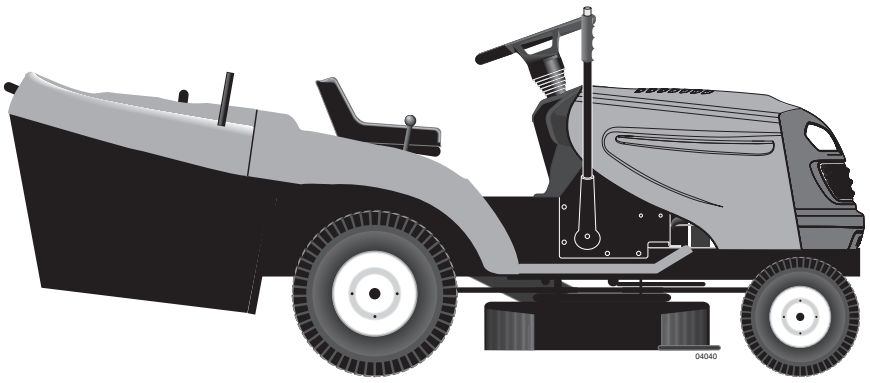
SEARS

OWNER'S MANUAL

MODEL NO. 607900

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



CRAFTSMAN®

18.5 HP ELECTRIC START 36" MOWER AUTOMATIC TRANSMISSION CENTER REAR DISCHARGE

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

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

SAFETY RULES

Safe Operation Practices for Ride-On Mowers

DANGER: 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.

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.

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.

I. GENERAL OPERATION

- Read, understand, and follow all instructions on the machine and in the manual before starting.
- Do not put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.
- 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 blades.
- Be sure the area is clear of bystanders before operating. 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.
- Never direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop the blades when crossing gravel surfaces.
- Do not operate machine without the entire grass catcher, discharge guard, or other safety devices in place and working.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.
- Disengage blades when not mowing. Shut off engine and wait for all parts to come to a complete stop before cleaning the machine, removing the grass catcher, or unclogging the discharge guard.
- Operate machine 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.
- Always wear eye protection when operating machine.
- 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.
- Follow the manufacturer's recommendation for wheel weights or counterweights.
- 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 tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

- Mow up and down slopes, not across.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Choose a low ground speed so that you will not have to stop or shift while on the slope.
- Do not mow on wet grass. Tires may lose traction. Always keep the machine in gear when going down slopes. Do not shift to neutral and coast downhill.
- Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly straight down the slope.
- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.
- Use extra care while operating machine with grass catchers or other attachments; they can affect the stability of the machine. Do no use on steep slopes.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not mow near drop-offs, ditches, or embankments. The machine could suddenly roll over if a wheel is over the edge or if the edge caves in.

SAFETY RULES

Safe Operation Practices for Ride-On Mowers

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 in the watchful care of a responsible adult other than the operator.
- Be alert and turn machine off if a child enters the area.
- Before and while backing, look behind and down for small children.
- Never carry children, even with the blades shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.

IV. TOWING

- Tow only with a machine that has a hitch designed for towing. Do not attach towed equipment except at the hitch point.
- Follow the manufacturer's recommendation for weight limits for towed equipment and towing on slopes.
- Never allow children or others in or on towed equipment.
- On slopes, the weight of the towed equipment may cause loss of traction and loss of control.
- Travel slowly and allow extra distance to stop.

V. SERVICE

SAFE HANDLING OF GASOLINE

To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.

- Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- Use only approved gasoline container.
- Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling.
- Never fuel the machine indoors.
- Never store the machine or fuel container where there is an open flame, spark, or pilot light such as on a water heater or other appliances.
- Never fill containers inside a vehicle or on a truck or trailer bed with plastic liner. Always place containers on the ground away from your vehicle when filling.
- Remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.
- Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
- If fuel is spilled on clothing, change clothing immediately.
- Never overfill fuel tank. Replace gas cap and tighten securely.

GENERAL SERVICE

- Never operate machine in a closed area.
- Keep all nuts and bolts tight to be sure the equipment is in safe working 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 and remove any fuel-soaked debris. Allow machine to cool before storing.
- If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before restarting.
- Never make any adjustments or repairs with the engine running.
- Check grass catcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently. Adjust and service as required.
- Maintain or replace safety and instruction labels, as necessary.

- Be sure the area is clear of bystanders before operating. 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.
- Never carry children, even with the blades shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.
- Keep children out of the mowing area and in the watchful care of a responsible adult other than the operator.
- Be alert and turn machine off if a child enters the area.
- Before and while backing, look behind and down for small children.
- Mow up and down slopes (15° Max), not across.
- Be alert and turn machine off if a child enters the area.
- Choose a low ground speed so that you will not have to stop or shift while on the slope.
- Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly straight down the slope.
- If machine stops while going uphill, disengage blades, shift into reverse and back down slowly.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.

PRODUCT SPECIFICATIONS

Gasoline Capacity and type:	2.0 Gallons Unleaded Regular
Oil Type (API-SG-SL):	SAE 10W30 (above 32°F) SAE 5W-30 (below 32°F)
Oil Capacity:	W/ Filter: 56 oz. W/O Filter: 48 oz.
Spark Plug:	Champion RC12YC (Gap: .030")
Ground Speed (MPH):	Forward: 0 – 5.5 Reverse: 0 – 2.4
Charging System:	9 AMPS @ 3600 RPM
Battery:	AMP/HR: 28 MIN. CCA: 230 CASE SIZE: U1R
Blade Bolt Torque:	27-35 FT. LBS.

CONGRATULATIONS on your purchase of a new tractor. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

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

CUSTOMER RESPONSIBILITIES

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

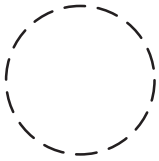
WARNING: This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

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

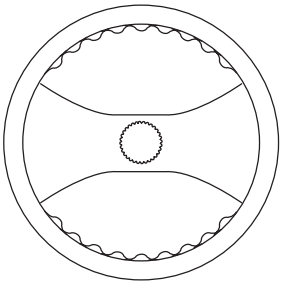
TABLE OF CONTENTS

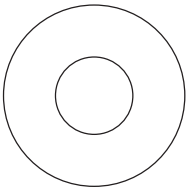
UNASSEMBLED PARTS

Steering Wheel

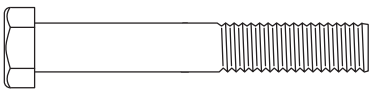


Steering
Wheel Insert



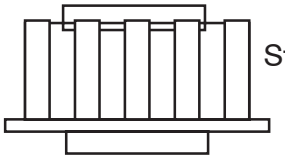


(1) Large Flat Washer



(1) Hex Bolt
5/16-18 x 4

(1) 5/16 Lock Washer

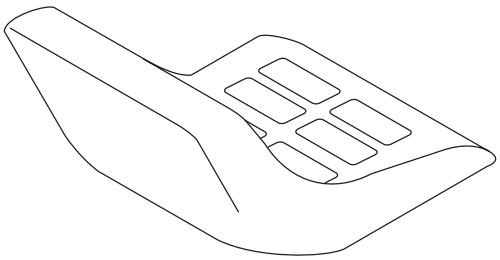


Steering Wheel
Adapter

Steering
Boot

Steering
Extension
Shaft

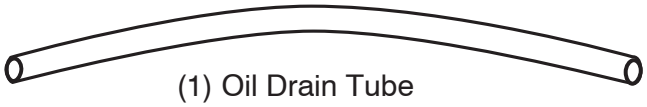
Seat



(1) Seat

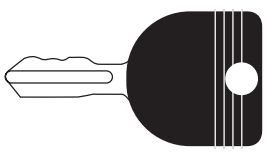
(1) Washer

(1) Knob



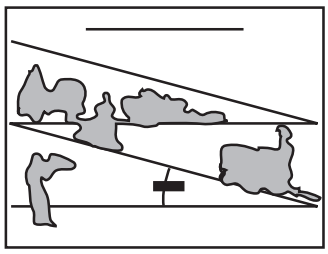
(1) Oil Drain Tube
For Future Use

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.

(2) 7/16" wrenches	Utility knife
(1) 3/4" wrenches	Tire pressure gauge
(1) 3/4" socket w/drive ratchet	Pliers

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 dashed lines on all four panels of carton. Remove end panels and lay side panels flat.
- Check for any additional loose parts or cartons and remove.

BEFORE REMOVING TRACTOR FROM SKID

ATTACH STEERING WHEEL (See Fig. 1)

- Remove locknut 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.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto steering wheel adapter.
- Secure steering wheel to steering shaft with locknut 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.

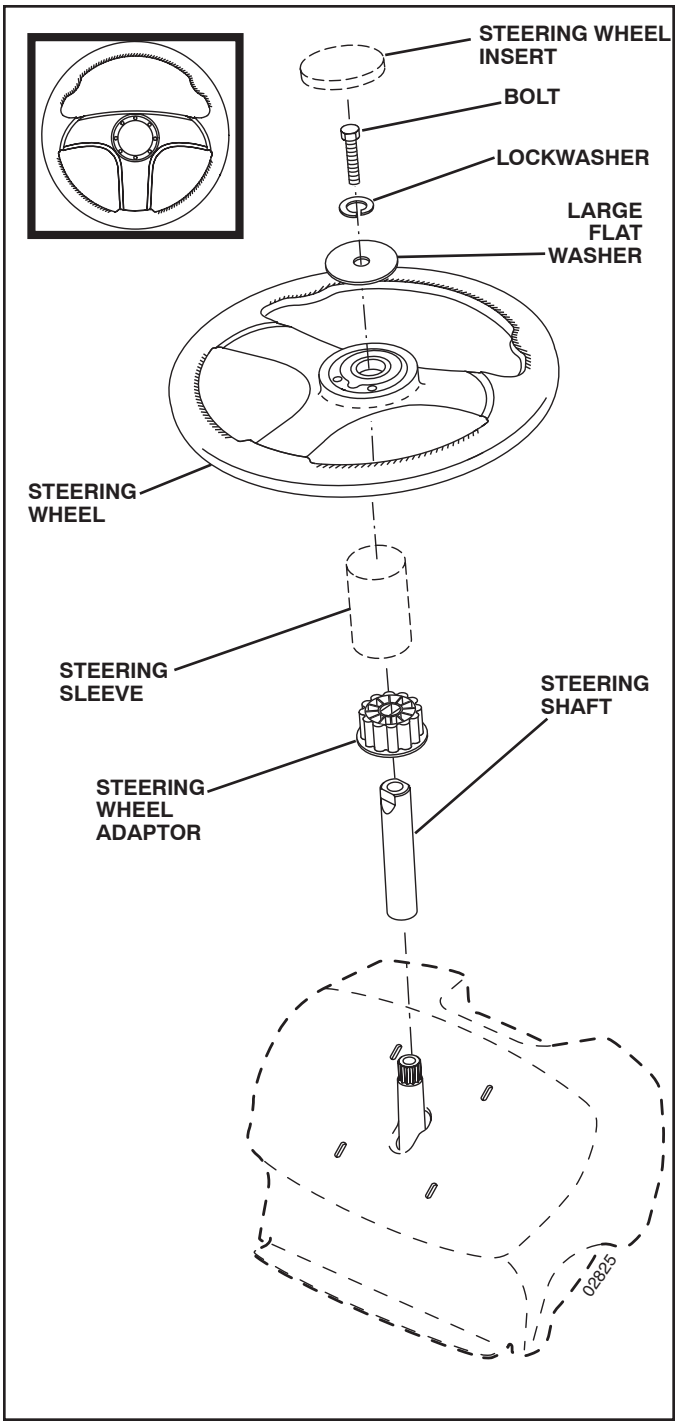


FIG. 1

ASSEMBLY

CONNECT BATTERY (See Figs. 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.

- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in the Maintenance section of this manual for charging instructions).
- Remove battery cover.
- Remove terminal protective caps and discard.
- First connect RED battery cable to positive (+) terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt and keps nut. Tighten securely.
- Replace battery cover.

Open battery cover for:

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

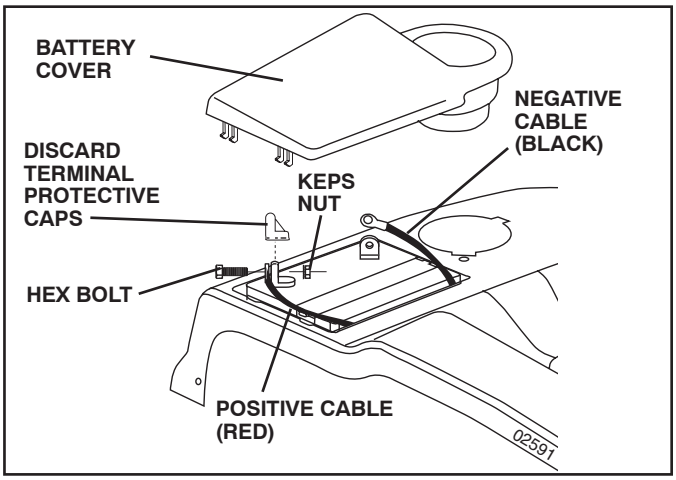


FIG. 2

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 bolt is positioned over large slotted hole in pan.
- Push down on seat to engage shoulder bolt in slot and pull seat towards rear of tractor.
- Pivot seat and pan forward and assemble adjustment knob and flat washer loosely. Do not tighten.
- Lower seat into operating position and sit on 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.

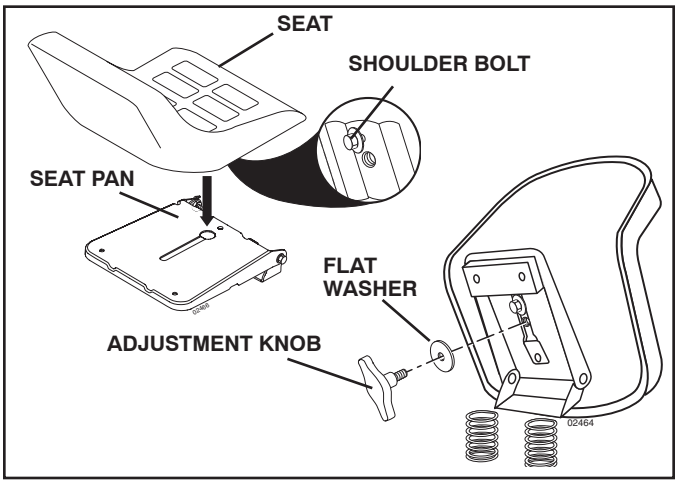


FIG. 3

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

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.

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

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

TO INSTALL BAGGER COMPONENTS TO TRACTOR (See Figs. 4A-4D)

- Remove discharge chute from rear of tractor. Unhook the two (2) straps and pull chute out and away from tractor.
- Remove the two (2) 3/8 nuts and flat washers from the bolts at the tractor back plate.

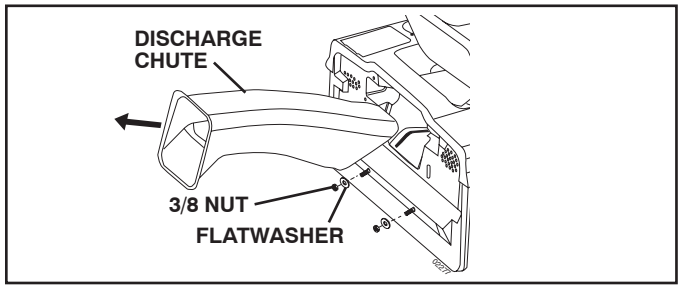


FIG. 4A

- Using the nuts and flat washers removed from tractor back plate, install the bagger support tube to the back plate as shown. Tighten securely.

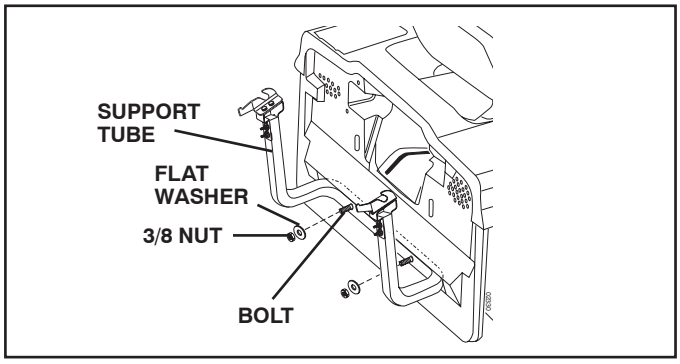


FIG. 4B

- Install the two upper support brackets through the back plate and to the chassis, install the clevis pin 10x17mm and secure with retainer spring.
- Assemble both support brackets to the outside of the bagger support tube using two each 3/8 x 63,5mm hex bolts13/32" I.D. flat washers and 3/8 locknuts from parts bag. Tighten securely.
- Replace discharge chute into rear opening of tractor. Secure the chute with the two hook straps.

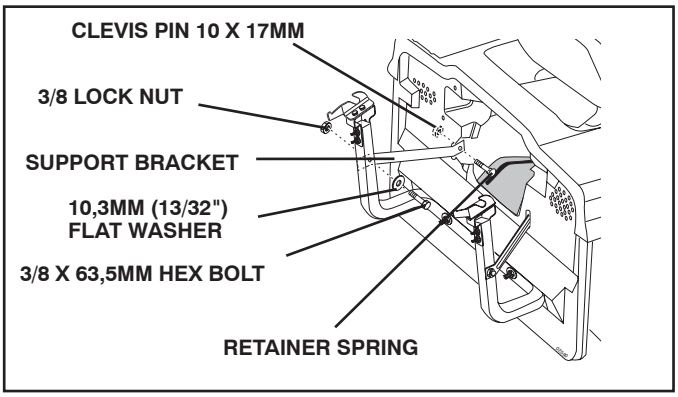


FIG. 4C

NOTE: The strap hook must go through the discharge chute only. Do not allow the hook to enter the slot in the tractor back plate. This will allow the discharge chute to float with the mower deck when moving on uneven terrain.

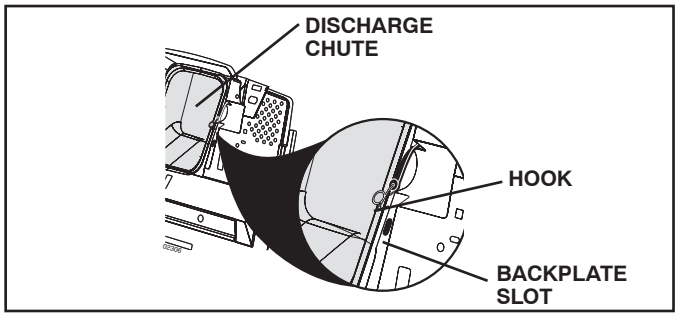


FIG. 4D

ASSEMBLY

TO ASSEMBLE BAGGER (See Figs. 5-8)

- Unfold bag by pivoting front bagger tube all the way forward and pressing the bottom vinyl binding onto the tube.
- Inside the bag, install spreader bars and retainer springs onto pins on both sides of bag as shown.
- Press the vinyl bindings onto the sides of front bagger tube.
- Slide the bagger dump handle through the hole in the bagger top, install the clevis pin 10 x 44mm and secure with retainer spring.

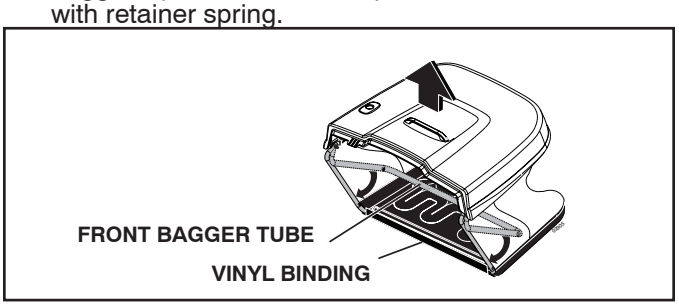


FIG. 5

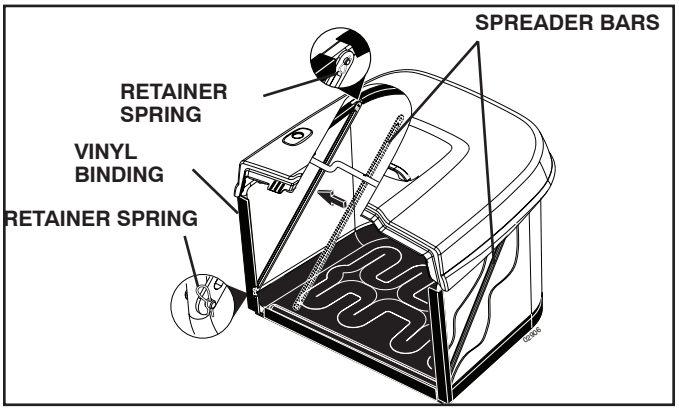


FIG. 6

- Push cap over end of bagger dump handle.

NOTE: For future use, the clevis pin may be removed in order to use the handle to clear the chute in the event it has become clogged.

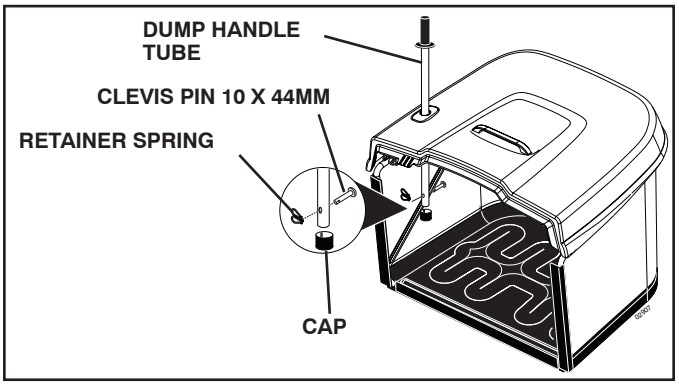


FIG. 7

BAGGER ADJUSTMENT (See Fig. 8)

For proper bag function and appearance, it may be necessary to adjust the bagger assembly. There should be 6mm (1/4")-9mm (3/8") gap between the bagger top and fender and the bagger top surface should be even with the top surface of the fender. To adjust bagger position:

HORIZONTAL ADJUSTMENT

- Slightly loosen the nuts securing the bagger RH and LH horizontal adjustment brackets. Loosen only enough so the brackets keep their position, but allow them to be moved.
- Move the brackets the amount forward or backward you wish the bag assembly to move. Retighten the nuts securely.

VERTICAL ADJUSTMENT

- Slightly loosen the nuts securing the vertical adjustment brackets. Loosen only enough so the brackets keep their position, but allow them to be moved.
- Move the brackets the amount up or down you wish the bag assembly to move. Retighten the nuts securely.
- Reinstall the bagger assembly and check the bagger to fender fit. If necessary, repeat the procedure until proper fit is attained.
- After proper fit is attained, remove bagger from tractor and install bagger latch (4) to tractor back plate as shown. Tighten securely.
- Install and carefully lower bagger to actuate latch.
- Measure distance between bagger and latch as shown.

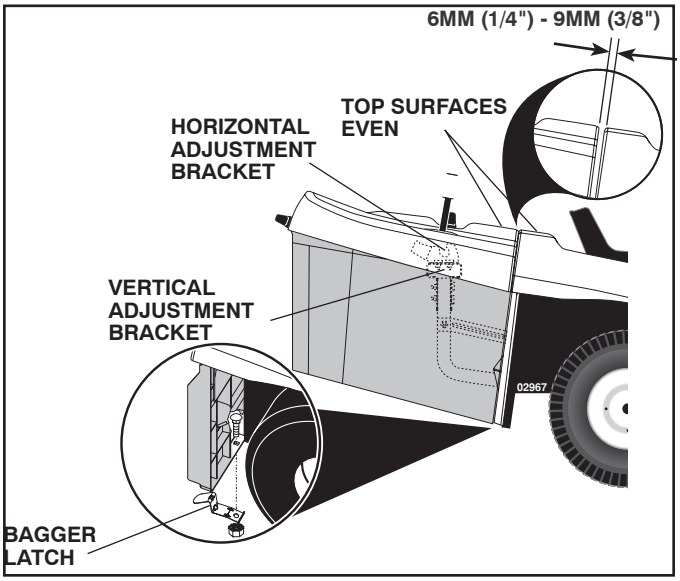


FIG. 8

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 on tires.

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 operating properly. See "TO CHECK 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 remaianing loose parts in carton.
- ✓ Battery is properly prepared and charged.
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated at the factory).
- ✓ Be sure mower deck is properly leveled side-to-side/ front-to-rear for best cutting results. (Tires must be properly inflated for leveling).
- ✓ Check mower and drive belts. Be sure they are routed properly around pulleys and inside all belt keepers.
- ✓ Check wiring. See that all connections are still secure and wires are properly clamped.
- ✓ Before driving tractor, be sure freewheel control is in drive position.

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

- ✓ Engine oil is at proper level.
- ✓ Fuel tank is filled with fresh, clean, regular unleaded gasoline.
- ✓ Become familiar with all controls - their location and function. Operate them before you start the engine.
- ✓ Be sure brake system is in safe operating condition.
- ✓ It is important to purge the transmission before operating your tractor for the first time. Follow proper starting and transmission purging instructions (See "TO START ENGINE" and "PURGE TRANSMISSION" in the Operation section of this manual).

OPERATION

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

REVERSE NEUTRAL HIGH LOW

CHOKE

FAST

SLOW

IGNITION SWITCH

ENGINE OFF

REVERSE OPERATION SYSTEM (ROS)

ENGINE ON

ENGINE START

PARKING BRAKE

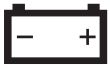
PARKING BRAKE LOCKED

PARKING BRAKE UNLOCKED

OVER TEMP LIGHT

FUEL

OIL PRESSURE



BATTERY

REVERSE

FORWARD

MOWER HEIGHT

MOWER LIFT

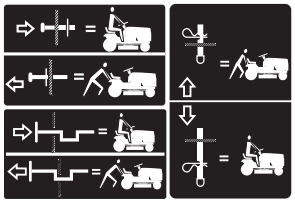
ATTACHMENT CLUTCH DISENGAGED

ATTACHMENT CLUTCH ENGAGED

BRAKE/CLUTCH PEDAL

KEEP AREA CLEAR (SEE SAFETY RULES SECTION)

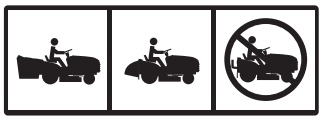
SLOPE HAZARDS



FREE WHEEL (Automatic Models only)

LIGHTS ON

BEWARE OF THROWN OBJECTS



DO NOT OPERATE WITHOUT BAGGER OR DEFLECTOR

DRAWBAR LOADING

DANGER, KEEP HANDS AND FEET AWAY

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 locations of various controls and adjustments. Save this manual for future reference.

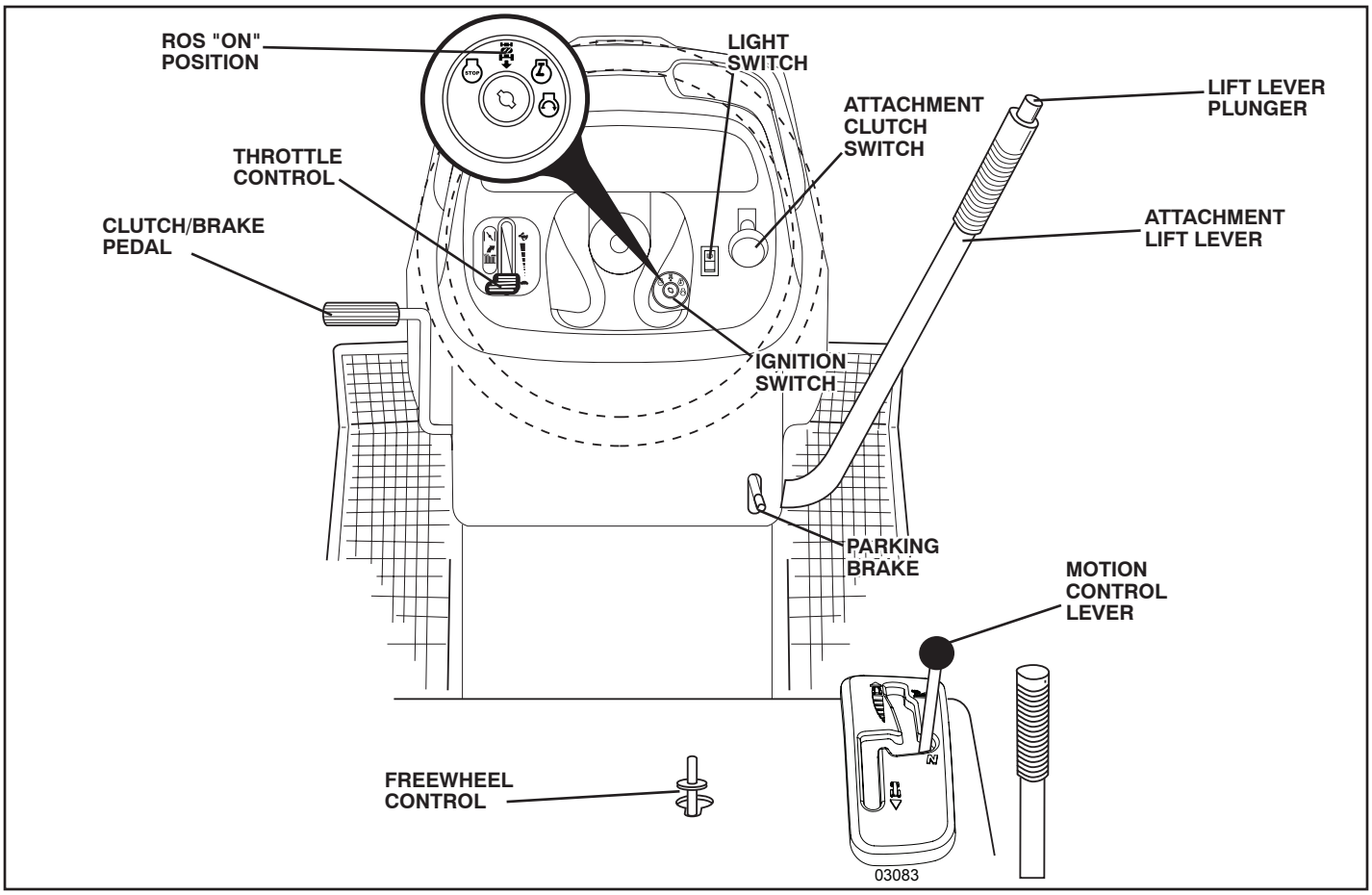


FIG. 9

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

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

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

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

FREEWHEEL CONTROL - Disengages transmission for pushing or slowly towing the tractor with the engine off.

IGNITION SWITCH - Used for starting and stopping the engine.

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

LIGHT SWITCH - Turns the headlights on and off.

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

PARKING BRAKE - Locks clutch/brake pedal into the brake position.

THROTTLE CONTROL - Used to control engine speed.

REVERSE OPERATION SYSTEM (ROS) "ON" POSITON - Allows operation of mower deck or other powered attachment while in reverse.

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. 10)

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.

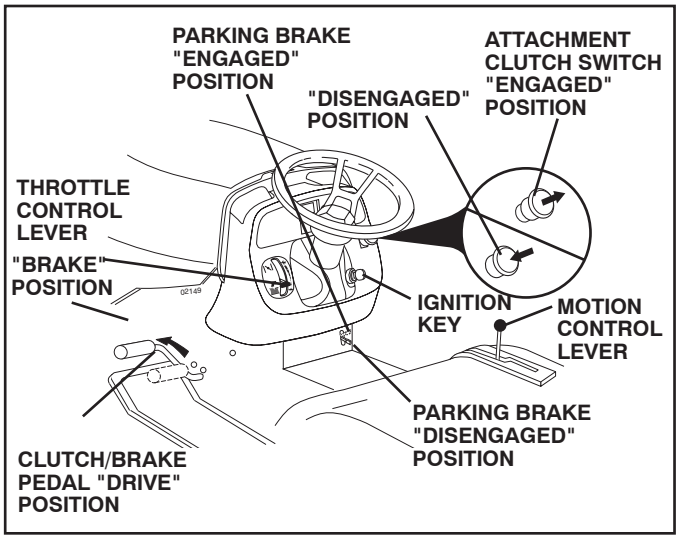


FIG. 10

STOPPING (See Fig. 10)

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 motion control lever to neutral (N) position.

ENGINE -

- Move throttle control between half and full speed (fast) position.

NOTE: Failure to move throttle control between half and full speed (fast) position, before stopping may cause engine to “backfire”.

- Turn ignition key to “STOP” position and remove key. Always remove key when leaving tractor to prevent unauthorized use.
- Never use choke to stop engine.

IMPORTANT: LEAVING THE IGNITION SWITCH IN ANY POSITION OTHER THAN "STOP" WILL CAUSE THE BATTERY TO 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. 10)

Always operate engine at full speed (fast).

- Operating engine at less than full speed (fast) reduces the engine's operating efficiency.
- Full speed (fast) offers the best mower performance.

TO MOVE FORWARD AND BACKWARD (See Fig. 10)

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

- Start tractor with motion control lever in neutral (N) position.
- Release parking brake.
- Slowly move motion control lever to desired position.

TO ADJUST GAUGE WHEELS (See Fig. 11)

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).
- With mower in desired height of cut position, gauge wheels should be assembled so they are slightly off the ground. Install gauge wheel in appropriate hole with shoulder bolt, 3/8 washer, and 3/8-16 locknut and tighten securely.
- Repeat for opposite side installing gauge wheel in same adjustment hole.

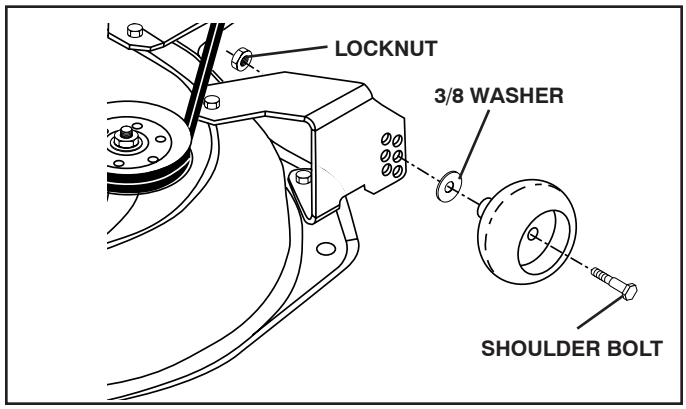


FIG. 11

TO OPERATE MOWER (See Fig. 12)

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.

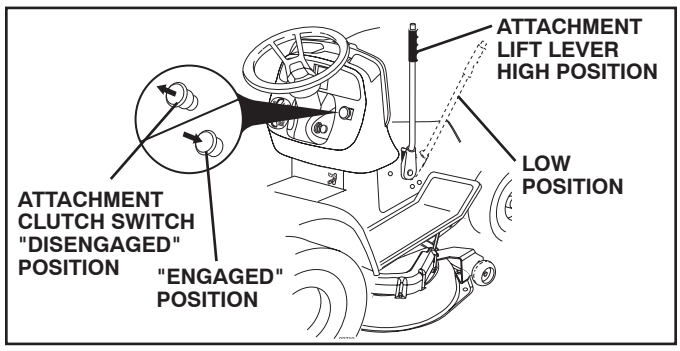


FIG. 12

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

REVERSE OPERATION SYSTEM (ROS)

Your tractor is equipped with a Reverse Operation System (ROS). Any attempt by the operator to travel in the reverse direction with the attachment clutch engaged will shut off the engine unless ignition key is placed in the ROS "ON" position.

⚠WARNING**:** Backing up with the attachment clutch engaged while mowing is strongly discouraged. Turning the ROS "ON", to allow reverse operation with the attachment clutch engaged, should only be done when the operator decides it is necessary to reposition the machine with the attachment engaged. **Do not mow in reverse unless absolutely necessary**.

USING THE REVERSE OPERATION SYSTEM (See Fig. 13)

Only use if you are certain no children or other bystanders will enter the mowing area.

- Move motion control lever to neutral (N) position.
- With engine running, turn ignition key counterclockwise to ROS "ON" position.
- Look down and behind before and while backing.
- Slowly move motion control lever to reverse (R) position to start movement.
- When use of the ROS is no longer needed, turn the ignition key clockwise to engine "ON" position.

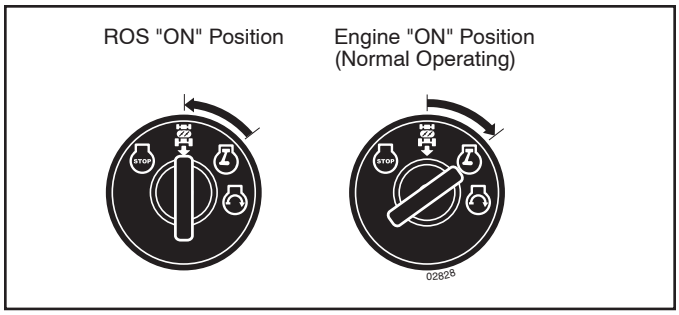


FIG. 13

TO OPERATE ON HILLS

WARNING: 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 stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.
- Move motion control lever to neutral (N) position.

IMPORTANT: THE MOTION CONTROL LEVER DOES NOT RETURN TO NEUTRAL (N) POSITION WHEN THE CLUTCH/BRAKE PEDAL IS DEPRESSED.

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

TO TRANSPORT (See Figs. 9 and 14)

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

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

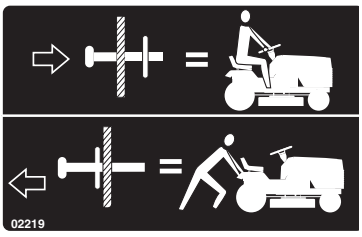


FIG. 14

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.
- 2. Unthread and remove oil fill cap/dipstick; wipe oil off. Reinsert the dipstick into the tube and rest oil fill cap on the tube. Do not thread the cap onto the tube. Remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See the 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. 9)

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

- Be sure freewheel control is in the transmission engaged position.
- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- Place motion control 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.

AUTOMATIC TRANSMISSION WARM UP

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

PURGE TRANSMISSION

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

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

IMPORTANT: SHOULD YOUR TRANSMISSION REQUIRE REMOVAL FOR SERVICE OR REPLACEMENT, IT SHOULD BE PURGED AFTER REINSTALLATION BEFORE OPERATING THE TRACTOR.

1. Place tractor safely on a level surface - that is clear and open - with engine off and parking brake set.
2. Disengage transmission by placing freewheel control in freewheeling position (See "TO TRANSPORT" in this section of manual).
3. Sitting in the tractor seat, start engine. After the engine is running, move throttle control to slow position. With motion control lever in neutral (N) position, slowly disengage clutch/brake pedal.

CAUTION: At any time, during step 4, there may be movement of the drive wheels.

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

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

MOWING TIPS

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

MULCHING MOWING TIPS

IMPORTANT: FOR BEST PERFORMANCE, KEEP MOWER HOUSING FREE OF BUILT-UP GRASS AND TRASH. CLEAN AFTER EACH USE.

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried the newly cut area will not be exposed to direct sunlight.
- For best results, adjust the mower cutting height so that the mower cuts off only the top one-third of the grass blades (See Fig. 15). For extremely heavy mulching, reduce your width of cut on each pass and mow slowly.

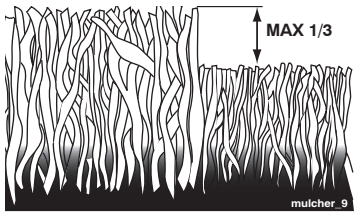


FIG. 15

- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across (perpendicular) to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.

TO DUMP BAGGER (See Fig.16)

Your tractor is equipped with a Dump Bag Alarm. To turn off the alarm disengage the attachment clutch switch.

- Position tractor in location you wish to dump bagger.
- Place motion control lever in Neutral position and set parking brake.
- Raise dump handle to its highest position. Pull handle forward to raise bagger and dump clippings.
- To continue mowing, be sure bagger is down and in proper operating position which will allow mower to operate.

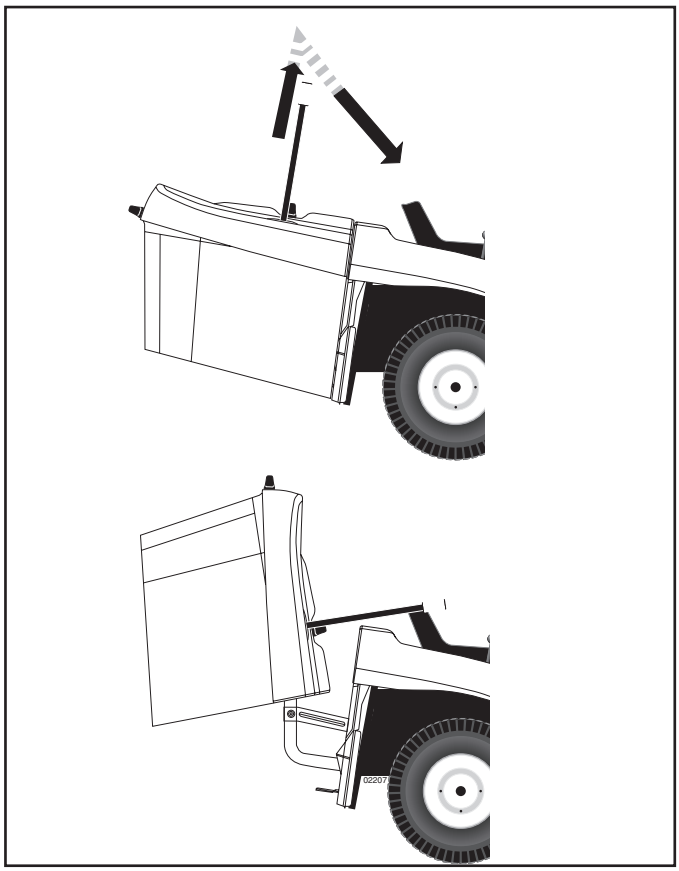


FIG. 16

TO CONVERT MOWER (See Fig.17)

(Converting to mulching or rear discharging will require a mulcher plug and discharge deflector)

MULCHING (Requires mulcher plug)

- Place deck into the high cut position.
- Remove bagger or optional rear discharge deflector.
- Unhook the two (2) straps and remove discharge chute
- Insert mulcher plug and handle assembly through back plate and onto the mower deck chute adaptor.
- Secure the plug assembly by connecting the two straps over the handle and hook into the holes provided .
- Replace bagger or optional rear discharge deflector to allow mower to operate.

You are now ready to begin mulching.

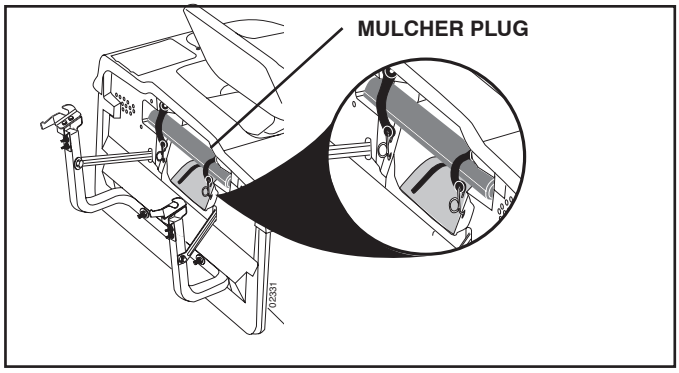


FIG. 17

BAGGING (See Fig.18)

- Place deck into the high cut position.
- Remove the rear discharge deflector or mulching plug.
- Insert the discharge chute into the opening in the backplate and onto the mower deck adaptor.
- Attach the chute to the tractor by hooking the two straps to the flange of the chute.

NOTE: The strap hook must go through the discharge chute only. Do not allow the hook to enter the slot in the tractor back plate. If it does, the discharge chute will not float with the mower deck when mowing on uneven terrain.

- Install bagger onto tractor.

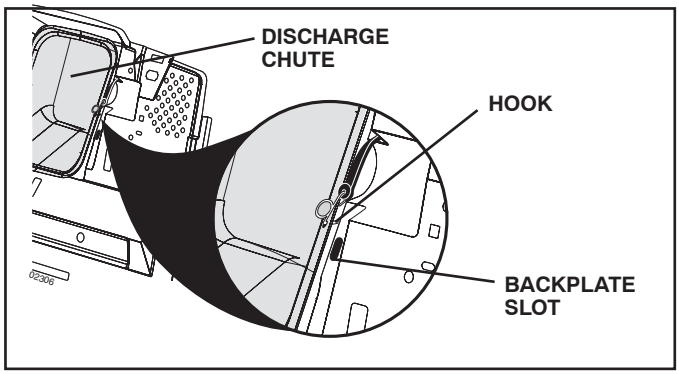


FIG. 18

REAR DISCHARGING (optional accessory required)

- Place deck into the high cut position.
- Remove bagger and mulching plug (if installed).
- Depress rear door and install discharge chute through opening in backplate and slide over deck adaptor.
- Attach the chute by hooking the two straps into the holes in the flange of the chute.

NOTE: The strap hook must go through the discharge chute only. Do not allow the hook to enter the slot in the tractor back plate. If it does, the discharge chute will not float with the mower deck when mowing on uneven terrain.

- Install the discharge deflector to the backplate by screwing the four (4) wing screws into the threaded inserts located in the backplate.
- Tighten the wing screws securely.

MAINTENANCE

	MAINTENANCE SCHEDULE	BEFORE EACH USE	EVERY 8 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY SEASON	BEFORE STORAGE
TRACTOR	Check Brake Operation	✔	✔					
	Check Tire Pressure	✔	✔					
	Check Operator Presence & ROS Systems	✔						
	Check for Loose Fasteners	✔				✔		✔
	Check/Replace Mower Blades			✔3				
	Lubrication Chart			✔				✔
	Check Battery Level			✔4				
	Clean Battery and Terminals			✔				✔
	Check Transaxle Cooling			✔				
	Check Mower Levelness				✔			
	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						✔	

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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.

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.

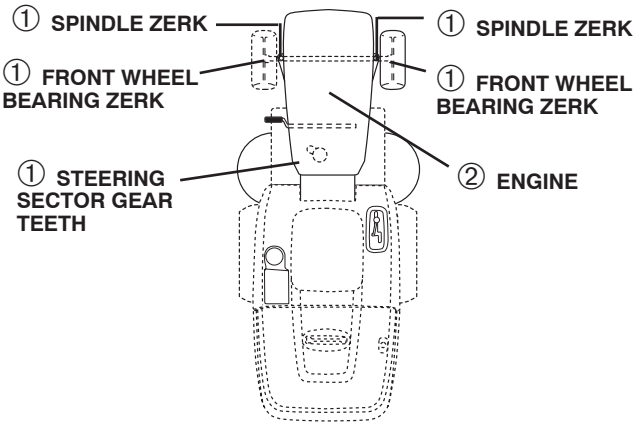
At least once a season, check to see if you should make any of the adjustments described in the Service and Adjustments section of this manual.

- 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 General Purpose Grease
② 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 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. (See “TO ADJUST BRAKE” in the Service and Adjustments section of this manual).

TIRES

- Maintain proper air pressure in all tires.
- 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 AND REVERSE OPERATION SYSTEM (ROS) (See Fig.19)

Be sure operator presence and reverse operation 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 the attachment clutch control is in the disengaged position.

CHECK OPERATOR PRESENCE SYSTEM

- 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.

CHECK REVERSE OPERATION (ROS) SYSTEM

- When the engine is running with the ignition switch in the engine "ON" position and the attachment clutch engaged, any attempt by the operator to shift into reverse should shut off the engine.
- When the engine is running with the ignition switch in the ROS "ON" position and the attachment clutch engaged, any attempt by the operator to shift into reverse should NOT shut off the engine.

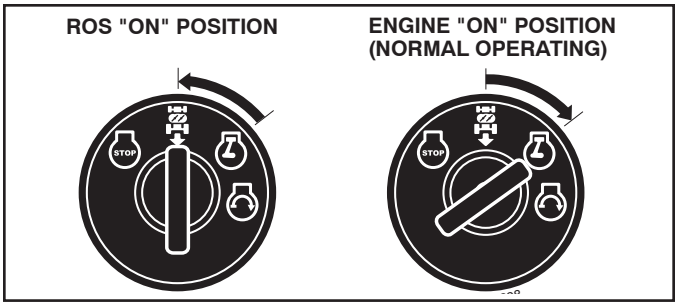


FIG.19

MAINTENANCE

BLADE CARE(See Figs.20-22)

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

IMPORTANT: THE BLADES ON YOUR MOWER ARE NOT THE SAME AND MUST BE INSTALLED ON THE CORRECT SIDE. IT IS SUGGESTED THAT YOU WORK ON ONE BLADE AT A TIME TO ENSURE PROPER ASSEMBLY OF COMPONENTS.

CAUTION: Use only a replacement blade approved by the manufacturer of your tractor. Using a blade not approved by the manufacturer of your tractor is hazardous, could damage your tractor and void your warranty.

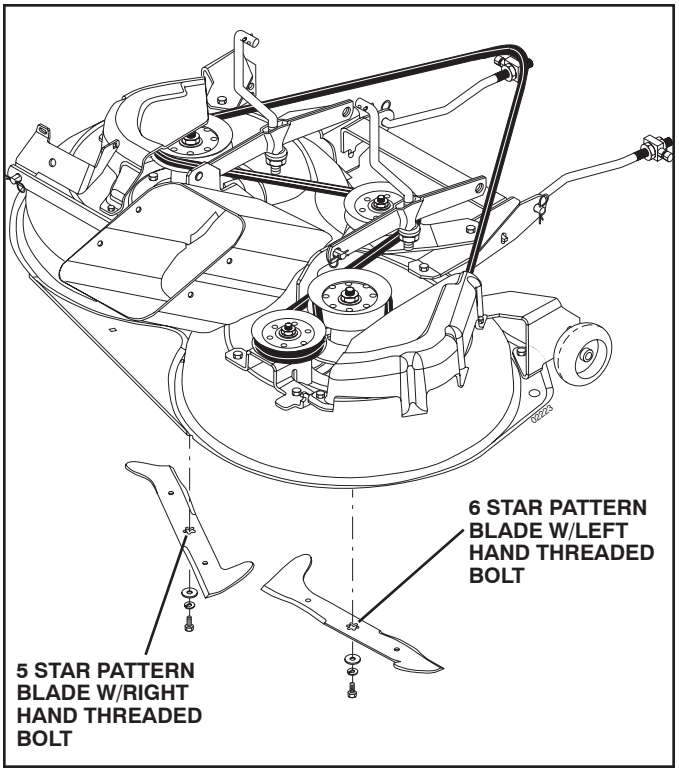


FIG.20

5 STAR PATTERN BLADE

The center of this blade has a five (5) star pattern. The bolt that attaches this blade has normal **Right Hand threads** that loosens by turning (↶) counterclockwise and tightens by turning (↷) clockwise.

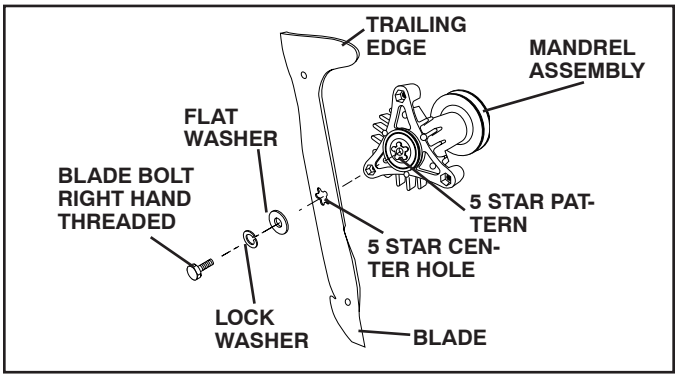


FIG.21

6 STAR PATTERN BLADE

The center of this blade has a 6 star pattern. The bolt attaching this blade has **Left Hand threads** that loosens by turning (↷) clockwise and tighten by turning (↶) counterclockwise.

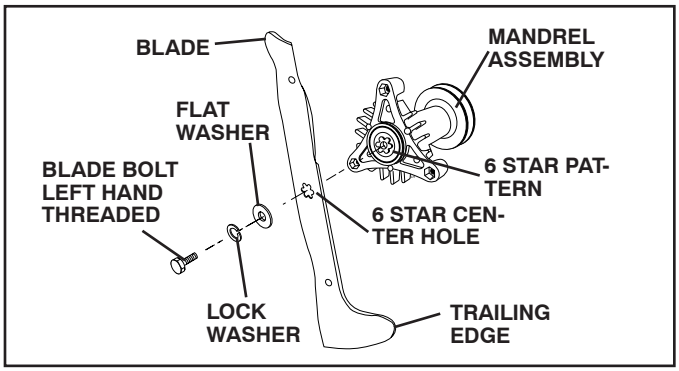


FIG. 22

BLADE REMOVAL

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

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

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

IMPORTANT: Blade bolt is grade 8 heat treated

MAINTENANCE

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 battery cover.
- 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

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

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

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

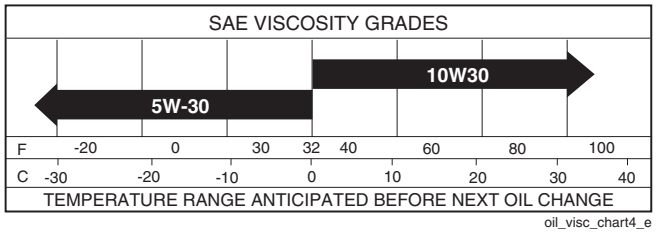
TRANSAXLE PUMP FLUID

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

ENGINE

LUBRICATION

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



oil_visc_chart4_e

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.

MAINTENANCE

TO CHANGE ENGINE OIL (SEE FIG. 23)

Determine temperature range expected before oil change. All oil must meet API service classification SG-SL.

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

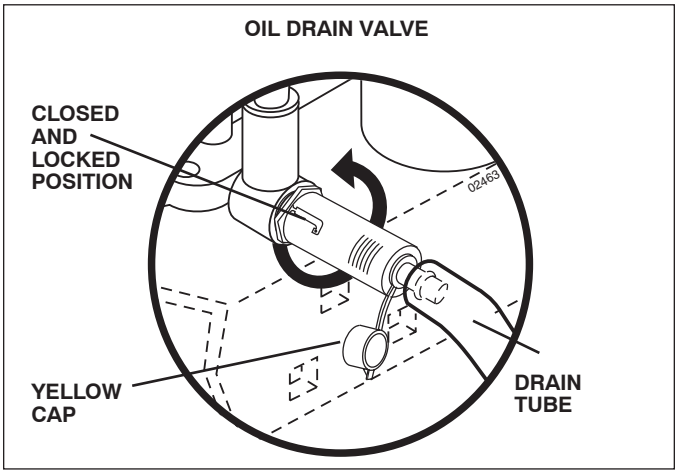


FIG. 23

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

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. See engine manual.

AIR FILTER

Your engine will not run properly using a dirty air filter. Clean the foam pre-cleaner after every 25 hours of operation or every season. Service paper cartridge every 50 hours of operation or every season, whichever occurs first. See engine manual.

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.

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. See engine manual.

IN-LINE FUEL FILTER (See Fig. 24)

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.

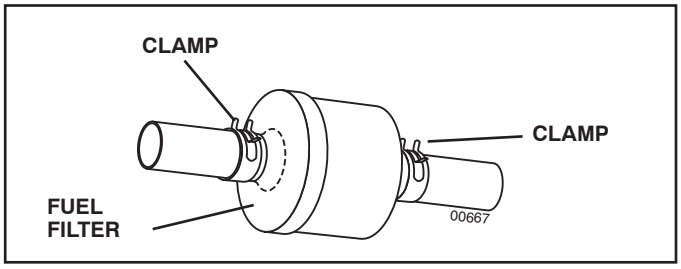


FIG. 24

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 motion control 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. 25)

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

- Place attachment clutch control in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off clutch pulley.
- Disconnect anti-sway bar from chassis bracket by removing retainer spring.
- Disconnect suspension arms from rear deck brackets by removing retainer springs.
- Disconnect front links from deck by removing retainer springs.
- Raise lift lever to raise suspension arms. Slide mower out from under tractor.

IMPORTANT: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, REMOVE THE FRONT LINKS.

TO INSTALL MOWER (See Fig. 25)

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

- Slide mower under tractor.

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

- Install belt into clutch pulley groove.
- Install left front link into the left hand front mower bracket (retain with single loop retainer springs as shown).
- Slide right side of mower back and install right front link into right hand front mower bracket (retain with single loop retainer springs).
- Place the suspension arms on mower pins, if necessary, rock and raise front of mower to align mower pins with the holes in suspension arms. Retain with double loop retainer spring, loop down as shown.
- Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.
- Raise deck to highest position.

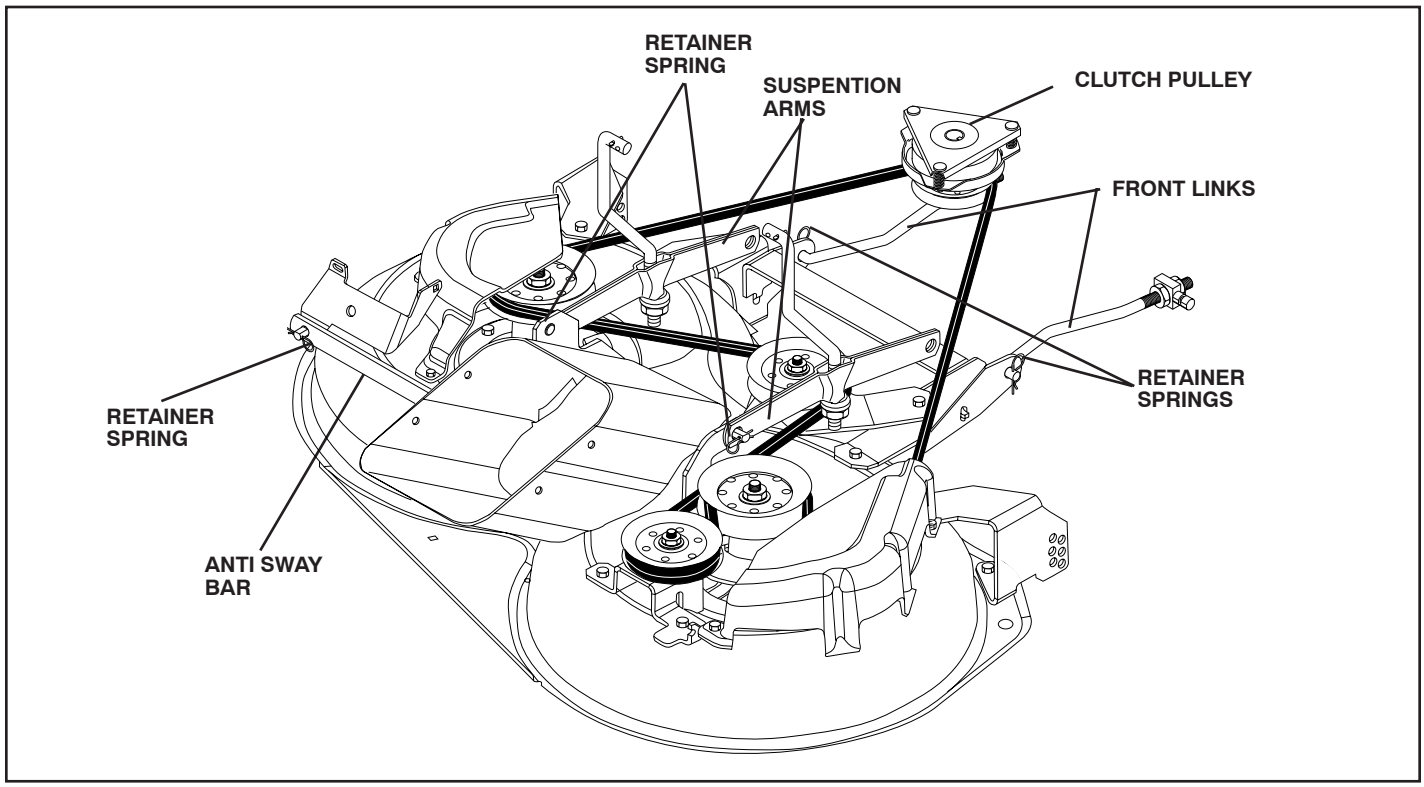


FIG. 25

SERVICE AND ADJUSTMENTS

TO LEVEL MOWER HOUSING

Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated. If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT (See Figs. 26 and 27)

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

NOTE: Three full turns of adjustment nut will change mower height about 1/8".

- Recheck measurements after adjusting.

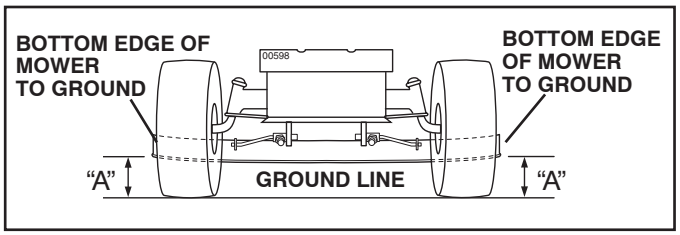


FIG. 26

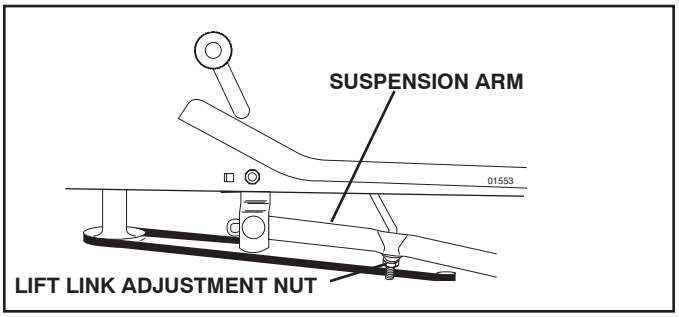


FIG. 27

FRONT-TO-BACK ADJUSTMENT (See Figs. 28-30)

IMPORTANT: DECK MUST BE LEVEL SIDE-TO-SIDE. IF THE FOLLOWING FRONT-TO-BACK ADJUSTMENT IS NECESSARY, BE SURE TO ADJUST BOTH FRONT LINKS EQUALLY SO MOWER WILL STAY LEVEL SIDE-TO-SIDE.

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

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

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

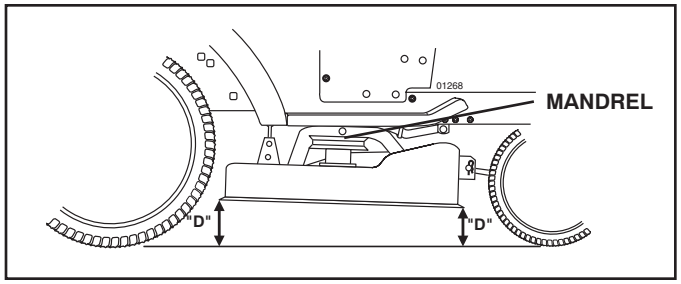


FIG. 28

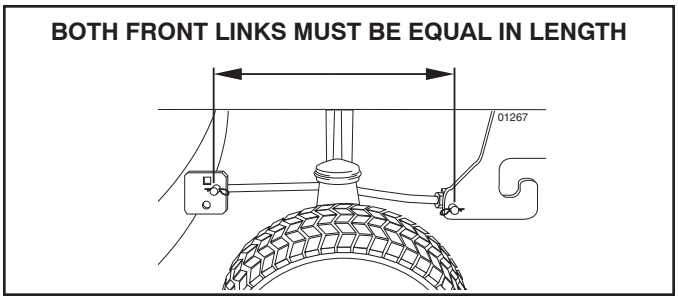


FIG. 29

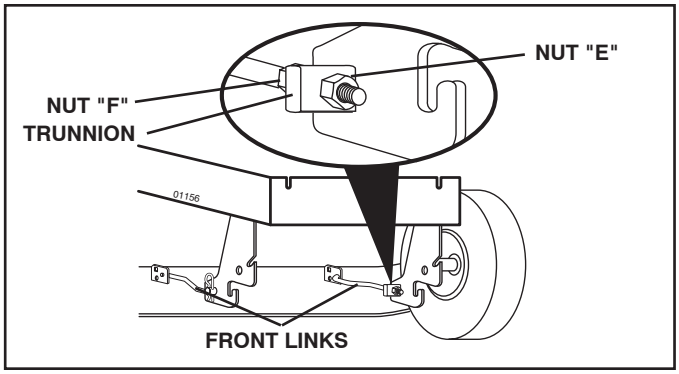


FIG. 30

TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 31)

Park the tractor on level surface. Engage parking brake.

BELT REMOVAL -

- Remove mower from tractor (See “TO REMOVE MOWER” in this section of this manual).
- Remove screws from RH mandrel cover and remove cover.
- Remove screws from LH mandrel cover and remove cover.
- Work belt off both mandrel pulleys and idler pulleys.
- Pull belt away from mower.

BELT INSTALLATION -

- Install new belt in reverse order of removal. See belt routing decal located on right mandrel cover.
- Make sure belt is in all pulley grooves and inside all belt guides.
- Install left and right mandrel covers and tighten securely. Make sure belt is in mandrel pulley cover.
- Install mower (see "To install mower" in this section of this manual).

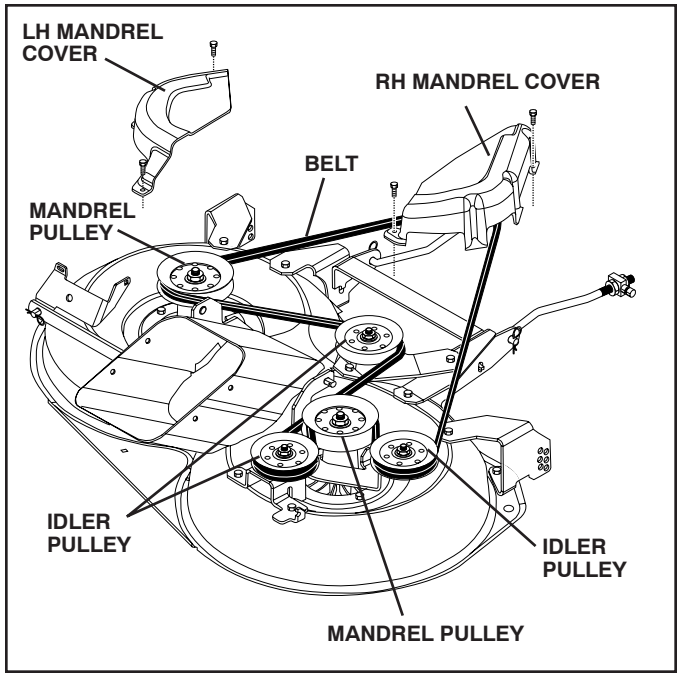


FIG. 31

TO CHECK BRAKE

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 serviced.

You may also check brake by:

1. Park tractor on a level, dry concrete or paved surface, depress brake pedal all the way down and engage parking brake.
2. Disengage transmission by placing freewheel control in “transmission disengaged” position. Pull freewheel control out and into the slot and release so it is held in the disengaged position.

The rear wheels must lock and skid when you try to manually push the tractor forward. If the rear wheels rotate, then the brake needs to be serviced. Contact a Sears or other qualified service center.

TO REPLACE MOTION DRIVE BELT (See Fig. 32)

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

BELT REMOVAL -

- Remove mower (See "TO REMOVE MOWER" in this section of manual).

NOTE: Observe entire motion drive belt and position of all belt guides and keepers.

- Disconnect clutch wire harness.
- Remove clutch locator.
- Remove belt from clutching idler and all stationary idlers.
- Remove belt downward from engine pulley and around electric clutch.
- Pull belt slack toward rear of tractor. Carefully remove belt upwards from transmission input pulley and over cooling fan blades.

BELT INSTALLATION -

- Carefully work new belt down around transmission cooling fan and onto the input pulley.
- Pull belt toward front of tractor and roll belt around electric clutch and onto engine pulley.
- Install belt through all stationary idlers and clutching idler.
- Reinstall clutch locator and tighten nut securely.
- Reconnect clutch harness.
- Make sure belt is in all pulley grooves and inside all belt guides and keepers.
- Install mower (See "TO INSTALL MOWER" in this section of manual).

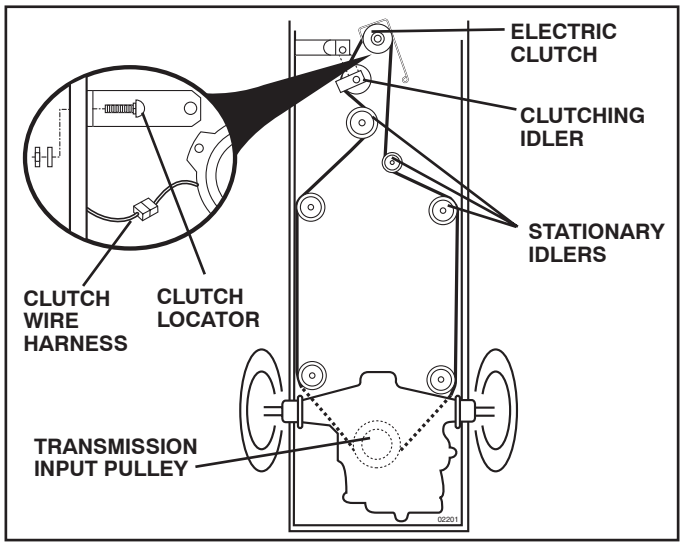


FIG. 32

TRANSMISSION REMOVAL/REPLACEMENT

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

TRANSAXLE MOTION CONTROL LEVER NEUTRAL ADJUSTMENT(See Fig. 33)

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

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

NOTE: If additional clearance is needed to get to adjustment bolt, move mower deck height to the lowest position.

After above adjustment is made, if the tractor still creeps forward or backward while motion control lever is in neutral position, follow these steps:

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

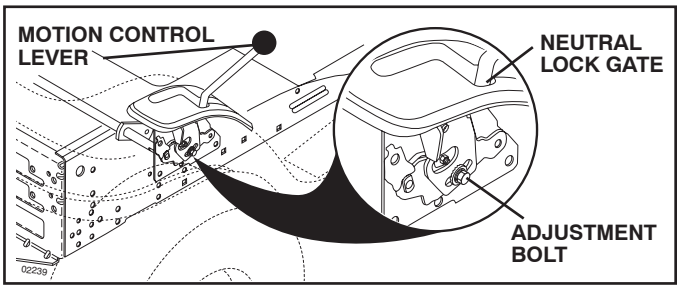


FIG. 33

SERVICE AND ADJUSTMENTS

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 (See Fig. 34)

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal (rear wheel contains a square key - Do not lose).
- Repair tire and reassemble.
- On rear wheels only: align grooves in rear wheel hub and axle. Insert square key.
- Replace washers and snap retaining ring securely in axle groove.
- Replace axle cover.

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

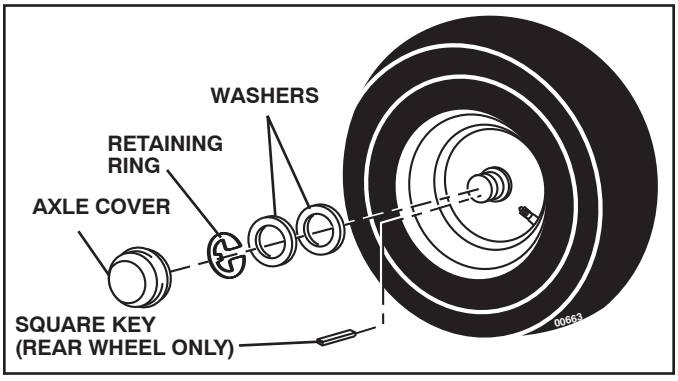


FIG. 34

TO START ENGINE WITH A WEAK BATTERY

(See Fig. 35)

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.

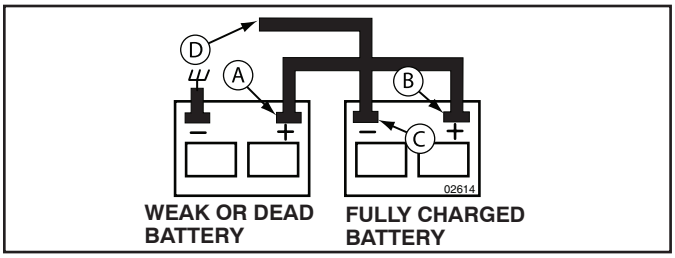


FIG. 35

SERVICE AND ADJUSTMENTS

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.

TO REPLACE FUSE

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

TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 36)

- 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.

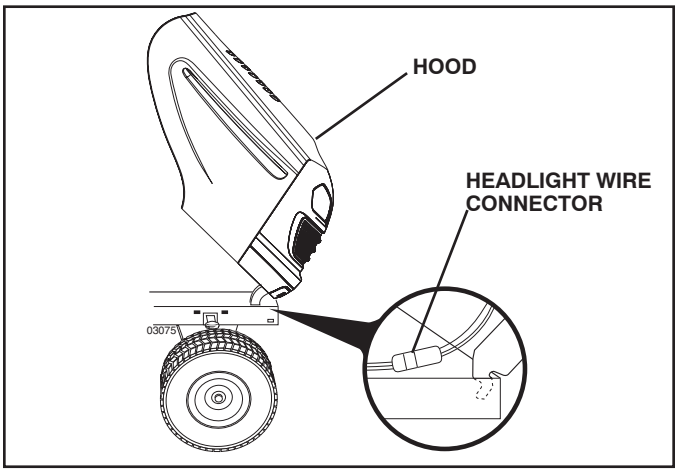


FIG. 36

ENGINE

TO ADJUST THROTTLE CONTROL CABLE

The throttle control has been preset at the factory and adjustment should not be necessary. If adjustment is necessary, see engine manual.

TO ADJUST CARBURETOR

The carburetor has been preset at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, see engine manual.

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

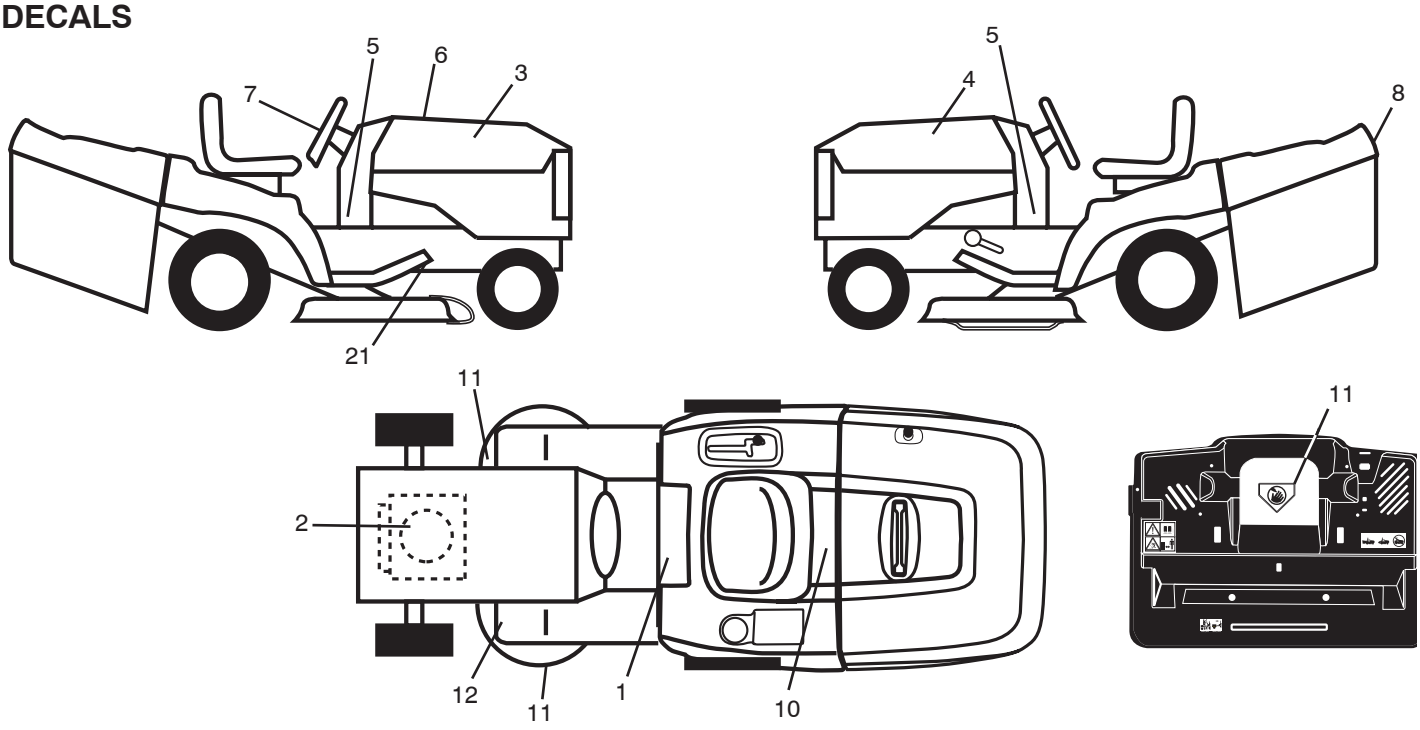
PROBLEM	CAUSE	CORRECTION
Will not start	1. Out of fuel. 2. Engine not “CHOKED” properly. 3. Engine flooded. 4. Bad spark plug. 5. Dirty air filter. 6. Dirty fuel filter. 7. Water in fuel. 8. Loose or damaged wiring. 9. Carburetor out of adjustment. 10. Engine valves out of adjustment.	1. Fill fuel tank. 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. 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 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. Light 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 light 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.
Loss of drive	1. Freewheel control in “disengaged” position. 2. Motion drive belt worn, damaged, or broken. 3. Air trapped in transmission during shipment or servicing.	1. Place freewheel control in “engaged” position. 2. Replace motion drive belt. 3. Purge transmission.
Engine “backfires” when turning engine “OFF”	1. Engine throttle control not set between half and full speed (fast) position before stopping engine.	1. Move throttle control between half and full speed (fast) position before stopping engine.
Mower will not operate	1. Bagger or optional rear discharge deflector is not installed correctly.	1. Check bagger or optional rear discharge deflector for proper installation

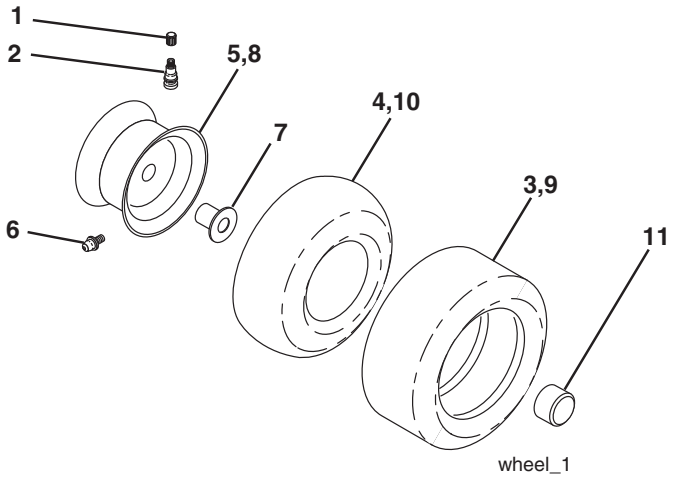
TRACTOR- -MODEL NO. 944.607900

DECALS



KEY NO.	PART NO.	DESCRIPTION
1	411658	Decal, Fender Warning
2	409702	Decal, Hp Engine
3	414310	Decal, Hood RH
4	414311	Decal, Hood LH
5	189088	Decal, LWR Dash
6	414160	Decal, Replacement
7	164065	Decal, Steering
8	411697	Decal, Hood/Fend Off Craftsman
10	149517	Decal, Btry Dngr/PSN E/FR AMCE
11	170563	Decal, Mower Warn Keep Hand away
12	181253	Decal, Footrest Eng/French
21	166286	Decal, Deck Sch 92 CRD
- -	138311	Decal, Lift Handle
- -	166960	Decal, Bypass
- -	179768X428	Pad, Footrest LH
- -	179769X428	Pad, Footrest RH
- -	414086	Manual Owners English
- -	414087	Manual Owners French

WHEELS & TIRES

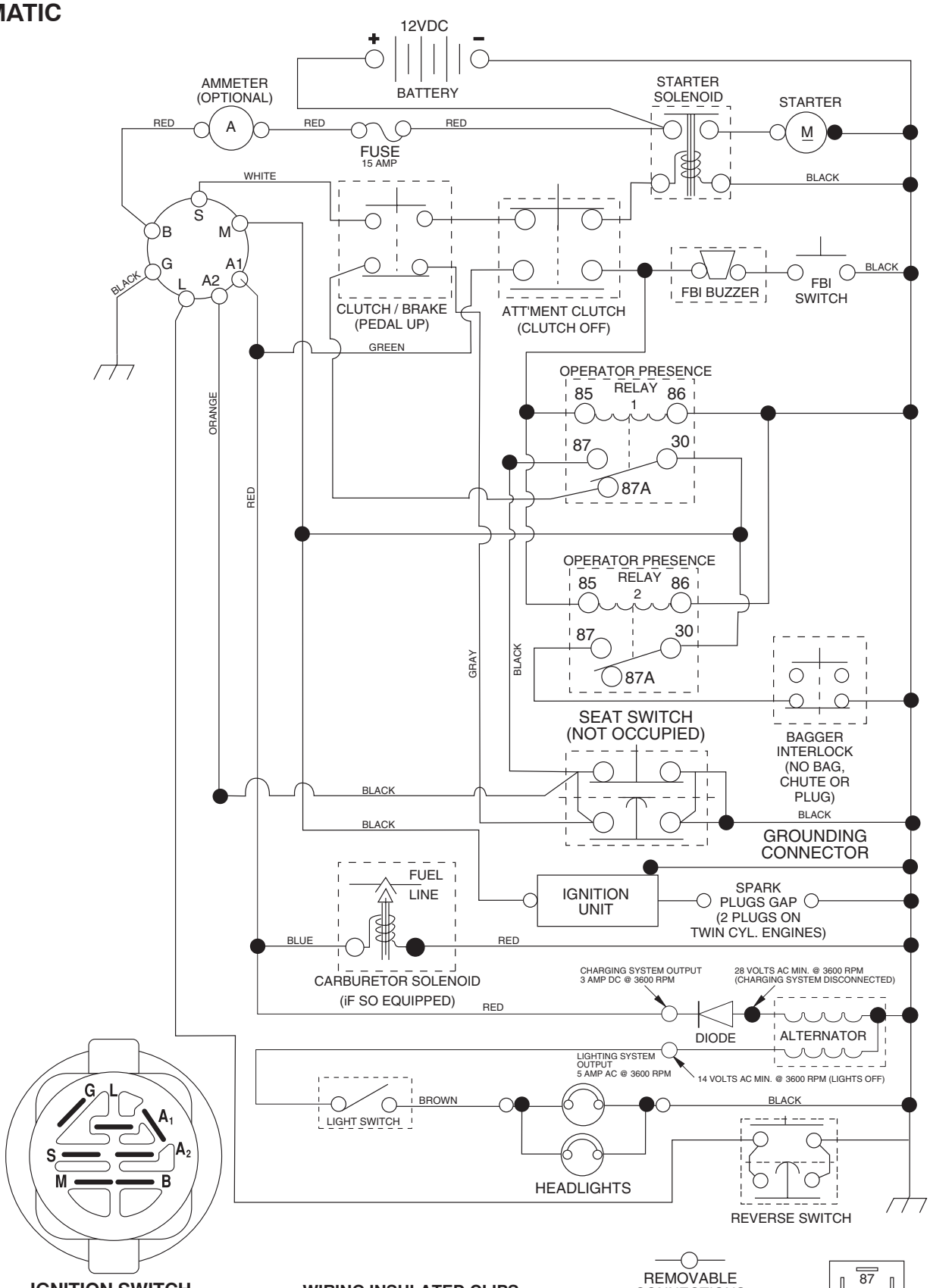


KEY NO.	PART NO.	DESCRIPTION
1	59192	Cap Valve Tire
2	65139	Stem Valve
3	106222X	Tire F Ts 15 x 6.0 - 6 Service
4	59904	Tube Inner Front #35060
5	106732X645	Rim Asm 6" front Service
6	278H	Fitting Grease
7	9040H	Bearing Flange
8	106108X645	Rim Asm 8" rear Service
9	122082X	Tire R. TS. 20 x 10-8 C. Service
10	7152J	Tube Rear 9.5 x 8 Service
11	104757X645	Cap Axle Blk 1 50 x 1 00
- -	144334	Sealant, Tire (10 oz. tube)

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

TRACTOR- -MODEL NO. 944.607900

SCHEMATIC



IGNITION SWITCH

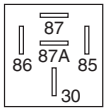
POSITION	CIRCUIT "MAKE"
OFF	M+G+A1
RUN/OVERRIDE	B+A1
RUN	B+A1 L+A2
START	B + S + A1

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

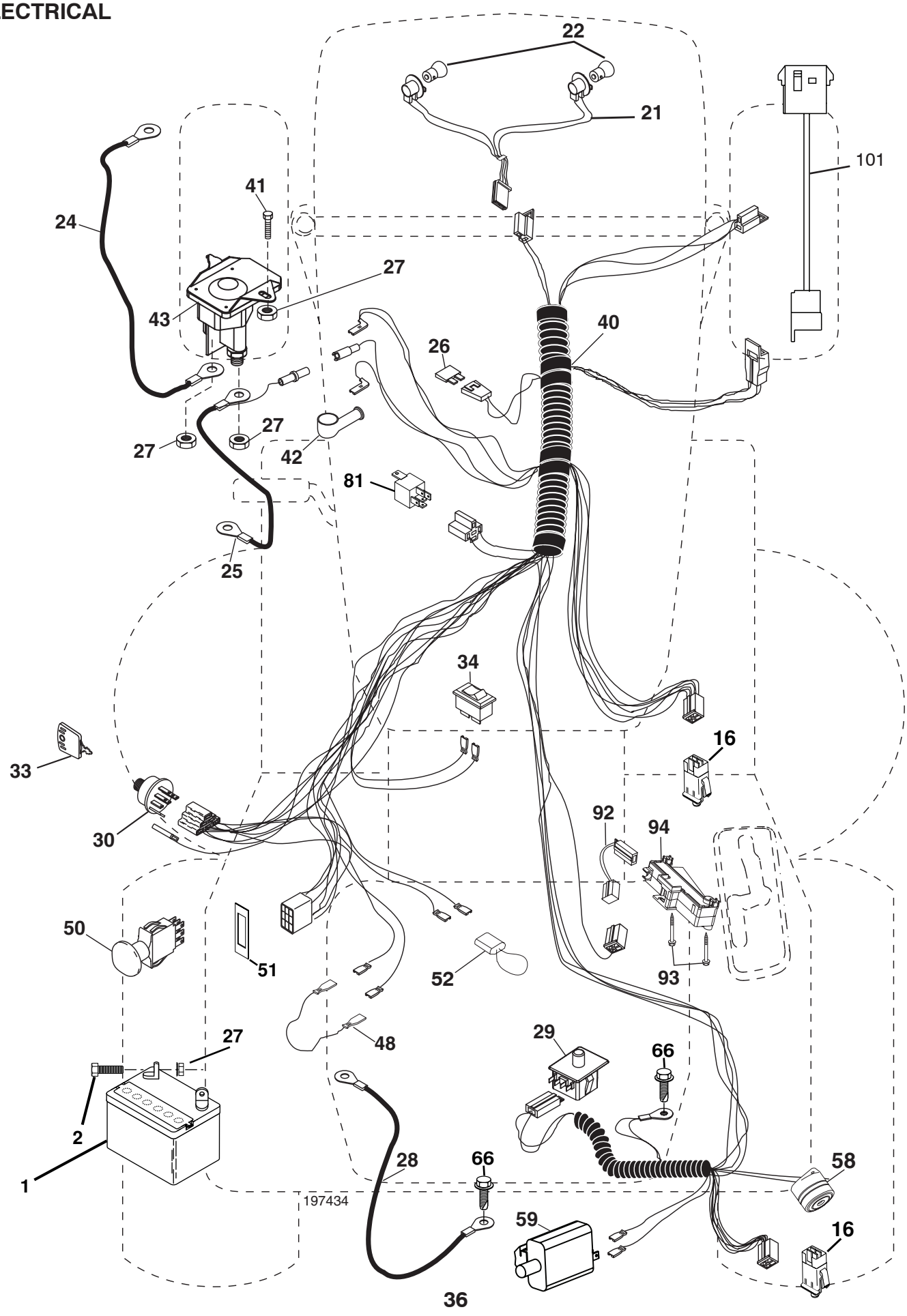


RELAY

03055

TRACTOR- -MODEL NO. 944.607900

ELECTRICAL



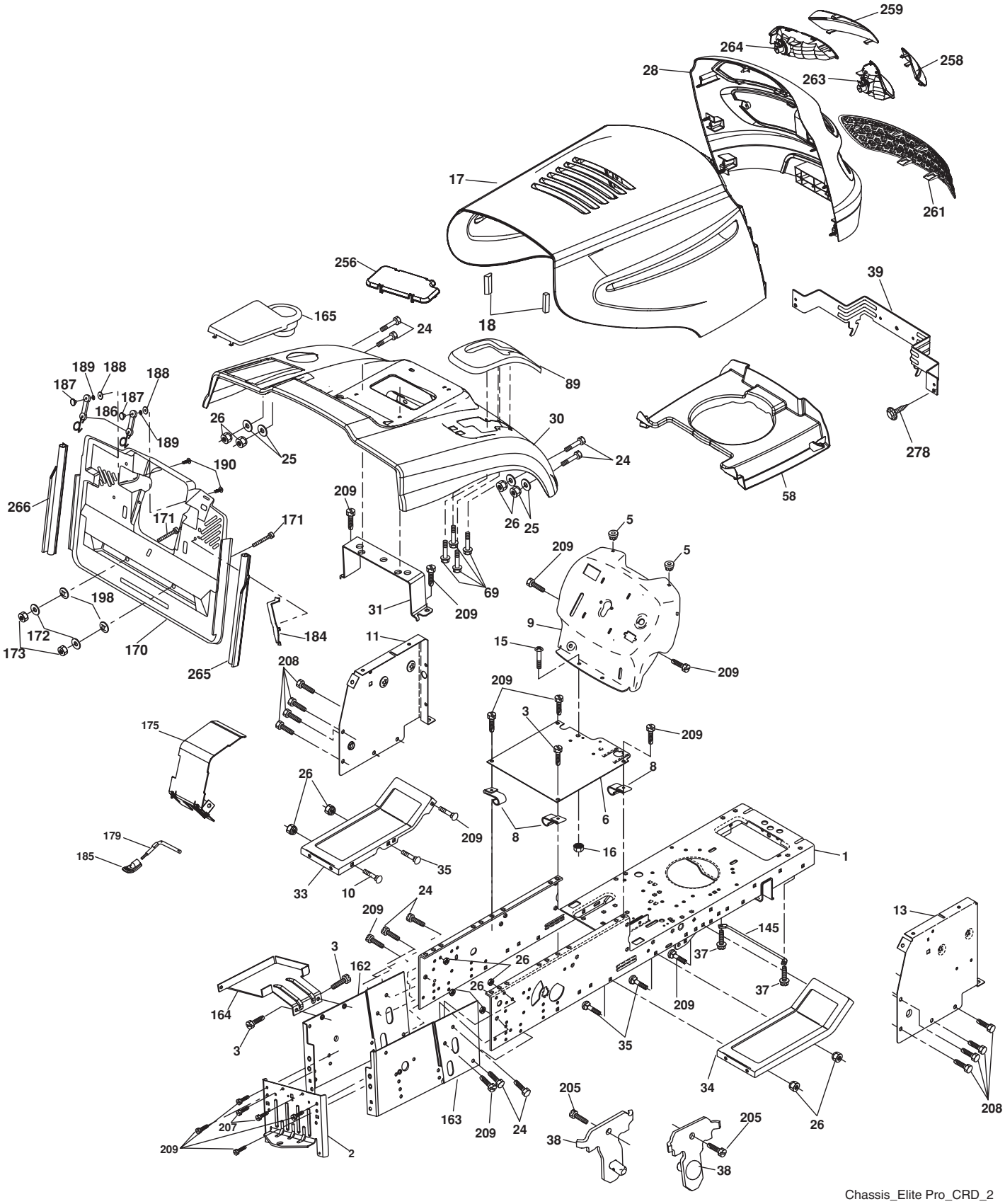
ELECTRICAL

KEY NO.	PART NO.	DESCRIPTION
1	163465	Battery
2	74760412	Bolt Hex Hd 1/4-20 UNC x 3/4
16	176138	Switch Interlock Push-In
21	183759	Harness Asm Light W/4152J
22	4152J	Bulb Light #1156
24	4799J	Cable Starter 6 Ga. 11" Red
25	165987	Cable Battery CRD 56" Red
26	175158	Fuse
27	STD541425	Nut Keps Hex 1/4-20 UNC
28	127725X	Cable Ground 6 Ga. 18" Black
29	192749	Switch Seat
30	193350	Switch Ignition
33	140403	Key Ign Molded
34	110712X	Switch Light
40	197434	Harness Ign
41	71110408	Bolt Flk Fin Hex 1/4-20 UNC x 1/2
42	131563	Cover Terminal Red
43	192507	Solenoid
48	140844	Adapter Ammeter
50	174651	Switch PTO
51	140405	Ring Retainer PTO
52	141940	Protection Wire loop
58	169419	Buzzer CRD
59	180379	Switch FBI CRD
66	17490608	Screw Thdrol 3/8-16 x 1/2 Ty-Tt
81	109748X	Relay Asm
92	196615	Harness Pigtail
93	192440	Screw 10-14 x 2.0
94	191834	Module Reverse
101	198317	Pigtail MATNLK

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

TRACTOR- -MODEL NO. 944.607900

CHASSIS AND ENCLOSURES



Chassis_Elite Pro_CRD_2

CHASSIS AND ENCLOSURES

KEY NO.	PART NO.	DESCRIPTION
1	174620	Chassis Assembly
2	180384	Drawbar
3	17060612	Screw 3/8-16 x .75
5	155272	Bumper Hood/Dash
6	184419	Saddle
8	126471X	Clip Insulator 13/32 Mtg. Hole
9	193522X013	Dash Slkscr
10	STD533710	Bolt, Carriage 3/8-16 x 1
11	174996	Panel, Dash, LH
13	179174X010	Panel, Asm. Dash RH
15	74180512	Screw, Machine, Truss Head 5/16-18 UNC x 3/4
16	STD541431	Nut Keps 5/16-18 UNC
17	183393X615	Hood Assembly
18	184921	Bumper Hood
24	STD523710	Bolt Fin Hex 3/8-16 UNC x 1. Gr. 5
25	19131312	Washer 13/32 x 13/16 x 12 Ga.
26	STD541437	Nut Lock Hex w/Ins 3/8-16 UNC
28	414159	Grille Asm (includes Key #'s 158, 159, 261, 263 + 264)
30	192533X615	Fender
31	165156	Bracket, Fender Support
33	179716X615	Footrest, LH
34	179717X615	Footrest, RH
35	STD533107	Bolt RDHD SHT SQNK 3/8-16 x 3/4
37	17490508	Screw Thdrol 5/16-18 x 1/2 TYT
38	181748	Pivot Bracket Assembly
39	407807	Bracket Pivot
58	184322	Duct Intake
69	142432	Screw Hex 1/4-1/2 UNC
89	192391X428	Console
145	409167	Rod Pivot Chassis/Hood
162	180382	Bracket Exten Chassis Lh CRD
163	180383	Bracket Exten Chassis Rh CRD
164	165605	Support Battery CRD
165	179020X428	Cover Battery CRD Lt
170	199488	Backplate Asm CRD
171	72140620	Bolt Rdhd Sqnk 3/8-16 x 2-1/2
172	19132016	Washer 13/32 x 1-1/4 x 16 Ga.
173	STD541437	Nut, Keps Hex 3/8-16 UNC
175	188203	Door Trap
179	188202	Rod Pivot FBI CRD
184	174662	Bracket Actuator Bagger CRD
185	179608X505	Knob Rod Brake Parking
186	160793	Latch Asm Mulch/Bagger
187	2029J	Nut Weld .327/.304 #10-24
188	19061216	Washer #10
189	STD551110	Washer Lock #10
190	71081010	Screw Pan Hd Phillips 10-24
198	168937	Nut, Push
205	17490608	Screw Thdrol 5/8-16 x 1/2
207	17670508	Screw Thdrol 5/16-18 x 1/2
208	17670608	Screw Thdrol 3/8-16 x 1/2 TYT
209	17000612	Screw Hex Wsh Thdrol 3/8-16
256	180810X428	Cover Fender Rack
258	183835X599	Lens Grille RH
259	183834X599	Lens Grille LH
261	183829X428	Insert Grille
263	183833	Bezel Grille RH
264	183832	Bezel Grille LH
265	185704	Seal Side RH
266	185703	Seal Side LH
278	191611	Screw 10 x 3/4 Single-Lead Hex
- -	187801	Plug Dome

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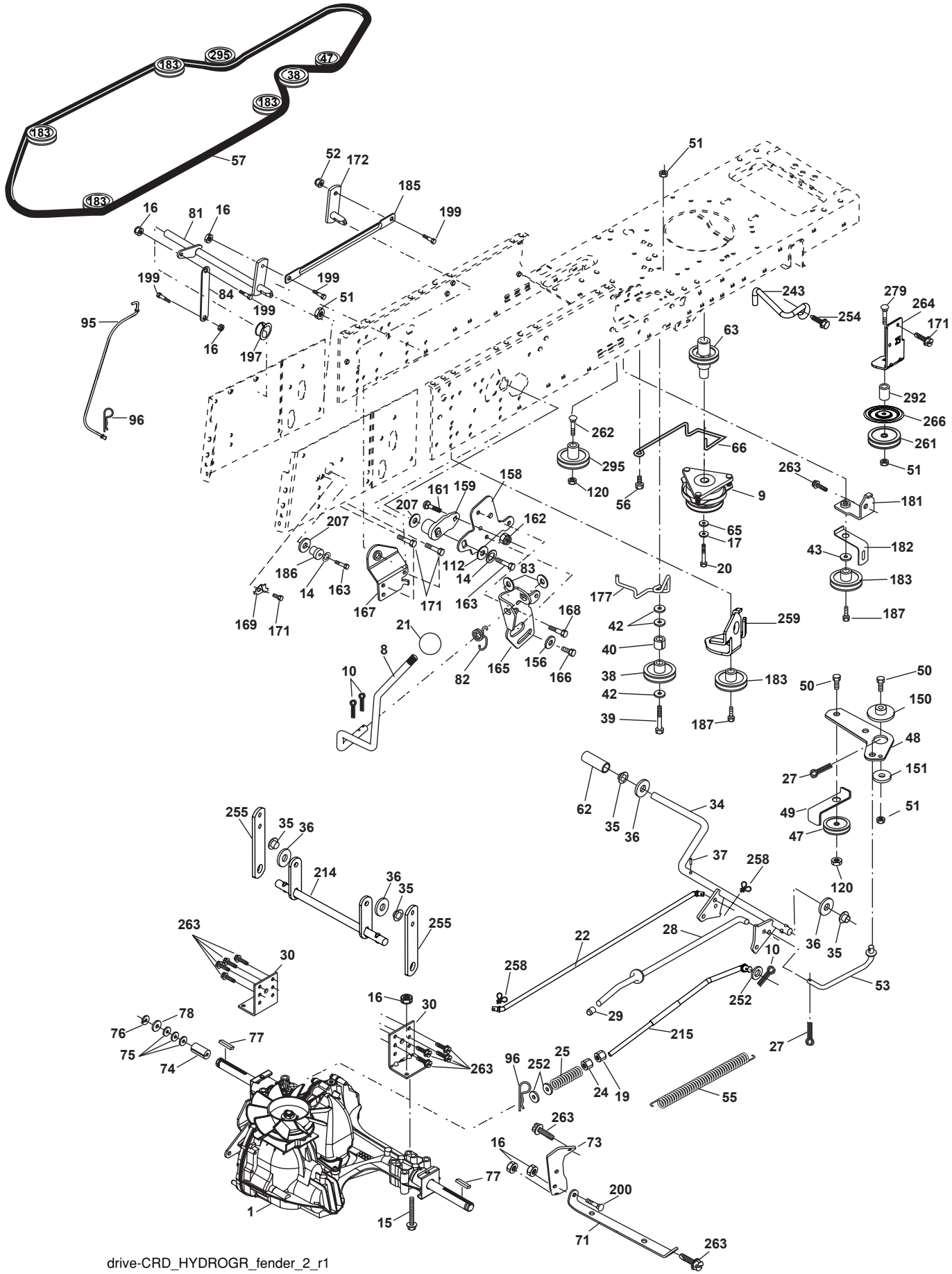
TRACTOR- -MODEL NO. 944.607900

DRIVE

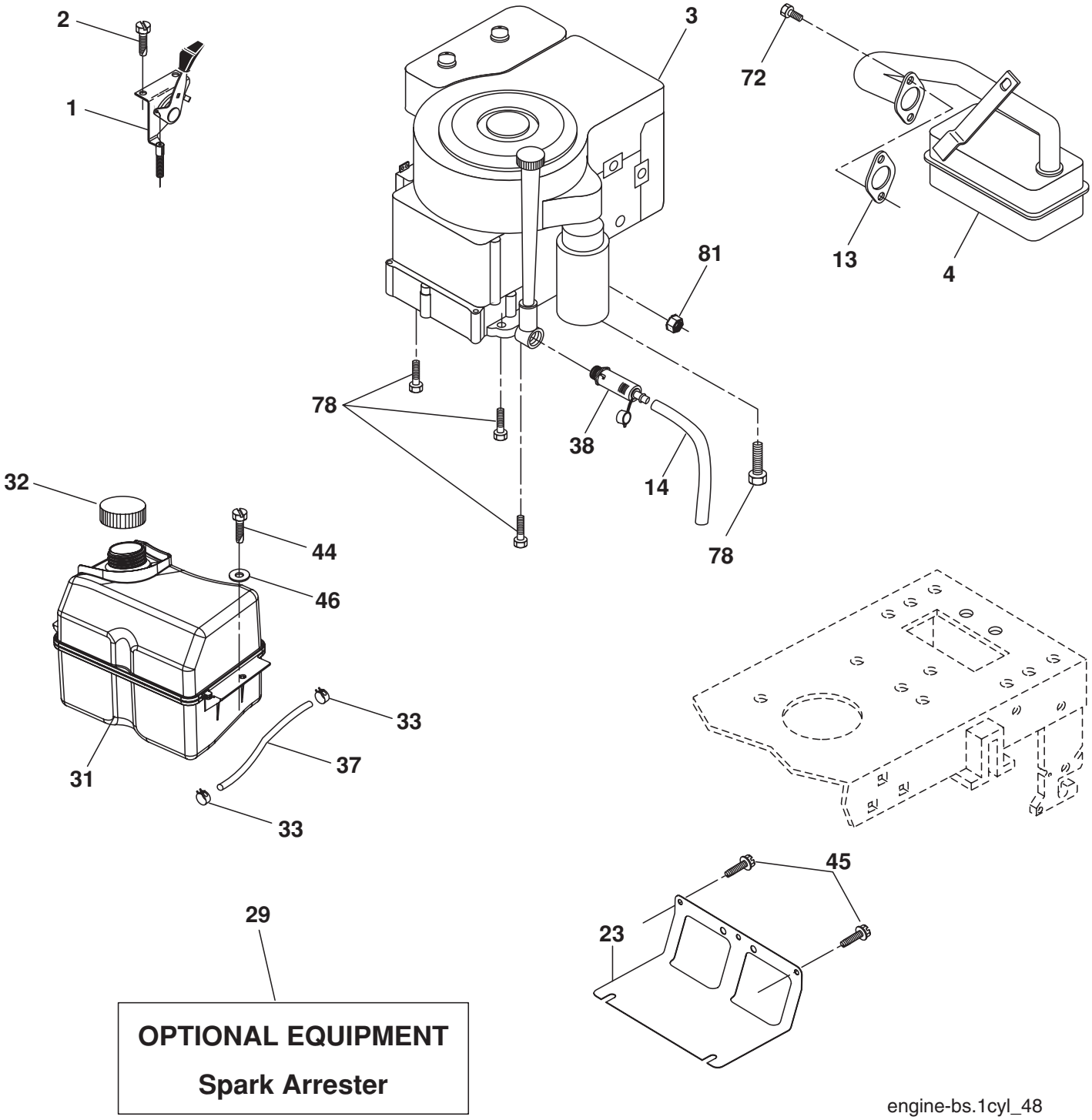


DRIVE

KEY NO.	PART NO.	DESCRIPTION
1	- - - - - - -	Transaxle Hydro Gear 321-0510 (See Breakdown)
8	192706	Rod, Shift
9	198143	Clutch
10	76020416	Pin, Cotter 1/8 x 1
14	10040400	Washer, Lock Hvy Helical
15	74490544	Bolt Hex FGHD 5/16-18 x Gr. 5
16	73800500	Nut, Lock Hex w/Ins 5/16-18 UNC
17	126197X	Washer 1-1/2 OD x 15/32 ID x .250
19	73800600	Nut, Lock Hex w/Ins. 3/8-16
20	173937	Bolt 7/16-20 x 4 Gr. 5-1.5
21	130564	Knob
22	175607	Rod, Brake
24	73350600	Nut
25	192036	Spring, Rod, Brake
27	76020412	Pin, Cotter 1/8 x 3/4
28	175765	Rod, Parking Brake
29	71673	Cap, Parking Brake
30	169592	Bracket, Mfg. Transaxle
34	175578	Shaft, Asm Pedal Foot CRD
35	120183X	Bearing, Nylon
36	19211616	Washer 21/32 x 1 x 16 Ga.
37	1572H	Pin, Roll 3/16 x 1"
38	165936	Pulley Flat Composite 3.06"
39	74760644	Bolt Fin Hex 3/8-16 UNC x 2-3/4
40	4470J	Spacer, Split 395 x 59 Bzp
42	19131312	Washer 13/32 x 13/16 x 12 Ga.
43	19111012	Washer 11/32 x 5/8 x 12 Ga.
47	127783	Pulley, Idler, V Groove Plasitc
48	154407	Bellcrank Clutch Grnd Drv
49	123205X	Retainer, Belt Style Spring
50	72110612	Bolt, Carr. 3/8-16 x 1/2 x Gr. 5
51	73680600	Nut, Crownlock 3/8-16 UNC
52	73680500	Nut Crownlock 5/16-18
53	199652	Link, Clutch 7.66
55	105709X	Spring, Return, Clutch
56	17060620	Screw 3/8-16 x 1-1/4
57	170140	V-Belt Kev 112" 0650 CRD
62	8883R	Cover, Pedal
63	180397	Pulley Eng.
65	10040700	Washer
66	154778	Keeper, Belt Engine F-Proof
71	169183	Strap, Torque, Lh
73	169182	Strap, Torque, Rh
74	137057	Spacer, Split
75	121749X	Washer 25/32 x 1-1/4 x 16 Ga.
76	12000001	Ring, E
77	123583X	Key, Square
78	121748X	Washer 25/32 x 1-5/8 x 16 Ga.
81	170006	Asm, Shaft
82	165711	Spring, Torsion
83	19171216	Washer 17/32 x 3/4 x 16 Ga.
84	170007	Link, Transaxle
95	170015	Control Asm Bypass Hydro
96	4497H	Spring, Retainer 1”
112	19091210	Washer 9/32 x 3/4 x 10 Ga.
120	73900600	Nut Lock Flg. 3/8-16 UNC
150	165850	Bushing, Bellcrank Grnd Dr.
151	19133210	Washer 13/32 x 2 x 10 Ga.
156	166002	Washer Srrted 5/16ID x 1.125
158	165589	Bracket Shift Mount
159	183900	Hub Shift
161	72140406	Bolt Rdhd Sqnk 1/4-20 x 3/4 Gr. 5
162	73680400	Nut Crownlock 1/4-20 UNC
163	74780416	Bolt Hex Fin 1/4-20 UNC x 1 Gr. 5
165	165623	Bracket Pivot Lever
166	17490510	Screw 5/16-18 x 5/8
167	165588	Bracket Support Shift CRD
168	165492	Bolt Shoulder 5/16-18 x .561
169	165580	Plate Fastening Lt
171	17490608	Screw Thdrol 3/8-16 x 1/2 Ty-Tt
172	170271	Shaft Asm Shifter Frt CRD
177	165932	Keeper Flat Idler 3.06" CRD
181	180211	Bracket Idler Ground Drive CRD
182	182682	Keeper Belt 2.5" Od V-Idler CRD
183	199532	Pulley V-Idler
185	170008	Link Shift
186	165614	Hub Tapered Round CRD
187	17580520	Screw Thdrol 5/16-18 x 1.25
197	169613	Nyliner Snap-In 5/8
199	169612	Bolt Shoulder 5/16-18 UNC
200	72140508	Bolt RDHD SQNK 5/16-18 x 1
207	169845	Washer Nylon Rear
214	175609	Shaft Asm. Brake
215	175652	Rod Brake Hydro
243	190736	Bracket Anti-Rotation
252	19131616	Washer 13/32 x 1 x 16 Ga.
254	17000616	Screw 3/8-16 x 1
255	175608	Brace Shaft Brake Mtg.
258	178062	Clip Retainer
259	180212	Bracket Pulley
261	131494	Pulley Idler Flat
262	72110622	Bolt Rdhd 3/8-16 UNC x 2-3/4 Gr. 5
263	17000612	Screw 3/8-16 x 3/4
264	197607	Bracket Idler
266	182061	Shield, Idler
279	72110616	Bolt RD HD SQ NK 3/8-16 UNC x 2
292	400271	Spacer
295	179114	Pulley Idler Composite

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

ENGINE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OPTIONAL EQUIPMENT
Spark Arrester
engine-bs.1cyl_48

ENGINE

KEY NO.	PART NO.	DESCRIPTION
1	170545	Control Throttle
2	17720408	Screw Hex Thd Cut 1/4-20 x 1/2
3	- - - - - - - -	Engine Briggs Model 31P777-0899-E1
4	137352	Muffler Exhaust B&S Lt
13	165291	Gasket 1 313 Id Tin Plated
14	148456	Tube Drain Oil Easy
23	169837	Shield Browning/Debris Guard
29	137180	Arrestor Spark
31	407552	Tank Fuel
32	197725	Cap Asm Fuel
33	123487X	Clamp Hose Blk
37	137040	Line Fuel 20"
38	181654	Plug Oil Drain Easy
44	17670412	Screw Hexwsh Thdrol 1/4-20 x 3/4
45	17000612	Screw Hexwsh Thdr 3/8-16 x 3/4
46	19091416	Washer 9/32 x 7/8 x 16 Ga.
72	192334	Screw Socket 5/16-18 x 3/4
78	17060620	Screw 3/8-16 x 1-1/4
81	STD541425	Nut Keps 1/4-20 UNC

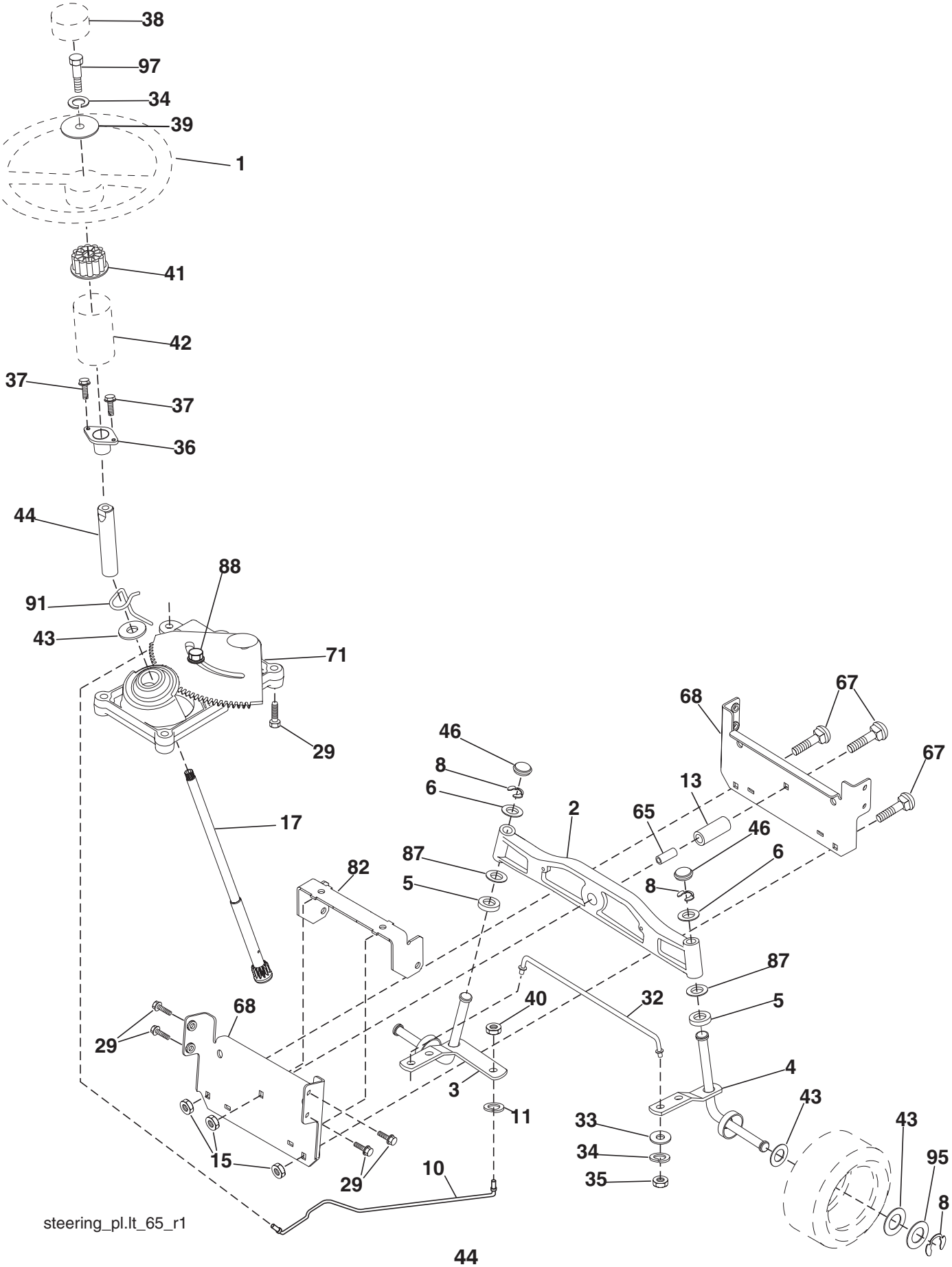
NOTE: All component dimensions given in U.S. inches
1 inch = 25.4 mm

Engine Power Rating Information

The gross power rating for individual gas engine models is labeled in accordance with SAE (Society of Automotive Engineers) code J11940 (Small Engine Power & Torque Rating Procedure), and rating performance has been obtained and corrected in accordance with SAE J1995 (Revision 2002-5). Actual gross engine power will be lower and is affected by, among other things, ambient operating conditions and engine-to-engine variability. Given both the wide array of products on which engines are placed and the variety of environmental issues applicable to operating the equipment, the gas engine will not develop the rated gross power when used in a given piece of power equipment (actual “on-site” or net horsepower). This difference is due to a variety of factors including, but not limited to, accessories (air cleaner, exhaust, charging, cooling, carburetor, fuel pump, etc.), application limitations, ambient operating conditions (temperature, humidity, altitude), and engine-to-engine variability. Due to manufacturing and capacity limitations, Briggs & Stratton may substitute an engine of higher rated power for this Series engine.

TRACTOR- -MODEL NO. 944.607900

STEERING ASSEMBLY



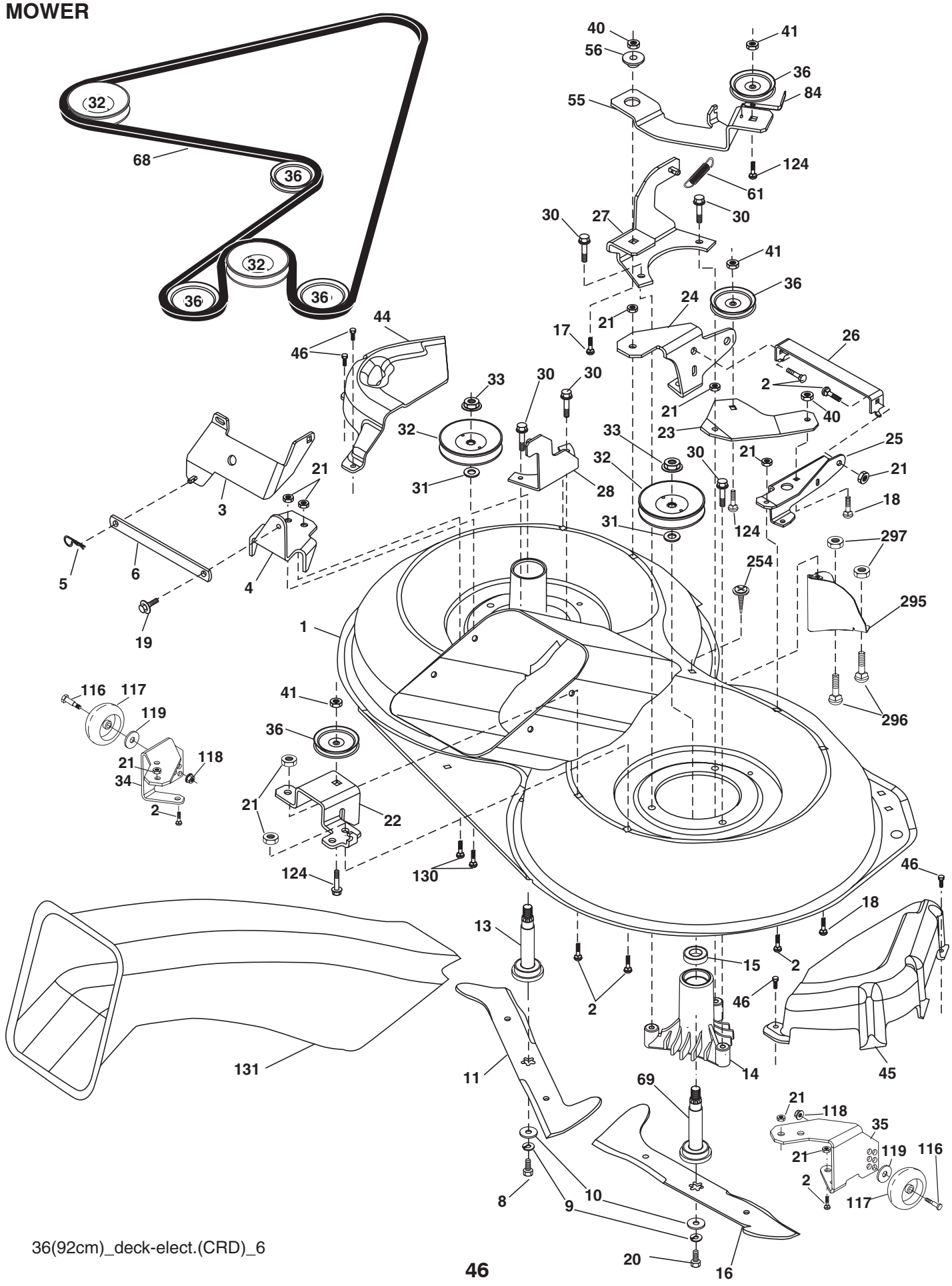
STEERING ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	186093X428	Steering Wheel
2	184706	Front Axle Assembly
3	169840	Spindle Assembly, LH
4	169839	Spindle Assembly, RH
5	6266H	Bearing, Race, Thrust, Hardened
6	121748X	Washer 25/32 x 1-5/8 x 16 Ga.
8	12000029	Ring, Klip
10	175121	Link, Drag
11	STD551137	Washer, Lock
13	136518	Spacer Axle
15	145212	Nut, Hexflange Lock
17	411386	Shaft Assembly, Steering
29	17000612	Screw, 3/8-16 x 3/4 SMGML Tap/R
32	171888	Rod, Tie
33	19111216	Washer 11/32 x 3/4 x 16 Ga.
34	STD551131	Washer Lock Hvy Hlcl Spr 5/16
35	73540500	Nut Crownlock 5/16-24 unf
36	155099	Bushing, Steering
37	152927	Screw TT #I0-32 x 5 x 3/8 Flange
38	186095X428	Cap Wheel Steering
39	19113812	Washer 11/32 ID x 2-3/8 OD x 12 Ga.
40	73540600	Nut Crownlock 3/8-24
41	186737	Adaptor, Steering Wheel
42	145054X428	Boot, Steering Dash
43	121749X	Washer 25/32 x 1-1/4 x 16 Ga.
44	190752	Extension Steering Non-Adjust
46	184946X505	Cap, Spindle
65	160367	Spacer Brace Axle
67	72110618	Bolt RDHD SQ 3/8-16 x 2-1/4
68	169827	Brace Axle
71	175146	Steering Asm.
82	199978	Bracket Susp Chassis Front
87	173966	Washer FLat .781 x 1-1/2 x .14
88	175118	Bolt Shoulder
91	175553	Clip Steering
95	188967	Washer Harden .739 x 1.637 x 060
97	74780564	Bolt 5/16-18 UNC x 4" L Gr. 5

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

TRACTOR- -MODEL NO. 944.607900

MOWER



36(92cm)_deck-elect.(CRD)_6

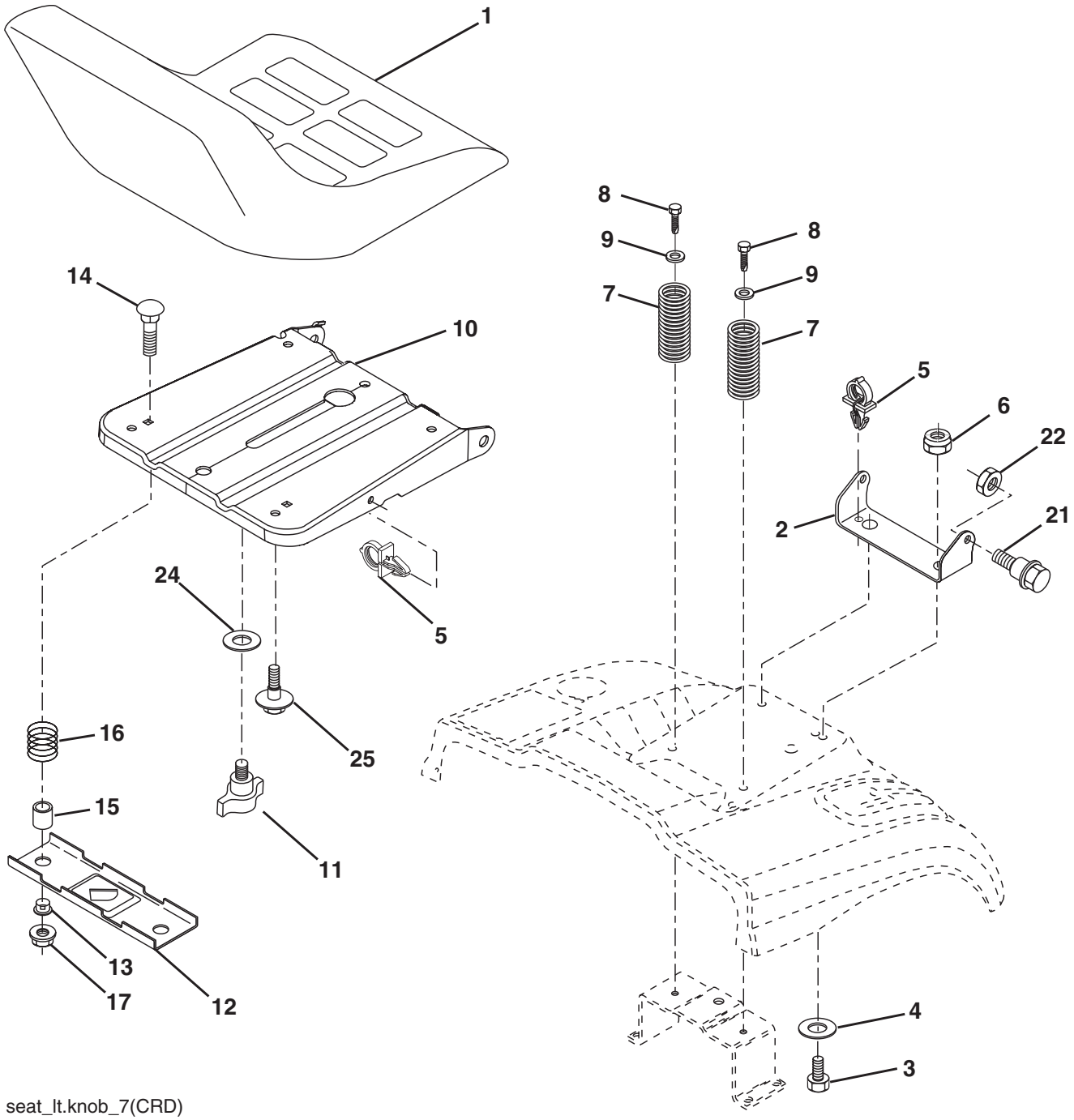
MOWER

KEY NO.	PART NO.	DESCRIPTION
1	400108	Housing Asm. Mower
2	72140506	Bolt Rdhd Sqnk 5/16-18 UNC x 3/4
3	165569	Bracket Asm. S-Bar Chass
4	165558	Bracket Bar Sway Deck
5	STD624008	Retainer Spring
6	165557	Bar Sway
8	181712	Bolt 3/8-24 x 1.25 Gr. 8 Patched
9	10030600	Washer Lock Hvy 3/8 Unplated
10	140296	Washer Hard Blade
11	186385	Blade 3-1 Lh
13	137645	Shaft Asm. W/Lower Bearing
14	128774	Housing Mandrel Vented (Machd)
15	110485X	Bearing Ball Mandrel
16	186386	Blade 3-1 Rh
17	72140610	Bolt Carriage 3/8-16 x 1-1/4
18	72110606	Bolt Rdhd Sqnk 3/8-16 x 3/4 Gr. 5
19	132827	Bolt Shoulder 5/16-18 Thd Form
20	181713	Bolt 3/8-24 x 1.25 Gr. 8 Ptch LHthd
21	73680500	Nut Crown Lock 5/16-18
22	199590	Bracket Idler Support
23	165446	Bracket Idler Sprt RF
24	165242	Bracket Suspension LF
25	165244	Bracket Suspension RF
26	400110	Brace Support Susp Frt CRD
27	165568	Bracket Asm. Susp RR
28	165567	Bracket Asm. Susp LR
30	173984	Screw Thd Rolling Dod.PT Hex
31	187690	Washer Spacer Mower Vented
32	153532	Mandrel Pulleys
33	400234	Nut Flg Top Lock
34	400107	Bracket Gauge Wheel Lf
35	400106	Bracket Gauge Wheel Rf
36	146763	Pulley Idler V-Groove Dim 4.25
40	73680600	Nut Crownlock 3/8-16 UNC
41	73900600	Nut Flangelock 3/8-16 UNC
44	175538	Cover Mandrel Lh
45	175539	Cover Mandrel Rh
46	137729	Screw Thd Roll 1/4-20 x 5/8
55	199498	Arm Idler
56	165723	Spacer Retainer Mower
61	199486	Spring Tension
68	402008	Hex-Belt Mower
69	165482	Shaft Asm W/Lwr Brg Rh Thd CRD
84	156085	Keeper Belt Idler
116	193406	Bolt Shoulder
117	174873	Wheel Gage
118	73900600	Nut Lock 3/8-16 UNC
119	19132012	Washer 13/32 x 1-1/4 x 12 Ga.
124	72110612	Bolt Carr Sh 3/8-16 x 1-1/2 Gr5
130	72110506	Bolt Rdhdsqnk 5/16-18 UNC x 3/4
131	165661	Chute Bagger CRD 92cm
254	17000616	Screw 3/8-16 x 1
295	412171	Baffle Front
296	72140406	Bolt RDHD SQNK 1/4-20 x 3/4 Gr. 5
297	73930400	Nut Centerlock 1/4-20 UNC
- - -	181857	Mandrel Asm Service
- - -	181858	Mandrel Asm CRD Lh Threads VC
- - -	413711	Replacement Mower Complete

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

TRACTOR- -MODEL NO. 944.607900

SEAT ASSEMBLY

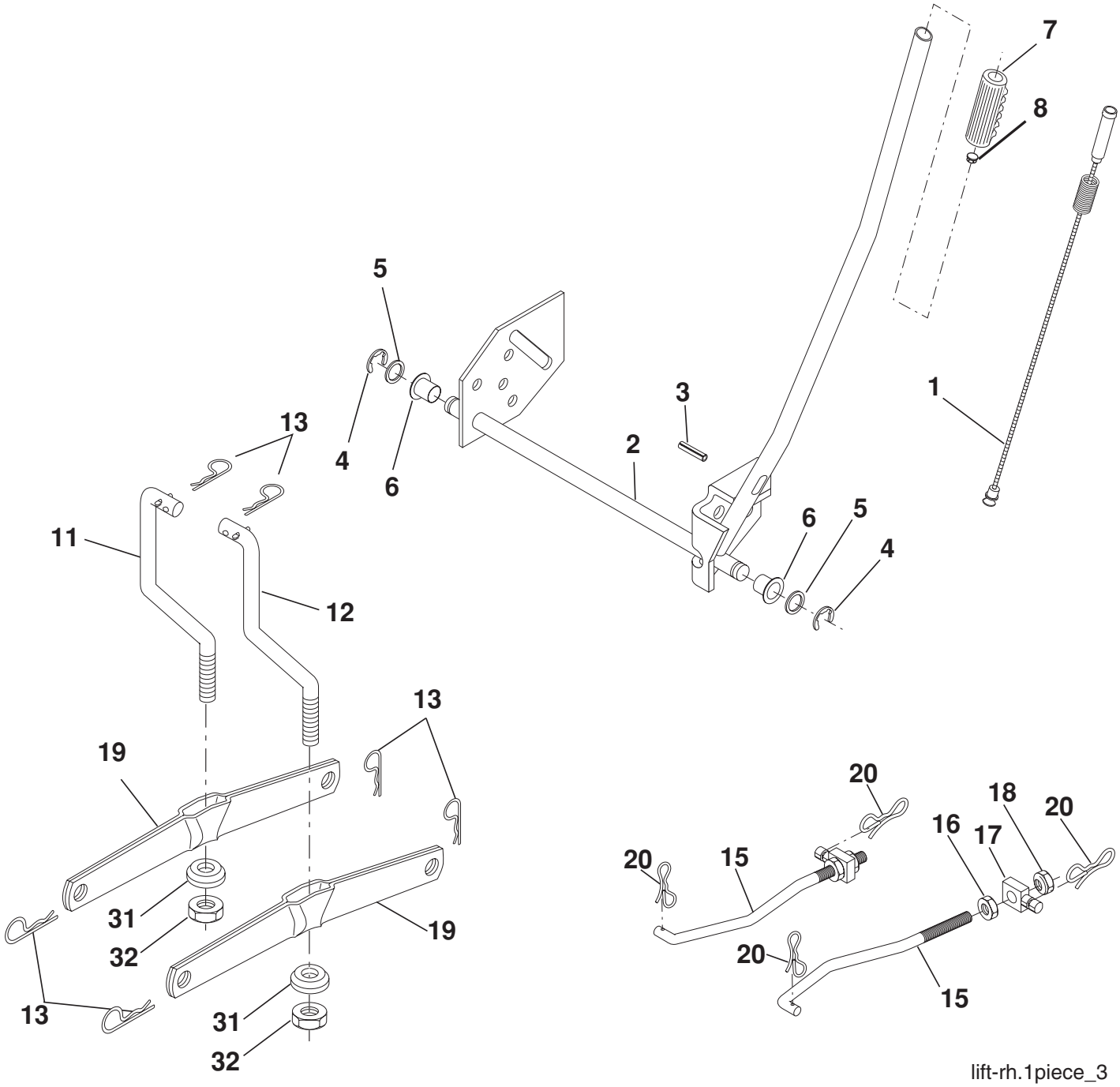


seat_lt.knob_7(CRD)

KEY NO.	PART NO.	DESCRIPTION
1	188939	Seat
2	140551	Bracket Pnt Pivot Seat (blk)
3	71110616	Bolt Fin Hex 3/8-16 UNC x 1
4	19131610	Washer Flat 13/32 x 1 x 10 Ga.
5	145006	Clip Push In Hinged
6	STD541437	Nut Lock Hex 3/8-16 UNC
7	124181X	Spring Seat Cprsn 2 250 Blk Zi
8	17000616	Screw 3/8-16 x 1
9	19131614	Washer 13/32 x 1 x 14 Ga.
10	195530	Pan Pnt Seat
11	166369	Knob Seat Adj Wingnut
12	174648	Bracket Pnt Mounting Switch
13	121248X	Bushing Snap Blk Nyl 50 Id
14	72050412	Bolt Rdhd Sht Nk 1/4-20 x 1-1/2
15	134300	Spacer Split .28 x .96 Zinc
16	121250X	Spring Cprsn
17	123976X	Nut Lock 1/4 Lge Flg Gr. 5 Zinc
21	171852	Bolt Shoulder 5/16-18 UNC-2A
22	STD541431	Nut Hex Lock w/Ins 5/16-18
24	19171912	Washer 17/32 x 1-3/16 x 12 Ga.
25	127018X	Bolt Shoulder 5/16-18 x .62

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

MOWER LIFT



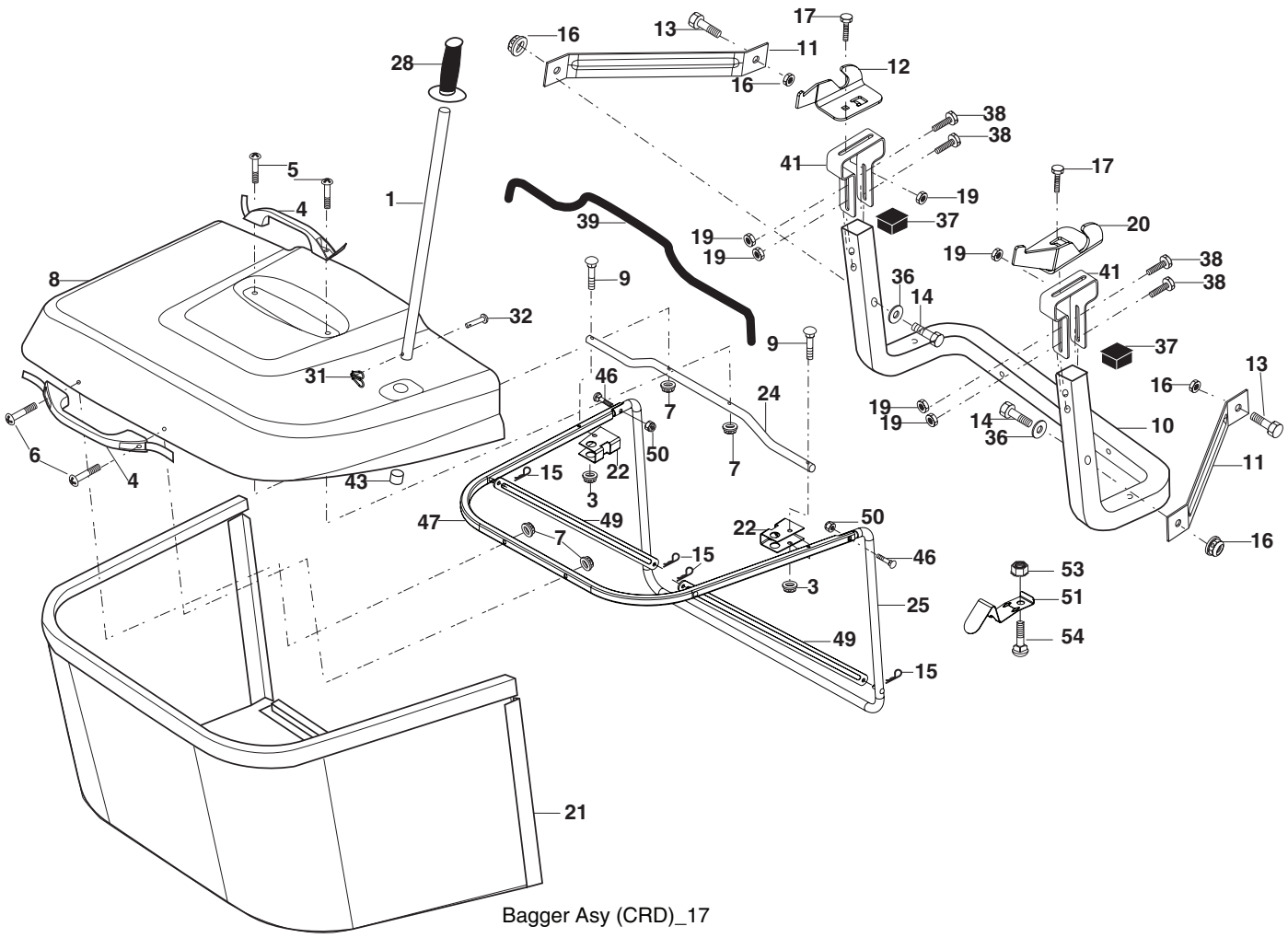
lift-rh.1piece_3

KEY NO.	PART NO.	DESCRIPTION
1	198417	Wire Asm Inner Spring W/Plunger
2	198070	Shaft Asm. Lift
3	188822	Pin Groove
4	12000002	E Ring #5133-62
5	19211621	Washer 21/32 x 1 x 21 Ga.
6	120183X	Bearing Nylong
7	125631X	Grip Handle
8	122365X	Button Plunger
11	165829	Link Asm Lift LH
12	165831	Link Asm Lift RH
13	STD624008	Retainer Spring

KEY NO.	PART NO.	DESCRIPTION
15	173288	Link Front
16	73350800	Nut Jam Hex 1/2-13 UNC
17	175689	Trunnion Blk Zinc
18	73800800	Nut Lock w/wsh 1/2-13 UNC
19	139868	Arm Suspension Mower
20	194209	Pin Cotter Bow Tie Lock
31	169865	Bearing, Pvt. Lift.
32	73540600	Nut Crownlock 3/8-24

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

BAGGER



Bagger Asy (CRD)_17

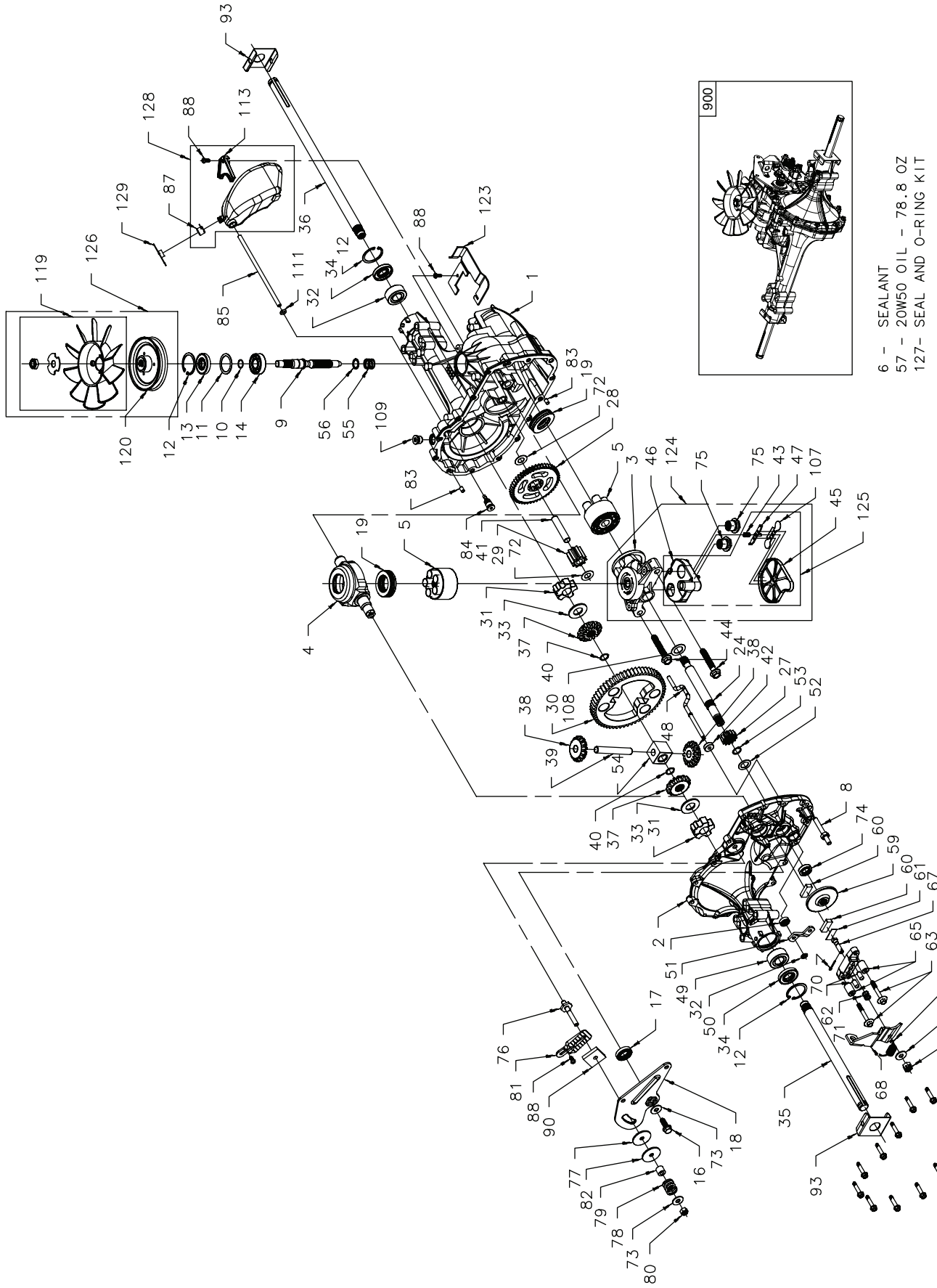
BAGGER

KEY NO.	PART NO.	DESCRIPTION
1	165249	Tube Handle Bagger CRD
3	123976X	Nut Lock 1/4 Lge Flg Gr. 5 Zinc
4	169916	Handle Bagger
5	74981024	Screw Pan Head #10-24 x 1.50 Blk
6	74981032	Screw Pan Hd
7	73401000	Nut Wiz Lock Hex Serr/Hd 10-24
8	169963X615	Cover Bagger Steel CRD
9	72140418	Bolt Carriage 1/4-20 x 2.25d x Gr. 5
10	181282	Tube Support Bagger CRD
11	165719	Bracket Support Upper Bag CRD
12	188848	Bracket Pivot Bagger Lh CRD
13	74760612	Bolt Hex 3/8-16 UNC x 3/4
14	74520636	Bolt Fin Hex 3/8-16 x 2-1/4 Gr.5
15	4939M	Retainer Spring
16	73900600	Nut Lock Flg 3/8-16 UNC
17	STD533107	BoltRdhdShtSqnk5/16-18UNCx3/4
19	73900500	Nut Lock Hex Flange 5/16-18
20	188847	Bracket Bagger RH CRD
21	406180	Bag Asm CRD
22	165781	Bracket Side Bagger CRD
24	165783	Tube Pivot Bagger CRD
25	193705	Tube Front Bagger CRD
28	165787	Grip Handle Black
31	169484	Retainer Clip
32	126875X	Rivet Rd Hd Drilled 3/8 Dia
36	19132012	Washer 13/32 x 1-1/4 x 12 Ga.
37	175401	Plug Support Bagger CRD
38	72010520	Bolt 5/16-18 x 5.20
39	180985	Seal 37"
41	169683	Bracket Vert Adj Bagger CRD
43	174083	Plug Tubing End
46	72110510	Bolt Carr 5/16-18 x 1-1/4 Gr.5
47	193704	Tube Upper
49	193305	Bar Spreader
50	73800500	Nut Lock Hx W/Ins 5/16-18 UNC
51	199903	Latch Spring
53	73510400	Nut Keps Hex 1/4-20 UNC
54	72140406	Bolt RDHD SQNK 1/4-20 x 3/4 Gr.5

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

TRACTOR- -MODEL NO. 944.607900

HYDRO TRANSAXLE - MODEL NUMBER 321-0510



TRACTOR- -MODEL NO. 944.607900

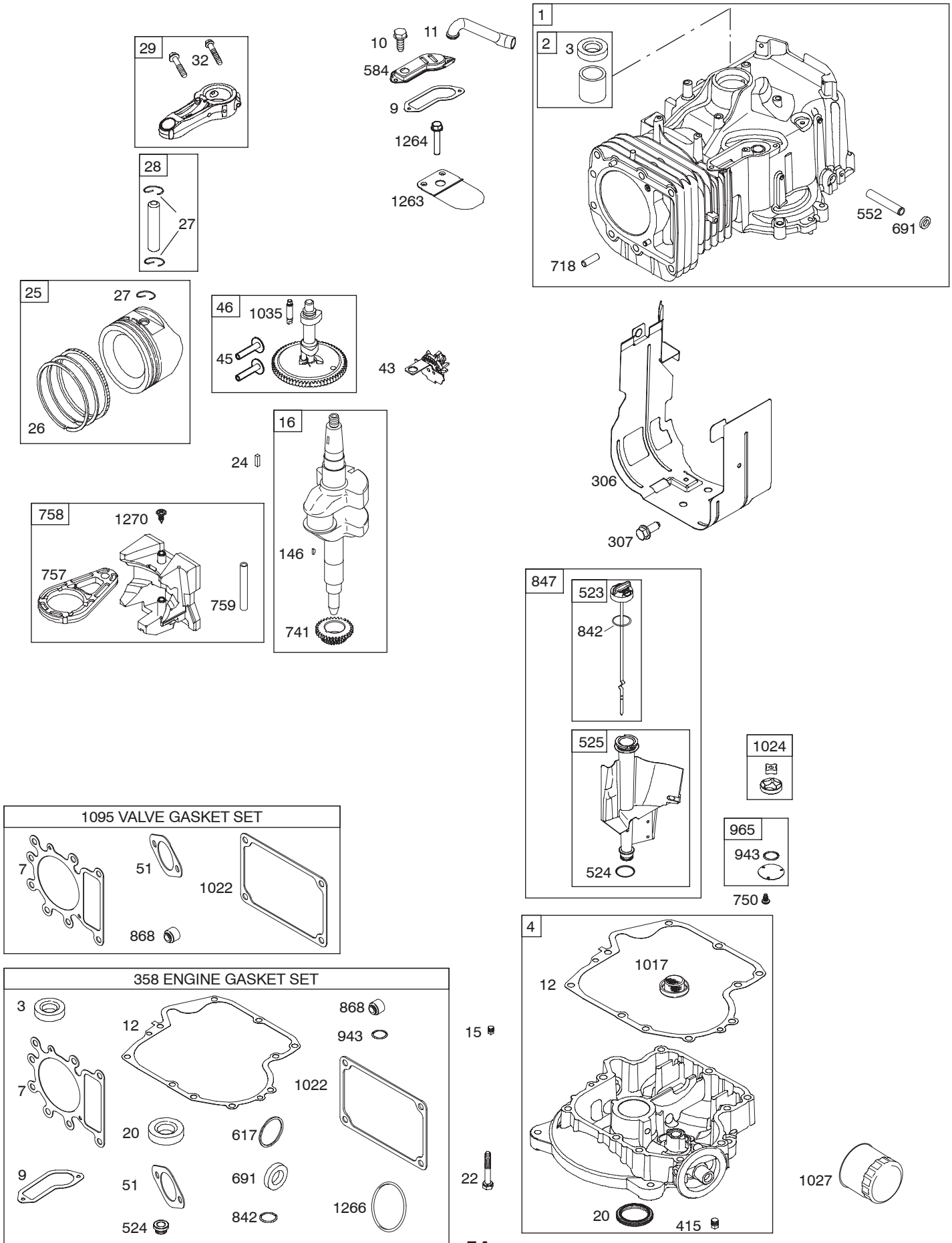
HYDRO TRANSAXLE - MODEL NUMBER 321-0510

KEY NO.	PART NO.	DESCRIPTION
1	170351	Kit, Main Housing
		Main Housing, Machined
		Bushing .855 X .985 X .790
2	170352	Kit, Side Housing
		Side Housing, Machined
		Bushing .865 X .985 X .790
		Bushing .624 X .719 X .562
3	170353	Kit, Center Section
		Center Section, Machined
		Bushing .707 X .788 X .591
4	170354	Swashplate, Trunnion Machined
5	169898	Kit, Cylinder Block (10cc)
		Block - Cylinder
		Piston
		Spring, Compression
		Washer - Thrust
6	178322	Sealant Tube
7	170356	Hexflange Screw 1/4-20 X 1.25
8	170357	Stud, 5/16-24 Hex Double End
9	170358	Shaft, Input
10	170359	Retaining Ring
11	170360	Spacer
12	169870	Retaining Ring
13	170361	Seal, Lip .67 X 1.58 X .276
14	173158	Bearing, Ball 6203 (Bdr)
16	170362	Hex Flange Head Screw 1/4-20 X 1.25
17	170363	Seal, Lip 18 X 32 X 7
18	170364	Arm, Control
19	173159	Bearing, Thrust (10cc)
24	170366	Shaft Motor
27	170367	Gear, Pinion, 13t
28	170368	10t / 48t Gear
29	170369	Gear, 10t Jackshaft
30	170370	60t Bullgear
31	170371	Sleeve Bearing .75 X 1.75 X .625
32	170389	Sleeve Bearing (Outboard) .75 X 1.575 X .625
33	142991	Washer
34	170390	Lip Seal, Axle Shaft
35	170391	Shaft, Axle (Keyed, R.h.)
36	170392	Shaft, Axle (Keyed, L.h.)
37	150792	Gear, Splined Diff. (210-1000 & 310-0750)
38	150793	Gear, Miter Diff. (210-1000 & 310-0750)
39	150809	Differential Shaft (310-0750)
40	170393	Retaining Ring
41	170394	Pin, Jackshaft
42	170395	Magnet, Ring
43	170396	Spring, Bypass
44	150797	Bolt 3/8-24 X 2-1/2
45	170397	Filter
46	170398	Base, Filter
47	170399	Actuator, Bypass
48	170400	Rod, Bypass Actuator
49	178156	Arm, Bypass
50	170402	Retaining Ring .25 External
51	170403	Seal, Lip .741 X .25 X .25
52	170404	Washer, Flat 0.050" (210-1000)
53	170405	Retaining Ring
54	170406	Bearing, Center Block
55	142977	Spring, Helical Compression
56	142978	Washer, Block Thrust
57	-- -- --	20W-50 0 1 78.80oz
58	142929	Kit, Brake Yoke
59	170408	Rotor, Brake
60	142883	Brake Puck
--	142882	Brake Puck Plate
62	170409	Pin, Brake Actuating
63	170410	Hfhcs 1/4-20 X 2 W/patch, Special Flange
65	170411	Spacer, Brake Torsion Spring
66	188297	Spring, Brake Arm Bias
67	170413	Bolt, Square Head - Brake
68	178157	Arm, Brake
69	170415	Nut, Castle 5/16-24
70	170416	Pin, Cotter 3/32x3/4
71	170417	Brake Spring
72	170418	Washer (310-0750)
73	142884	Washer, Flat
74	170419	Seal, Oil
75	170420	Ass'y Check Plug
76	170421	Bolt, Stud 5/16-24
77	170422	Puck, Friction
78	142969	Spring
79	142980	Spacer
80	150778	Nut, Nylon Insert Hex Lock 5/16-24
81	170423	Wedge, Friction
82	170424	Clip, Washer
83	161168	Pin
84	170425	Fitting, 5/16 X Sae 5/32 Tube
85	170426	Hose, Expansion Tank
87	173160	Cap, Vent
88	178334	Bolt, Self Tapping (BDR)
90	170430	Puck, Inner Wedge
91	170431	Spring Clip, Housing
107	170432	Deflector
108	170433	Washer, Motor Shaft .71id X 1.15od X .03 Thick
109	170434	Plug, Straight Thread 9/16-18
111	170435	O-ring .7 X .301 Id
113	170437	Bracket, Support Expansion Tank
119	191031	Kit, Fan - Washer - Nut
		Washer, Od Slotted .53 X 1.63 X .06
		Hex Lock Nut 1/2-20 (Nylon Insert)
		Fan 7"
120	178159	Pulley
123	178160	Bracket, Belt Keeper
124	191033	Kit, Centersection, Filter Bypass
		Center Section Machining
		Base Filter W/ Poppet
		Check Plug Assembly, .027 Washer
		Spring, Bypass
		Actuator, Bypass
		Deflector
		Bottom, Filter
		Bushing, .707 X .788 X .591
125	170445	Kit, Filter
		Bottom, Filter
		Base, Filter W/ Poppet
		Spring, Bypass
		Actuator, Bypass
		Deflector
126	191029	Kit, Fan/pulley
		Hex Jam 1/20-20 (Nylon Insert)
		Washer, OD Slotted, .53 X 1.53 X .06
		Fan, 7 In
		Pulley
127	170447	Kit, Seal
		Lip Seal .67 X 1.58 X .276
		Lip Seal 18 X 32 X 7
		Lip Seal .706 X 1.584 X .25
		Lip Seal .741 X .250 X .250 Tc
		Oil Seal .625 X 1.0 X .25
		O-ring .07 X .301 ID
128	173165	Kit, Expansion Tank
		Tank, Expansion Assembly
		Cap, Vent
		Vsbolt, Self Tapping 10-32 X 1/2
		Bracket, Support Expansion Tank
129	191032	Cap, Expansion Tank Shipping
900	170061	Transaxle

NOTE: All Component Dimensions Given In U.S. Inches
1Inch = 25.4 mm

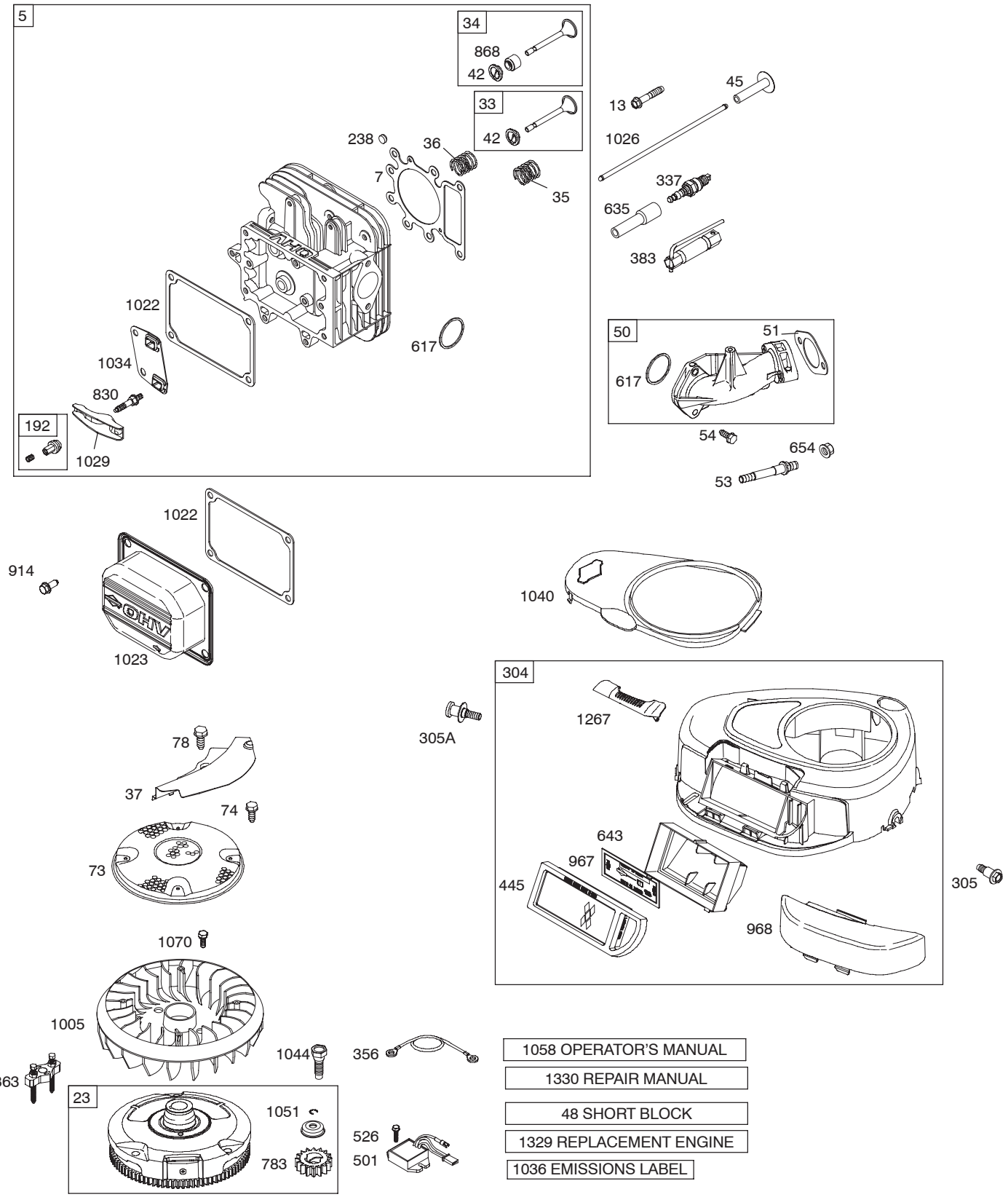
TRACTOR- -MODEL NO. 944.607900

BRIGGS & STRATTON ENGINE - - MODEL NUMBER 31P777, TYPE NUMBER 0899-E1



TRACTOR- -MODEL NO. 944.607900

BRIGGS & STRATTON ENGINE - - MODEL NUMBER 31P777, TYPE NUMBER 0899-E1



1058 OPERATOR'S MANUAL

1330 REPAIR MANUAL

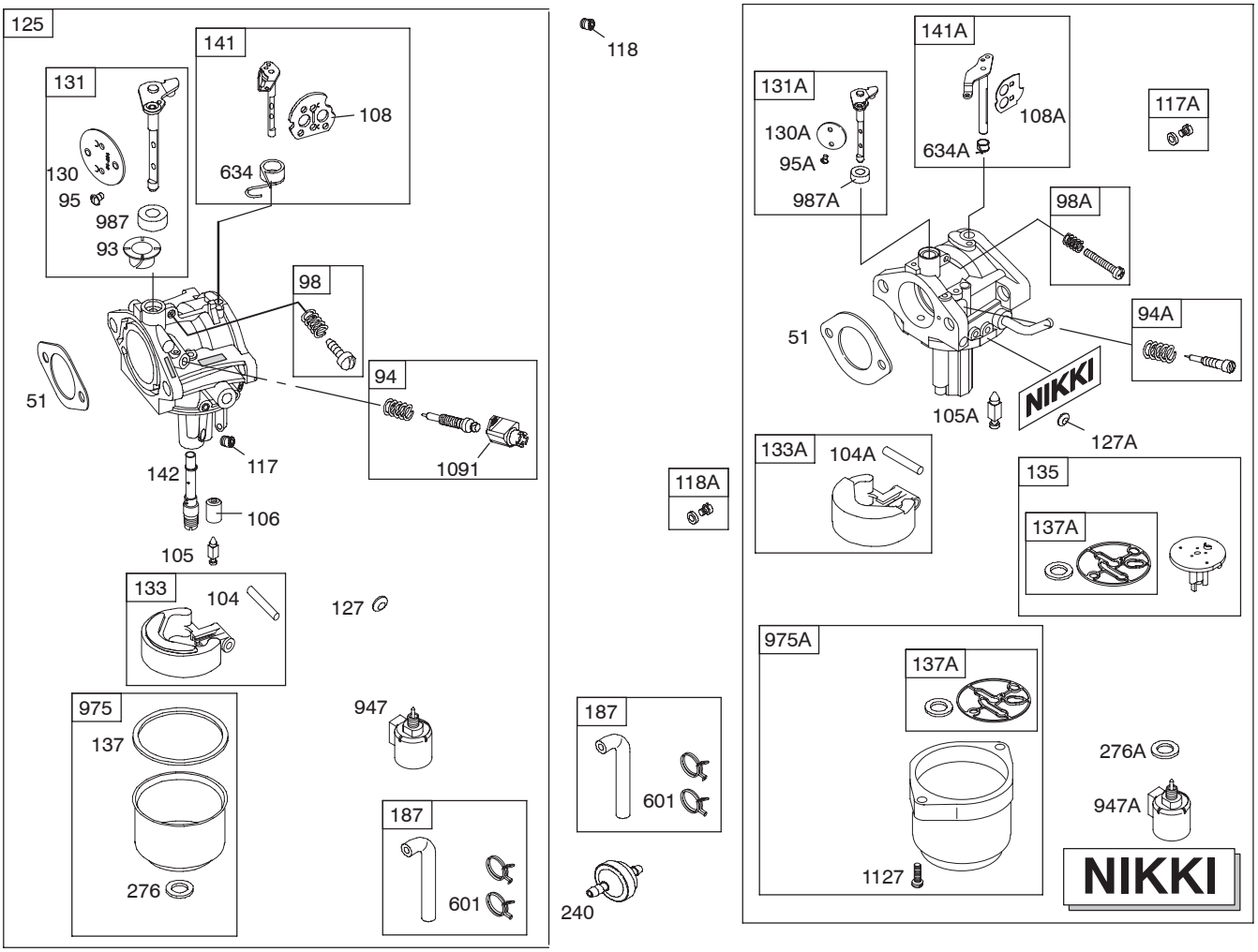
48 SHORT BLOCK

1329 REPLACEMENT ENGINE

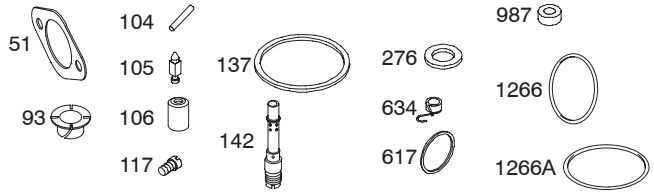
1036 EMISSIONS LABEL

TRACTOR- -MODEL NO. 944.607900

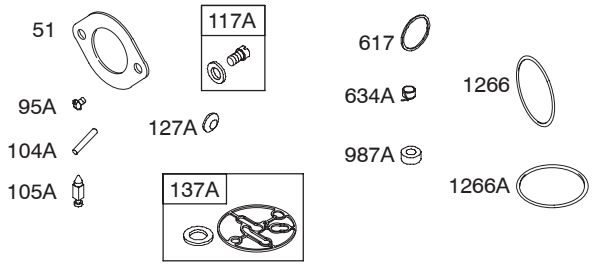
BRIGGS & STRATTON ENGINE - - MODEL NUMBER 31P777, TYPE NUMBER 0899-E1



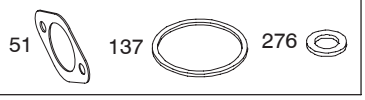
121 CARBURETOR OVERHAUL KIT



121A CARBURETOR OVERHAUL KIT

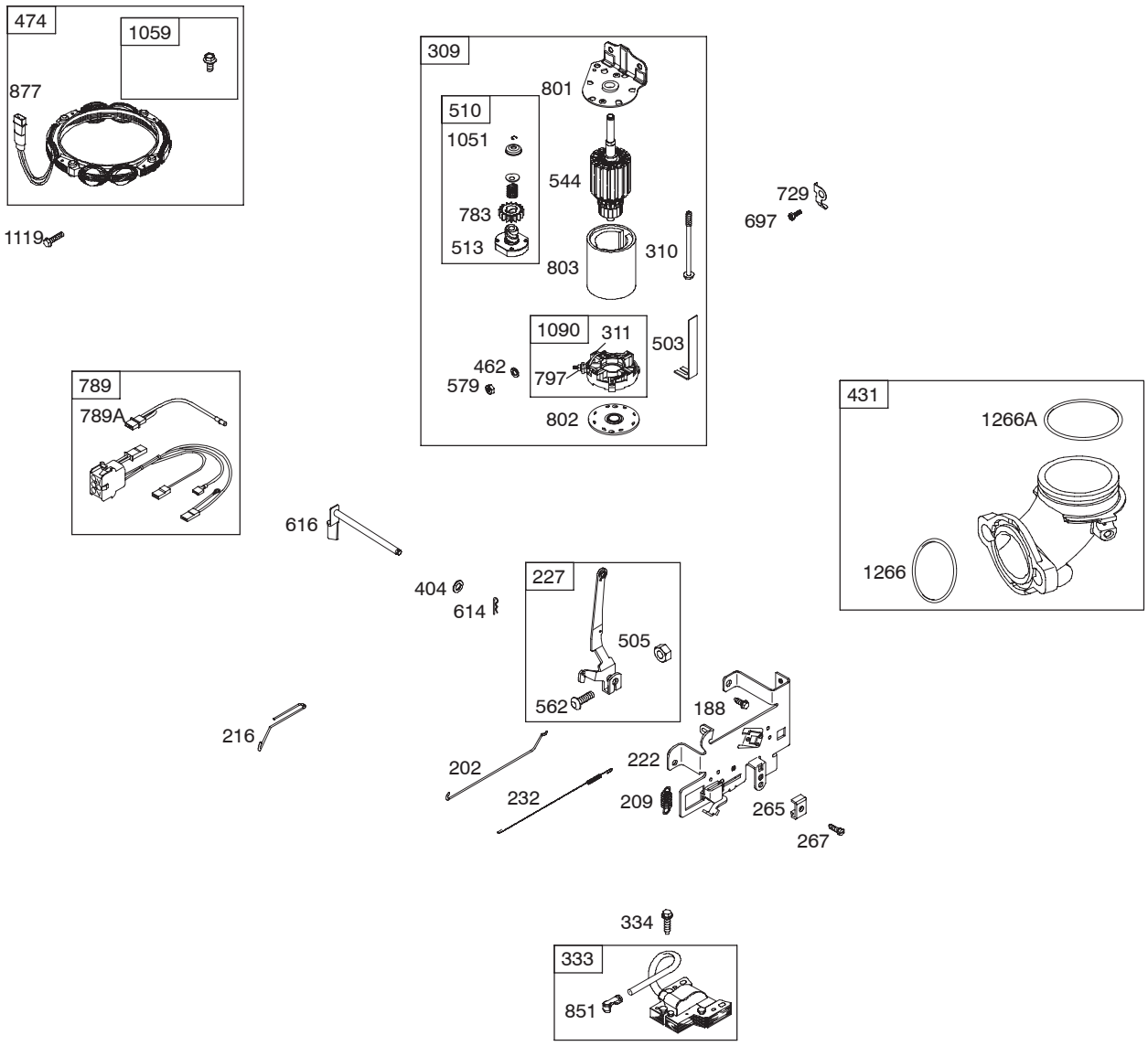


977 CARBURETOR GASKET SET



TRACTOR- -MODEL NO. 944.607900

BRIGGS & STRATTON ENGINE - - MODEL NUMBER 31P777, TYPE NUMBER 0899-E1



TRACTOR- -MODEL NO. 944.607900

BRIGGS & STRATTON ENGINE - - MODEL NUMBER 31P777, TYPE NUMBER 0899-E1

KEY NO.	PART NO.		DESCRIPTION
1	793987		Cylinder Assembly
2	399265		Kit-Bushing/Seal (Magneto Side)
3	391086s	•	Seal-Oil (Magneto Side)
4	697188		Sump-Engine
5	793989		Head-Cylinder
7	699168	•+	Gasket-Cylinder Head
9	697109	•	Gasket-Breather
10	697157		Screw (Breather Assembly)
11	697113		Tube-Breather
12	697110	•	Gasket-Crankcase
13	793988		Screw (Cylinder Head)
15	690946		Plug-Oil Drain
16	697127		Crankshaft
20	791892	•	Seal-Oil (PTO Side)
22	692125		Screw (Crankcase Cover)
23	693556		Flywheel
24	222698s		Key-Flywheel
25	792507		Piston Assembly (Standard)
	792648		Piston Assembly (.020" Oversize)
26	791936		Ring Set-Piston (Standard)
	792649		Ring Set-Piston (.020" Oversize)
27	698469		Lock-Piston Pin
28	697099		Pin-Piston (Standard)
29	791631		Rod-Connecting (Standard)
32	791118		Screw (Connecting Rod)
33	791934		Valve-Exhaust
34	791935		Valve-Intake
35	691279		Spring-Valve (Intake)
36	691279		Spring-Valve (Exhaust)
37	697352		Guard-Flywheel
42	499586		Retainer-Valve
43	691968		Slinger-Governor/Oil
45	690564		Tappet-Valve
46	793880		Camshaft
48	697762		Short Block
50	699028		Manifold-Intake
51	692137	• Ø‡+	Gasket-Intake
53	690227		Stud (Carburetor)
54	691148		Screw (Intake Manifold)
73	697133		Screen-Rotating
74	697897		Screw (Rotating Screen)
78	691003		Screw (Flywheel Guard)
93	690602	Ø	Bushing-Throttle Shaft
94	794176		Kit-Idle Mixture
94A	793610		Kit-Idle Mixture (Nikki)
95	691636		Screw (Throttle Valve)
95A	690718	Ø	Screw (Throttle Valve) (Nikki)
98	495800		Kit-Idle Speed
98A	695408		Kit-Idle Speed (Nikki)
104	690525	Ø	Pin-Float Hinge
104A	694918	Ø	Pin-Float Hinge (Nikki)
105	231855s	Ø	Valve-Float Needle
105A	696136	Ø	Valve-Float Needle (Nikki)
106	690577	Ø	Seat-Inlet
108	692344		Valve-Choke
108A	695419		Valve-Choke
117	694352	Ø	Jet-Main (Standard)
117A	699457	Ø	Jet-Main (Standard) (Nikki)
118	697228		Jet-Main (High Altitude)
118A	699458		Jet-Main (High Altitude) (Nikki)
121	697241		Kit-Carburetor Overhaul
121A	699521		Kit-Carburetor Overhaul (Nikki)
125	793224		Carburetor
127	695005		Plug-Welch
127A	690727	Ø	Plug-Welch (Nikki)
130	691750		Valve-Throttle
130A	699500		Valve-Throttle (Nikki)
131	790901		Kit-Throttle Shaft
131A	699501		Kit-Throttle Shaft (Nikki)
133	494381		Float-Carburetor
133A	694914		Float-Carburetor (Nikki)
135	698780		Tube-Fuel Transfer
137	281165s	Ø‡	Gasket-Float Bowl
137A	698781	Ø	Gasket-Float Bowl (Nikki)
141	790902		Kit-Choke Shaft
141A	695420		Kit-Choke Shaft (Nikki)
142	697140	Ø	Nozzle-Carburetor
146	691639		Key-Timing
187	791805		Line-Fuel (Cut to Required Length)
188	691693		Screw (Control Bracket)
192	691986		Adjuster-Rocker Arm
202	691841		Link-Mechanical Governor
209	692208		Spring-Governor
216	691840		Link-Choke
222	694042		Bracket-Control
227	691374		Control Lever-Governor
232	691842		Spring-Governor Link
238	691843		Cap-Valve
240	394358s		Filter-Fuel
265	691024		Clamp-Casing
267	792629		Screw (Casing Clamp)
276	692255	Ø‡	Sealing Washer
276A	695410		Sealing-Washer (Nikki)
304	792866		Housing-Blower
305	697102		Screw (Blower Housing)
305A	793376		Screw (Blower Housing)
306	697107		Shield-Cylinder
307	691003		Screw (Cylinder Shield)
309	693551		Motor-Starter
310	690323		Screw (Starter Motor)
311	497608		Brush Set
333	492341		Armature-Magneto
334	691061		Screw (Armature Magneto)
337	491055s		Spark Plug
356	697089		Wire-Stop
358	792621		Gasket Set-Engine
363	19203		Flywheel Puller
383	89838		Wrench-Spark Plug
404	691691		Washer (Governor Crank)
415	690283		Plug
431	697122		Elbow-Intake
445	697153		Filter-Air Cleaner Cartridge
462	691261		Washer (Brush Retainer)
474	696457		Alternator

TRACTOR- -MODEL NO. 944.607900

BRIGGS & STRATTON ENGINE - - MODEL NUMBER 31P777, TYPE NUMBER 0899-E1

KEY NO.	PART NO.		DESCRIPTION
501	691188		Regulator
503	691532		Strap-Starter
505	691251		Nut (Governor Control Lever)
510	693699		Drive-Starter
513	692024		Clutch-Drive
523	699908		Dipstick
524	691032	•	Seal-Dipstick Tube
525	697184		Tube-Dipstick
526	697088		Screw (Regulator)
544			Armature-Starter (For service order 693551 Starter Motor)
552	697144		Bushing-Governor Lever
562	691119		Bolt (Governor Control Lever)
579	691029		Nut (Starter Cable)
584	697112		Cover-Breather Passage
601	791850		Clamp-Hose
614	691620		Pin-Cotter
616	692012		Crank-Governor
617	692138	• Ø	O Ring Seal (Intake Manifold)
634	690802	Ø	Spring/Seal Assembly
634A	698779	Ø	Spring/Seal Assembly (Nikki)
635	691909		Boot-Spark Plug
643	698401		Retainer-Air Filter
654	690958		Nut (Carburetor)
691	692407	•	Seal-Governor Shaft
697	690372		Screw (Drive Cap)
718	690959		Pin-Locating
729	691224		Clip-Wire
741	697128		Gear-Timing
750	790832		Screw (Oil Pump Cover)
757	793242		Link-Counterweight
758	697134		Counterweight
759	697392		Pin-Counterweight
783	693713		Gear-Pinion
789	698329		Harness-Wiring
789A	790544		Harness-Wiring
797	693167		Nut (Brush Retainer)
801	691283		Cap-Drive
802	691286		Cap-End
803			Housing-Starter (For service order 693551 Starter Motor)
830	691095		Stud (Rocker Arm)
842	691031	•	Seal-O Ring (Dipstick Tube)
847	790442		Dipstick/Tube Assembly
851	692424		Terminal-Spark Plug
868	690968	•+	Seal-Valve
877	393456		Wire/Connector-Alternator
914	691108		Screw (Rocker Cover)
943	690589	•	O Ring Seal (Oil Pump Cover)
947	694393		Solenoid-Fuel
947A	699915		Solenoid-Fuel (Nikki)
965	499613		Cover-Oil Pump
967	697015		Filter-Pre Cleaner
968	699986		Cover-Air Cleaner
975	495933		Bowl-Float
975A	699502		Bowl-Float (Nikki)
977	690192		Set-Carburetor Gasket
987	691326	Ø •	Seal-Throttle Shaft
987A	698777	Ø	Seal-Throttle Shaft (Nikki)
1005	699043		Fan-Flywheel
1017	690770		Screen-Oil Pump
1022	272475s	•+	Gasket-Rocker Cover
1023	791079		Cover-Rocker
1024	499054		Pump-Oil
1026	692003		Rod-Push (Intake)
	692011		Rod-Push (Exhaust)
1027	696854		Filter-Oil
1029	691751		Arm-Rocker
1034	690822		Guide-Push Rod
1035	693784		Shaft-Pump
1036			Label-Emissions (Available from a Briggs & Stratton authorized Service Dealer)
1040	699852		Plate-Trim
1044	698139		Screw (Flywheel)
1051	691265		Retaining-Ring
1058	MS3787		Operator's Manual
1059	698516		Kit-Screw/Washer
1070	690372		Screw (Flywheel Fan)
1090	691293		Retainer-Brush
1091	691333		Cap-Limiter
1095	690190		Gasket Set-Valve
1119	691183		Screw (Alternator)
1127	695407		Screw (Float Bowl)
1263	697124		Reed-Breather
1264	697104		Screw (Breather Reed)
1266	691917	•Ø	O Ring Seal (Intake Elbow)
1266A	697123	Ø	O Ring Seal (Intake Elbow)
1267	697419		Latch-Blower Housing
1270	793243		Plug-AVS Counterweight
1329	31Q777-0036		Replacement Engine (Transfer Regulator and Lead Wires to the replacement engine.)
1330	272147		Repair Manual

•	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

SERVICE NOTES

SERVICE NOTES

LIMITED WARRANTY ON CRAFTSMAN RIDING EQUIPMENT

For two (2) years from the date of purchase, if this Craftsman Riding Equipment is maintained, lubricated and tuned up according to the instructions in the owner's manual, Sears will repair or replace free of charge any parts that are found to be defective in material or workmanship according to the guidelines of coverage listed below. Sears will also provide free labor for these applicable warranted parts for the two full years. During the first 30 days of purchase, there will be no charges to service the product at your home for issues covered by this warranty. (See exclusions below). For your convenience, IN HOME warranty service will still be available after the first 30 days of purchase, but a trip charge will apply. This charge will be waived if the Craftsman product is dropped off at an authorized Sears location. For the nearest authorized Sears location, please call 1-800-4-MY-HOME®. This warranty applies only while this product is within the United States.

This Warranty does not cover**:**

- Expendable items which become worn during normal use, including but not limited to blades, spark plugs, air cleaners, belts, and oil filters.
- Standard Maintenance Servicing, oil changes, or tune-ups
- Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps, or glass.
- Repairs necessary because of operator abuse, including but not limited to, damage caused by towing objects beyond the capability of the riding equipment, impacting objects that bend the frame or crankshaft, or over-speeding the engine.
- Repairs necessary because of operator negligence, including but not limited to, electrical and mechanical damage caused by improper storage, failure to use the proper grade and amount of engine oil, failure to keep the deck clear of flammable debris, or failure to maintain the equipment according to the instructions contained in the owner's manual.
- Engine (fuel system) cleaning or repairs caused by fuel determined to be contaminated or oxidized (stale). In general, fuel should be used within 30 days of its purchase date.
- Normal deterioration and wear of the exterior finishes, or product label replacement.
- Riding equipment used for commercial or rental purposes.

LIMITED WARRANTY ON BATTERY

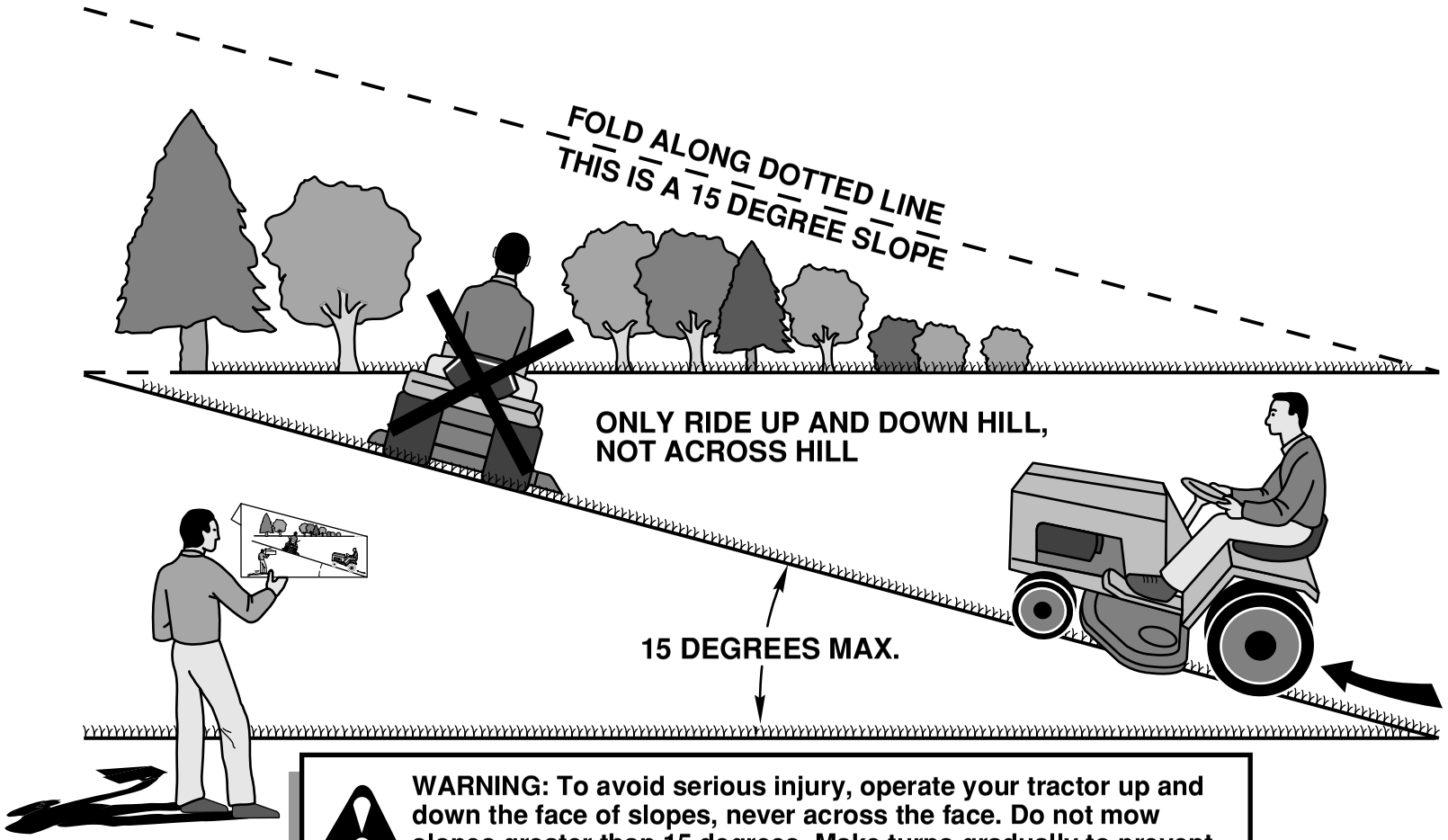
For ninety (90) days from date of purchase, if any battery included with this riding equipment proves defective in material or workmanship and our testing determines the battery will not hold a charge, Sears will replace the battery at no charge. During the first 30 days of purchase, there will be no charges to replace the battery at your HOME. After the first 30 days, for your convenience, IN-HOME warranty service will still be available but a trip charge will apply. This charge will be waived if the Craftsman product is dropped of at an authorized Sears location. For the nearest authorized Sears location, please call 1-800-4-MY-HOME®.

This battery warranty applies only while this product is within the United States.

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

Sears, Roebuck and Co., Hoffman Estates, IL 60179

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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1-800-4-MY-HOME®

(1-800-469-4663)

24 hours a day, 7 days a week

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no matter who made it, no matter who sold it!

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to bring in products like vacuums, lawn equipment and electronics.

For **Sears Parts & Service,** to order the replacement parts,
accessories and owner's manuals that you need to do-it-yourself.

www.sears.ca

To purchase or inquire about a Sears Maintenance Agreement, call:

1-800-361-6665

9 a.m. – 11 p.m. Mon. – Fri., EST, 9 a.m. – 4 p.m. Sat.

Pour service en français:

1-800-LE-FOYERMC

(1-800-533-6937)

www.sears.ca

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414086 Rev. 2 05.08.08 AP/TH

Printed in U.S.A.