

# Operator's Manual

# CRAFTSMAN®

## P R O F E S S I O N A L

**2-Cycle**

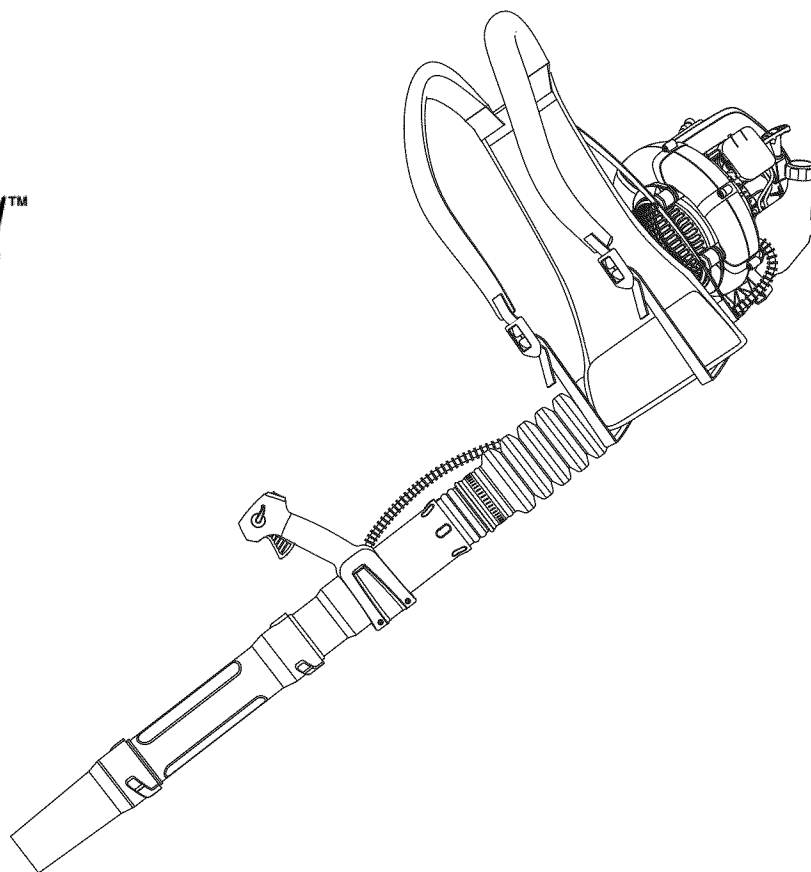
**Electric Start Capable**

**BACKPACK BLOWER**

Model No. 316.794001



**INCREDI-PULL™**  
UNBELIEVABLE STARTING EASE™



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

- SAFETY
- ASSEMBLY
- OPERATION
- MAINTENANCE
- PARTS LIST
- ESPAÑOL, P. 19

**Sears Brands Management Corporation, Hoffman Estates, IL 60179 U.S.A.**

Visit our website: [www.craftsman.com](http://www.craftsman.com)

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All information, illustrations and specifications in this manual are based on the latest product information available at the time of printing. We reserve the right to make changes at any time without notice.

SAFETY


The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

SYMBOL	MEANING
	<b>DANGER:</b> Signals an EXTREME hazard. Failure to obey a safety <b>DANGER</b> signal <b>WILL</b> result in serious injury or death to yourself or to others.
	<b>WARNING:</b> Signals a SERIOUS hazard. Failure to obey a safety <b>WARNING</b> signal <b>CAN</b> result in serious injury to yourself or to others.
	<b>CAUTION:</b> Signals a MODERATE hazard. Failure to obey a safety <b>CAUTION</b> signal <b>MAY</b> result in property damage or injury to yourself or to others.

**NOTE:** Advises you of information or instructions vital to the operation or maintenance of the equipment.

SPARK ARRESTOR NOTE

**NOTE: For users on U.S. Forest Land and in the states of California, Maine, Oregon and Washington.** All U.S. Forest Land and the state of California (Public Resources Codes 4442 and 4443), Oregon and Washington require, by law that certain internal combustion engines operated on forest brush and/or grass-covered areas be equipped with a spark arrestor, maintained in effective working order, or the engine be constructed, equipped and maintained for the prevention of fire. Check with your state or local authorities for regulations pertaining to these requirements. Failure to follow these requirements could subject you to liability or a fine. **This unit is factory equipped with a spark arrestor.** Replacement requires **Muffler Assembly Part #753-06418**, installed at a Sears Parts & Repair Service Center.



**CALIFORNIA PROPOSITION 65**

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

**Read the operator’s manual and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystanders.**

## • IMPORTANT SAFETY INSTRUCTIONS •

### READ ALL INSTRUCTIONS BEFORE OPERATING



**WARNING:** When using the unit, all safety rules must be followed. Please read these instructions before operating the unit in order to ensure the safety of the operator and any bystanders. Please keep these instructions for later use.

- Read the instructions carefully. Be familiar with the controls and proper use of the unit.
- Do not operate this unit when tired, ill or under the influence of alcohol, drugs or medication.
- Children must not operate the unit. Teens must be accompanied and guided by an adult.
- Inspect the unit before use. Replace damaged parts. Check for fuel leaks. Make sure all fasteners are in place and secure. Replace parts that are cracked, chipped, or damaged in any way.
- All guards and safety attachments must be installed properly before operating the unit.
- Be aware of risk of injury to the head, hands and feet.
- Carefully inspect the area before starting the unit. Remove all debris that can be thrown or become entangled with the unit, such as rocks, glass, nails, wire, string, etc.
- Clear the area of children, bystanders and pets; keep them outside a 50-foot (15 m) radius, at a minimum. Even then, they are still at risk from thrown objects. Encourage bystanders to wear eye protection. If you are approached, stop the unit immediately.
- Squeeze the throttle control and check that it returns automatically to the idle position. Make all adjustments or repairs before using the unit.

### SAFETY WARNINGS FOR GAS UNITS



**WARNING:** Gasoline is highly flammable and its vapors can explode if ignited. Take the following precautions:

- Store fuel only in containers specifically designed and approved for the storage of such materials.
- Always stop the engine and allow it to cool before filling the tank. Never remove the fuel tank cap or add fuel when the engine is hot. Always loosen the fuel tank cap slowly to relieve any pressure in the tank before fueling.
- Always mix and add fuel in a clean, well-ventilated outdoor area where there are no sparks or flames. DO NOT smoke.
- Never operate the unit without the fuel cap securely in place.
- Avoid creating a source of ignition for spilled fuel. Wipe up any spilled fuel from the unit immediately, before starting the unit. Move the unit at least 30 ft. (9.1 m) from the fueling source and site before starting the engine. DO NOT smoke.
- Never start or run the unit inside a closed room or building. Breathing exhaust fumes can kill. Operate this unit only in a well ventilated outdoor area.

### WHILE OPERATING

- Wear safety glasses or goggles that meet current ANSI Z87.1 standards and are marked as such. Wear ear/hearing protection when operating this unit. Wear a face or dust mask if the operation is dusty.
- Wear heavy long pants, boots, gloves and a long sleeve shirt. Do not wear loose clothing, jewelry, short pants, sandals or go barefoot. Secure hair above shoulder level.
- Use the unit only in daylight or good artificial light.

- Avoid accidental starting. Be in the starting position whenever pulling the starter rope. The operator and unit must be in a stable position while starting. Refer to *Starting and Stopping*.
- Use the right tool. Only use this tool for its intended purpose.
- Always hold the unit with both hands when operating. Keep a firm grip on both handles or grips.
- Keep hands, face, and feet away from all moving parts. Do not touch or try to stop any moving parts while they are in motion.
- Do not touch the engine, gear housing or muffler. These parts get extremely hot from operation, even after the unit is turned off.
- Do not operate the unit faster than the speed needed to do the job. Do not run the unit at high speed when not in use.
- Always stop the unit when operation is delayed or when walking from one location to another.
- Do not force the unit. It will do a better, safer job when used at the intended rate.
- Do not overreach or use the unit from unstable surfaces such as ladders, trees, steep slopes, rooftops, etc. Always keep proper footing and balance.
- If you strike or become entangled with a foreign object, stop the engine immediately and check for damage. Do not operate before repairing damage. Do not operate the unit with loose or damaged parts.
- Turn the engine to off and disconnect the spark plug for maintenance or repair.
- Use only original equipment manufacturer (OEM) replacement parts and accessories for this unit, as listed in the *Parts List* section of this manual. Use of any other parts or accessories could lead to serious injury to the user, or damage to the unit, and void the warranty.
- Keep the unit clean of vegetation and other materials that may clog, gum or bind moving parts.
- To reduce fire hazard, replace a faulty muffler and spark arrestor. Keep the engine and muffler free from grass, leaves, excessive grease or carbon build up.

### BLOWER SAFETY

- Do not insert anything into the air openings, blower tubes or nozzle. Do not operate the unit if any of the air openings or tubes are blocked. Keep the air openings free from dust, lint, hair and anything else that may reduce airflow.
- Do not operate the unit without the blower tubes attached.
- Do not use the unit to spray liquids, especially flammable or combustible liquids, such as gasoline. Do not use the unit in areas where such liquids are present.
- Do not use the unit for spreading chemicals, fertilizer or any other substance that may contain toxic materials.
- Do not set the unit down on any surface while the unit is running. Debris can be picked up by the air intake and thrown out the discharge opening, resulting in damage to the unit or property or causing serious injury to bystanders or the operator.
- During operation, never point the unit in the direction of people, animals, windows or automobiles. Always direct blowing debris away from people, animals, windows or automobiles.
- Use extra caution when blowing debris near solid objects, such as trees, walls, fences, etc. When possible, blow away from such objects, not toward them.
- Take care when working near valuable plants. The force of the blown air could damage tender plants.

## OTHER SAFETY WARNINGS







- Stop the engine, make sure all moving parts have stopped, allow the unit to cool and disconnect the spark plug wire before performing any maintenance or replacing any parts on the unit.
- Never store the unit with fuel in the tank, inside a building where fumes may reach an open flame (pilot lights, etc.) or sparks (switches, electrical motors, etc.).
- Allow the engine to cool before storing or transporting. Be sure to secure the unit while transporting.
- Store the unit in a dry place, secured or at a height to prevent unauthorized use or damage. Keep out of the reach of children.
- Never douse or squirt the unit with water or any other liquid. Keep handles dry, clean and free from debris. Clean after each use, see *Cleaning and Storage* instructions.
- Keep these instructions. Refer to them often and use them to instruct other users. If you loan this unit to others, also loan them these instructions.

## SAVE THESE INSTRUCTIONS









### • SAFETY & INTERNATIONAL SYMBOLS •

This operator's manual describes safety and international symbols and pictographs that may appear on this product. Read the operator's manual for complete safety, assembly, operating and maintenance and repair information.

#### SYMBOL MEANING

	<b>• SAFETY ALERT SYMBOL</b> Indicates danger, warning or caution. May be used in conjunction with other symbols or pictographs.
	<b>• READ OPERATOR'S MANUAL</b> <b>WARNING:</b> Read the operator's manual(s) and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystanders.
	<b>• WEAR EYE AND HEARING PROTECTION</b> <b>WARNING:</b> Thrown objects and loud noise can cause severe eye injury and hearing loss. Wear eye protection meeting current ANSI Z87.1 standards and ear protection when operating this unit. Use a full face shield when needed.
	<b>• UNLEADED FUEL</b> Always use clean, fresh unleaded fuel.
	<b>• OIL</b> Refer to operator's manual for the proper type of oil.
	<b>• DO NOT USE E85 FUEL IN THIS UNIT</b> <b>WARNING:</b> It has been proven that fuel containing greater than 10% ethanol will likely damage this engine and void the warranty.

#### SYMBOL MEANING

	<b>• ON/OFF STOP CONTROL</b> ON / START / RUN
	<b>• ON/OFF STOP CONTROL</b> OFF or STOP
	<b>• PRIMER BULB</b> Push primer bulb, fully and slowly, 10 times.
	<b>• CHOKE CONTROL</b> <ol style="list-style-type: none"> <li>1. • FULL choke position</li> <li>2. • PARTIAL choke position</li> <li>3. • RUN choke position</li> </ol>
	<b>• THROWN OBJECTS CAN CAUSE SEVERE INJURY</b> <b>WARNING:</b> Small objects can be propelled at high speed, causing injury.
	<b>• KEEP BYSTANDERS AWAY</b> <b>WARNING:</b> Keep all bystanders, especially children and pets, at least 50 feet (15 m) from the operating area.
	<b>• HOT SURFACE</b> <b>WARNING:</b> Do not touch a hot muffler or cylinder. You may get burned. These parts get extremely hot from operation. When turned off they remain hot for a short time.
	<b>• BLOWERS - ROTATING IMPELLER BLADES CAN CAUSE SEVERE INJURY</b> <b>WARNING:</b> Stop the engine and allow the impeller to stop before changing tubes, cleaning or performing any maintenance.

## WARRANTY

### CRAFTSMAN PROFESSIONAL THREE YEAR FULL WARRANTY

FOR THREE YEARS from the date of purchase, this product is warranted against any defects in material or workmanship. A defective product will receive free repair or replacement if repair is unavailable.

**For warranty coverage details to obtain free repair or replacement, visit the web site: [www.craftsman.com](http://www.craftsman.com)**

**This warranty covers ONLY defects in material and workmanship. Warranty coverage does NOT include:**

- Expendable items that can wear out from normal use within the warranty period, such as spark plugs or filters.
- Product damage resulting from user attempts at product modification or repair or caused by product accessories.
- Repairs necessary because of accident or failure to operate or maintain the product according to all supplied instructions.
- Preventive maintenance, or repairs necessary due to improper fuel mixture, contaminated or stale fuel.

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

Sears Brands Management Corporation, Hoffman Estates, IL 60179

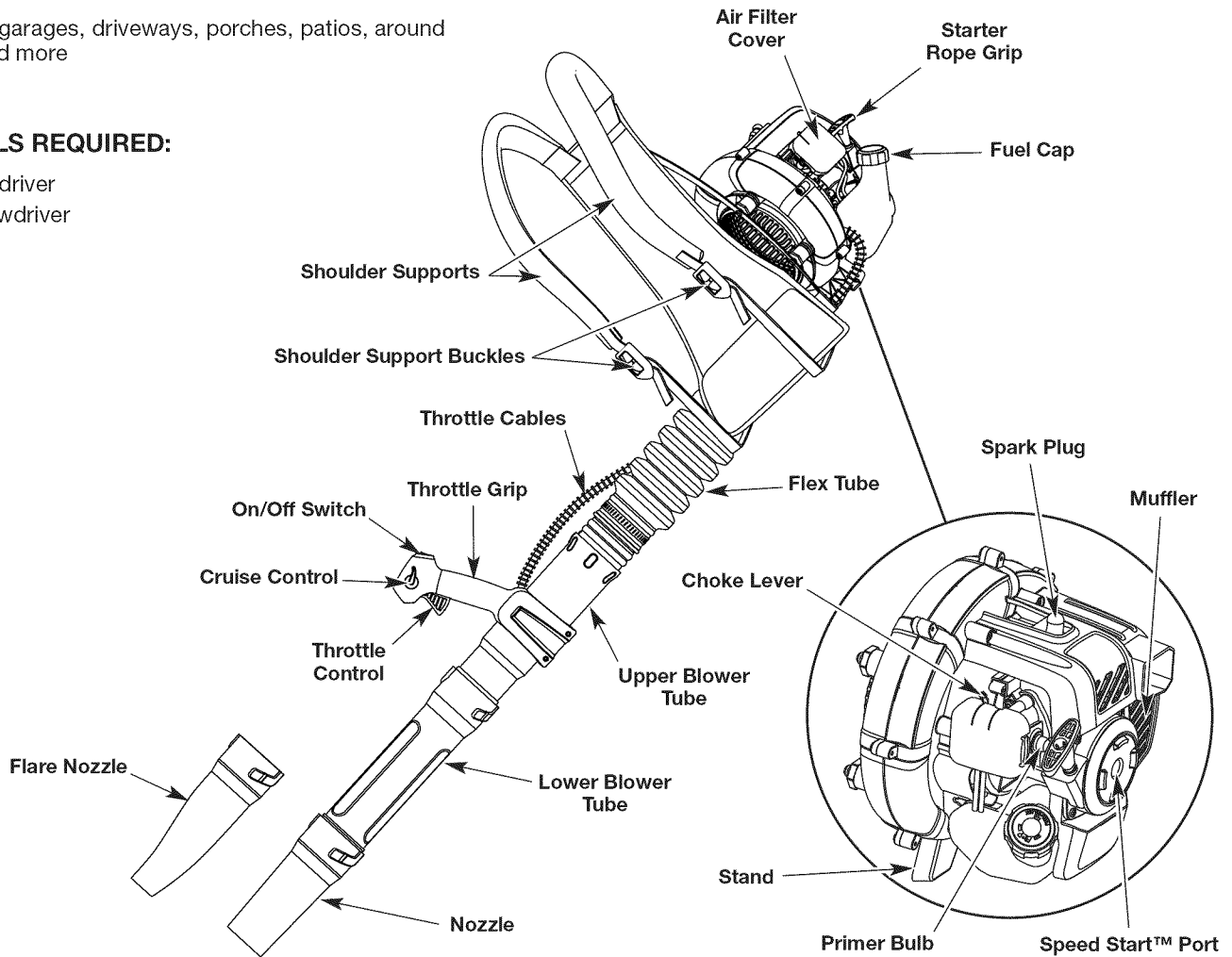
## KNOW YOUR UNIT

### APPLICATIONS

- Cleaning yards, garages, driveways, porches, patios, around walls, fences and more

### ASSEMBLY TOOLS REQUIRED:

- Flat-head Screwdriver
- T-20 Torx® Screwdriver



## SPECIFICATIONS\*

Engine Type . . . . .	Air-Cooled, 2-Cycle
Displacement . . . . .	27 cc (1.64 cu. in.)
Blower Air Volume . . . . .	up to 445 cfm
Blower Air Speed . . . . .	up to 145 mph
Spark Plug Gap . . . . .	0.025 in. (0.635 mm)
Spark Plug . . . . .	Champion® RDJ7J or equivalent plug
Lubrication . . . . .	Fuel/Oil Mixture
Fuel/Oil Ratio . . . . .	40:1
Fuel Tank Capacity . . . . .	20 oz. (591 ml)
Approximate Unit Weight (No fuel) . . . . .	17 - 18 lbs. (7.7 - 8.2 kg)

\* All specifications are based on the latest product information available at the time of printing. We reserve the right to make changes at any time without notice.

## ASSEMBLY

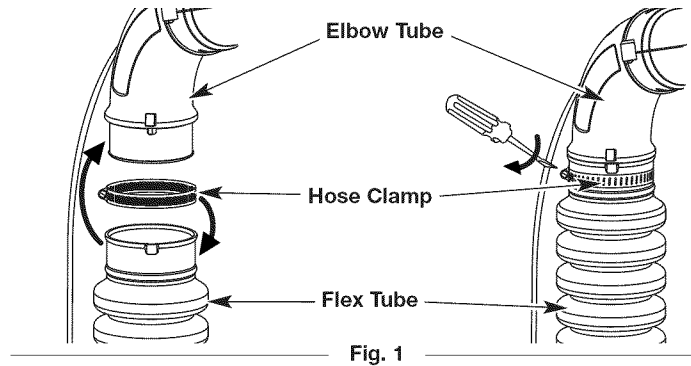
### ASSEMBLING THE BLOWER TUBE



**WARNING:** To avoid serious personal injury and damage to the unit, shut the unit off before removing or installing blower tubes or nozzles.

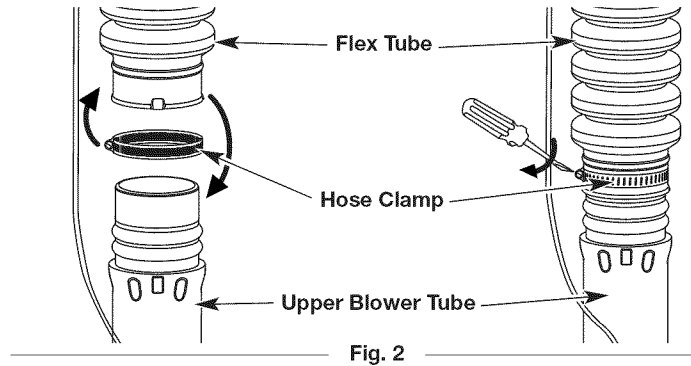
#### Installing the Flex Tube

1. Place a hose clamp around one end of the flex tube (Fig. 1).
2. Slide the flex tube and hose clamp onto the elbow tube (Fig. 1).
3. Tighten the screw on the hose clamp with a flat-head screwdriver (Fig. 1).



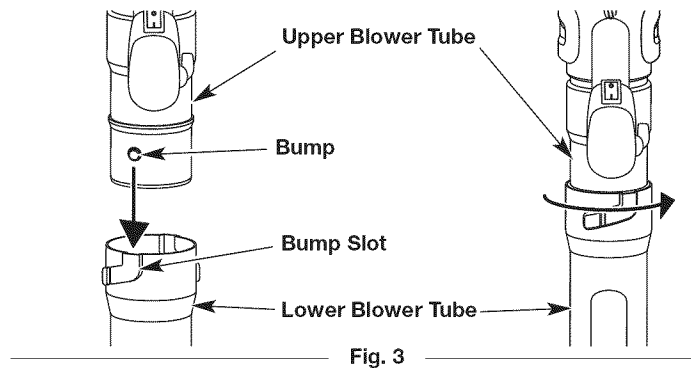
#### Installing the Upper Blower Tube

1. Place a hose clamp around the other end of the flex tube (Fig. 2).
2. Slide the flex tube and hose clamp onto the upper end of the upper blower tube (Fig. 2).
3. Tighten the screw on the hose clamp with a flat-head screwdriver (Fig. 2).



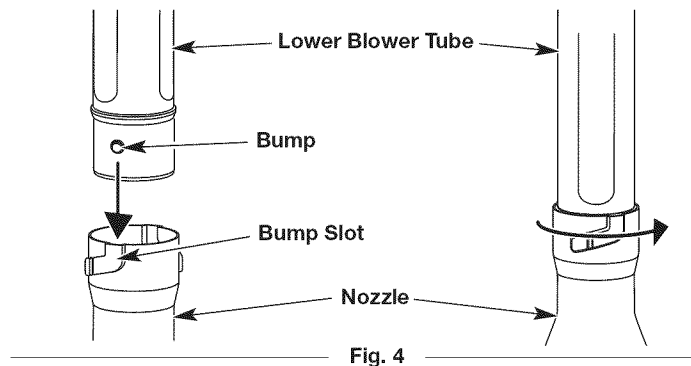
#### Installing the Lower Blower Tube

1. Align the bump on the upper blower tube with the bump slot on the lower blower tube (Fig. 3).
2. Insert the upper blower tube into the lower blower tube (Fig. 3).
3. While holding the upper blower tube, twist the lower blower tube clockwise until it locks into place (Fig. 3).



#### Installing the Nozzle

1. Align the bump on the lower blower tube with the bump slot on the nozzle (Fig. 4).
2. Insert the lower blower tube into the nozzle (Fig. 4).
3. While holding the lower blower tube, twist the nozzle clockwise until it locks into place (Fig. 4).



### Securing the Throttle Cables

1. Wrap a zip tie around the elbow tube and the throttle cables (Fig. 5).
2. Carefully tighten the zip tie. Do not crimp the throttle cables.

### Adjusting the Throttle Grip

1. Move the throttle grip to a location on the upper blower tube that provides the best grip (Fig. 6).
2. Tighten the two screws on the throttle grip with a T-20 Torx® screwdriver until the throttle grip is secure (Fig. 6).

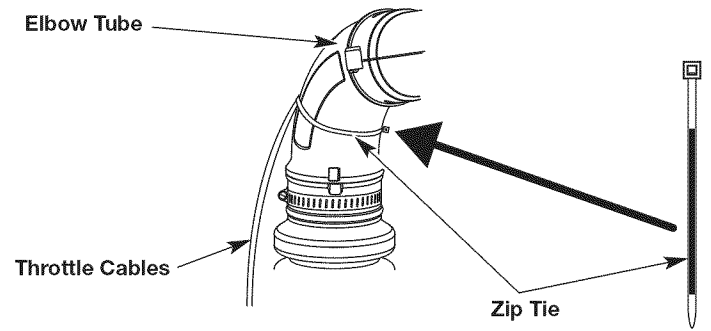


Fig. 5

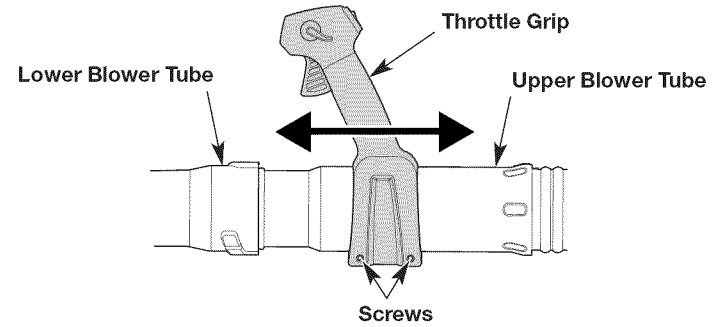


Fig. 6



# OIL AND FUEL

## OIL AND FUEL MIXING INSTRUCTIONS

The use of old and/or improperly mixed fuel is the most common cause of performance problems. Use only fresh, clean unleaded gasoline. Follow the instructions carefully for the proper gasoline/oil mixture, or use TruFuel® 40:1 Premixed Gas & Oil (PN 490-000-0017).

### Definition of Blended Fuels

Today's fuels are often a blend of gasoline and oxygenates such as ethanol, methanol or MTBE (ether). Alcohol-blended fuel absorbs water. As little as 1% water in the fuel can make fuel and oil separate, forming acids when stored. ALWAYS use fresh fuel (less than 30 days old).

**NOTE:** Dispose of old fuel according to federal, state and local regulations.

### Using Blended Fuels

If using a blended fuel:

- Always use the fresh fuel mix explained in your operator's manual
- Use the fuel additive STA-BIL® or an equivalent
- Always agitate the fuel mix before fueling the unit
- Drain the tank and run the engine dry before storing the unit



**WARNING: DO NOT USE E85 FUEL IN THIS UNIT.** It has been proven that fuel containing greater than 10% ethanol will likely damage this engine and void the warranty.

### Using Fuel Additives

The bottle of 2-cycle oil provided with this unit contains a fuel additive to help inhibit corrosion and minimize gum deposits. Always use the brand of 2-cycle oil that came with this unit. If this is unavailable, use a 2-cycle oil designed for air-cooled engines and mix it with a fuel additive, such as STA-BIL Fuel Stabilizer or an equivalent. Add 0.8 oz. (23 ml) of fuel additive per gallon of fuel, according to the instructions on the container. NEVER add fuel additives directly to the unit's fuel tank.



### Mixing the Fuel

**NOTE:** This unit comes with a 3.2 oz. bottle of 2-cycle oil. To obtain the correct fuel mixture described below, pour the entire bottle into one gallon of unleaded gasoline.



**CAUTION:** For proper engine operation and maximum reliability, pay strict attention to the gasoline and oil mixing instructions on the 2-cycle oil bottle. Using improperly mixed fuel can severely damage the engine.

Thoroughly mix the proper ratio of unleaded gasoline with 2-cycle engine oil. Do not mix them directly in the unit's fuel tank. Use a separate fuel can. Use a 40:1 gasoline/oil ratio. See the table below for specific gasoline and oil mixing ratios.

	
<b>Unleaded gasoline</b>	<b>2-cycle oil</b>
<b>1 gallon U.S. (3.8 liters)</b>	<b>3.2 fl. oz. (95 ml)</b>
<b>1 liter</b>	<b>25 ml</b>

**MIXING RATIO - 40:1**

## FUELING THE UNIT



**WARNING:** Gasoline is extremely flammable. Ignited vapors may explode. Always stop the engine and allow it to cool before filling the fuel tank. Do not smoke while filling the tank. Keep sparks and open flames at a distance from the area.



**WARNING:** Remove the fuel cap slowly to avoid injury from fuel spray. Never operate the unit without the fuel cap securely in place.



**WARNING:** Add fuel in a clean, well ventilated outdoor area. Wipe up any spilled fuel immediately. Avoid creating a source of ignition for spilled fuel. Do not start the engine until fuel vapors dissipate.

1. Position the unit with the fuel cap facing up.
2. Remove the fuel cap.
3. Place the fuel container spout into the fill hole on the fuel tank and fill the tank.

**NOTE:** Do not overfill the tank.

4. Wipe up any fuel that may have spilled.
5. Reinstall the fuel cap.
6. Move the unit at least 30 ft. (9.1 m) from the fuel container and the fueling site before starting the engine.

## STARTING AND STOPPING



**WARNING:** Operate this unit only in a well-ventilated outdoor area. Carbon monoxide exhaust fumes can be lethal in a confined area.



**WARNING:** Avoid accidentally starting the unit. To avoid serious injury, the operator and the unit must be in a stable position when pulling the starter rope (Fig. 9).

### STARTING INSTRUCTIONS

1. Mix gasoline with oil. Refer to *Oil and Fuel Mixing Instructions*.
2. Fill the fuel tank. Refer to *Fueling the Unit*.

**NOTE:** There is no need to turn the unit on. The On/Off switch is in the ON (I) position at all times (Fig. 7).

3. Slowly press and release the primer bulb **10 times** (Fig. 8). If fuel cannot be seen in the primer bulb, press and release the primer bulb until fuel is visible.
4. Move the choke lever to **Position 1** (Fig. 8).
5. Move the cruise control to the FAST position (Fig. 7).

**NOTE:** Keep the cruise control in the FAST position for **ALL** further steps.

6. Crouch in the starting position (Fig. 9).
7. Pull the starter rope with a controlled and steady motion **5 times** (Fig. 9).

**NOTE:** This unit uses the **INCREDI-PULL™** starting system, which significantly reduces the effort required to start the engine.

8. Move the choke lever to **Position 2** (Fig. 8).
9. Pull the starter rope with a controlled and steady motion **3 to 5 times** to start the engine.
10. Allow the engine to warm up for 30 to 60 seconds.
11. Move the choke lever to **Position 3** (Fig. 8) and continue warming the engine for an additional 60 seconds. The unit may be used during this time.

**NOTE:** The engine is properly warmed up when it accelerates without hesitation.

**NOTE:** Once the engine is properly warmed, the cruise control may be adjusted and the throttle control can be used normally.

**IF...** the engine hesitates, return the choke lever to **Position 2** (Fig. 8) and continue the warm-up.

**IF...** the engine does not start, begin the starting procedure with step 3.

**IF...** the engine fails to start after a few attempts, move the choke lever to **Position 3** and move the cruise control to the FAST position. Pull the starter rope with a controlled and steady motion **3 to 8 times**. The engine should start. If it does not, repeat this instruction.

**IF...** the engine is already warm, begin the starting procedure with step 8.

### STOPPING INSTRUCTIONS

1. Release the throttle control, or move the cruise control to the SLOW position, and allow the engine to idle.
2. Press and hold the On/Off switch in the OFF (O) position until the engine comes to a complete stop (Fig. 7).

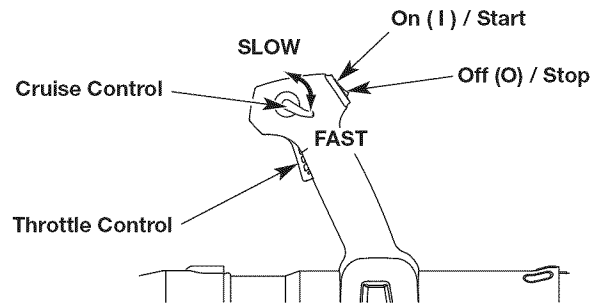


Fig. 7

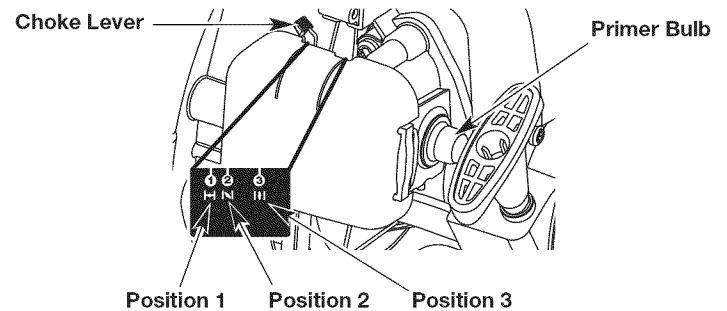


Fig. 8

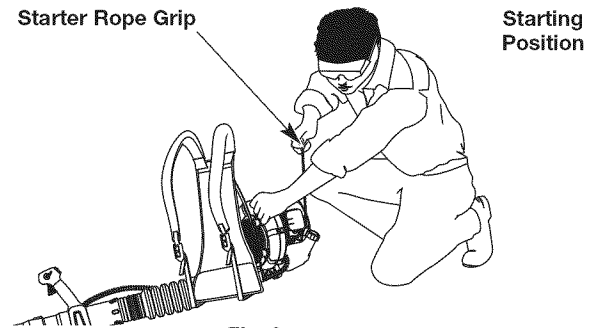


Fig. 9

**NOTE: This unit can use a Speed Start™ Accessory!**

Please refer to the Speed Start™ accessory operator's manual for the proper use of this feature. (Items Sold Separately! Refer to the *Speed Start™ Accessory* section of this manual for more information about these Speed Start™ accessories.)

### STARTING INSTRUCTIONS

1. Mix gasoline with oil. Refer to *Oil and Fuel Mixing Instructions*.
2. Fill the fuel tank. Refer to *Fueling the Unit*.

**NOTE:** There is no need to turn the unit on. The On/Off switch is in the ON ( I ) position at all times (Fig. 7).

3. Slowly press and release the primer bulb **10 times** (Fig. 8). If fuel cannot be seen in the primer bulb, press and release the primer bulb until fuel is visible.
4. Move the choke lever to **Position 1** (Fig. 8).
5. Move the cruise control to the FAST position (Fig. 7).

**NOTE:** Keep the cruise control in the FAST position for **ALL** further steps.

6. Crouch in the starting position (Fig. 9).
7. Insert the Speed Start™ accessory into the Speed Start™ port (Fig. 16). Refer to the *Operation* section of the Speed Start™ accessory operator's manual.
8. Run the Speed Start™ accessory for 2 seconds.
9. Move the choke lever to **Position 2** (Fig. 8).
10. Run the Speed Start™ accessory in intervals no longer than 2 seconds each until the unit starts.
11. Remove the Speed Start™ accessory from the unit.
12. Allow the engine to warm up for 30 to 60 seconds.
13. Move the choke lever to **Position 3** (Fig. 8) and continue warming the engine for an additional 60 seconds. The unit may be used during this time.

**NOTE:** The engine is properly warmed up when it accelerates without hesitation.

**NOTE:** Once the engine is properly warmed, the cruise control may be adjusted and the throttle control can be used normally.

**IF...** the engine hesitates, return the choke lever to **Position 2** (Fig. 8) and continue the warm-up.

**IF...** the engine does not start, begin the starting procedure with step 3.

**IF...** the engine fails to start after a few attempts, move the choke lever to **Position 3** and move the cruise control to the FAST position. Run the Speed Start™ accessory in intervals no longer than 2 seconds each until the unit starts. The engine should start. If it does not, repeat this instruction.

**IF...** the engine is already warm, begin the starting procedure with step 9.

### STOPPING INSTRUCTIONS

1. Release the throttle control, or move the cruise control to the SLOW position, and allow the engine to idle.
2. Press and hold the On/Off switch in the OFF (O) position until the engine comes to a complete stop (Fig. 7).

## OPERATION



**WARNING:** To prevent serious personal injury, never operate the unit without the blower tubes firmly installed.



**WARNING:** Always wear eye, hearing, hand, foot and body protection to reduce the risk of injury when operating this unit. Wear a face mask or dust mask if the operation is dusty.

### PUTTING ON AND TAKING OFF THE UNIT

#### Putting On the Unit

1. Place the shoulder supports over both shoulders. The engine should rest securely on the operator's back.
2. Pull the shoulder support straps down to tighten the shoulder supports (Fig. 10).

**NOTE:** Start the unit before putting it on. Refer to *Starting and Stopping*.

#### Taking Off the Unit

1. Pull the tabs on the bottom of the shoulder support buckles up to loosen the shoulder supports (Fig. 11).
2. Remove the unit.

### HOLDING THE UNIT

- Stand in the operating position (Fig. 12).
- Hold the throttle grip with the right hand. Keep the right arm slightly bent.
- Make sure the unit is secure and comfortable on the operator's back.

### TIPS FOR BEST RESULTS

- Conserve water by using the blower instead of a hose to perform many outdoor cleaning actions.
- Operate the unit only at reasonable hours, not early in the morning or late at night when people might be disturbed. Comply with times listed in local ordinances. Usual recommendations are 9:00 a.m. to 5:00 p.m., Monday through Saturday.
- To reduce noise levels, operate the unit at the lowest speed needed to do the job. Limit the number of pieces of power equipment used at any one time.
- Use rakes or brooms to loosen debris before blowing.
- In dusty conditions, slightly dampen surfaces.
- Watch out for children, pets, open windows and freshly washed cars. Blow debris safely away. Never direct the unit toward anyone while the unit is in operation.
- Use the nozzle to concentrate the air stream closer to the ground.
- Use the cruise control to make continuous operation easier (Fig. 7).
- Clean up after operation. Dispose of debris appropriately.

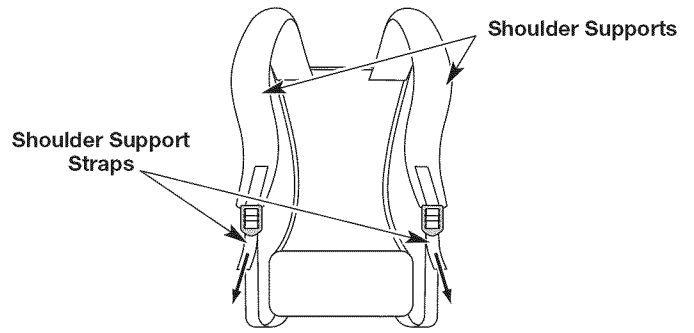


Fig. 10

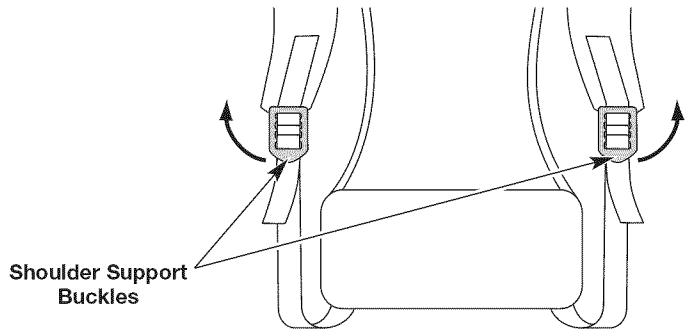


Fig. 11



Fig. 12

## MAINTENANCE



**WARNING:** To prevent serious injury, never perform maintenance or repairs while the unit is running. Always allow the unit to cool before servicing or repairing the unit. Disconnect the spark plug wire to prevent the unit from starting accidentally.

### MAINTENANCE SCHEDULE

Perform these required maintenance procedures at the frequency stated in the table. These procedures should also be a part of any seasonal tune-up.

**NOTE:** Some maintenance procedures may require special tools or skills. If unsure about these procedures, take the unit to a Sears or other qualified service dealer. Call **1-800-4-MY-HOME** for more information.

**NOTE:** Maintenance, replacement, or repair of the emission control devices and system may be performed by a Sears or other qualified service dealer. Call **1-800-4-MY-HOME** for more information.

**NOTE:** Please read the California/EPA statement that came with the unit for a complete listing of terms and coverage for the emissions control devices, such as the spark arrestor, muffler, carburetor, etc.

FREQUENCY	MAINTENANCE REQUIRED
Every 10 hours	Clean and re-oil the air filter. Refer to <i>Maintaining the Air Filter</i> .
Every 25 hours	Check the spark plug condition and gap. Refer to <i>Maintaining the Spark Plug</i> .

### MAINTAINING THE AIR FILTER



**WARNING:** To avoid serious personal injury, always stop the engine and allow it to cool before cleaning or maintaining the unit.

Failure to maintain the air filter can result in poor performance or can cause permanent damage to the engine. Engine failure due to improper air filter maintenance is not covered by the product warranty.

#### Cleaning the Air Filter

1. Open the air filter cover: press in the lock tab and swing the air filter cover to the left (Fig. 13).
2. Remove the air filter (Fig. 13).
3. Wash the air filter in detergent and water. Rinse the air filter thoroughly and allow it to dry.
4. Lightly coat the air filter with clean SAE 30 oil.
5. Squeeze the air filter to spread and remove excess oil.
6. Reinstall the air filter (Fig. 13).

**NOTE:** Operating the unit without the air filter and air filter cover will VOID the warranty.

7. Close the air filter cover: insert the tabs on the air filter cover into the slots on the backplate. Swing the air filter cover to the right and press it closed until the lock tab snaps into place (Fig. 13).

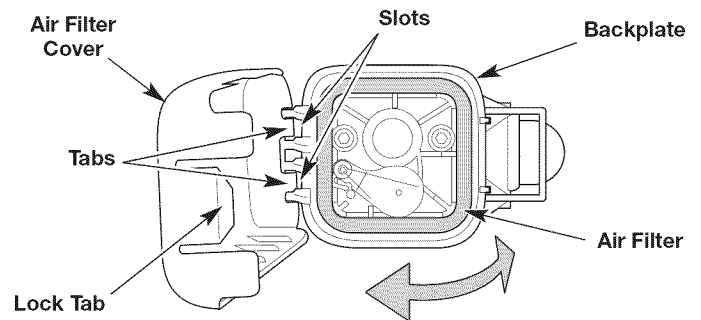


Fig. 13

## ADJUSTING THE IDLE SPEED



**WARNING:** The cutting head may spin during idle speed adjustments. Wear protective clothing and observe all safety instructions to prevent serious personal injury.

**NOTE:** Careless adjustments can seriously damage the unit. A Sears or other qualified service dealer should make carburetor adjustments.

If, after checking the fuel and cleaning the air filter, the engine still will not idle, adjust the idle speed screw as follows:

1. Start the engine. Refer to *Starting and Stopping*.
2. Move the cruise control to the SLOW position and let the engine idle. If the engine stops, use a small Phillips screwdriver to turn the idle speed screw clockwise, 1/8 of a turn at a time (as needed) until the engine idles smoothly (Fig. 14).
3. If the engine is idling too quickly, turn the idle speed screw counterclockwise, 1/8 of a turn at a time (as needed) to reduce the idle speed (Fig. 14).

Checking the fuel, cleaning the air filter, and adjusting the idle speed should solve most engine problems. If not, and any of the following conditions are true, take the unit to a Sears or other qualified service dealer:

- the engine will not idle
- the engine hesitates or stalls on acceleration
- there is a loss of engine power

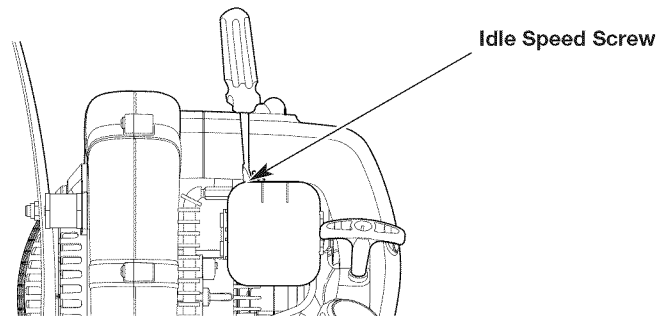


Fig. 14

## MAINTAINING THE SPARK PLUG

1. Stop the engine and allow it to cool. Grasp the spark plug boot firmly and pull it from the spark plug.
2. Clean around the spark plug. Remove the spark plug from the cylinder head with a 5/8-inch socket, turning counterclockwise.



**WARNING:** Do not sand blast, scrape or clean spark plug electrodes. Grit in the engine could damage the cylinder.

3. Inspect the spark plug. If the spark plug is cracked, fouled or dirty, replace it with a replacement part #753-06193, a **Champion RDJ7J** or an equivalent spark plug.
4. Use a feeler gauge to set the air gap at **0.025 in. (0.635 mm)** (Fig. 15).
5. Install the spark plug in the cylinder head. Tighten the spark plug with a 5/8-inch socket, turning it clockwise until snug.

**NOTE:** If using a torque wrench, torque to:

**110-120 in.·lb. (12.3-13.5 N·m). Do not over tighten.**

6. Reattach the spark plug boot.

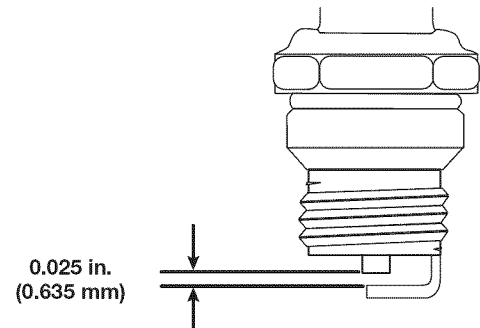


Fig. 15

## CLEANING AND STORAGE

### CLEANING



**WARNING:** To avoid serious personal injury, always stop the engine and allow it to cool before cleaning or maintaining the unit.

Use a small brush to clean the outside of the unit. Do not use strong detergents. Household cleaners that contain aromatic oils such as pine and lemon, and solvents such as kerosene, can damage plastic. Wipe off any moisture with a soft cloth.

### STORAGE

- Never store a fueled unit where fumes may reach an open flame or spark.
- Allow the engine to cool before storing.
- Lock up the unit to prevent unauthorized use or damage.
- Store the unit in a dry, well-ventilated area.
- Store the unit out of the reach of children.

#### Long-term Storage

1. Remove the fuel cap, tip the unit and drain the fuel into an approved container. Reinstall the fuel cap.
2. Start the engine and allow it to run until it stalls. This ensures that all fuel has been drained from the carburetor.
3. Allow the engine to cool. Remove the spark plug and put 5 drops of any high quality motor oil or 2-cycle oil into the cylinder. Pull the starter rope slowly to distribute the oil. Reinstall the spark plug.
4. Thoroughly clean the unit and inspect it for any loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts.

#### Preparing the Unit for Use after Long-term Storage

1. Remove the spark plug and drain all of the oil from the cylinder.

**NOTE:** Do not use fuel that has been stored for more than 30 days. Dispose of old fuel according to federal, state and local regulations.

## SPEED START™ ACCESSORY

This unit can be started with an optional Speed Start™ accessory (items sold separately). Please contact your local Craftsman retailer, call **1-800-4-MY-HOME®** or visit **www.craftsman.com** for more information.

Item No.	Description
316.85951 .....	Plug-In Power Start
316.85952 .....	Power Bit Start
316.85953 .....	Cordless Power Start

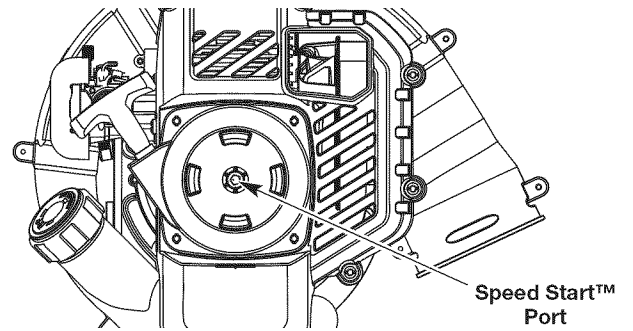


Fig. 16



## TROUBLESHOOTING

PROBLEM	SOLUTION
<b>THE ENGINE WILL NOT START</b>	
The fuel tank is empty	Fill the fuel tank with properly mixed fuel
The primer bulb was not pressed enough	Press the primer bulb 10 times or until fuel is visible
The engine is flooded	Move the choke lever to Position 3, squeeze the throttle control and pull the starter rope
The fuel is old (over 30 days) and/or improperly mixed	Drain the fuel tank and add fresh, properly mixed fuel
The spark plug is fouled	Replace the spark plug
<b>THE ENGINE WILL NOT IDLE</b>	
The air filter is dirty	Clean or replace the air filter
The fuel is old (over 30 days) and/or improperly mixed	Drain the fuel tank and add fresh, properly mixed fuel
The idle speed is incorrect	Adjust the idle speed
<b>THE ENGINE WILL NOT ACCELERATE</b>	
The fuel is old (over 30 days) and/or improperly mixed	Drain the fuel tank and add fresh, properly mixed fuel
The air filter is dirty	Clean or replace the air filter
<b>THE ENGINE LACKS POWER OR STALLS</b>	
The fuel is old (over 30 days) and/or improperly mixed	Drain the fuel tank and add fresh, properly mixed fuel
The air filter is dirty	Clean or replace the air filter
The spark plug is fouled	Replace the spark plug

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**\*Coverage in Canada varies on some items. For full details call Sears Canada at 1-800-361-6665.**

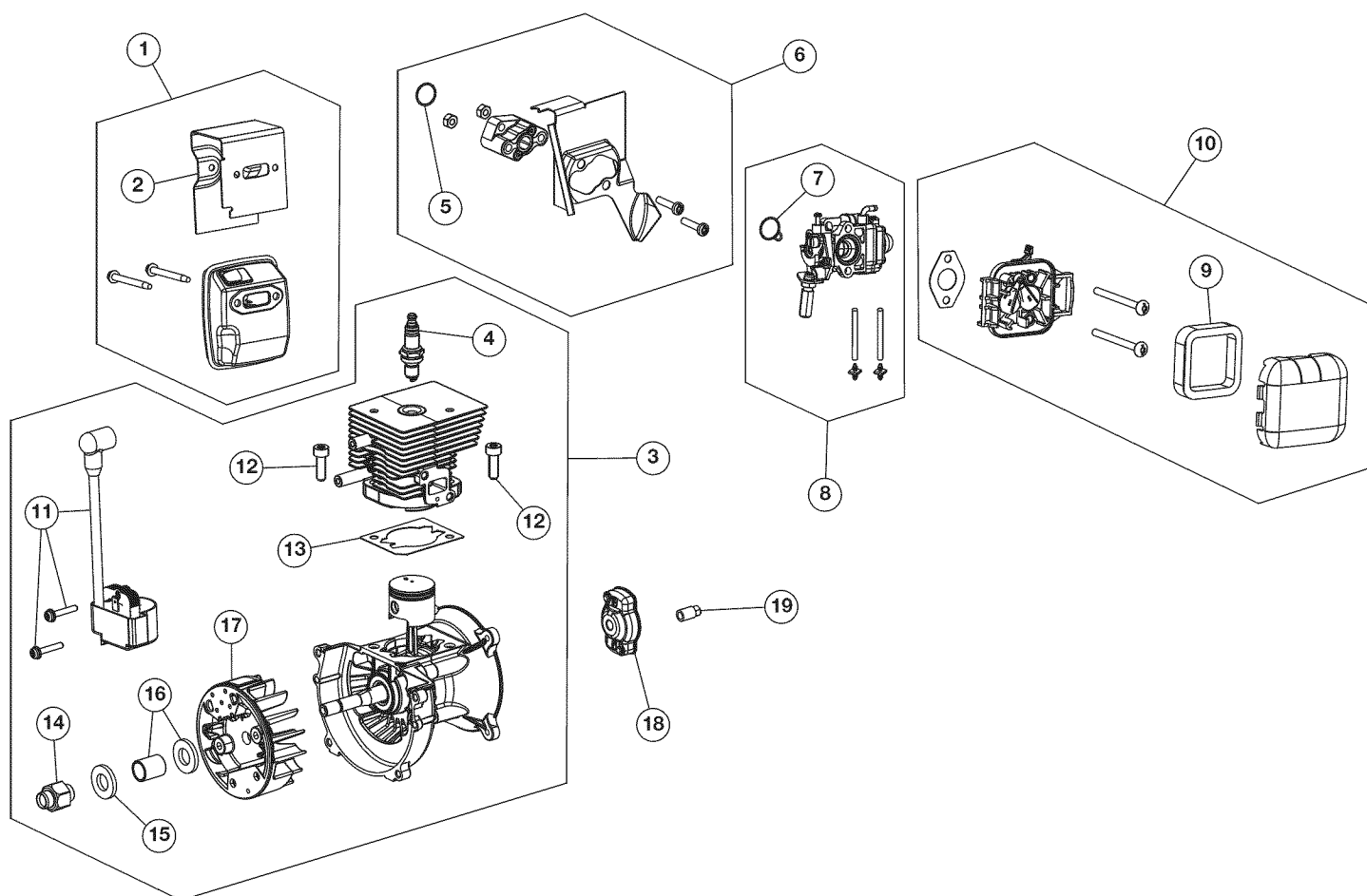
### **Sears Installation Service**

*For Sears professional installation* of home appliances, garage door openers, water heaters, and other major home items, in the U.S.A. or Canada call **1-800-4-MY-HOME**.



## PARTS LIST

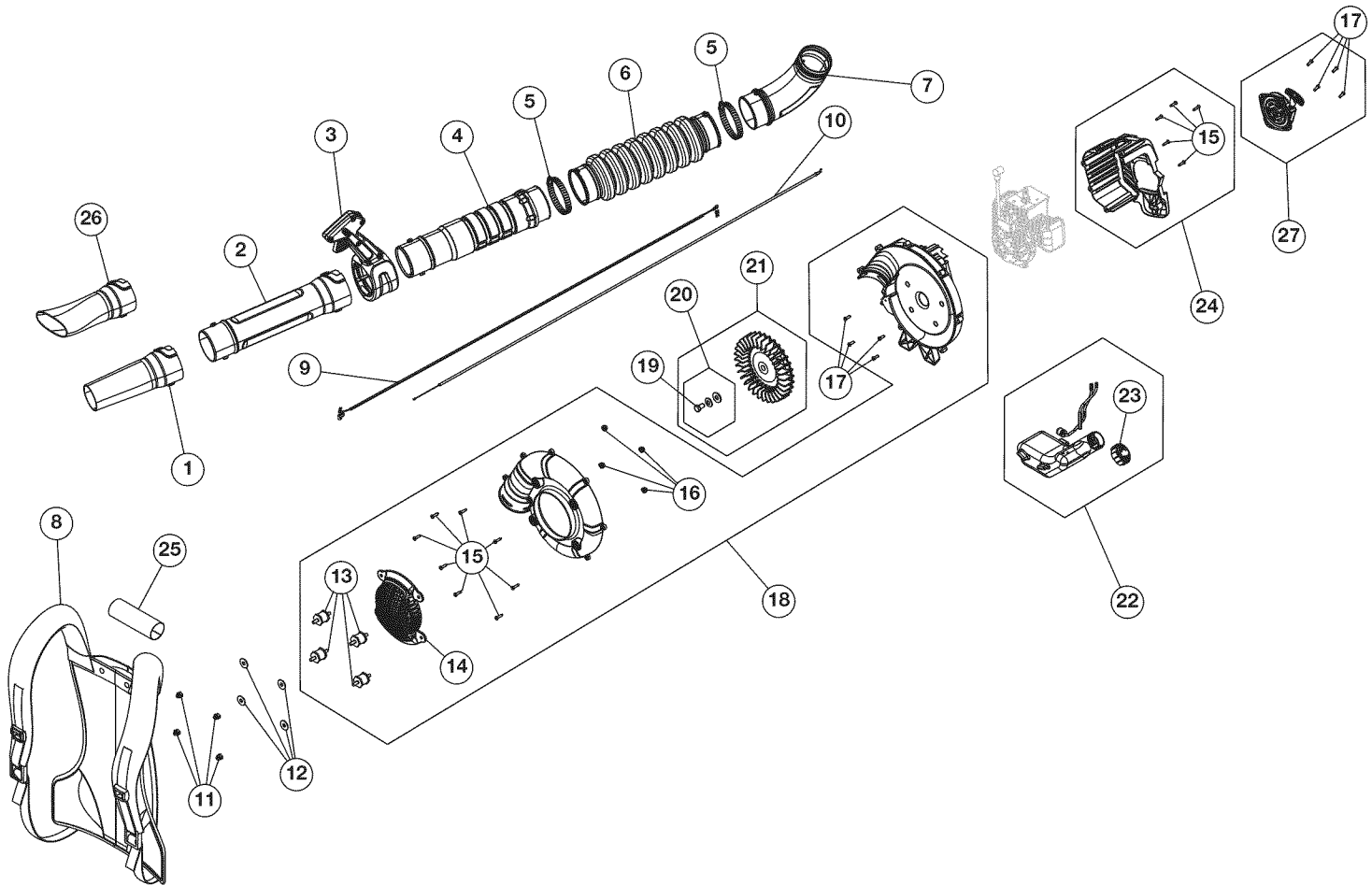
### REPLACEMENT PARTS - MODEL 316.794001 ELECTRIC START CAPABLE 2-CYCLE BACKPACK BLOWER



Item	Part No.	Description	Item	Part No.	Description
1	753-06418	Muffler Assembly (includes 2)	10	753-05725	Aircleaner Assembly (includes 9)
2	753-06419	Muffler Gasket	11	753-06443	Module Assembly
3	753-06441	Shortblock Assembly (includes 4 & 11-17)	12	753-05703	Screw
4	753-06193	Spark Plug	13	753-06440	Cylinder Gasket
5	753-06184	Insulator O-Ring	14	753-05705	Flywheel Adapter
6	753-06189	Insulator Assembly (includes 5)	15	753-05706	Washer
7	753-06253	Carburetor Gasket	16	753-05707	Bushing
8	753-06442	Carburetor Assembly (includes 7)	17	753-06246	Flywheel Assembly
9	791-181757	Air Filter	18	753-06091	Pawl Assembly
			19	753-06104	Electric Start Adapter

## PARTS LIST

### REPLACEMENT PARTS - MODEL 316.794001 ELECTRIC START CAPABLE 2-CYCLE BACKPACK BLOWER



Item	Part No.	Description	Item	Part No.	Description
1	753-06000	Nozzle	14	753-05649	Intake Cover
2	753-05971	Lower Blower Tube	15	791-181345	Screw
3	753-05975	Throttle Grip Assembly	16	791-180050	Nut
4	753-05991	Upper Blower Tube	17	791-181862	Screw
5	753-05640	Clamp	18	753-06448	Impeller Housing Assembly (includes 13-17)
6	753-05641	Flex Tube	19	791-182414	Bolt
7	753-05990	Elbow	20	753-04482	Impeller Hardware (includes 19)
8	753-05645	Harness	21	753-05651	Impeller (includes 19 & 20)
9	753-05643	Lead Wire	22	753-05654	Fuel Tank Assembly (includes 23)
10	753-06434	Throttle Cable	23	791-182529	Fuel Cap
11	753-05647	Nut	24	753-06455	Housing Assembly (includes 15)
12	791-182678	Washer	25	753-06344	Grip
13	753-05648	Insulator Mount	26	753-06001	Flare Nozzle
			27	753-06436	Starter Assembly (includes 17)

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