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SEARS

**OWNER'S
MANUAL**

MODEL NO.
944.601380

IMPORTANT:

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



CRAFTSMAN®

12.5 HP*

ELECTRIC START

30" RIDING MOWER

SIDE DISCHARGE

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

Gasoline containing up to 10% ethanol (E10) is acceptable for use in this machine.
The use of any gasoline exceeding 10% ethanol (E10) will void the product warranty.

*As rated by the engine manufacturer

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

SAFETY RULES

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 riding mower.

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

WARNING: This unit is not intended for the use of wheel weights. Only use attachments designed specifically for this riding mower.

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

I. GENERAL OPERATION

- Read, understand, and follow all instructions 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 blade.
- 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 blade when crossing gravel surfaces.
- Do not operate machine without the entire grass catcher, discharge chute, or other safety devices in place and working.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blade, set parking brake, stop engine, and remove keys before dismounting.
- Disengage blade 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 chute.
- 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.
- 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.

GENERAL: Craftsman products are warranted to be free from defects in materials or workmanship for a specific time period as set-out below (the "Warranty Period"). Warranties extend to the original purchaser of a Craftsman product only. Purchases made through an online auction or through any website other than www.sears.ca are excluded. The relevant Warranty Period commences on the original date of purchase. Within this period, SEARS CANADA, Inc. will, at its sole option, repair or replace any products or components which fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost.

EXCLUSIONS: This warranty does not cover failures due to normal wear, abuse, misuse, neglect (including but not limited to the use of stale fuel, dirt, abrasives, moisture, rust, corrosion, or any adverse reaction due to improper storage or use habits), improper maintenance or failure to follow maintenance guidelines and/or instructions, failure to operate the product in accordance with the owner's manual or any additional instructions or information provided at the time of purchase or in subsequent communications with the original purchaser, accident or unauthorized alterations or repairs made or attempted by others. Also excluded from warranty coverage - except as provided below - are the following: maintenance, adjustments, components subject to wear including but not limited to: cosmetic components, belts, blades, blade adapters, bulbs, tires, filters, guide bars, lubricants, seats, grips, recoil assy's, saw chains and bars, trimmer lines and spools, spark plugs, starter ropes and tines, and discoloration resulting from ultraviolet light. Any product missing the model and/or serial number identification label will be disqualified from coverage under this warranty.

REPAIRS: Repairs have a 90 day warranty. If the defective product is still within the Warranty Period, then the new warranty is 90 days from the date of repair or to the end of the original Warranty Period, whichever period is longer.

DISCLAIMERS: THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER ORAL OR WRITTEN (OTHER THAN AS STATED HEREIN), AND WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, WHICH MAY VARY FROM PROVINCE TO PROVINCE.

IN NO EVENT SHALL SEARS BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT. THE EXCLUSIONS IN THIS PARAGRAPH SHALL NOT APPLY IN JURISDICTIONS WHERE APPLICABLE LAW DOES NOT ALLOW FOR THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. IN SUCH JURISDICTIONS, THIS PARAGRAPH SHALL NOT APPLY, BUT THE REMAINING PROVISIONS OF THIS DOCUMENT SHALL REMAIN VALID.

SEARS retains the exclusive right to repair or replace the product or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

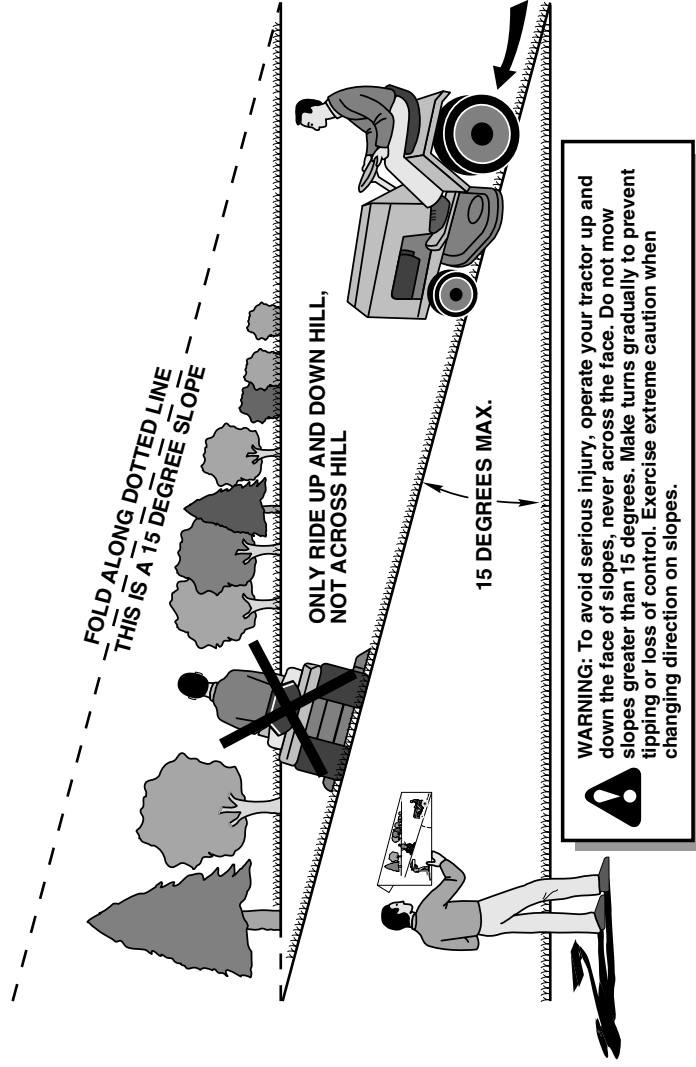
CUSTOMER RESPONSIBILITIES: In addition to complying with all suggested maintenance guidelines and instructions, customers' obligations shall include but shall not be limited to: operating the product in accordance with the owner's manual or any additional instructions or information provided at the time of purchase or in subsequent communications to the purchaser from time to time, exhibit reasonable care in the use, operation, maintenance, general upkeep and storage of the product. Failure to comply with these requirements will void any applicable warranty.

LIST OF APPLICABLE WARRANTY PERIODS: The following list contains the applicable Warranty Period for your Craftsman product and is based on a combination of the type of product or component and the intended and actual use of the product or component:

1. **90 DAYS:** Craftsman products intended for use or actually used for commercial, institutional, professional or income-producing purposes
2. **2 YEARS:** Craftsman riding lawn mowers, yard and garden tractors, walk behind mowers, tillers, brush cutters, snow blowers, handheld blowers, backpack blowers, hedge trimmers and electrical products for noncommercial, nonprofessional, non-institutional, or non-income-producing use, except for those components which are part of engine systems manufactured by third party engine manufacturers for which the purchase has received a separate warranty with product information supplied at the time of purchase.
3. **1 YEAR:** Craftsman power cutters, stump grinders, pole pruners, gas chain saws, electric chain saws, trimmer attachments, baggers and pole saws for noncommercial, nonprofessional, non-institutional, or non-income-producing use.
4. **90 DAYS:** All defective batteries, which will be replaced during this 90-day Warranty Period.
5. **60 DAYS:** Additional Warranty Period of 60 days will apply to adjustments and worn products or components BUT DOES NOT INCLUDE WEAR OR ADJUSTMENTS for products used for commercial, institutional, professional or income-producing purposes. Wear items include but are not limited to: belts, blades, tires, spark plugs, air filters, chains, shear bolts, skid plates, scraper bars, drift cutters, ropes, tines, collection bags and pulleys.

As the Warranty Period runs from the date of purchase and NOT from the date that a product is delivered, opened, assembled or first used, please ensure during this time period that your product or component has been assembled and tested for correction operation regardless of when you intend to actually use it. Claims made after the Warranty Period has expired will not be honored.

PROOF OF PURCHASE/DOCUMENTATION: Warranty coverage is conditioned upon the original purchaser furnishing SEARS CANADA or its authorized third party service provider if applicable, with the original sales receipt or other adequate written proof of the original purchase date and identification of the product. In the event that the original purchaser is unable to provide a company of the original sales receipt, SEARS CANADA Inc. reserves the right to determine in its sole discretion what other written proof of the original purchase date and identification of the product is acceptable.



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.

SAFETY RULES



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 (15° Max), 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.
- If machine stops while going uphill, disengage blade, shift into reverse and back down slowly.
- Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blade 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.

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 blade 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. 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.

SAFETY RULES

- 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 chute frequently and replace with manufacturer's recommended parts, when necessary.
 - Mower blade is 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.

RIDING MOWER - MODEL NO. 944.60138 (601380) BRIGGS & STRATTON ENGINE MODEL NUMBER 219807, TYPE NUMBER 1581-G5

KEY PART NO.	PART NO.	DESCRIPTION	KEY PART NO.	PART NO.	DESCRIPTION
337	691043	Plug-Spark	864	796002	Adapter-Muffler
358	796181	Gasket Set-Engine	868	690968	Seal-Valve
404	691691	Washer (Governor Crank)	883	692236	Gasket-Exhaust
415	794129	Plug (Rotating Screen)	914	691108	Screw (Rocker Cover)
415A	794903	Plug (Intake Manifold)	964	799159	Cap-Connector
431	797901	Elbow-Intake	968	799016	Cover-Air Cleaner
445	796032	Filter-Air Cleaner Cartridge	975	698783	Bowl-Float
474	696459	Alternator	987	698777	Seal-Throttle Shaft
505	691251	Nut (Governor Control Lever)	1005	796082	Fan-Flywheel
510	693699	Drive-Starter	1022	272475S	Gasket-Rocker Cover
513	692024	Clutch-Drive	1023	797421	Cover-Rocker
523	699908	Dipstick	1026	794573	Rod-Push (Exhaust)
524	691032	Seal-Dipstick Tube		697394	Rod-Push (Intake)
525	697184	Tube-Dipstick	1029	691751	Arm-Rocker
552	697144	Bushing-Governor Crank	1034	690822	Guide-Push Rod
562	691119	Bolt (Governor Control Lever)	1036	- - - - -	Label-Emissions (Available from a Briggs & Stratton Authorized Dealer)
584	794682	Cover-Breather Passage			Plate-Trim
597	691696	Screw (Pawl Friction Plate)	1040	698368	Screw (Flywheel)
601	791850	Hose-Clamp (Green)	1044	698139	Ring-Retaining
613	691416	Screw (Muffler) (5/16-18x.54)	1051	691265	Operator's Manual
613A	691678	Screw (Muffler) (5/16-18x.62)	1058	276344TRI	Kit-Screw/Washer (Alternator)
614	691620	Pin-Cotter (Governor Crank)	1059	698516	Retainer-Brush
616	692012	Crank-Governor	1090	691293	Cap-Limiter
617	692138	Seal-O Ring (Intake Manifold) (Red)	1091	691333	Gasket Set-Valve
		Seal-Choke/Throttle Shaft (Choke Shaft)	1095	795807	Screw (Alternator)
		Spring/Seal Assembly (Choke Shaft)	1119	691183	Screw (Float Bowl)
		Boot-Spark Plug	1127	695407	Reed-Breather
		Nut (Carburetor)	1263	697124	Screw (Breather Reed)
		Deflector-Muffler	1264	697104	Seal-O Ring (Intake Elbow) (Red)
		Screw (Muffler Deflector)	1266	691917	
		Seal-Governor Shaft	1329	219907-	Replacement Engine
		Screw (Drive Cap)		3026-G5	Repair Manual
		Pin-Locating	1330	276781	
		Clip-Wire			
		Gear-Timing			
		Gear-Pinion			
		Harness-Wiring			
		Cap-Drive			
		Cap-End			
		Screw (Muffler Adapter)			
		Stud-Rocker Arm			
		Seal-O Ring (Dipstick Tube)			
		Dipstick/Tube Assembly			
		Sealant-Liquid			
		Terminal-Spark Plug			

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

**RIDING MOWER - MODEL NO. 944.60138 (601380)
BRIGGS & STRATTON ENGINE MODEL NUMBER 219807, TYPE NUMBER 1581-G5**

KEY PART NO.	PART NO.	DESCRIPTION	KEY PART NO.	PART NO.	DESCRIPTION
1	697377	Cylinder Assembly	105	696136	Valve-Float Needle
2	399265	Kit-Bushing/Seal (Magneto Side)	108	698773	Valve-Choke
3	391086s	Seal-Oil (Magneto Side)	117	796079	Jet-Main (Standard)
4	697106	Sump-Engine	118	796332	Jet-Main (High Altitude)
5	796183	Head-Cylinder	121	796184	Kit-Carburetor Overhaul
7	273280s	Gasket-Cylinder Head	125	794653	Carburetor
9	697109	Gasket-Breather	127	690727	Plug-Welch
10	697157	Screw (Breather Assembly)	130	698774	Valve-Throttle
11	794683	Tube-Breather	131	698776	Kit-Throttle Shaft
12	697110	Gasket-Crankcase	133	694914	Float-Carburetor
13	690360	Screw (Cylinder Head)	135	698780	Tube-Fuel Transfer
15	690946	Plug-Oil Drain	137	698781	Gasket-Float Bowl
16	796146	Crankshaft	141	698778	Kit-Choke Shaft
20	795387	Seal-Oil (PTO Side)	146	691639	Key-Timing
22	692125	Screw (CrankcaseCover/Sump)	186	794873	Connector-Hose (Intake Manifold)
23	698281	Flywheel	187	791805	Line-Fuel (Formed) (Cut to Required Length)
24	222698s	Key-Flywheel	188	691693	Screw (Control Bracket)
25	797009	Piston Assembly (Standard)	192	691986	Adjuster-Rocker Arm
	797010	Piston Assembly (.020" Oversize)	202	691841	Link-Mechanical Governor
26	797011	Ring Set (Standard)	209	792602	Spring-Governor (Red)
	797012	Ring Set (.020" Oversize)	216	691840	Link-Governor
27	698469	Lock-Piston Pin	217	695409	Spring-Choke Return
28	797013	Pin-Piston	222	694042	Bracket-Control
29	791633	Rod-Connecting	227	691374	Lever-Governor Control
32	791118	Screw (Connecting Rod)	232	691842	Spring-Governor Link
33	791934	Valve-Exhaust	238	691843	Cap-Valve
34	791935	Valve-Intake	240	394358s	Filter-Fuel
35	691279	Spring-Valve (Intake)	265	691024	Clamp-Casing
36	691279	Spring-Valve (Exhaust)	267	794904	Screw (Casing Clamp)
37	697352	Guard-Flywheel	300	796001	Muffler
42	499586	Keeper-Valve	304	799012	Housing-Blower
43	691968	Slinger-Governor/Oil	305	799370	Screw (Blower Housing) (1/4-20x.90)
45	690564	Tappet-Valve	305A	697102	Screw (Blower Housing) (1/4-20x1.20)
46	793880	Camshaft	305B	793376	Screw (Blower Housing) (1/4-20x.81)
48	697740	Short Block	305C	795891	Screw (Blower Housing) (#10-16x.44)
50	796188	Manifold-Intake	306	697359	Shield-Cylinder
51	692137	Gasket-Intake	307	691693	Screw (Cylinder Shield)
51A	794312	Gasket-Intake	309	693551	Motor-Starter
53	690227	Stud (Carburetor)	310	690323	Screw (Starter Motor)
54	691148	Screw (Intake Manifold)	324	796308	Screen/Cup Assembly
78	691693	Screw (Flywheel Guard)	333	795315	Armature-Magneto
81	691178	Lock-Muffler Screw	334	691061	Screw (Magneto Armature)
94	793610	Kit-Idle Mixture			
95	690718	Screw (Throttle Valve)			
98	695408	Kit-Idle Speed			
104	694918	Pin-Float Hinge			

PRODUCT SPECIFICATIONS

Gasoline Capacity and Type:	1.5 Gallons Unleaded Regular
Oil Type (API SG-SL):	SAE 30 (Above 32°F) SAE 5W30 (Below 32°F)
Oil Capacity:	48 Oz.
Spark Plug:	Champion RC12YC (Gap: .030")
Ground Speed (Mph):	Forward: 0 - 4 Reverse: 0 - 2
Charging System:	3 Amps @ Battery
Blade Bolt Torque:	45-55 Ft. Lbs.

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

Should you experience any problem you cannot easily remedy, please contact a Sears or other qualified service center. We have competent, well-trained representatives and the proper tools to service or repair this riding mower.

Please read and retain this manual. The instructions will enable you to assemble and maintain your riding mower 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 riding mower.
- Follow the instructions under "Maintenance" and "Storage" sections of this manual.

⚠ WARNING: This riding mower 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.

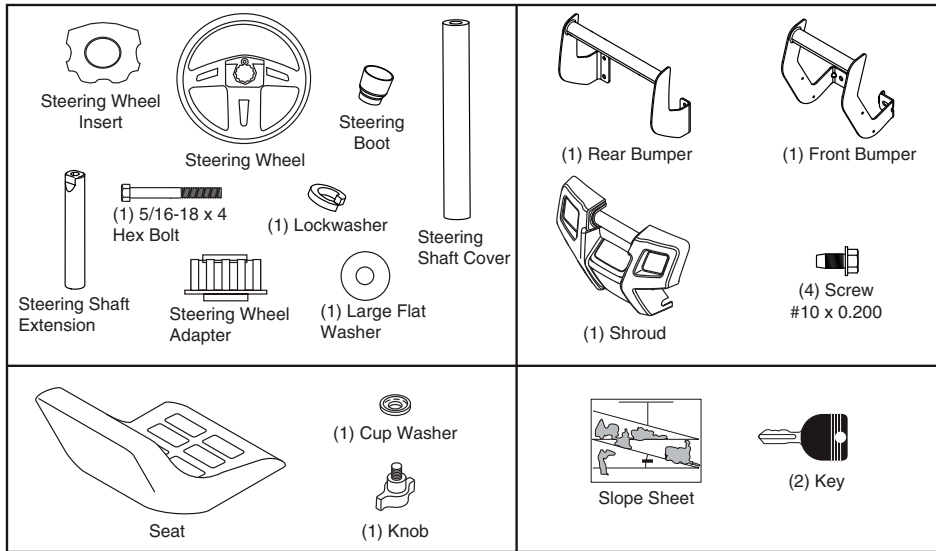
In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.

A spark arrester for the muffler is available through your nearest Sears or other authorized service center/department.

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Maintenance	17	Sears Service	Back Cover

UNASSEMBLED PARTS



ASSEMBLY/PRE-OPERATION

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

TOOLS REQUIRED FOR ASSEMBLY

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

- (1) 1/2" wrench
- (1) Utility knife
- (1) Tire pressure gauge

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 RIDING MOWER FROM CARTON

UNPACK CARTON

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

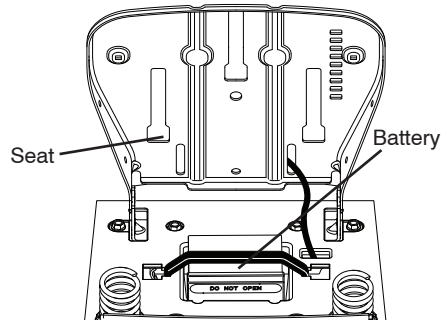
NOTE: Only cut carton with a short blade utility knife, a long blade or saw can puncture tires on unit.

HOW TO SET UP YOUR RIDING MOWER

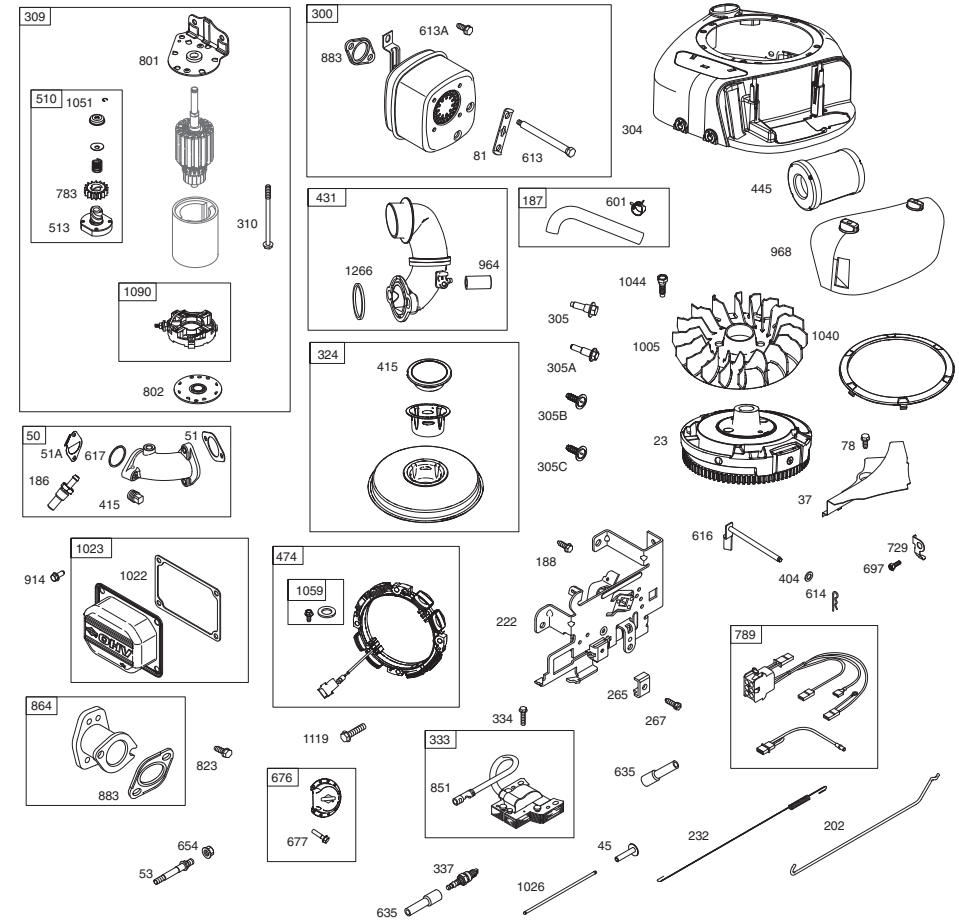
CHECK BATTERY

Ensure battery is securely fastened, and that all wires are securely connected.

- Battery is located under the seat.
- Battery has been fully charged from the factory, before installation.



RIDING MOWER - MODEL NO. 944.60138 (601380) BRIGGS & STRATTON ENGINE MODEL NUMBER 219807, TYPE NUMBER 1581-G5



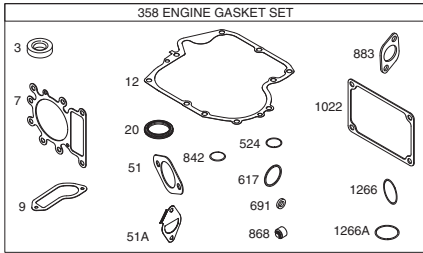
RIDING MOWER - MODEL NO. 944.60138 (601380)
BRIGGS & STRATTON ENGINE MODEL NUMBER 219807, TYPE NUMBER 1581-G5

48 SHORT BLOCK

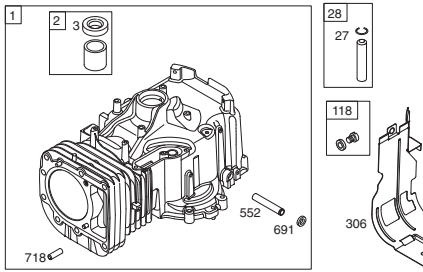
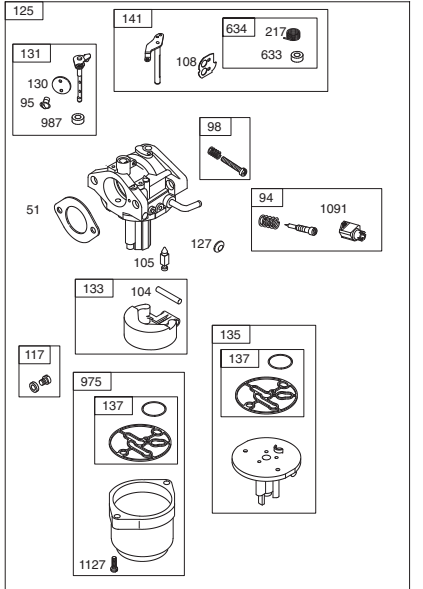
1058 OPERATOR'S MANUAL

1329 REPLACEMENT ENGINE

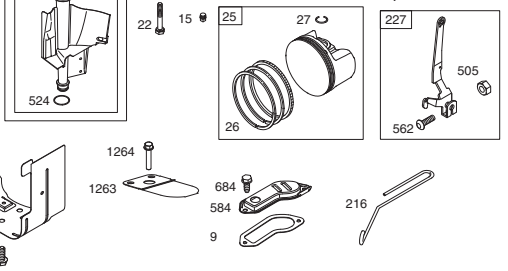
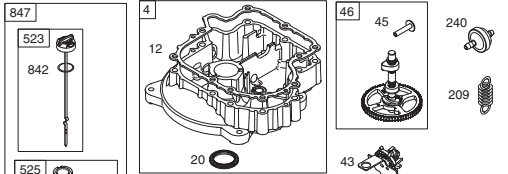
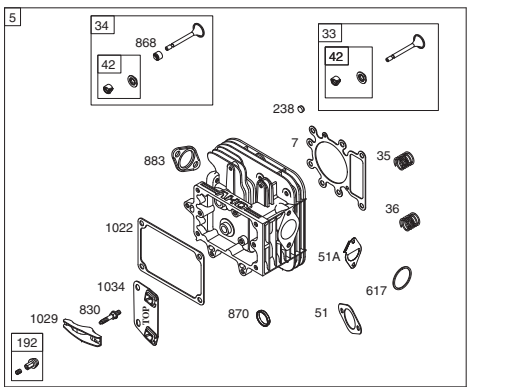
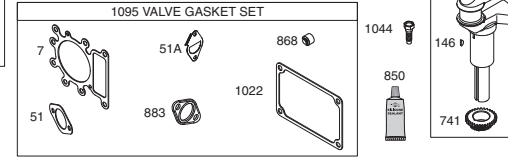
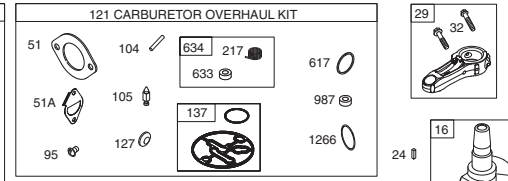
1330 REPAIR MANUAL



1036 EMISSIONS LABEL

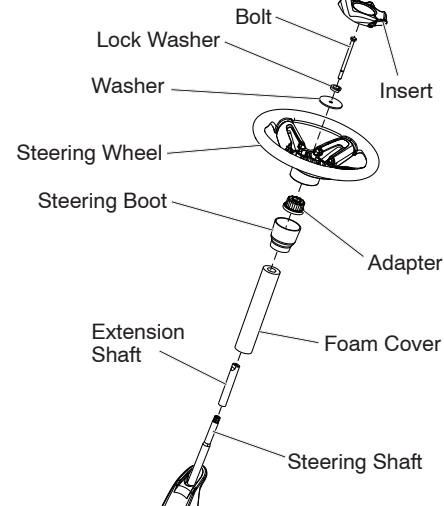


306, 307



TO INSTALL STEERING WHEEL

1. Slide extension shaft onto steering shaft.
2. Slide steering shaft protective foam cover over steering shaft.
3. Place steering boot over steering shaft and push down to secure.
4. Position front wheels of the riding mower so they are pointing straight forward.
5. Remove steering wheel adapter from steering wheel and slide adapter onto steering shaft.
7. Press steering wheel into position on shaft, install large washer, lock washer, bolt and tighten securely.
8. Snap steering wheel insert into center of steering wheel securely.

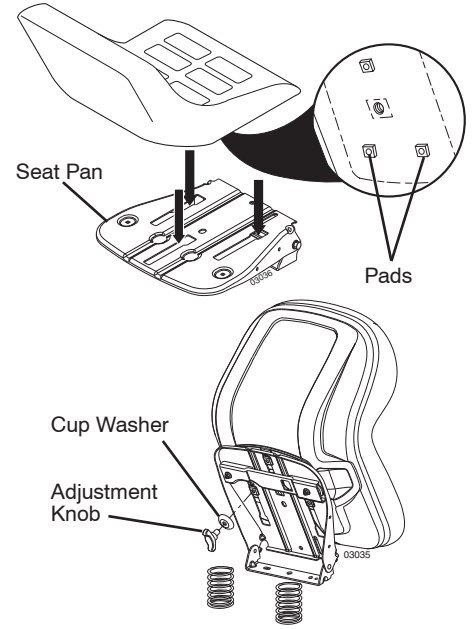


TO INSTALL SEAT

Adjust seat before tightening adjustment knob.

1. Remove adjustment knob and cup washer securing seat to cardboard packing and set aside.
2. Remove seat from the cardboard packing and set seat aside. Remove the cardboard packing and discard.
3. Place seat on seat pan so all three (3) bottom pads are positioned over large slotted holes in pan.
4. Push down on seat to engage pads in slots and pull seat towards rear of the riding mower.
5. Pivot seat and pan forward and assemble adjustment knob and cup washer loosely. Do not tighten.
6. Lower seat into operating position and sit in seat.

7. Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
8. Get off seat without moving its adjusted position.
9. Raise seat and tighten adjustment knob securely.



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

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

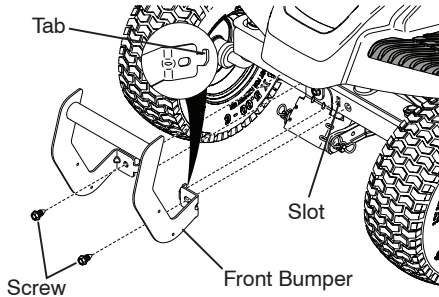
TO ROLL RIDING MOWER OFF SKID (See Operation section for location and function of controls)

1. Raise deck lift lever to its highest position.
2. Release parking brake by depressing clutch/brake pedal.
3. Shift unit to neutral.
4. Roll riding mower forward off skid.

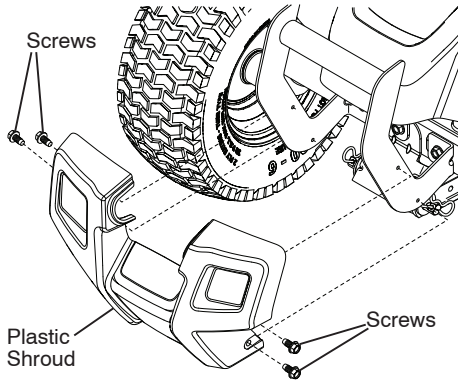
TO ATTACH FRONT BUMPER

NOTE: For ease of assembly, you may wish to obtain the assistance of another person for mounting bumper to riding mower.

1. Remove (2) screws from front chassis of riding mower.
2. Tilt the front bumper so that the bumper tabs catch the slots on the front of the chassis and lower the bumper in to place.
3. Attach the bumper to front of chassis with screws removed in step 1.
4. Tighten the two (2) screws securely.



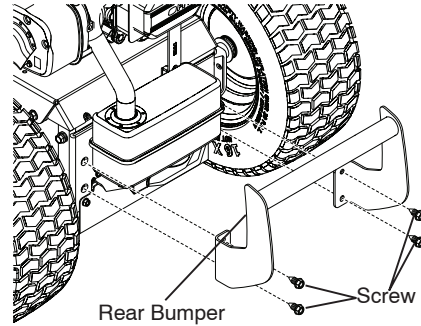
5. Position plastic shroud over bumper as shown and loosely assemble to bumper with the four (4) supplied screws.
6. Tighten all four (4) screws securely.



TO ATTACH REAR BUMPER

NOTE: For ease of assembly, you may wish to obtain the assistance of another person for mounting bumper to riding mower.

1. Remove (4) screws from rear chassis of riding mower.
2. Position bumper as shown and assemble to rear chassis with screws removed in step 1.
3. Tighten the four (4) screws securely.



CHECK TIRE PRESSURE

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

CHECK DECK LEVELNESS

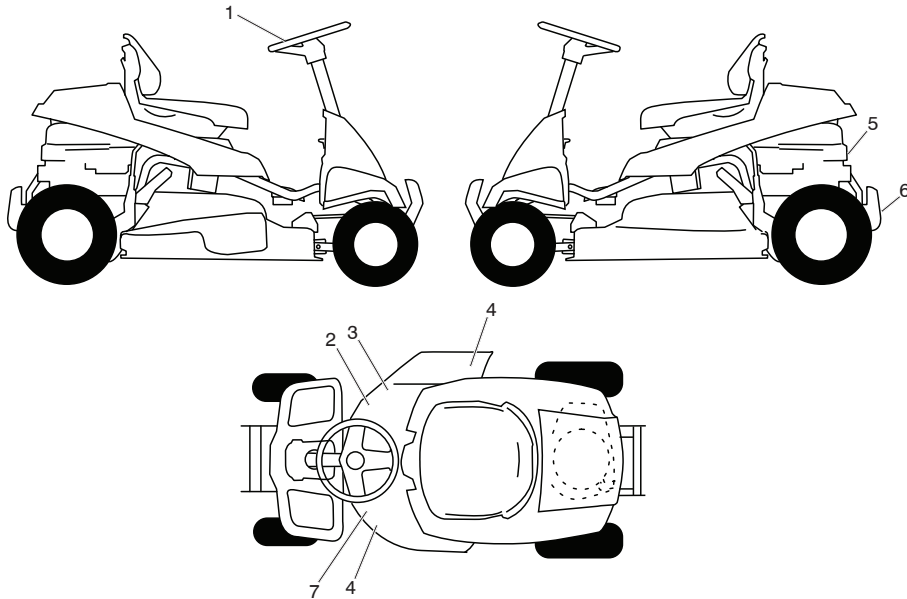
For best cutting results, mower housing should be properly leveled. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.

CHECK FOR PROPER POSITION OF MOWER DRIVE BELT

See the figure that is shown for replacing the mower drive belt in the service and adjustment section of this manual. Verify that the belt is routed correctly.

CHECK BRAKE SYSTEM

After you learn how to operate your riding mower, check to see that the brake is operating properly.



KEY NO.	PART NO.	DESCRIPTION
1	439525	DECAL, STEERING WHEEL
2	441497	DECAL, V-BELT SCH 30"
3	425112	DECAL, WARN. DEFLECT/CTFGR
4	441837	DECAL, DECK/DEFLECTOR
5	441928	DECAL, ENGINE H.P.
6	435286	DECAL, WARNING SPARK
7	170563	DECAL, MOWER WARN
--	442295	MANUAL OWNER'S ENGLISH
--	442935	MANUAL OWNER'S FRENCH

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

✓ **CHECKLIST**

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

Please review the following checklist:

- ✓ All assembly instructions have been completed.
 - ✓ No remaining loose parts in carton.
 - ✓ Battery is properly connected.
 - ✓ 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 belt. Be sure it is routed properly around pulleys and inside all belt keepers.
 - ✓ Check wiring. See that all connections are still secure and wires are properly clamped.
- While learning how to use your riding mower, 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.
 - ✓ Be sure Operator Presence System and Reverse Operation System (ROS) are working properly (See the Operation and Maintenance sections in this manual.)

OPERATION







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



BRAKE/CLUTCH PEDAL



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.

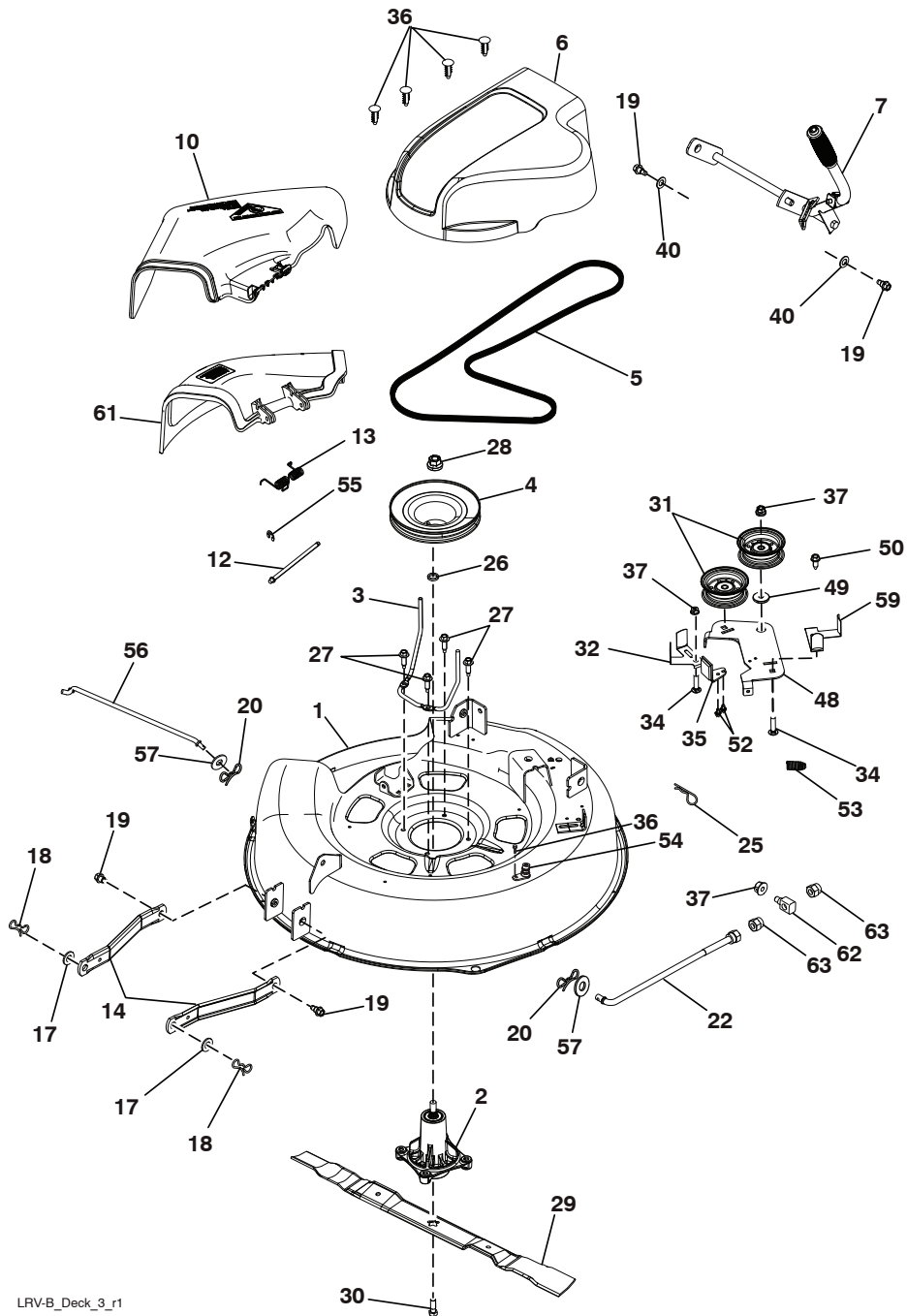
-  **DANGER** indicates a hazard which, if not avoided, will result in death or serious injury.
-  **WARNING** indicates a hazard which, if not avoided, could result in death or serious injury.
-  **CAUTION** indicates a hazard which, if not avoided, might result in minor or moderate injury.
-  **CAUTION** 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.

RIDING MOWER - MODEL NO. 944.60138 (601380) MOWER DECK

KEY NO.	PART NO.	DESCRIPTION
1	436848	DECK
2	192870	MANDREL ASM
3	436856	KEEPER, BELT
4	436855	PULLEY, MANDREL
5	441597	BELT
6	436863	COVER, MANDREL
7	437144	LIFT ASM, DECK
10	439638	DEFLECTOR
12	436647	PIN, HINGE
13	437462	SPRING, TORSION
14	195185	ARM, MOWER SUPPORT
17	19191912	WASHER
18	194209	PIN
19	196539	BOLT, SHOULDER
20	194208	PIN COTTER 5/16 BOW TIE LOCK
22	429397	LINK ASM DECK
25	4497H	RETAINER SPRING 1"
26	187690	SPACER, MANDREL
27	173984	BOLT, MANDREL
28	400234	NUT LOCK
29	419273	BLADE
30	193003	BOLT, BLADE
31	193197	PULLEY, IDLER
32	141043	GUARD, IDLER TUV
34	72110612	BOLT, 3/8-16 X 1 1/2
35	199470	ARM, BRAKE
36	137729	SCREW THD ROLL 1/4-20 X 5/8
37	73900600	NUT, 3/8-16 FLANGE
40	19171616	WASHER, 16 GA.
48	436857	ARM CLUTCHING
49	199092	SPACER RETAINER
50	17000616	SCREW 3/8-16 X 1
52	17600406	SCREW 1/4-20 X 3/8
53	401872	SPRING RETURN DECK
54	415598	PORT WASHOUT
55	437988	E-RING 5/16
56	436862	ROD ANTI-SWAY
57	19131312	WASHER 13/32 X 13/16 X 12 GA
59	436858	GUARD TUV IDLER
61	437947	MULCH COVER ASM
62	176205	TRUNION SUSPENSION ARM
63	175994	NUT LIFT LINK 7/16-20

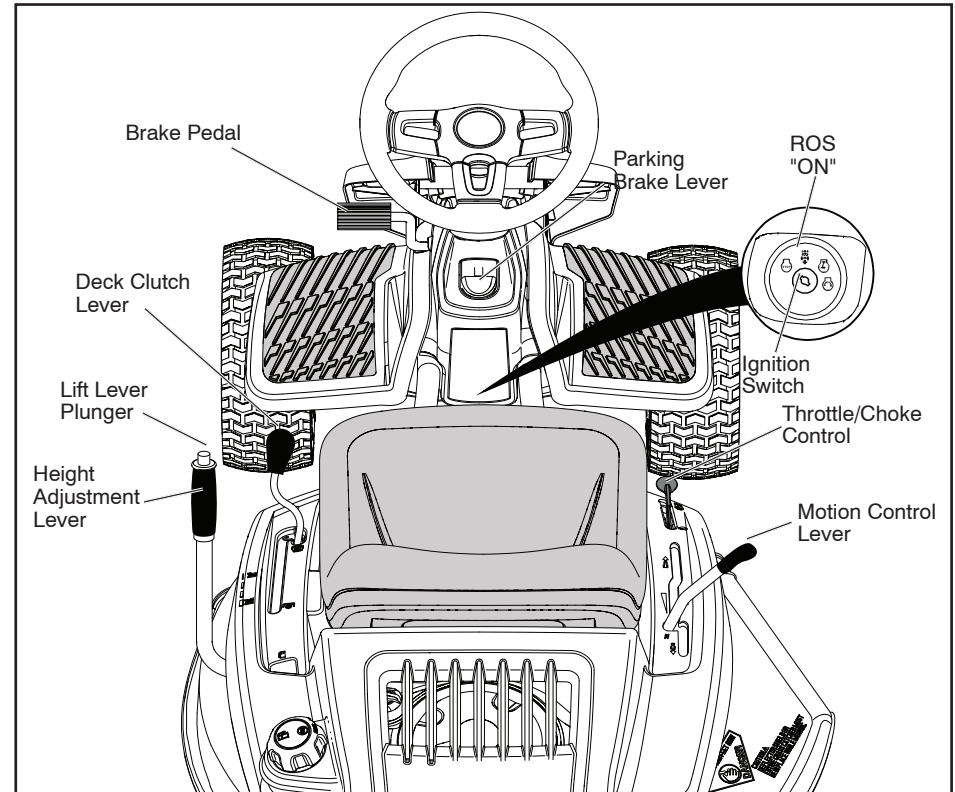
NOTE: All component dimensions given in U.S. inches
1 inch = 25.4 mm

RIDING MOWER - MODEL NO. 944.60138 (601380)
MOWER DECK



KNOW YOUR RIDING MOWER
READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR RIDING MOWER

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



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

DECK CLUTCH LEVER - Used to engage the mower blade.

BRAKE PEDAL - Used for braking the riding mower and starting the engine.

HEIGHT ADJUSTMENT LEVER - Used to adjust mower cutting height.

IGNITION SWITCH - Used for starting and stopping the engine.


LIFT LEVER PLUNGER - Used to release height adjustment lever when changing its position.

PARKING BRAKE LEVER - Locks parking brake into brake position.

MOTION CONTROL LEVER - Selects the speed and direction of the riding mower.

ROS "ON" POSITION - Allows operation of mower deck or other powered attachment while in reverse.

THROTTLE/CHOKE CONTROL - Used for starting and controlling engine speed.



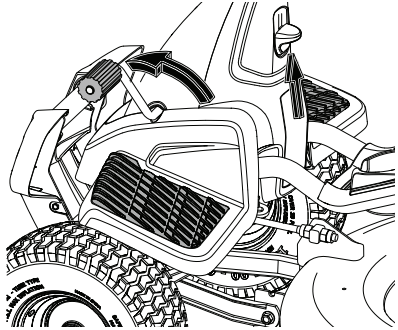
The operation of any riding mower can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your riding mower or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or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

HOW TO USE YOUR RIDING MOWER

TO SET PARKING BRAKE

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

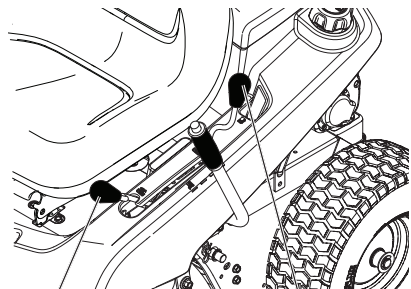
1. Depress brake pedal all the way down and hold.
2. Pull parking brake lever up and hold, release pressure from brake pedal, then release parking brake lever. Pedal should remain in brake position. Ensure parking brake will hold mower secure.



STOPPING

MOWER BLADE -

- To stop mower blade, move deck clutch lever to disengaged position.

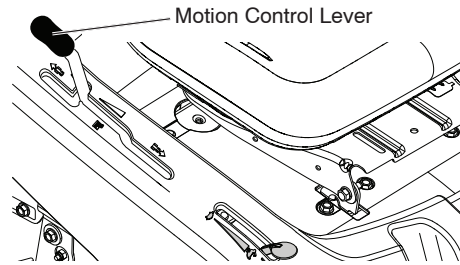


 Deck Clutch Control "Engaged"

 Deck Clutch Control "Disengaged"

GROUND DRIVE -

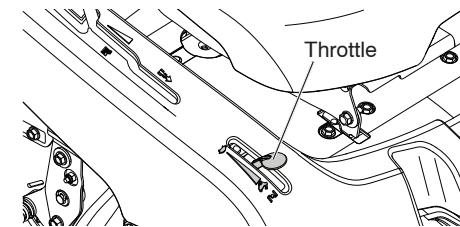
- To stop ground drive, depress brake pedal all the way down.
- Move motion control lever to neutral position.



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 riding mower to prevent unauthorized use.

IMPORTANT: Leaving the ignition switch in any position other than "STOP" will cause the battery to discharge and go dead.

NOTE: Under certain conditions when riding mower 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 riding mower on grass areas.

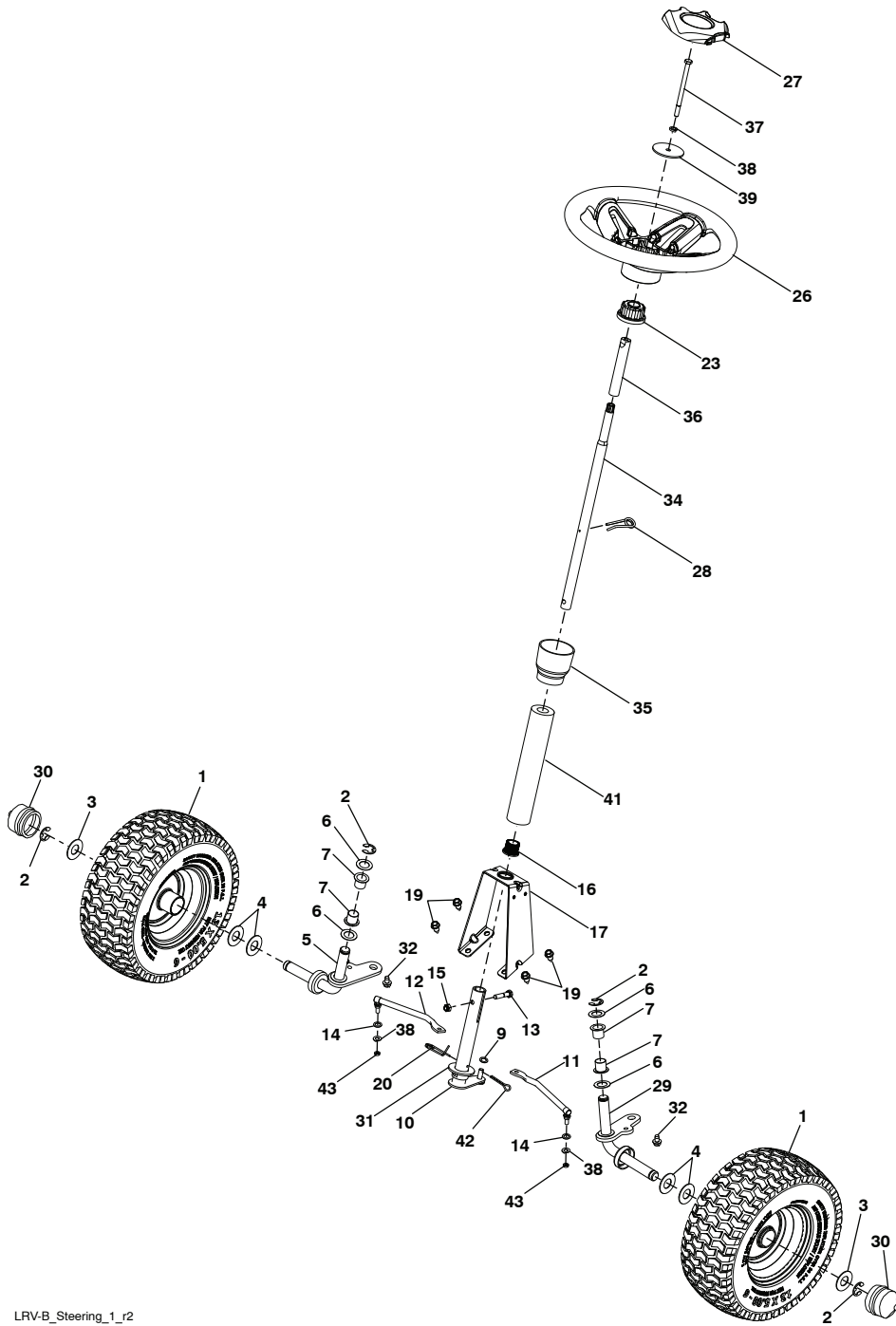
CAUTION: Always stop riding mower completely, as described above, before leaving the operator's position.

STEERING

RIDING MOWER - MODEL NO. 944.60138 (601380)

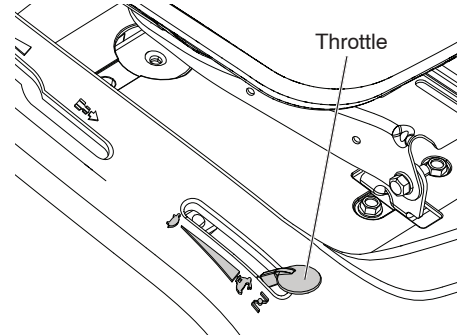
KEY NO.	PART NO.	DESCRIPTION
1	436552X613	WHEEL TUBE
2	12000001	E-CLIP
3	188967	WASHER, HARDENED
4	121749X	WASHER, 1/4 X 3/4
5	436181	SPINDLE, RH
6	6266H	WASHER, HARDENED THRUST
7	3366R	BUSHING, STEERING COLUMN
9	19131414	WASHER
10	428057	WELDMENT, LWR STRG SHAFT
11	436183	LINK, STRNG LH
12	436184	LINK, STRNG RH
13	74780524	BOLT, 5/16-18 X 1 1/2
14	19111216	WASHER 11/32 X 3/4 X 16 GA
15	73800500	NUT, 5/16-18
16	428794	BUSHING
17	436178	SUPPORT, UPPER STEERING
19	17000512	BOLT, 5/16-18 X 3/4
20	428045	CLIP, RETAINER SPRING
23	437747	ADAPTER, STEERING WHEEL
26	414851X615	WHEEL, STEERING
27	414852X615	CAP, STEERING WHEEL
28	199849	CLIP, RETAINER SPRING
29	436180	SPINDLE, LH
30	104757X613	CAP, HUB, AXLE
31	19343210	WASHER 1-1/16 X 2 X 10GA.
32	17580520	SCREW HEXWSH THD 5/16-18 X 1-3/4
34	436182	SHAFT STEERING UPPER
35	436932X428	BOOT LOWER STERRING WHEEL
36	196075	SHAFT EXTENSION STEERING SPLINE
37	74780580	BOLT FIN HEX 5/16-18 UNC X 5 GR5
38	10040500	WASHER LOCK HVY HLCL SPR 5/16
39	19113812	WASHER
41	436590	FOAM SHAFT STEERING
42	421076	PIN, 5/64 X 3/4 COTTER
43	73540500	CROWNLOCK NUT 5/16-24 UNF

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



TO USE THROTTLE CONTROL

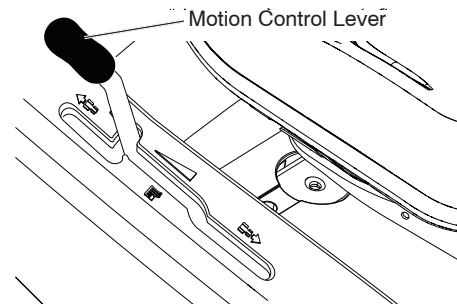
Always operate engine at full speed (fast).
 • Operating engine at less than full speed (fast) reduces engine's operating efficiency.
 • Full speed (fast) offers the best mower performance.



TO MOVE FORWARD AND BACKWARD

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

1. Ensure the parking brake is applied.
2. Start riding mower with motion control lever in neutral (N) position.
3. Release parking brake.
4. Slowly move motion control lever to desired position.



TO ADJUST MOWER CUTTING HEIGHT

The position of the mower height deck lift lever determines the cutting height.

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

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

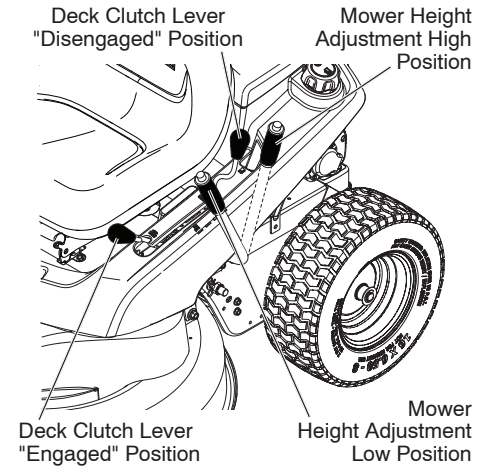
- The average lawn should be cut to approximately 2-1/2" during the cool season and to over 3" during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6" in height should be mowed twice. Make the first cut relatively high;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

TO OPERATE MOWER

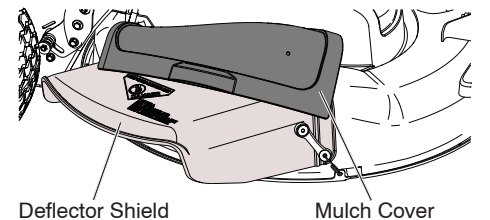
Your riding mower is equipped with an operator presence sensing switch. Any attempt by the operator to leave the deck seat with the engine running and the deck clutch engaged will shut off the engine. You must remain fully and centrally positioned in the seat to prevent the engine from hesitating or cutting off when operating your equipment on rough, rolling terrain or hills.

1. Select desired height of cut.
2. Start mower blade by engaging deck clutch lever.

TO STOP MOWER BLADE -
 Disengage deck clutch lever.



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



REVERSE OPERATION SYSTEM (ROS)

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

WARNING: Backing up with the deck clutch engaged while mowing is strongly discouraged. Turning the ROS "ON", to allow reverse operation with the deck 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 -

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

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

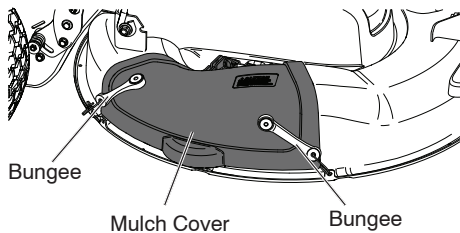
ROS "ON" Position

Engine "ON" Position
(Normal Operating)

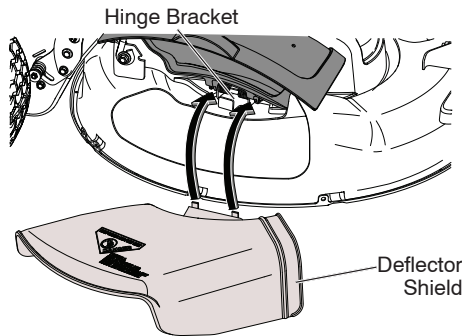


TO ATTACH DEFLECTOR

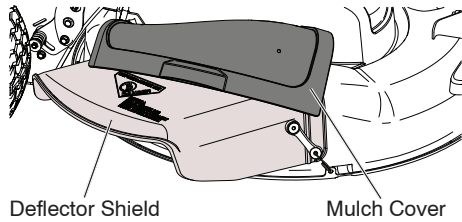
1. Unhook the 2 bungees from deck to the mulch cover.



2. Lift the mulch cover.
3. Attach the deflector to the hinge bracket.



4. Rest the mulch cover on the deflector.
5. Attach the 1 bungee from the deflector to the deck.



TO OPERATE ON HILLS

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

- Choose the slowest speed before starting up or down hills.
- Avoid stopping or changing speed on hills.
- If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.
- Move motion control lever to neutral (N) position.
- To restart movement, slowly release parking brake and clutch/brake pedal.
- Make all turns slowly.

TO TRANSPORT

When pushing or towing your riding mower, be sure to disengage transmission by placing shifter in neutral.

- Raise mower height adjustment to its highest position with mower height adjustment lever.
- To reengage transmission, press brake and shift out of neutral.

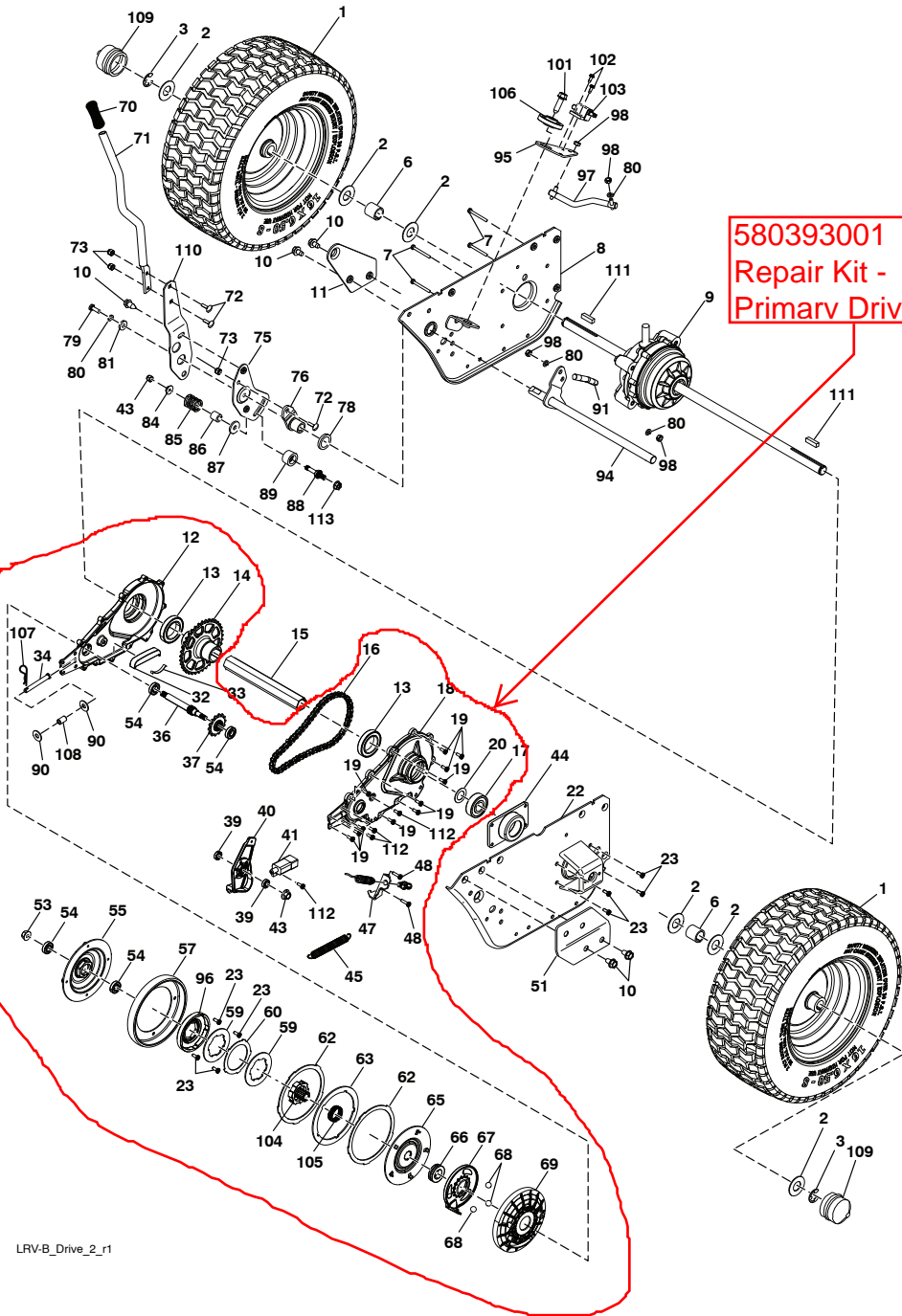
RIDING MOWER - MODEL NO. 944.60138 (601380)

DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	436533X613	WHEEL ASM (REAR)	68	435728	BEARING BALL LOOSE
2	121748X	WASHER, 16 GA.	69	435727	COVER CLUTCH
3	12000001	E-CLIP	70	196492X428	GRIP LEVER
6	156972	SPACER AXLE	71	436865	TUBE SHIFT LRV
7	74780428	HCS 1/4-20 X 1-3/4 GR 5 ZD	72	72110406	BOLT CARR.
8	441851	WELMENT SUPPORT AXLERH	73	73680400	NUT CROWN LOCK 1/4 - 20 UNC
9	441936	SUBASM FINAL DRIVE	75	436758	BRACKET MOUNT SHIFT
10	17000512	SCREW 5/16 - 18 X 3/4	76	183900	HUB SHIFT
11	436741	BRACKET.SUPPORT.RH	78	429055	SPACER NYLON .866 X 1.25 X .250
12	436148	CASE CHAIN RH	79	74780412	BOLT.FIN.HEX.1/4-20 UNC X .75
13	437280	BEARING BALL 6207-SRS	80	10040400	WASHER LOCK HVY HLCL SPRING
14	437176	SPROCKET DRIVEN 37 TOOTH	81	19091210	WASHER 9/32 X 3/4 X 10 GA.
15	442496	TUBE INPUT HEX	84	19111610	WASHER 11/32 X 1.00 X 10 GA.
16	436153	CHAIN PRIMARY DRIVE	85	436914	SPRING FRICTION PACK
17	437282	BEARING BALL 6204-3-2RS	86	437304	BUSHING PACK FRICTION FD2
18	436149	CASE CHAIN LH	87	436948	WASHER PLASTIC
19	18051010	SCREW 10 - 24 X 5/8 PAN HEAD TORX	88	436701	STUD PACK FRICTION
20	6266H	WASHER THRUST .75 X 1.230	89	437299	SPACER PACK FRICTION FD2
22	436696	WELMENT SUPPORT AXLE LH	90	19111416	WASHER.11/32 X 7/8 X 16 GA.
23	18101008	SCREW TORX #10 - 14 X 1/2	91	436924	SUBASM.LINK.SHIFT
32	436151	BLOCK TENSION CHAIN	94	436918	WELDMENT.SHIFT.FD2
33	436150	SPRING ADJUSTER TENSION	95	436866	PLATE.SHIFT
34	77101040	PIN CLEVIS 5/16 X 2-1/2	96	437767	DRUM CLUTCH MULTI DISC
36	435722	SHAFT INPUT CLUTCH	97	436925	SUBASM LINK SHIFT PRIMARY
37	436152	SPROCKETS PLINED 14 TOOTH	98	150360	NUT LOCK CENTER 1/4 - 28 FNTHD
39	430470	BEARING BALL	101	17060624	SCREW.3/8-16X1-1/2. SMGML. TAP/R
40	436939	ARM BRAKE	102	86777	THREAD.CUTTER
41	104445X	SWITCH INTL CL MWR GRY 4 TERM	103	109869X	SWITCH.SEAT.
43	73800500	NUT LOCK HEX W/INSERT 5/16 - 18 UNC	104	437781	HUB CENTER
44	436652	COVER END HEX	105	436142	SPRING WAVE C125-H5
45	436154	SPRING DRIVE	106	194321	SPACER RETAINER
47	436949	BRACKET MOUNT CABLE LRV B	107	4497H	CLIP
48	17541016	SCREW.HEX.HEAD WASH.10-24X1.00	108	436784	BUSHING.5/16IDX7/16ODX1/2
51	436739	BRACKET SUPPORT LH	109	104757X613	CAP.HUB.AXLE.1.50 X 1.00. MS613
53	73900600	LOCK NUT, FLANGED	110	428461	BRACKET SHIFTER FLEX
54	435726	BEARING BALL	111	123583X	KEY.SQUARE.2.0X.1845/.1865
55	444035	COVER WHEEL CLUTCH	112	18101012	SCREW TORX #10-14 X .750
57	436559	WHEEL FRICTION	113	73900500	NUT LOCK HEX FLANGE 5/16-18
59	441097	PLATE.CLUTCH.DRIVE			
60	437787	PLATE PRESSURE DRIVE			
62	437786	PLATE CLUTCH BRAKE			
63	437785	PLATE PRESSURE BRAKE			
65	435723	PLATE PRESSURE MASTER			
66	435724	BEARING THRUST 20MM			
67	435725	PLATE THROWOUT			

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

DRIVE



BEFORE STARTING THE ENGINE

CHECK ENGINE OIL LEVEL

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

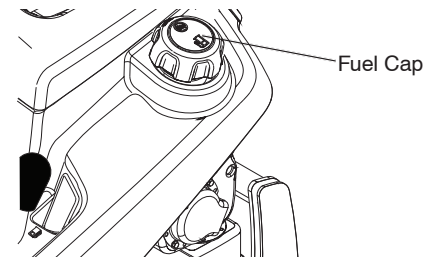
1. Check engine oil with riding mower on level ground.
2. Remove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw cap tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See 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.

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



TO START ENGINE

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

- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- Place motion control lever in neutral position.
- Move deck clutch lever to "DISENGAGED" position.
- Move throttle control to choke position.

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

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

WARM WEATHER STARTING (50°F/10°C AND ABOVE)

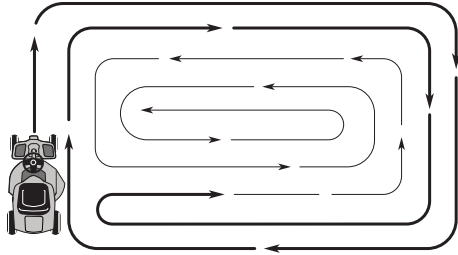
- When engine starts, move the throttle control to the fast position.
- The ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

COLD WEATHER STARTING (50°F/10°C AND BELOW)

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

MOWING TIPS

- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has already been cut. Have the cut area to the right of the riding mower. This will result in a more even distribution of clippings and more uniform cutting.



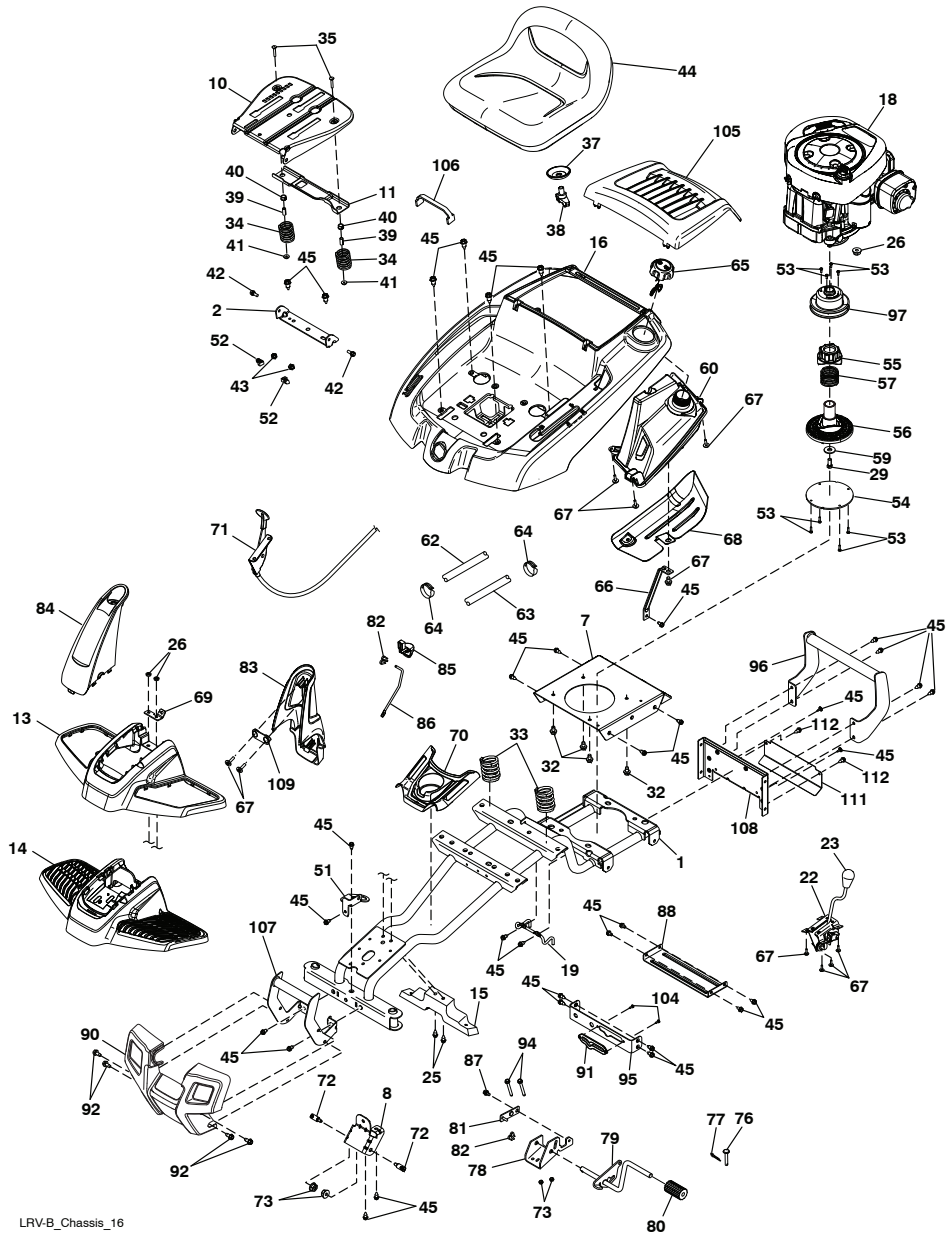
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished.
- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- 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.

RIDING MOWER - MODEL NO. 944.60138 (601380)

CHASSIS

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	436176	WELDMENT, CHASSIS	67	421756	SCREW #10 X 0.500
2	180166	BRACKET, SEAT	68	439851	SHIELD HEAT
7	436177	PLATE, ENGINE	69	437427	BRACKET MOUNT CABLE
8	436860	BRACKET, CHASSIS FRONT	70	436591X428	CONSOLE CENTER CUPHOLDER
10	441805	PAN, SEAT	71	437857	THROTTLE ASM
11	199370	BRACKET, SWITCHMOUNTING	72	195161	STUD FASTNER
13	436595X615	COVER, FOOT REST	73	73900500	NUT LOCK HEX FLANGE 5/16-18
14	436592X428	STRUCTURE, FOOT REST	76	77100812	PIN CLEVIS
15	436597X428	SUPPORT, FOOT REST	77	76020208	PIN COTTER 1/16 X 1/2
16	439393	PANEL ASM, CONTROL	78	437056	BRACKET SUPPORT ROD
18	---	---	79	437057	BRAKE WELDMENT
19	436861	KEEPER, BELT	80	429693	BRAKE PEDAL COVER
22	442130	DECK CLUTCH ASM	81	437374	WELDMENT LINK CONNECTING
23	149846	KNOB	82	169484	RETAINER CLIP
25	72140424	BOLT	83	439366	STEERING BOOT REAR
26	73510400	NUT, 1/4-20	84	439287	STEERING BOOT FRONT
29	438921	BOLT, 7/16-20 X 1.00	85	437660	PARKING BRAKE HANDLE
32	17060620	SCREW 3/8-16 X 1-1/4	86	438762	ACTUATOR PARKING BRAKE
33	124181X	SPRING, SEAT	87	165492	SHOULDER BOLT
34	123740X	SPRING	88	428110	CROSS BRACE
35	72050412	BOLT, 1/4-20 X 1 1/2	90	436594X428	SHROUD BRUSH GUARD FRONT
37	199371	WASHER CUP	91	437401	TRACK CLUTCH BRKT
38	199372	KNOB, SEAT	92	184471	BOLT
39	134300	SPACER	94	74490548	BOLT
40	121248X	BUSHING, NYLON SNAP	95	436702	BRACKET
41	123976X	NUT, LOCK	96	436955X428	BUMPER REAR
42	171852	BOLT, 5/16-18 SHOULDER	97	436472	PULLEY ENGINE
43	73800500	NUT, 5/16-18	104	18101008	SCREW
44	197520	SEAT	105	437252X428	COVER
45	17000512	BOLT, 5/16-18 X 3/4	106	436834	STRAP BATTERY
51	428856	BRACKET	107	436593X428	FRONT BUMPER
52	145006	CLIP PUSH-IN HINGED	108	437168	COVER REAR TRANSAXLE
53	438562	SCREW	109	439008	RETAINER BRAKE
54	436473	DISC FRICTION	111	438171	SHIELD, BRAKE CABLE
55	435808	TORSION BODY UPPER	112	17720408	SCREW THD CUT
56	441925	ASM TORQUE CONTROL			
57	436479	SPRING HELIX			
59	199162	WASHER 1.5 X .505 X .116			
60	437856	FUEL TANK ASM			
62	400414	FUEL LINE			
63	414119	PURGE LINE			
64	123487X	CLAMP HOSE			
65	438596	FUEL CAP			
66	436606	FUEL TANK SUPPORT BRKT			

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



LRV-B_Chassis_16

MAINTENANCE

MAINTENANCE SCHEDULE		BEFORE EACH USE	EVERY 8 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY SEASON	BEFORE STORAGE
RIDING MOWER	Check Brake Operation	✓	✓					
	Check Tire Pressure	✓	✓					
	Check Operator Presence & ROS Systems	✓						
	Check for Loose Fasteners	✓					✓	✓
	Check/Replace Mower Blade			✓ ₃				
	Clean Battery and Terminals			✓				✓
	Adjust Clutch			✓	✓	✓		
	Lubricate Axles and Spindles			✓				
	Clean Friction Surfaces			✓ ₄				✓
	Check Mower Levelness				✓			
Check V-Belt					✓			
ENGINE	Check Engine Oil Level	✓	✓					
	Change Engine Oil			✓ _{1,2}				✓
	Clean Air Filter			✓ ₂				
	Clean Air Screen			✓ ₂				
	Inspect Muffler/Spark Arrester				✓			
	Clean Engine Cooling Fins					✓ ₂		
	Replace Spark Plug					✓	✓	
Replace Air Filter Paper Cartridge					✓ ₂			

1 - Change more often when operating under a heavy load or in high ambient temperatures. 3 - Replace blade more often when mowing in sandy soil
 2 - Service more often when operating in dirty or dusty conditions. 4 - Clean surfaces with isopropyl alcohol or non filming cleaner.

GENERAL RECOMMENDATIONS

The warranty on this riding mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain riding mower as instructed in this manual.

Some adjustments will need to be made periodically to properly maintain your riding mower.

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 blade and belt for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

BEFORE EACH USE

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

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.

RIDING MOWER

Always observe safety rules when performing any maintenance.

BRAKE OPERATION

If riding mower requires more than four (4) feet to stop at highest speed in highest gear on a level, dry concrete or paved surface, then brake must be serviced at your nearest authorized service center.

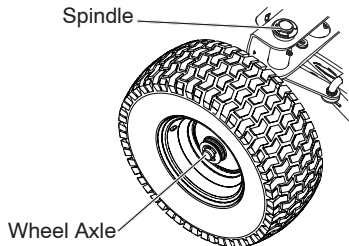
TIRES

- Maintain tire pressure at 12 PSI.
- 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.

AXLE AND SPINDLES

- Front wheel axles and front spindles should be properly lubricated.
- Wheel axles and spindles should be lubricated with grease.



OPERATOR PRESENCE SYSTEM AND REVERSE OPERATION SYSTEM (ROS)

Be sure operator presence and reverse operation systems are working properly. If your riding mower does not function as described, repair the problem immediately.

- The engine should not start unless the brake pedal is fully depressed, and the deck clutch lever 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 deck clutch lever is engaged, any attempt by the operator to leave the seat should shut off the engine.
- Never operate the deck clutch lever unless you are seated in the seat.

CHECK REVERSE OPERATION (ROS) SYSTEM

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



ROS "ON" Position



Engine "ON" Position (Normal Operating)

BLADE CARE

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

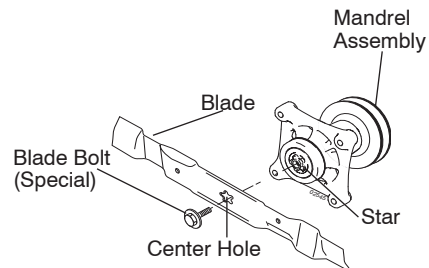
CAUTION: Use only a replacement blade approved by the manufacturer of your riding mower. Using a blade not approved by the manufacturer of your riding mower is hazardous, could damage your riding mower and void your warranty.

BLADE REMOVAL

1. Raise mower to highest position to allow access to blade.

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

2. Remove blade bolt by turning counter-clockwise.
3. Install new blade with stamped "THIS SIDE UP" facing deck and mandrel assembly.



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

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

IMPORTANT: Special blade bolt is heat treated.

ELECTRICAL

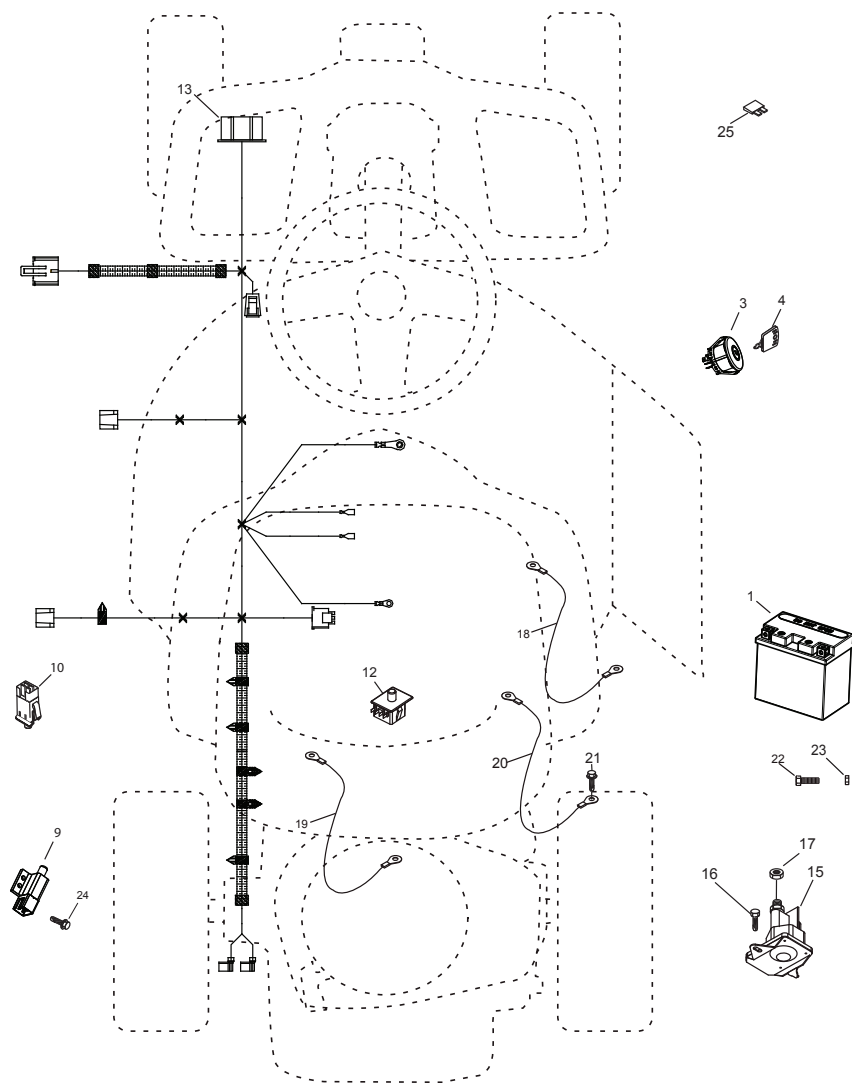
RIDING MOWER - MODEL NO. 944.60138 (601380)

KEY PART NO.

KEY PART NO.	PART NO.	DESCRIPTION
1	436551	BATTERY
3	193350	SWITCH, IGN, DLTA, P-IN, ROS
4	411932	KEY/CHAIN
9	109553X	SWITCH, INTLK,CL, MWR, GRY
10	176138	SWITCH, INTERLOCK, NONC,GRAY
12	192749	SWITCH, SEAT, DP, ROS
13	437228	HARNESS, IGN, ELECTSTART, LRV
15	192507	SOLENOID
16	17720408	SCREW THD CUT 1/4-20 X 1/2 TY23
17	73510400	NUT KEPS HEX 1/4-20 UNC
18	416694	CABLE BATTERY
19	421299	CABLE STARTER
20	421298	CABLE GROUND
21	17060512	SCREW 5/16-18 X 3/4
22	M74350509	SCREW HEX M5X0.8.9MM
23	438122	NUT M5
24	18101012	SCREW TORX #10-14 X .750
25	441622	FUSE, 10

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

LRV2



BATTERY

Your riding mower has a battery charging system which is sufficient for normal use.

- Keep battery and connectors clean.
- Only recharge battery with charger approved for a 12V 6 amp. hour battery.
- Charging with any other charger or an automotive style charger can cause permanent damage to the battery.
- Charge battery for 24 hours for a full charge.

NOTE: The original equipment battery on your riding mower is maintenance free. Do not attempt to open or remove caps or covers. Adding or checking level of electrolyte is not necessary.

WARNING: Do not jump start battery. Permanent damage to the battery or personal injury may occur.

TRANSAXLE COOLING

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

V-BELT

Check V-belt for deterioration and wear after 100 hours of operation and replace if necessary. The belt is not adjustable. Replace belt if it begins to slip from wear.

ENGINE LUBRICATION

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

SAE VISCOSITY GRADES								
← 5W-30	SAE 30 →							
F	-20	0	30	32	40	60	80	100
C	-30	-20	-10	0	10	20	30	40
TEMPERATURE RANGE ANTICIPATED BEFORE NEXT OIL CHANGE								

NOTE: Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, the oils will result in increased oil consumption when used above 32°F/0°C. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

Change the oil after every 25 hours of operation or at least once a year if the riding mower is not used for 25 hours in one year. Check the crankcase oil level before starting the engine and after each eight (8) hours of operation. Tighten oil fill cap/dipstick securely each time you check the oil level.

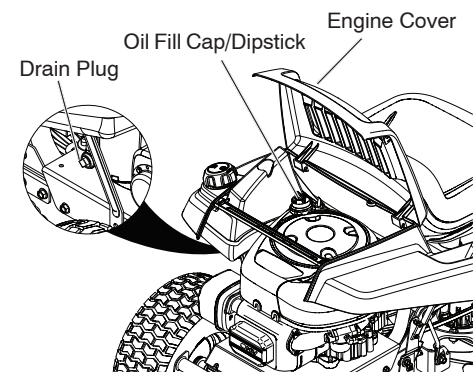
TO CHANGE ENGINE OIL

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

- Be sure riding mower is on level surface.
- Oil will drain more freely when warm.
- Catch oil in a suitable container.

CAUTION: If engine has been operated for an extended period of time immediately prior to draining oil, oil will be hot.

1. Lift engine cover.
2. Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
3. Position a container to catch oil.
4. Remove drain plug and drain oil into container.
5. After oil has drained completely, replace oil drain plug and tighten securely.
6. Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" section of this manual.
7. Use gauge on oil fill cap/dipstick for checking level. For accurate reading, tighten dipstick cap securely onto the tube before removing dipstick. Keep oil at "FULL" line on dipstick. Tighten cap onto the tube securely when finished.
8. Lower engine cover.



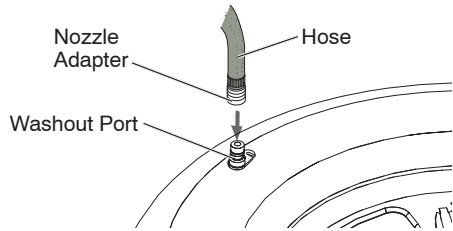
DECK WASHOUT PORT

Your riding mower's deck is equipped with a washout port on its surface as part of its deck wash system. It should be utilized after each use.

1. Drive the riding mower to a level, clear spot on your lawn, near enough to a water spigot for your garden hose to reach.

IMPORTANT: Make certain the riding mower's discharge chute is directed AWAY from your house, garage, parked cars, etc. Remove bagger chute or mulch cover if attached.

2. Make sure the attachment clutch control is in the "DISENGAGED" position, set the parking brake, and stop the engine.
3. Thread the nozzle adapter (packaged with your riding mower's Operator's Manual) onto the end of your garden hose.
4. Pull back the lock collar of the nozzle adapter and push the adapter onto the deck washout port at the left end of the mower deck. Release the lock collar to lock the adapter on the nozzle.



IMPORTANT: Tug hose ensuring connection is secure.

5. Turn the water on.
6. While sitting in the operator's position on the riding mower, re-start the engine and place the throttle lever in the Fast "F" position.

IMPORTANT: Recheck the area making certain the area is clear.

7. Move the riding mower's attachment clutch control to the "Engaged" position. Remain in the operator's position with the cutting deck engaged until the deck is cleaned.

8. Move the riding mower's attachment clutch control to the "DISENGAGED" position. Turn the ignition key to the STOP position to turn the tractor's engine off. Turn the water off.

9. Pull back the lock collar of the nozzle adapter to disconnect the adapter from the nozzle washout port.

10. Move the riding mower to a dry area, preferably a concrete or paved area. Place the attachment clutch control in the "Engaged" position to remove excess water and to help dry before putting the riding mower away.

WARNING: A broken or missing washout fitting could expose you or others to thrown objects from contact with the blade.

- Replace broken or missing washout fitting immediately, prior to using mower again.
- Plug any holes in mower with bolts and locknuts.

AIR FILTER

Your engine will not run properly using a dirty air filter. Service air cleaner more often under dusty conditions. See engine manual.

CLEAN AIR SCREEN

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

CLEAN AIR INTAKE/COOLING AREAS

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

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

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

MUFFLER

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

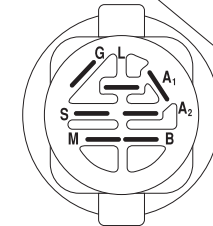
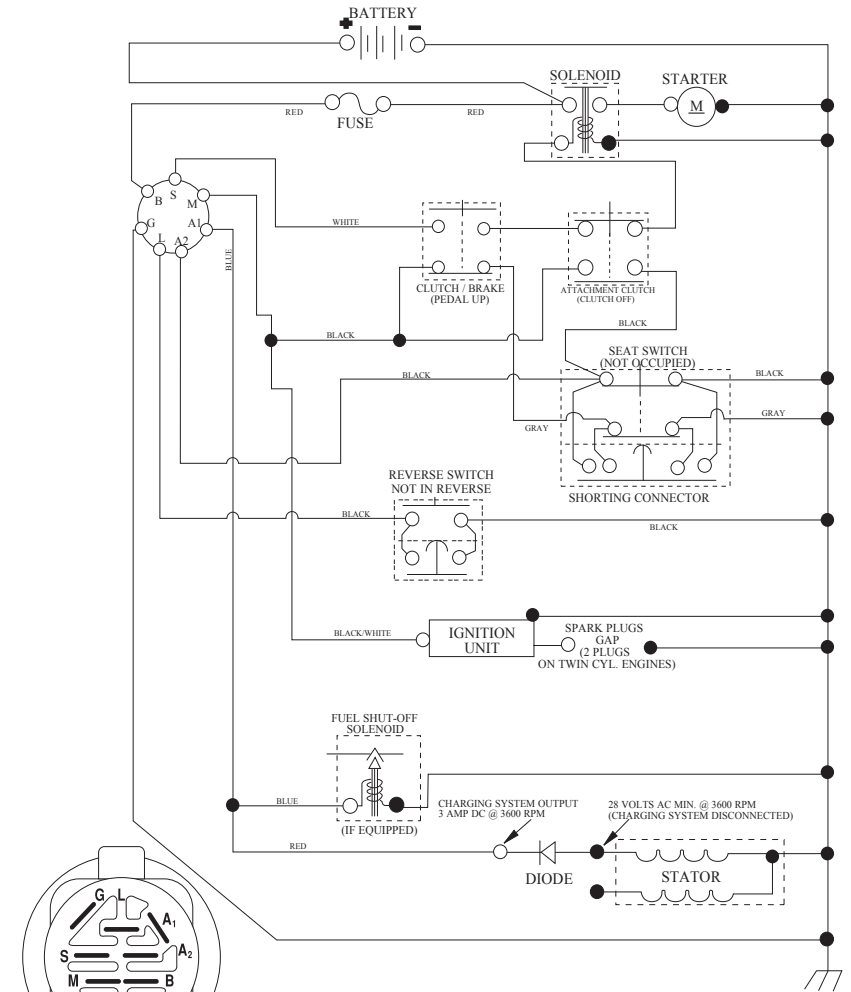
SPARK PLUG(S)

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

SCHEMATIC

SCH24

RIDING MOWER - MODEL NO. 944.60138 (601380)



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 RE-INSTALLED TO PROPERLY SECURE YOUR WIRING.

○
REMOVABLE CONNECTIONS

●
NON-REMOVABLE CONNECTIONS

TROUBLESHOOTING CHART:

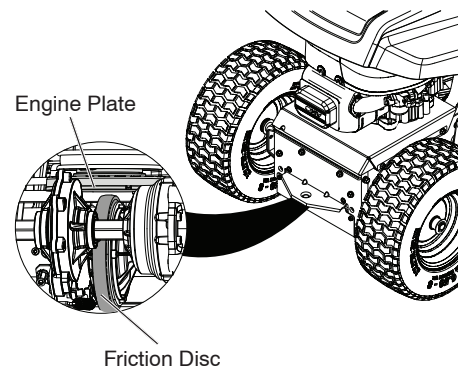
See appropriate section in manual unless directed to Sears service center.

PROBLEM	CAUSE	CORRECTION
Poor cut - uneven cutting	1 Worn, bent or loose blade.	1 Replace blade. Tighten blade bolt.
	2 Mower deck not level.	2 Level mower deck.
	3 Buildup of grass, leaves, and trash under mower.	3 Clean underside of mower housing.
	4 Bent blade mandrel.	4 Contact a Sears or other qualified service center.
	5 Clogged mower deck vent from build-up of grass, leaves, and trash around mandrel.	5 Clean around mandrels to open vent holes.
Mower blade will not rotate	1 Obstruction in clutch mechanism.	1 Remove obstruction.
	2 Worn/damaged mower drive belt.	2 Replace mower drive belt.
	3 Frozen idler pulley.	3 Replace idler pulley.
	4 Frozen blade mandrel.	4 Contact a Sears or other qualified service center.
Poor grass discharge	1 Travel speed too fast.	1 Shift to slower speed.
	2 Wet grass.	2 Allow grass to dry before mowing.
	3 Mower deck not level.	3 Level mower deck.
	4 Low/uneven tire air pressure.	4 Check tires for proper PSI.
	5 Worn, bent or loose blade.	5 Replace/sharpen blade. Tighten blade bolt.
	6 Buildup of grass, leaves and trash under mower.	6 Clean underside of mower housing.
	7 Mower drive belt worn.	7 Replace mower drive belt.
	8 Blade improperly installed.	8 Reinstall blade sharp edge down.
	9 Improper blade used.	9 Replace with blade listed in parts manual.
	10 Clogged mower deck vent from build-up of grass, leaves, and trash around mandrel.	10 Clean around mandrels to open vent holes.
Battery will not charge	1 Bad battery cell(s).	1 Replace battery.
	2 Poor cable connections.	2 Check/clean all connections.
	3 Faulty alternator.	3 Replace alternator.
Loss of drive	1 Axle key missing.	1 Install axle key at rear wheel. See "TO REMOVE WHEEL" in the Service and Adjustments section.
	2 Clutch out of adjustment.	2 Adjust clutch. See "TO ADJUST CLUTCH" in the Service and Adjustments section.
Engine dies when riding mower is shifted into reverse	1 Reverse operation system (ROS) is not "ON" while mower or other attachment is engaged.	1 Turn ignition key to ROS "ON" position. See Operation section.
	2 Engine is cold.	2 Allow engine warm-up by running for several seconds to several minutes.

CLEANING FRICTION SURFACES

To ensure proper drive performance keep the friction surfaces free from dirt, chaff and excess rubber at all times.

Every 25 hours of operation, the friction surfaces need to be rubbed clean with isopropyl alcohol or other non-filming cleaner.



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

SERVICE AND ADJUSTMENTS



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

1. Depress clutch/brake pedal fully and set parking brake.
2. Place motion control lever in neutral (N) position.
3. Place deck clutch in "DISENGAGED" position.
4. Turn ignition key to "STOP" and remove key.
5. Ensure the blade and all moving parts have completely stopped.
6. Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

RIDING MOWER

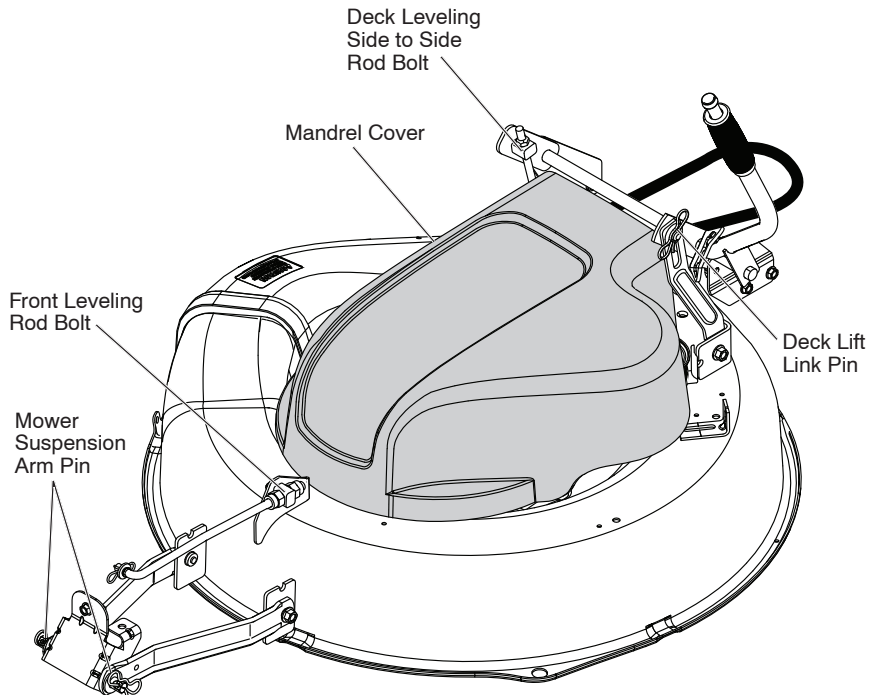
TO REMOVE MOWER

1. Place deck clutch in "DISENGAGED" position.
2. Move mower height adjustment lift lever forward to lower mower to its lowest position.
3. Remove mandrel cover.
4. Remove pins holding left and right front mower suspension arms in place.
5. Remove bolt holding deck front to rear leveling rod in place.

6. Remove pin holding deck lift link arm in place.
7. Remove bolt holding deck side to side leveling rod in place.
8. Remove belt from around pulleys.
9. Slide deck out from under side of mower.

TO INSTALL MOWER

Install in reverse order following instructions in "TO REMOVE MOWER" section.



TROUBLESHOOTING CHART:

See appropriate section in manual unless directed to Sears service center.

PROBLEM	CAUSE	CORRECTION
Will not start	1 Out of fuel.	1 Fill fuel tank.
	2 Bad spark plug.	2 Replace spark plug.
	3 Dirty air filter.	3 Clean/replace air filter.
	4 Water in fuel.	4 Empty fuel tank & carburetor, refill tank with fresh gasoline & replace fuel filter.
	5 Loose or damaged wiring.	5 Check all wiring.
	6 Engine valves out of adjustment.	6 Contact a Sears or other qualified service center.
Hard to start	1 Dirty air filter.	1 Clean/replace air filter.
	2 Bad spark plug.	2 Replace spark plug.
	3 Weak or dead battery.	3 Recharge or replace battery.
	4 Stale or dirty fuel.	4 Empty fuel tank and refill tank with fresh, clean gasoline.
	5 Loose or damaged wiring.	5 Check all wiring.
	6 Engine valves out of adjustment.	6 Contact a Sears or other qualified service center.
Engine will not turn over	1 Clutch/brake pedal not depressed.	1 Depress clutch/brake pedal.
	2 Deck clutch is engaged.	2 Disengage deck clutch.
	3 Weak or dead battery.	3 Recharge or replace battery.
	4 Blown fuse.	4 Replace fuse.
	5 Corroded battery terminals.	5 Clean battery terminals.
	6 Loose or damaged wiring.	6 Check all wiring.
	7 Faulty ignition switch.	7 Check/replace ignition switch.
	8 Faulty solenoid or starter.	8 Check/replace solenoid or starter.
	9 Faulty operator presence switch(es).	9 Contact a Sears or other qualified service center.
Engine clicks but will not start	1 Weak or dead battery.	1 Recharge or replace battery.
	2 Corroded battery terminals.	2 Clean battery terminals.
	3 Loose or damaged wiring.	3 Check all wiring.
	4 Faulty solenoid or starter.	4 Check/replace solenoid or starter.
Loss of power	1 Cutting too much grass/too fast.	1 Raise cutting height/reduce speed.
	2 Build-up of grass, leaves and trash under mower.	2 Clean underside of mower housing.
	3 Dirty air filter.	3 Clean/replace air filter.
	4 Low oil level/dirty oil.	4 Check oil level/change oil.
	5 Faulty spark plug.	5 Clean & regap or change spark plug.
	6 Stale or dirty fuel.	6 Empty fuel tank and refill tank with fresh, clean gasoline.
	7 Water in fuel.	7 Empty fuel tank and carburetor, refill tank with fresh gasoline.
	8 Spark plug wire loose.	8 Connect & tighten spark plug wire.
	9 Dirty engine air screen/fins.	9 Clean engine air screen/fins.
	10 Dirty/clogged muffler.	10 Clean/replace muffler.
	11 Loose or damaged wiring.	11 Check all wiring.
	12 Engine valves out of adjustment.	12 Contact a Sears or other qualified service center.
Excessive vibration	1 Worn, bent or loose blade.	1 Replace blade. Tighten blade bolt.
	2 Bent blade mandrel.	2 Contact a Sears or other qualified service center.
	3 Loose/damaged part(s).	3 Tighten loose part(s). Replace damaged parts.
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 a Sears or other qualified service center.

STORAGE

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

WARNING: Never store the riding mower 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.

MOWER

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

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

BATTERY

- Fully charge the battery for storage.
- If battery is removed from riding mower for storage, do not store battery directly on concrete or damp surfaces.

ENGINE

FUEL SYSTEM

IMPORTANT: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel hose, or tank during storage. Also, alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

- Empty the fuel tank by starting the engine and letting 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)

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

OTHER

- Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust. Rust and/or dirt in your gasoline will cause problems.
- If possible, store your riding mower indoors and cover it to give protection from dust and dirt.
- Cover your riding mower 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 riding mower to rust.

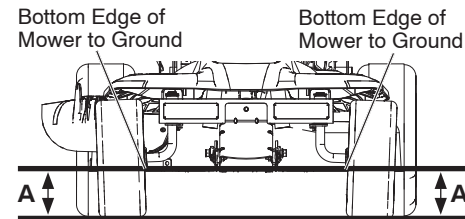
IMPORTANT: Never cover riding mower while engine and exhaust areas are still warm.

TO LEVEL MOWER HOUSING

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

SIDE-TO-SIDE ADJUSTMENT

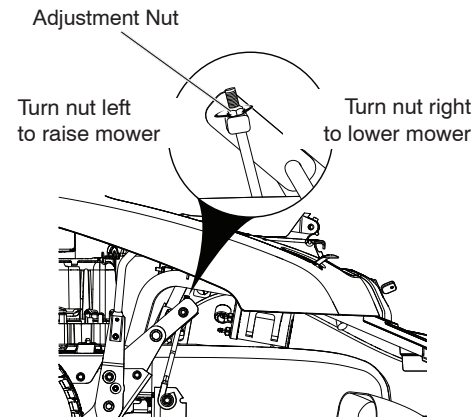
- Raise mower to its highest position.
- Measure distance "A" from bottom edge of mower to ground level at front corners of mower.



- To raise the right side of the mower, tighten lift link adjustment nut.
- To lower the right side of the mower, loosen lift link adjustment nut.

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

- Recheck measurements after adjusting.

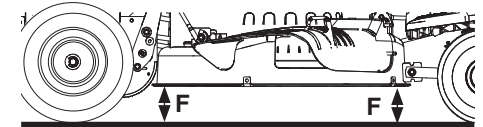


FRONT-TO-BACK ADJUSTMENT

IMPORTANT: Deck must be level side-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.

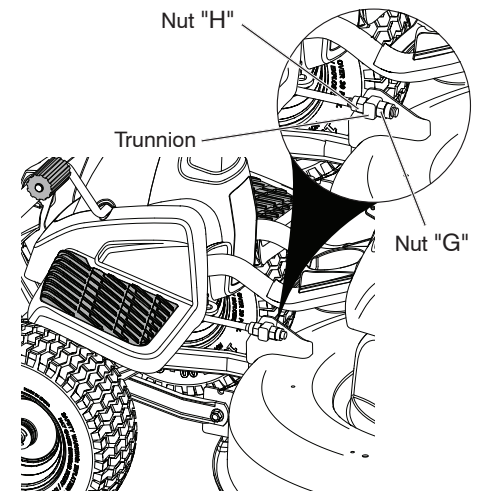
Check adjustment on right side of riding mower. Measure distance "F" directly in front and behind the mandrel at bottom edge of mower housing as shown.



- To lower front of mower housing turn nuts "G" and "H" clockwise.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on front link.
- To raise front of mower housing turn nuts "G" and "H" counter clockwise.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on front link.

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

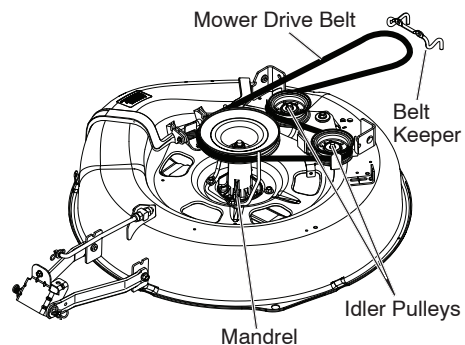
- Recheck side-to-side adjustment.



TO REPLACE MOWER BLADE DRIVE BELT

MOWER DRIVE BELT REMOVAL

1. Park riding mower on a level surface.
2. Set parking brake.
3. Lower mower to its lowest position.
4. Remove mandrel cover from mower deck.
5. Remove rear engine plate from unit.
6. Remove rear belt keeper from unit.
7. Carefully roll belt over the top of the mower blade mandrel.



8. Remove belt from idler pulleys.
9. Check idler pulleys to see that they rotate freely.

MOWER DRIVE BELT INSTALLATION

Install in reverse order following instructions in "MOWER DRIVE BELT REMOVAL" section.

TO CHECK BRAKE

If riding mower requires more than four (4) 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 riding mower on a level, dry concrete or paved surface, depress clutch/brake pedal all the way down and engage parking brake.
2. Place motion control lever in neutral position.

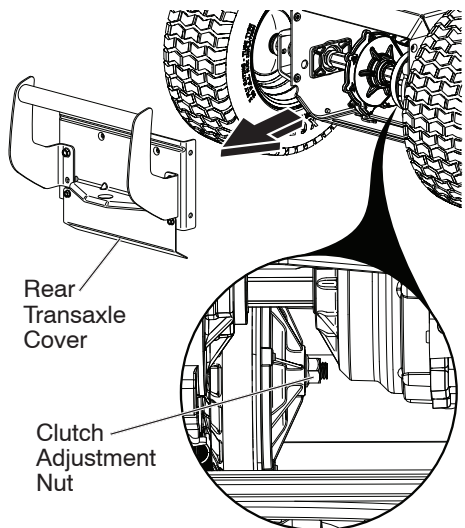
The rear wheels must lock and skid when you try to manually push the riding mower forward. If the rear wheels rotate, then the brake needs to be serviced. Contact a Sears or other qualified service center.

TO ADJUST CLUTCH

To ensure proper drive performance, periodic adjustment of the clutch will be needed. This adjustment is only necessary when there is a reduction or loss of drive. Refer to the maintenance section in this manual for recommended intervals.

1. Park riding mower on a level surface.
2. Set parking brake.
3. Remove rear transaxle cover.
4. Using a 9/16th wrench, tighten the clutch adjustment nut by 1/8th of a turn.

CAUTION: Do not over-tighten the clutch adjustment nut. Only make as many 1/8th turns as needed.



5. Test riding mower where it will be used to cut grass.
6. If further adjustment is needed, return to step 4.
7. After adjustment is completed, replace rear transaxle cover.

If the clutch adjustment procedure is not effective, take your riding mower to a qualified service center for repair and/or adjustment.

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 "INSTALL STEERING COLUMN" section of this manual.

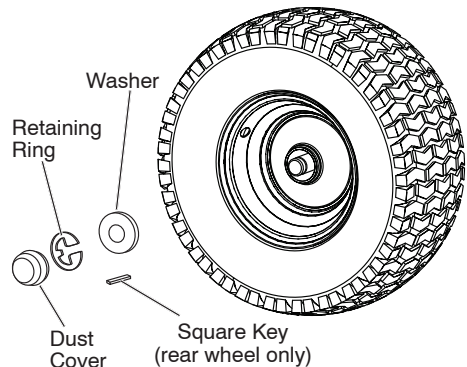
TO REMOVE WHEEL FOR REPAIRS

FRONT WHEEL

1. Block up front axle securely.
2. Remove dust cover, retaining ring, and washer to allow wheel removal.
3. Repair tire and reassemble.
4. Replace washer and retaining ring securely in axle groove.

REAR WHEEL

1. Block up rear axle securely.
2. Remove dust cover, retaining ring, washer, and square key while pulling tire off.
3. Repair tire and reassemble.
4. Replace square key while putting tire back on, then replace washer and retaining ring securely in axle groove.



NOTE: To seal tire punctures and prevent flat tires due to slow leaks, purchase and use tire sealant from Sears. Tire sealant also prevents tire dry rot and corrosion.

TO START ENGINE WITH A WEAK BATTERY

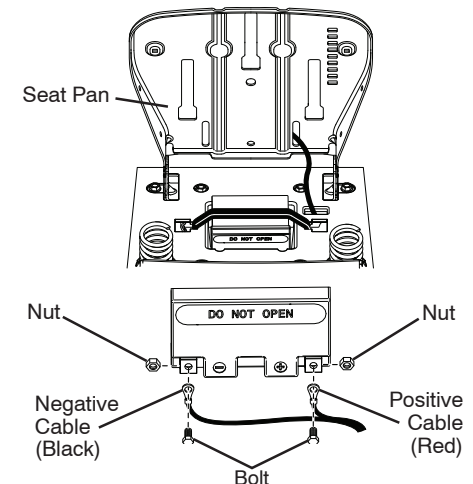
CAUTION: Lead-acid batteries generate explosive gases. Keep sparks, flame and smoking materials away from batteries. Always wear eye protection when around batteries.

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

REPLACING BATTERY

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

1. Lift seat pan to raised position.
2. Remove terminal cover.
3. Disconnect BLACK battery cable then RED battery cable, battery strap and carefully remove battery from riding mower.
4. Install new battery with terminals in same position as old battery.
5. Reinstall terminal cover.
6. First connect RED battery cable to positive (+) battery terminal with bolt and nut as shown. Tighten securely.
7. Connect BLACK grounding cable to negative (-) battery terminal with remaining bolt and nut. Tighten securely.
8. Lower seat pan.



INTERLOCKS AND RELAYS

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

- Check wiring. Ensure all wiring and connectors are secure.

ENGINE

Your carburetor is not adjustable. If your engine does not operate properly due to suspected carburetor problems, take your riding mower to a qualified service center for repair and/or adjustment.