

Cyclone Rake **SPS-10**



OWNER'S MANUAL

SAFETY

THE CYCLONE RAKE® SPS-10 IS A POWERFUL MACHINE.

DO NOT attempt to operate until you have read and completely understand this safety section.

IMPORTANT

- **THE SPS-10 ENGINE IS NOT SHIPPED WITH OIL.** Please read all instructions and fill the engine with oil before starting.
- **NEVER START THE ENGINE UNLESS IT IS BOLTED FIRMLY TO THE CHASSIS.**
The wheels on the engine unit are for ease of storage **ONLY**. They will **NOT SUPPORT THE ENGINE** while running and you risk a serious overturning or a roll-away accident.
- **DO NOT USE THE ENGINE UNIT AS A STAND-ALONE VACUUM. IT MUST ALWAYS BE BOLTED TO THE CHASSIS BEFORE OPERATING.** You risk serious injury from a roll-away accident.
- **DO NOT MAKE DESIGN MODIFICATIONS TO THIS EQUIPMENT** or any of its accessories or upgrades. You could risk serious personal injury or damage to the equipment.
- **NEVER CHANGE HOSES UNLESS THE ENGINE IS STOPPED.** You can be seriously injured by rotating machinery, high vacuum forces or flying debris.
- **NEVER OPERATE UNLESS ALL HOSES AND AIR FLOW CONNECTIONS ARE FIRMLY LATCHED IN PLACE.**
- **NEVER CLEAR JAMS UNLESS THE ENGINE IS STOPPED.**
- **ALWAYS WEAR EYE PROTECTION** when you operate the Cyclone Rake SPS-10
- **NEVER OPEN THE COLLECTOR CAP WHEN THE ENGINE IS RUNNING, EVEN TO CHECK CONTENTS.** You risk serious injury. **ALWAYS STOP** the engine first.
- **ALWAYS KEEP THE ENGINE/BLOWER UNIT FREE FROM ALL ORGANIC MATERIAL BUILD UP.** Clean this area after every use.
- **DO NOT ALLOW CHILDREN TO OPERATE THIS EQUIPMENT.**
- **KEEP CHILDREN AND PETS AWAY.** They can be seriously injured by this machinery.
- **ORGANIC LAWN DEBRIS ONLY! DO NOT ATTEMPT TO VACUUM METAL, GLASS, TRASH, STONES, SAND, CARPENTRY CUTTINGS OR ANYTHING ELSE EXCEPT NATURAL LAWN DEBRIS.** You risk damage to the Cyclone Rake and serious personal injury.
- **STOP THE ENGINE AND REMOVE THE SPARK PLUG WIRE** before performing any service or adjustment functions.
- **DO NOT CHANGE ENGINE OR GOVERNOR SETTINGS.** They are there for your safety.
- **CHECK ALL BOLTS AND FITTINGS FOR TIGHTNESS** at frequent intervals. If you sense any abnormal vibration, **IMMEDIATELY STOP** the equipment and check thoroughly.
- **USE ONLY THE NYLON LOCK NUTS AND FASTENERS** supplied with the Cyclone Rake for product assembly. **DO NOT REPLACE EXCEPT WITH IDENTICAL PARTS.**
- **DO NOT FILL FUEL TANK INDOORS. DO NOT SMOKE WHILE FUELING. WIPE UP ANY FUEL SPILLS IMMEDIATELY.**

IMPORTANT SAFETY NOTE

To ensure safe and optimal performance of your SPS-10, it is highly recommended to clean the unit thoroughly after each use.

- *Debris and dry leaves near the engine can potentially lead to a fire hazard.*
- *Use a brush to sweep away any debris and a cloth to wipe down the unit.*
- *Additionally, remove debris from the collector cap and corrugated collector.*
- *It is important to check all main connection points, including collars and latches, and ensure that the hoses are clear.*

By performing these simple maintenance tasks, you can help prevent potential hazards and extend the lifespan of your SPS-10.

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CHAPTER 1

INTRODUCTION & UNPACKING

Congratulations on your purchase of the Cyclone Rake SPS-10!

We believe you'll find this machine to be the best small property solution for clearing leaves off your property. A blower and collector unit all in one, the SPS-10 makes debris cleanup a breeze. Made from high-quality parts that are durable and made to last, you'll find the right maintenance and use will give you years of reliable service.

CONTENTS OF THIS MANUAL

The Owner's Manual covers the assembly, operation, and maintenance your Cyclone Rake SPS-10. Please keep this manual somewhere safe where you can easily access it as you will need to follow the instructions in the order presented for optimal performance. The manual also includes all the parts included in the boxes and the tools you will need for assembling.

EASY TO ACCESS ASSEMBLY VIDEOS

To help in assembling the SPS-10, we've included brief and easy-to-follow videos that can be viewed simply by scanning the QR Code with your smartphone. If you don't have a smartphone, don't worry. All our assembly videos are in one spot on our website. We recommend watching these videos first, so you have a good understanding of the machine and how it works before putting it together.

<https://www.cyclonerake.com/sps-10-assembly-videos/>

USING A QR CODE

Whenever you see a QR code like this one, just scan them with your mobile phone or tablet, and immediately watch a video related to that section of your owner's manual. These codes and the videos will demonstrate the assembly of your new Cyclone Rake SPS-10. Download a QR code reader from the Apple App store, Google Play, or scan them with your phone camera to open a web link. Try them out! We think you'll find them helpful, and we're confident they'll make your ownership experience more enjoyable.

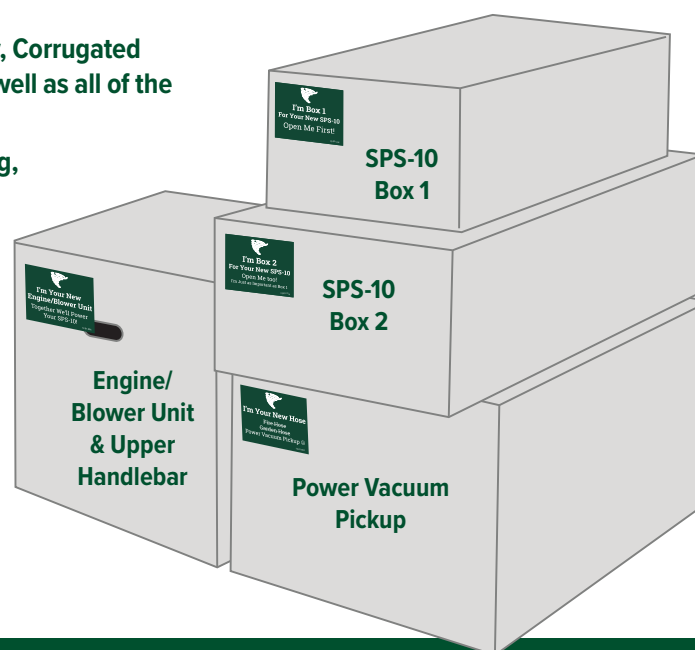


GETTING STARTED

Your Cyclone Rake® SPS-10 is shipped in 4 boxes. To get started, first identify your 4 boxes, which have these box names:

- **SPS-10 Box 1:** This contains the Owner's Manual, Bag Caddy, Corrugated Collector Box & Frame, 2 Wheels, and the Bag Platform, as well as all of the hardware needed for assembly.
- **SPS-10 Box 2:** This contains the Chassis, Fabric Collector Bag, SPS-10 Hose, Blower Inlet Cover, Exit Chute, Blower Nozzle, 2 Wheels and Lower Handlebar as well as a box with all of the hardware needed for assembly.
- **Engine/Blower Unit Box:** This contains the XR950 Engine and Upper Handlebar.
- **Power Vacuum Pickup Box:** This contains the vacuum hose and wand to allow you to collect materials from hard to reach areas or simply vacuum piles of leaves.

ASSEMBLY NOTE: Before starting to assemble, please unpack the contents of the SPS-10 Boxes 1 & 2 to familiarize yourself with all assembly components.

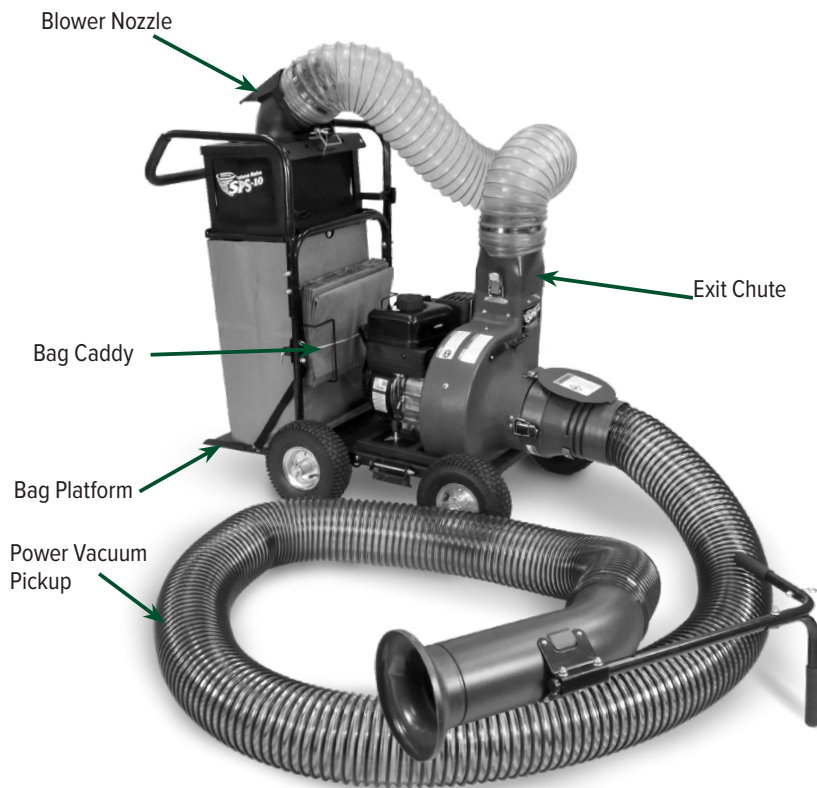


THE CYCLONE RAKE SPS-10 MAIN COMPONENTS

BLOWER MODE



COLLECTION MODE



Shown with Fabric Collector Bag




CHAPTER 2

ASSEMBLING THE SPS-10

All the parts you need to assemble the Chassis & Handlebars will be in the SPS-10 Box 2. All the hardware you'll need will be packaged in a separate box that can be found inside the Blower Inlet Cover.

ASSEMBLE THE CHASSIS & HANDLEBARS

ATTACH THE LOWER HANDLEBAR TO THE CHASSIS

-  PARTS YOU'LL NEED
- Chassis
 - Lower Handlebar

- HARDWARE YOU'LL NEED IN THE BAG MARKED:**
12-01-088 HANDLEBAR TO CHASSIS HARDWARE KIT
- (4) 5/16-18 x 1.5" Bolts
 - (4) 5/16-18 Nylon Lock Nuts

- TOOLS YOU'LL NEED:**
- (2) 1/2" Box wrenches or sockets

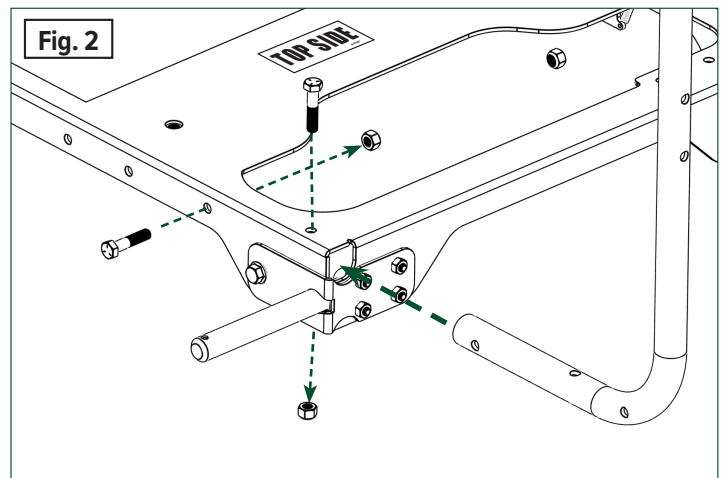
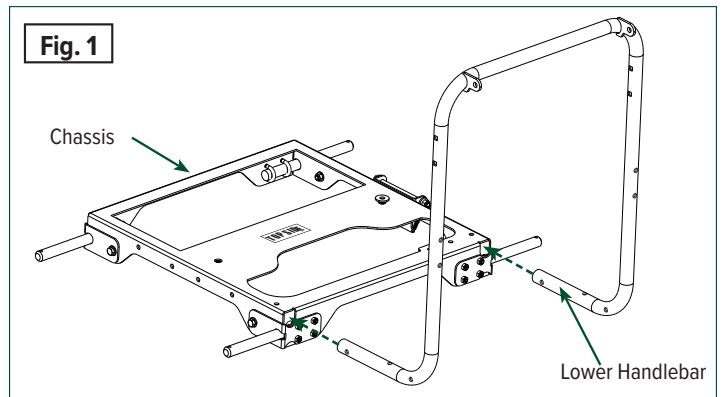
1. **(Fig. 1)** Put the Chassis on a flat surface with the "TOP SIDE" label facing up. Then, slide the end of the Lower Handlebar into the openings in the rear of the Chassis.
2. **(Fig. 2)** Align the holes in the Chassis and the Lower Handlebar. Then attach the Handlebar to the Chassis using four 5/16-18 x 1.5" bolts and nylon lock nuts. One on the side and one at the top of each side. Secure with the 1/2" wrenches.

TIP: Once the Lower Handle bar is inserted, it may help to flip the Chassis over to have better access to the bolts and lock nuts.

SAFETY NOTE:

Single cylinder engines always create high vibration. For safety, the Cyclone Rake® SPS-10 makes extensive use of "shake-proof" nylon lock nuts. Always use them where indicated. Do not substitute ordinary nuts. If you lose any, you can buy them at any hardware store.





ATTACH THE WHEELS



PARTS YOU'LL NEED

- (4) Wheels

HARDWARE YOU'LL NEED IN THE BAG MARKED: 12-01-086 WHEEL HARDWARE KIT

- (12) Washers
- (4) Cotter pins

TOOLS YOU'LL NEED:

- None

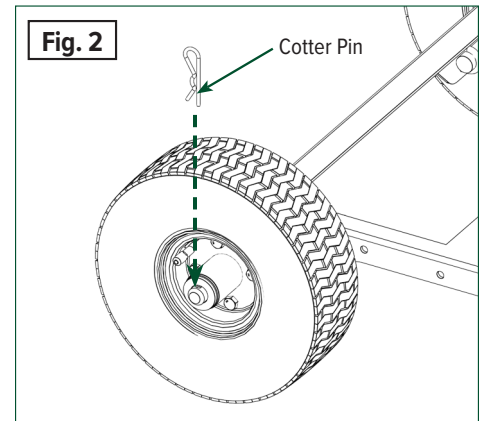
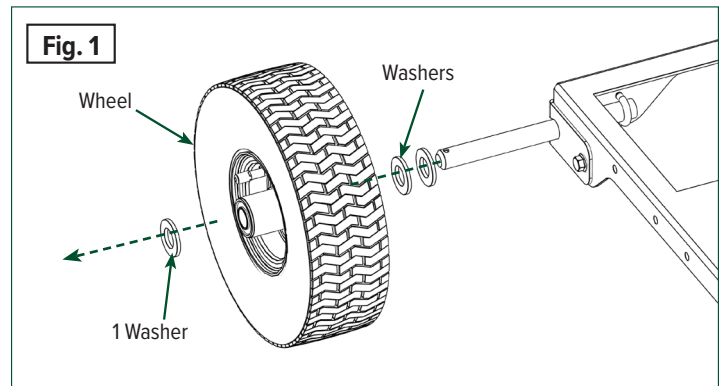
1. **(Fig. 1)** Slide 2 washers onto an axle followed by a wheel with the valve stem facing out, then slide 1 washer onto axle.
2. **(Fig. 2)** Secure with Cotter Pin.

INSTALLATION NOTE:

The washer widths may vary. If you cannot insert the Cotter Pin into the axle, remove one of the 2 washers you first added then reinstall the wheel and single washer.

3. Repeat steps 1 and 2 for the remaining wheels.

NOTE: *Recommended tire inflation: 25 psi.*



ATTACH THE BAG PLATFORM TO THE LOWER HANDLEBAR



PARTS YOU'LL NEED

- Bag Platform

HARDWARE YOU'LL NEED IN THE BAG MARKED: 12-01-092 PLATFORM HARDWARE KIT

- (2) Clevis pins
- (2) Cotter pins

TOOLS YOU'LL NEED:

- None

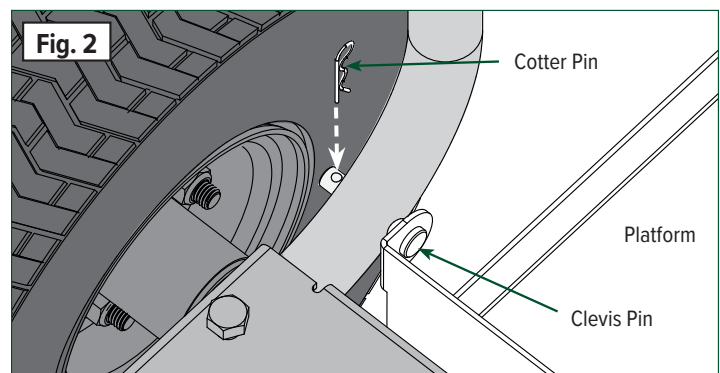
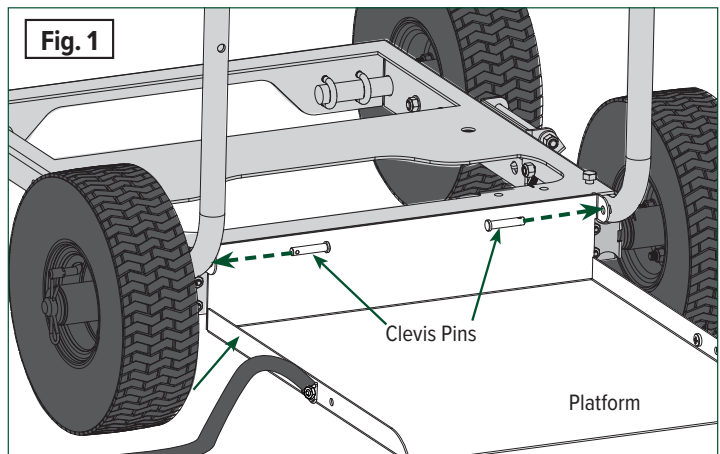
1. **(Fig. 1)** At the rear of the Chassis, insert the Bag Platform between the Lower Handlebar tubes. Locate and align the pin holes. From the inside of the Bag Platform, insert a Clevis Pin on each side.

INSTALLATION NOTE:

To make installation easier use a piece of cardboard from package to help keep platform level during installation (approx. 3.5" off ground).

2. **(Fig. 2)** Secure both Clevis Pins with a Cotter Pin on the outside of the handlebar tube.

NOTE: *The Platform may have some play left to right once installed. This is normal.*



ATTACH THE PLATFORM LOCK & BAG CADDY TO THE LOWER HANDLEBAR



PARTS YOU'LL NEED

- Platform Lock (located in the Hardware Box)
- Bag Caddy

HARDWARE YOU'LL NEED IN THE BAG MARKED:

12-01-091 HANDLEBAR LOCK BRACKET KIT

- (2) 5/16-18 x 1.75" Hex bolts
- (2) 5/16-18 x 1.5" Hex bolts
- (4) 5/16-18 Nylon lock nuts

TOOLS YOU'LL NEED:

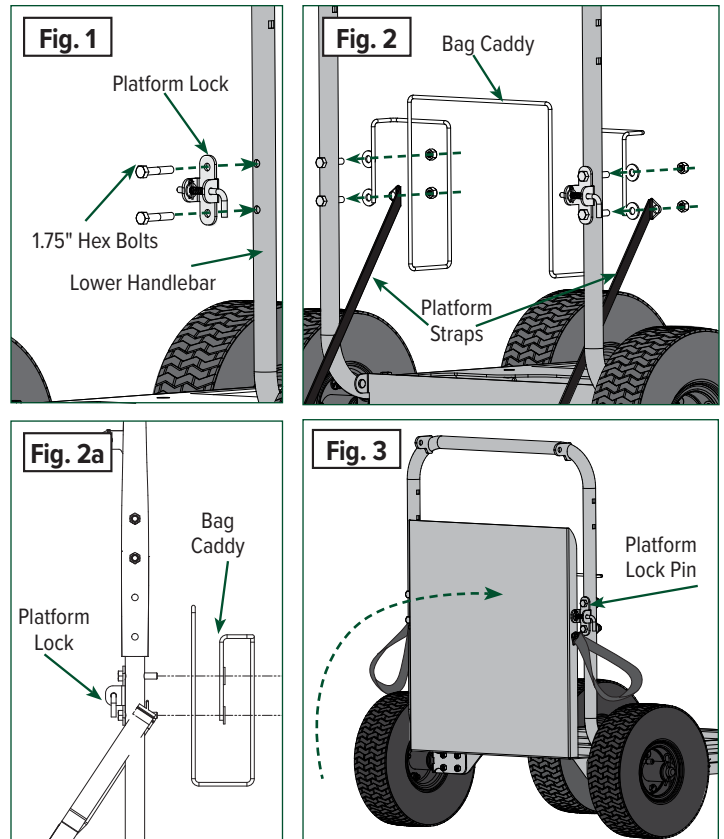
- (2) 1/2" Box wrenches or sockets

1. (**Fig. 1**) At the back, right side of the lower handlebar, insert (2) 5/16 – 1.75" Hex Bolts through Platform Lock and Handlebar.
2. (**Fig. 2**) On the left side of the Lower Handlebar install the (2) 1.5" long Hex Bolts.

3. (**Fig. 2**) At the front of the Lower Handlebar install the Bag Caddy onto the hex bolts. (**Fig. 2a**) Mount the bag caddy on the opposite side of the platform lock bracket so that the platform locks in place without any obstruction. Starting on the right side, attach the Platform Strap onto the lower 1.75" Hex bolt and secure the strap and caddy with 2 nylon lock nuts. Then on the left side attach the Platform Strap onto the lower 1.5" Hex bolt and secure the strap and caddy with 2 nylon lock nuts.

NOTE: The Platform Straps should be pulled up through the inside of the handlebars.

4. Adjust the length of the Platform Straps so the Platform is parallel to the ground.
5. (**Fig. 3**) Lift the platform, pull out the Platform Lock pin and secure the Platform in the stowed position.



ATTACH THE UPPER HANDLEBAR



PARTS YOU'LL NEED

- Chassis
- Upper Handlebar (located in the Engine Box)

HARDWARE YOU'LL NEED IN THE BAG MARKED:

12-01-087 HANDLEBAR HARDWARE KIT

- (4) 5/16-18 x 2" Carriage bolts
- (4) 5/16-18 Nylon lock nuts

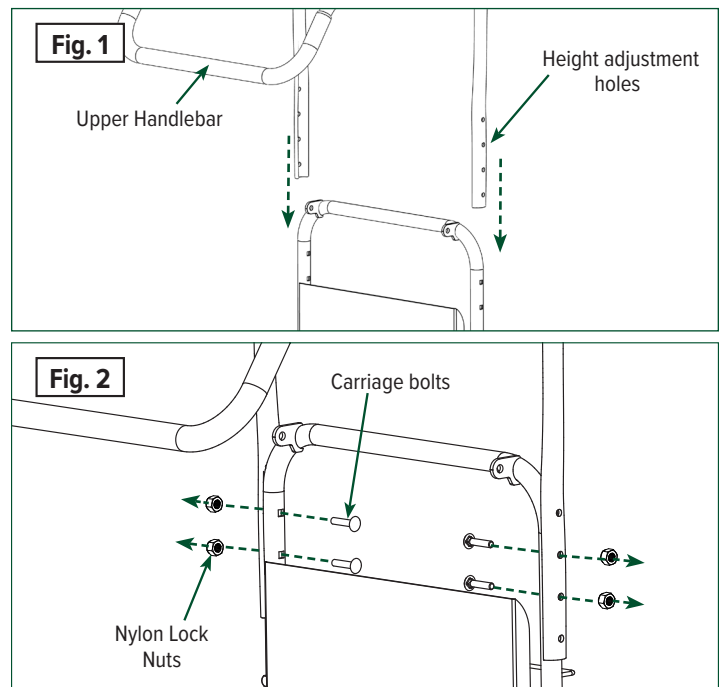
TOOLS YOU'LL NEED:

- (2) 1/2" Box wrenches or sockets

1. (**Fig. 1**) Slide Upper Handlebar downward over Lower Handlebar.

NOTE: There are 3 height settings. Find the one that is most comfortable for you.

2. (**Fig. 2**) Attach both handlebars by installing four 5/16" carriage bolts through the square holes in the Lower Handlebar then through the holes in the Upper Handlebar.
3. Secure with the nylon lock nuts making sure to tighten until handlebars are fully secure.



INSTALL THE ENGINE/BLOWER UNIT



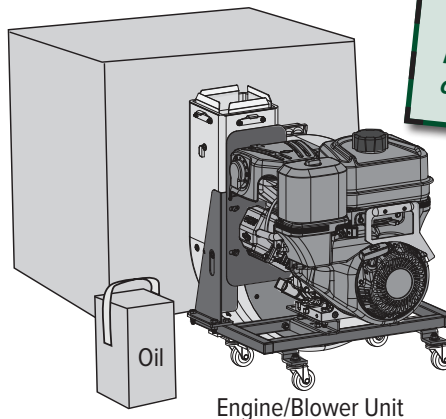
The **SPS-10 Engine/Blower Unit** is on its own chassis with wheels. It's located in the box labeled **Engine/Blower Unit**.

CAUTION:
The Engine/Blower Unit is heavy. You may need assistance removing it from the box and lining it up on the chassis.

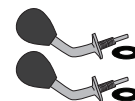
- (Fig. 1)** Remove the Engine/Blower Unit using the handles on each side and position it on the chassis with the blower inlet facing away from the handlebars.

NOTE: Locate **Engine Clamp Knob Kit (the two engine clamp knobs and rubber washers)** in the enclosed **Hardware Box**.

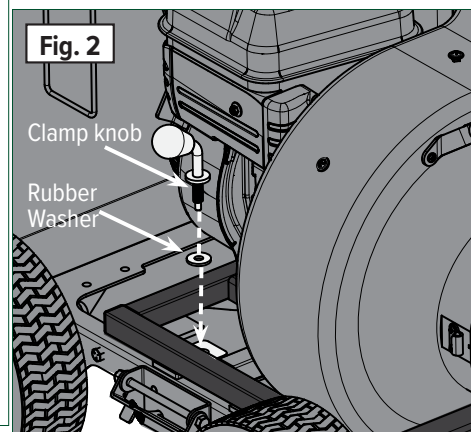
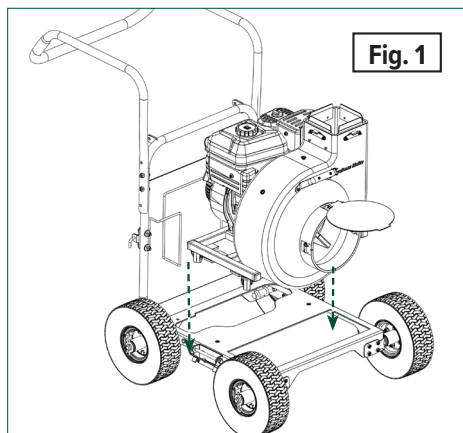
- (Fig. 2)** Line up the mounting brackets on both sides of the Engine/Blower Unit over the threaded holes in the Chassis. Install one rubber washer on each clamp knob then securely clamp the engine to the cart by screwing the engine clamp knobs through the holes.



Engine Clamp Knobs & Rubber Washers



WARNING:
Do not start the engine now! The engine contains no oil or gasoline and you have not completed the assembly of your Cyclone Rake SPS-10.



FILL THE ENGINE WITH OIL

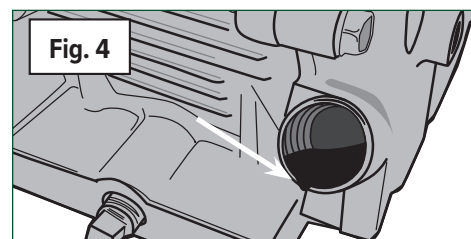
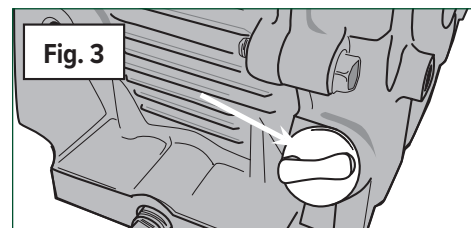


OIL CAPACITY: XR950-PRO: 18-20 OZ.

NOTE: The oil refill amounts are slightly lower than total oil capacity due to residual oil left in the engine during the testing process.

IMPORTANT: Do not use the dipstick on the butterfly plug to measure when filling the engine oil. It is hard to read when the oil is new, and you might over or under fill, resulting in engine damage. Instead, use this simple procedure:

- (Fig. 3)** There are two **YELLOW** plastic “butterfly” plugs at the base of the engine. Remove one of the plugs and place a rag under the opening to catch any spilled oil.
- (Fig. 4)** Using a small funnel, slowly pour oil into the opening **until the oil reaches the bottom edge of the butterfly hole**. (See chart below for recommended oils.)
- Replace the butterfly plug and **tighten firmly by hand**. Do not use a wrench or pliers as you might break the plug. Wipe up any spilled oil.



RECOMMENDED OIL CHART	
The oil should be marked A.P.I. service “SF,” “SG,” “SH,” “SJ” or higher.	
Air Temperature	Type of Oil
Above 32° F	SAE 30 or SAE 10W30 oil
Below 32° F	SAE 5W30 oil
If synthetic oil is preferred 5W-30 is good in all temps. SAE 10W40 is specifically not recommended.	

ASSEMBLE & CONNECT THE COLLECTOR CAP TO THE HANDLEBAR

ASSEMBLE THE COLLECTOR CAP



PARTS YOU'LL NEED

- Collector Cap

HARDWARE YOU'LL NEED IN THE BAG MARKED:

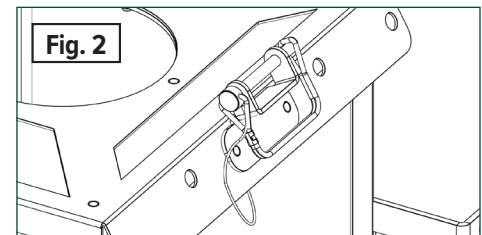
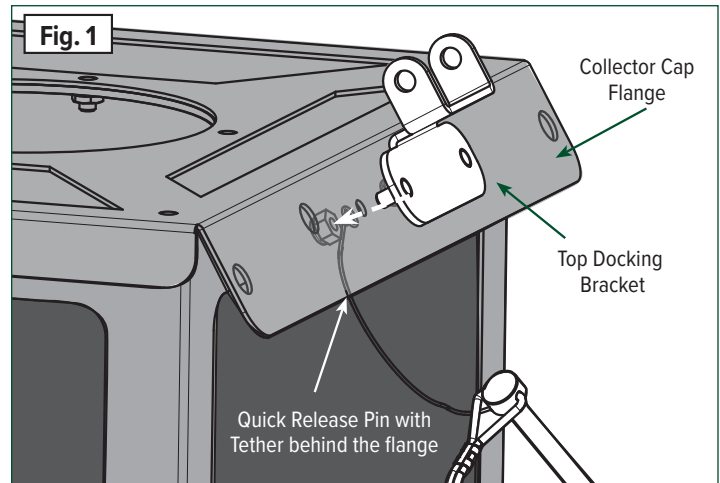
12-02-034 TOP DOCKING BRACKET ASSEMBLY

- Top Docking Bracket
- Quick Release Pin
- (2) 1/4-20 Nylon Lock Nuts

TOOLS YOU'LL NEED:

- 7/16" Open-end wrench

1. **(Fig. 1)** Insert both Top Docking Bracket studs into the two center holes in slanted flange of the Collector Cap, making sure Top Docking Bracket is facing upward as shown. Attach the Tether Wire of the Quick Release Pin onto either stud **behind the flange**. Then, secure both studs with two nylon lock nuts with the 7/16" open-end wrench **behind the flange**.
2. **(Fig. 2)** Open the Quick Release Pin and insert the pin into the Docking Bracket and secure with the other end.



ATTACH THE COLLECTOR CAP TO THE HANDLEBAR



PARTS YOU'LL NEED

- Collector Cap

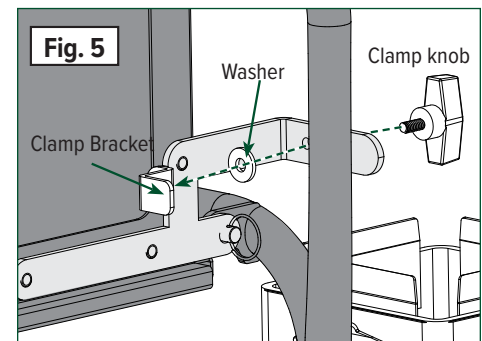
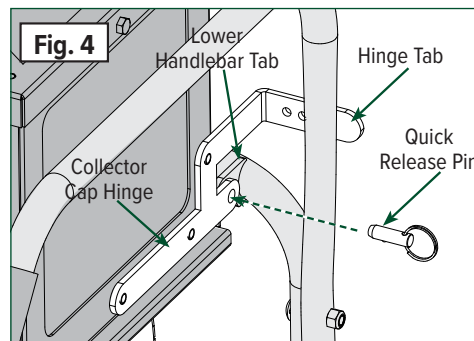
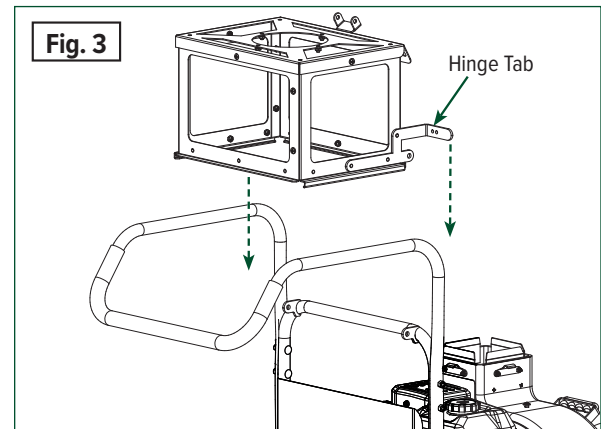
HARDWARE YOU'LL NEED IN THE BAGS MARKED:

12-01-093 COLLECTOR CAP PINS, SET OF 2

01-02-120 RRC CLAMP BRACKET AND KNOB, SET OF 2

- (2) Quick Release Pins
- (2) Clamp Brackets with Knobs & Washers

1. **(Fig. 3)** Lower the Collector Cap between the upper handlebars making sure the hinge tabs on the Collector Cap are on the front of the handle bars.
2. **(Fig.4)** Align the holes on the sides of the Collector Cap Hinge with the holes in the tabs on the Lower Handlebar. Insert a Quick Release Pin to secure.
3. Repeat on the other side.
4. **(Fig.5)** Locate outer holes in the Collector Cap Hinge of the Collector Cap. Attach knobs, washer and clamp brackets to secure to the handlebar.
5. Repeat on other side.



ASSEMBLE THE HOSE



PARTS YOU'LL NEED

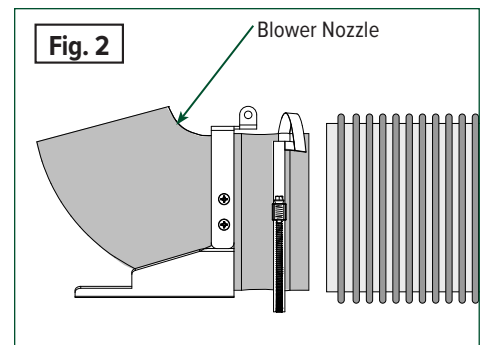
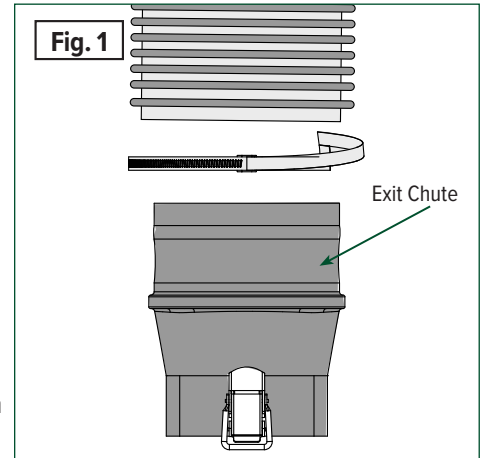
- 7x6 SPS Hose
- Exit Chute
- Blower Nozzle
- (2) 7 " Right-Handed Bridge-Type Band Clamp

TOOLS YOU'LL NEEDED:

- 5/16" Nut driver or Flat blade screwdriver

1. **(Fig. 1)** Slide one of the bridge-type band clamps over the circular end of the Exit Chute. Then slide the hose over the end of the Exit Chute covering 2-3". Pull the band clamp up and over the hose then secure using the 5/16" nut driver or flat blade screwdriver.
2. **(Fig. 2)** Slide the other bridge-type band clamp over the larger end of the Blower Nozzle . Then slide the hose over the end of the blower nozzle covering about 2-3". Pull the band clamp over the hose and secure with the 5/16" nut driver or flat blade screwdriver.

That's it! Your SPS-10 hose is all set up!



ASSEMBLE THE POWER VACUUM PICKUP

You'll be using the Power Vacuum Pickup to fill your paper bags or fabric bag with all your leaves. But, you can use it to pick up just about any other organic lawn debris. It's great for pine needles, acorns, lawn thatch and more. It's also an excellent tool for clearing out window wells, culverts, planting beds and other areas.

WARNING:

Always stop the SPS-10 engine before changing hoses. High vacuum forces and rotating machinery can cause severe personal injury. NEVER change hoses unless the engine is STOPPED.

ASSEMBLE THE HANDLES

The vacuum wand handles are shipped unattached to prevent shipping damage.

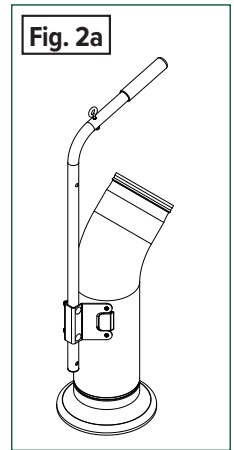
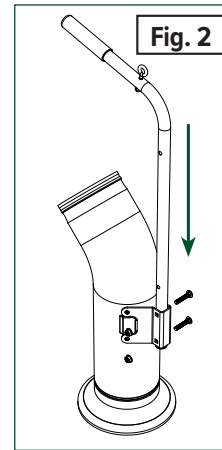
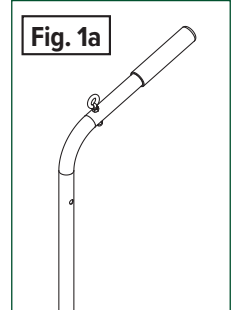
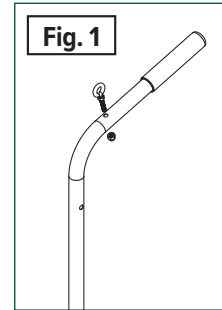
TOOLS YOU'LL NEED:

- 1/2" Wrench
- (2) 7/16" Wrenches,
- Flat Blade Screwdriver or 5/16" Nut Driver
- Scissors

1. Cut the nylon cable tie that is holding the two parts of the handle.
2. **(Fig. 1 & 1a)** Slip the eye-bolt into the hole above the bend of the long handle tube, and secure with the 1/4" Cap Nut. Tighten with two 7/16" wrenches.
3. **(Fig. 2)** Slide the long handle tube into the mounting bracket attached to the wand inlet, making sure the handle grip lines up over the bent portion of the wand inlet. Line up the 2 holes nearest the end of the long handle tube with the square holes in the mounting bracket. Secure with the two included carriage bolts and nuts. Tighten with the 1/2" wrench.

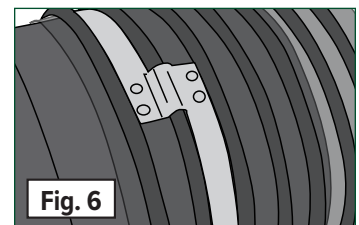
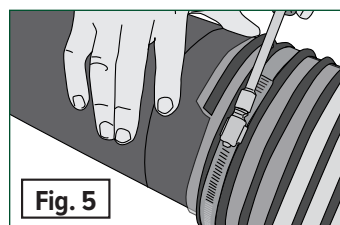
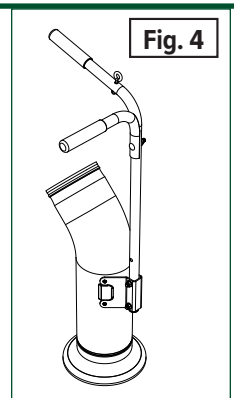
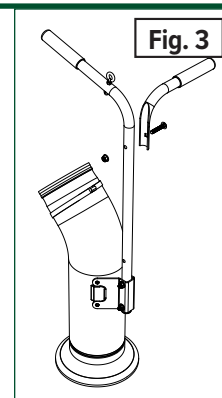
NOTE: If you are under 5'6" tall, you may find it more comfortable to shorten up the wand by mounting the long handle tube through the second and third holes. Figure 2a.

4. **(Fig. 3 & 4)** Attach the side handle tube to the hole beneath the bend in the long handle tube, using the last included carriage bolt and nut.
Right handed users, the side handle tube should look like **Fig. 3**.
Left handed users can mount the side handle to the other side as shown in **Fig. 4**. Tighten with 1/2" wrench.



CONNECT THE HOSE TO THE VACUUM WAND

1. **(Fig. 5)** Slide the vacuum hose over the end of the molded wand 2-3". Secure with the bridge-type band clamp supplied. Use a 5/16" nut driver or flat blade screwdriver.
2. **(Fig. 6)** Be sure the "bridge" on the reverse side of the band clamp saddles neatly over the hose ribs. Also be sure the stainless steel bands are seated between the hose ribs all around.
3. Attach shoulder strap's clip to the eye-bolt on top of the handle tube.



CHAPTER 3

USING THE CYCLONE RAKE SPS-10

The SPS-10 allows you to blow leaves into piles or into the woods. The SPS-10 also let's you collect those piles of debris with the Power Vacuum Pickup into either paper leaf/lawn bags for curb-side pickup or into a fabric Collector bag to dump into your compost pile or wooded area.

IMPORTANT SAFETY NOTE

To ensure safe and optimal performance of your SPS-10, it is highly recommended to clean the unit thoroughly after each use.

- Debris and dry leaves near the engine can potentially lead to a fire hazard.
- Use a brush to sweep away any debris and a cloth to wipe down the unit.
- Additionally, remove debris from the collector cap and corrugated collector.
- It is important to check all main connection points, including collars and latches, and ensure that the hoses are clear.

By performing these simple maintenance tasks, you can help prevent potential hazards and extend the lifespan of your SPS-10.

BLOWER MODE SET-UP



We've designed the SPS-10 to be easily maneuvered in Blower Mode. Its four wheels and comfortable handlebar let you roll forward, backward and make turns to corral all your leaves and lawn debris. We've included 4 wide strikes and only 3 latches to allow the exit chute to turn different directions.

PARTS NEEDED:

- SPS-10 Hose
- Blower Inlet Guard

TOOLS YOU'LL NEED:

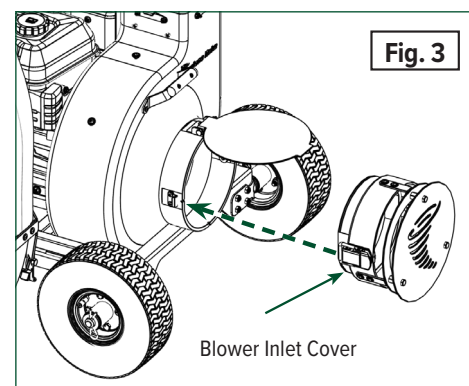
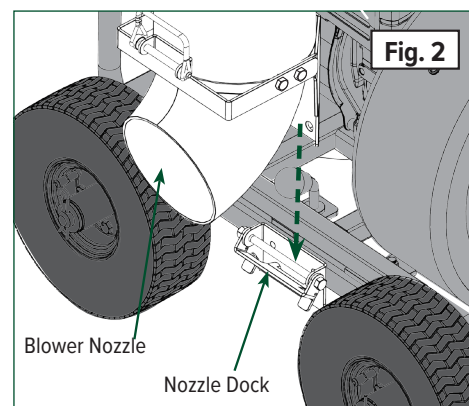
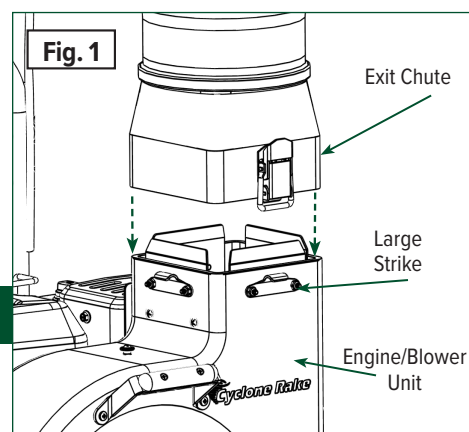
- None

1. **(Fig. 1)** Attach the Exit Chute end of the SPS-10 Hose to the top of the Engine/Blower Unit and secure using the Latches
2. **(Fig. 2)** Lower the Blower Nozzle behind the pin of the Nozzle Dock located on the right side of the Chassis.
3. **(Fig. 3)** Install the Blower Inlet Cover onto the front of the Blower opening and secure with the latches.

NOTE: Make sure the Bag Platform is lifted up and in the stowed position before operating in Blower Mode.

You're all set to start using your SPS-10 as a leaf blower.

To learn how to start and stop the XR950 Engine please go to page 16.



COLLECTION MODE SET-UP

When in collection mode, the SPS-10 will take the debris you've piled up and funnel it through the Blower Unit and dump it into your Paper Leaf Collection Bags for curbside pickup or, into the Fabric Collector Bag to be dumped wherever you like.

PARTS NEEDED:

- Collector Insert and Paper Leaf Bag
- OR the Fabric Collector Bag
- The Power Vacuum Pickup

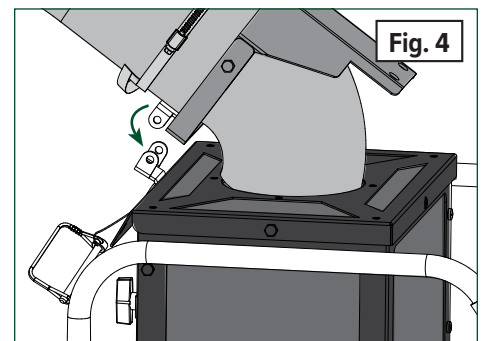
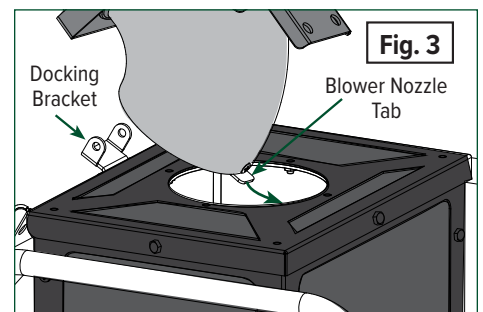
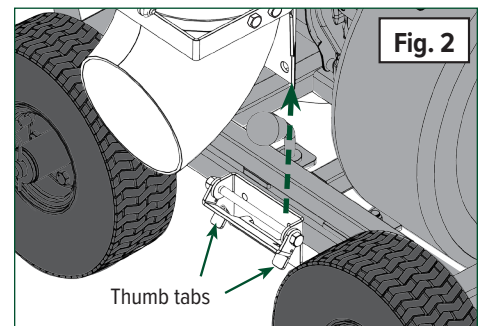
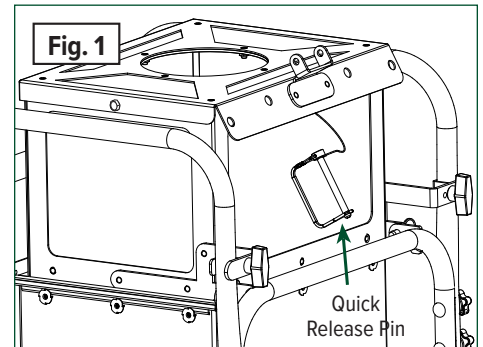
ATTACH THE BLOWER NOZZLE TO THE COLLECTOR CAP



TOOLS YOU'LL NEED:

- None

1. **(Fig. 1)** Remove the Quick Release Pin at the top of the Top Docking Bracket.
2. **(Fig. 2)** Disconnect the Blower Nozzle from the Chassis by locating the thumb tabs on either side of Nozzle Dock. Flip the tabs upward while lifting Blower Nozzle to release it.
3. **(Fig. 3)** Insert the Blower Nozzle Bracket Tab into the round opening at the top of the Collector Cap.
3. **(Fig. 4)** Then tilt it backwards to align the Blower Nozzle Bracket pin holes with those of the Top Docking Bracket. Secure by sliding the Quick Release Pin through the pin holes in the docking bracket.

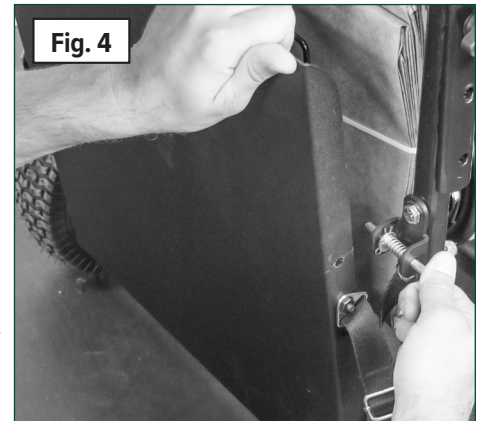




USING PAPER COLLECTION BAGS

LOWER THE PLATFORM

1. **(Fig.4)** While supporting the Platform, pull the Platform Lock Pin to release it from its stowed position. Then carefully lower the platform until it is supported by the platform straps.

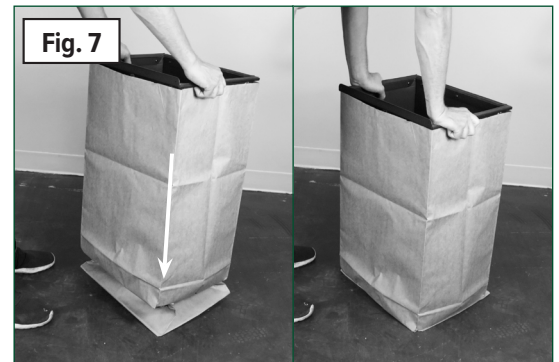
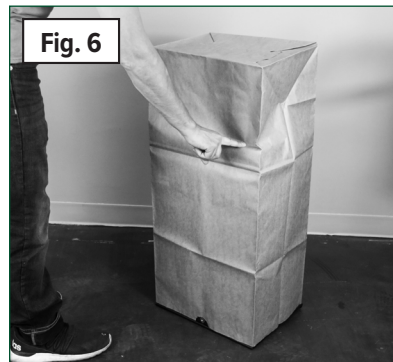
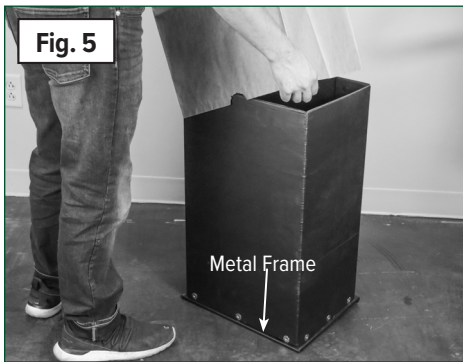


INSTALL THE COLLECTOR INSERT INTO A PAPER LEAF BAG

PARTS NEEDED:

- Corrugated Collector Insert
- Paper Leaf Bags

2. **(Fig. 5)** Flip the Corrugated Collector Insert so the metal frame is on the ground (upside down). Slide the paper bag over the Collector Insert starting on one side, then the other.
3. **(Fig. 6)** The Collector Insert should fit two-thirds to three-quarters of the bag.
4. **(Fig. 7)** Turn the Collector Insert over and push down to collapse the bottom of the paper bag.



NOTE: *By using this technique, you ensure that you will have room left over at the top of the bag to close the bag for collection at the curb.*

SLIDE THE PAPER COLLECTOR BAG INTO THE CAP

1. **(Fig. 8)** Slide the Collector Bag Frame into the slots at the bottom of the Collector Cap until it's fully inserted.



USING FABRIC COLLECTION BAG

SLIDE THE FABRIC COLLECTOR BAG INTO THE CAP

1. **(Fig. 9)** Make sure the Bag platform is in the stowed position. Then, slide the Collector Bag Frame and Fabric Collector Bag into the slots at the bottom of the Collector Cap until it's fully inserted.

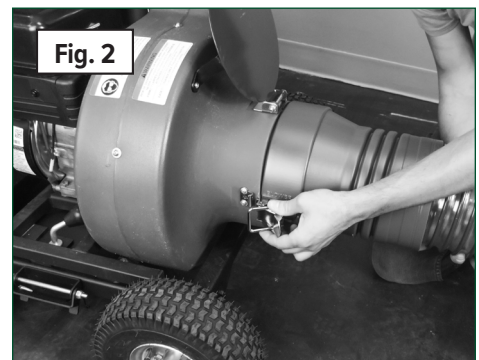
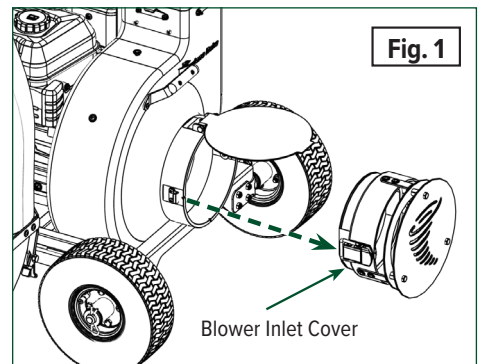


ATTACHING THE POWER VACUUM PICKUP

NOTE: Before vacuuming remove any long sticks you may find in your leaf pile. The hose may jam if you feed material longer than the hose diameter.

IMPORTANT: Stop the engine before attaching the Power Vacuum Pickup.

1. **(Fig. 1)** Remove the Blower Inlet Cover by disengaging the latches.
2. **(Fig. 2)** Attach the Power Vacuum Pickup to the Engine/Blower Unit inlet securing it with the latches. Be sure both latches are firmly locked before starting or restarting the engine.



ADJUSTING THE SHOULDER STRAP LENGTH

The length of the shoulder strap can be easily adjusted to accommodate persons of various heights. Each side of the shoulder strap has a Velcro strip. You can peel back the Velcro to release it. Then re-fasten the Velcro in the most comfortable position for your use. To get the maximum (or minimum) extension length, adjust the Velcro on both sides.

You're all set to start using your SPS-10 to Collect all your debris

To learn how to start and stop the XR950 Engine please go to page 16.



VACUUMING TIPS

- Pass the wand back and forth over the material, allowing it to enter the wand in moderate amounts.
- Keep the hose as straight as possible while vacuuming. This will increase the vacuum power and minimize the possibility of hose jams. If your hose is coiled up on the ground, straighten it out before starting. Unnecessary twists and turns can reduce power.
- Try not to overfill the bags. After some practice, you will become familiar with how much to pickup while using the SPS-10 and Power Vacuum Pickup.
- The average fill time is about 2 minutes.



REMOVING OR EMPTYING THE COLLECTOR BAGS

REMOVING THE FULL PAPER COLLECTION BAG

1. **STOP THE ENGINE.**
2. Slide the Collector Bag Frame out from the Collector Cap.
3. **(Fig. 1)** Lift the Collector Insert with the Paper bag until the paper bag is fully expanded.
4. **(Fig. 2)** Then continue to lift the Collector Insert out from the paper bag and set it aside.
5. Fold down the top of the paper bag and bring to the curb.

Now you're ready for another paper bag!



REMOVING & EMPTYING THE FABRIC COLLECTION BAG

1. Slide the Collector Bag Frame out of the Collector Cap.
2. **(Fig. 3)** Use the handles to safely dump your debris anywhere you want.

Now you're ready to collect another load!



USING THE B&S XR950-PRO ENGINE

Be sure the engine has sufficient oil before starting. Be sure the fuel tank has only **clean, fresh, unleaded regular gasoline** and that the gas cap is firmly secured to prevent spillage. **(We highly recommend adding fuel stabilizer to every tank of gas.)** Make sure to wipe up any gasoline spills before starting.

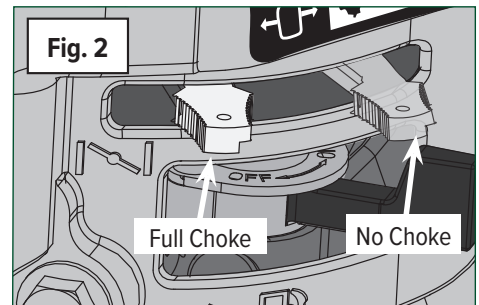
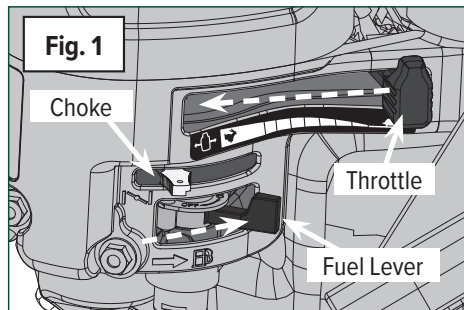
IMPORTANT: Always add fuel stabilizer per Briggs & Stratton's instructions. This is available at any hardware store or in our Engine Maintenance Kit. See the Warranty And Maintenance section for further details or refer to your Briggs & Stratton® Operating and Maintenance Manual.

WARNING:
Never start engine until the Cyclone Rake SPS-10 is completely assembled, the engine unit is firmly bolted to the chassis, and all hoses and couplings are in place.



STARTING XR950-PRO ENGINE

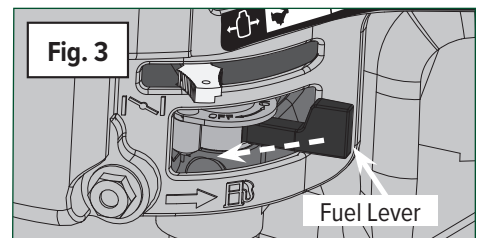
1. **(Fig. 1)** Push the black fuel lever on the front of the engine to the **"ON"** position.
2. **(Fig. 1)** Slide the throttle control lever **all the way to the left (rabbit)** for full throttle.
3. **(Fig. 2)** Move the **gray choke lever to the left, or full choke** position. Grasp the starter cord and pull slowly until you feel resistance. **Then pull rapidly.**
4. As the engine warms up, **move the choke lever right to the no choke** position.
5. The engine should always run at full throttle during use.



NOTE: When restarting a warm engine, use of the choke may not be necessary.

STOPPING THE XR950-PRO ENGINE

1. **(Fig. 3)** First, **move the throttle lever right to the slow position (turtle)** for 15-30 seconds to idle down the engine. Then continue to **move the throttle lever all the way to the right ("Stop" position)**. After the engine stops, **move the fuel lever left to the closed position.**



CHAPTER 4

WARRANTY & MAINTENANCE

PROTECT YOUR INVESTMENT— PLEASE READ CAREFULLY

Your Cyclone Rake® SPS-10 is fully warrantied against defects in materials and workmanship for a period of two years from date of delivery for home use and 6 months for commercial use. It's very similar to a new car warranty. If we did anything wrong in building your Cyclone Rake SPS-10, we will fix it. The owner is responsible for routine maintenance including oil changes, air filters and spark plugs.

NOTE: *Our Engine Maintenance Kit includes everything you need: air filter, oil, spark plug, spark plug wrench, fuel stabilizer, funnel, and shop towel. Order on-line or by phone.*

WHAT'S NOT COVERED

Just like your new car warranty, you are **not covered for collision damage, accidents, abuse, improper storage or failure to perform basic maintenance**, like changing the engine oil, spark plug and air filter. Good news: There should be no need for out-of-warranty service if you follow these simple guidelines.

ENGINE MAINTENANCE

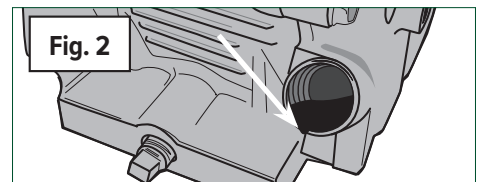
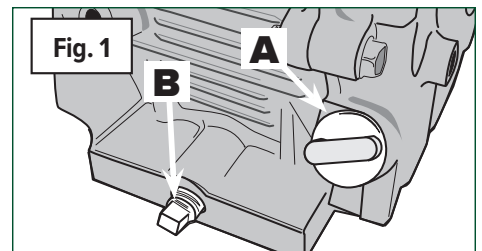
Your engine is the most costly component of your Cyclone Rake. To maintain your warranty and to ensure long life, you must do five things:

- *Change the engine oil after the first 5 hours of operation.*
- *Change the engine oil every 20 operating hours.*
- *Always add fuel stabilizer per Briggs & Stratton's instructions.*
- *Change or clean the air filter at least annually, and never run the engine without the air filter.*
- *Change the spark plug annually.*



CHANGING THE ENGINE OIL:

1. **(Fig. 1A)** There are two **YELLOW** plastic "butterfly" at the base of the engine. Remove either one.
2. **(Fig. 1B)** Place a shallow pan under the engine and remove the metal drain. Drain until oil flow stops.
3. Replace drain plug and **tighten firmly**.
4. Place a rag under the butterfly cap opening.
5. **(Fig. 2)** Using a small funnel, slowly pour oil into the opening **until the oil reaches the bottom edge of the butterfly hole**.
6. Replace the butterfly plug and **tighten firmly by hand**. Wipe up any spilled oil.
7. Oil capacity is approximately **18-20 ounces for the XR950-PRO**.



RECOMMENDED OIL CHART

The oil should be marked A.P.I. service "SF," "SG," "SH," "SJ" or higher.

Air Temperature	Type of Oil
Above 32° F	SAE 30 or SAE 10W30 oil
Below 32° F	SAE 5W30 oil

*If synthetic oil is preferred 5W-30 is good in all temps.
SAE 10W40 is specifically not recommended.*

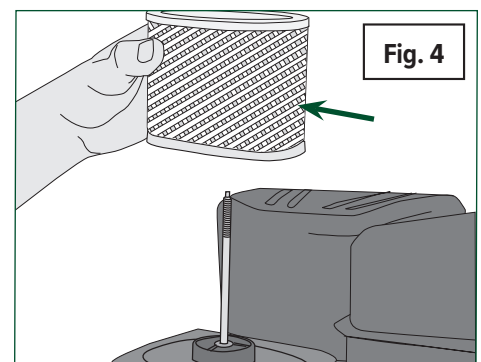
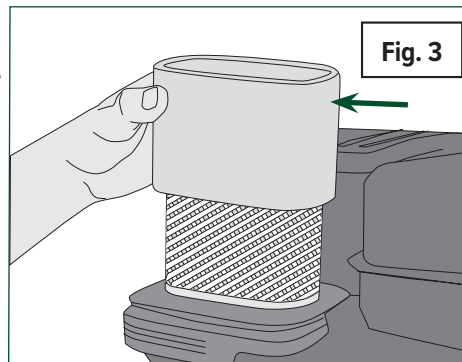
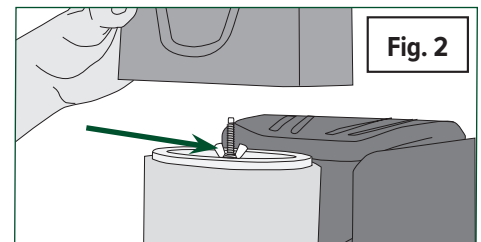
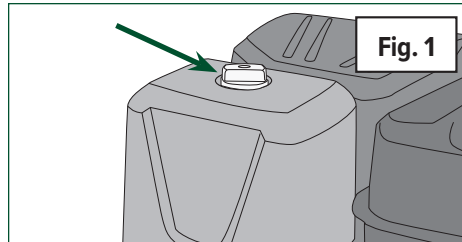


CHANGING THE AIR FILTER

Like oil changes, we recommend an air filter inspection every 20 hours of operation. Regular inspection and replacement will ensure full engine power and prolong engine life.

NOTE: NEVER run your engine without an air filter. This will void your warranty!

1. **(Fig. 1)** Unscrew the knob at the top of the air filter housing.
2. **(Fig. 2)** Lift the housing to expose the air filter.
3. **(Fig. 2)** Remove the wing nut that secures the filter to the housing.
4. **(Fig. 3)** Remove the foam pre-filter.
5. **(Fig. 4)** Remove the filter. Loosen the debris by gently tapping the filter on a hard surface. If the filter is excessively dirty, replace with a new filter.
6. Wash the pre-filter in liquid detergent and water. Squeeze dry in a clean cloth. Allow it to air dry thoroughly.
Do not oil the pre-filter.
7. Place the dry pre-filter over the air filter, place them onto the threaded rod and secure with the wing nut.
8. Replace the filter housing and secure with the plastic knob.



REPLACING THE SPARK PLUG

We recommend replacement once a year. Replace with **Bosch FR8DCX** spark plug or equivalent. The spark plug gap should be 0.030.

GENERAL MAINTENANCE

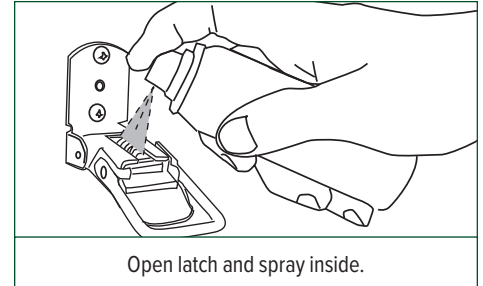
CHECK BOLTS & FITTINGS

The Cyclone Rake SPS-10 is subject to strong vibrations during operation. Take a few seconds each time you set up to check that all bolts and fittings are tight. If anything has loosened, tighten it. If you sense unusual vibration when operating, immediately stop the engine and check things out. This is particularly important the first few times you use your Cyclone Rake SPS-10.

MAINTAINING THE LATCHES

We recommend lubricating all your Cyclone Rake latches with WD-40 every six months.

NOTE: *One quick spray is sufficient. Do not over lubricate.*



STORING YOUR SPS-10®

NOTE: *We recommend adding fuel stabilizer, per Briggs & Stratton's instructions, to your gasoline storage container each time you refill at the gas station.*

SHORT TERM STORAGE

Do not store the Cyclone Rake SPS-10 outdoors for extended periods. House it, like any good equipment, in a dry sheltered place.

If possible, find a heated, indoor spot. Make sure to thoroughly clean out the Fabric Collector Bag and Collector Cap and all the hoses of debris buildup. **Store your SPS-10 after use Only when completely cool to touch.**

LONG TERM STORAGE

Fuel can become stale when stored over 30 days. Stale fuel causes acid and gum deposits in the fuel system or essential carburetor parts.

To keep fuel fresh, **always add fuel stabilizer per Briggs & Stratton's instructions. This is available at any hardware store or in our Engine Maintenance Kit.** There is no need to drain gasoline from the engine if a fuel stabilizer is added. Run the engine for two minutes to circulate the stabilizer throughout the fuel system before storage. If gasoline in the engine has not been treated with stabilizer, it must be drained into an approved container. Run the engine until it stops from lack of fuel.

See your Briggs & Stratton® Operating and Maintenance Manual for further details.

CHAPTER 5

OPERATING TIPS & TROUBLESHOOTING GUIDE**OPERATING THE CYCLONE RAKE SPS-10****IMPORTANT SAFETY TIP:**

To ensure safe and optimal performance of your SPS-10, it is highly recommended to clean the unit thoroughly after each use.

- Debris and dry leaves near the engine can potentially lead to a fire hazard.
- Use a brush to sweep away any debris and a cloth to wipe down the unit.
- Additionally, remove debris from the collector cap and corrugated collector.
- It is important to check all main connection points, including collars and latches, and ensure that the hoses are clear.

By performing these simple maintenance tasks, you can help prevent potential hazards and extend the lifespan of your SPS-10.

EYE PROTECTION

Always wear eye protection, as with any power tool. That's why we've included safety goggles.

OPERATING NOISE

With an engine running, there's no way to avoid noise. Whenever you operate loud machinery, you should always wear hearing protection. That's why we've included a pair of disposable ear plugs. You can get replacements inexpensively at most hardware stores. Or use power equipment "ear muffs" found at any good hardware store or home center.

BLOWER MODE TIPS

- Make consecutive passes across property to collect leaves into one or more piles.
- When you've finished blowing your debris into piles, position your SPS-10 near (within 15 ft) a pile before changing to Collector mode.

COLLECTION MODE TIPS

The Power Vacuum Pickup(PVP) is a great tool and will lift just about anything it touches. **DO NOT use it on dangerous materials like rocks, glass, trash, metal scraps, etc.** Watch out for hidden rocks, glass, metal, etc. **Remove them before you vacuum.** Never vacuum up anything except organic lawn debris.

- Use PVP to vacuum one pile at a time, keeping the wand slightly above the leaves and using a (slow) back and forth motion to prevent vacuuming too much at once.
- The municipal bag and fabric bag will take approximately 2 minutes to fill to capacity (time will vary based on debris type and weight).
- Keep an eye on the SPS-10 Hose, when you start to see debris swirling in place, it is most likely full. After a few fill-ups you should develop a sense of the time it takes to fill a Collector bag.
- If the leaves and debris have become heavy, wet and matted (for example, uncleared debris from a previous season) then do the job in two steps. Go over the top layer. Then give the remaining leaves a day or two to dry out. A second pass should get them all.

PROTECTING HOSES

Don't drag your Power Vacuum Pickup™ hose over curbs, stone walls or piles of cut branches. They're tough, but they do puncture on sharp objects. And please store your hoses out of direct sunlight as this will cause your hose (or any plastic) to degrade over time.

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	CORRECTION
Leaves are escaping the paper bag during collecting.	<ol style="list-style-type: none"> 1. Corrugated Collector Insert is more than ½” above the platform. 2. Collected material is too small or has been previously mulched. 3. The municipal bag may have tears. 4. The Corrugated Collector Insert may be damaged. 	<p>During normal operation, the bag should self-seal within 20-30 seconds. If it takes longer, confirm that:</p> <ol style="list-style-type: none"> 1. Corrugated Collector Insert is no more than ½” above the platform. If not, adjust platform straps. 2. Avoid vacuuming mulched debris. 3. Inspect municipal bag for tears. 4. Inspect Corrugated Insert for damage.
Debris is escaping between metal Collector Frame and Collector Cap.	<ol style="list-style-type: none"> 1. The rubber seals are not attached to the metal Collector Frame. 2. The Collector Frame is not all the way into the slots underneath the Collector Cap. 	<ol style="list-style-type: none"> 1. Check to make sure rubber seals are attached to the Frame. If the seals are not attached, the adhesive may be worn out. <ul style="list-style-type: none"> • Order new seals if they look damaged. 2. Make sure the Collector Frame is all the way into the slots underneath the Collector Cap.
The Collector is tilting during operation.	<ol style="list-style-type: none"> 1. The Clamp Brackets and Knobs are missing. 2. The Bag Platform is more than half an inch below the Corrugated Collector Insert. 	<ol style="list-style-type: none"> 1. Ensure the Clamp Brackets and Knobs are present and tightened to restrict movement. 2. Make sure the Bag Platform is no more than half an inch below the bottom of the Corrugated Collector Insert. If not, adjust Platform Straps.
The Collector Frame will not come out of the Collector Cap.	<ol style="list-style-type: none"> 1. The SPS-10 may be overfilled. 	<ol style="list-style-type: none"> 1. Push the Collector Frame all the way in, remove blower nozzle from the Collector Cap and push debris in the collector down.
How do I know if the paper bag is filled?		The debris will begin swirling in the clear SPS-10 Hose after approximately 2 minutes after starting a new municipal bag.
There is a lack of suction.	<ol style="list-style-type: none"> 1. Clog in the Power Vacuum Pickup hose. 2. The hose is twisted upon its self. 3. The engine may not be at full-throttle. 	<ol style="list-style-type: none"> 1. Gently shake the hose to dislodge clog. 2. Keep PVP hose straight if possible to reduce chances for clogs. 3. Check the engine and make sure it's at full throttle.
The Blower is not strong enough.	<ol style="list-style-type: none"> 1. The Inlet Cover is not attached to the blower opening. 2. The Safety Cover has flipped closed on the blower opening. 3. Blower housing is clogged with debris. 	<ol style="list-style-type: none"> 1. Attach the Inlet Cover. 2. Attach the Inlet Cover. 3. Make sure the engine has had time to cool. Remove the spark plug wire. Disconnect any hoses attached to the housing, and check for any debris inside the blower housing. Remove any debris, re-attach items then re-start the engine.
The Collector Frame does not fit into Collector Cap.	<ol style="list-style-type: none"> 1. Debris may be stuck in the tracks. 2. Rubber seals may have come detached. 	<ol style="list-style-type: none"> 1. Check/ remove debris stuck in the track at the bottom of the Collector Cap. <ul style="list-style-type: none"> • It may help to remove debris from Collector Cap with a few gentle taps after each load. • If the tray does not slide in and out easily, spray some dry lube inside the track at the bottom of the Collector Cap. 2. Ensure rubber seals are properly attached at all points.
There is excessive or violent vibration.	<ol style="list-style-type: none"> 1. The bolt may have come out of the impeller. 2. The Impeller might have broken, or fan might have separated from the hub. 	<ol style="list-style-type: none"> 1. Check the impeller, if loose, replace the impeller. <ul style="list-style-type: none"> • <i>Always check your Impeller and Impeller bolt before each use.</i>

TROUBLESHOOTING GUIDE

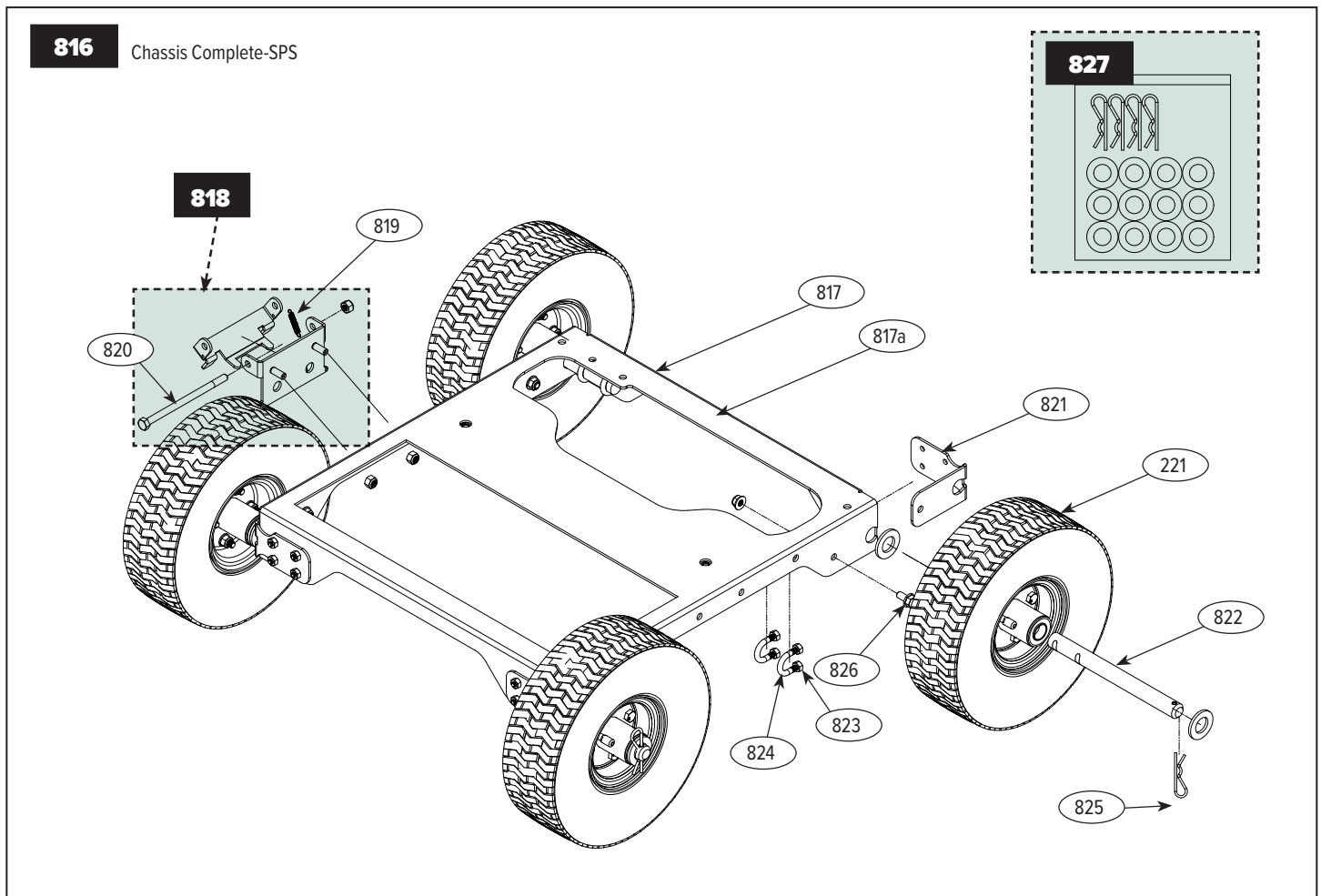
PROBLEM	POSSIBLE CAUSE	CORRECTION
The Nozzle Dock will not stay in place.	<ol style="list-style-type: none"> 1. The spring of the Nozzle Dock is missing or maybe damaged. 2. The Blower Nozzle is not inserted properly. 	<ol style="list-style-type: none"> 1. Verify that the Nozzle Dock spring is present and attached at both ends. <ul style="list-style-type: none"> • Order new Spring if damaged or missing. 2. Verify Blower Nozzle Bracket is being inserted behind the pin of Nozzle Dock.
The wheels shake.	<ol style="list-style-type: none"> 1. The washers and U-bolts may be loose. 	<ol style="list-style-type: none"> 1. Verify that the wheel's washers and U-bolts are tightened.
Engine will not start (pull- start).	<ol style="list-style-type: none"> 1. Fuel tank empty, or stale fuel. 2. Spark plug wire is disconnected. 3. Faulty spark plug. 4. Fuel shut-off lever not in the correct position. 5. Throttle control lever not in the correct position. 	<ol style="list-style-type: none"> 1. Gas should be fresh, clean gas. If the gas is old change it. If you keep gas longer than 30 days, always add an ethanol specific fuel stabilizer per Briggs & Stratton's instructions. 2. Connect the wire to the spark plug. 3. Clean, adjust gap or replace the spark plug. 4. Place the fuel shut-off lever to the "ON" position. 5. Slide the throttle control all the way to the right (rabbit).
The engine is smoking.	<ol style="list-style-type: none"> 1. Oil level incorrect. 2. Incorrect type of oil. 3. Air filter is dirty. 4. Operating on a steep incline. 	<ol style="list-style-type: none"> 1. Check the oil level and adjust accordingly. (See Briggs & Stratton owner's manual). 2. Check that you are using the proper oil. 3. Clean or replace the air filter. 4. Travel up and down slopes, avoid going across slopes. Avoid blowing on slopes more than 15 degrees.
The recoil will not pull or is difficult to pull.	<ol style="list-style-type: none"> 1. Blower housing is clogged with debris. 2. Oil level is low. 3. The recoil is tangled up on itself. 4. There is debris in the recoil. 	<ol style="list-style-type: none"> 1. Make sure the engine has had time to cool. Remove the spark plug wire. Disconnect any hoses attached to the housing, and check for any debris inside the blower housing. Remove any debris, re-attach items and try re-starting the engine. 2. Check the engine oil level, the engine may be seized. Fill oil if necessary. (See Briggs & Stratton owner's manual.) 3. Disconnect the spark plug wire, reach into the blower housing. Slowly turn the impeller by hand counter-clockwise, at the same time pull the starter cord. The rope should pull out. Reconnect the spark plug and try re-starting the engine. 4. Locate and remove the 4 bolts that secure the recoil housing to the engine. Remove housing, check for debris and clean if necessary. Re-install the housing and try re-starting the engine.
The Engine is not running smoothly.	<ol style="list-style-type: none"> 1. Choke is in the incorrect position. 2. Air filter is dirty. 3. Spark plug is faulty. 4. Gas is old. 5. Oil is not at the proper level or is dirty. 	<ol style="list-style-type: none"> 1. Once the engine has started the gray choke lever should be all the way to the left or full choke position. 2. Clean or replace the air filter. 3. Clean, adjust gap or replace the spark plug. 4. Gas should be fresh, clean gas. If the gas is old change it. If you keep gas longer than 30 days, always add an ethanol specific fuel stabilizer per Briggs & Stratton's instructions. 5. Check the oil level and adjust accordingly. (See Briggs & Stratton owner's manual.) If dirty, change the oil per the instructions in the owner's manual.

CHAPTER 6

SERVICE PARTS

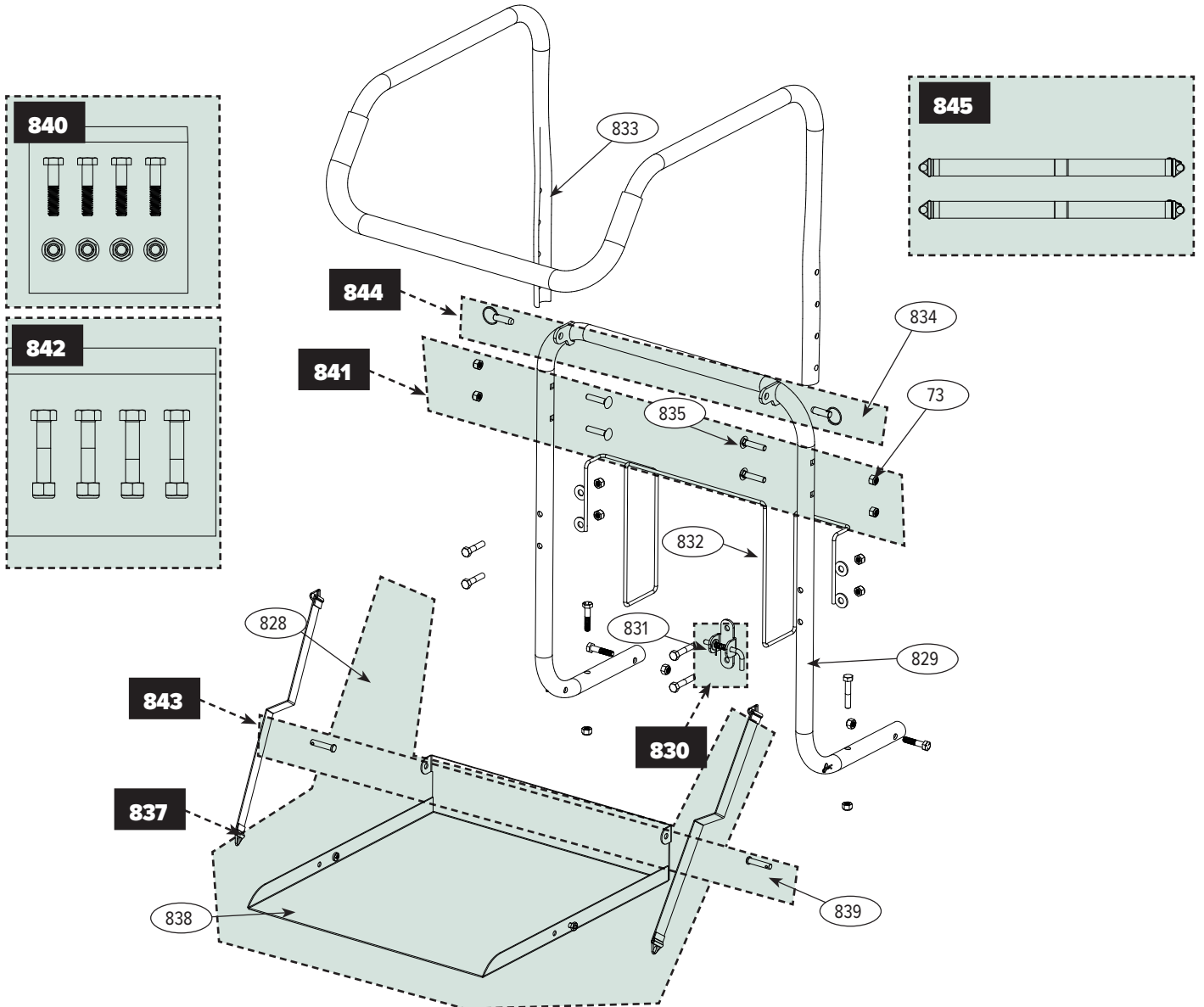
CHASSIS

Ref. #	Part Name	Part #
221	Tire & Wheel Assembly	01-01-826
816	Chassis Complete with wheels-SPS	12-04-003
817	Chassis Frame	12-02-003
817a	Chassis Frame with axles	12-03-003
818	Nozzle Dock Assembly	12-02-010
819	Extension Spring	12-01-013
820	5/16-18 x 5.25 x 0.875 Hex bolt	12-01-014
821	Axle Brace	12-01-005
822	Wheel Axle	12-01-006
823	1/4"-20 Black Oxide nylon lock nut	12-01-094
824	1/4-20 x 3/4 x 1-1/4 U bolt	12-01-007
825	Cotter Pin 1/8 dia. 2-5/8 long	12-01-008
826	5/16-18 x 0.625 Hex flange bolt	12-01-009
827	Wheel Hardware Kit: (4) axle cotter pins, (12) axle washers	12-01-086



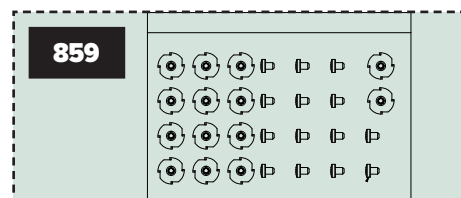
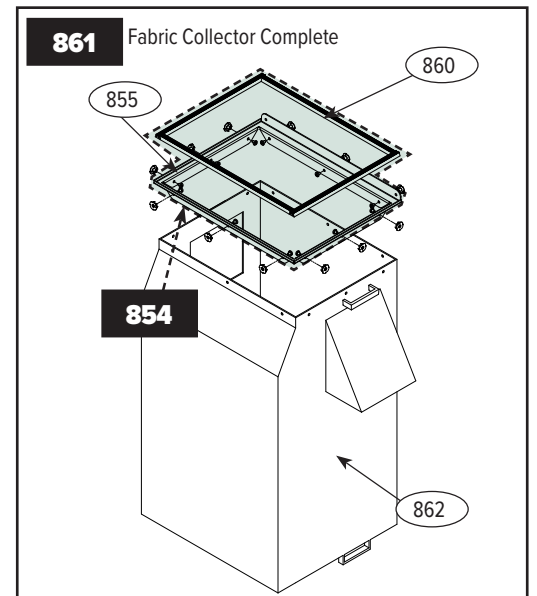
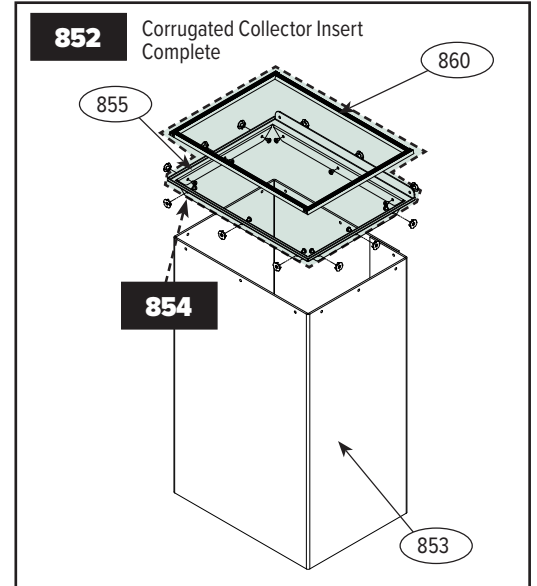
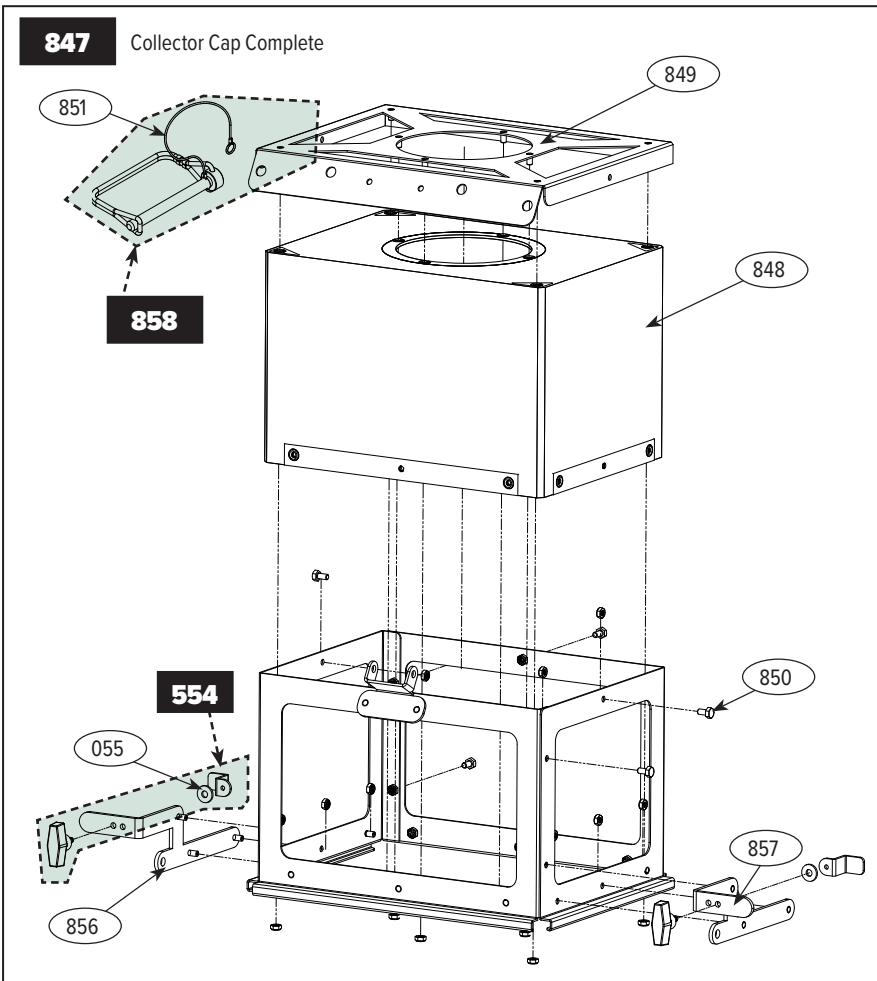
HANDLEBARS

Ref. #	Part Name	Part #
73	Flange nut	07-01-151
828	Strap for Platform	12-01-070
829	Lower Handlebar	12-02-015
830	Platform Locking Bracket	12-02-062
831	Cotter Pin for 1/4"-3/8" Pin	12-01-066
832	Bag Caddy	12-01-067
833	Upper Handlebar	12-02-017
834	Collector Cap Pin	12-01-018
835	5/16-18 x 1.5 Round head square neck bolt	12-01-020
837	Bag Platform w/straps	12-02-022
838	Bag Platform	12-01-022
839	Clevis and Cotter Pin	12-01-023
840	Handlebar to Chassis Hardware Kit: (4) 5/16-18 x 1.5 Hex bolts	12-01-088
841	Handlebar Hardware Kit: 4) Carriage bolts, (4) 5/16-18 nylon lock nuts	12-01-087
842	Handlebar Lock Bracket Hardware Kit: (2) 5/16-18 x 1.5 Hex bolts, (2) 5/16-18 x 1.75 Hex bolts, (4) 5/16-18 nylon lock nuts	12-01-091
843	Platform Hardware Kit: (2) Clevis & Cotter pins	12-01-092
844	Collector Cap Pins, set of 2	12-01-093
845	Strap for Platform, set of 2	12-02-070



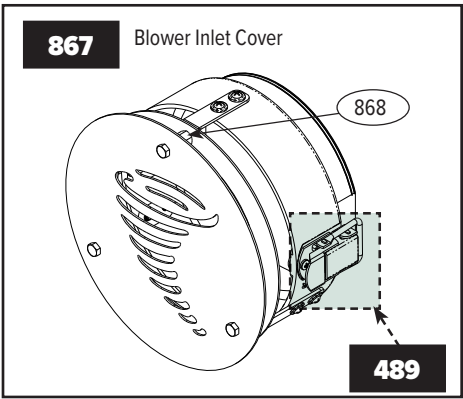
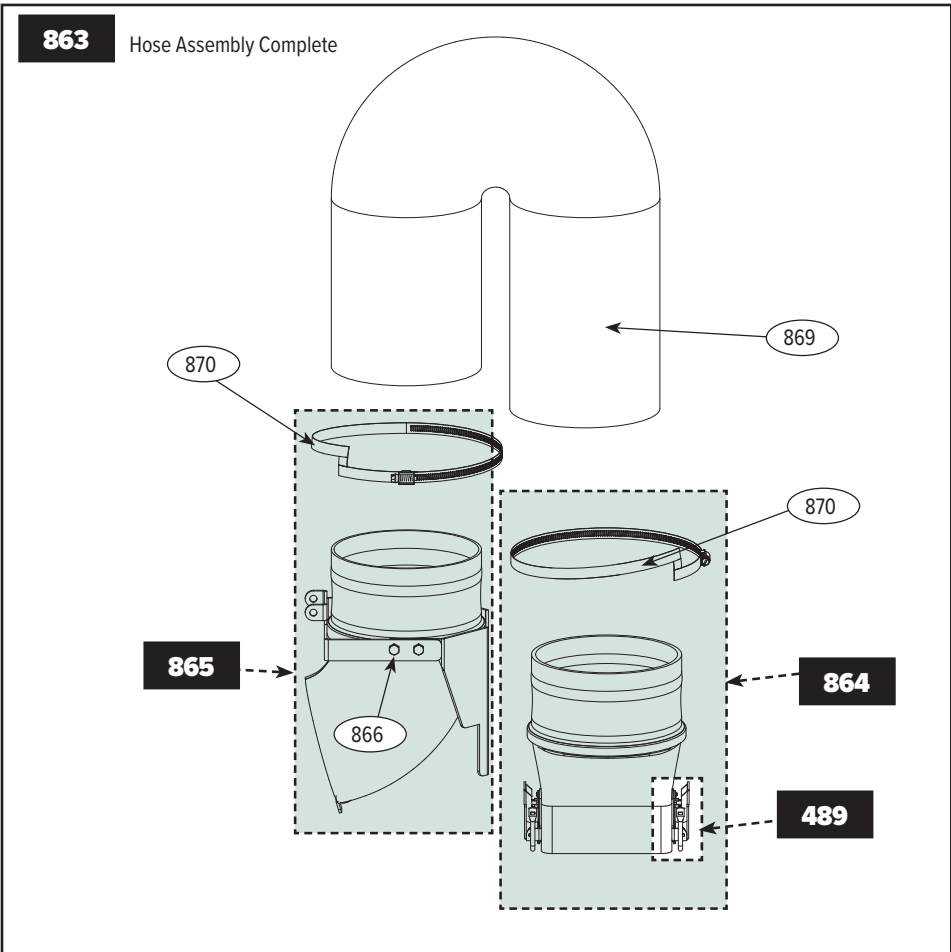
COLLECTOR

Ref. #	Part Name	Part #
055	Rubber washer	01-01-1990
554	Clamp Bracket and Knob (rubber washer is not included)	01-02-121
847	Collector Cap Complete - SPS	12-03-026
848	Top Screen - SPS	12-02-029
849	Collector Cap Top	12-02-048
850	1/4-20 x 0.5 Black oxide steel hex screw	12-01-113
851	8" X 3/64 Wire lanyard	12-01-068
852	Corrugated Collector Insert Complete w/Frame	12-02-037
853	Corrugated Collector Insert	12-01-037
854	Metal Collector Frame with Seals	12-02-038
855	Metal Collector Frame	12-01-038
856	Right Collector Hinge	12-02-036
857	Left Collector Hinge	12-02-035
858	Top Docking Bracket Assembly	12-03-034
859	Collector Frame Hardware kit: (14) 10-24 x 0.25 screws, (14) T-nuts	12-01-090
860	Seals for Metal Frame	12-02-040
861	Fabric Collector Bag Complete w/Frame	12-03-049
862	Fabric Collector Bag	12-02-049



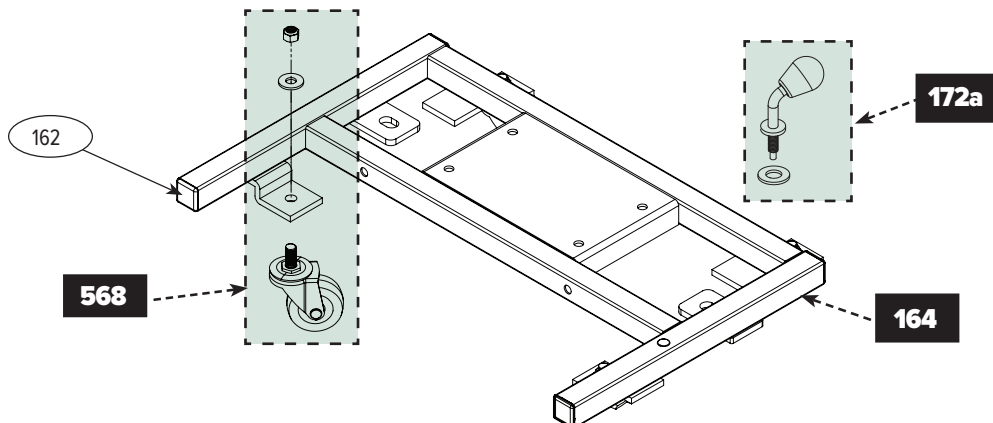
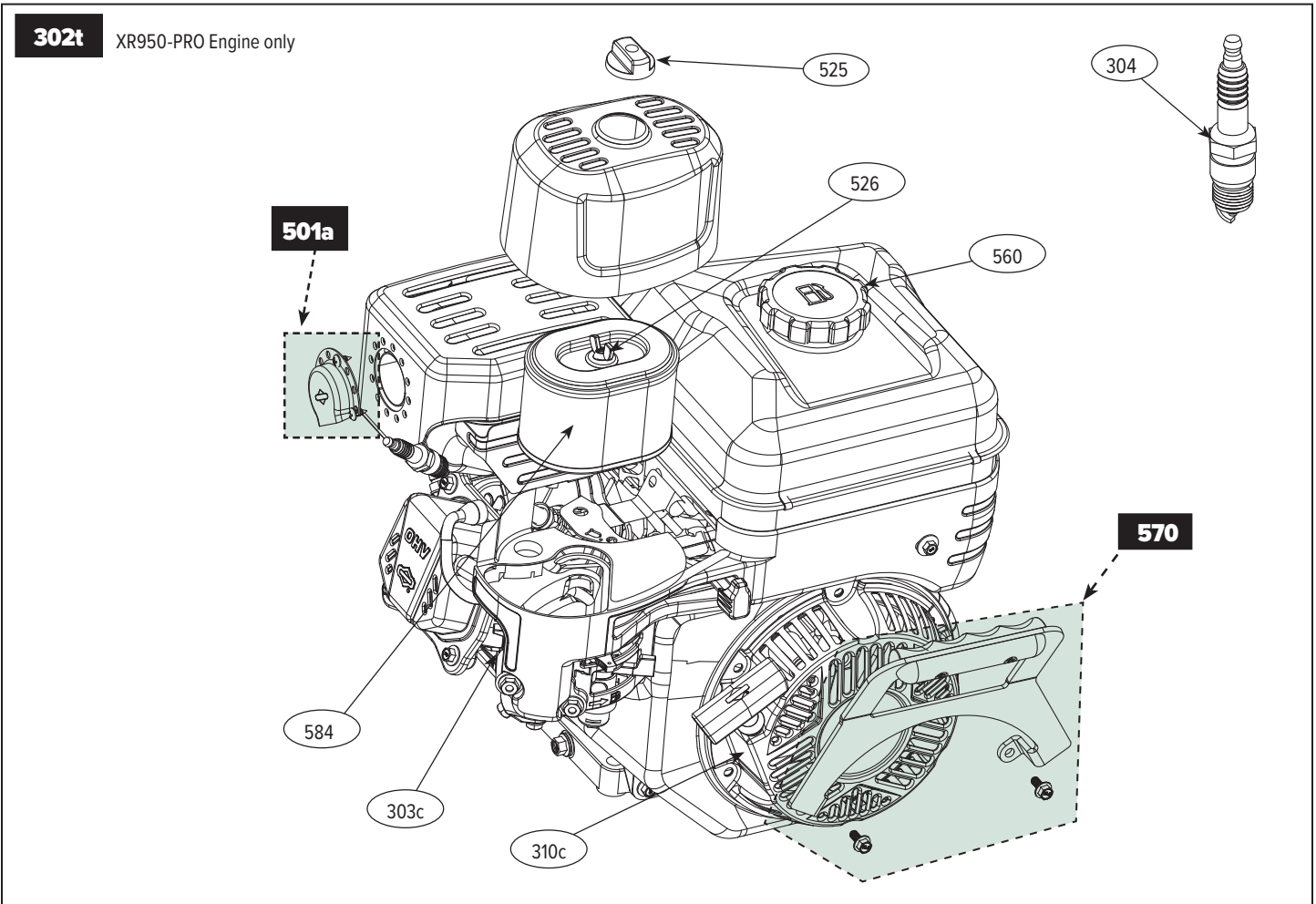
HOSE ASSEMBLY

Ref. #	Part Name	Part #
489	Latch w/hardware - set of 2	01-03-045
863	Hose Assembly Complete - SPS	12-03-001
864	Exit Chute Complete - SPS	12-02-002
865	Blower Nozzle Complete	12-02-001
866	1/4-20 x 0.75 Black oxide steel hex screw	12-01-112
867	Blower Inlet cover	12-02-057
868	1/2 x 1 Male-Female threaded hex standoff	12-01-061
869	7x6 SPS Hose	12-01-047
870	7 in Right Handed Bridge Type Band Clamp	WHBCBT-07-R



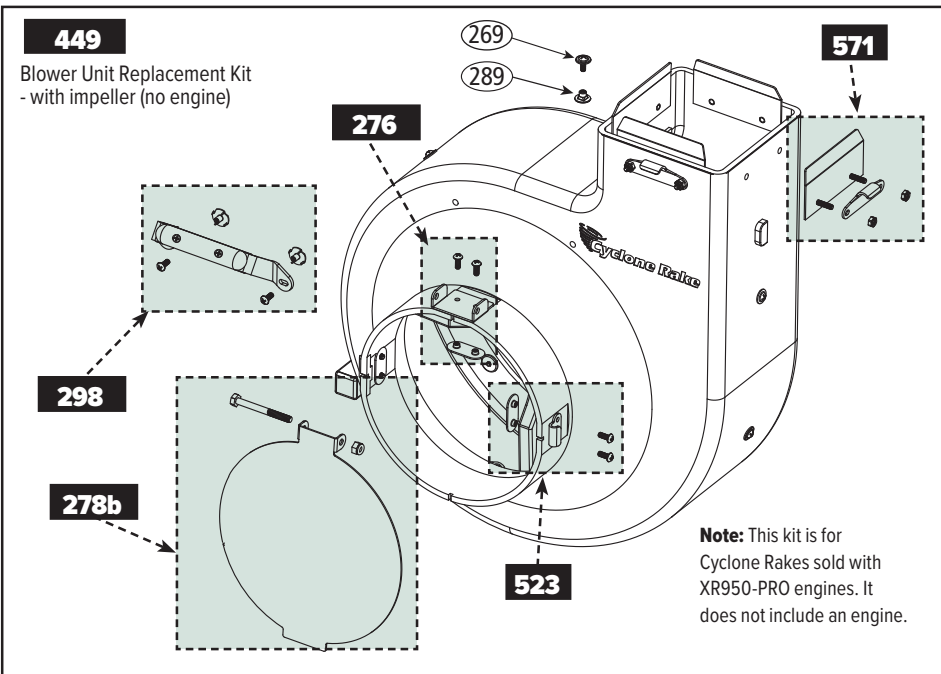
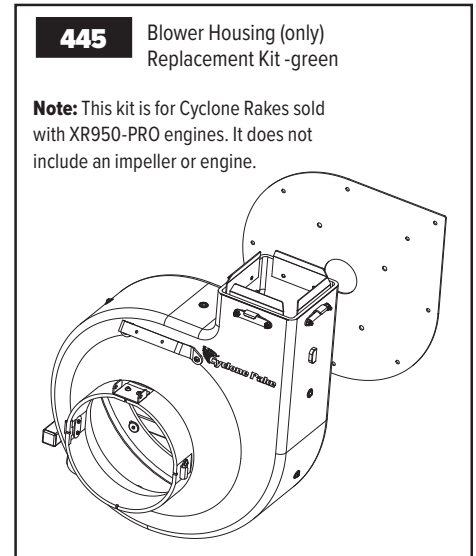
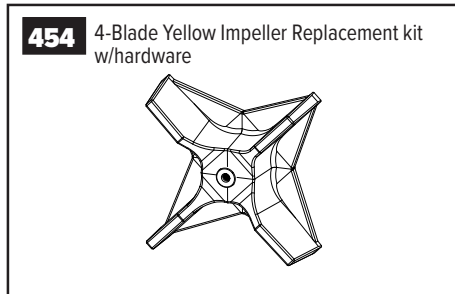
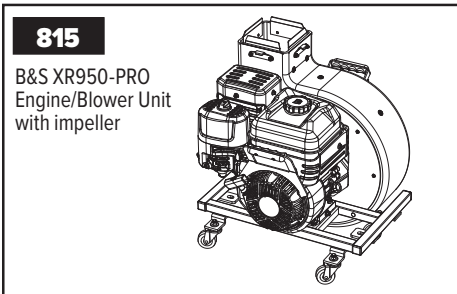
ENGINE - B&S XR950-PRO ENGINE

Ref. #	Part Name	Part #	Ref. #	Part Name	Part #
162	.....1" Cap plug - black (set of 4)	09-02-055	525	.....Air filter cover knob - plastic.....	01-01-1744
164	.....Engine frame w/cap plugs	05-02-003	526	.....Wing nut - air filter.....	01-01-1745
172a	.....Engine clamp handle w/rubber washers (set of 2)	01-02-681	560	.....Carbon canister gas cap.....	01-01-782
302t	.....Engine - B&S - XR950-PRO	04-02-302	568	.....Caster wheel w/nut & washer for engine frame (set of 4)	01-02-126
303c	.....Butterfly dipstick - XR950-PRO & Cyclonic engine.....	01-01-2151	570	.....Engine handle w/hardware, B&S XR950-PRO	01-03-2109
304	.....Spark plug, Bosch FR8DCX or equiv.....	01-01-758	584	.....Air & foam filters, B&S XR950-PRO.....	01-01-2116
310c	.....Recoil starter, B&S XR950-PRO	01-01-2113			
501a	.....Exhaust deflector w/hardware.....	01-01-1331			



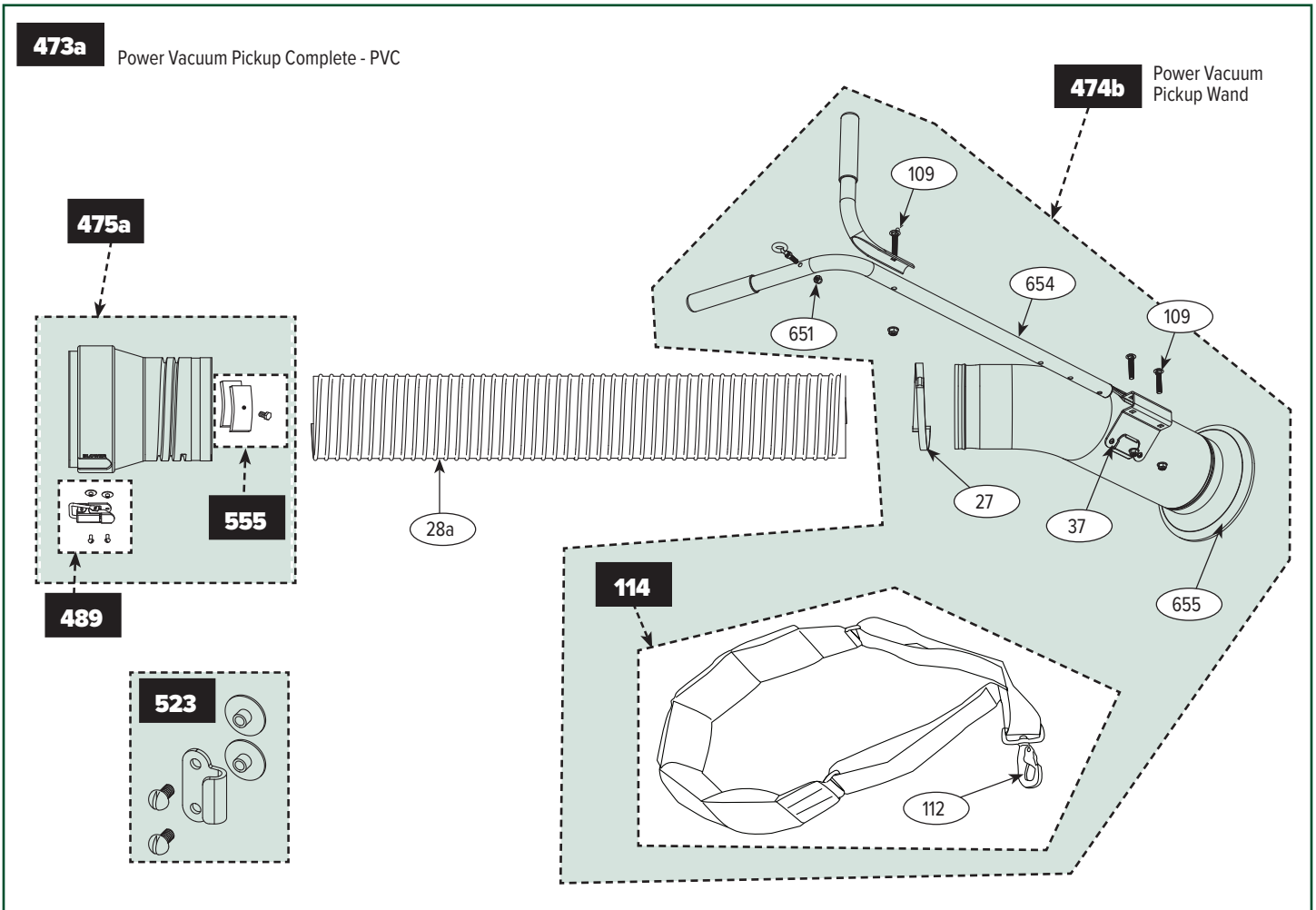
BLOWER UNIT - B&S XR950-PRO

Ref. #	Part Name	Part #
269	10-24 x 1/2" Truss head screw	01-01-563
276	Safety cover hinge bracket w/t-nut & screw	01-02-261
278b	8" Safety cover w/bolt & nut	01-02-1160
289	Blower liner nut (special part - 8 req'd)	01-01-145
298	Blower front handle w/hardware	01-03-1866
445	8" Blower housing replacement kit - std liner (no impeller)	01-03-1039
449	8" Blower Unit replacement kit, - std liner & 4-blade impeller - SPS-10	01-04-1039
454	Yellow 4-blade impeller replacement kit for XR950-PRO engine	02-03-017
489	Latch w/hardware (set of 2)	01-03-045
523	Standard strike, w/hardware (set of 4)	01-02-564
571	Exit plate w/studs, wide strike & nuts	01-02-128
815	Blower Unit Complete- XR950-PRO engine, 4-blade impeller & std liner - SPS-10	12-04-510



POWER VACUUM PICKUP

Ref. #	Part Name	Part #
27	6" Band clamp, bridge type	01-02-024
28a	15 ft.- PVC (green), 6" dia.	RPVC-06-15
37	10-24 x 1/2" Round head screw	01-01-173
54	7" Band clamp, bridge type	01-02-023
109	5/16-18 x 1.75" Carriage bolt	01-01-1034
112	Spring clip	01-01-1109
114	Strap w/ spring clip	01-04-055
473a	Power Vacuum Pickup, complete as boxed - PVC (green)	225
474b	Wand, complete w/handles & shoulder strap	01-04-2120
475a	6" x 8" Power Vacuum collar, complete w/latches	01-02-137
489	Latch w/hardware (set of 2)	01-03-045
523	Standard strike w/hardware (set of 4)	01-02-564
555	Inner & outer hose clamp w/screw	01-02-122
650	1/4"-20 Eye bolt	01-01-2129
651	1/4"-20 Acorn nut	01-01-2130
652	5/15"-18 Nylon flange nut	07-01-151
653	Side handle tube w/grip	01-02-2124
654	Handle tube w/grip	01-02-2122
655	Molded wand inlet w/bracket	01-02-2120





MANUFACTURER'S WARRANTY

CYCLONE RAKE SPS-10 - RESIDENTIAL USE

Your new Cyclone Rake SPS-10 with the Briggs & Stratton® XR950-PRO engine is covered under a bumper-to-bumper warranty for two year from the date of delivery for residential use. This covers you against any defects in materials and workmanship. This two year engine warranties is covered by Briggs & Stratton® directly. You are responsible for routine maintenance including (but not limited to) oil changes, air filters, and spark plugs. ***Collision damage and normal wear/age damage are not covered under the warranty.***

CYCLONE RAKE SPS-10 - COMMERCIAL USE

Your new Commercial use Cyclone Rake SPS-10 with the Briggs & Stratton® XR950-PRO engine is covered under a bumper-to-bumper warranty for six months from the date of delivery. This covers you against defects in materials and workmanship. This engine warranty is covered by Briggs & Stratton® directly. You are responsible for routine maintenance including oil changes, air filters, and spark plugs. ***Collision damage, and normal wear/age damage is not covered under the warranty.***

WOODLAND POWER PRODUCTS, INC.

KEEP THIS WARRANTY FOR YOUR RECORDS

REGARDING YOUR BRIGGS & STRATTON® ENGINE

Please refer to the separate Engine Operating & Maintenance Instructions included with your Cyclone Rake for detailed instructions on engine care and maintenance. Just like your new car, your engine warranty will be made void if you fail to maintain it. There are two things you must be sure to do: (1) Change the engine oil regularly. We recommend changing the oil after the first five hours of operation. Then, every 20 hours. (2) Never operate the engine without the air filter. Dust and grit can destroy it. Air filters should be changed at least once a year; more often if operating in very dusty environments or in commercial service. We also recommend **always adding fuel stabilizer to your gasoline** and replacing the spark plug once a year for peak engine performance. Be sure to use an exact replacement plug, as described in your Owner's Manual.

REPLACEMENT PARTS

We maintain a complete parts inventory and as well as manufacturer's approved engine maintenance kits available on-line at www.cyclonerake.com/store/owners-marketplace/cyclone-rake-sps-parts/ or through our technical sales team.

If you have any questions regarding your Cyclone Rake, please contact us toll-free at 888-531-7253, or visit CycloneRake.com.

If you'd like to register your Cyclone Rake Warranty online please go to:

<https://www.cyclonerake.com/cr-warranty-registration/>

or just scan the QR code.



**We'd love to hear about your experience with
Woodland Power Products, Inc. please go online to:**

www.Trustpilot.com/review/cyclonerake.com

Your Cyclone Rake Model: _____

Date Delivered: _____

ASSEMBLING YOUR CYCLONE RAKE SPS-10 VIDEOS

We want to make assembling and using the Cyclone Rake SPS-10 as easy as possible. For that reason, you will find QR codes below and throughout your manual that you can access with your smart phone to watch videos that will help walk you through the assembly process.

Again, if you don't happen to have a smart phone, don't worry about it! All our assembly videos are also in one easy spot on our website. Simply type the link below into any web browser to watch all our assembly videos.

WWW.CYCLONERAKE.COM/SPS-10-ASSEMBLY-VIDEOS/



Attaching the Lower Handlebar



Attaching the Wheels



Attaching the Bag Platform



Attaching the Platform Lock and Bag Caddy



Attaching the Upper Handlebar



Installing the Engine/Blower Unit



Filling the XR950-PRO Engine with Oil



Assembling the Collector Cap



Attaching the Collector Cap to the Handlebars



Assembling the Hose



Setting up for Blower Mode



Setting up for Collection Mode



Using Paper Collection Bags



Attaching the Power Vacuum Pickup



Removing the Collection Bags



Starting & Stopping the XR950-PRO Engine



Changing the Engine Oil on the XR950-PRO Engine



Changing the Air Filter on the XR950-PRO Engine



Replacing the Spark plug.

SERVICE NOTES

Lined area for service notes.

WOODLAND POWER PRODUCTS, INC.

72 Acton Street, West Haven, Connecticut 06516

TOLL-FREE 888-531-7253

www.CycloneRake.com