

Operator's Manual

# Rotary Lawn Mower

26-inch Wide Cut

Variable Speed

Rear Drive

Model 536.885600

**CAUTION:** Before using this product, read this manual and follow all of its Safety Rules and Operating Instructions.

- Safety
- Assembly
- Operation
- Maintenance
- Service And Adjustment
- Repair Parts

**CRAFTSMAN**<sup>®</sup>

Manual del usuario

# Cortacésped

Ancho de corte de 26 pulg.

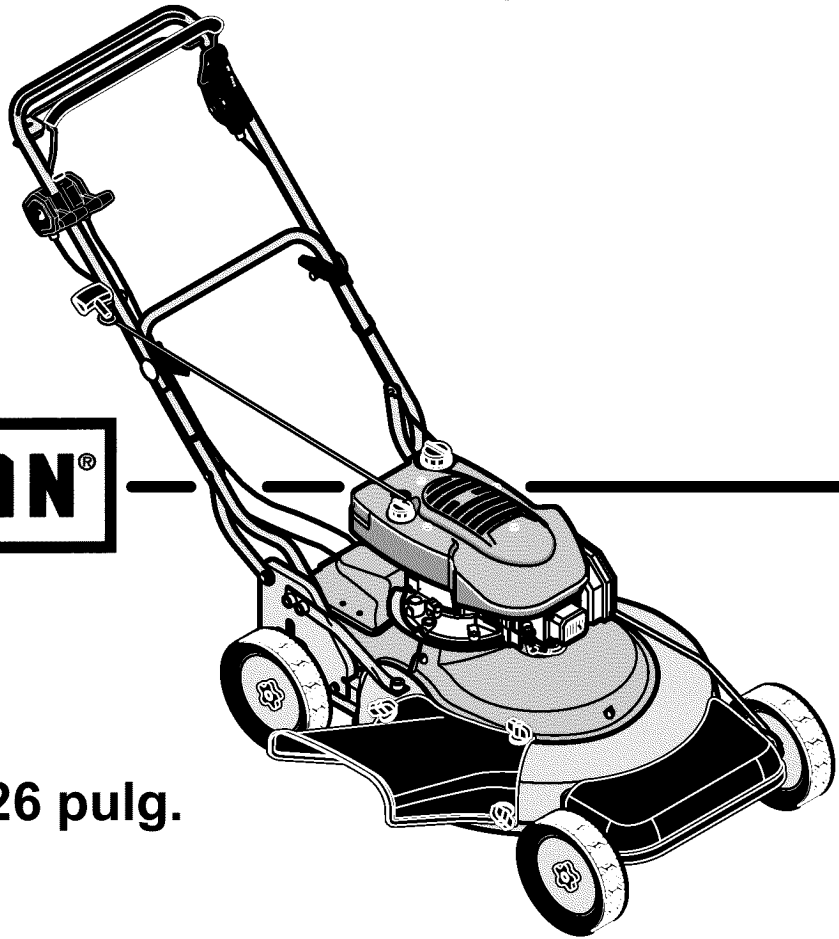
Velocidad variable

Tracción trasera

Modelo 536.885600

**PRECAUCIÓN:** Antes de usar este producto, lea este manual y siga todas las reglas de seguridad e instrucciones de operación.

- Seguridad
- Ensamblaje
- Operación
- Mantenimiento
- Servicio y ajustes
- Piezas de repuesto



Sears, Roebuck and Co., Hoffman Estates, IL. 60179 U.S.A.

F-010472M

[www.sears.com/craftsman](http://www.sears.com/craftsman)

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## LIMITED WARRANTY ON CRAFTSMAN EQUIPMENT PARTS

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

This Warranty does not cover:

- Expendable items which become worn during normal use, such as blades, spark plugs, air cleaners, belts, and oil filters.
- Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps or glass.
- Repairs necessary because of operator abuse, including but not limited to, damage caused by towing objects beyond the capability of the 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.
- Equipment used for commercial or rental purposes.

**TO LOCATE THE NEAREST SEARS SERVICE CENTER OR TO SCHEDULE SERVICE, SIMPLY CONTACT SEARS AT 1-800-488-1222.**

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

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

Congratulations on your purchase of a Craftsman Rotary Lawn Mower. It has been designed, engineered and manufactured to give you the best possible dependability and performance. If you experience any problems you cannot easily remedy, please see your nearest Sears Service Department. We have competent, well trained technicians and the proper tools to service or repair this unit. Please read and keep this manual. The instructions will enable you to assemble and maintain your unit properly. Always observe the "Safety Rules".

## FEATURES

**Variable Speed Transmission:** Quickly and easily set the forward speed.

**Large Cutting Width:** 26-inch cutting width.

**Mow or Mulch:** Side discharge attachment can be easily installed.

**Quick Type Height Adjustment:** Single lever adjust all wheels.

### Rotary Lawn Mower

Record in the space below the serial number and the date of purchase of this unit.

The model number and serial number are found on a decal attached to the unit.

**Model Number:** 536.885600

**Serial Number:** \_\_\_\_\_

**Date of Purchase:** \_\_\_\_\_

Keep these numbers for future reference.

## MAINTENANCE AGREEMENT

A Sears Maintenance Agreement is available on this unit. See the nearest Sears Store for information.



### 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.**

**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.**

**NOTE:** This unit is equipped with an internal combustion engine and must 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 must 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. See a Sears Service Center for a spark arrester for the muffler.

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# OWNER'S INFORMATION

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## CUSTOMER RESPONSIBILITIES

It is the owner's responsibility to follow the instructions below.

1. Carefully read and follow the rules for safe operation.
2. Follow all the assembly instructions.
3. Inspect the unit.
4. Make sure that the operator of the unit knows how to correctly use all standard and accessory equipment.
5. Operate the unit only with guards, shields, and other safety items in place and working correctly.
6. Correctly adjust the unit.
7. Service the unit only with authorized or approved replacement parts.
8. Complete all maintenance on the unit.

### Environmental Awareness

- Do not fill the engine's fuel tank completely full.
- Drain fuel for off-season storage.
- Use only unleaded gasoline.
- Service the air cleaner regularly.
- Change oil regularly. Use 10W-30 oil in summer.
- Tune-up the engine regularly.
- Keep equipment in efficient operating condition.
- Dispose of used engine oil properly.

## SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS



**WARNING:** 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.

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

### I. General Operation

1. Read, understand, and follow all instructions on the machine and in the manual(s). Be thoroughly familiar with the controls and the proper use of the mower before starting.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
3. Only allow responsible individuals, who are familiar with the instructions, to operate the mower.
4. Thoroughly inspect the mower and area where the equipment is to be used. Clear the area of objects such as rocks, toys, wire, bones, sticks etc., which could be picked up and thrown by the blade.
5. Be sure the area is clear of other people before mowing. Stop mower if anyone enters the area.
6. Do not operate the mower when barefoot or wearing open sandals. Always wear substantial foot wear.
7. Do not pull mower backwards unless absolutely necessary. Look down and behind before and while moving backwards.
8. Do not operate the mower without proper guards, plates, grass catcher or other safety protective devices in place.
9. See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by the manufacturer.
10. Stop the blade(s) when crossing gravel drives, walks, or roads.
11. Stop the engine (motor) whenever you leave the equipment, before cleaning the mower or unclogging the chute.
12. Shut the engine (motor) off and wait until the blade comes to complete stop before removing grass catcher.

13. Mow only in daylight or good artificial light.
14. Do not operate the mower while under the influence of alcohol, drugs or other medication which can cause drowsiness or affect your ability to operate this machine safely.
15. Never operate mower in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk; never run.
16. Disengage the self-propelled mechanism or drive clutch on mowers so equipped before starting the engine (motor).
17. If the equipment should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble such as a blade that is damaged, a loose blade, or the engine mounting bolts are loose.
18. Always wear safety goggles or safety glasses with side shields when operating mower to protect your eyes from foreign objects which can be thrown from the unit.
19. Plan your mowing pattern to avoid discharge of material toward roads, sidewalks, bystanders and the like.
20. After striking a foreign object, stop the engine. Remove the wire from the spark plug. Inspect the blade and mower for damage. If damaged, repair before starting and operating the mower.
21. Keep any washout ports and other mower housing service openings closed when mowing.

### II. Slope Operation

Slopes are a major factor related to slip and fall accidents which can result in severe injury. All slopes require extra caution. If you feel uneasy on a slope, do not mow it.

#### DO:

Mow across the face of slopes; never up and down. Do not mow excessively steep slopes (maximum 15 degrees) or areas where the ground is very rough. See the "Guide" in the back of this manual to check a slope. Exercise extreme caution when changing direction on slopes.

Remove objects such as rocks, tree limbs, etc.

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# OWNER'S INFORMATION

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Watch for holes, ruts, or bumps. Tall grass can hide obstacles.

## DO NOT:

*Do not* mow near drop-offs, ditches, or embankments. The operator could lose footing or balance.

*Do not* mow excessively steep slopes.

*Do not* mow on wet grass. Reduced footing could cause slipping.

## III. Children

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

1. Keep children out of the mowing area and under the watchful care of a responsible adult.
2. Be alert and turn mower off if children enter the area.
3. Before and while moving backwards, look behind and down for small children.
4. Never allow children to operate the mower.
5. Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

## IV. Service

- \*1. Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
  - a. Use only an approved container.
  - b. Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
  - c. Never refuel the machine indoors.
  - d. Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- \*2. Never run an engine indoors or inside a closed area.
3. Never make adjustments or repairs to items such as the height adjusters or grass catcher with the engine (motor) run-

ning. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting. Always wear eye protection when you make adjustments or repairs.

4. Keep all nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
5. Never tamper with safety devices. Check their proper operation regularly.
6. To reduce fire hazard, keep mower free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage. Allow mower to cool before storing.
7. Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
8. Never attempt to make wheel height adjustments while the engine (motor) is running.
9. Always disconnect electric mowers (live operated) before cleaning, repairing, or adjusting.
10. Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary. For storage, always make sure grass catcher is empty.
11. Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
12. Do not change the engine governor setting or over-speed the engine.
13. Frequently check the blade for wear or damages such as cracks and nicks. A blade that is bent or damaged must be immediately replaced with a factory replacement blade. For safety and good cutting performance, replace the blade every two years. Frequently check the blade bolt and the engine mounting bolts. Replace damaged bolts and tighten loose bolts.
14. Use only original equipment or authorized replacement parts.

\* Asterisked items do not apply to electric mowers.



**Look for this symbol to indicate important safety precautions. This symbol indicates: "Attention! Become Alert! Your Safety Is At Risk."**

# PREPARATION

## UNPACKING INSTRUCTIONS

The mower was fully assembled at the factory. When the mower was put in the carton, the handle was put in a folded position (see Figure 1). To put the handle in the operating position, follow the steps below.

### Handle

1. Remove the packing material from the carton.
2. Remove the side discharge attachment, the oil, and the fuel stabilizer from the carton. Put the fuel stabilizer in a safe place until needed for storage.
3. Cut down all four corners of the carton.

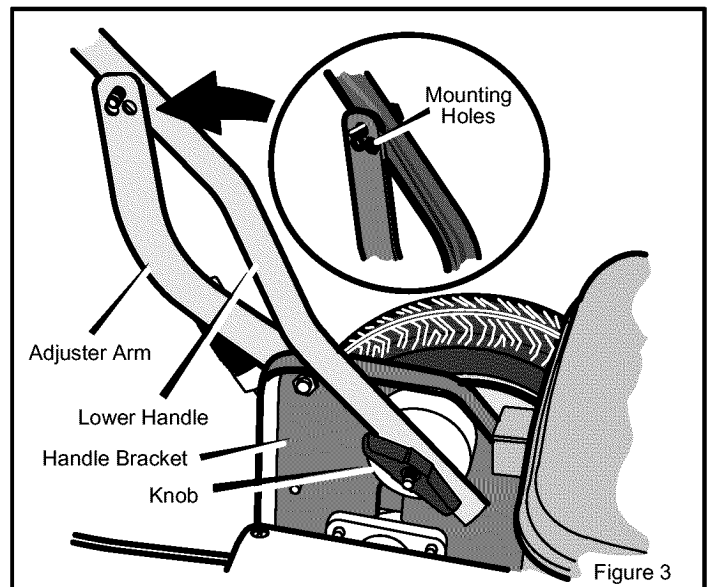
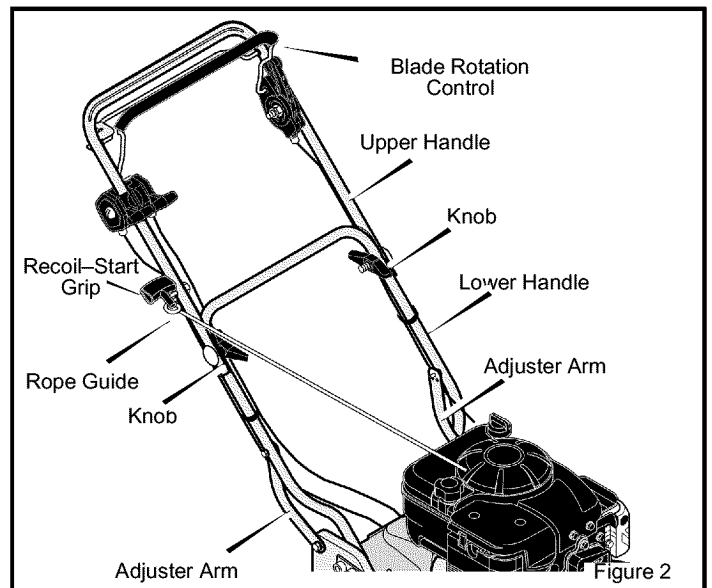
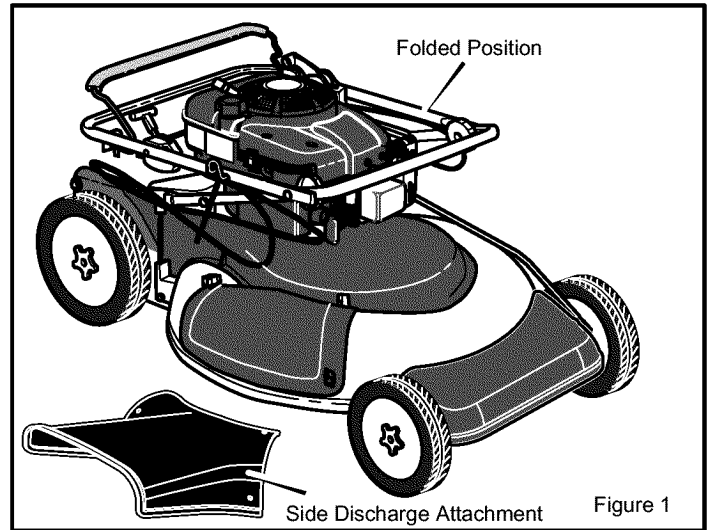
**CAUTION: Be careful when you fold or raise the handle. Do not damage the cables. A cable that is bent will not work correctly. Before you use the unit, replace a bent or damaged cable.**

4. Raise the **upper handle** and the **lower handle** to the operating position (see Figure 2). Tighten the **knobs** that secure the **upper handle** to the **lower handle**.

5. Each **adjuster arm** has three **mounting holes**. These **mounting holes** will raise the height of the handle approximately four inches. Determine the desired height and mount the **adjuster arms** to the **lower handle** (see Figure 3).

6. Tighten the **knobs** that secure the **lower handle** to the **handle brackets**.

7. To attach the **recoil-start grip** to the **rope guide**, twist the rope through the **rope guide** mounted on the right side of the handle (Figure 2).



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# PREPARATION

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## HOW TO PREPARE THE ENGINE

ENGINE DOES NOT CONTAIN OIL OR GASOLINE

See "Before Starting The Engine" in the Operation section for the type of oil and gasoline to use. Before you use the unit, read the information on safety, operation, maintenance, and storage.

**IMPORTANT:** This unit is equipped with an internal combustion engine and must 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 must 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. See a Sears Service Center for a spark arrester for the muffler.

In some areas, local law requires the use of a resistor spark plug to control the ignition signals. See a Sears Service Center for a resistor spark plug for the engine.

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## FINAL PREPARATION

Before you mow, check the handle and the controls. Make sure all fasteners are tight.



**WARNING:** Before doing any assembly or maintenance to the mower, remove the wire from the spark plug.

## IMPORTANT! BEFORE YOU START MOWING

- The engine was shipped without engine oil. Make sure to fill the engine with the correct amount of engine oil.
- Fill the fuel tank with gasoline.

# OPERATION

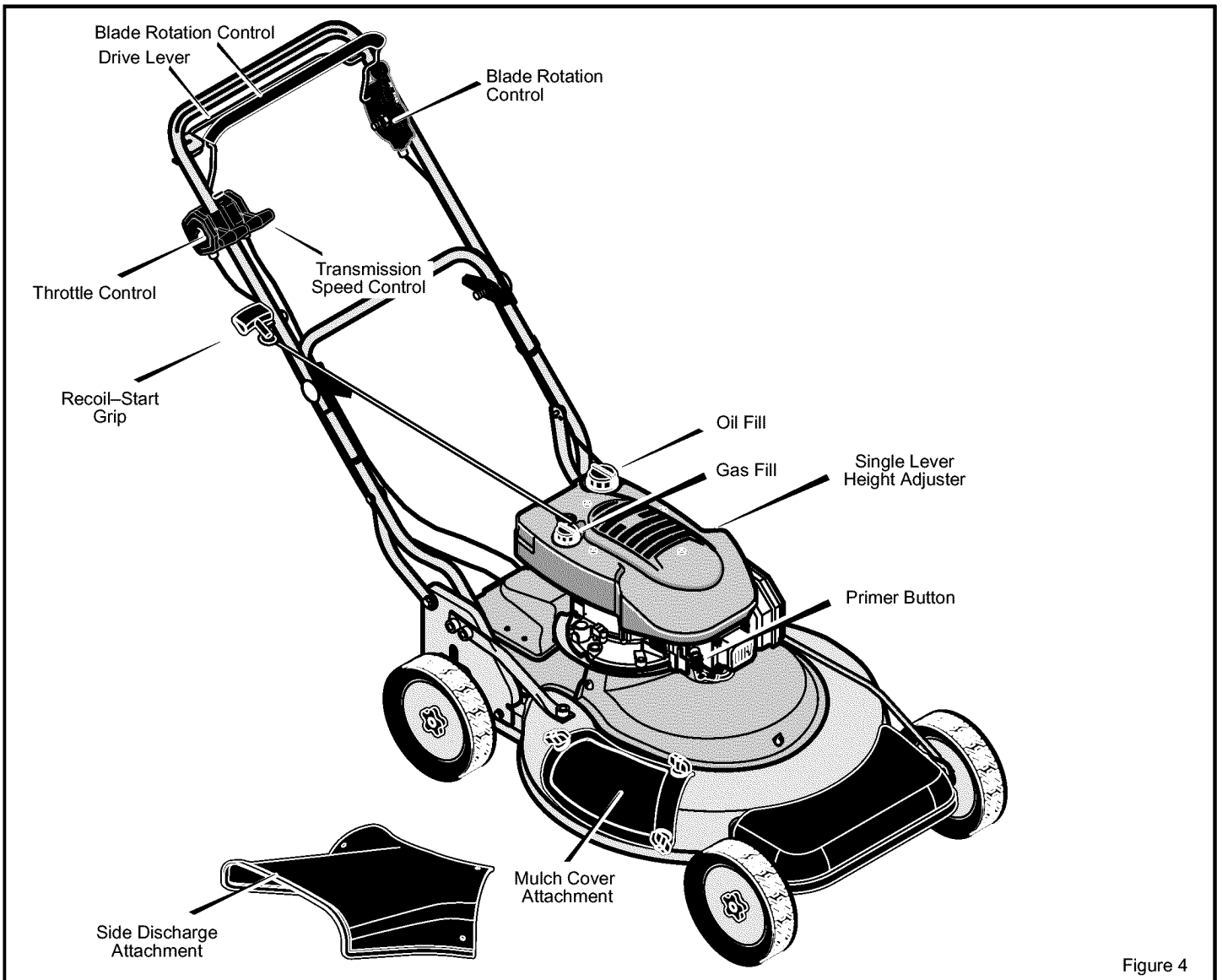


Figure 4

## KNOW YOUR PRODUCT

**BLADE ROTATION CONTROL:** For the blade to rotate, the blade rotation control must be in the ENGAGED position (against the handle). To quickly stop the blade, release the control.

**BLADE CONTROL LEVER:** Use the blade control lever to engage the blade.

**DRIVE LEVER:** To quickly disengage the drive, release the drive lever.

**RECOIL-START GRIP:** To start the engine, quickly pull the recoil-start grip.

**TRANSMISSION SPEED CONTROL:** To increase the forward speed, move the transmission speed control forward.  
F-010472M

**MULCH COVER ATTACHMENT:** Use to mulch the grass.

**SIDE DISCHARGE ATTACHMENT:** Use to discharge the grass out the side.

**SINGLE LEVER HEIGHT ADJUSTER:** Use to quickly change the cutting height.

**THROTTLE CONTROL:** Use the throttle control lever to increase or decrease the speed of the engine.

**PRIMER BUTTON:** When starting a cold engine, use the primer button to choke the engine.

**OIL FILL / DIPSTICK:** Use to check and add oil.

**GAS FILL:** Use to add gasoline.

# OPERATION

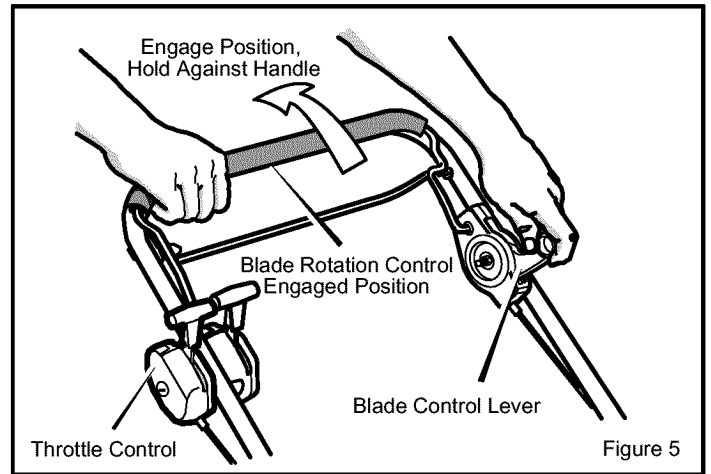
## HOW TO USE THE THROTTLE CONTROL

Use the **throttle control** to increase or decrease the speed of the engine.

1. To increase the engine speed, move the **throttle control** forward to the **FAST** position. For normal operation and when using a grass bagger, move the **throttle control** to the **FAST** position. Also, for a cooler running engine, operate the engine in the **FAST** position.
2. The engine governor is set at the factory for maximum performance. Do not adjust the governor to increase the speed of the engine.

## HOW TO ENGAGE THE BLADE

1. When you start the engine, do not engage the **blade rotation control**.
2. To rotate the blade, hold the **blade rotation control** in the **ENGAGE position** (against the handle).
3. With the **blade rotation control** against the handle, push the **blade control lever** forward.
4. To stop the blade, release the **blade rotation control**. Before you leave the operator's position, make sure the blade has stopped rotating.



5. Before you go across a sidewalk or a road, release the **blade rotation control** to stop the blade.

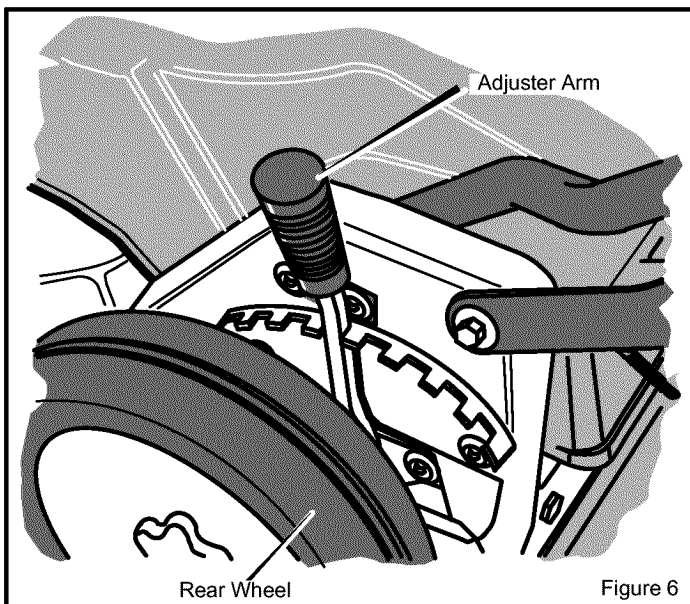


**WARNING: Always keep your hands and feet away from the blade, deflector opening, and the mower housing when the engine runs.**

## HOW TO CHANGE THE HEIGHT OF CUT

To change the height of cut, move the position of the **adjuster arm** (see Figure 6).

1. Disengage the **adjuster arm**.
2. Move the **adjuster arm** to another position.



# OPERATION

## HOW TO OPERATE THE REAR WHEEL DRIVE

**IMPORTANT:** When you operate, always operate with the throttle control in the **FAST** position.

### Height Of Cut

Set the height of cut. See "How To Change The Height Of Cut". In high or thick grass, cut the grass in the highest position first and then change to a lower position.

### Rear Wheel Drive System

The mower has a multi-speed transmission with a rear wheel drive system. To change the speed, follow the steps below.

1. Start the engine. See "How To Start The Engine".
2. **DO NOT** engage the drive lever.
3. Move the **transmission speed control** forward to the desired speed (see Figure 7).



**WARNING:** For better control of the unit, always select a safe speed.

4. To go forward, hold the **drive lever** against the handle in the **ENGAGED** position.
5. When operating, always keep both hands on the handle (see Figure 8).
6. To stop forward motion, release the **drive lever**.
7. To shift to a different speed, release the **drive lever**. Move the **transmission speed control** to another speed.

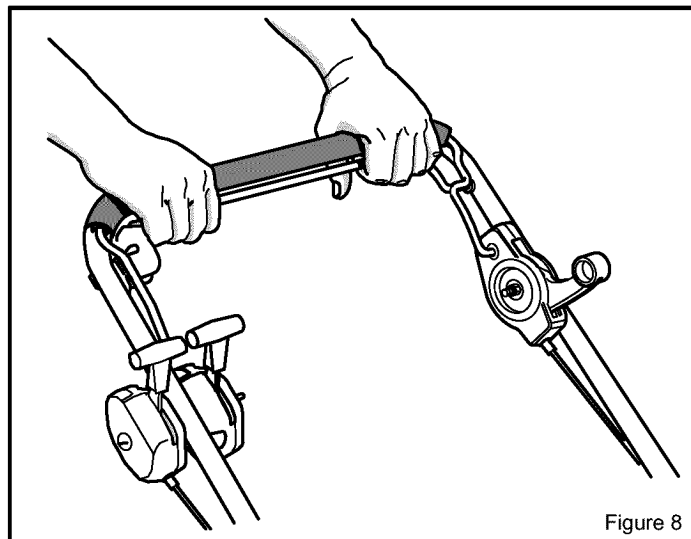
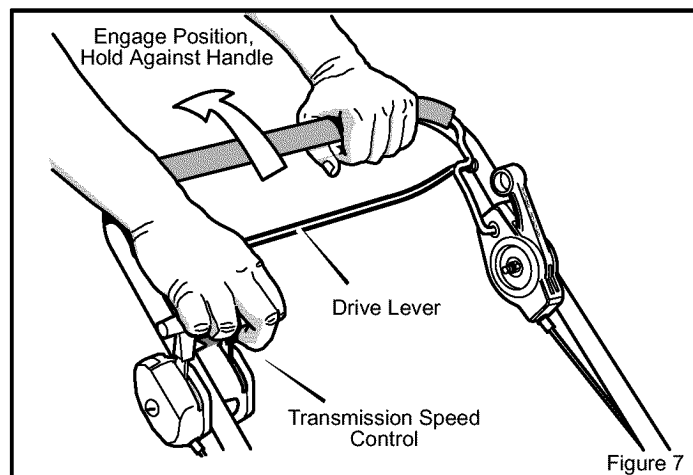
Check the operation of the drive system as follows.

1. With the engine *not running* and the **drive lever** in the **DIS-ENGAGED** position, pull the mower backwards. The rear wheels must freely turn.
2. With the engine *not running* and the **drive lever** in the **ENGAGED Position**, pull the mower backwards. The rear wheels must now be engaged and will not turn.
3. If the drive system does not operate correctly, adjust the drive cable. See "How To Adjust The Drive Cable" in the maintenance section.

**NOTE:** To stop the engine, move the throttle control lever to the **OFF** position.



**WARNING:** For safe operation, the drive system must immediately disengage when the drive lever is released. If the drive system does not disengage correctly, do not operate the mower until the drive system is adjusted or repaired by a Sears service center.



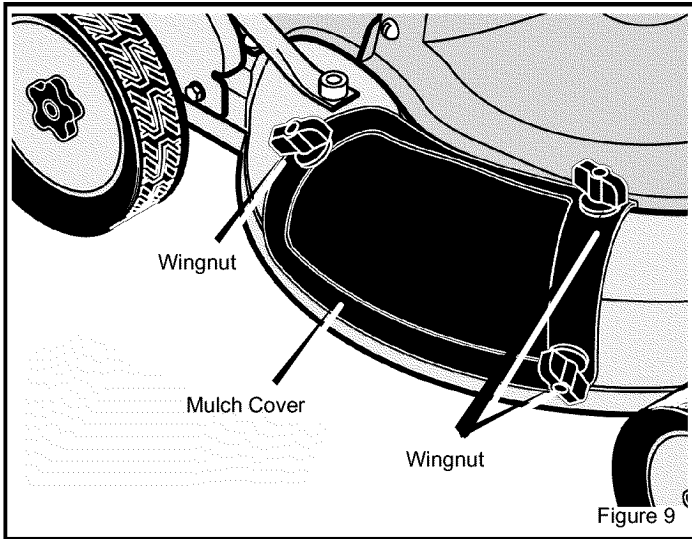
# OPERATION

## HOW TO INSTALL THE SIDE DISCHARGE ATTACHMENT

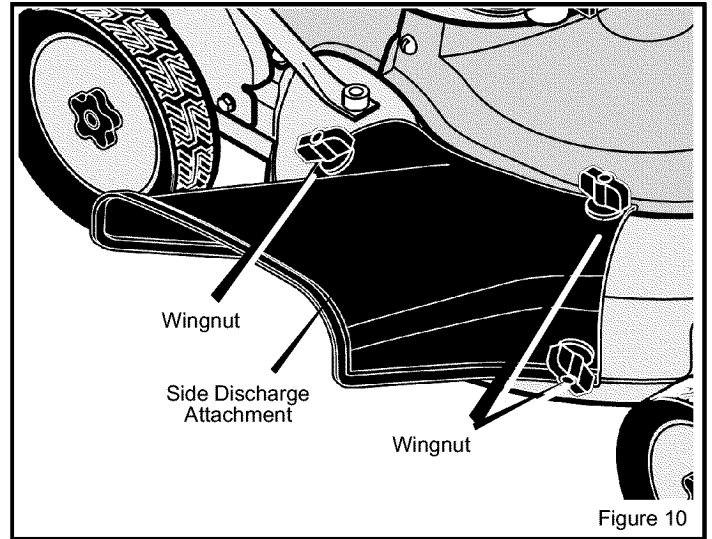


**WARNING:** To prevent the engine from starting, disconnect the wire from the spark plug.

1. Remove the three **wingnuts** that secure the **mulch cover** to the mower housing (see Figure 9).



2. Remove the **mulch cover**.
3. Mount the **side discharge attachment** on the mower housing (see Figure 10).
4. Make sure the **side discharge attachment** is mounted on all three bolts and fasten with the **wingnuts** that were removed in step 1.



## MULCHING TIPS

When you use a mulcher attachment, the grass is cut into very small pieces. These small pieces will quickly break down. Because the nutrients are returned to the soil, the lawn will need less fertilizer. To correctly mulch the grass, follow the steps below.

1. Set the throttle in the FAST position. Operate the mower at a slower ground speed. If ground speed is too fast, the grass will not have an even cut.
2. Keep a sharp edge on the blade. A blade that is not sharp will cause the ends of the grass to become brown.
3. Make sure the grass is dry. Wet grass is difficult to cut.
4. Set the height of the mower housing so that only the top third of the grass is cut. If the grass is too high, set the height of the mower housing to the maximum height. Then, lower the mower housing for the second cut. Also, instead of using the full width of the mower housing, mulch at half the width.
5. Clean the bottom of the mower housing. Grass and other debris can keep the mower from working correctly.
6. If the grass grows fast, mulch more often.
7. If an area needs improvement, mulch a second time.

# OPERATION

## BEFORE STARTING THE ENGINE

### ADD OIL

**NOTE:** This unit is shipped without oil in the engine. Before adding oil, be sure that the engine is level.

### TO FILL WITH OIL

**CAUTION: DO NOT overfill the engine with oil or it will smoke on startup.**

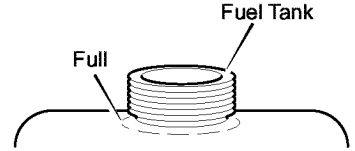
1. Remove the oil dipstick from the oil fill spout. Make sure that the rim of the oil fill spout is clean.
2. You received a 20 oz. container of oil with the unit. Slowly pour 3/4 (15 oz.) of the oil from the container down the oil fill spout into the engine.
3. Wait one minute to allow oil to settle. Insert and tighten the dipstick, then remove it to check the oil level.
4. Continue adding small amounts of oil and rechecking the dipstick until it reads full. **DO NOT** overfill, or the engine will smoke on startup.
5. Always make sure to retighten the oil dipstick before starting the engine.

## ADD GASOLINE



**WARNING:** Always use a safety gasoline container. Do not smoke when adding gasoline to the fuel tank. Do not add gasoline when you are inside an enclosure. Before you add gasoline, stop the engine and let the engine cool for several minutes.

Fill the fuel tank with regular unleaded gasoline. Do not use premium unleaded gasoline. Make sure the gasoline is fresh and clean. Leaded gasoline will increase deposits and shorten the life of the valves.



**CAUTION: A mixture of alcohol (ethanol or methanol) and gasoline (called gasohol), will attract moisture and cause acid deposits during storage. While the unit is in storage, the acids in the fuel can damage the fuel system.**

To prevent engine problems with the fuel system, empty the fuel system before storage of 30 days or longer as follows.

1. Drain the fuel tank.
2. Start the engine. Let the engine run until the fuel lines and the carburetor are empty.
3. After storage, make sure you use fresh fuel. See the storage instructions for additional information.
4. Never use engine cleaner or carburetor cleaner in the fuel tank or permanent damage can occur.

## HOW TO START THE ENGINE

**NOTE:** The mower is equipped with a no-adjust carburetor. For increased performance, the carburetor has been preset to run in the **FAST** position. The **FAST** position will also improve lubrication and prolong engine life.

1. Move the **throttle control lever** to the **FAST** position.

**NOTE:** For the engine to start, the throttle control lever must be in the **FAST** position.

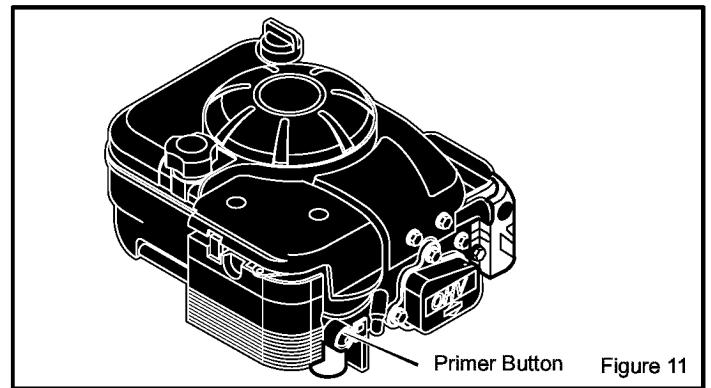
2. Push the **primer button** (see Figure 11). Every time you push the **primer button**, wait two seconds. For the number of times required to push the **primer button**, see the decal located on the engine.

**NOTE:** Do not use the primer button when starting a warm engine.

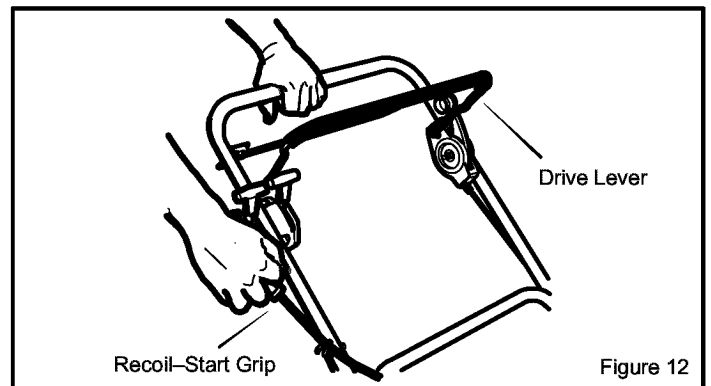
3. Make sure the **drive lever** is in the **DISENGAGED** Position (see Figure 12).
4. Stand behind the mower. Rapidly pull the **recoil-start grip**. Slowly return the **recoil-start grip**.

**NOTE:** If the engine does not start after four or five tries, see the **TROUBLESHOOTING CHART**.

5. Let a cold engine run for several minutes. Begin work when the engine is warm.
6. To stop the engine, move the **throttle control lever** to the **OFF** position.



Primer Button Figure 11



Recoil-Start Grip Drive Lever Figure 12

# MAINTENANCE

MAINTENANCE CHART						
PROCEDURE	EACH USE	FIRST 2 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	BEFORE STORAGE
Blade, Inspect and Sharpen			√			
Oil, Check	√					
Oil, Change *		√		√		√
Cooling System, Clean					√	
Muffler, Check				√		
Air Filter, Clean / Change				√		√
Spark Plug, Check				√		√
Spark Plug, Replace					√	

\* Dusty conditions every 25 hours.

## GENERAL RECOMMENDATIONS

1. The owner's responsibility is to maintain this product. This will extend the life of the product and is also necessary to maintain warranty coverage.
2. Check the spark plug, blade brake, lubricate the unit, and clean or replace the air filter once a year.
3. Check the fasteners. Make sure all fasteners are tight.
4. Follow the Maintenance section and the Service And Adjustment section to keep the unit in good operating condition.



**WARNING:** Before you make an inspection, adjustment, or repair to the unit, disconnect the wire to the spark plug. Remove the wire from the spark plug to prevent the engine from starting by accident.

**NOTE:** Torque is measured in foot pounds (metric Nm). This measurement describes how tight a nut or bolt must be. The torque is measured with a torque wrench.

## ENGINE TIPPING

When you service the engine, inspect the blade, or clean the underside of the mower housing; make sure to always tip the engine with the spark plug up. Transporting or tipping the engine with the spark plug down will cause:

- Hard starting.
- Engine smoking.
- Spark plug fouling.
- Oil or gas saturation of the air filter.



Figure 13

# MAINTENANCE

## INSPECT BLADE



**WARNING:** Before you inspect or remove the blade, disconnect the wire to the spark plug. If the blade hits an object, stop the engine. Check the unit for damage. The blade has sharp edges. When you hold the blade, use gloves or cloth material to protect your hands.

If you keep the blade sharp and inspect the blade for damage, the blade will cut better and be more safe to operate. Frequently check the blade for excessive wear, cracks, or other damage. Frequently check the nut that holds the blade. Keep the nut tight. If the blade hits an object, stop the engine. Disconnect the wire to the spark plug. See if the blade is bent or damaged. Check the blade adapter for damage. Before you operate the unit, replace damaged parts with original equipment parts. See a Sears service center in your area. Every three years, have an authorized service person inspect the blade or replace the old blade with an original equipment part.

## HOW TO REMOVE AND INSTALL THE BLADE

1. Drain the fuel tank.
2. Lift the side of the mower that has the muffler or spark plug.
3. As you loosen the nut, use a piece of wood to keep the blade from rotating.
4. Remove the **nut, washers, and blade** (Figure 14).

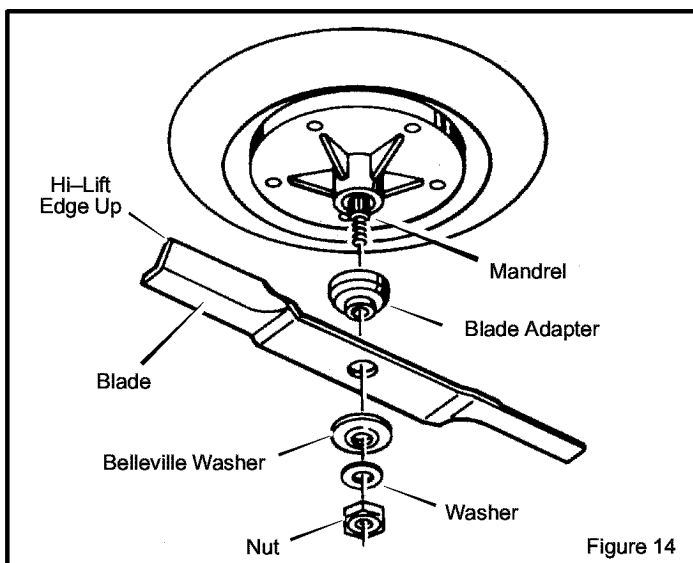


Figure 14

5. Check the **blade** and the **blade adapter** according to the instructions for "Inspect Blade". Replace a badly worn or damaged **blade** with an original equipment blade. See a Sears service center in your area.
6. Clean the bottom of the mower housing. Remove all the grass and debris.
7. Mount the **blade** and **blade adapter** on the **mandrel** (Figure 14).
8. Mount the **blade** so that the **hi-lift edges** are up. If the **blade** is upside down, the **blade** will not cut correctly and can cause an accident.
9. Fasten the **blade** with the original washers and **nut**. Make sure the outside rim of the **Belleville washer** is against the **blade** (Figure 15).



**WARNING:** Always keep the nut tight that holds the blade. A loose nut or blade can cause an accident.

10. Tighten the **nut** that holds the **blade** to a torque of 35 foot pounds (47,5 N-m).

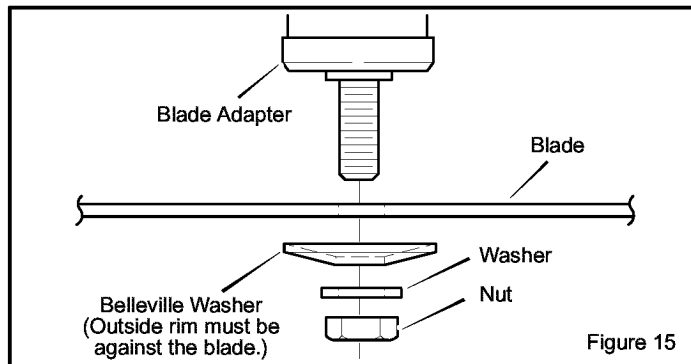


Figure 15

## HOW TO SHARPEN THE BLADE



**WARNING:** Vibration can be caused if the blade is not correctly balanced or if the blade is damaged. A blade that is damaged with cracks can break and cause an accident.

Keep a sharp edge on the **blade**. A **blade** that is not sharp will cause the tips of the grass to become brown.

1. Sharpen the **blade** two times a year or every 25 hours.
2. Remove the **blade** according to the instructions in "How To Remove And Install The Blade".
3. Clean the **blade** with a brush, soap and water. Check the **blade**. Look for cracks, nicks, or other damage. Replace a badly worn or damaged blade with an original equipment blade. See a Sears service center in your area.
4. Sharpen the **blade** with a **file** (Figure 16). Make sure you keep the original bevel angle.
5. Make sure the **blade** is balanced. Use a **screwdriver** and hold the **blade** parallel to the **ground** (Figure 16). A **blade** that is balanced will stay parallel to the **ground**. If the **blade** is not balanced, the heavy end will rotate toward the **ground**. Sharpen the heavy end until the **blade** is balanced.
6. A new blade will cut better than a badly worn blade. Every three years, have an authorized service person inspect the blade or replace the old blade with an original equipment blade.
7. Assemble the **blade** according to the instructions "How To Remove And Install The Blade".

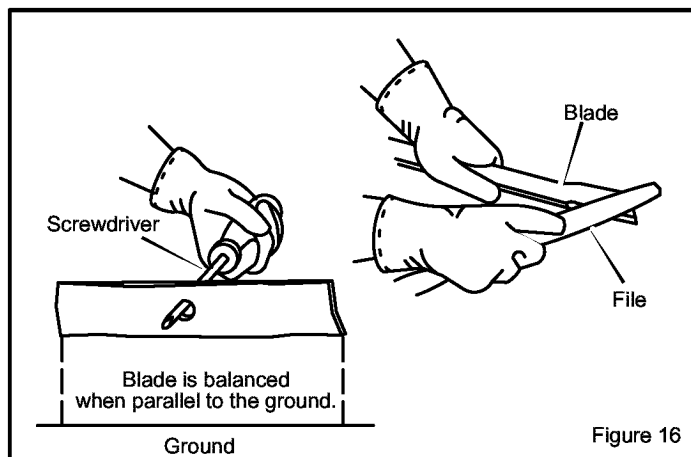


Figure 16

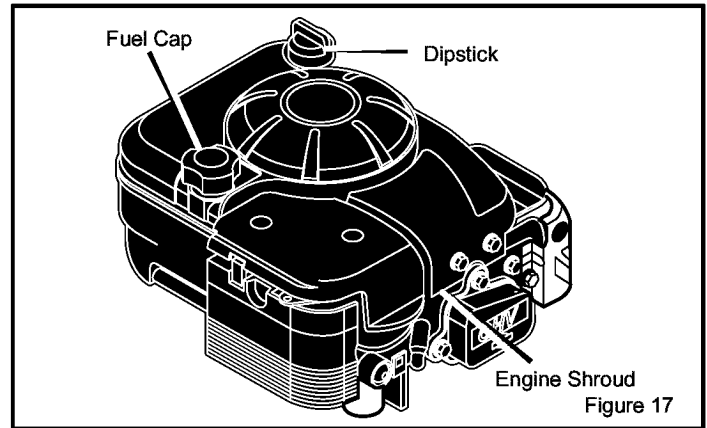
# MAINTENANCE

## ENGINE

### HOW TO CHECK THE OIL

**NOTE:** Do not check the level of the oil while the engine runs.

1. Make sure the unit is level.
2. Clean the area around the **dipstick** (Figure 17). Remove the **dipstick**. Wipe the oil from the **dipstick**.
3. Insert the **dipstick** into the oil fill tube. Turn the **dipstick** clockwise until it is tight. Remove the **dipstick**. Check the oil level on the **dipstick**. The oil level must reach the **FULL** mark on the **dipstick**.
4. If necessary, add oil until the oil reaches the **FULL** mark on the **dipstick**. The quantity of oil needed from **ADD** to **FULL** is shown on the **dipstick**. Do not add too much oil.



### HOW TO CHANGE THE OIL

**NOTE:** Do not drain the oil from a cold engine. Before you drain the oil, let the engine run for several minutes. Make sure you do not get oil on the belts.

1. Loosen the oil fill cap to serve as an air vent.
  2. Turn **oil drain valve** counter-clockwise and pull to release the **oil drain valve**. See Figure 18.
  3. Open the **oil drain cap**.
- NOTE:** To make the job cleaner, use an optional hose to drain the oil.
4. After draining the oil, close the **oil drain cap**.
  5. To lock the **oil drain valve**, push and turn the **oil drain valve** clockwise.

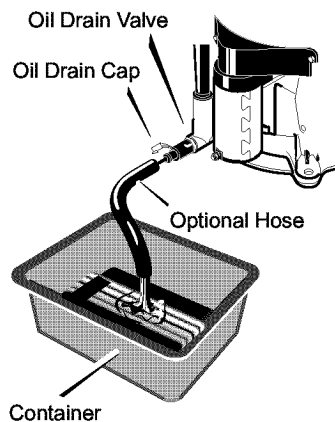
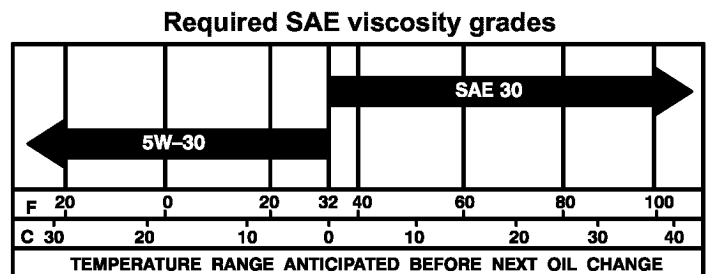


Figure 18

6. Only use a high quality detergent oil rated with API service classification SG. Select the oil's SAE viscosity grade according to the expected operating temperature using the temperature chart below:



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

7. Remove oil dipstick from oil fill spout. Make sure that rim of oil fill spout is clean.
8. Slowly pour 15 oz. of the oil down the oil fill spout into the engine.
9. Wait one minute to allow the oil to settle. Insert and tighten the **dipstick**, then remove it to check the oil level.
10. Continue adding small amounts of oil and rechecking the dipstick until it reads **FULL**. DO NOT overfill, or the engine will smoke on startup.
11. Always be sure to retighten oil dipstick before starting engine.

### HOW TO CLEAN THE COOLING SYSTEM

The engine is air cooled. The air that cools the engine enters through the **air screen** on top of the engine. Clean the engine every 100 hours or every year as follows.

1. Remove any grass, dirt or debris from the **air screen** with a cloth or brush.
2. Inspect the edge of the **engine shroud** for grass or debris. Remove any grass or debris visible at the bottom edge of the **engine shroud**.

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### HOW TO CHECK THE MUFFLER

Check the muffler every 50 hours. Make sure the muffler is correctly mounted and is not loose. If the muffler is worn or burnt, replace with a new muffler. A worn muffler is a fire hazard and can damage the engine.

If you mount a spark arrester to the muffler, also check the spark arrester when you check the muffler. If the spark arrester is worn or damaged, replace it with a new spark arrester. See your nearest Sears service center for a spark arrester.

# MAINTENANCE

## HOW TO CLEAN THE AIR FILTERS (FLAT TYPE)

**NOTE:** Never run the engine with the air filters removed. The air filters will help protect the engine against wear. For the correct replacement filter, see the parts list for the engine.

1. Loosen **screw** and tilt **cover** down (Figure 19).
2. Remove the air filters.
3. Clean the inside of the **base** and the **cover** with a cloth.
4. If equipped with a **pre-cleaner**, separate the **pre-cleaner** from the **cartridge**. Wash the **pre-cleaner** in a detergent and water solution. Let the **pre-cleaner** thoroughly air dry.

**CAUTION:** Do not wash the filters in gasoline or other solvents that will burn.

5. To clean the **cartridge**, lightly tap the **cartridge** against a hard flat surface.
6. If the **cartridge** is very dirty, replace the **cartridge**.
7. Assemble the air filters.
8. If equipped with a **pre-cleaner**, the lip of the **pre-cleaner** must touch the base of the **cartridge**.
9. Mount the tabs on the **cover** to the slots in the bottom of the **base**.
10. Close the **cover** and secure with **screw**.

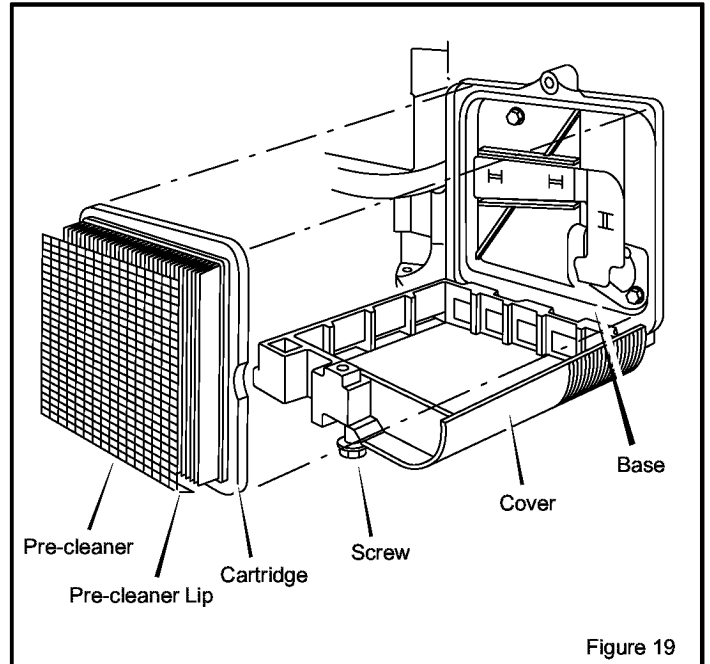


Figure 19

## HOW TO CHECK THE SPARK PLUG

1. Check the gap of the **spark plug** with a **feeler gauge** (Figure 20). The correct gap is **0.030"**.
2. For easy starting and good performance, replace the **spark plug** every two years or after every 100 hours of use.

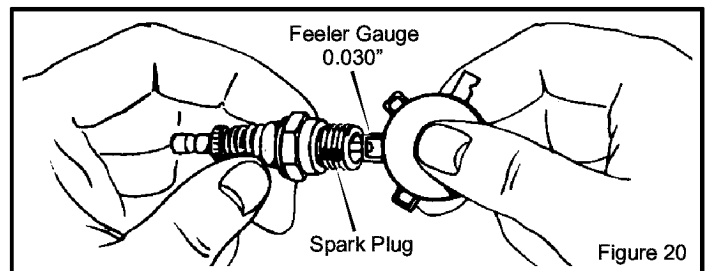


Figure 20

# SERVICE AND ADJUSTMENT

## HOW TO ADJUST THE BLADE DRIVE SYSTEM



**WARNING:** To prevent an injury, the blade rotation control must operate correctly.

In normal usage, the **blade drive system** will not require an adjustment. However, if the cutting performance decreases or the quality of cut is poor, make the following changes.

1. Start the engine. Make sure the throttle control is in the FAST position.
2. Release the blade rotation control.
3. Turn the **cable adjuster** one turn in the direction shown in Figure 21.
4. Engage the blade. See "How To Engage The Blade". Mow for a short distance and again check the quality of cut. If necessary, turn the **cable adjuster** one more turn to shorten the cable.
5. Repeat the adjustment and check the quality of cut.
6. If the quality of cut does not improve, replace the **mower drive belt**. See "How To Replace The Mower Drive Belt". If replacing the belt does not correct the problem, take the unit to a Sears service center.
7. Release the **blade rotation control**. Stop the engine. Disconnect the wire from the spark plug.
8. Check the operation of the blade brake. Rotate the pulley with your hand. Make sure the **brake pad** is pressed tightly against the pulley (Figure 22).



**WARNING:** If the brake pad does not press tightly against the pulley, take the unit to a Sears service center.

9. Move the **blade rotation control** to the **ENGAGE** position. Check the pad for the **blade brake**. If the pad is excessively worn or damaged, replace the **brake pad** assembly. Correct replacement parts and assistance are available from a Sears service center.
10. Attach the wire to the spark plug and start the engine. Mow for a short distance and again check the operation of the **blade drive system**.
11. If you replace the **mower drive belt**, turn the cable adjuster in the **OPPOSITE** direction as shown in Figure 21. Turn the cable adjuster until all the adjustment that was set with the old belt has been removed.
12. When you move the **blade rotation control** to the **DISENGAGE** position, all movement will stop within three seconds. If there is movement of the belt or the blade continues to rotate, engage and disengage the **blade rotation control** five times to remove any excess rubber from a new **mower drive belt**. If you need assistance, take the unit to a Sears service center.

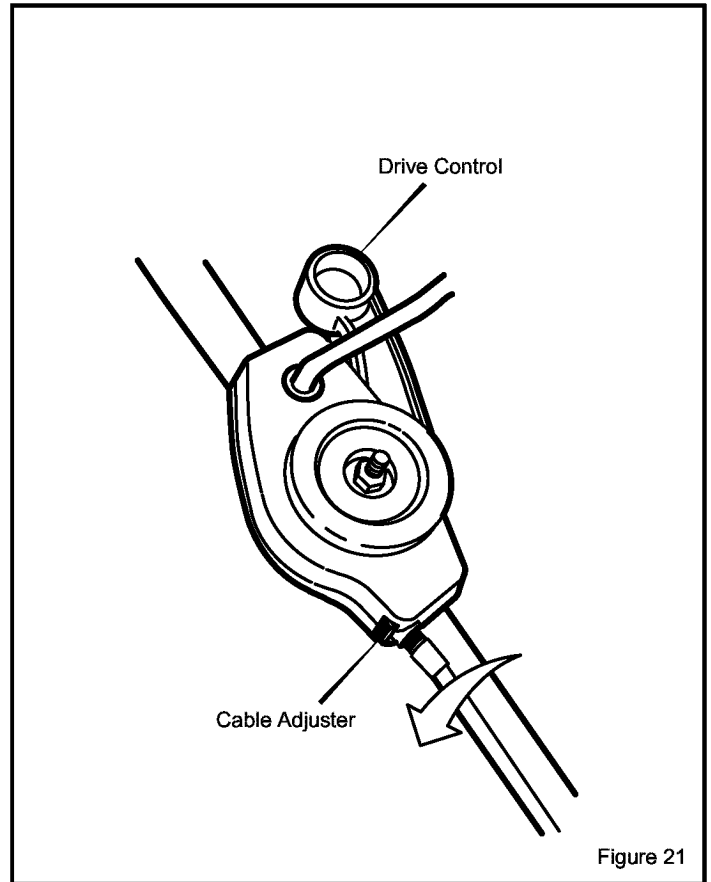


Figure 21

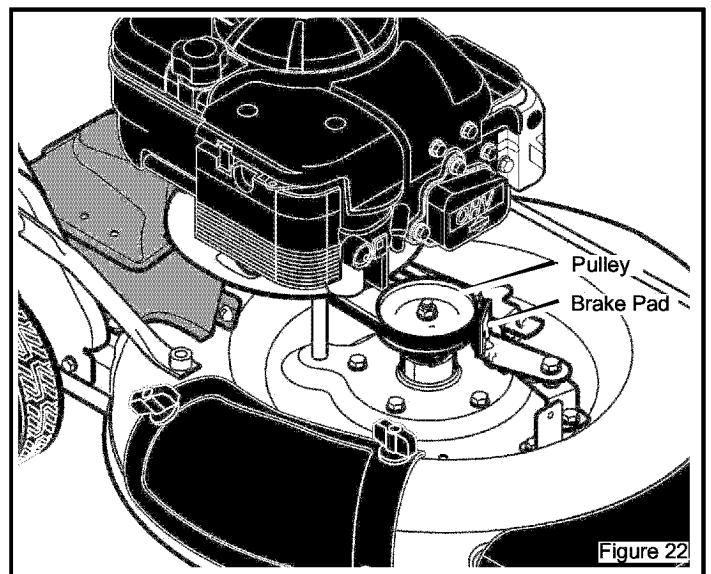


Figure 22

# SERVICE AND ADJUSTMENT

## HOW TO REPLACE THE BELTS



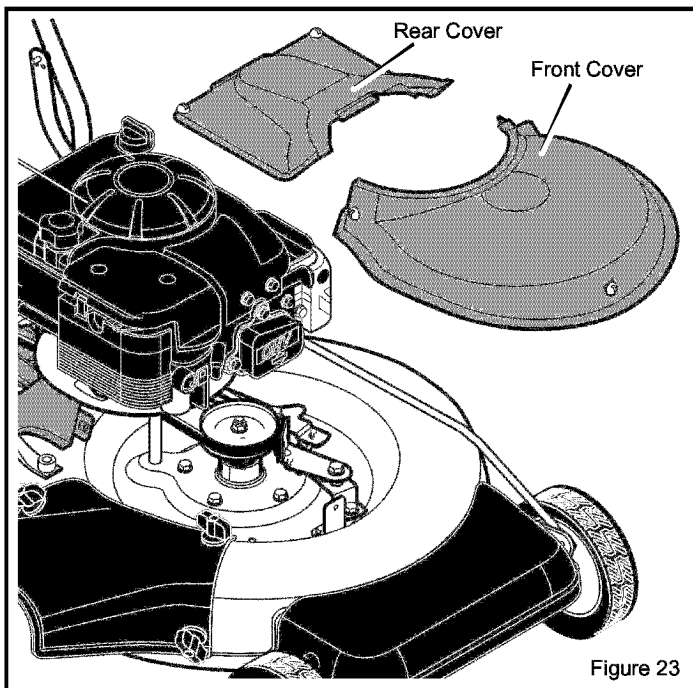
**WARNING:** Before you remove a belt, disconnect the wire from the spark plug.

### Blade Drive Belt

1. Remove the **front belt cover** (see Figure 23).
2. Remove the **blade drive belt** from the **engine stack pulley** (see Figure 24).
3. Remove the **blade drive belt** from the **mandrel pulley**.

**NOTE:** Replace the blade drive belt with an original equipment belt. See a Sears service center in your area.

4. Make sure the cable adjuster is turned so that all adjustment is removed the the blade drive cable. See "How To Adjust The Blade Drive System".
5. To install a new **blade drive belt**, put the belt around the **mandrel pulley**. Make sure that the "V" side of the belt is against the **mandrel pulley**.



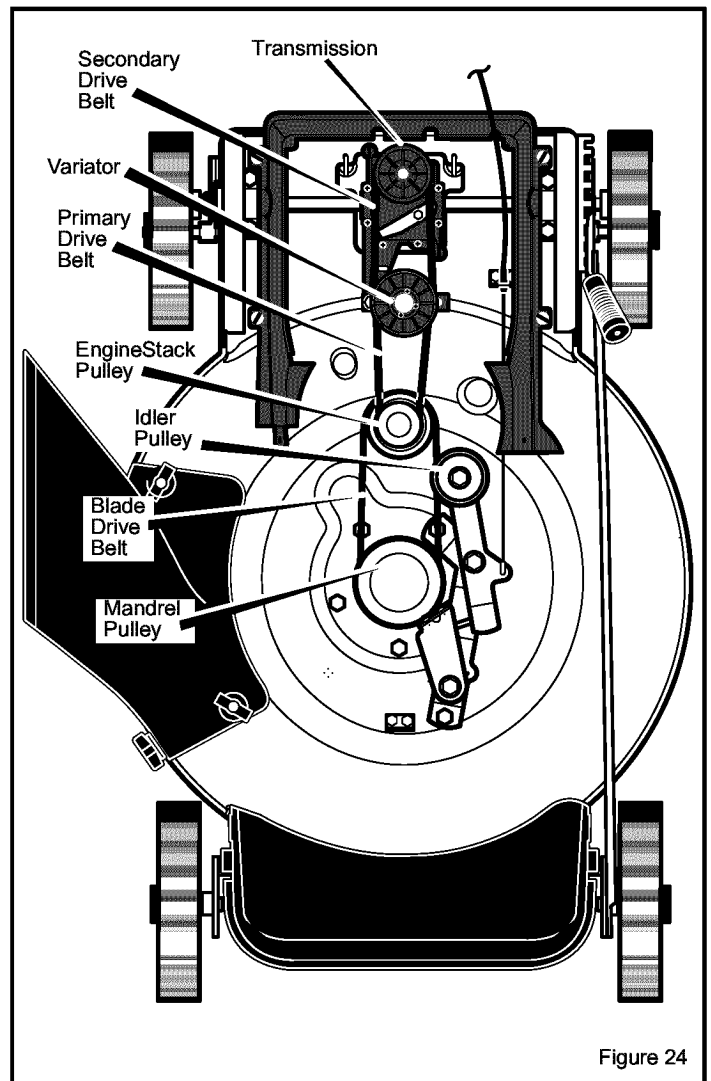
6. Put the **blade drive belt** onto the bottom pulley of the **engine stack pulley**. Make sure that the flat side of the **blade drive belt** is against the **idler pulley**.
7. Check the routing of the **blade drive belt** as shown in the illustration.

### Motion Drive Belts

1. Remove the **rear belt cover** (see Figure 23).
2. Remove the **blade drive belt** from the **engine stack pulley** (see Figure 24).
3. Remove the **secondary drive belt** from the **transmission**.
4. Remove the **primary drive belt** from the **engine stack pulley** and from the **variator**.
5. Remove the **secondary drive belt**.

**NOTE:** Replace the motion drive belts with original equipment belts. See a Sears service center in your area.

6. To install new motion drive belts, reverse the above steps.



# SERVICE AND ADJUSTMENT

## HOW TO ADJUST THE DRIVE CABLE

If the drive system does not engage and disengage correctly, check the handle for correct assembly. Make sure that all parts are in good condition, not broken or bent, and that all fasteners are tight.

Worn parts and cable stretch will change the performance of the drive system. When you mow in high or thick grass or on hills, the drive system can slip. If the drive system is slipping, adjust as follows or take the mower to a Sears service center.

1. If the drive system is slipping, loosen the **jam nut** (see Figure 25).
2. Turn the **cable adjuster** one turn in the direction shown in the illustration. Test the drive system and check for slippage.
3. If the drive system still slips, turn the **cable adjuster** one more turn to shorten the cable. Again, test the drive system.
4. Repeat the adjustment and test until the drive system does not slip.
5. Before you begin to mow, make sure the drive system will correctly disengage and that the mower will stop. If the drive system will not disengage, take the mower to a Sears service center before you operate the mower.
6. Tighten the **jam nut**.

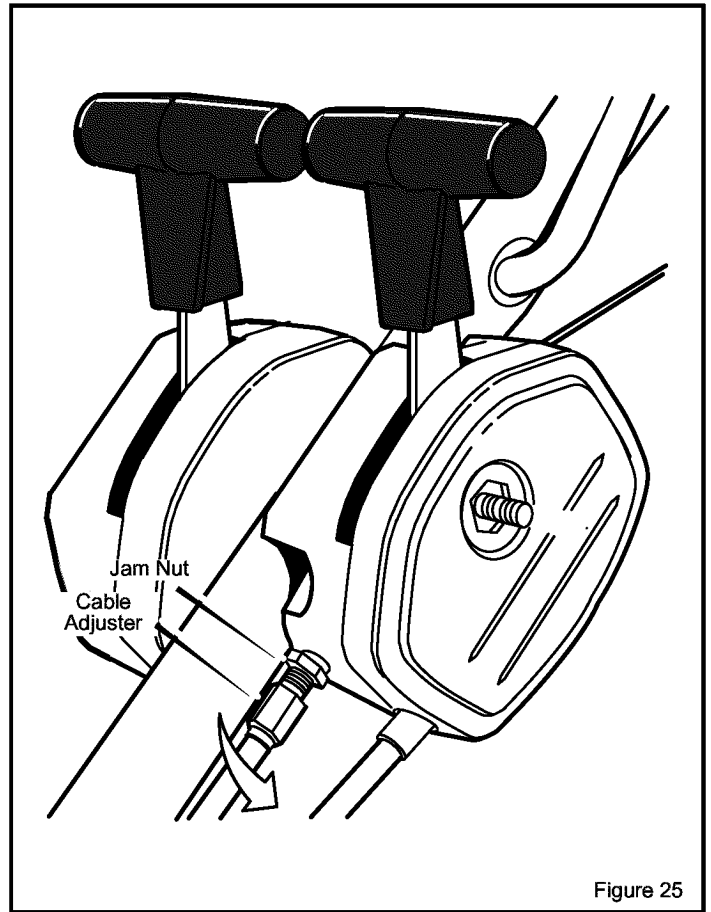


Figure 25

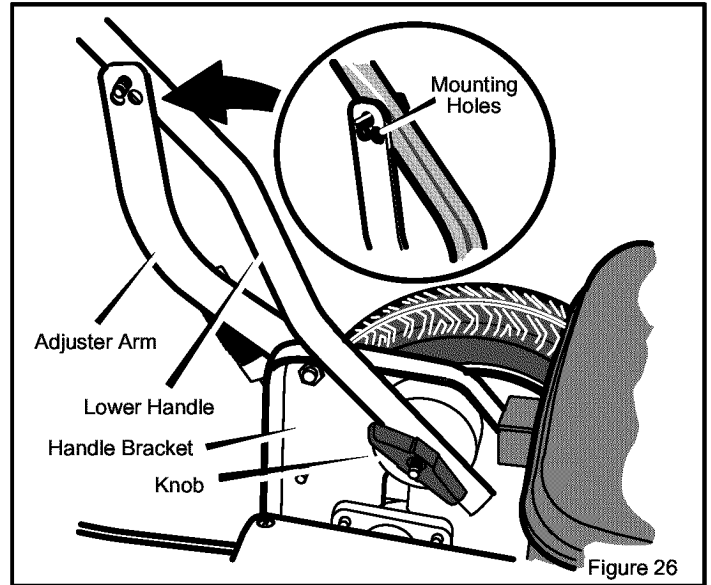
# STORAGE

## FOLDING HANDLE STORAGE

**CAUTION:** Be careful when you fold or raise the handle. Do not damage the cables. A cable that is bent will not work correctly. Before you use the unit, replace a bent or damaged cable.

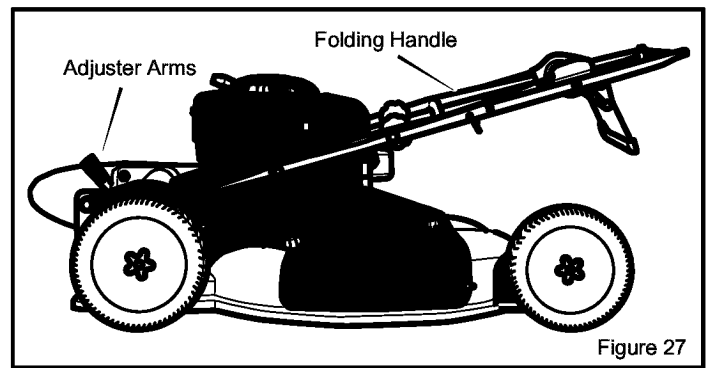
### How To Fold The Handle

1. Remove the **adjuster arms** from the **lower handle** (see Figure 26).
2. Loosen the **knobs** that secure the **lower handle** to the **handle brackets**.
3. Rotate the handle forward over the engine (see Figure 27). As you fold the handle, make sure the cables are not around the loose fasteners and do not become damaged.



### How To Raise The Handle

1. Lift the handle into the operator's position.
2. Each **adjuster arm** has three **mounting holes** (see Figure 26). These **mounting holes** will raise the height of the handle approximately four inches. Determine the desired height and mount the **adjuster arms** to the **lower handle**.
3. Tighten the **knobs** that secure the **lower handle** to the **handle brackets**.



## STORAGE (over 30 days)

At the end of each year, prepare the unit for storage as follows.



**WARNING:** Do not remove gasoline while inside a building, near a fire, or while you smoke. Gasoline fumes can cause an explosion or a fire.

1. Drain the fuel tank.
2. Let the engine run until it is out of gasoline.
3. Drain the oil from the warm engine. Fill the engine crankcase with new oil.
4. Remove the spark plug from the cylinder. Pour one ounce of oil into the cylinder. Slowly pull the recoil-start grip so that the

oil will protect the cylinder. Install a new spark plug in the cylinder.

5. Clean the dirt and debris from the cylinder cooling fins and the engine housing.
6. Clean the bottom of the mower housing.
7. Completely clean the mower to protect the paint.
8. Put the unit in a building that has good ventilation.

**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 in stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not drain the gas tank and carburetor if using stabilizer.

# TROUBLESHOOTING CHART

**PROBLEM: The engine will not start.**

1. Follow the steps, "How To Start The Engine" in this book.
2. Electric-Start Models: Clean the battery terminals. Tighten the cables.
3. Drain the fuel tank. Clean the fuel line. Replace the fuel filter.
4. Remove the spark plug. Move the throttle to the OFF position. Try to start the engine several times. Install the spark plug.
5. Replace the spark plug.

**PROBLEM: The engine will not turn over.**

1. Follow the steps, "How To Start The Engine" in this book.
2. Electric-Start Models: Check the level of the acid in the battery. If needed, add water. Charge the battery.
3. Electric-Start Models: Replace the fuse.
4. Electric-Start Models: Check the wiring harness for damage or a loose connection. Repair the damaged wire.

**PROBLEM: The engine is difficult to start.**

1. Replace the spark plug.
2. Clean or replace the air filter.

**PROBLEM: The engine does not run smooth or has a loss of power.**

1. Check the oil.
2. Clean or replace the air filter.
3. Clean the air screen.
4. Replace the spark plug.
5. Replace the fuel filter.

**PROBLEM: The engine does not run smooth at fast speed.**

1. Replace the spark plug.
2. Clean or replace the air filter.

**PROBLEM: The engine will not idle.**

1. Replace the spark plug.
2. Clean or replace the air filter.
3. Drain the fuel tank. Clean the fuel line.

**PROBLEM: A hot engine causes a decrease in power.**

1. Clean the air screen.
2. Check the oil.

**PROBLEM: Excessive vibration.**

1. Remove the blade. Check the blade and balance if necessary. See the blade maintenance instructions.
2. Check for a bent or broken blade. A DAMAGED BLADE IS DANGEROUS AND MUST BE REPLACED.

3. Check the blade adapter. REPLACE A BROKEN BLADE ADAPTER.
4. Check for loose engine bolts.
5. Check for a damaged belt or damaged pulley. Replace the damaged parts.
6. If the vibration continues, take the mower to a Sears Service Center.

**PROBLEM: The grass does not discharge correctly.**

1. Stop the engine. Clean the mower housing.
2. Raise the height of cut.
3. Replace or sharpen the blade.
4. Move the shift lever to a slower speed.
5. Move the throttle control to the FAST position.

**PROBLEM: The grass is not mulching correctly.**

1. Clean the bottom of the mower housing.
2. Check for a badly worn blade. Remove and sharpen the blade. For safety, replace the blade every two years with a factory replacement blade.
3. Move the throttle control lever to the FAST position. Check the speed of the engine according to the "Engine Instruction Book".
4. The grass must be dry. If the grass is wet, it will be difficult to cut and cause heavy clumps of grass.
5. The grass must not be too tall. Set the height adjusters so that only the top third of the grass is cut.

**PROBLEM: The grass is not cut even.**

1. Check the height adjustment at each wheel. The height adjustment must be the same for each wheel.
2. Make sure the blade is sharp.
3. Check for a bent or broken blade. A DAMAGED BLADE IS DANGEROUS AND MUST BE REPLACED.
4. Check for a broken blade adapter. REPLACE A BROKEN BLADE ADAPTER.

**PROBLEM: The mower blade will not rotate.**

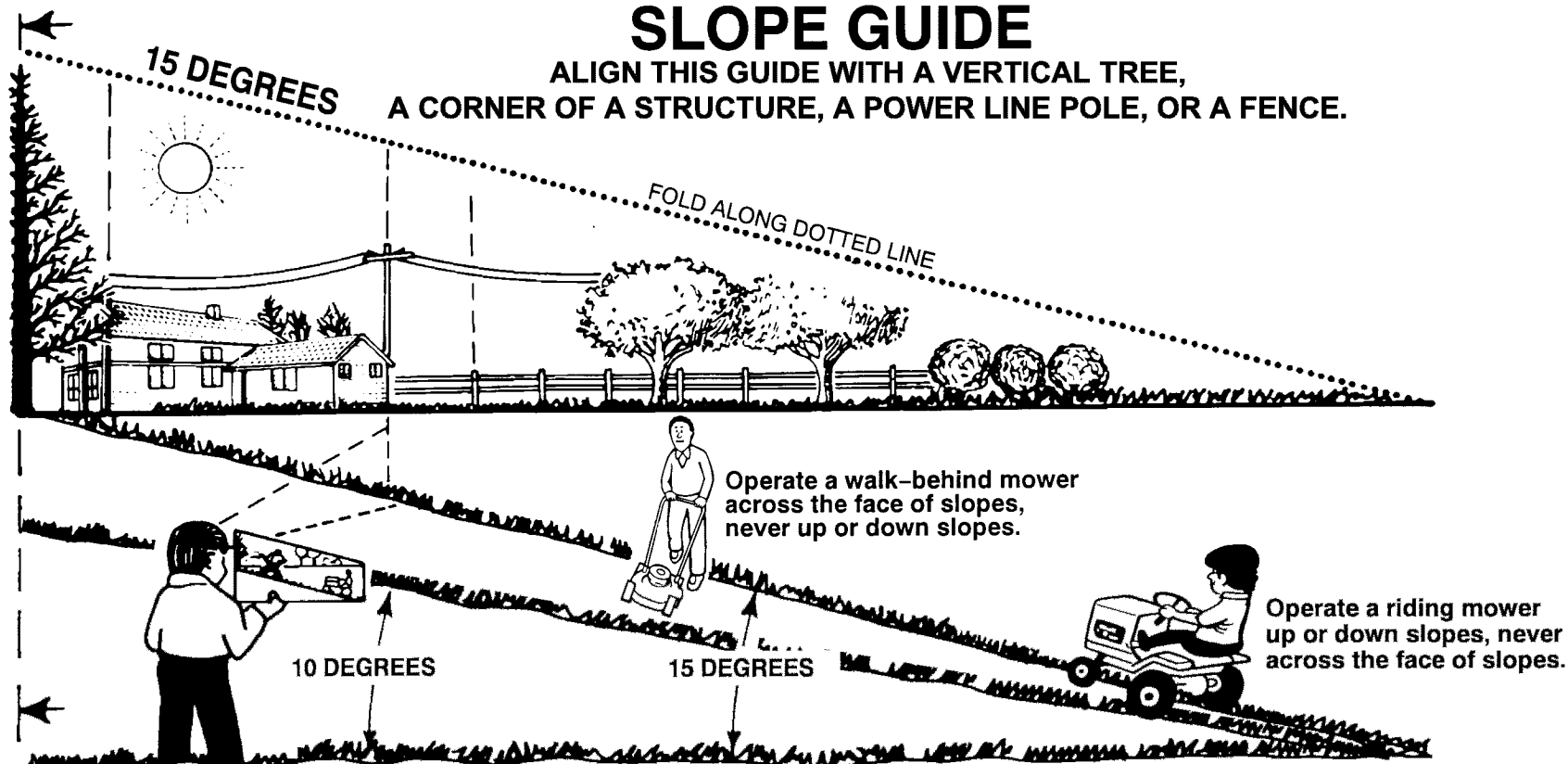
1. Check the blade drive belt. Make sure the belt is installed correctly.
2. Replace the blade drive belt.

**PROBLEM: The unit will not move forward when the drive lever is engaged.**

1. Check the motion drive belts. Make sure the belts are installed correctly.
2. Adjust the drive cable. See "How To Adjust The Drive Cable".
3. Replace the motion drive belts.

# SLOPE GUIDE

ALIGN THIS GUIDE WITH A VERTICAL TREE,  
A CORNER OF A STRUCTURE, A POWER LINE POLE, OR A FENCE.



On a riding mower to determine if a slope is safe to mow: (1) disengage the blade(s), (2) put the unit in reverse, and (3) try to back straight up the slope. If you can back up the slope, it is generally safe to mow. However, if you do not feel safe, or if you are not completely sure, use this guide and do not mow a slope that is greater than 15 degrees. If the riding mower is used with a pull-behind or rear mounted attachment, do not operate the unit on a slope that is greater than 10 degrees.

A 15 degree slope is a hill that increases in height at approximately 2.5 feet in 10 feet.  
A 10 degree slope is a hill that increases in height at approximately 1.7 feet in 10 feet.



Use extreme care at all times, and avoid sudden turns or maneuvers. Follow other instructions in this manual for safety in mowing on slopes. Operate a riding mower up or down slopes, never across the face of slopes. Operate a walk-behind mower across the face of slopes, never up or down slopes. Use extra care when operating on or near slopes and obstructions.

-----  
CUT HERE TO USE SLOPE GUIDE

**Briggs & Stratton Corporation (B&S), the California Air Resources Board (CARB)  
and the United States Environmental Protection Agency (U.S. EPA)**

**Emission Control System Warranty Statement (Owner's Defect Warranty Rights and Obligations)**

EMISSION CONTROL WARRANTY COVERAGE IS APPLICABLE TO CERTIFIED ENGINES PURCHASED IN CALIFORNIA IN 1995 AND THEREAFTER, WHICH ARE USED IN CALIFORNIA, AND TO CERTIFIED MODEL YEAR 1997 AND LATER ENGINES WHICH ARE PURCHASED AND USED ELSEWHERE IN THE UNITED STATES (AND AFTER JANUARY 1, 2001 IN CANADA).

**California and United States Emission Control Defects Warranty Statement**

The California Air Resources Board (CARB), U.S. EPA and B&S are pleased to explain the Emission Control System Warranty on your model year 2000 and later small off-road engine (SORE). In California, new small off-road engines must be designed, built and equipped to meet the State's stringent anti-smog standards. Elsewhere in the United States, new non-road, spark-ignition engines certified for model year 1997 and later, must meet similar standards set forth by the U.S. EPA. B&S must warrant the emission control system on your engine for the periods of time listed below, provided there has been no abuse, neglect or improper maintenance of your small off-road engine.

Your emission control system includes parts such as the carburetor, air cleaner, ignition system, muffler and catalytic converter. Also included may be connectors and other emission related assemblies.

Where a warrantable condition exists, B&S will repair your small off-road engine at no cost to you including diagnosis, parts and labor.

**Briggs & Stratton Emission Control Defects Warranty Coverage**

Small off-road engines are warranted relative to emission control parts defects for a period of two years, subject to provisions set forth below. If any covered part on your engine is defective, the part will be repaired or replaced by B&S.

**Owner's Warranty Responsibilities**

As the small off-road engine owner, you are responsible for the performance of the required maintenance listed in your Operating and Maintenance Instructions. B&S recommends that you retain all your receipts covering maintenance on your small off-road engine, but B&S cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small off-road engine owner, you should however be aware that B&S may deny you warranty coverage if your small off-road engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your small off-road engine to an Authorized B&S Service Dealer as soon as a problem exists. The undisputed warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact a B&S Service Representative at 1-414-259-5262.

The emission warranty is a defects warranty. Defects are judged on normal engine performance. The warranty is not related to an in-use emission test.

**Briggs & Stratton Emission Control Defects Warranty Provisions**

The following are specific provisions relative to your Emission Control Defects Warranty Coverage. It is in addition to the B&S engine warranty for non-regulated engines found in the Operating and Maintenance Instructions.

**1. Warranted Parts**

Coverage under this warranty extends only to the parts listed below (the emission control systems parts) to the extent these parts were present on the engine purchased.

- a. Fuel Metering System
  - Cold start enrichment system
  - Carburetor and internal parts
  - Fuel Pump
- b. Air Induction System
  - Air cleaner
  - Intake manifold
- c. Ignition System
  - Spark plug(s)
  - Magneto ignition system
- d. Catalyst System
  - Catalytic converter
  - Exhaust manifold
  - Air injection system or pulse valve
- e. Miscellaneous Items Used in Above Systems
  - Vacuum, temperature, position, time sensitive valves, and switches
  - Connectors and assemblies

**2. Length of Coverage**

B&S warrants to the initial owner and each subsequent purchaser that the Warranted Parts shall be free from defects in materials and workmanship which caused the failure of the Warranted Parts for a period of two years from the date the engine is delivered to a retail purchaser.

**3. No Charge**

Repair or replacement of any Warranted Part will be performed at no charge to the owner, including diagnostic labor which leads to the determination that a Warranted Part is defective, if the diagnostic work is performed at an Authorized B&S Service Dealer. For emissions warranty service contact your nearest Authorized B&S Service Dealer as listed in the "Yellow Pages" under "Engines, Gasoline," "Gasoline Engines," "Lawn Mowers," or similar category.

**4. Claims and Coverage Exclusions**

Warranty claims shall be filed in accordance with the provisions of the B&S Engine Warranty Policy. Warranty coverage shall be excluded for failures of Warranted Parts which are not original B&S parts or because of abuse, neglect or improper maintenance as set forth in the B&S Engine Warranty Policy. B&S is not liable to cover failures of Warranted Parts caused by the use of add-on, non-original, or modified parts.



5. Maintenance

Any Warranted Part which is not scheduled for replacement as required maintenance or which is scheduled only for regular inspection to the effect of "repair or replace as necessary" shall be warranted as to defects for the warranty period. Any Warranted Part which is scheduled for replacement as required maintenance shall be warranted as to defects only for the period of time up to the first scheduled replacement for that part. Any replacement part that is equivalent in performance and durability may be used in the performance of any maintenance or repairs. The owner is responsible for the performance of all required maintenance, as defined in the B&S Operating and Maintenance Instructions.

6. Consequential Coverage

Coverage hereunder shall extend to the failure of any engine components caused by the failure of any Warranted Part still under warranty.

## Look For Relevant Emissions Durability Period and Air Index Information On Your Engine Emissions Label

Engines that are certified to meet the California Air Resources Board (CARB) Tier 2 Emission Standards must display information regarding the Emissions Durability Period and the Air Index. Briggs & Stratton makes this information available to the consumer on our emission labels.

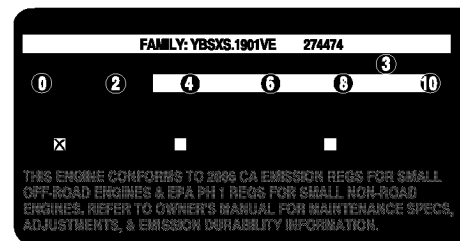
The **Emissions Durability Period** describes the number of hours of actual running time for which the engine is certified to be emissions compliant, assuming proper maintenance in accordance with the Operating & Maintenance Instructions. The following categories are used:

- Moderate:** Engine is certified to be emission compliant for 125 hours of actual engine running time.
- Intermediate:** Engine is certified to be emission compliant for 250 hours of actual engine running time.
- Extended:** Engine is certified to be emission compliant for 500 hours of actual engine running time.

For example, a typical walk-behind lawn mower is used 20 to 25 hours per year. Therefore, the **Emissions Durability Period** of an engine with an **intermediate** rating would equate to 10 to 12 years.

The **Air Index** is a calculated number describing the relative level of emissions for a specific engine family. The lower the **Air Index**, the cleaner the engine. This information is displayed in graphical form on the emissions label.

**This is a generic representation of the emission label typically found on a certified engine.**



## GENERAL INFORMATION

### ENGINE MODEL

This is a single cylinder, overhead valve (OHV), air-cooled engine. It is a low emissions engine.

In the state of California, OHV Model Series 110000 and 120000 engines are certified by the California Air Resources Board to meet emissions standards for 125 hours. Such certification does not grant the purchaser, owner or operator of this engine any additional warranties with respect to the performance or operational life of this engine. This engine is warranted solely according to the product and emissions warranties stated elsewhere in this manual.

### MODEL SERIES 110000

Bore ..... 2-11/16 in. (68.26 mm)

Stroke ..... 1-51/64 in. (46.00 mm)

Displacement ..... 10.20 cu. in. (167.4 cc)

### MODEL SERIES 120000

Bore ..... 2-11/16 in. (68.26 mm)

Stroke ..... 2-3/64 in. (52.00 mm)

Displacement ..... 11.58 cu. in. (189.7 cc)

**Note:** For practical operation, the horsepower loading should not exceed 85% of rated horsepower. Engine power will decrease 3-1/2% for each 1,000 feet (300 meters) above sea level and 1% for each 10° F (5.6° C) above 77° F (25° C). It will operate satisfactorily at an angle up to 15°.

## TUNE-UP SPECIFICATIONS

Armature air gap ..... 0.006 – 0.014 in. (0.25 – 0.36 mm)

Spark plug gap ..... 0.020 in. (0.51 mm)

Valve clearance with valve springs installed and piston 1/4 in. (6 mm) past top dead center (check when engine is cold). See Repair Manual P/N 274008.

Intake ..... 0.004 – 0.006 in. (0.10 – 0.15 mm)

Exhaust ..... 0.009 – 0.011 in. (0.23 – 0.28 mm)

- This engine is certified to operate on gasoline. Exhaust Emission Control System: EM (Engine Modifications).

## EMISSION CONTROL

**Maintenance, replacement or repair of the emission control devices and systems may be performed by any nonroad engine repair establishment or individual.** However, to obtain no charge repairs under the terms and provisions of the Briggs & Stratton warranty statement, any service or emission control part repair or replacement must be performed by a factory authorized dealer.

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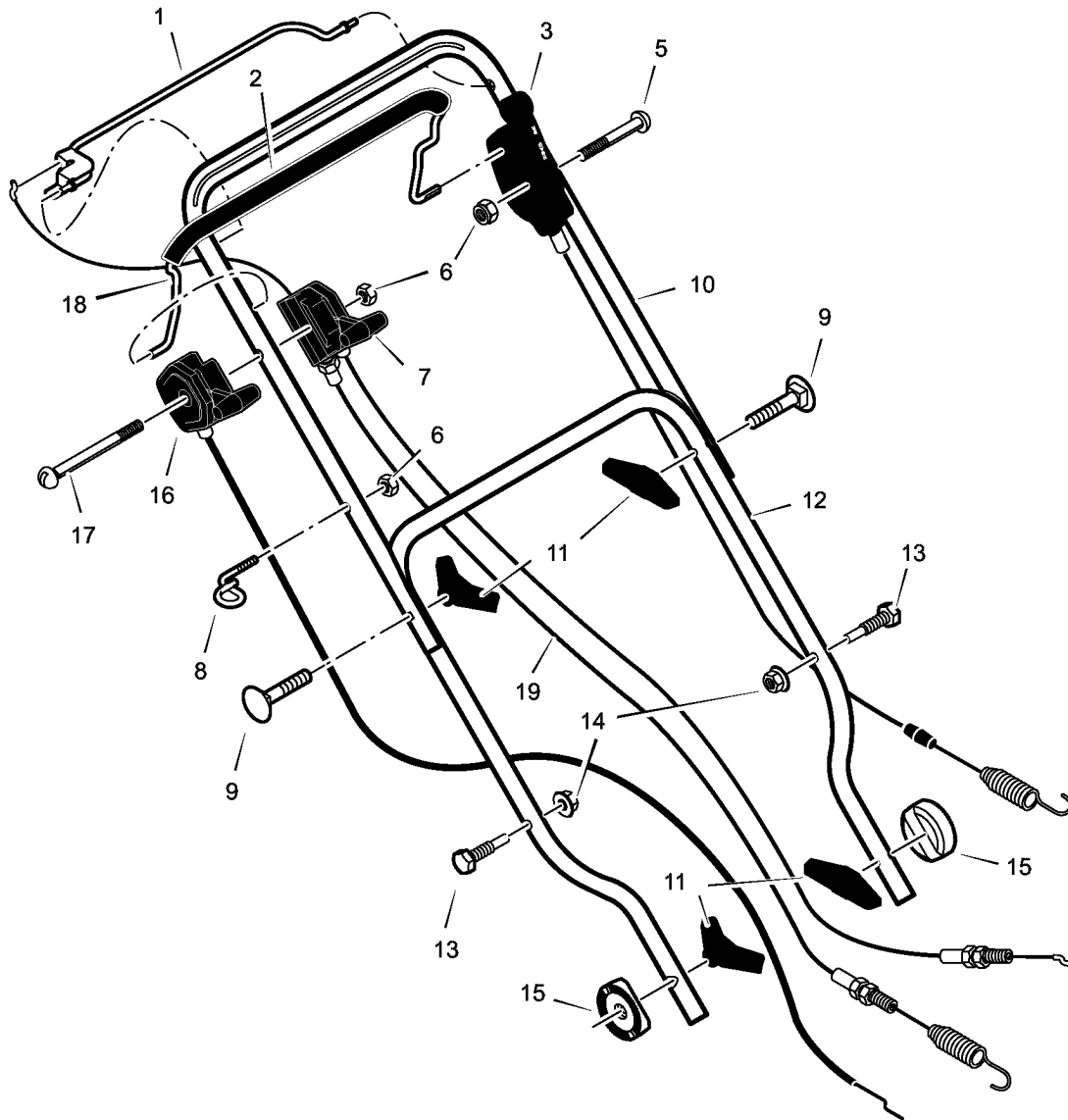
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# CRAFTSMAN MODEL 536.885600

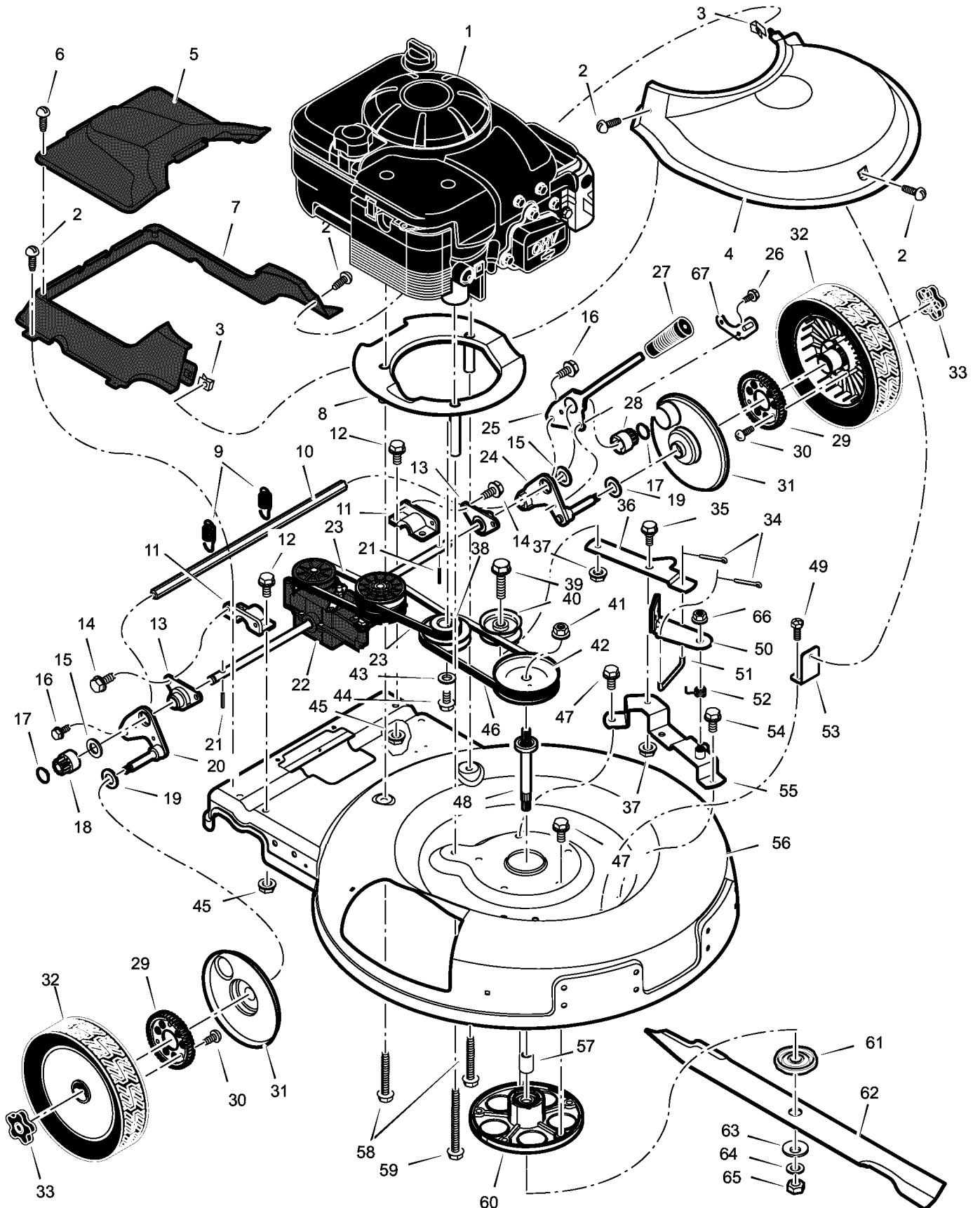
# REPAIR PARTS HANDLE ASSEMBLY



Key No.	Description	Part No.	Key No.	Description	Part No.
1	Lever, Drive	1101188-848	11	Knob, Handle	1101453
2	Control, Blade Rotation	1101160	12	Handle, Lower	1101217-846
3	Control, Blade	1101374	13	Bolt, Handle Support	1x183
5	Screw	3x144	14	Nut, Flange	15x79
6	Nut	15x116	15	Adjuster, Handle	1101154
7	Control, Speed	1101430	16	Cable and Throttle Control	1101376
8	Guide, Rope	672510	17	Bolt, Hex	-----
9	Bolt, Carriage	710175	18	Lever, Blade Stop	1101212-848
10	Handle, Upper	1101218-846	19	Cable, Drive	1101377

# CRAFTSMAN MODEL 536.885600

# REPAIR PARTS DRIVE ASSEMBLY



# CRAFTSMAN MODEL 536.885600

# REPAIR PARTS DRIVE ASSEMBLY

Key No.	Description	Part No.	Key No.	Description	Part No.
1	Engine *	-----	35	Bolt, Shoulder	9x30
2	Screw	26x270	36	Idler Arm	1101174 Z
3	Tinnerman, "U"	28x75	37	Nut, Flange	15x84
4	Cover, Front	1101164	38	Pulley, Engine	1101156
5	Cover, Transmission	1101166	39	Screw	1x111
6	Screw	26x300	40	Pulley, Idler	56526
7	Cover, Rear	1101165	41	Nut, Blade Pulley	15x121
8	Base Assembly, Engine	1101187-848	42	Pulley, Blade	1101191
9	Spring, Extension	165x151	43	Washer, Split	18x31
10	Crossbar, Rear	1101207	44	Screw	710163
11	Bearing, Axle Support	1101148	45	Nut	45171
12	Screw	710167	46	Belt, Blade Drive	37x117
13	Retainer Assembly, Axle Bearing	1101189	47	Bolt	25x7
14	Screw	710277	48	Jackshaft	1101193
15	Washer, Thrust	17x186	49	Screw	26x233
16	Screw	26x263	50	Brake Assembly, Blade	1101190
17	Retainer Ring	11x29	51	Link, Blade Brake	1101196
18	Gear, Right Pinion	1101152	52	Spring, Torsion	166x27
19	Washer, Spring	20x3	53	Bracket, Front Cover	1101205-848
20	Bracket Assembly, Right Axle	1101235	54	Screw	26x214
21	Pin, Drive	43629	55	Support Assembly, Idler & Brake	1101230 Z
22	Transmission – <b>Note: There are no internal serviceable parts for the transmission.</b>	1101233	56	Housing	1101145-848
23	Belt, Transmission	37x118	57	Spacer, Jackshaft	1101194
24	Bracket Assembly, Left Axle	1101234	58	Bolt, Short Engine Mount	25x17
25	Lever, Spring Height Adjuster	1101192	59	Bolt, Long Engine Mount	25x18
26	Screw, Tap	26x297	60	Mandrel Assembly	1001049
27	Knob, Height Adjuster	671297	61	Adapter, Blade	92466
28	Gear, Left Pinion	1101153	62	Blade	1101220E701
29	Gear	1101211	63	Washer, Cup	17x166
30	Screw, Tap	26x296	64	Washer	17x165
31	Cover, Dust	1101163	65	Nut, Blade Mount	15x100
32	Wheel, Drive	1101147	66	Nut	15x68
33	Knob, Axle	672449	67	Bracket Assembly, Lifter	1101465-848
34	Pin, Cotter	30x1	--	Instruction Book	F-010472M

\*\* These parts are included in Key No. 61.  
F-010472M

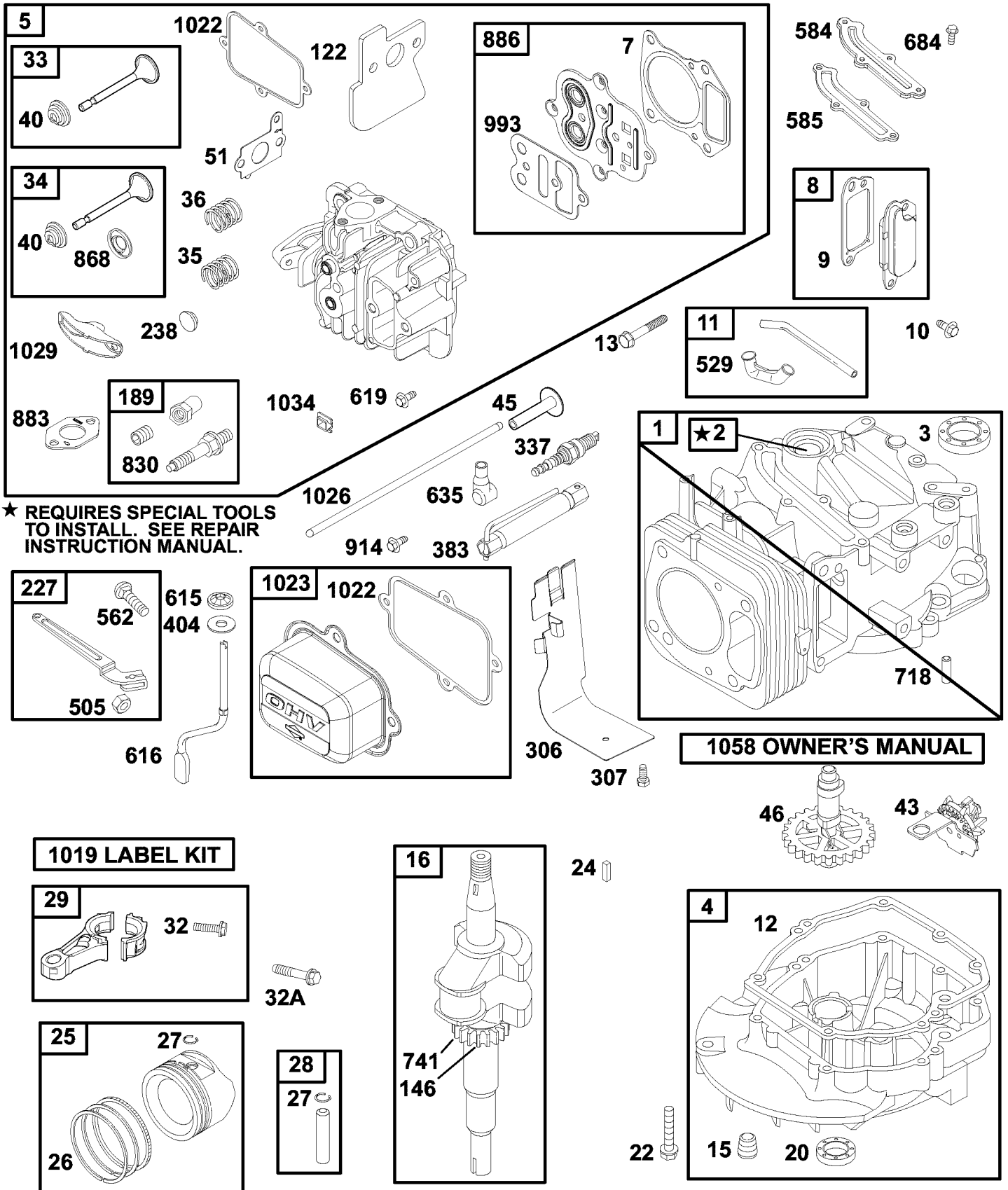




# CRAFTSMAN MODEL 536.885600

# REPAIR PARTS FIXED WHEEL ASSEMBLY

Key No.	Description	Part No.	Key No.	Description	Part No.
1	Screw	710277	21	Bracket Assembly, Lifter	1101465-848
2	Brace, Handle Bracket	1101378-848	22	Crossbar Assembly, Front	1101186-848
4	Support, Handle	1101229-846	23	Clip, Front	1101158
5	Bolt, Shoulder	710200	24	Screw	26x300
6	Link, Lifter	1101380-848	25	Knob, Axle	672449
7	Bracket, Left Handle	1101168-848	31	Wheel and Tire	1101146
8	Plate, Index	1101206-848	32	Nut, Flange	15x79
9	Nut, Flange	15x84	33	Bolt, Hex	1x45
10	Screw	710167	34	Bolt, Carriage	2x95
11	Screw	26x233	35	Retainer, Bolt	28x55
12	Bracket, Blade Drive Cable	1101213-848	36	Screw	26x293
13	Support, Handle Adjuster	1101155	37	Baffle, Rear	1101171-848
14	Bolt, Carriage	2x76	38	Deflector, Rear	1101200
15	Bracket, Right Handle	1101169-848	39	Screw	26x245
16	Nut	45171	41	Knob	1101222
17	Housing, Mower	1101145-884	42	Deflector, Chute	1101161
18	Screw	26x301	43	Cover, Mulch	1101162
19	Panel, Front	1101223			
20	Pin, Cotter	30x20			



★ **REQUIRES SPECIAL TOOLS TO INSTALL. SEE REPAIR INSTRUCTION MANUAL.**

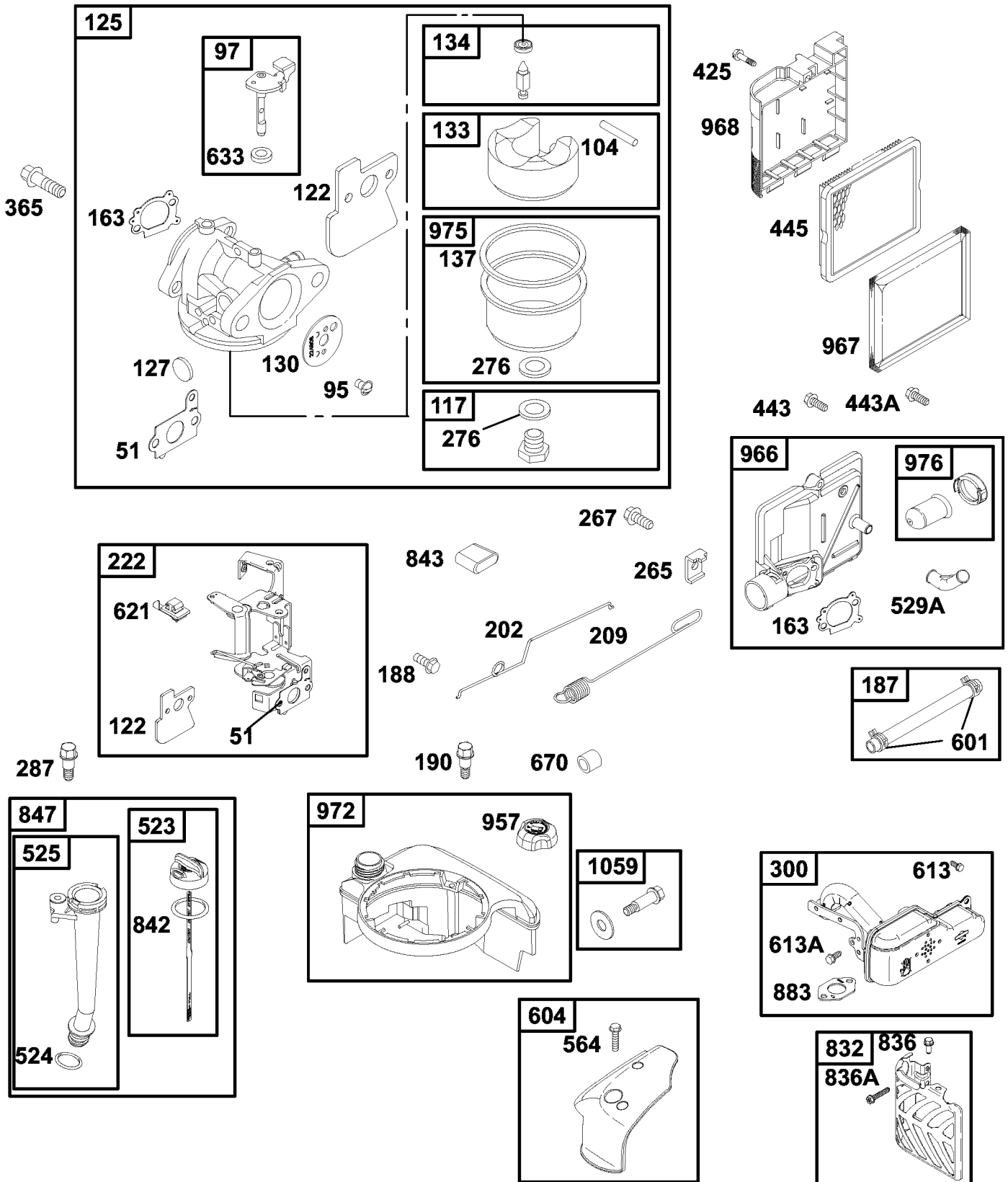


# MODEL 536.885600

# B&S ENGINE 120602-0129-E1

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	692670	Cylinder Assembly		692786	Ring Set			(Governor Control Lever)
2	399269	Kit-Bushing/Seal			(.020" Oversize)	529	692937	Grommet
3	★299819	Seal-Oil (Magneto Side)			692787	562	94852	Bolt
4	696340	Sump-Engine	27	691866	Lock-Piston Pin			(Governor Control Lever)
5	695276	Head-Cylinder	28	499423	Pin-Piston	584	692342	Cover-Breather
7	★△695166	Gasket-Cylinder Head	29	499424	Rod-Connecting			Passage
8	495786	Breather Assembly	32	691664	Screw (Connecting Rod)	585	★691879	Gasket-Breather
9	★272481	Gasket-Breather						Passage
10	691125	Screw (Breather Assembly)	32A	695759	Screw (Connecting Rod)	615	690340	Retainer-Governor Shaft
11	499675	Tube-Breather	33	499642	Valve-Exhaust	616	691308	Crank-Governor
12	★692232	Gasket-Crankcase	34	499641	Valve-Intake	619	691108	Screw (Cylinder Head Cover)
13	691137	Screw (Cylinder Head)	35	691304	Spring-Valve (Intake)	635	66538	Boot-Sparkplug
15	691680	Plug-Oil Drain	36	691304	Spring-Valve (Exhaust)	684	690345	Screw (Breather Passage Cover)
16	692823	Crankshaft	40	692194	Retainer-Valve	718	690959	Pin-Locating
20	★399781	Seal-Oil (PTO Side)	43	691994	Slinger-Governor/Oil	741	691830	Gear-Timing
22	691092	Screw (Engine Sump)	45	690977	Tappet-Valve	830	694544	Stud (Rocker Arm)
24	222698	Key-Flywheel	46	694039	Camshaft	868	★△692044	Seal-Valve
25	690021	Piston Assembly (Standard)	51	★△692668	Gasket-Intake	883	★△691893	Gasket-Exhaust
		<b>Note</b>	122	★△692799	Spacer-Carburetor	886	696268	Gasket Kit-Cylinder Head/Plate
		694167	146	690979	Timing-Key	914	691108	Screw (Rocker Cover)
		694168	189	694543	Ball-Rocker Arm	993	★△694088	Gasket-Cylinder Head Plate
		694169	227	691467	Lever-Governor Control	1019	693868	Kit-Label
		(.030" Oversize)	238	691300	Cap-Valve	1022	★△691890	Gasket-Rocker Cover
			306	691232	Shield-Cylinder	1023	499624	Cover-Rocker Arm
			307	690345	Screw (Cylinder Shield)	1026	692045	Rod-Push
26	499631	Ring Set (Standard)	337	692051	Sparkplug	1029	691230	Arm-Rocker
		<b>Note</b>	383	19374	Wrench-Sparkplug	1034	691343	Guide-Push Rod
		692785	404	690272	Washer (Governor Crank)	1058	274782	Owner's Manual
		(.010" Oversize)	505	231082	Nut			





# MODEL 536.885600

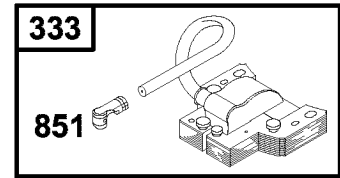
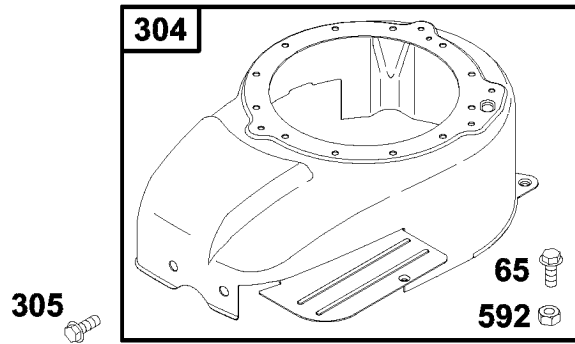
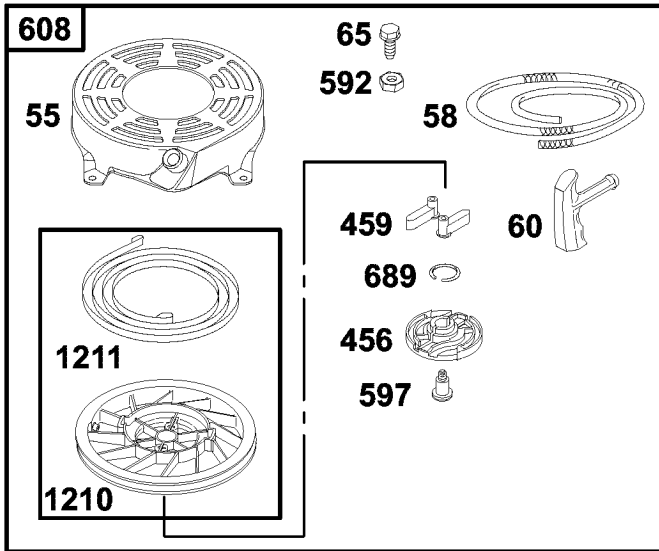
# B&S ENGINE 120602-0129-E1

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
51	◆◆692668	Gasket-Intake	222	693378	Bracket-Control	604	692669	Cover-Control
95	691636	Screw (Throttle Valve)	265	690798	Clamp-Casing	613	691108	Screw (Muffler)
97	499682	Shaft-Throttle	267	691044	Screw (Casing Clamp)	613A	691140	Screw (Muffler)
104	◆691242	Pin-Float Hinge	276	◆◆271716	Washer-Sealing	621	692310	Switch-Stop
117	498978	Jet-Main (Standard)	287	690940	Screw (Dipstick Tube)	633	◆◆691321	Seal-Choke/Throttle Shaft
		<b>Note</b>	300	693982	Muffler	670	692294	Spacer-Fuel Tank
		498975 Jet-Main (High Altitude)	365	691136	Screw (Carburetor)	832	695593	Guard-Muffler
122	◆◆692799	Spacer-Carburetor	425	690670	Screw (Air Cleaner Cover)	836	691147	Screw (Muffler Guard)
125	694202	Carburetor	443	691637	Screw (Air Cleaner Primer Base)	836A	692557	Screw (Muffler Guard)
127	◆694468	Plug-Welch	443A	692523	Screw (Air Cleaner Primer Base)	842	◆691031	Seal-O Ring (Dipstick Tube)
130	691203	Valve-Throttle	445	491588	Filter-Air Cleaner Cartridge	843	691884	Sleeve-Lever
133	398187	Float-Carburetor	523	499621	Dipstick	847	692047	Assembly-Dipstick/Tube
134	◆398188	Kit-Needle/Seat	524	◆692296	Seal-Dipstick Tube	883	★△691893	Gasket-Exhaust
137	◆◆693981	Gasket-Float Bowl	525	495265	Tube-Dipstick	966	692673	Base-Air Cleaner Primer
163	◆◆692667	Gasket-Air Cleaner	529A	691923	Grommet	967	493537	Filter-Pre Cleaner
187	691050	Line-Fuel (Cut to Required Length)	564	693808	Screw (Control Cover)	968	692298	Cover-Air Cleaner
188	691147	Screw (Control Bracket)	601	95162	Clamp-Hose	972	693377	Tank-Fuel
190	690940	Screw (Fuel Tank)				975	493640	Bowl-Float
202	691303	Link-Mechanical Governor				976	694395	Primer-Carburetor
209	691291	Spring-Governor				1059	692311	Kit-Screw/Washer

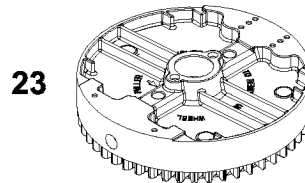
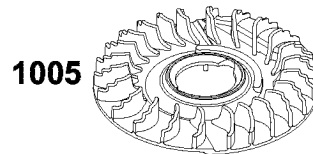
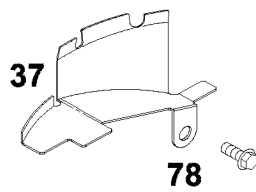
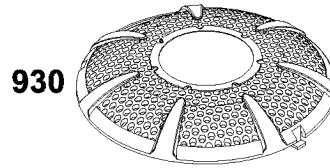
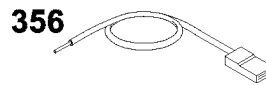


# MODEL 536.885600

# B&S ENGINE 120602-0129-E1



1036 LABEL-EMISSIONS

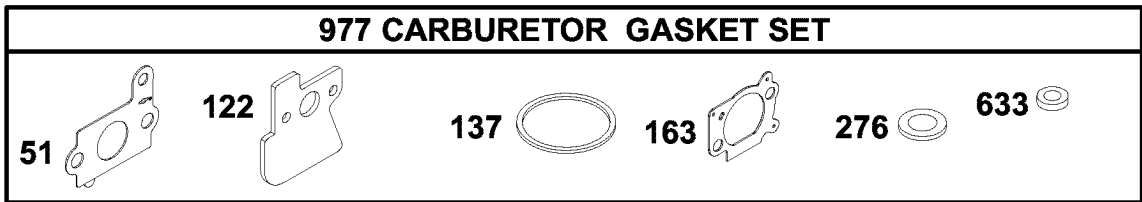
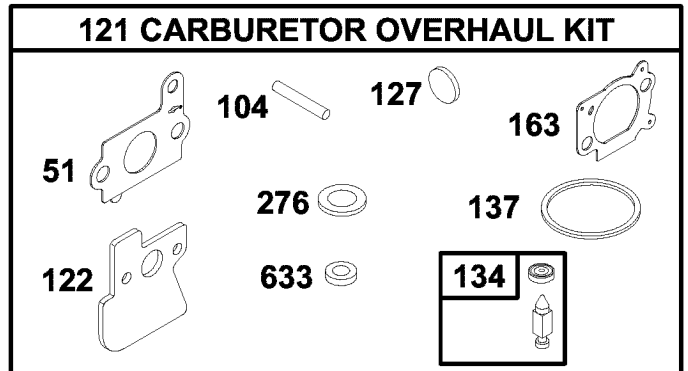
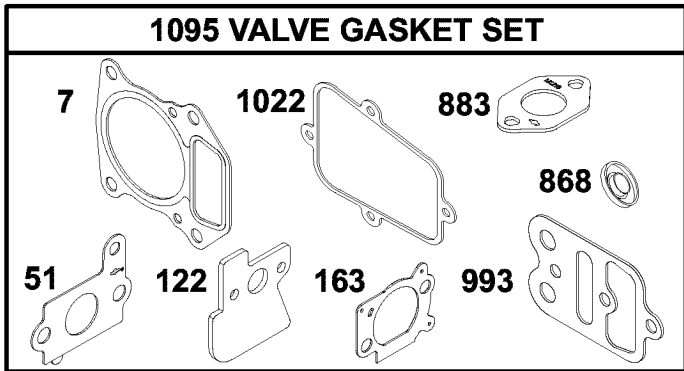
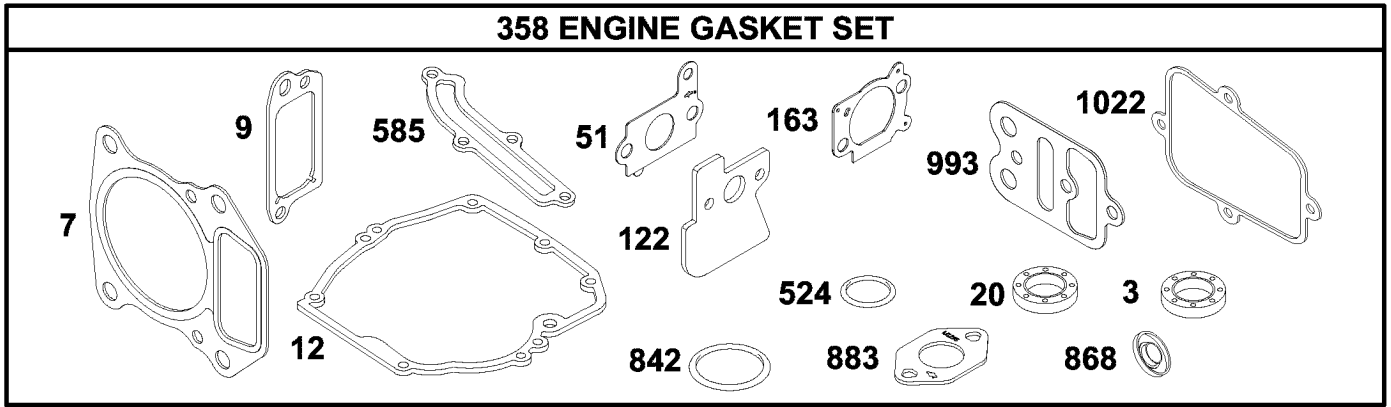


# MODEL 536.885600

# B&S ENGINE 120602-0129-E1

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
23	692693	Flywheel	332	690662	Nut (Flywheel)	597	691696	Screw (Pawl Friction Plate)
37	694086	Guard-Flywheel	333	802574	Armature-Magneto	689	691855	Spring-Friction
55	691421	Housing-Rewind Starter	334	691061	Screw (Magneto Armature)	851	493880	Terminal-Sparkplug
58	692259	Rope-Starter (Cut to Required Length)	356	692390	Wire-Stop	930	692675	Guard-Rewind
60	281434	Grip-Starter Rope	363	19069	Puller-Flywheel	1005	691346	Fan-Flywheel
65	690837	Screw (Rewind Starter)	455	695161	Cup-Flywheel	1036	695109	Label-Emissions
78	691108	Guard-Flywheel	456	692299	Plate-Pawl Friction	1210	498144	Assembly-Pulley/Spring (Pulley)
304	499676	Housing-Blower	459	281505	Ratchet-Pawl	1211	498144	Assembly-Pulley/Spring (Spring)
305	690960	Screw (Blower Housing)	592	690800	Nut (Rewind Starter)			





# MODEL 536.885600

# B&S ENGINE 120602-0129-E1

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
3	★299819	Seal—Oil (Magneto Side)	127	●694468	Plug—Welch	842	★691031	Seal—O Ring (Dipstick Tube)
7	★△695166	Gasket—Cylinder Head	134	●398188	Kit—Needle/Seat	868	★△692044	Seal—Valve
9	★272481	Gasket—Breather	137	◆●693981	Gasket—Float Bowl	883	★△691893	Gasket—Exhaust
12	★692232	Gasket—Crankcase	163★◆●△692667		Gasket—Air Cleaner	977	692704	Gasket Set—Carburetor
20	★399781	Seal—Oil (PTO Side)	276	◆●271716	Washer—Sealing	993	★△694088	Gasket—Cylinder Head Plate
51★◆●△692668		Gasket—Intake	358	694090	Gasket Set—Engine	1022	★△691890	Gasket—Rocker Cover
104	●691242	Pin—Float Hinge	524	★692296	Seal—Dipstick Tube	1095	694091	Gasket Set—Valve
121	692703	Kit—Carburetor Overhaul	585	★691879	Gasket—Breather Passage			
122★◆●△692799		Spacer—Carburetor	633	◆●691321	Seal—Choke/Throttle Shaft			



# Get it fixed, at your home or ours!

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