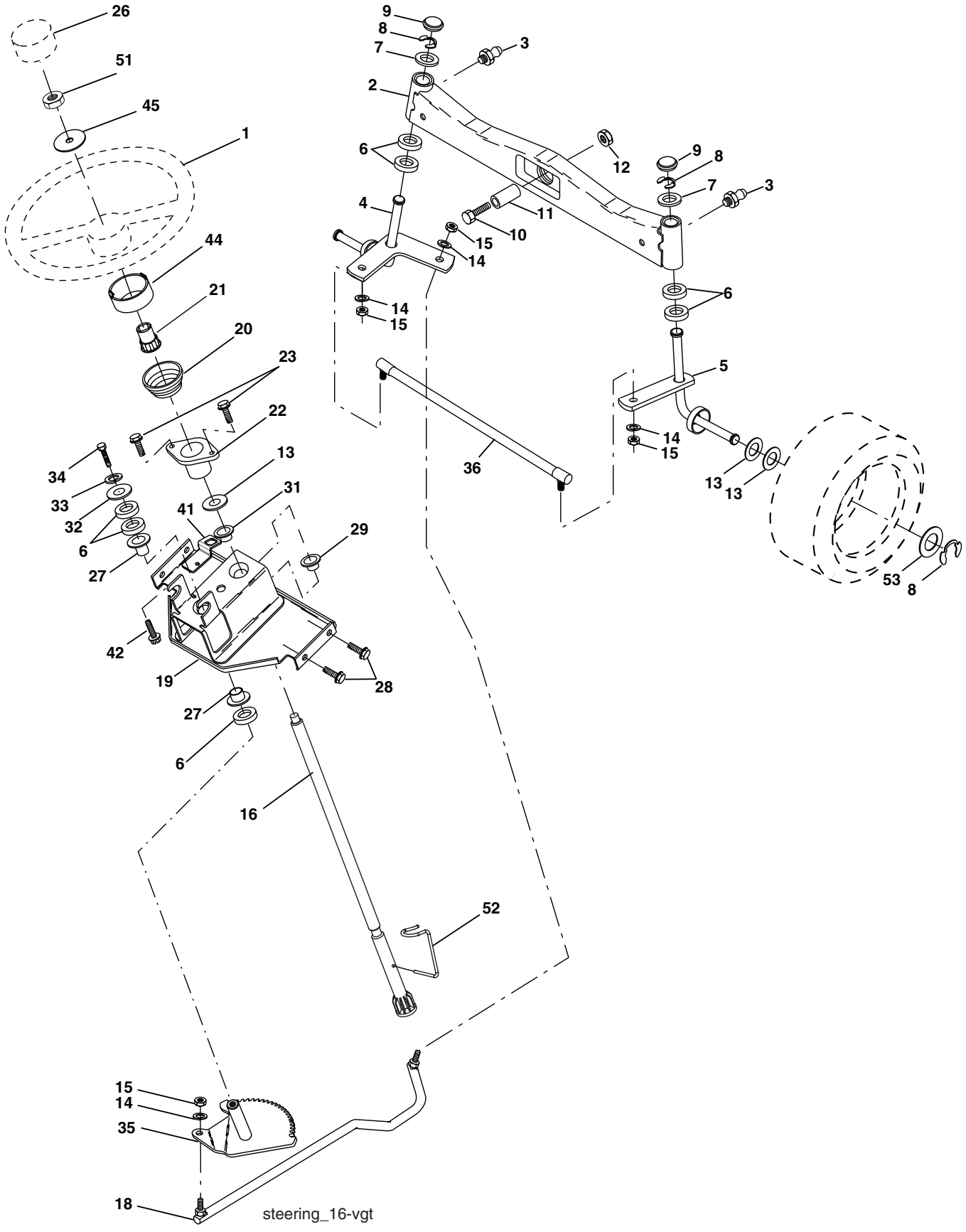
KEY NO.	PART NO.	DESCRIPTION
3	7563R	Washer, Thrust, Axle
4	17490508	Screw Thdrol 5/16-18 x 3/4
5	STD541437	Nut, Crownlock 3/8-16
6	STD561210	Pin, Cotter
7	149176	Wheel, Hub Assembly
8	12000034	Klip, Ring
9	140080	Bolt, Hub
10	142509	Disc, Brake
11	136927	Yoke, Brake Disc
13	139419	Washer, Special
14	138901	Bushing
15	STD551037	Washer 13/32x13/16 x 16 Ga.
16	143012	Set, Screw 1/4-28 x 3/4
17	126909X	Spring
18	137104	Lever, Brake
19	136926	Cam, Brake Disc
21	23260412	Screw, Flat Head 1/4-28 x 3/4
22	633A109	Gearshift, Lever Assembly
23	106932X	Knob
24	136925	Support, Puck Brake
25	136923	Puck, Brake Top
26	137552	Spring, Return
27	17490528	Screw, Hex Wsh Thd. 5/16-18 x 1-3/4
28	73350600	Nut, Hex Jam 3/8-16
29	137213	Brake, Rod
30	19131616	Washer 13/32 x 1 x 16 Ga.
34	71673	Cap, Plunger
35	137648	Rod, Parking Brake
36	149412	Spring, Drive Ground
37	121749X	Washer 25/32 x1-1/4 x 16 Ga.
38	150035	Nyliner
39	74321016	Screw, Fin. #10-24 x 1
40	178575	Actuator, Interlock Switch
41	73931000	Nut, Centerlock #10-24
42	8883R	Cover, Pedal
46	145170	Retainer, Spring
47	138228	Clutch Rod
48	72110612	Bolt, Carr. 3/8-16 x 1-1/2 Gr. 5
50	131494	Pulley, Idler, Flat
51	STD541437	Nut, Crownlock 3/8-16 unc
52	139123	Pulley, Idler, Grooved
54	161590	Clutch, Arm Assembly
55	105706X	Bearing, Idler
56	137153	V-Belt
57	141756	Bracket, Shift Rod, Hi-Lo
59	122253X	Shift Rod, Hi-Lo
60	122268X	Spring Clip, Connecting Link
61	184787	Pulley, Transaxle
62	STD551143	Washer, Lock 7/16
63	74780720	Bolt, Fin Hex 7/16-14 x 1-1/4
64	154752	Shaft, Clutch/Brake Pedal
65	179613	Bolt, Shoulder
66	140296	Washer, Hardened
67	19131312	Washer, Flat
68	5142H	Pin, Roll
69	136327	Hub, Cover
117	73900600	Nut, Lock Flg. 3/8-16 unc
150	9858M1	Key, Woodruff
155	12000028	Ring Retainer
157	1370H	Washer

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

STEERING ASSEMBLY



REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

STEERING ASSEMBLY

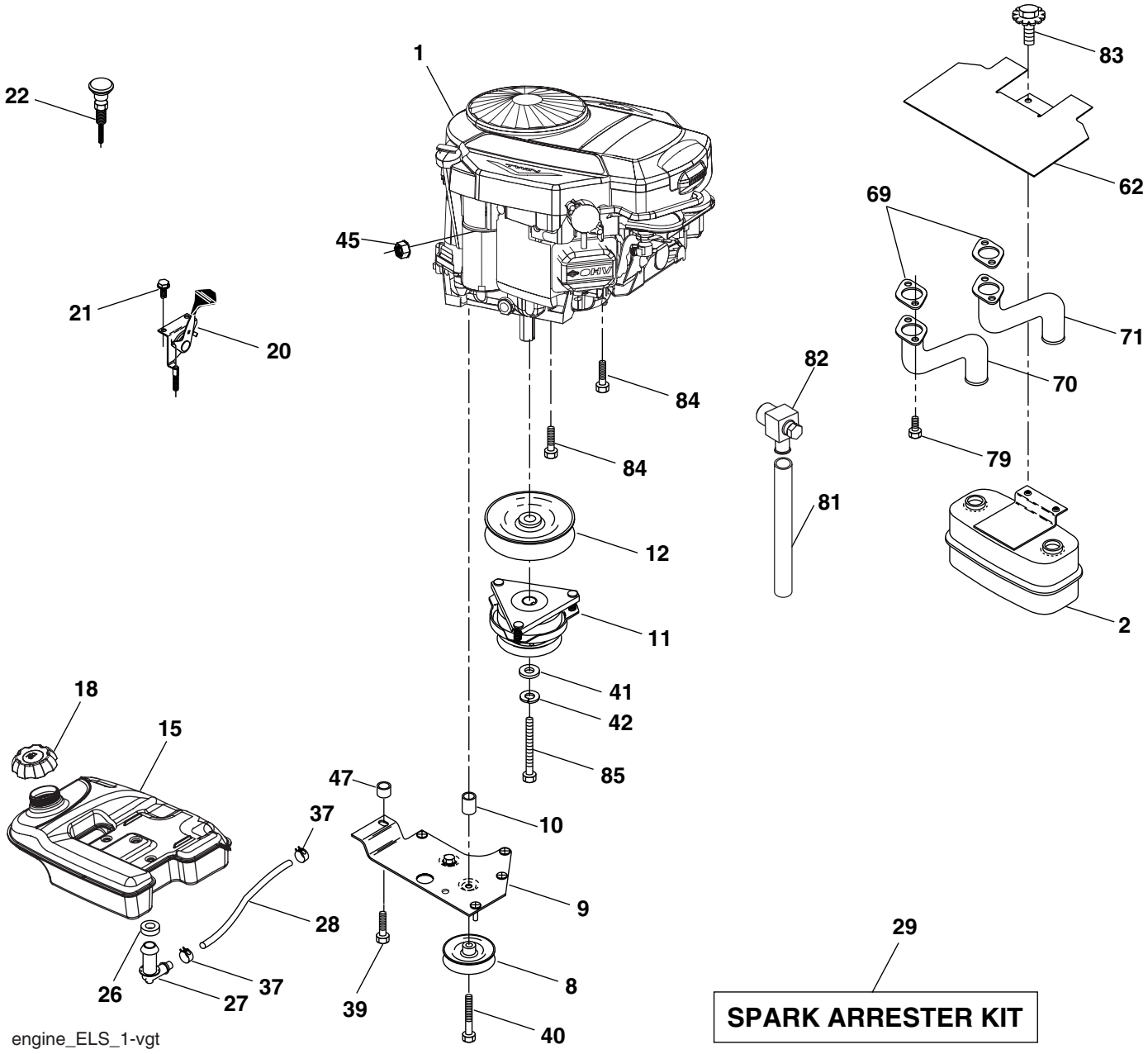
KEY NO.	PART NO.	DESCRIPTION
1	184704X428	Wheel, Steering
2	178557	Axle Asm., Front
3	183226	Fitting, Grease
4	161849	Spindle Asm, LH
5	161848	Spindle Asm., RH
6	6266H	Bearing, Race Thrust Harden
7	121748X	Washer 25/32 x 1-5/8 x 16 Ga.
8	12000029	Ring, Klip #T5304-75
9	184946X505	Cap, Spindle
10	74781044	Bolt, Fin Hex 5/8-11 x 2-3/4
11	136518	Spacer, Brg. Axle Front
12	73901000	Nut, Lock Flange 5/8-11 unc
13	121749X	Washer 25/32 x 1-1/4 x 16 Ga.
14	STD551137	Washer, Lock Hvy Hlcl Spr 3/8
15	73540600	Nut 3/8-24
16	186814	Shaft Asm., Steering
18	175572	Draglink Vgt
19	156011	Support Asm., Steering Vgt
20	163887X428	Boot Steering Stealth GTYT
21	159945	Adapter, Wheel Steering
22	155105	Bushing, Strg.
23	152927	Screw
26	159946X428	Insert Cap Strg WH
27	3366R	Bearing, Col. Strg.
28	17000612	Screw Hexwsh thdr 3/8-16 x 3/4
29	104239X	Bearing, Flange
31	138136	Bushing, Nyliner Snap
32	19111610	Washer 11/32 x 1 x 10 Ga.
33	STD551131	Washer, Lock Hvy Hlcl Spr 5/16
34	STD523107	Bolt, Hex Hd 5/16-18 x 3/4
35	187039	Gear, Sector Steering
36	186799	Tie Rod
41	155246	Bracket Switch Interlock Vgt 97
42	17490508	Screw Thdrol 5/16-18 x 1/2 Tyt
44	160135X428	Extension Steering
45	19182411	Washer 9/16 x 1-1/2 x 11 Ga.
46	19131610	Washer Flat 13/32 x 1 x 10 Ga.
47	179471	Bracket Asm Idler Stationary
49	175820	Pulley Idler
50	73900600	Nut Lock Flg 3/8-16 unc
51	73940800	Nut Hex Jam Toplock 1/2-20 unf
52	175553	Clip Steering .750
53	188967	Washer Hardened

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

ENGINE



REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

ENGINE

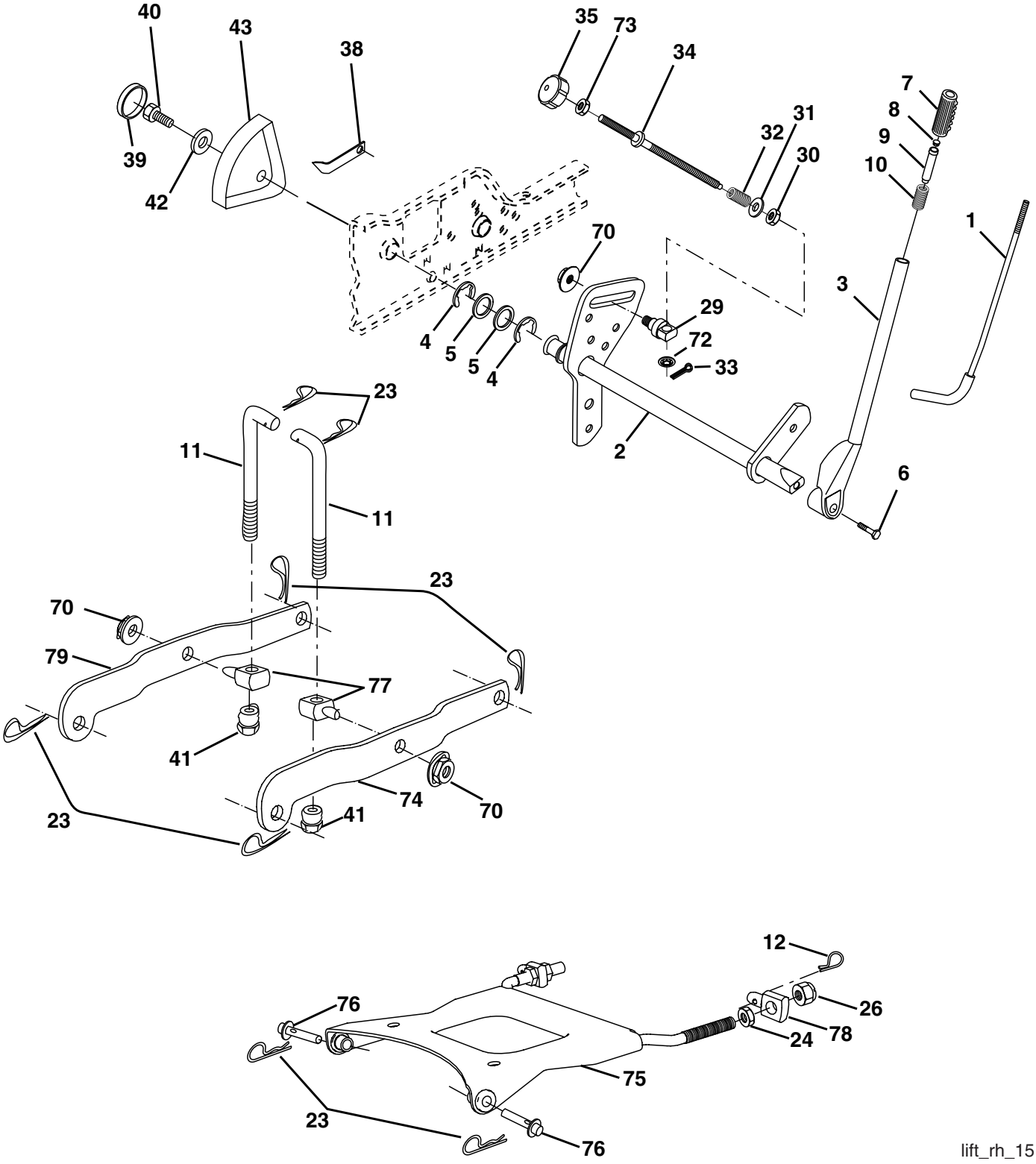
KEY NO.	PART NO.	DESCRIPTION
1	- - - - - - -	Engine (See Breakdown) Briggs 446777-0244-E1
2	149723	Muffler
8	121361X	Pulley V-Idler
9	177748	Keeper Asm Belt Engine Vgt
10	175287	Bushing
11	179335	Clutch Electric
12	143996	Pulley Engine Grnd Drive
15	179115	Tank Fuel Rear
18	179124X428	Cap Asm Fuel
20	175437X505	Control Throttle
21	171875	Screw HWHD Hi-Lo #13-16 x 3/4
22	187767X505	Control Choke
26	3645J	Bushing
27	139277	Stem Tank Fuel
28	188669	Fuel Line
29	137180	Spark Arrester Kit
37	123487X	Clamp Hose
39	17490636	Screw 3/8 - 16 x 2-1/4 unc TT
40	17490664	Screw 3/8 - 16 x 4 unc TT
41	126197X	Washer 1-1/2 OD x 15/32 ID x .250
42	STD551143	Washer Lock 7/16
45	73510400	Nut
47	175288	Bushing
62	146629	Shield Heat Muffler
69	165391	Gasket
70	176069	Tube Exhaust LH
71	176070	Tube Exhaust RH
79	183906	Screw
81	188800	Tube Drain Oil Easy
82	188799	Plug Drain Oil Easy
83	171877	Bolt 5/16-18 unc x 3/4
84	17060624	Screw 3/8-16 x 1-1/2
85	179953	Bolt Hex 7/16-20 x 3.75 Gr.5

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

LIFT ASSEMBLY



REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

LIFT ASSEMBLY

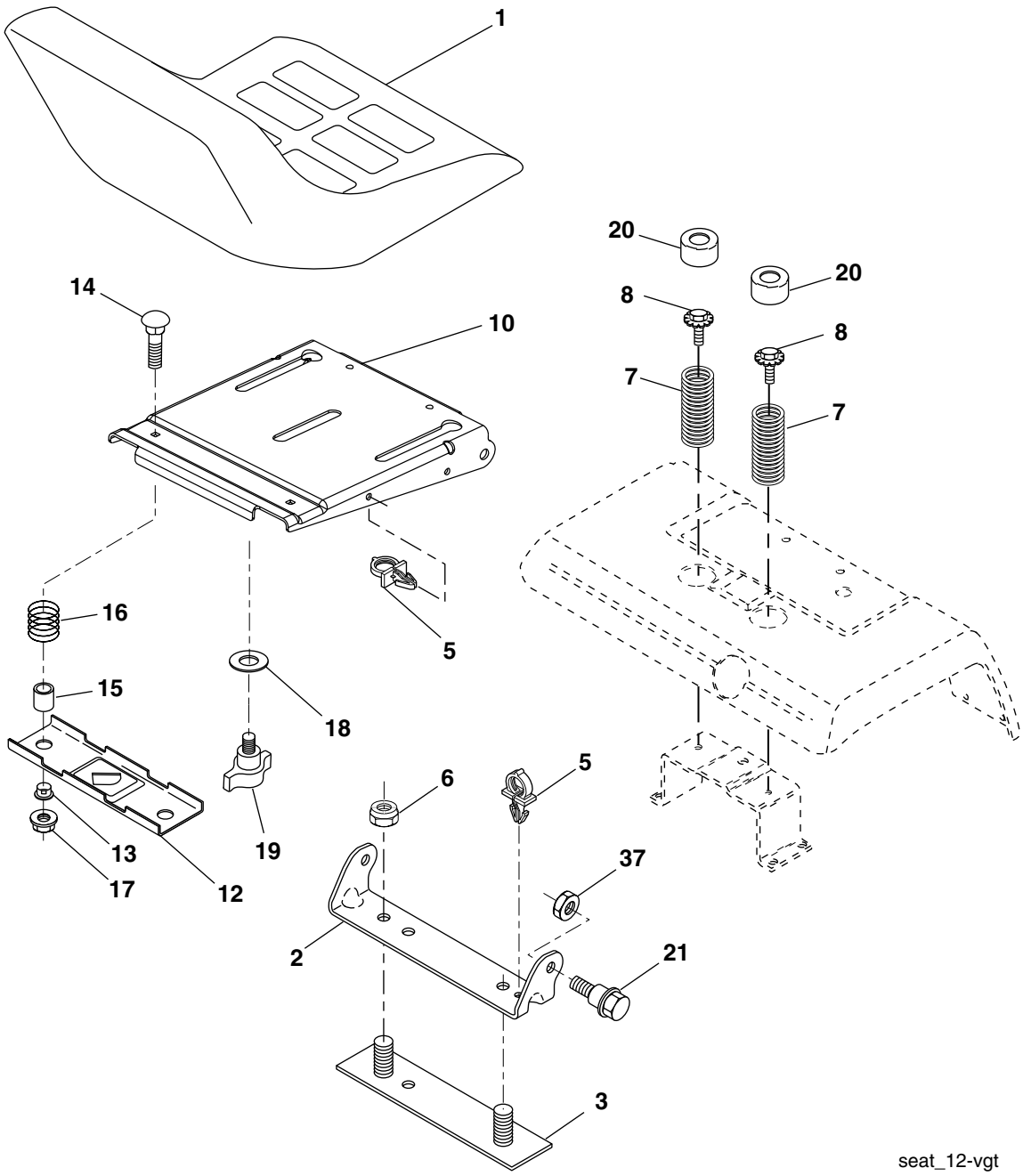
KEY NO.	PART NO.	DESCRIPTION
1	121006X	Rod Asm., Lever
2	180045	Shaft Asm., Lift Vgt
3	159189	Lever Asm., Lift Rh
4	12000022	E-Ring Truarc #5133-87
5	19292016	Washer 29/32 x 1-1/4 x 16 Ga.
6	71110624	Bolt, Fin Hex 3/8-16 x 1-1/2
7	125631X	Grip, Handle
8	122365X	Button, Plunger
9	122364X	Plunger Lever
10	183894	Spring 2-1/8"
11	175375	Link Lift
12	163552	Retainer, Spring
23	STD624008	Retainer, Spring
24	73350800	Nut, Jam Hex 1/2-13 Unc
26	73680800	Nut, Lock W/Wsh 1/2-13 Unc
29	150233	Trunnion Inf. Height
30	110807X	Nut, Special
31	19131016	Washer 13/32 x 5/8 x 16 Ga.
32	137150	Spring, Compression Inf Hgt
33	STD560907	Pin, Cotter 3/32 x 1/2
34	137167	Rod, Adj Lift
35	138057	Knob, Inf 3/8-16 Unc
38	155097	Pointer, Height Indicator
39	123935X	Plug, Hole
40	17060516	Screw 5/16-18 x 3/4
41	175994	Nut, Lift Link 7/16-20
42	19112410	Washer 11/32 x 1-1/2 x 10 Ga.
43	123934X	Scale, Indicator Height
70	145212	Nut, Hexflange Lock
72	110452X	Nut, Push Phos & Oil
73	73350600	Nut Hex Jam 3/8-16 Unc
74	175802	Arm Susp RRRH
75	175805	Plate Asm Susp Front
76	175560	Pin Flange
77	176205	Trunnion Susp Arm
78	175689	Trunnion Susp Front
79	175378	Arm Susp RR LH

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

SEAT ASSEMBLY



seat_12-vgt

KEY NO.	PART NO.	DESCRIPTION
1	180598	Seat
2	180166	Bracket, Pivot Seat
3	140675	Strap, Fender Assembly
5	145006	Clip, Push-In Hinged
6	STD541437	Nut, Crownlock 3/8-16
7	124181X	Spring, Seat Cprsn.
8	171877	Bolt 5/16-18 unc x 3/4 w/Sems
10	180186	Pan, Seat
12	121246X	Bracket, Mounting Switch
13	121248X	Bushing, Snap
14	72050412	Bolt, Carriage 1/4-20 x 1-1/2
15	121249X	Spacer, Split
16	123740X	Spring, Cprsn.
17	123976X	Nut, Lock 1/4 Lg. Flg. Gr. 5
18	19171912	Washer 17/32 x 1-3/16 x 12 Ga.
19	166369	Knob, Seat
20	124238X	Cap, Spring Seat Blk
21	171852	Bolt 5/16-18 unc-2A
37	STD541431	Nut, Crownlock 5/16-18

NOTE: All component dimensions given in U.S. inches
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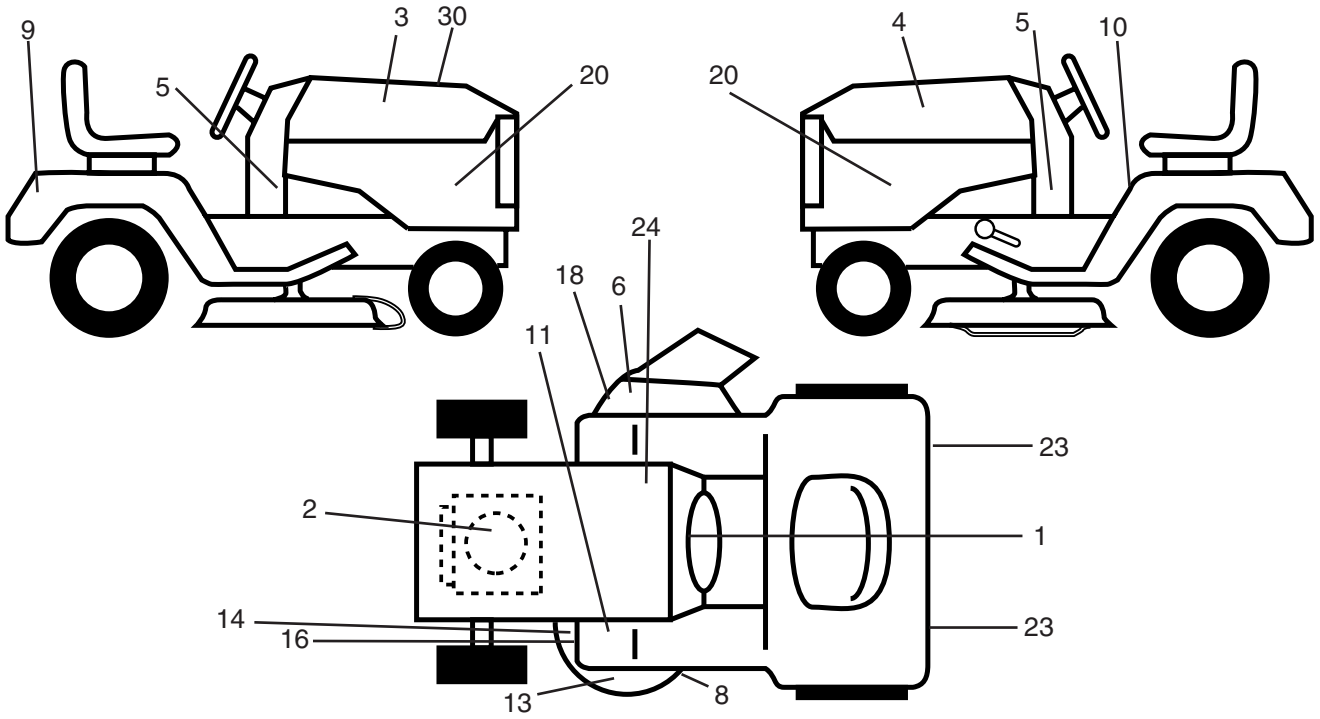
REPAIR PARTS

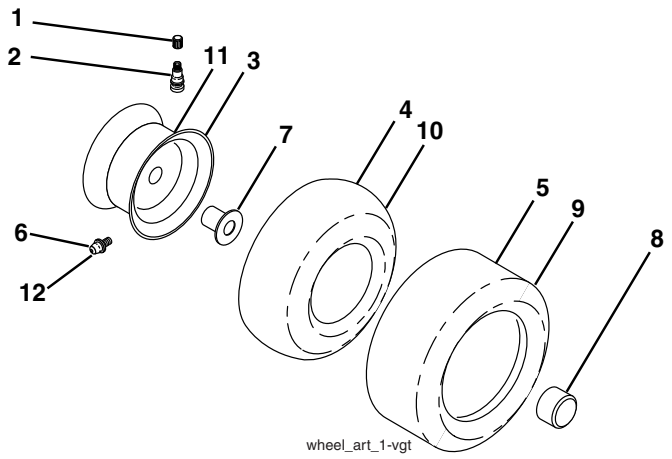
TRACTOR - - MODEL NUMBER 944.604060

DECALS



KEY NO.	PART NO.	DESCRIPTION
1	190276	Decal, Dash
2	186463	Decal, Engine
3	186316	Decal, Hood, RH
4	186317	Decal, Hood, LH
5	182136	Decal, Dash
6	170563	Decal, Warning
8	175291	Decal, V-Belt Schematic
9	186282	Decal, Craftsman
10	157140	Decal, Danger
11	181251	Decal, F/Rest
13	178482	Decal, Deck Hvy Dty
14	146047	Decal, V-Belt Schematic
16	178502	Decal, Deck Caution
18	181471	Decal, Deck Level
20	186318	Decal, Hood Side Panel
23	106202X	Reflector, Taillight
24	149517	Decal, Btry Dngr/Psn
30	190110	Decal, Replacement Parts
- -	179768X428	Pad, Footrest LH
- -	179769X428	Pad, Footrest RH
- -	190297	Manual, Owner's (English)
- -	190298	Manual, Owner's (French)

WHEELS & TIRES



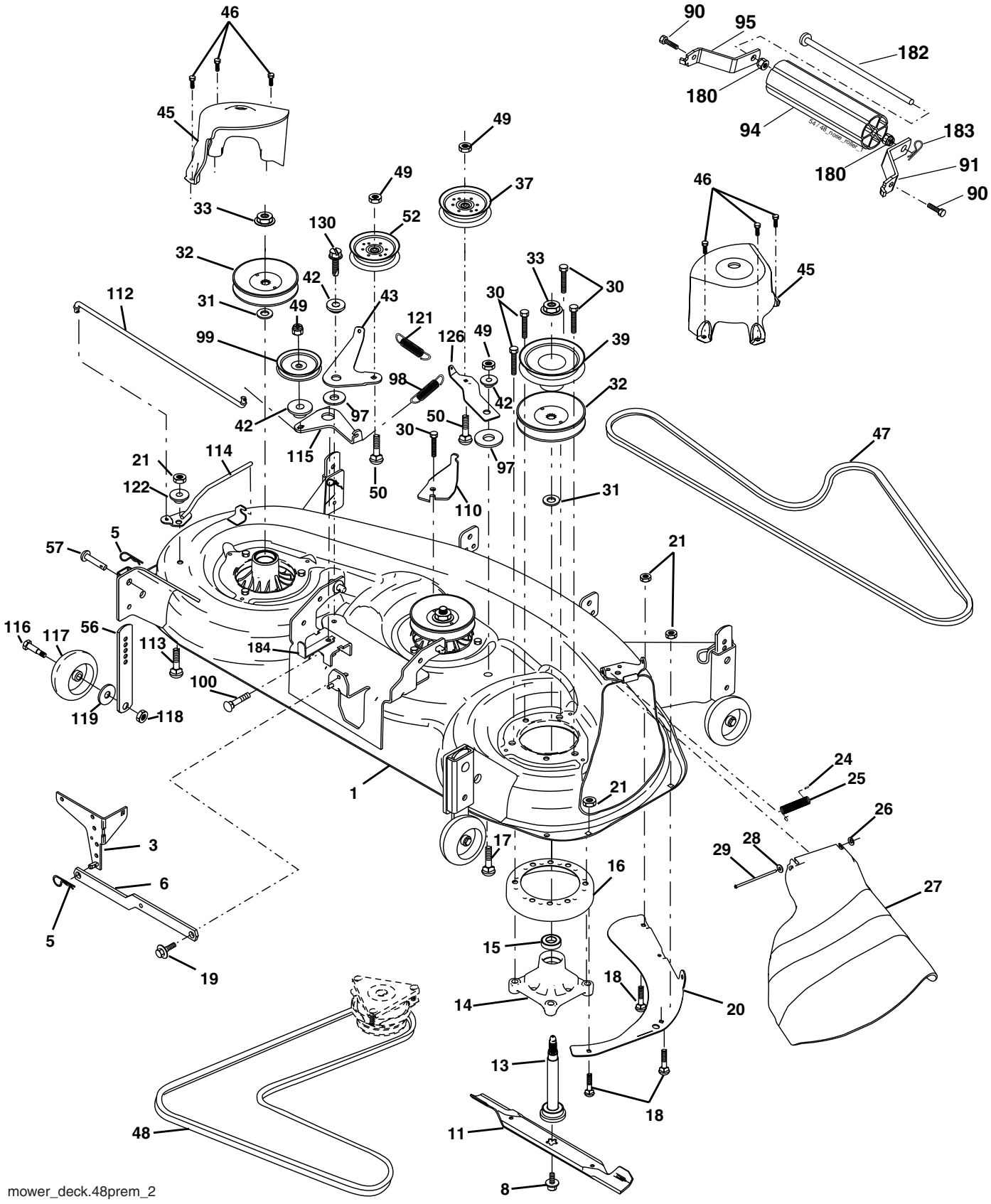
KEY NO.	PART NO.	DESCRIPTION
1	59192	Cap, Valve, Tire
2	65139	Stem, Valve
3	106228X624	Rim Assembly, Front
4	8134H	Tube, Front (Service Item Only)
5	106230X	Tire, Front
6	278H	Fitting, Grease (Front Wheel nly)
7	9040H	Bearing, Flange (Front Wheel Only)
8	104757X428	Cap, Axle (Front Wheel Only)
9	105588X	Tire, Rear
10	7154J	Tube, Rear (Service Item Only)
11	106277X624	Rim Assembly, Rear
12	6856M	Fitting, Grease
- -	144334	Sealant, Tire (10 oz. Tube)

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

MOWER DECK



REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

MOWER DECK

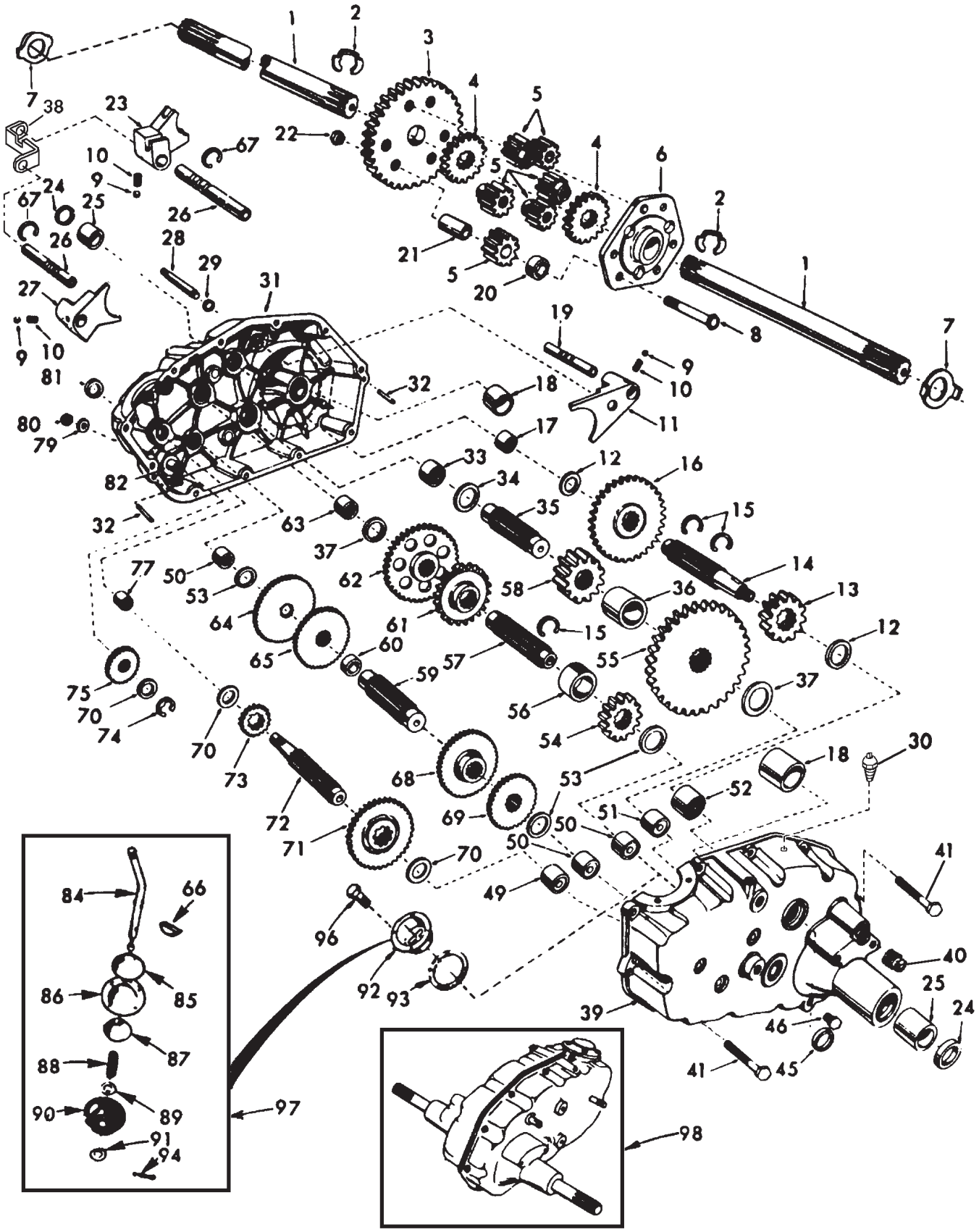
KEY NO.	PART NO.	DESCRIPTION
1	180358	Deck Weldment Mower 48
3	178915	Bracket Asm., Sway Bar
5	4939M	Retainer Spring
6	178024	Arm, Suspension, Rear (Sway Bar)
8	174365	Bolt 7/16 Asm. Blade (The following blades are available)
11	173921	Blade, 48" Mulching (For mulching mowers only)
- -	180054	Blade, 48" Hi-Lift (For bagging and discharging)
13	174360	Shaft Asm.
14	174358	Mandrel Asm.
15	110485X	Bearing, Ball, Mandrel
16	174493	Stripper Mandrel Deck
17	72110610	Bolt RDHD Sq Neck 3/8-16 x 1.25
18	72140505	Bolt, Carriage 5/16-18 x 5/8
19	132827	Bolt, Hex Hd, Shoulder 5/16-18
20	174378	Baffle, Vortex Mower
21	73680500	Nut, Crownlock 5/16-18 unc
24	105304X	Cap, Sleeve
25	178102	Spring, Torsion
26	110452X	Nut, Push
27	180655X428	Deflector Shield
28	19111016	Washer 11/32 x 5/8 x 16 Ga.
29	131491	Rod, Hinge
30	173984	Screw, Thdroll
31	187690	Washer, Spacer Mower Vented
32	173436	Pulley, Mandrel
33	178342	Nut, Flg. Top Lock Cntr. 9/16
37	177968	Pulley, Idler, 48" Primary
39	174375	Pulley, Idler, Driven
42	165723	Spacer, Retainer
43	174373	Arm, Idler Secondary
45	180806	Cover, Mandrel Deck
46	137729	Screw, Thdroll. 1/4-20 x 5/8
47	180808	V-Belt, Mower, Secondary
48	174368	V-Belt, Mower, Primary
49	73900600	Nut 3/8-16 unc
50	72110612	Bolt, Carr. 3/8-16 x 1-1/2 Gr. 5
52	175820	Pulley Idler Flat
56	155986	Bar Adj.
57	156941	Pin Head Rivet
90	74760516	Bolt Hex Head 5/16-18 unc x 1
91	180535	Bracket Asm N Roller RH
94	176066	Roller Nose 48"
95	180534	Bracket Asm N Roller LH
97	178515	Washer Hardened
98	179479	Spring Primary Drive
99	184058	Pulley Idler"V"
100	72110616	Bolt RD. HD. SQNK. 3/8-16 unc x 2
110	175016	Arm Spring Secondary
112	174387	Link Tension Relief Lever
113	72110506	Bolt RDHD. SQNK. 5/16-18 unc x 3/4
114	174384	Tension Asm Relief Lever
115	174609	Arm Spring Tension Relief
116	184219	Bolt, Shoulder
117	174873	Gauge Wheel, Rally
118	73930600	Nut, Centerlock 3/8-16 unc
119	19121414	Washer 3/8 x 7/8 x 14 Ga.
121	174371	Spring Secondary Drive
122	174606	Bushing Pivot Tension Relief
126	174372	Arm, Idler, Primary Deck
130	17000616	Screw 3/8-16 x 1.0
180	73800500	Nut Lock Hex w/ins 5/16-18 unc
182	179127	Rod Nose Roller
183	163552	Retainer Spring
184	173979	Keeper Belt Idler
- -	174356	Mandrel Asm. Service (Includes Key Nos. 13-15)
- -	181579	Replacement Deck, Complete (Std. Deck-Order separately nose roller components Key Nos. 90 - 95 and 180 - 183.)

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

TRANSAXLE



REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

TRANSAXLE

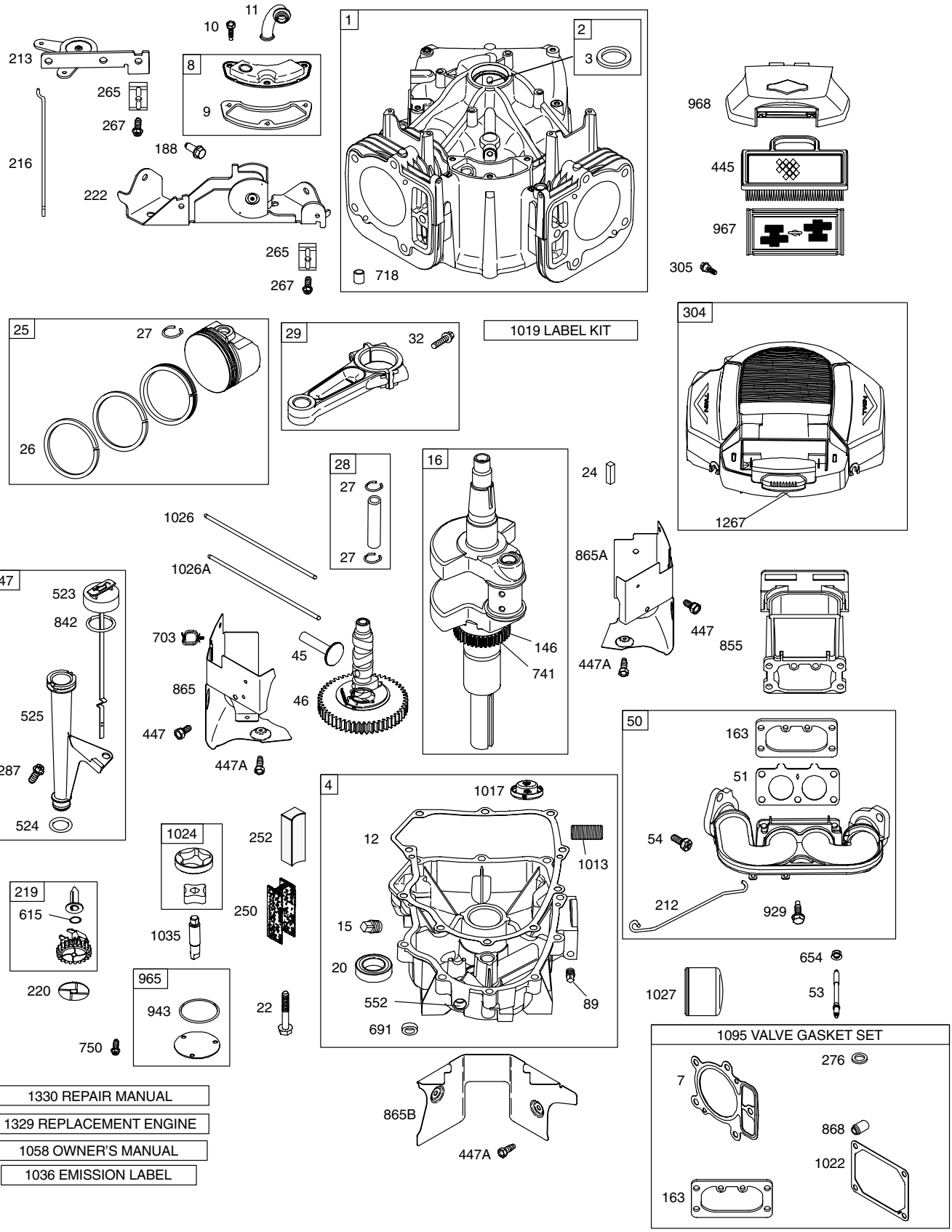
KEY NO.	PART NO.	DESCRIPTION
1	4197R	Axle Shaft
2	12000034	Retaining Ring
3	4199R	Final Drive Gear
4	4216R	Differential Gear
5	4215R	Differential Pinion
6	4217R	Differential Carrier
7	174728	Axle Thrust Washer
8	74020652	Bolt, Hex Head 3/8-24 x 3-1/4 (1" Thread Length)
9	7392M	Steel Ball
10	137261	Spring Shift Fork Detent
11	4985R	Shift Fork, High-Low Range
12	6266H	Thrust Bearing Race
13	4212R	4th Reduction Pinion
14	137125	Shaft, Brake
15	6276H	Snap Ring, Crescent Type
16	633A63	High-Low Range Gears
17	8118M	Needle Bearing
18	8740H1	Sintered Iron Bearing
19	122238X	Shift Fork Shaft, High-Low Range
20	4218R	Differential Pinion Spacer
21	6252H1	Differential Pinion Bushing
22	7810H	Gripco Centerlock Nut 3/8-24
23	6262H	Shift Fork, R.H.
24	7393R	Oil Seal
25	992R1	Sintered Iron Bearing
26	139111	Shift Fork Shaft
27	4986R	Shift Fork, L.H.
28	122254X	Shift Shaft, High-Low Range
29	6269H	Oil Seal
30	5855H	Pressure Relief Valve
31	174731	Gearcase, Reverse Idler Shaft and Bearings, R.H. (Includes Key No.'s 17,18, 25, 33, 50, 63, 77 and 82)
32	6277H	Dowel Pin
33	4225R	Needle Bearing
34	7396H	Thrust Bearing Race
35	4198R	4th Reduction Gear Shaft
36	4200R	4th Reduction Gear Spacer
37	7395H	Thrust Bearing Race
38	160789	Gate, Lower, Shift
39	174729	Gearcase and Bearings, L.H. (Includes Key Numbers 18, 25, 49, 50 (2), 51 and 52)
40	13320400	Pipe Plug 1/2-14 N.P.T.
41	17580520	Bolt, Hex 5/16-18 UNC x 1-1/4
45	6271H	Oil Seal
46	13060200	Pipe Plug 1/4-18 N.P.T.
49	4895H	Needle Bearlng
50	4222R	Needle Bearing
51	1529R	Needle Bearing
52	8119M	Needle Bearing
53	4220R	Thrust Bearing Race
54	4209R	3rd Reduction Pinion, Low
55	4213R	4th Reduction Gear
56	4442R	3rd Reduction Pinion Spacer
57	4195R	2nd Reduction Gear Shaft
58	4214R	Final Drive Pinion
59	4194R	1st Reduction Gear Shaft
60	7528R	1st Reduction Shaft Spacer
61	4208R	3rd Reduction Plnion Hlgh
62	4207R	2nd Reduction Gear
63	7398H	Needle Bearlng
64	4203R	Low Speed Gear and 2nd Reductlon Pinion Cluster
65	4204R	Reverse Gear
66	2898J	Key, Hi-Pro 1/8 x 17/32
67	12000033	Klip Ring
68	4205R	Intermediate Speed Gear
69	4206R	High Speed Gear
70	1370H	Thrust Bearing Race
71	633A69	Intermediate and High Speed Cluster Pinions
72	139120	Input Shaft
73	4201R	Low Speed Pinion
74	12000008	E-Ring
75	1153R	Reverse Idler Gear
77	6803J	Needle Bearing
79	1167R	Sealing Washer
80	73360700	Nut, Hex, Jam 7/16-20
81	6270H	Oil Seal
82	136984	Reverse Idler Shaft
84	5384J	Gearshift Lever, Bent
85	2978J	Gearshift Cap
86	633A85	Gearshift Ball Cover and Pin
87	8739H1	Shift Lever Guide Ball, Keyed
88	4924H	Spring
89	19151516	Washer 15/32 x 15/16 x 16 Gauge
90	110542X	Shift Mechanism Seal
91	19181511	Washer 9/16 x 15/16 x 12 Gauge
92	75J	Gearshift Gate and Reinforcement
93	6274H	Shift Ball Cover Gasket
94	76020412	Cotter Pin 1/8 x 3/4
96	159783	Screw, Hex, Washer, HD.
97	633A109	Gearshift Lever Assembly
98	174742	Transaxle, 6 Speed, Complete Assembly

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

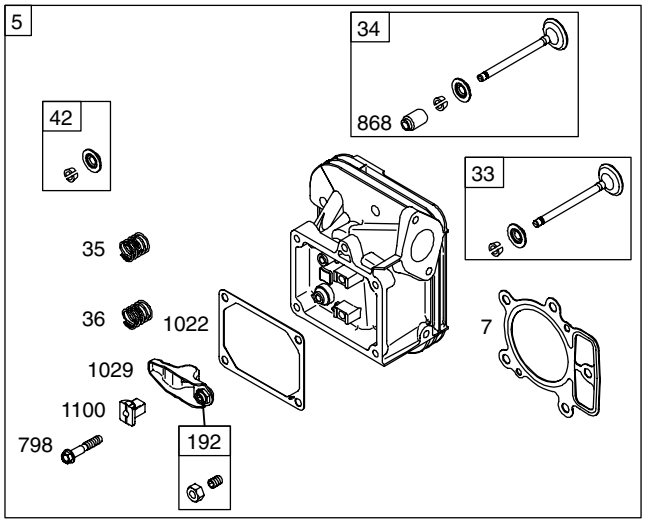
BRIGGS ENGINE - MODEL NUMBER 446777, TYPE NUMBER 0244-E1

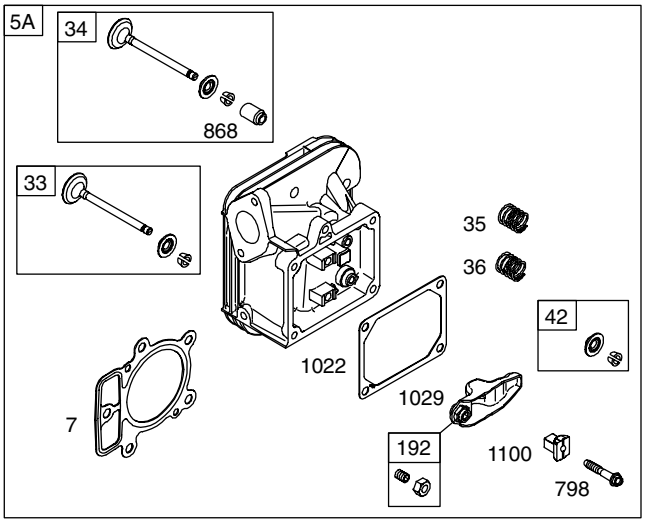


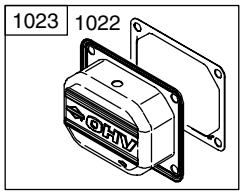
REPAIR PARTS

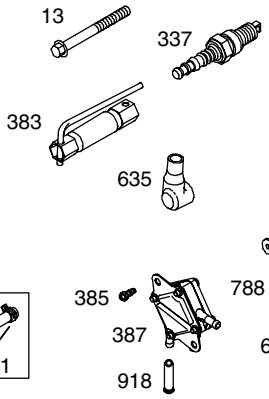
TRACTOR - - MODEL NUMBER 944.604060

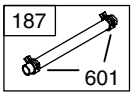
BRIGGS ENGINE - MODEL NUMBER 446777, TYPE NUMBER 0244-E1

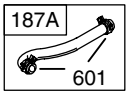


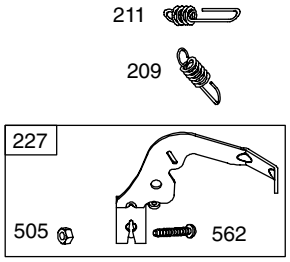


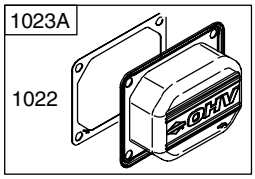


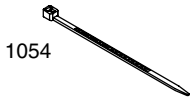


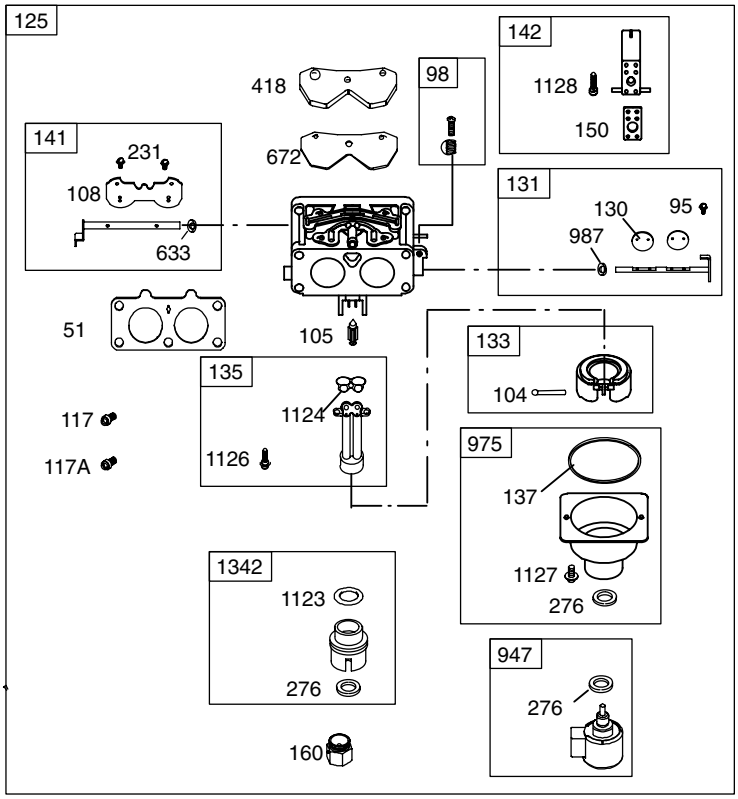


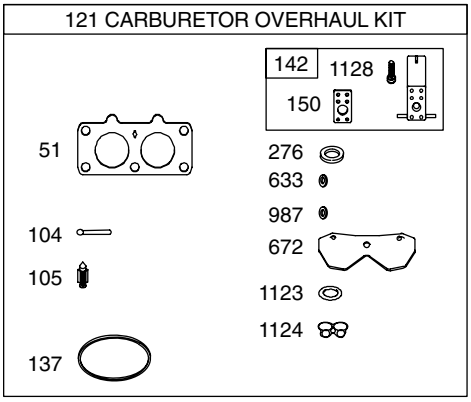


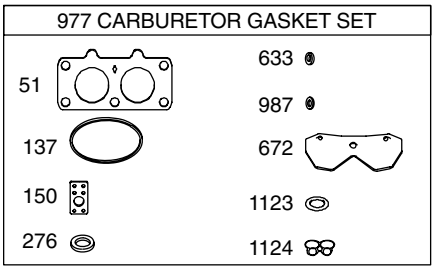








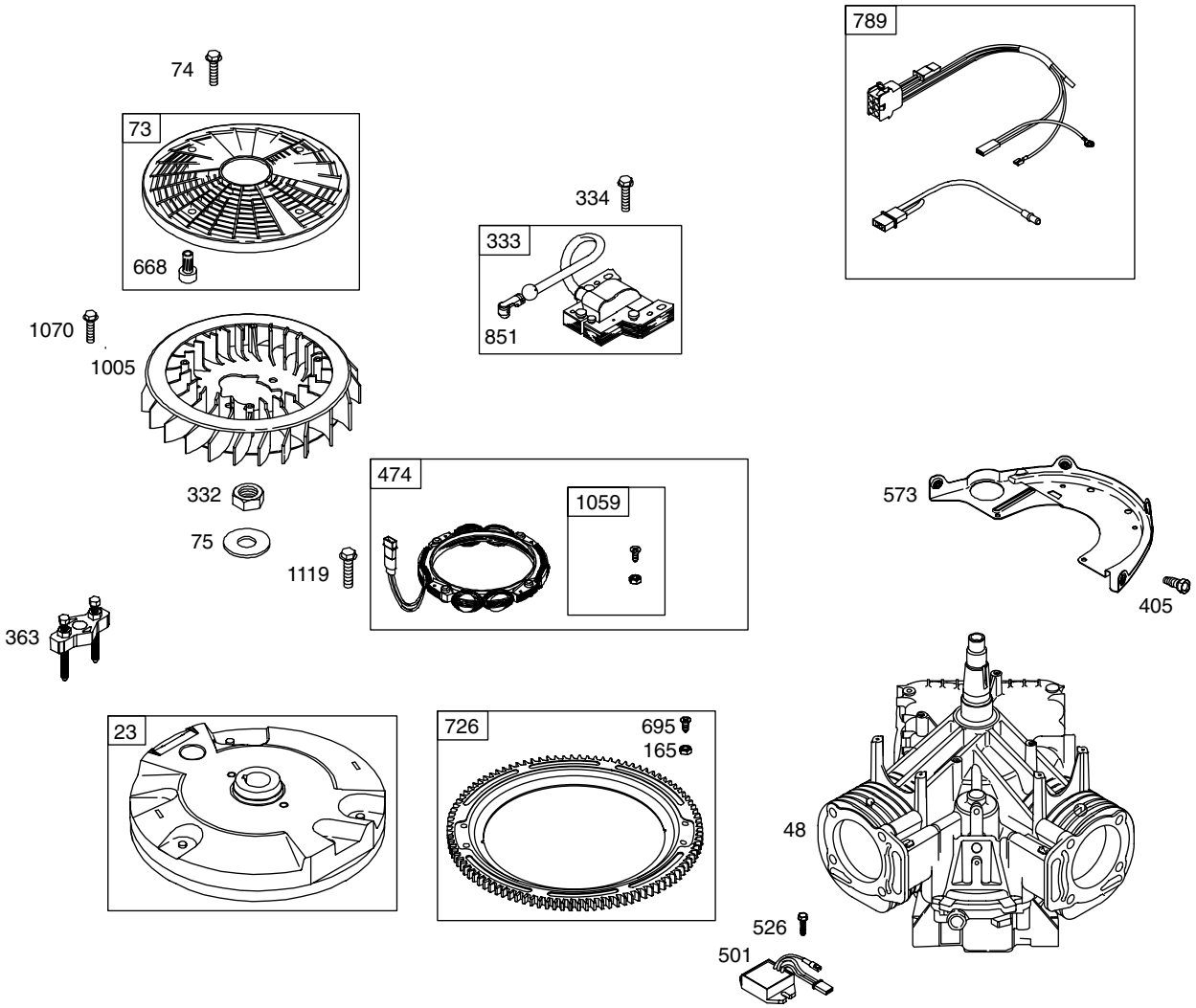


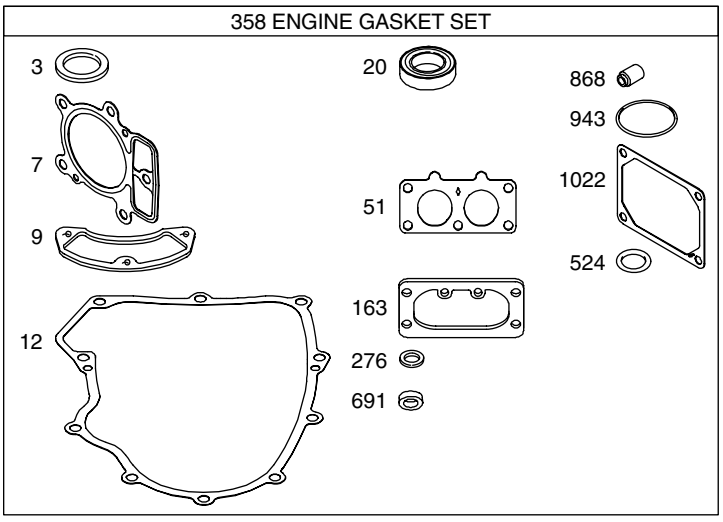


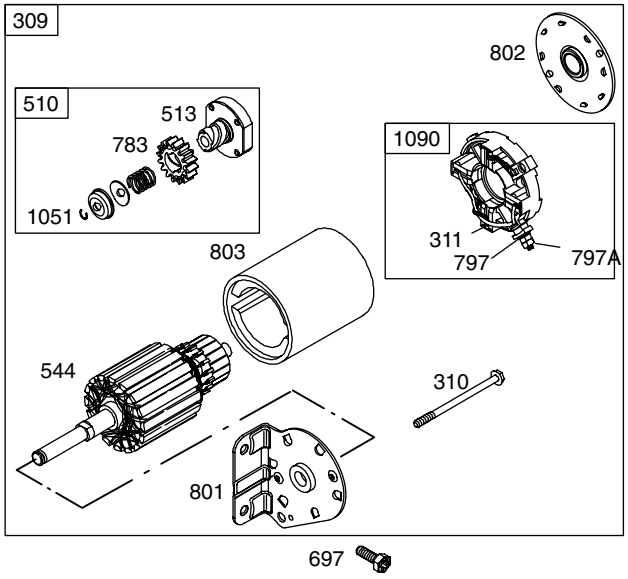
REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

BRIGGS ENGINE - MODEL NUMBER 446777, TYPE NUMBER 0244-E1







REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

BRIGGS ENGINE - MODEL NUMBER 446777, TYPE NUMBER 0244-E1

KEY NO.	PART NO.		DESCRIPTION
1	699753		Cylinder Assembly
2	499585		Kit-Bushing/Seal (Magneto Side)
3	391086	•	Seal-Oil (Magneto Side)
4	699747		Sump-Engine
5	697580		Head-Cylinder (Cylinder 1)
5A	697581		Head-Cylinder (Cylinder 2)
7	693997	•+	Gasket-Cylinder Head
8	499601		Breather Assembly
9	690937	•	Gasket-Breather
10	690960		Screw (Breather Assembly)
11	690942		Tube-Breather
12	697227	•	Gasket-Crankcase
13	690360		Screw (Cylinder Head)
15	690946		Plug-Oil Drain
16	691047		Crankshaft
20	690947	•	Seal-Oil (PTO Side)
22	694966		Screw (Engine Sump)
23	691053		Flywheel
24	222698		Key-Flywheel
25	697679		Piston Assembly (Standard)
25	697681		Piston Assembly (.020” Oversize)
26	697683		Ring Set-Piston (Standard)
26	697685		Ring Set-Piston (.020” Oversize)
27	690975		Lock-Piston Pin
28	690229		Pin-Piston
29	499583		Rod-Connecting
32	690976		Screw (Connecting Rod)
33	697576		Valve-Exhaust
34	499597		Valve-Intake
35	690963		Spring-Valve (Intake)
36	690963		Spring-Valve (Exhaust)
42	499586		Keeper-Valve
45	690977		Tappet-Valve
46	699748		Camshaft
48	698173		Short Block
50	695241		Manifold-Intake
51	690950	• Ø‡	Gasket-Intake
53	690951		Stud (Carburetor)
54	695240		Screw (Intake Manifold)
73	691055		Screen-Rotating
74	698425		Screw (Rotating Screen)
75	691056		Washer (Flywheel)
89	690283		Plug-Oil
95	690718		Screw (Throttle Valve)
98	699721		Kit-Idle Speed
104	694918	Ø	Pin-Float Hinge
105	698537	Ø	Valve-Float Needle
108	699723		Valve-Choke
117	699494		Jet-Main (Standard)
117A	699495		Jet-Main (Standard)
121	699734		Kit-Carburetor Overhaul
125	699709		Carburetor
130	690993		Valve-Throttle
131	499805		Kit-Throttle Shaft
133	699724		Float-Carburetor
135	699729		Tube-Fuel Transfer
137	690994	Ø‡	Gasket-Float Bowl
141	699722		Kit-Choke Shaft
142	699726	Ø	Nozzle-Carburetor
146	690979		Key-Timing
150	690995	Ø‡	Gasket-Nozzle
160	699727		Retainer-Solenoid
163	691001	•+	Gasket-Air Cleaner
165	693148		Nut (Ring Gear)
187	698472		Line-Fuel (Molded)
187A	697712		Line-Fuel (Molded)
188	690960		Screw (Control Bracket)
192	690083		Adjuster-Rocker Arm
209	697674		Spring-Governor
211	691019		Spring-Governed Idle
212	695238		Link-Throttle
213	691021		Bracket-Choke Control
216	691022		Link-Choke
219	698231		Gear-Governor
220	690412		Washer (Governor Lever)
222	698761		Bracket-Control
227	691048		Lever-Governor Control
231	690718		Screw (Choke Valve)
240	695666		Filter-Fuel
250	690957		Retainer-Breather
252	690956		Collector-Oil
265	691024		Clamp-Casing
267	695134		Screw (Casing Clamp)
276	690997	•Ø+‡	Washer-Sealing
287	690960		Screw (Dipstick Tube)
304	698073		Housing-Blower
305	691005		Screw (Blower Housing)
309	691262		Motor-Starter
310	691263		Bolt-Starter Motor
311	497608		Brush Set
332	691059		Nut (Flywheel)
333	691060		Armature-Magneto
334	691061		Screw (Magneto Armature)
337	491055		Spark Plug
358	694012		Set-Engine Gasket
363	19203		Flywheel Puller
383	19374		Wrench-Spark Plug
385	690960		Screw (Fuel Pump)
387	808656		Pump-Fuel
404	690442		Washer (Governor Crank)

• Included in Engine Gasket Set, Key. No. 358
Ø Included in Carburetor Overhaul Kit, Key. No. 121
‡ Included in Carburetor Gasket Set, Key. No. 977
+ Included in Valve Gasket Set, Key. No. 1095

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

REPAIR PARTS

TRACTOR - - MODEL NUMBER 944.604060

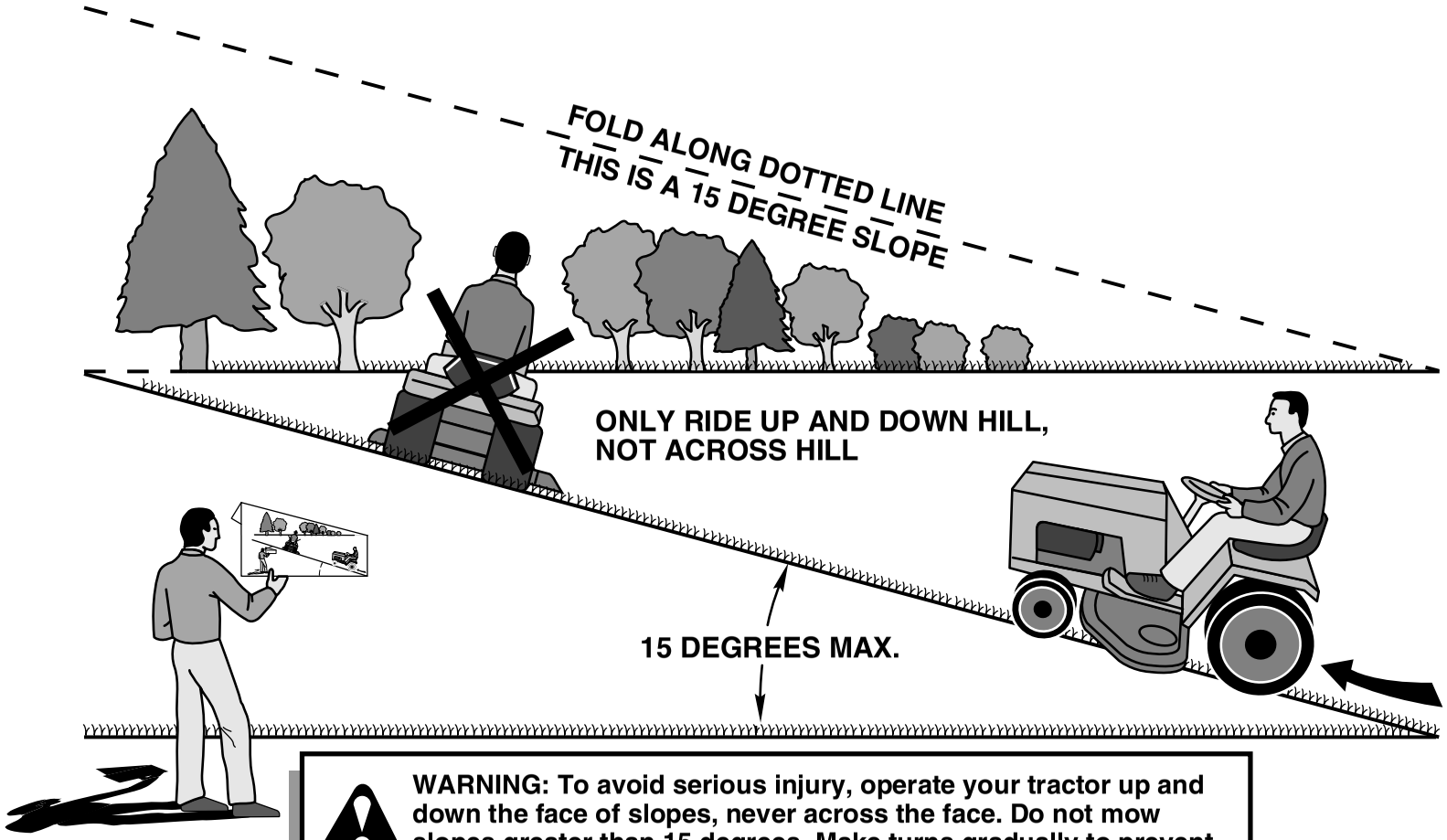
BRIGGS ENGINE - MODEL NUMBER 446777, TYPE NUMBER 0244-E1

KEY NO.	PART NO.		DESCRIPTION
405	697820		Screw (Back Plate)
418	690999		Plate-Carburetor
445	698754		Filter-Air Cleaner Cartridge
447	691003		Screw (Air Guide Cover)
447A	690960		Screw (Air Guide Cover)
474	696458		Alternator
501	691185		Regulator
505	691029		Nut (Governor Control Lever)
510	497606		Drive-Starter
513	692024		Clutch-Drive
523	691036		Dipstick
524	691032	•	Seal-Dipstick Tube
525	691037		Tube-Dipstick
526	690960		Screw (Regulator)
544	---------		Armature-Starter (Service with 691262 Starter Motor)
552	690552		Bushing-Governor Crank
552A	690553		Bushing-Governor Crank
562	690311		Bolt (Governor Control Lever)
573	691009		Plate-Back
601	691038		Clamp-Hose
615	698290		Retainer-Governor Shaft
616	691045		Crank-Governor
628	690960		Screw (Fuel Pump Bracket)
633	690998	Ø‡	Seal-Choke/Throttle Shaft
635	66538		Boot-Spark Plug
654	690958		Nut (Carburetor)
668	691215		Spacer
672	690234	Ø‡	Gasket-Carburetor Plate
691	690657	•	Seal-Governor Shaft
695	693149		Screw (Ring Gear)
697	690372		Screw (Drive Cap)
703	691010		Clip
718	690959		Pin-Locating
726	499612		Gear-Ring
741	690980		Gear-Timing
742	690328		Retainer-E Ring
750	696999		Screw (Oil Pump Cover)
783	693058		Gear-Pinion
788	691039		Bracket-Fuel Pump
789	696576		Harness-Wiring
797	691029		Nut (Brush Retainer)
797A	693167		Nut (Brush Retainer)
798	690967		Screw (Rocker Arm)
801	691283		Cap-Drive
802	691286		Cap-End
803	---------		Housing-Starter (Service with 691262 Starter Motor)
842	691031	•	Seal-Dipstick/Tube
847	499602		Dipstick/Tube Assembly
851	493880		Terminal-Spark Plug
855	698072		Adapter-Air
865	691012		Cover-Air Guide
865A	691014		Cover-Air Guide
865B	691015		Cover-Air Guide
868	690968	•+	Seal-Valve
914	691127		Screw (Rocker Cover)
918	694000		Hose-Vacuum
929	695239		Screw (Choke Control Bracket)
943	690589	•	Seal-O Ring (Oil Pump Cover)
947	699728		Solenoid-Fuel
965	499613		Cover-Oil Pump
967	273638		Filter-Pre Cleaner
968	698075		Cover-Air Cleaner
975	499810		Bowl-Float
977	699735		Gasket Set-Carburetor
987	691000	Ø‡	Seal-Throttle Shaft
1005	698760		Fan-Flywheel
1013	690954		Nipple-Oil Filter
1017	690770		Screen-Oil Pump
1019	690103		Kit-Label
1022	690971	•+	Gasket-Rocker Cover
1023	499599		Cover-Rocker (Cylinder 1)
1023A	499600		Cover-Rocker (Cylinder 2)
1024	499054		Pump-Oil
1026	690981		Rod-Push (Steel)
1026A	690982		Rod-Push (Aluminum)
1027	696854		Filter-Oil
1029	690972		Arm-Rocker
1035	691042		Shaft-Pump
1036	697913		Label-Emission
1051	691265		Ring-Retaining
1054	280275		Cable-Tie
1058	275475		Owner's Manual
1059	698516		Kit-Screw/Washer
1070	691058		Screw (Flywheel Fan)
1090	691293		Retainer-Brush
1095	694013		Gasket Set-Valve
1100	690973		Pivot-Rocker Arm
1119	691183		Screw (Alternator)
1123	699725	Ø‡	Seal-O Ring (Solenoid Retainer)
1124	690988	Ø‡	Seal-O Ring (Fuel Transfer Tube)
1126	690991		Screw (Fuel Transfer Tube)
1127	690992		Screw (Float Bowl)
1267	698440		Latch-Blower Housing
1329	446777-0026		Replacement Engine (Transfer 6 pin and Exhaust)
1330	273521		Repair Manual
1342	699731		Extension-Fuel Transfer Tube

• Included in Engine Gasket Set, Key. No. 358
Ø Included in Carburetor Overhaul Kit, Key. No. 121
‡ Included in Carburetor Gasket Set, Key. No. 977
\+ Included in Valve Gasket Set, Key. No. 1095

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

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



WARNING: To avoid serious injury, operate your tractor up and down the face of slopes, never across the face. Do not mow slopes greater than 15 degrees. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

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

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