

OUTLAW XP MODELS

ZERO-TURN MOWER

OWNER'S, SERVICE & PARTS MANUAL

For additional information, please see us at
www.badboymowers.com

Bad Boy, Inc.
102 Industrial Drive
Batesville, Arkansas 72501

TABLE OF CONTENTS

Basic Information..... Section 1 (page 4)

Bad Boy Safety Guidelines Section 2 (pages 5–8)

Operation Section 3 (pages 9)

Maintenance Section 4 (page 10)

Storage and Transportation Section 5 (page 10)

Troubleshooting and FAQ Section 6 (page 11)

Controls Section 7 (page 12)

Moving In-operable Mower Section 8 (page 13)

Instrumentation Section 9 (page 13)

Mower Blade Maintenance Section 10 (page 14)

Greasing Bearings..... Section 11 (pages 14)

How to choose the right bladePage 15

Mowing TipsPage 16

SERVICE SECTION BEGINS ON PAGE 17
PARTS SECTION BEGINS ON PAGE 25
LIMITED WARRANTY PAGE 46



This manual applies to the following equipment:

Bad Boy Outlaw XP Series

Outlaw XP 5400 54" 852cc Kawasaki FX-850

Outlaw XP 6100 61" 852cc Kawasaki FX-850

Outlaw XP 7200 72" 852cc Kawasaki FX-850

Outlaw XP 6100 61" 993cc Vanguard

Outlaw XP 7200 72" 993cc Vanguard

COMMONLY USED ITEMS AND PART NUMBERS

72" Blade	Hi-Lift Fusion 038-7230-00	Gator Blade 038-5400-00	Wave Blade 038-7215-00
61" Blade	Hi-Lift Fusion 038-6080-00	Gator Blade 038-6081-00	Wave Blade 038-6090-00
54" Blade	Hi-Lift Fusion 038-0001-00	Gator Blade 038-0003-00	Wave Blade 038-5220-00
Deck Belt	72" 041-0202-00	61" 041-0178-00	54" 041-1650-00
Pump Belt	041-8411-00		
Vanguard 993cc	Oil Filter 063-8018-00	Air Filter Inner 063-8020-00	Air Filter Outer 063-8019-00
Kawasaki 852cc	Oil Filter 063-8017-00	Air Filter Inner 063-8020-00	Air Filter Outer 063-8019-00
Motor Oil	10W-30 Motor Oil – Bad Boy Synthetic Blend Motor Oil Recommended		
Hydro Oil	20W-50 Motor Oil – Bad Boy Hydrostatic Oil Recommended; approximately 4 quarts/side		
Hydraulic Filters	063-8014-00		

SECTION 1: BASIC INFORMATION

Congratulations on the purchase of your new Bad Boy Mower! The purpose of this manual is to assist operators in maintaining and operating their machine. The information and instructions in this manual can help you attain years of performance from your new Bad Boy. Also, check out our website to learn more about the Bad Boy family.

- 1.1 All Bad Boy engines use 10W-30 engine oil. For maximum protection, Bad Boy synthetic blend engine oil is recommended.
- 1.2 All Bad Boy hydraulic systems use 20W-50 engine oil (Conventional or Synthetic). Bad Boy Hydrostatic oil is recommended.
- 1.3 All Bad Boy Mowers use hi-temp multi-purpose grease. NLGI No. 2 for the grease fittings.
- 1.4 Outlaw models have 12 psi in both front and rear tires.
- 1.5 Most Briggs, Kohler, Kawasaki, and Vanguard engines hold approximately two (2) quarts of motor oil. Be careful not to over fill engine oil. Refer to the engine's service manual.

Warranty Registration

The Warranty Registration form must be completed within 30 days to validate your warranty. As the new equipment owner, you are expected to see that the form is completed and forwarded to Bad Boy, Inc., at time of delivery. Warranty is non transferable. **Warranty registration should be completed by the selling dealership using the on-line registration site.**

Model/Serial Number

Your Outlaw model serial numbers are found on the SIN plate underneath seat. Also, these numbers can assist you in the ordering of new parts when replacements become necessary.

Parts/Service

Only Bad Boy replacement parts are to be used on your mower.

Replacement parts are available through your local Bad Boy Mower Dealer. Remember to always provide the following information when ordering parts:

1. Correct part number
2. Correct serial number

All warranty repair and service must be handled through your authorized Bad Boy Mowers dealer.

To locate the nearest dealer, go to our website and click on Locate a Dealer.

EVAPORATIVE EMISSION CONTROL WARRANTY STATEMENT

Federal Evaporative Emission Control Warranty: Your Warranty Rights and Obligations

The Environmental Protection Agency (EPA), and Bad Boy Inc. are pleased to explain the evaporative emission control system's warranty on your 2015 equipment. New equipment that uses spark ignition engines for off-road use must meet stringent anti-smog standards.

The evaporative emission control system on your equipment is designed, built, and equipped so it conforms at the time of sale to the ultimate purchaser with the requirements of 40 CFR 1060. The evaporative emission control system is free from defects in materials and workmanship that may keep it from meeting said requirements. Bad Boy Inc. must warrant the evaporative emission control system on your equipment for two years provided there has been no abuse, neglect or improper maintenance. If an evaporative emission control system component does fail in a manner that would cause the equipment to no longer meet the requirements of 40 CFR 1060 within the first two years Bad Boy Inc. will replace the defective component. Your evaporative emission control system may include parts such as fuel tanks, fuel lines, carbon canisters, fuel caps, valves, vapor hoses, clamps, or connectors.



SECTION 2: MOWER SAFETY GUIDELINES

Never allow untrained people to operate this machine. It is the owner's responsibility to get training and see to it that anyone who has permission to use your machine receives the proper training. Do not mow around people. The factory discharge chute is designed to deflect debris downward, but it could be possible for debris to be thrown in a way that can cause damage to people or property. Seek additional training when possible to learn more about safety techniques and practices. **This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.**

GENERAL OPERATION

- 2.1 Read, understand, and follow all instructions on the machine and in the manual before starting.
- 2.2 Do not put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.
- 2.3 Always remain seated while operating the machine. If the machine is equipped with Roll Over Protection (ROPs), always buckle your seat belt.
- 2.4 Only allow responsible adults who are familiar with the instructions to operate this machine.
- 2.5 Clear the area of objects such as rocks, wire, toys, etc., which could be thrown by the blades.
- 2.6 Always maintain a safe distance from people and pets just prior to, and during, operation. Stop the machine if anyone enters the area.
- 2.7 Never carry passengers.
- 2.8 Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- 2.9 Never direct discharged material toward anyone. Avoid discharging material against a wall or obstruction as material may ricochet back toward the operator. Stop the blades when crossing gravel surfaces.
- 2.10 Never operate the machine without the discharge chute, grass catcher, or other safety devices correctly in place and functioning properly.
- 2.11 Slow down before turning.
- 2.12 Always disengage blades, place steering controls in neutral, engage parking brake, and remove ignition key when leaving operators seat. Never leave a running machine unattended.
- 2.13 Disengage blades when not mowing. Shut off engine and wait for all parts to come to a complete stop before cleaning the machine, inspecting the machine for damage, removing the grass catcher, or unclogging the discharge guard.
- 2.14 Always operate machine in daylight or with adequate working lights.
- 2.15 Do not operate the machine while under the influence of alcohol or drugs.
- 2.16 Watch for traffic when operating near or crossing roadways.
- 2.17 Always wear eye protection when operating or servicing the machine.
- 2.18 Always wear ear protection, such as earplugs, while mowing.
- 2.19 Use extra care when loading or unloading the machine into a trailer or truck.
- 2.20 Be alert of surroundings. Watch for rocks, stumps, mounds, depressions, and low hanging limbs or objects that could be potentially hazardous while mowing.
- 2.21 Data indicates that operators 60 years of age and above are involved in a large percentage of riding mower related injuries. These operators should periodically evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

SLOPE OPERATION

Slopes are a major factor related to loss of control and tip over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution. If you cannot back up the slope, or you feel uneasy on it, do not mow it.

- 2.22 Mow up and down slopes, not across.
- 2.23 Watch for holes, ruts, bumps, rocks, or other hidden objects that tall grass can obscure. Uneven terrain could overturn the machine.
- 2.24 Choose a low ground speed when operating the machine on a slope.
- 2.25 Do not mow on wet grass, the tires may lose traction.
- 2.26 Do not attempt to coast down a slope in the neutral position.
- 2.27 Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly, straight down the slope.
- 2.28 Keep all movement on slopes slow and gradual. Sudden changes in speed or direction could cause the machine to roll over.
- 2.29 Use extra care while operating machine with grass catchers or other attachments: they can affect the stability of the machine. Do not use on steep slopes.
- 2.30 Do not try to stabilize the machine by putting your foot on the ground.
- 2.31 Do not mow near drop offs, ditches or embankments. The machine could suddenly roll over if a wheel goes over the edge or the edge caves in.
- 2.32 Be aware of what is located at the bottom of slopes. For example: rocks water, cliffs, and roadways.

CHILDREN

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

- 2.33 Keep children out of the mowing area and in the watchful care of a responsible adult other than the operator.**
- 2.34 Maintain alertness and turn machine off if a child enters the area.**
- 2.35 Before and while backing, look behind and down for small children.**
- 2.36 Never carry children, even with the blades shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.**
- 2.37 Never allow children to operate the machine.**
- 2.38 Never leave key in the ignition, especially around children.**
- 2.39 Use extreme care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.**

TOWING

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



SERVICE:

SAFE HANDLING OF GASOLINE

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

- 2.45 Extinguish all cigarettes, cigars, pipes, and all other sources of ignition.
- 2.46 Use only an approved gasoline container.
- 2.47 Never remove gas cap or add fuel with the engine running.
- 2.48 Allow engine to cool before refueling.
- 2.49 Never fuel the machine indoors.
- 2.50 Do not store machine near open flame or source of ignition, such as a water heater or furnace.
- 2.51 Remove gas powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.
- 2.52 Never fill gasoline containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
- 2.53 Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until the fueling is complete. Do not use a nozzle lock-open device.
- 2.54 If fuel is spilled on clothing, change clothing immediately.
- 2.55 Never overfill fuel tank. Replace gas cap and tighten securely. **Tank is full when level reaches bottom of fill tube.**

GENERAL SERVICE

- 2.56 Never operate machine in a closed area where dangerous carbon monoxide fumes can collect.
- 2.57 Keep all nuts and bolts tight to be sure the equipment is in safe working condition. Never operate a poorly maintained machine.
- 2.58 Do not touch hot areas of the machine.
- 2.59 Never interfere with the intended function of a safety device or reduce the protection provided by a safety device. Check their proper operation regularly.
- 2.60 Keep the entire machine free of grass, leaves, or other debris build up. Clean up oil or fuel spillage and remove any fuel soaked debris. Failure to do so can affect the safety and functionality of the machine, as well as increase the danger of a fire due to contact with the hot surfaces of the machine.
- 2.61 Allow machine to cool before storing.
- 2.62 If you strike something with the mower, turn the mower and blades off, engage the parking brake, and inspect the machine for damage. Repair, if necessary, before resuming.
- 2.63 Never make any adjustments or repairs with the engine running.
- 2.64 Check grass catcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary.
- 2.65 Mower blades are sharp. Wrap the blade or wear gloves before servicing them.
- 2.66 Check parking brake operation frequently. Adjust and service as required.
- 2.67 Maintain or replace safety and instruction labels, as necessary.
- 2.68 Do not attempt to mount a tire without the proper equipment and experience to perform the job.

-
- 2.69 Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.
 - 2.70 Park machine on level ground. Never allow untrained personnel to service machine. Understand service procedure before doing work.

SAFETY INTERLOCK SYSTEM

Your Bad Boy mower is equipped with a safety interlock system. This system is designed to prevent serious injury or death to the operator and other people or property damage. The system consists of an operator presence switch in the seat, the parking brake, drive lever neutral position, the mower blade engagement switch, and the ignition switch.

These interlocks are vitally important and must be tested frequently. Following are instructions to test these very important safety precautions. **Note: the operator must be seated properly on the machine during these tests and the engine should have been previously allowed to warm to operating temperature.**

- 2.71 With the parking brake engaged, bring lever arms to their inward position, then attempt to start the machine (the blade actuator should be in off position); the engine should not start.
- 2.72 On a level surface, disengage the parking brake and place lever arms to their outward position, then attempt to start the machine (the blade actuator should be in off position); the engine should not start.
- 2.73 Engage parking brake and leave lever arms in outward position, put blade actuator in the on position, then attempt to start the machine; the engine should not start.
- 2.74 Next, start the engine as stated in the "Mower Operation Section", disengage parking brake, and Very Slowly begin to rise from the seat; the engine should stop.

If any of these tests fail to produce the results indicated and the problem cannot be identified, contact your Bad Boy Mower dealer or the support contacts in the rear of this manual.

ROLL OVER PROTECTION STRUCTURES (ROPS)

If your machine is equipped with ROPS, it is of utmost importance they are used properly. ROPS, when used correctly, dramatically decrease the fatality rate in instances when the machine overturns.

- 2.75 Periodically ensure the bolts that attach the ROPS to the machine are securely fastened.
- 2.76 Always operated the machine with the ROPS secured in the upright position.
- 2.77 If the surrounding environment (e.g. low lying limbs, signage, etc.) makes it impossible to mow with the ROPS upright, lower the ROPS at the hinge point, mow the area, then immediately secure the ROPS upright.
- 2.78 Upright ROPS are taller than then operators head. Be aware of this and your surrounding environment, as referenced above. The mower and operator may clear low lying items, but the ROPS may not.
- 2.79 Always wear the provided seat belt when ROPS are utilized. Failure to use the seat belt severely handicaps the safety benefits of the ROPS.
- 2.80 In the event of a roll-over, replace the ROPS before resuming use of the machine.



SECTION 3: MOWER OPERATION

Never operate the machine with faulty equipment. Always be alert of sudden changes in landscape, as the mower will react differently on slopes or embankments than it will on flat surfaces. Never operate the mower with the discharge chute open. Do not cross terrain, other than grass, with blades turning. This could cause damage to property or bystanders.

- 3.1 Place parking brake in up position
- 3.2 Drive arms must be in the “open” position. While sitting on the machine, each arm is positioned away from the operator, to the right and left. Drive arms will lock into place and must be in this position to start machine.
- 3.3 Put PTO switch in the OFF position.
- 3.4 Your machine has been equipped with ROPS (Roll Over Protection System). The operator must fasten his or her seat belt while operating the mower.
- 3.5 If machine has not been started recently, engage the choke.
- 3.6 Make sure nothing is under or around machine.
- 3.7 Place key in ignition and turn.
- 3.8 Once machine is started, disengage the choke.
- 3.9 Increase RPM by sliding the throttle to fast position, toward the rabbit.
- 3.10 Owners must become familiar with the controls before operating a zero-turn radius vehicle.
- 3.11 Start slowly and build your skill level. Have ample practice before using the machine at full capabilities.
- 3.12 Be comfortable with machine before engaging blades. Know what each component controls before using machine.
- 3.13 Your mower will perform differently on an incline /decline. Be cautious, slow down, and do not make any sudden jerking movements with control arms. The machine could lose traction on a decline or tip backwards on an incline.
- 3.14 Once you become comfortable with your Bad Boy Mower you will notice your overall mowing time will decrease.

***Avoid operating your mower on side hills of over 5 degrees,
inclines of over 10 degrees,
and declines of over 15 degrees.***

SECTION 4: MOWER MAINTENANCE

***Check each and provide maintenance when needed.*

DAILY

- 4.1 Check Engine Oil
- 4.2 Check Engine Air Filter
- 4.3 Tire Pressure and Wheel Lug Nuts
- 4.4 Inspect Blades

Within FIRST five hours of usage, change engine oil and filter

EVERY 30 HOURS OF USAGE

- 4.5 Grease Machine

EVERY 50 HOURS OF USAGE

- 4.6 Replace Engine Oil and Filters

Replace filters once a year if under 50 hours

Check air and fuel filters more often in dry, dusty conditions

Within FIRST 50 hours of usage, change hydraulic oil and filters

EVERY 250 HOURS OF USAGE

- 4.7 Change Hydraulic Fluid and Filters
- 4.8 Refer to manufacturer manual for specific information on maintenance schedules.

SECTION 5: MOWER STORAGE & TRANSPORTATION

- 5.1 Keep machine from collecting debris by storing in a covered area while not in use.
- 5.2 Fuel can harm your machine if left for more than 30 days without changing, especially if the fuel contains ethanol. Never use fuel with more than 10% ethanol by volume. E-15 is not permitted.
- 5.3 Disconnect the negative battery cable when machine will be stored for more than 30 days.
- 5.4 Always secure machine properly when transporting machine.
- 5.5 Do not load machine on trailer with blades engaged.
- 5.6 Do not use ramps to load the machine.
- 5.7 Make sure Parking Brake is in “up” position.
- 5.8 In wet conditions tires may spin while loading / unloading. If necessary, wait for dry conditions before loading / unloading.
- 5.9 Make sure mode of transportation is suitable to bear the weight of mower.
- 5.10 Deck height should be set at maximum before attempting to load.
- 5.11 Secure mower with at least two straps capable of securing weight of mower.

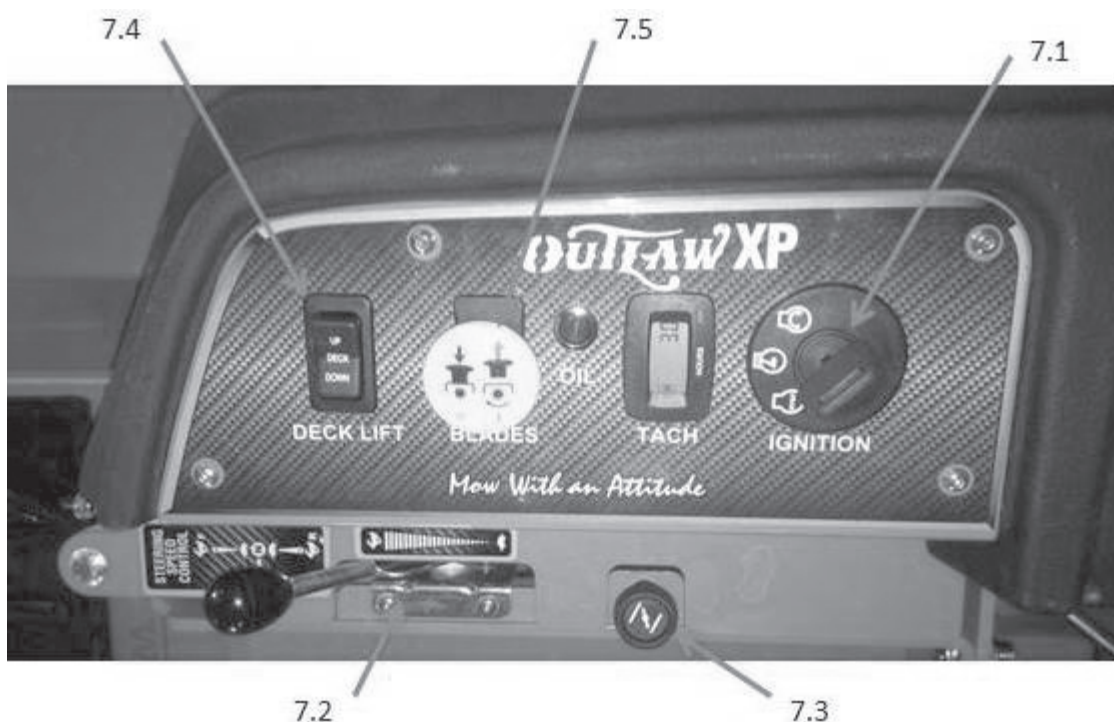


SECTION 6: TROUBLESHOOTING

- 6.1 **Q:** *How do I prevent an uneven cutting pattern and increase the quality of cut?*
- 6.1 **A:** Check tire pressure, check blade sharpness (replace blades or sharpen at least once per year or when needed), make sure blades are tightened properly, check spring and belt tension, check the underside of the deck to ensure the mower deck is free of grass build-up and debris, make sure your machine is at full throttle, and vary your mowing pattern each time you cut your grass.
- 6.2 **Q:** *What should I do if my mower won't start?*
- 6.2 **A:** Check battery charge and connection (grounds), check your fuel (make sure fuel is less than 30 days old and contains no water), make sure your spark plug is in good condition and spark plug wire is attached, and make sure air filter is clean (a dirty filter makes it more difficult for the engine to draw air). Check the integrity of the 25 amp main fuse; also check for any bare wires and/or bad connections.
- 6.3 **Q:** *What should I do if the blades won't engage?*
- 6.3 **A:** Make sure the safety switch is plugged in on the bottom of seat. Check the underside of the PTO engager to ensure the plug is secure at switch.
- 6.4 **Q:** *What type of fuel is recommended for my mower?*
- 6.4 **A:** We recommend that you use a name brand fuel to ensure quality. Use fuel with an octane rating near 87. Higher octane fuels offer no benefit. By law, E-15 fuel is not permitted. Usage of E-15 will result in premature engine failure.
- 6.5 **Q:** *Do you offer touch-up paint for your mowers?*
- 6.5 **A:** Touch-up paint is available. Contact your local dealer for more information.
- 6.6 **Q:** *How durable is the electric deck lift?*
- 6.6 **A:** The actuator which controls the deck height is designed for moving loads of up to 1000 pounds and has a static holding capability which exceeds 3,000 pounds. Our 1/4" deck weighs approximately 250 pounds which is only 25% of working capability.

SECTION 7: CONTROLS

- 7.1 **Ignition Switch**—Bad Boy mowers have a three position ignition switch: off, run, and start. With key inserted, rotate it clockwise to START position and release key when engine starts. Switch will automatically return to the RUN position.
- 7.2 **Throttle Control**—A cable is connected to the engine throttle for controlling engine speed. Move lever forward to increase engine rpm, move lever backward to decrease engine rpm.
- 7.3 **Choke Control**—A cable is linked to manually operate the engine choke. When the lever is in the down position, the choke is in the off (run) position. When the lever is pulled up, the choke is in the on (start) position. Do not operate the machine in the on (start) position. The choke lever is behind the throttle control.
- 7.4 **Deck Height Adjust**—XP has a rocker switch for deck height adjustment.
- 7.5 **Blade Engage Switch**—This switch engages the blades. Pull the switch up to engage; push the switch down to disengage.
- 7.6 **Parking Brake (not pictured)**—This lever engages the parking brake; it is located to the operator's left. Pull back fully to engage the parking brake; push forward to disengage.
- 7.7 **Control Arms (not pictured)**—These levers control the mower's speed and direction (left-right and forward-reverse). Pushing the arms to their outward-most position places the mower in neutral.





SECTION 8: MOVING INOPERABLE MOWER

- 8.1 Do not tow machine. Use a winch to load on a trailer for transporting.
- 8.2 **ATTENTION:** RETURN BYPASS VALVES TO OPERATING POSITION BEFORE RUNNING MOWER FOLLOWING REPAIRS.
- 8.3 If it is necessary to move mower when the engine is inoperable, the hydraulic drive pumps are equipped with bypass valves. Before moving the mower, turn the bypass valves counterclockwise one-half to one revolution. The bypass valve bolts are located on the side of each pump and are easily identified by the hole through the bolt heads.
- 8.4 Your Bad Boy Mower Weighs: **OUTLAW XP SERIES: 1180—1310 lbs**
*** Weights fluctuate with the addition of accessories.
- 8.5 As you can see by the weights of the machines, you shouldn't ever try to push or pull a Bad Boy Mower by hand. This could cause serious bodily injury.
- 8.6 Hopefully, you'll never need to use this section of the manual. However, if you do, use extreme caution when moving machine!

SECTION 9: INSTRUMENTATION

- 9.1 **Electronic Hour Meter**—Registers Hour increments up to 9,999.9 total hours. This meter records the cumulative time the engine is running.
- 9.2 **Engine Oil Light**—Alerts the user of a low oil level situation when lit.

SECTION 10: MOWER BLADE MAINTENANCE

- 10.1 Check mower blades after each use. This is essential for maintaining well-groomed turf. Keep the blades sharp. If a dull blade is used for cutting, the grass will tear rather than cut. This could damage the grass leaving a brown frayed top on the grass within a few hours. A dull blade will also require more power from the engine.
- 10.2 NEVER attempt to straighten a bent blade by heating. NEVER attempt to weld a cracked blade. The blades can break and cause serious injury or death.
- 10.3 NEVER work with blades while engine is running or deck clutch is engaged.
- 10.4 ALWAYS place deck clutch in DISENGAGE position while performing maintenance.
- 10.5 Use blocks when you MUST work under mower.
- 10.6 ALWAYS wear thick gloves when handling blades.
- 10.7 ALWAYS check for blade damage if mower strikes rock, branch, or other objects that could potentially damage the blade.

***(REMEMBER: NEVER CHECK BLADE WHILE ENGINE IS ON!
NEVER CHECK BLADES WHILE BLADES ARE ENGAGED!)***

SECTION 11: GREASING THE BEARINGS

- 11.1 Park the machine on a level surface and disengage the blade control switch.
- 11.2 Move the motion control levers outward to the neutral position, engage parking brake, stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
- 11.3 Grease Type: NGLI grade #2 multi-purpose gun grease. Grease the front caster pivots.
- 11.4 Clean the grease fittings with a cloth. Scrape any paint off the front of the fitting(s).
- 11.5 Connect a grease gun to each fitting. Pump grease in fittings until grease begins to seep out of the bearings. Wipe up excess grease.
- 11.6 Refer to service manual section for grease fitting locations.



HOW TO CHOOSE THE RIGHT BLADE

Essentially there are only TWO basic styles of mowing blades used or approved for use on our current products:

- 1) The standard style of mowing blade is essentially designed for cutting grass and effectively discharging the clippings out from the deck to fall onto the lawn or to be captured in a grass collection system. Standard blades are also referred to as “2-in-1” (discharging & bagging) or “high-lift” blades (because they are designed to create a higher-lifting airflow).
- 2) Mulching blades generally have a more curved style surface and frequently include extra cutting surfaces along the blade edges. These blades may also come in a “+” design (which is actually two individual blades arranged in a perpendicular fashion to enhance mulching). The “+” blades are usually found on older style mowers; newer ones utilize blades with more advanced mulching technology. Mulching blades may also be referred to as “3-in-1” (mulching, discharging & bagging) or “all-purpose” blades.

Bear in mind that the re-circulating airflow design of 3/1 blades makes them less efficient at discharging grass clippings than a standard 2/1 blade. As with most all-purpose tools, there is some give and take as opposed to using a tool designed for a more specific purpose.

If you’re experiencing less-than-desired cutting or discharging performance with a 3/1 blade, you may want to check into using a 2/1 blade. Conversely, if you’re using a 2/1 blade and want to mulch clippings, you should see about the availability of mulching blades or a mulching kit.*

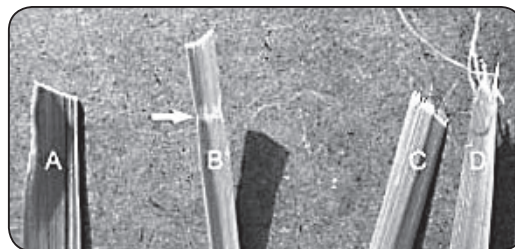
The type of blade installed on a new mower is a decision the retailer makes for each model of mower, based on the expected needs of most customers. If you’re unsure of which blade is on a particular model, inspect the blade. Blades have part numbers stamped into them. Then compare these part numbers with the unit’s Operator’s Manual or Parts List.

It is true there are many other styles of blades available. But since we don’t manufacture or recommend using these other aftermarket styles, we will leave them out of this discussion. Should you want more information on special application or aftermarket blades, you should contact the companies that make these products. NOTE: Customers using non-OEM blades do so at their own risk. The use of unapproved (non-OEM) blades may void any or all of the mower and engine factory warranties.

* **MULCHING KITS** – These generally consist of mulching blades and a mulching plug (which closes off the discharge opening to keep the clippings contained under the deck for re-cutting) plus any necessary hardware for installation. Please check with your parts distributor regarding the contents of a particular mulching kit.

MOWING TIPS:

- Mow header strips at the ends of the lawn and around flower beds first. Make them wide enough that you can turn the mower around in the already mown section. Then mow back and forth between these header strips overlapping each lap by about 1/8 the width of the mower's deck.
- Don't cut your grass too short, particular for cool season grasses. Higher heights usually provide for a deeper root system, looks better, and is less likely to have weeds invading, particularly crabgrass.
- Don't remove any more than one third of the grass leaf at any one cutting. If circumstances arise that a lawn gets too tall and you just have to lop off a bunch to get caught up, bite the bullet and break it down into several mowings to get caught up with 3 or so days between cuttings.
- **NEVER SCALP YOUR LAWN.** Scalping severely damages the root system to such a degree that it may die.
- Avoid mowing when the grass is wet or when it's dark
- Avoid throwing grass clippings into the street and driveway where they can be washed into the sewer system. After mowing, clean up driveway and walkways.
- When mowing remove only a third with each cutting (except for the first mowing of the season when it's ok to remove more). You can safely leave clippings that will quickly decompose and add nutrients back into the soil. Contrary to popular opinion, grass clippings do not add to thatch buildup. Grass blades are made up of about 75% water.
- Mow your lawn in a different direction with each mowing, especially with lawns of shorter grass types. Altering the direction ensures a more even cut since grass blades will grow more erect and less likely to develop into a set pattern.
- Keep your mower's blade sharp, which means having it sharpened several times during the mowing season. Keep several blades around so you'll always have a sharp one on hand. Sharp blades cut the grass cleanly and help mulch clippings into small pieces which break down quickly.
- Don't forget to change your mower's oil at least once during the mowing season. For brand new mowers, change the oil after about 5 hours of operation during the initial break-in period.
- At the end of the mowing season use a fuel stabilizer in the remaining gasoline
- In the spring, don't use that old gas unless you properly used a fuel stabilizer, it can cause a number of problems. Better to use fresh gasoline to begin the new mowing season.
- **Leaf blade A** demonstrates what a leaf blade should look like after mowing with a sharp blade.
- **Leaf blade B** demonstrates a leaf blade that was injured by a dull mower blade.
- **Leaf blade C** was cut by the mower but indicates that the mower blade is not sharp enough. The shredded white tissue protruding from the leaf blades C and D is the vascular tissue of the plant.
- **Leaf blade D** has been mown for quite some time with a dull mower blade.



The leading edge of the blade enclosure is equipped with an adjustable guard. When the guard is set to a higher position, it allows incoming grass to remain in a more upright position just prior to being cut. The result is a higher quality cut.

To bag or mulch?

Grass clippings do not contribute to thatch buildup or increase the chances of disease. If you mow your lawn at the right height, without removing any more than 1/3 of it's total height, clippings will quickly breakdown without a trace. These clippings contribute additional nitrogen and other nutrients to the soil and supply it with additional organic materials. Clippings from a 1000 sq. ft. lawn can add as much as 1 - 2 pounds of nitrogen back into the soil. If you have a compost pile, then you may want to bag your clippings occasionally to add much needed green-matter to the compost pile. Make sure it is mixed thoroughly with brown matter to avoid a strong ammonia odor. **DO NOT COMPOST CLIPPINGS** after applying any weed control or weed-feed type product. Before adding clippings to the compost pile wait at least 3 mowings after these products have been applied.





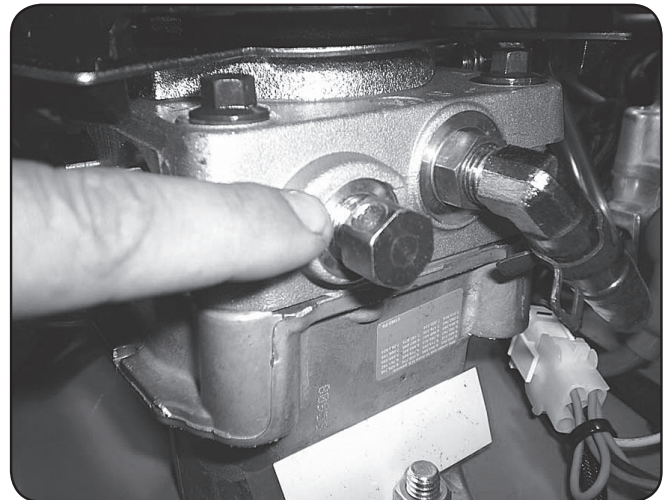
SERVICE SECTION

SECTION 1: HYDROSTATIC SYSTEM

To change hydro oil on the Outlaw XP, remove oil return lines from side of hydro tank and place them in a disposable oil container. Start and run mower until oil level is reduced to about 2" of oil remaining in the tank. Do not allow air to enter the oil lines in the bottom of the tank. Keep in mind that only about 75% of the hydro oil can be changed at a time. Use only 20w-50 motor oil in the hydro system (Bad Boy Hydrostatic oil is recommended). Bad Boy recommends that the hydro oil and filters be changed within the first 50 hours of use; then at intervals of 250 usage hours. Each side requires approximately four quarts of oil to refill the system.

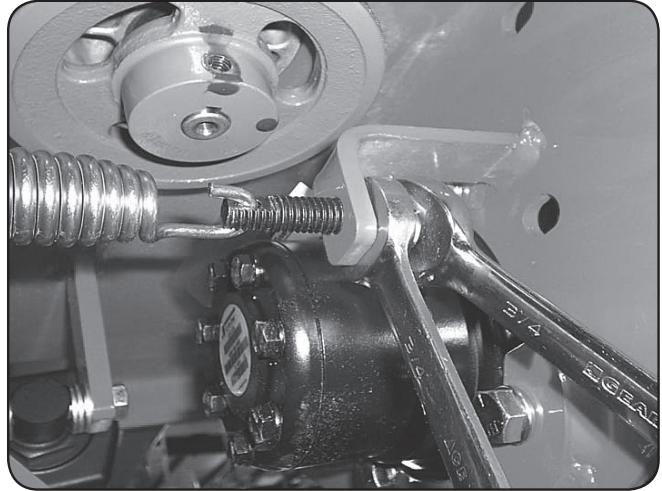
Change hydro oil filters by unscrewing them from the filter head. Fill new filters with 20w-50 motor oil before installing. Use only Bad Boy replacement filters. Use of any other filters will result in damage to the hydro system and void the warranty.

Once the system is refilled with oil, lift rear of mower until tires are off the ground; then chock the front caster tires. Loosen the bypass valve bolt (pictured) by one-half to three-quarters of a turn. Next, with the bypass valves open, slowly move the drive arms forward and rearward. Keep away from the rear tires: they will be rotating and present a safety hazard. After the drive arms have been pushed forward and rearward five times, turn the engine off and close the pumps' bypass valves. Check the oil level in each hydro reservoir after the first 15 minutes of subsequent usage; it may be necessary to add more oil to the reservoirs.

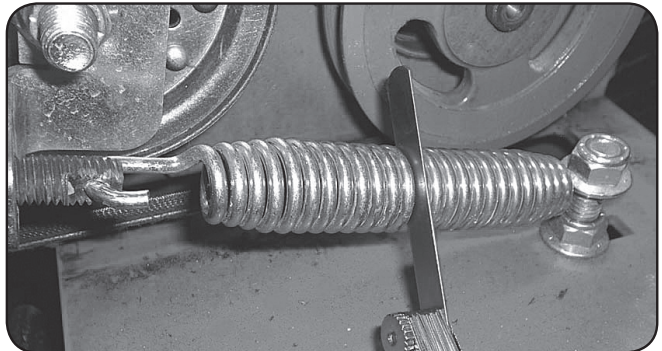


SECTION 2: DRIVE BELT

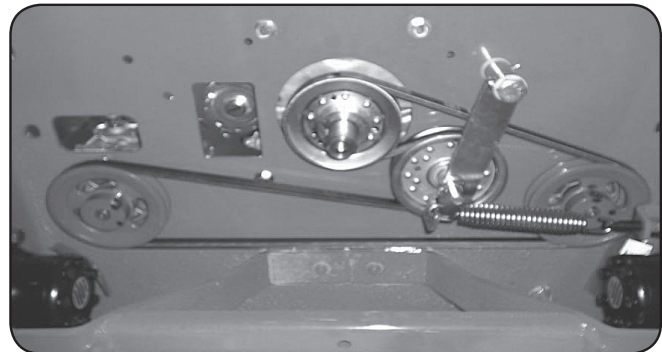
Shown above is a typical pump belt tensioner for Outlaw models.



Factory setting is about .030" (about the thickness of a credit card) between coils as shown.



Shown to the right is a typical pump belt layout for most models.





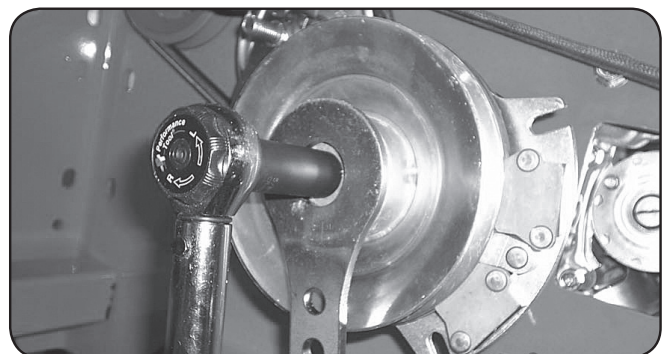
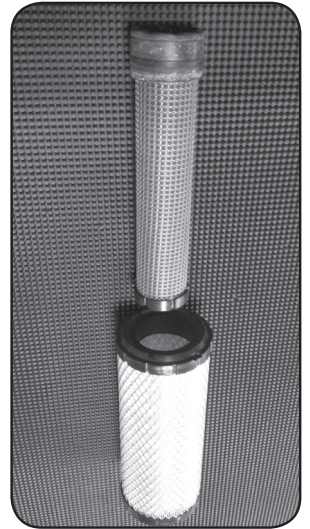
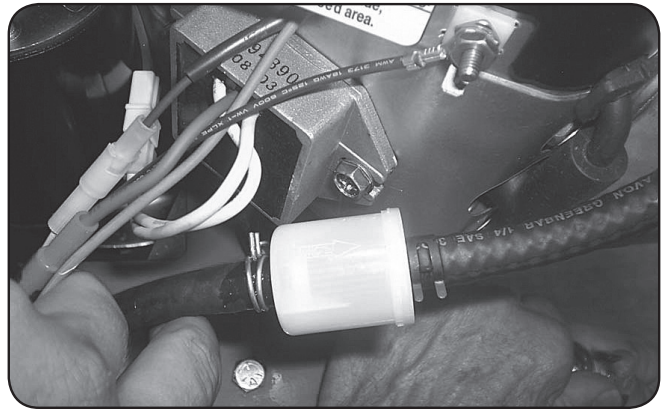
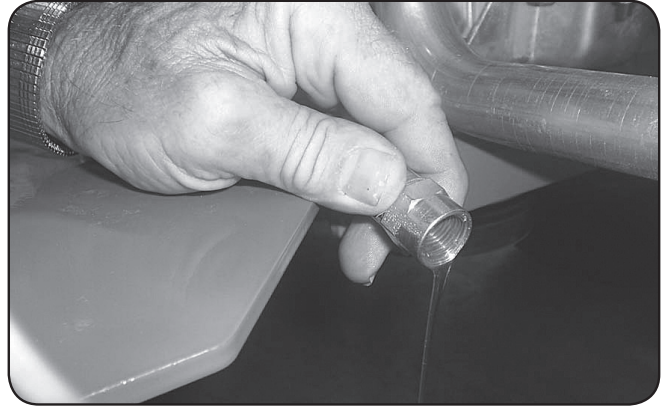
SECTION 3: ENGINE

Most models have a drain hose installed on the engine for easier oil changes. Bad Boy recommends that the oil and filter be changed at intervals of 50 usage hours or yearly, whichever occurs first. Consult your engine owner's manual for exact oil capacity. Bad Boy 10W-30 synthetic blend engine oil is recommended for maximum protection.

The fuel filter is located in the fuel line about 12" from the carburetor on the side of the engine. Replace the filter yearly. Prior to the removal of the old filter, note the direction of fuel flow as indicated on the filter. Have towels readily available in order to quickly remove any fuel leakage. Always use new hose clamps and ensure the security of the new filter by lightly pulling on each hose. Always perform maintenance outdoors or in a well ventilated area. Do not smoke or allow any open flames in the vicinity of any maintenance activities.

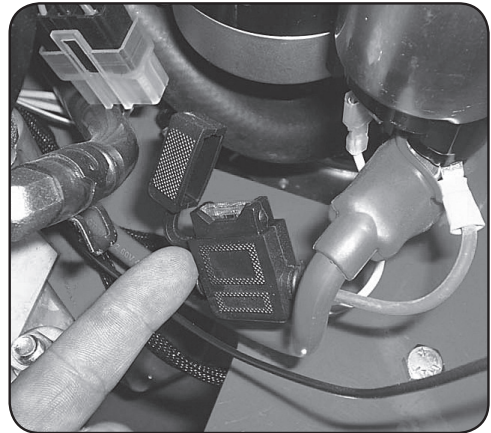
These engines are equipped with Donaldson® air filters. These advanced technology filters utilize two air cleaner elements to better protect the engine and extend its life. The filter is the engine's only defense against damaging foreign particles; it is very important to inspect the air filter elements before each use. To access the air filter elements, unhook the two latches pictured to the right. Remove the filter elements and tap each one on the side in order to remove debris. Do not blow the filters out with compressed air, doing so will greatly reduce the air filter's effectiveness. Replace yearly; more often in dusty environments.

Torque the clutch bolt to 50 ft. lbs. on all models. Retorque at every oil change. (All Models)



SECTION 4: ELECTRICAL SYSTEM

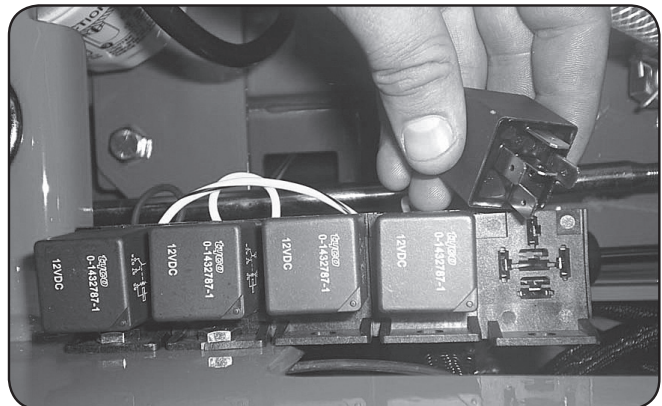
The 25 amp main fuse is located approximately 3" from the engine's starter. A blown fuse usually indicates a problem within the electrical system or an electrical component. Never replace a fuse with one of a higher amperage rating or 'bypass' a fuse in any way. Doing so creates a significant fire hazard and can cause severe damage to the mower's electrical components. If the fuse is repeatedly blowing, contact your Bad Boy dealer.



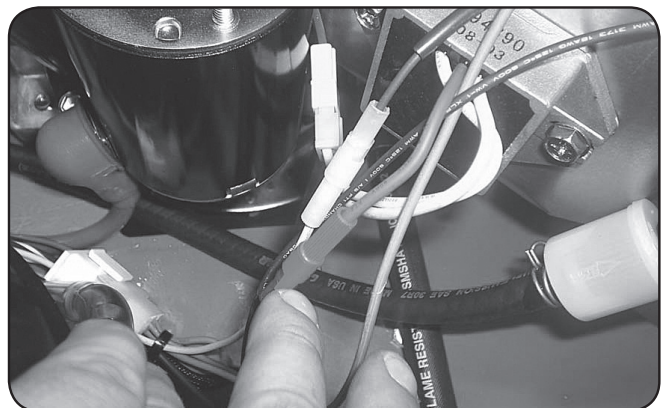
Always check the condition of the wiring harness ground cable. Ensure that the ground is connected, clean, and tight.

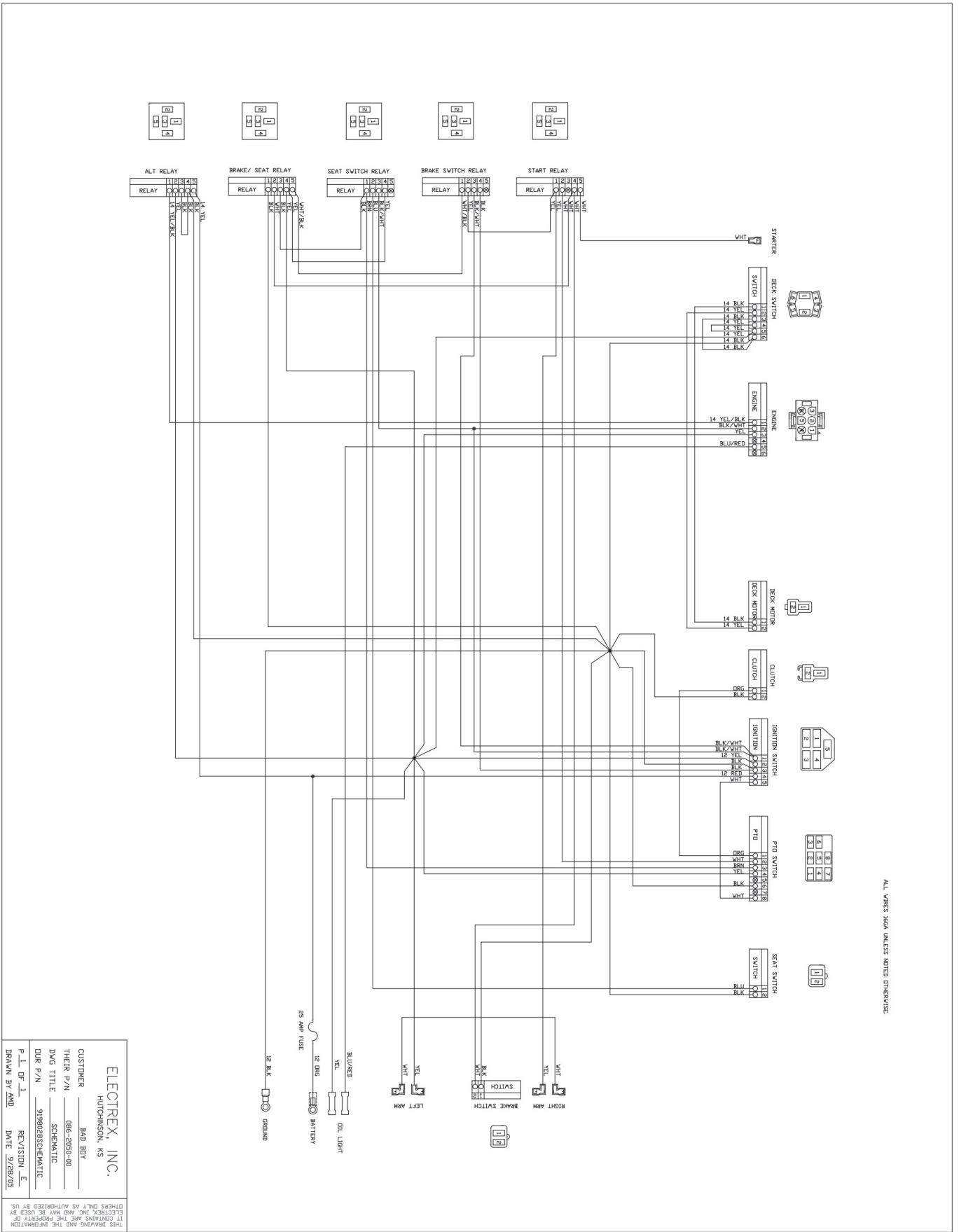


Check the condition and connection of the relays located under the seat. Ensure that they are clean and connected. Make sure that wire terminal ends have not been pushed out of the relay block.



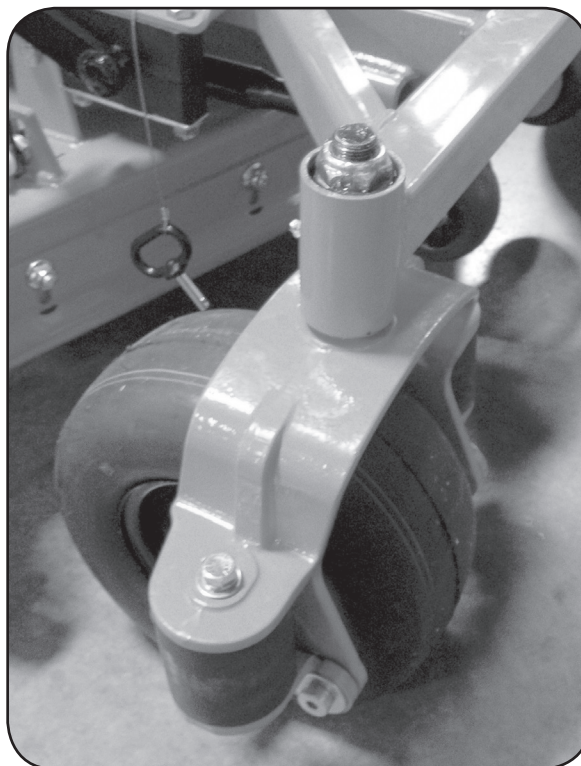
On most models, the red wire coming out of the engine is the charging wire from the alternator. Check for 13.6—14.2 volts DC at this wire with engine at full throttle.





SECTION 5: FRAME

The front fork nuts require a torque of 40ft-lbs. While applying this torque, turn the fork itself to ensure no damage is done to the bearing. This operation is only necessary if a repair requires it.



Torque rear wheel lugs to 65-75 ft. lbs. Re-torque at every oil change and check at every mowing.



There is one grease fitting in each front wheel and one in each front caster bearing housing. Grease at every engine oil change.

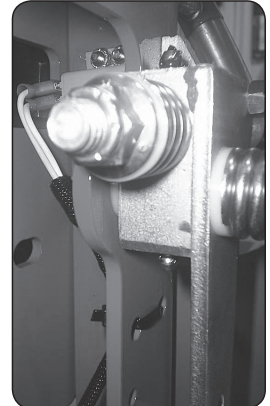
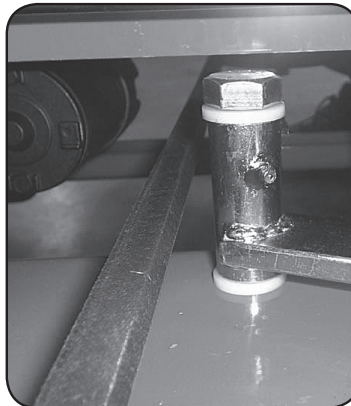
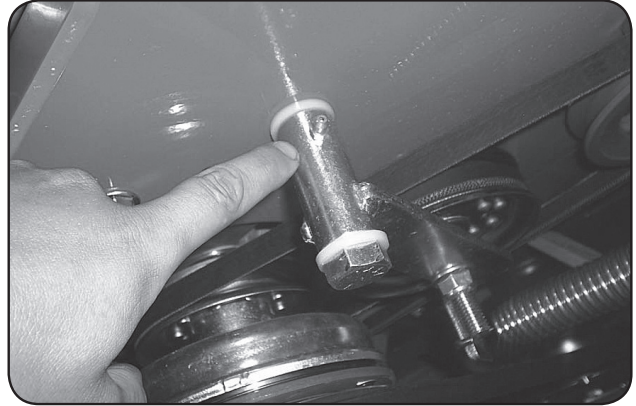




The pump belt tensioner is located under the engine and has a grease fitting at its pivot point. Grease at every engine oil change.

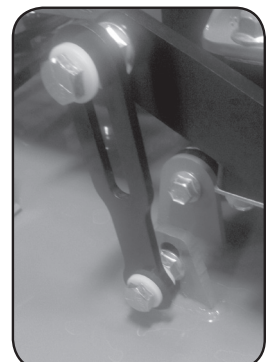
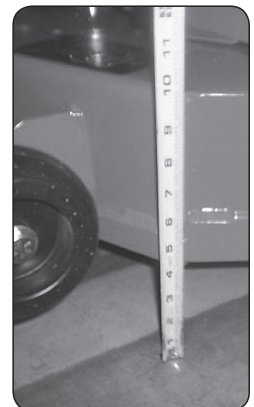
The deck belt tensioner is located at the rear of the deck and has a grease fitting on its pivot point. Grease at every engine oil change.

The control arm blocks have grease fittings located on the top of each block. Grease one time a year.

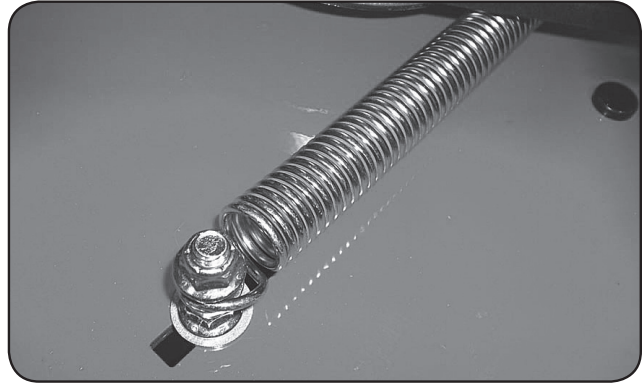


SECTION 6: CUTTING DECK

Deck belt removal: (1) Remove ignition key. (2) Slide the tension adjustment bolt to its most rearward position in order to provide the lowest belt tension possible. (3) Raise the deck to its highest position. (4) Remove either the right or left blade pulley cover. (5) While lifting up on the belt (as shown in the photograph), rotate the pulley until the belt is free of the pulley. Exercise caution while performing this step as fingers can easily become caught between the belt and pulley. For optimal cutting performance, the blade enclosure should be level from right to left and have a slight forward tilt downward. To ensure proper deck orientation, perform the following steps: (1) Move the mower onto a flat surface such as a concrete pad. (2) Ensure all tires are inflated to the recommended pressure. (3) Measure the distance from the ground surface to the bottom of the blade enclosure (as indicated in the photograph) at each of the four corners. The rear corners should be equal in ground clearance as should the forward corners. The forward corners should be approximately 1/8" lower than the rear corners. If adjustment becomes necessary, perform the actions described below in order to return the mower to its optimum cutting state. The deck brackets (pictured, 4 total) are the principal means for deck reorientation. Begin the adjustment by leveling the deck; both front to back and left to right. This is accomplished by shifting the position (upward/downward) of the deck brackets within the vertical slots located on their respective deck tabs. Once the deck is parallel with ground, the proper forward tilt must be obtained. This can be achieved by re-adjusting the forward or rearward deck bracket pair. If necessary, the two turnbuckles may be used for slight position refinements.



The deck spring tension is critical. If the tension is too high, premature failure of the deck belt and blade spindles can occur. If the tension is too low, the belt can 'jump off' or slip on the pulleys. This results in reduced cut quality and early belt failure. With the deck up, the spring coil gap should be about .025" - .030" (about the thickness of a credit card). Spring tension adjustments can be made by sliding the bolt shown above forward or backward in the slot of the deck. Belt tension should be 50- 55 lbs with the deck at its highest setting.



The blade in the foreground (see photo) was utilized long after replacement was required. In addition to a decline in cut quality, failure to replace a worn or damaged blade creates a major safety hazard. Bad Boy recommends that blade sharpening be performed by a professional.

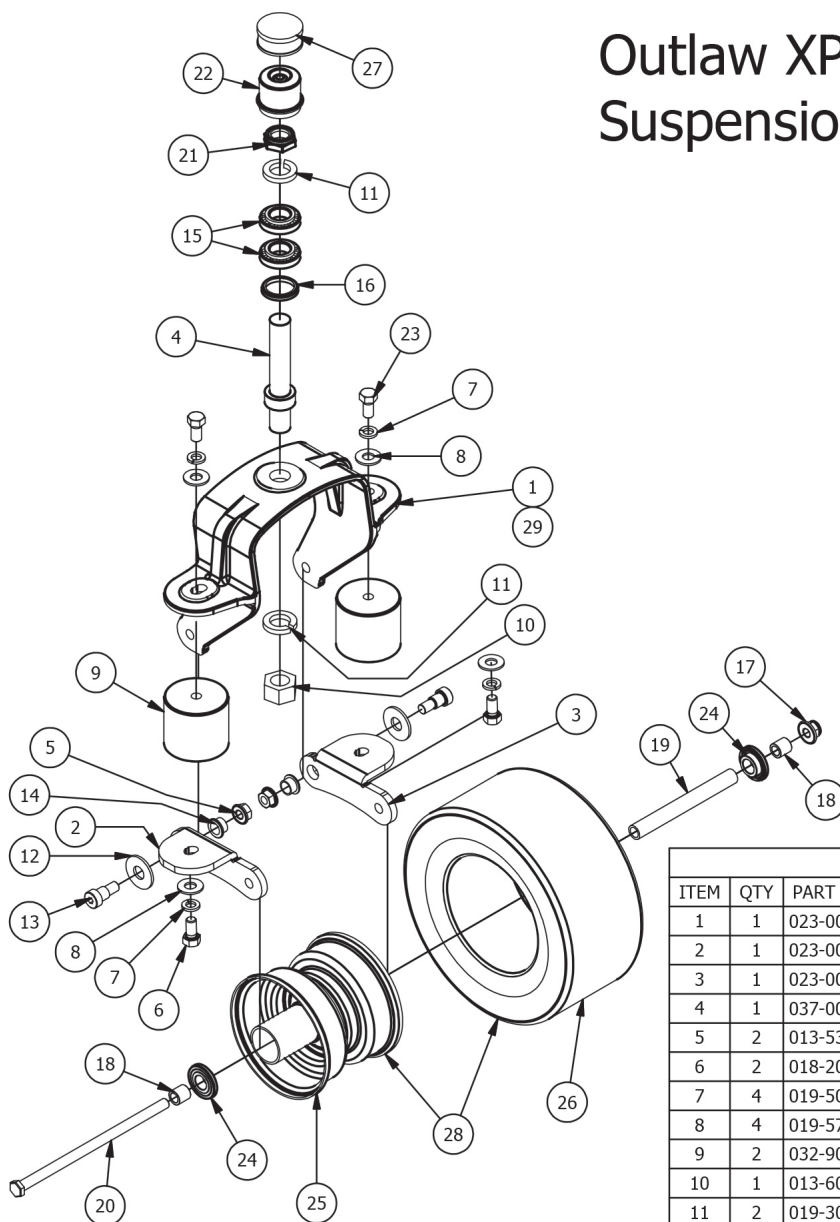


To change blades, it may be easier to use a piece of wood to keep the blade from turning so that the bolt can be loosened. **Bolts used have right-handed threads.** Re-torque the blade bolts to 90-110 lbs. The blade spindles contain two sealed ball bearings inside the top and bottom of the spindle. The bearings are replaceable for a more cost effective repair.



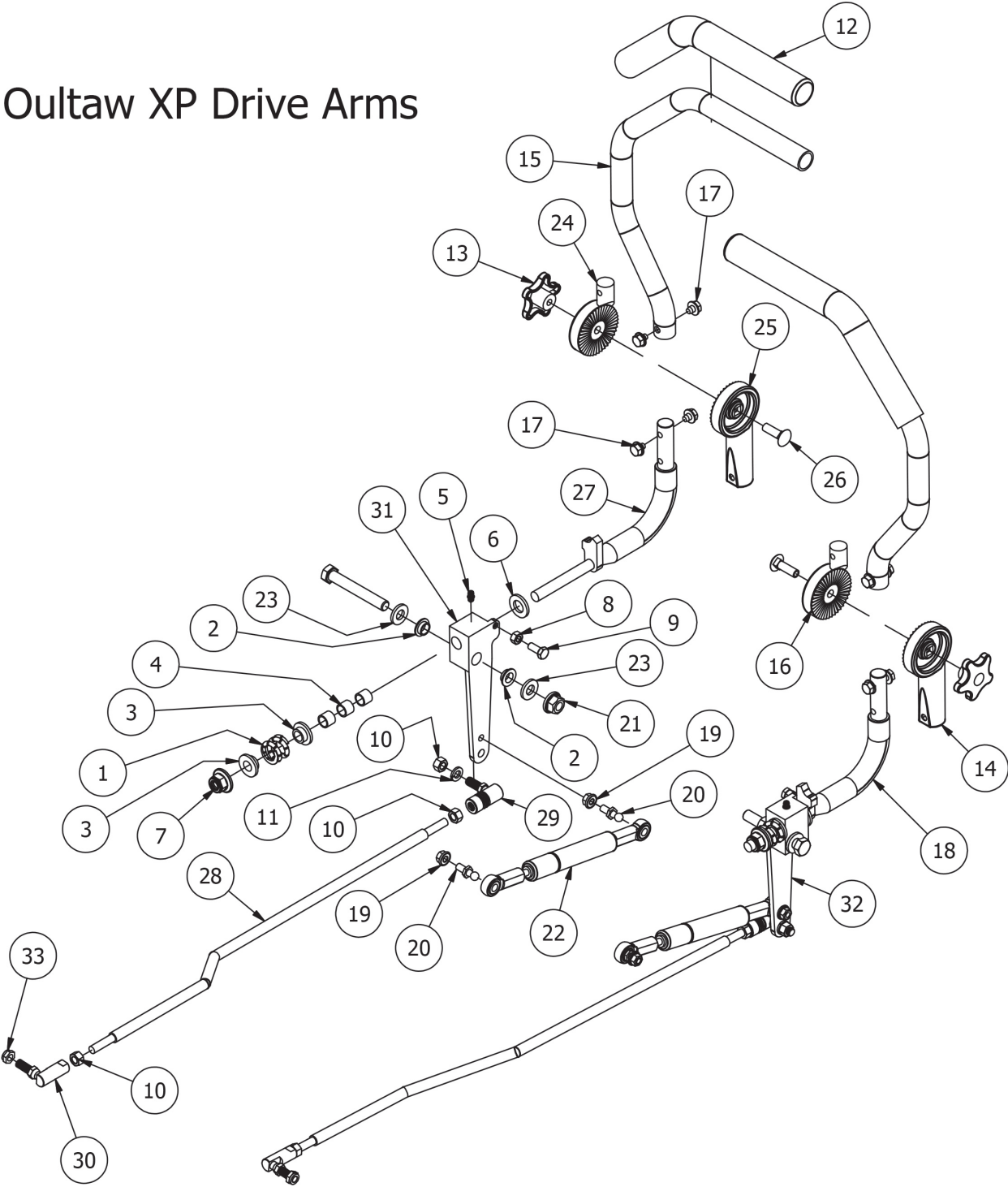


Outlaw XP Suspension Fork Assembly



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	023-0020-00	Suspension Fork Top/Side Combo
2	1	023-0012-00	Suspension Fork - Bottom Left
3	1	023-0013-00	Suspension Fork - Bottom Right
4	1	037-0010-00	Front Suspension Fork Spindle
5	2	013-5300-00	1/2" Flange Nut
6	2	018-2030-00	1/2" x 1" Hex Bolt
7	4	019-5007-00	1/2" Lock Washer
8	4	019-5702-00	1/2" Washer (Grade 8)
9	2	032-9002-00	Vibration Mount- Red Dot
10	1	013-6016-00	1" Fine Thread Nut
11	2	019-3000-00	1" Lock Washer
12	2	019-5038-00	5/8" Flat Washer
13	2	018-3001-00	5/8" x 5/8" Shoulder Bolt
14	2	032-5052-00	Bronze Bushing - SF - 2024-8
15	2	010-7001-00	Bearing
16	1	012-7003-00	Seal
17	1	013-8050-00	1/2-13 Nylon Flange Nut-Orange
18	2	025-5203-00	3/4 OD x 1/2 ID x 3 1/4 Length
19	1	025-5202-00	Front Wheel Spanner
20	1	018-3002-00	1/2" x 10" Bolt
21	1	013-9004-00	1" Fine Thread 1/2 Nut
22	1	014-7005-00	Dust Cover
23	2	018-2080-00	1/2" x 1-1/4" Gr5 Hex Bolt (Coarse)
24	2	022-7010-00	1-3/4" Bearing-Large Bore Front Rim
25	1	022-3090-00	Black Front Tire Rim
26	1	022-5347-00	13 x 6.50 - 6 Tire
27	1	014-8047-00	Spring Cap Cover
28	1	022-3085-00	13x6.5-6 Large Bore - Black Front Assembly
29	1	023-7915-98	Suspension Fork Assembly

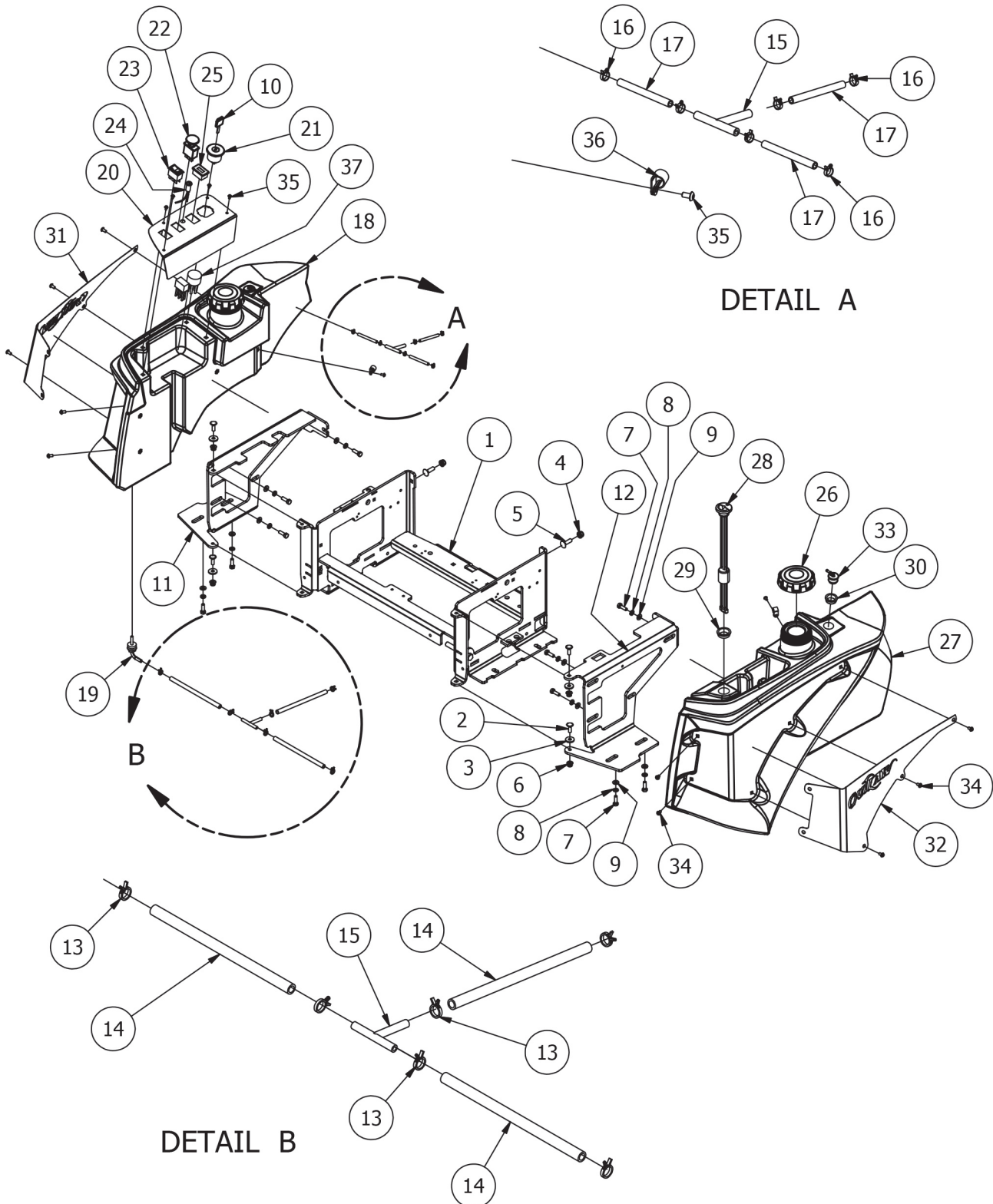
Oultaw XP Drive Arms





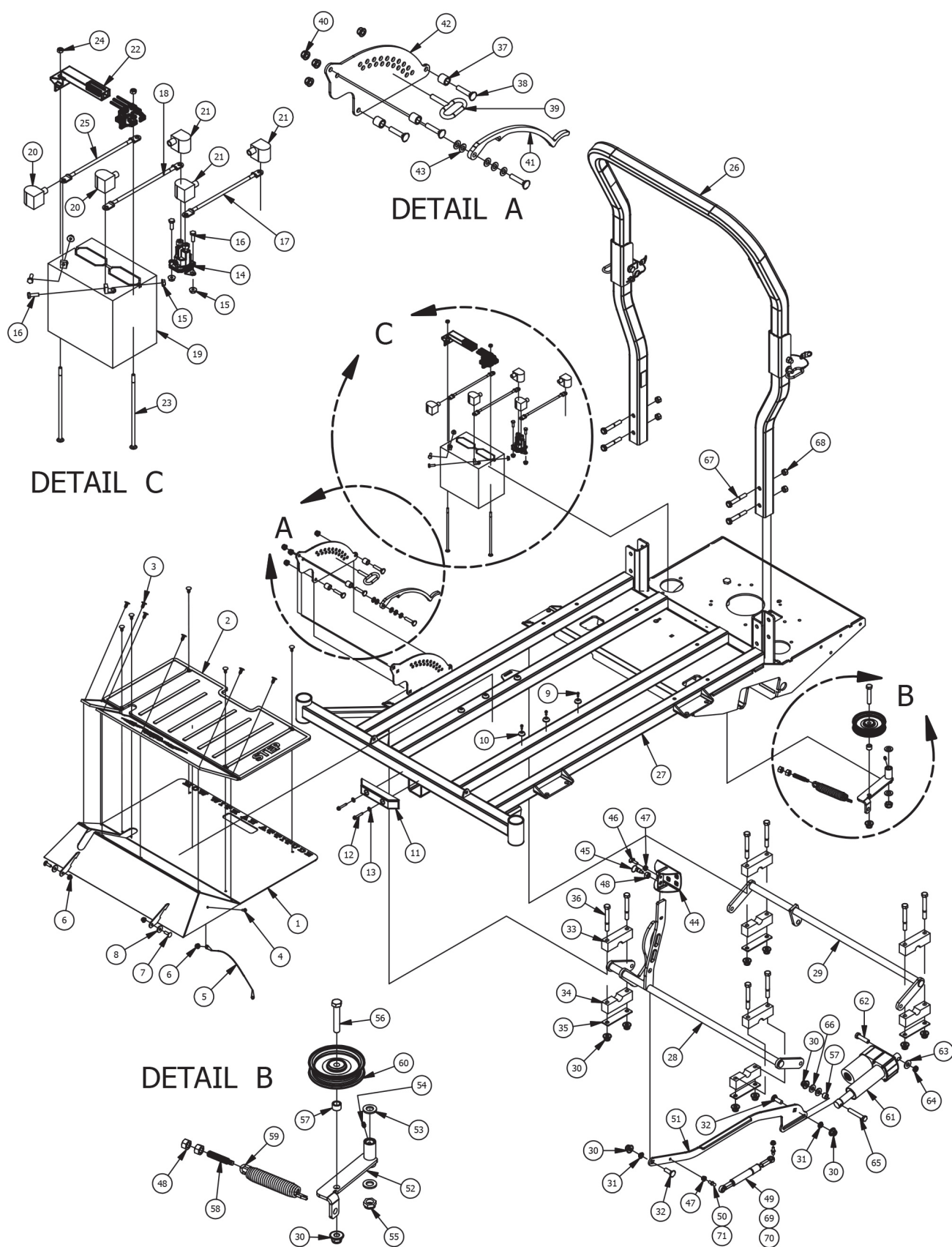
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	034-8025-00	Drive Lever Spring
2	4	032-5055-00	Bushing for 2012 Drive Arms
3	4	019-8027-00	.515 ID Nylon Shoulder Washer
4	6	032-8024-00	.507 ID Nylon Bushing
5	2	024-6034-00	1/4" Press in Grease Fitting
6	2	019-6017-00	.635 ID Plastic Washer
7	2	013-8050-00	1/2-13 Nylon Flange Nut-Orange
8	2	013-8043-00	5/16" Nut
9	2	018-8063-00	5/16" x 3/4" Hex Bolt
10	6	013-6051-00	3/8" Fine Threaded Jam Nut
11	2	019-5037-00	3/8" Lock Washer
12	2	069-4010-00	Black Steering Grip
13	2	045-5000-00	Black Knob for Adjustable Steering Arm
14	1	031-9015-70	Lower Adjuster - Steering Arm- Right
15	2	031-9010-00	Upper Tube-Adjustable Steering
16	1	031-9016-70	Upper Adjust Steering Arm- Right
17	8	018-2020-00	5/16-18 1/2 HWH Bolt-Steering
18	1	031-9025-70	Steering Arm Elbow - Right
19	4	013-9002-00	5/16" Flange Nut
20	4	018-2050-00	10mm Damper Ball Stud-Steering
21	2	013-0085-00	1/2-13 Hex Flange (GR.G) ZC
22	2	087-3000-00	Steering Damper For Outlaw
23	4	019-7000-00	.505x1x .125 Oil Impregnated washer
24	1	031-9017-70	Upper adjuster-Steering Arm- Left
25	1	031-9014-70	Lower Adjuster - Steering Arm- Left
26	2	018-5043-00	3/8" x 1 1/4" Carriage Bolt
27	1	031-9020-70	Steering Arm Elbow - Right
28	2	035-5350-00	outlaw XP Push Rod
29	2	099-2009-00	Quick Release Ball Joint
30	2	099-6046-00	3/8-24 Ball Joint
31	1	027-8819-00	Drive Arm Lever Housing (Left)
32	1	027-8820-00	Drive Arm Lever Housing Right
33	2	018-4011-00	3/8-24 Nylon Insert jam locknut

Outlaw XP Gas Tank Assemblies





Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	080-5100-00	2015 Outlaw Seat Bracket
2	4	018-8065-00	5/16-18 x 1 Carriage Bolts Zinc
3	4	019-6042-00	.360 ID Plastic Washer
4	2	013-5202-00	3/8" Nylock Flange Nut
5	2	018-5043-00	3/8" x 1 1/4" Carriage Bolt
6	4	013-8049-00	5/16-18 Nylon Insert Flange Nut Zinc Orange Nylon
7	10	018-2007-00	5/16" x 1" Bolt
8	10	019-8051-00	5/16" Lock Washer
9	10	019-8044-00	5/16" Flat Washer
10	1	042-9000-00	Ignition Key
11	1	031-2040-00	Outlaw 2015 Tank Support (Right)
12	1	031-2041-00	Outlaw 2015 Tank Support (Left)
13	6	072-8069-00	1/4 fuel clamp
14	3	051-8067-00	1/4" fuel line hose
15	2	073-8068-00	fuel line T
16	6	072-8070-00	3/16 vinyl clamp
17	3	051-8072-00	1/4" vinyl tubing
18	1	067-1180-50	Outlaw 2015 Fuel Tank (Right)
19	2	067-6055-00	Fuel Tank Hose Nipple w/Filter
20	1	079-3360-00	Analog Control Panel Outlaw
21	1	077-8076-00	Ignition Switch
22	1	056-8058-00	PTO Switch
23	1	078-3000-00	Rocker Deck Lift Switch
24	1	089-1000-00	Oil Light
25	1	083-4013-00	Tachometer
26	2	066-8076-00	Fuel Cap (Kelch)
27	1	067-1190-50	Outlaw 2015 Fuel Tank (Left)
28	1	067-4080-00	Fuel Gauge w/Grommet
29	1	067-6054-00	Grommet for Fuel Gauge
30	2	067-6053-00	ROV Grommet
31	1	079-3280-00	Outlaw Tank Panel (Right)
32	1	079-3281-00	Outlaw Tank Panel (Left)
33	2	067-6060-00	Rollover Valve - Black
34	10	018-2012-00	1/4" x 1/2" BS C/S 18-8 SS
35	6	018-2010-00	10-32 x 3/8" Button Socket Head Bolt
36	2	072-0001-00	3/8 Cable Clamp-Black Nylon
37	1	086-2050-00	Wiring Harness





Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	079-3110-00	Outlaw Floor Panel
2	1	081-2008-00	Foot Assist Floor Mat
3	11	040-6080-00	Ratchet Fastener
4	1	018-8064-00	1/4" x 5/8" BS C/S 18-8 SS
5	1	064-2006-00	Floor board Cable W/ Swivel Ends
6	3	013-8049-00	5/16" Flange Nut Zinc W/Serrations
7	2	018-8065-00	5/16" x 1" Carriage Bolt
8	2	019-6042-00	.360 ID Plastic Washer
9	6	030-3050-00	#10 x 1/2" Self Taping Screw
10	6	029-4010-00	Button Bumper
11	1	029-7038-00	8" Rubber Bumper
12	2	030-7039-00	1/4" x 1 1/2" Self Tapping Screw
13	2	019-7040-00	1/4" Flat Washer
14	1	108-5349-00	Solenoid
15	4	013-9001-00	1/4-20 Hex Flange Nuts Zinc w/Serrations
16	4	018-8052-00	1/4-20 x 3/4 GR 5 Hex Bolts Zinc
17	1	086-0003-00	red battery cable alternator to Started cable
18	1	064-5301-00	12 in red battery cable
19	1	068-8049-00	Battery
20	2	103-5400-00	Black Boot For ground cable
21	3	103-5300-00	Red Boot
22	1	043-8929-00	Battery Hold Down
23	2	018-8050-00	1/4-20 X 8 Carriage Bolt
24	2	013-8039-00	1/4-20 Hex Nut
25	1	086-0005-00	Starter to chassis cable
26	1	089-0002-00	2015 Outlaw 2x2 Folding ROPS
27	1	070-5380-00	2015 XP Frame
28	1	028-6030-00	2015 Outlaw Act Bar Assembly (Front)
29	1	028-6040-00	2015 Outlaw Act Bar Assembly (Rear)
30	12	013-8050-00	1/2-13 Nylon Flange Nut-Orange
31	2	032-3000-00	Bushing- SF-1620-4
32	2	018-0008-00	1/2 x 1-1/2 Carriage Bolt
33	4	017-9000-00	Two Piece Pillow Block (Male)
34	4	017-9050-00	Two Piece Pillow Block (Female)
35	4	017-9025-00	Two Piece Pillow Block Strap
36	8	018-5019-00	1/2" x 4" Bolt (Grade 8)
37	3	025-5203-00	3/4 OD x 1/2 ID x 3/4 Length
38	4	018-0009-00	3/8 x 1 3/4 Carriage Bolt
39	1	040-4000-00	Deck height lever pin
40	4	013-5202-00	3/8" Nylock Flange Nut
41	1	031-0100-00	Outlaw Deck Lever Lock
42	1	026-2100-00	Outlaw Height Indicator Plate (Outer)
43	5	019-2003-00	.390 x .750 x .062 Nylon Washer
44	1	026-0013-00	Outlaw Deck Lift Pedal
45	1	040-5000-00	Pull Pin
46	1	030-0010-00	5/16-18 x1 Thumb Screw Zinc
47	3	013-9002-00	5/16" Flange Nut
48	3	013-7018-00	1/2" Hex Nut
49	1	087-5400-00	200 lb Gas Spring- 54" Deck outlaw
50	2	018-2050-00	10mm Damper Ball Stud-Steering
51	1	028-6055-00	Outlaw Linkage Bar Susp Frame
52	1	039-5944-00	Pump Idler Bracket
53	2	019-6017-00	.635 ID Plastic Washer
54	1	024-6034-00	1/4" Press in Grease Fitting
55	1	013-5301-00	5/8" Nylock (1/2 Jam)
56	1	018-6036-00	1/2" x 2 3/4" Hex Bolt
57	2	025-7036-00	1/2 x 1/2 Spacer
58	1	018-2004-00	All Thread-pump Idler Tensioner
59	1	034-2009-00	2009 Deck/Pump Idler Spring
60	1	033-6001-00	4 3/4" Idler Pulley
61	1	035-7033-00	Actuator
62	1	018-0022-00	1/2-13x2 Grade 8 Hex Bolt
63	1	019-5702-00	1/2" Washer (Grade 8)
64	1	018-4010-00	1/2" Nylock Nut (1/2 Jam)
65	1	018-7016-00	1/2" x 3" Hex Bolt
66	2	019-8054-00	.505 Nylon Spacer
67	4	018-0050-00	1/2-13 X 3.25 Hex Bolt - Grade 5
68	4	013-0005-00	1/2" Center Lock Nut
69	1	087-6100-00	250 lb Gas Spring 61" Deck Outlaw
70	1	087-7200-00	300 lb Gas Spring 72" Deck Outlaw
71	2	018-2049-00	13mm Ball Stud (72" Deck Only)

This technical drawing is an exploded view of a mechanical assembly. The main assembly consists of a base frame (1) with a large wheel (16) and a smaller wheel (17). A motor (20) is mounted on the side, connected to a drive shaft (23) and a pulley (24). A belt (25) is shown driving another pulley (26) on a vertical shaft (27). A large flywheel (15) is at the top. A detailed inset A shows a close-up of the motor and drive shaft assembly. A detailed inset B shows a close-up of the belt drive and pulley system. Various other components like bearings, gears, and structural parts are labeled with numbers from 1 to 65.

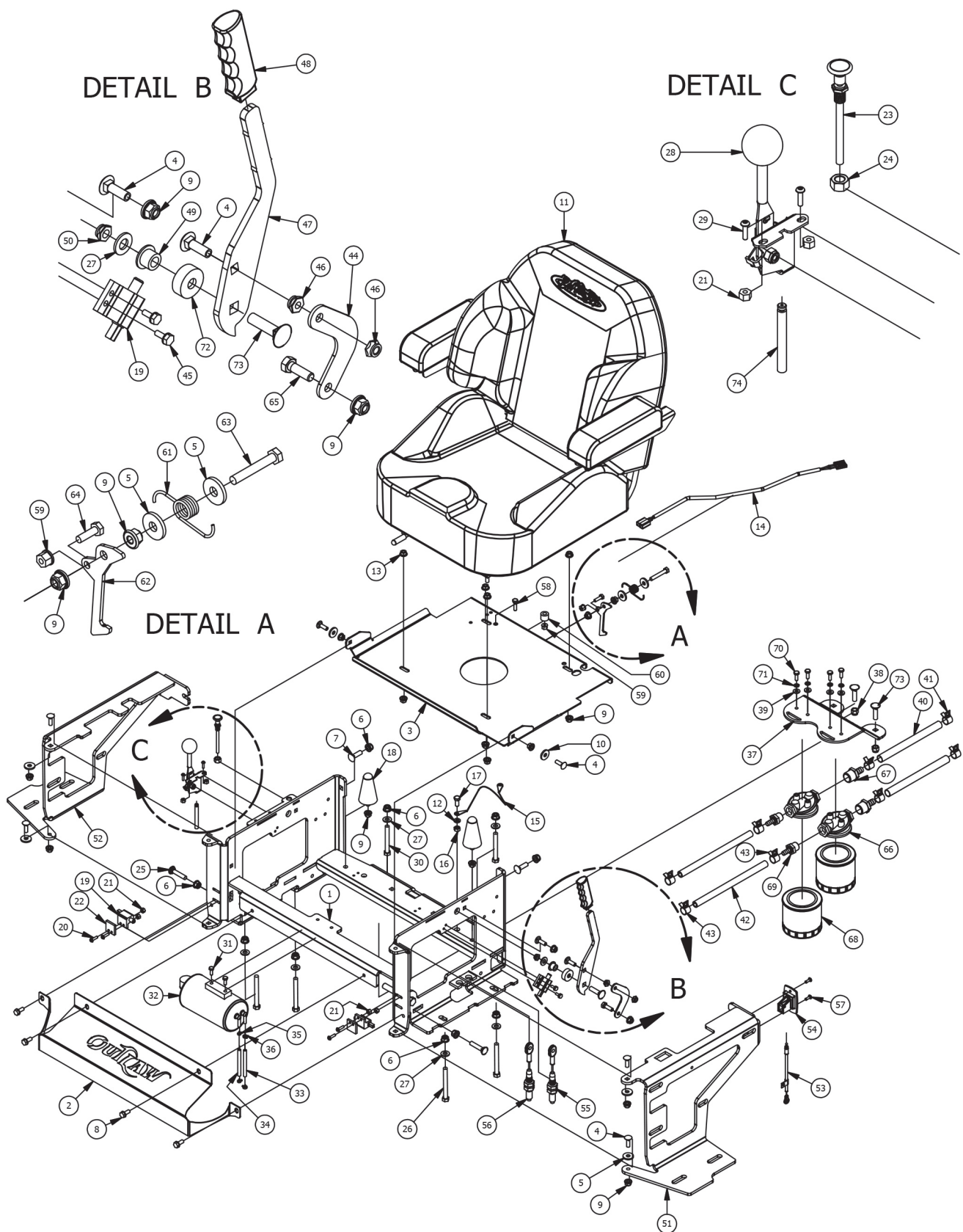
DETAIL A

DETAIL B

DETAIL B



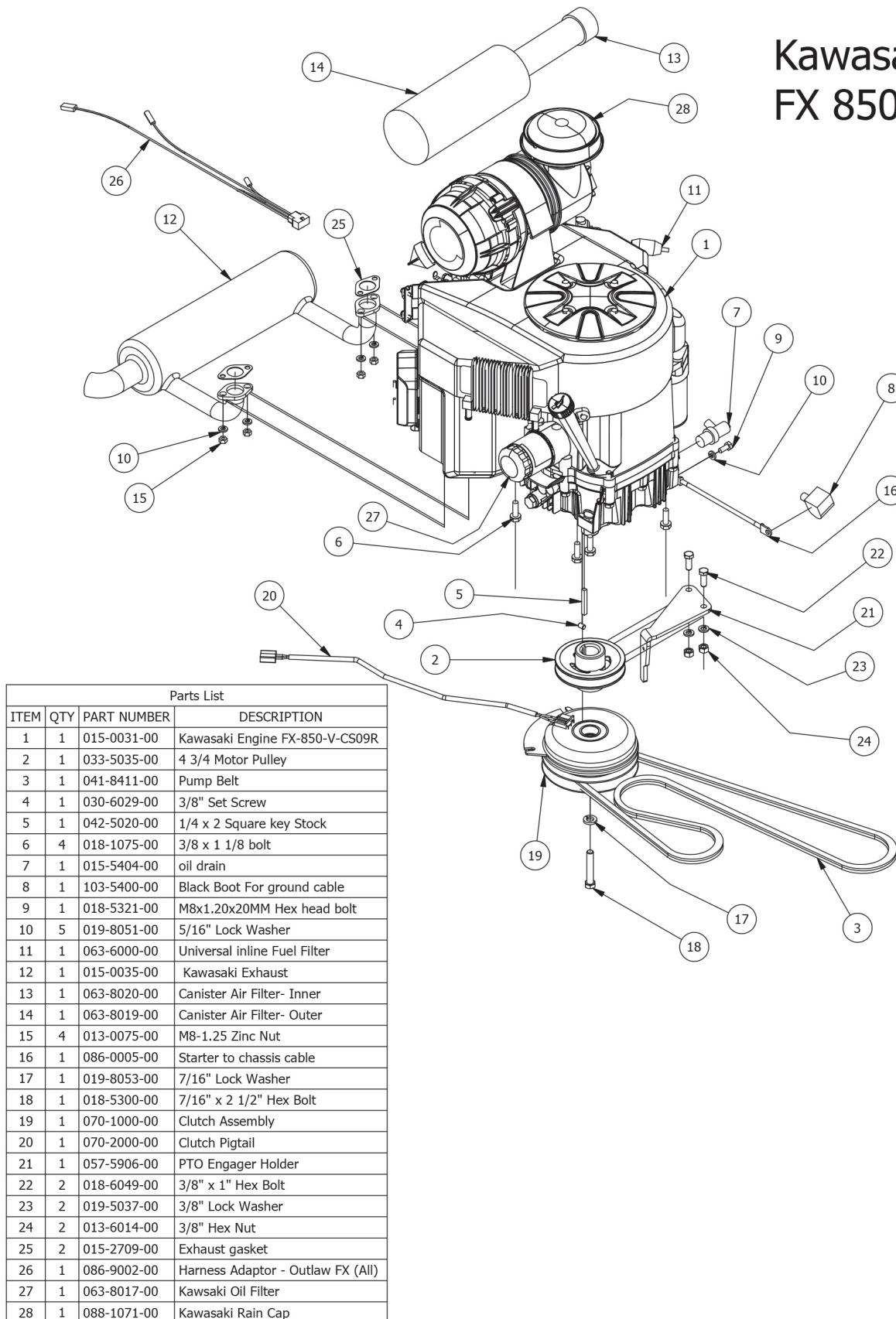
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	070-5380-00	2015 XP Frame
2	4	018-5043-00	3/8" x 1 1/4" Carriage Bolt
3	4	013-5041-00	3/8 Nylock Nut
4	2	018-4702-00	1/4-20 x 1-1/4 GR 5 Hex Bolt
5	1	029-7037-00	14" Rubber Bumper
6	2	019-7040-00	1/4" Flat Washer
7	1	026-2180-00	2015 Outlaw Rear Plate
8	4	019-8040-00	1/4" x 3/4" Carriage Bolt
9	6	013-2050-00	1/4-20 Nylon Insert flange Nut
10	2	070-8000-00	60 Suspension kit Wheel Motor
11	8	018-2030-00	1/2" x 1" Hex Bolt
12	8	019-5007-00	1/2" Lock Washer
13	8	019-5702-00	1/2" Washer (Grade 8)
14	4	051-2000-00	18" hose Assembly W/forged 45 Degr
15	2	033-5003-00	5" Pump Pulley
16	2	022-4005-00	24 x 12.00 - 10 outlaw Tire
17	2	022-4070-00	10" Black Wheel For Outlaw
18	2	042-0010-00	3/16 x 1 Square Key
19	10	018-7033-00	1/2-20 x 1-1/2 Lug Bolts Zinc
20	1	067-8051-00	Outlaw Hydraulic Tank Left
21	2	066-8050-00	Hydraulic Tank Cap W/Dipstick
22	2	051-8063-00	3/8 clear hose
23	2	051-8064-00	1/2 Clear Braded Hose Priced/Foot
24	4	072-8066-00	1/2 Hose Clamp
25	1	067-8050-00	Outlaw Hydraulic Tank Right
26	4	072-8065-00	3/8 hose clamp
27	2	014-9000-00	2X2 Frame Plug
28	4	032-5056-00	Flange Bushing for Deck Arm - Upper
29	2	018-2051-00	5/8"x10" Hex Bolt (Grade8)
30	2	013-5301-00	5/8" Nylock (1/2 Jam)
31	2	024-3050-00	1/4" Drive in Grease Fitting (72" Suspension Kit Wheel Moter)
32	2	013-7021-00	5/8 Std NC Nylock Nut
33	4	032-9000-00	Vibration Mount-Green Dot
34	2	015-9999-00	Hydraulic Fan
35	2	013-8043-00	5/16" Nut
36	4	024-5206-00	3/8" X 9/16"-18 ORB Male Fitting (S,A-2 P-4)
37	2	031-5333-00	Pump Arm
38	2	013-8073-00	1/4" Nylock Nut
39	2	018-4007-00	1/4-20 x 1 GR 5 hex bolt zinc
40	4	024-5343-00	Hydraulic Pump Fitting 6400-10
41	4	018-6012-00	3/8" x 1 1/2" Hex Bolt
42	4	019-5037-00	3/8" Lock Washer
43	4	019-5029-00	3/8" Flat Washer
44	4	013-6014-00	3/8" Hex Nut
45	2	014-5600-00	Fan Guard 6" Fits wheel Motor Pumps
46	2	020-7022-00	1/8x2-1/4 cotter pin Zinc
47	2	042-7041-00	Woodruff Key
48	2	013-7050-00	1" Castle Nut for Wheel Motor
49	4	024-0050-00	45 Degree Fitting 31704-10-10
50	8	013-5300-00	1/2" Flange Nut
51	8	018-6036-00	1/2" x 2 1/2" Hex Bolt
52	2	013-8047-00	5/16-18 Nylock Insert Locknut
53	1	015-4501-00	15cc Parker Wheel Motor- Left
54	2	092-5201-00	Brake Disk
55	1	092-7001-00	XP/AOS Left Brake Caliper
56	2	018-6049-00	3/8" x 1" Hex Bolt
57	1	015-4500-00	15cc Parker Wheel Motor- Right
58	1	092-7000-00	XP/AOS Right Brake Caliper
59	2	070-8001-00	72" Suspension Kit Wheel Moter
60	8	018-2080-00	1/2-13 x 1 1/4 Hex Bolt (Only on 60" Suspension Kit Wheel Motor)
61	4	051-6005-00	18" Hydraulic Hose Only
62	1	050-3050-00	Right Pump 12cc
63	1	050-3000-00	Left Pump 12cc
64	2	022-4050-00	24 x 12.00-10 Tire and Black Wheel Assembly
65	2	024-8000-00	3/8" Threaded Grease Fitting (60" Suspension Kit Wheel Moter)





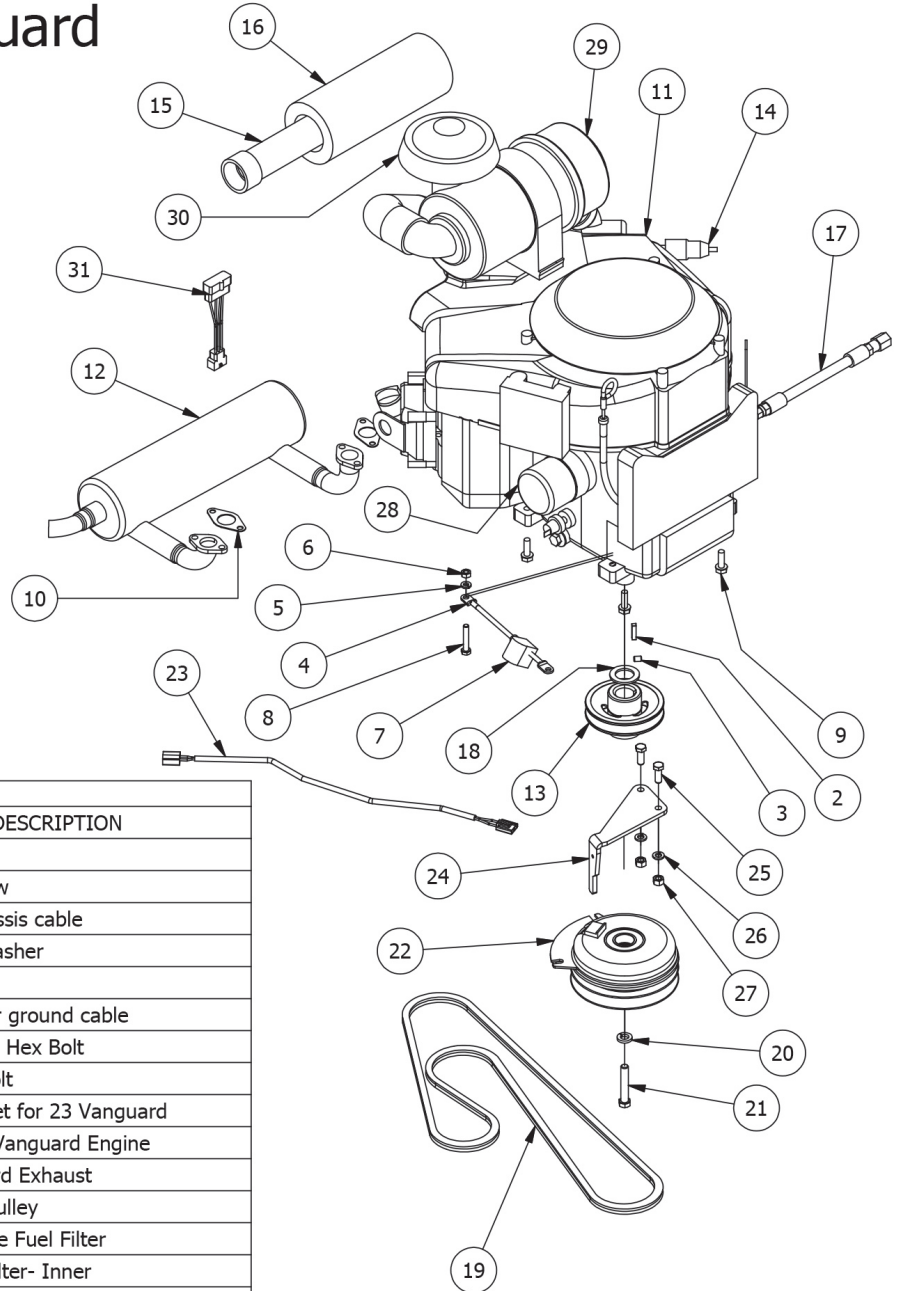
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	080-5100-00	2015 Outlaw Seat Bracket
2	1	014-2100-00	Outlaw Cooler Cover
3	1	026-2006-00	Seat Plate
4	8	018-8065-00	5/16" x 1" Carriage Bolt
5	6	019-6042-00	.360 ID Plastic Washer
6	10	013-5202-00	3/8" Nylock Flange Nut
7	2	018-5043-00	3/8" x 1 1/4" Carriage Bolt
8	4	030-7042-00	5/16 x 3/4 washer head type F screw
9	16	013-8049-00	5/16" Flange Nut Zinc W/Serrations
10	2	019-6050-00	.360 ID Plastic Washer-Black
11	1	071-5060-00	2015 Outlaw Seat
12	1	019-8051-00	5/16" Lock Washer
13	4	013-9002-00	5/16" Flange Nut
14	1	036-5300-00	Seat Switch Adapter
15	1	064-8081-00	Seat Cable
16	1	013-8043-00	5/16" Nut
17	1	018-8063-00	5/16" x 3/4" Hex Bolt
18	2	034-1444-00	Rubber Cone-1621-153
19	3	077-8073-00	Safety Switch
20	4	018-8058-00	10-24 x 1 BS C/S 18-8 SS
21	6	013-5019-00	10-24 Nylon Insert Locknut
22	2	025-6041-00	Switch Block Plastic
23	1	054-8017-00	Choke
24	1	013-6051-00	3/8" Fine Threaded Jam Nut
25	2	018-0009-00	3/8 x 1 3/4 Carriage Bolt
26	4	018-1010-00	3/8-16x3-1/2 grade 5 hex bolt
27	7	019-5029-00	3/8" Flat Washer
28	1	055-2012-00	Universal Throttle Head - 2012
29	2	018-5200-00	10-24 X 5/8 BS C/S 18-8 SS
30	2	018-4700-00	3/8-16x3 grade 5 hex bolt
31	2	018-0024-00	M6-1.0 X 16MM Hex Bolt
32	1	067-0020-00	Carbon Canister ZT,CZT,Outlaw
33	1	051-8072-00	1/4" vinyl tubing
34	1	051-8073-00	3/16 vinyl tubing
35	2	072-8073-00	3/16" Vinyl Hose Clamp
36	2	072-8070-00	3/16 vinyl clamp
37	1	039-2130-00	Outlaw Filter Bracket
38	2	013-5041-00	3/8 Nylock Nut
39	4	019-7040-00	1/4" Flat Washer
40	2	051-8064-00	1/2 Clear Braded Hose Priced/Foot
41	4	072-8066-00	1/2 Hose Clamp
42	2	051-8063-00	3/8 clear hose
43	4	072-8065-00	3/8 hose clamp
44	1	039-0150-00	Brake Cable Adapter Bracket
45	2	018-1080-00	12-24x 1/2 HWH Bolt
46	2	013-9005-00	5/16-18 Nylock Jam Nut 1/2 Nut
47	1	069-1000-00	Brake Handle Cam Over
48	1	069-7000-00	Rubber Brake Grip-cZT/ZT 2013
49	1	032-5053-00	Bronze Bushing SF-1220-8
50	1	013-0009-00	3/8-16 Hex Flange Top L/N
51	1	031-2041-00	Outlaw 2015 Tank Support (Left)
52	1	031-2040-00	Outlaw 2015 Tank Support (Right)
53	1	064-0047-00	2015 Seat Latch Cable
54	1	064-0046-00	2015 Seat Latch Toggle
55	1	064-9001-00	2015 XP Brake Cable - Long
56	1	064-9000-00	2015 XP Brake Cable - Short
57	2	018-9000-00	3/16 Rivet
58	1	018-4007-00	1/4-20 x 1 GR 5 hex bolt zinc
59	2	013-2050-00	1/4-20 Nylon Insert flange Nut
60	1	025-2000-00	.380x.735x.470 Nylon Spacer
61	1	034-1075-00	Torsion Spring for Seat latch
62	1	031-0200-00	Seat Latch Lever
63	1	018-0012-00	5/16-18 X 2 Hex C/S (GR.5) ZC
64	1	018-4702-00	1/4-20 x 1-1/4 GR 5 Hex Bolt
65	1	018-2007-00	5/16" x 1" Bolt
66	2	062-8013-00	Filter Head-Hydraulic Filter
67	2	024-5050-00	Filter Head Fitting 1/2 x 1/2
68	2	063-8014-00	Hydraulic filter
69	2	024-5342-00	1/2" Pipe to 3/8" Barb
70	4	018-8052-00	1/4" x 3/4" Hex Bolt
71	4	019-4008-00	1/4" Lock Washer
72	1	025-0001-00	2015 Brake Lever Spacer
73	3	018-4706-00	3/8 x 1 1/2 Carriage Bolt
74	1	055-8021-75	Outlaw Throttle Cable (Cable Only)

Kawasaki FX 850-V



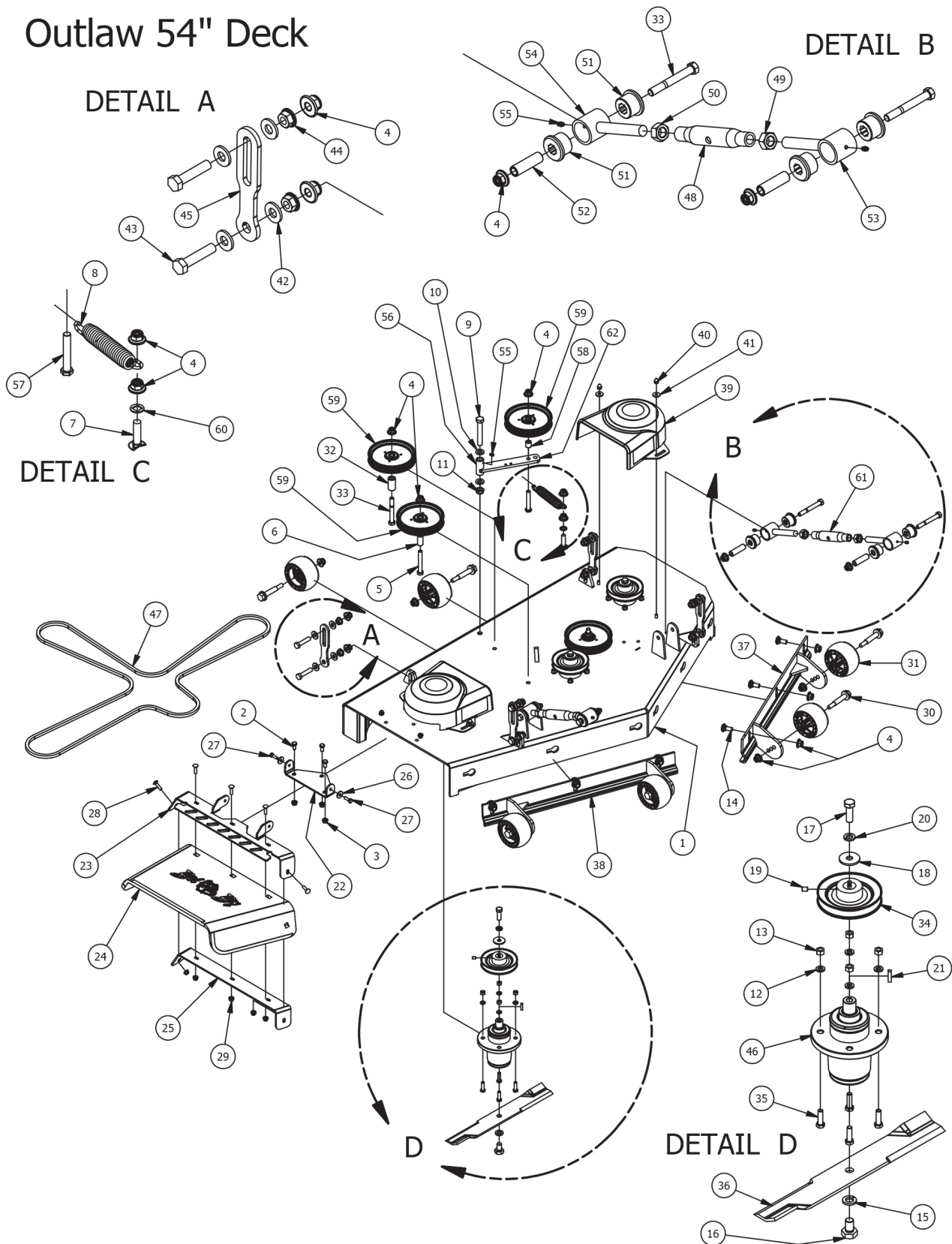


993cc Vanguard



993cc Vanguard			
ITEM	QTY	PART NUMBER	DESCRIPTION
2	1	042-6030-00	1/4" x 1" Key
3	1	030-0050-00	5/16 Set Screw
4	1	086-0005-00	Starter to chassis cable
5	1	019-8051-00	5/16" Lock Washer
6	1	013-8043-00	5/16" Nut
7	1	103-5400-00	Black Boot For ground cable
8	1	018-8059-00	5/16" x 1 3/4" Hex Bolt
9	3	018-1075-00	3/8 x 1 1/8 bolt
10	2	015-0025-00	Exhaust Gasket for 23 Vanguard
11	1	015-3600-00	993cc Briggs Vanguard Engine
12	1	015-0034-00	32Hp Vanguard Exhaust
13	1	033-5035-00	4 3/4 Motor Pulley
14	1	063-6000-00	Universal inline Fuel Filter
15	1	063-8020-00	Canister Air Filter- Inner
16	1	063-8019-00	Canister Air Filter- Outer
17	1	051-5402-00	14 mm Oil drain Hose 993cc Vanguard
18	1	019-6029-00	1 1/8" Flat Spacer
19	1	041-8411-00	Pump Belt
20	1	019-8053-00	7/16" Lock Washer
21	1	018-5300-00	7/16" x 2 1/2" Hex Bolt
22	1	070-1000-00	Clutch Assembly
23	1	070-2000-00	Clutch Pigtail
24	1	057-5906-00	PTO Engager Holder
25	2	018-6049-00	3/8" x 1" Hex Bolt
26	2	019-5037-00	3/8" Lock Washer
27	2	013-6014-00	3/8" Hex Nut
28	1	063-8018-00	Briggs Oil Filter
29	1	015-2705-00	Complete Canister
30	1	063-2045-00	Rain Cap Fits all Canisters
31	1	086-9001-00	Harness Adaptor - 933cc Vanguard

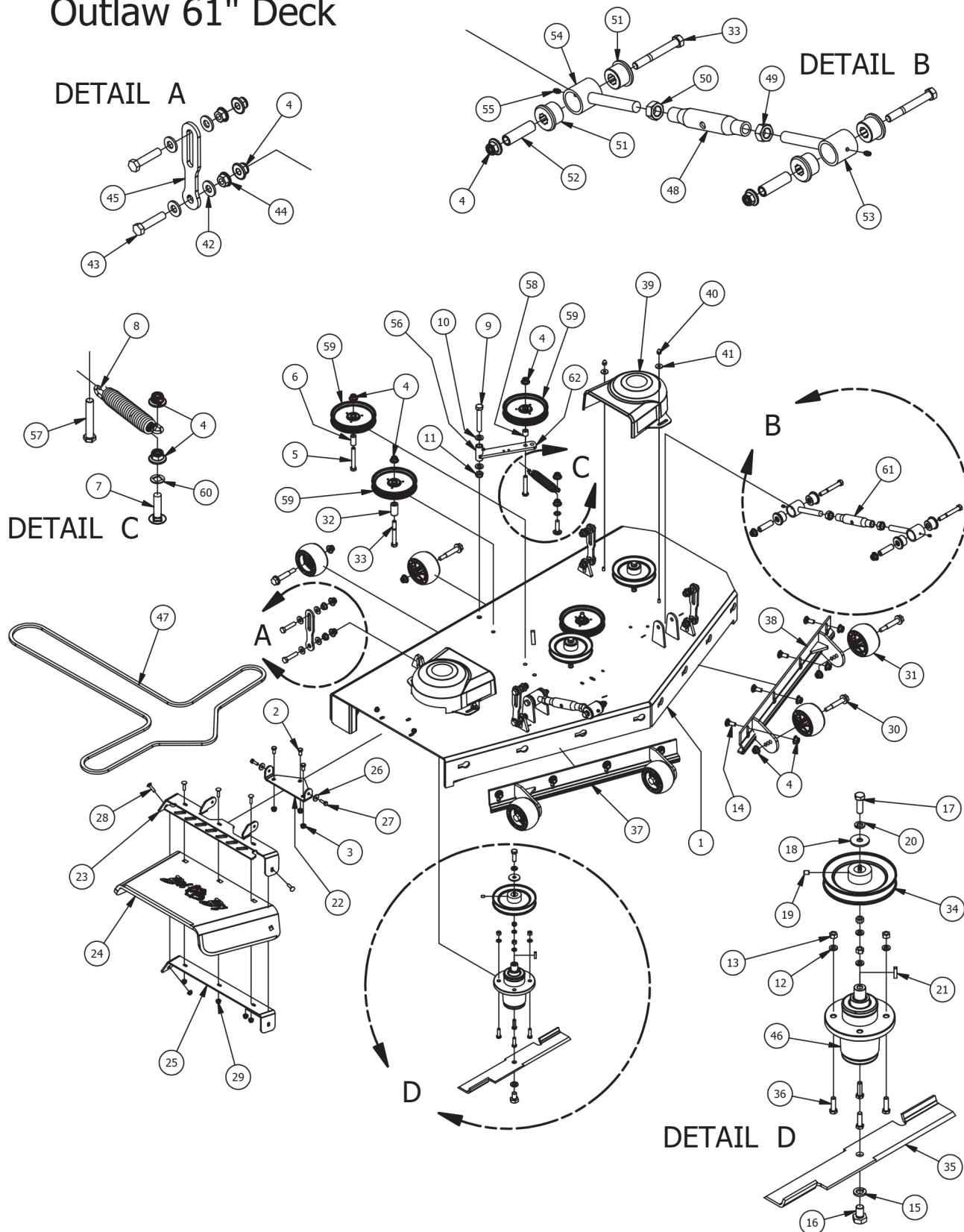
Outlaw 54" Deck





Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	060-5550-00	2015 54" Deck
2	3	018-5250-00	3/8" x 3/4" Hex Bolt
3	3	013-5201-00	3/8" Flange Nut
4	30	013-8050-00	1/2-13 Nylon Flange Nut-Orange
5	2	018-2018-00	1/2 x 3 1/2 Flange Bolt Grade 8
6	2	025-5338-00	.502 ID X .75 OD X 1.500 Leng
7	1	018-1050-00	1/2 x 2" Carriage Bolt
8	1	034-2020-00	2015 Deck Idler Spring Outlaws
9	1	018-5311-00	5/8" x 4" Hex Bolt
10	2	019-6017-00	.635 ID Plastic Washer
11	1	013-5301-00	5/8-11 Nylon Insert Jam Half Nut
12	12	019-5037-00	3/8 Lockwasher Zinc
13	12	013-6014-00	3/8-16 Hex Nuts Zinc
14	6	018-3003-00	1/2" x 1 1/4 Carriage Bolt
15	3	019-4807-00	5/8" Lock Washer
16	3	018-6020-00	5/8" x 1 1/2" Gr8 Hex Bolt (Fine)
17	3	018-6019-00	1/2"-20 x 1 1/2 - Grade 5 Fine Thread Bolt
18	3	019-6020-00	1/2 Belleville Washer
19	3	030-0050-00	5/16 Set Screw
20	3	019-5007-00	1/2" Lock Washer
21	3	042-6030-00	1/4" x 1" Key
22	1	206-6017-00	Discharge Chute Hanger (deck mounted)
23	1	039-4864-00	60" Discharge Chute Upper Hanger
24	1	210-6005-00	Rubber Discharge Chute
25	1	039-4863-00	60" Discharge Lower Bracket
26	2	019-6042-00	.360 ID Plastic Washer
27	2	018-2007-00	5/16" x 1" Bolt
28	5	018-4703-00	5/16" x 1 1/4" Carriage Bolt
29	7	013-8049-00	5/16" Flange Nut Zinc W/Serrations
30	6	018-0010-00	Deck Wheel Bolt
31	6	022-1000-00	Anti-Scalp Rollers
32	1	025-5339-00	1 3/4" Pulley Spacer
33	5	018-5019-00	1/2" x 4" Bolt (Grade 8)
34	3	033-6003-00	5" Deck Pulley
35	12	018-5040-00	3/8" x 1 1/4" Hex Bolt
36	3	038-0001-00	54" Deck Fusion Blade For Outlaw
37	1	060-5520-00	54 Deck Adjustable Front (Left)
38	1	060-5530-00	54 Deck Adjustable Front (Right)
39	2	014-5000-00	Pulley Cover
40	4	013-0004-00	Acorn nut-pulley Cover
41	4	019-6050-00	.360 ID Plastic Washer-Black
42	16	019-8054-00	.505 Nylon Spacer
43	8	018-6037-00	1/2-13X 2-1/4 GR Hex Bolts
44	8	013-5300-00	1/2" Flange Nut
45	4	039-2125-00	Deck_Hanging_Tab
46	3	037-4000-50	OUTLAW SPINDLE ASSEMBLY
47	1	041-1650-00	60" ZT Deck Belt
48	2	048-7020-00	Body
49	2	013-0008-00	3/4-10 Left-Handed Hex Nuts Zinc
50	2	013-0007-00	3/4-10 Hex Nuts Zinc
51	8	032-2000-00	Bushing
52	4	032-2001-00	Sleeve
53	2	048-7022-00	Turn Left-Handed
54	2	048-7021-00	Right-Handed End
55	5	024-6034-00	1/4" Press in Grease Fitting
56	1	039-6945-00	Deck Idler
57	1	018-7016-00	1/2-13 x GR 5 Hex Bolt Zinc
58	1	025-5203-00	3/4 OD x 1/2 ID x 3/4 Length
59	4	033-7201-00	5-3/4 Idler Pulley
60	1	019-0007-00	.517 Square Hole Round Washer
61	1	048-7000-00	Turnbuckle Assembly
62	1	039-6945-98	Deck Idler Assembly - Includes parts: 4,10,59,60,61

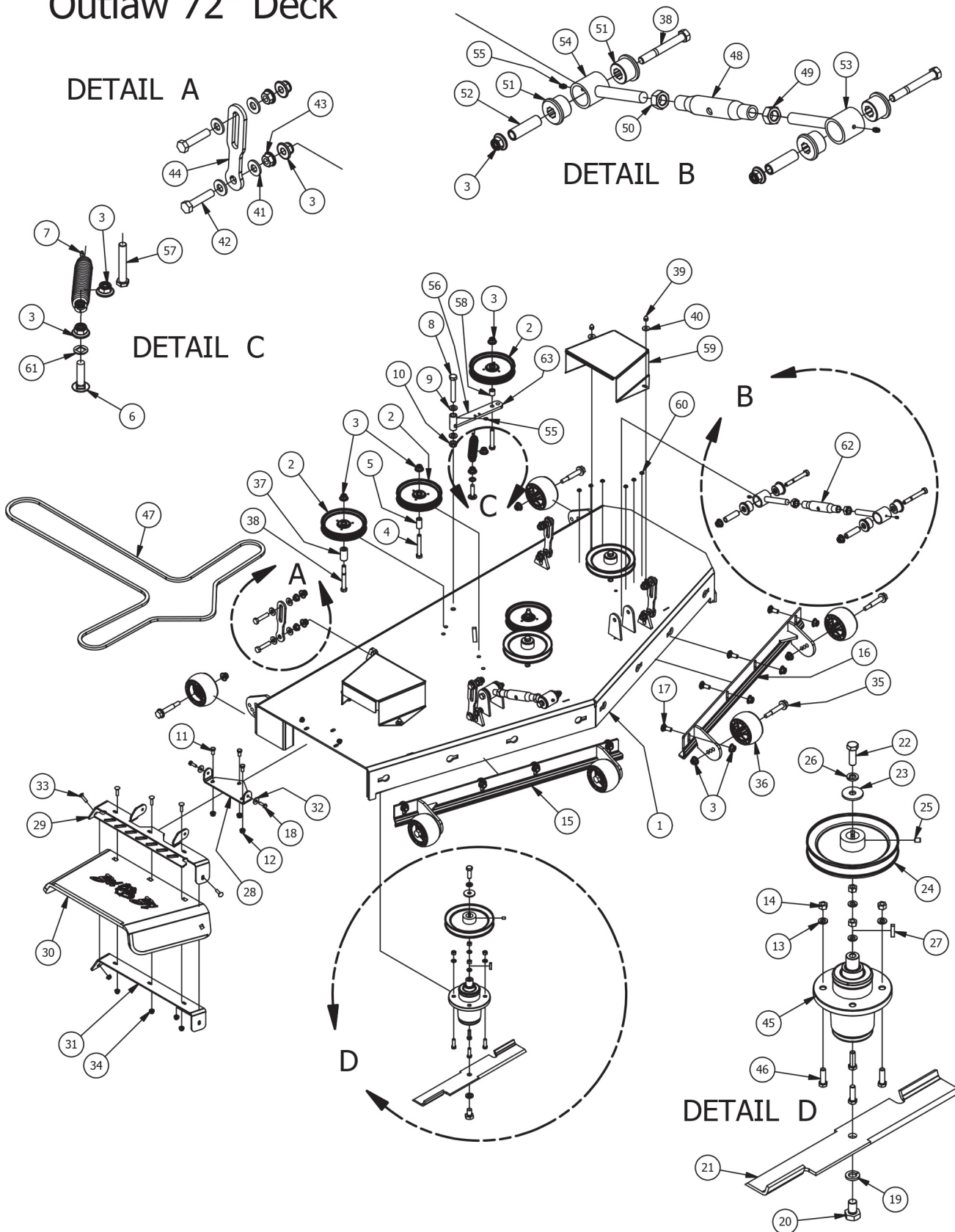
Outlaw 61" Deck





Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	060-6150-00	2015 61" Deck
2	3	018-5250-00	3/8" x 3/4" Hex Bolt
3	3	013-5201-00	3/8" Flange Nut
4	32	013-8050-00	1/2-13 Nylon Flange Nut-Orange
5	2	018-2018-00	1/2 x 3 1/2 Flange Bolt Grade 8
6	2	025-5338-00	.502 ID X .75 OD X 1.500 Leng
7	1	018-1050-00	1/2 x 2" Carriage Bolt
8	1	034-2020-00	2015 Deck Idler Spring Outlaws
9	1	018-5311-00	5/8" x 4" Hex Bolt
10	2	019-6017-00	.635 ID Plastic Washer
11	1	013-5301-00	5/8-11 Nylon Insert Jam Half Nut
12	12	019-5037-00	3/8 Lockwasher Zinc
13	12	013-6014-00	3/8-16 Hex Nuts Zinc
14	8	018-3003-00	1/2" x 1 1/4 Carriage Bolt
15	3	019-4807-00	5/8" Lock Washer
16	3	018-6020-00	5/8" x 1 1/2" Gr8 Hex Bolt (Fine)
17	3	018-6019-00	1/2"-20 x 1 1/2 - Grade 5 Fine Thread Bolt
18	3	019-6020-00	1/2 Belleville Washer
19	3	030-0050-00	5/16 Set Screw
20	3	019-5007-00	1/2" Lock Washer
21	3	042-6030-00	1/4" x 1" Key
22	1	206-6017-00	Discharge Chute Hanger (deck mounted)
23	1	039-4864-00	60" Discharge Chute Upper Hanger
24	1	210-6005-00	Rubber Discharge Chute
25	1	039-4863-00	60" Discharge Lower Bracket
26	2	019-6042-00	.360 ID Plastic Washer
27	2	018-2007-00	5/16" x 1" Bolt
28	5	018-4703-00	5/16" x 1 1/4" Carriage Bolt
29	7	013-8049-00	5/16" Flange Nut Zinc W/Serrations
30	6	018-0010-00	Deck Wheel Bolt
31	6	022-1000-00	Anti-Scalp Rollers
32	1	025-5339-00	1 3/4" Pulley Spacer
33	5	018-5019-00	1/2" x 4" Bolt (Grade 8)
34	3	033-6004-00	6 1/4" Drive Pulley
35	3	038-6080-00	61 inch Fusion Blade
36	12	018-5040-00	3/8" x 1 1/4" Hex Bolt
37	1	060-6220-00	61 Deck Adustable Front (Right)
38	1	060-6210-00	61 Deck Adustable Front (Left)
39	2	014-5000-00	Pulley Cover
40	4	013-0004-00	Acorn nut-pulley Cover
41	4	019-6050-00	.360 ID Plastic Washer-Black
42	16	019-8054-00	.505 Nylon Spacer
43	8	018-6037-00	1/2-13X 2-1/4 GR Hex Bolts
44	8	013-5300-00	1/2" Flange Nut
45	4	039-2125-00	Deck_Hanging_Tab
46	3	037-4000-50	OUTLAW SPINDLE ASSEMBLY
47	1	041-0178-00	B178 Belt For 61 Inch Outlaw
48	2	048-7020-00	Body
49	2	013-0008-00	3/4-10 Left-Handed Hex Nuts Zinc
50	2	013-0007-00	3/4-10 Hex Nuts Zinc
51	8	032-2000-00	Bushing
52	4	032-2001-00	Sleeve
53	2	048-7022-00	Turn Left-Handed
54	2	048-7021-00	Right-Handed End
55	5	024-6034-00	1/4" Press in Grease Fitting
56	1	039-6945-00	Deck Idler
57	1	018-7016-00	1/2-13 x GR 5 Hex Bolt Zinc
58	1	025-5203-00	3/4 OD x 1/2 ID x 3/4 Length
59	4	033-7201-00	5-3/4 Idler Pulley
60	1	019-0007-00	.517 Square Hole Round Washer
61	1	048-7000-00	Turnbuckle Assembly
62	1	039-6945-98	Deck Idler Assembly - Includes parts: 4,10,59,60,61

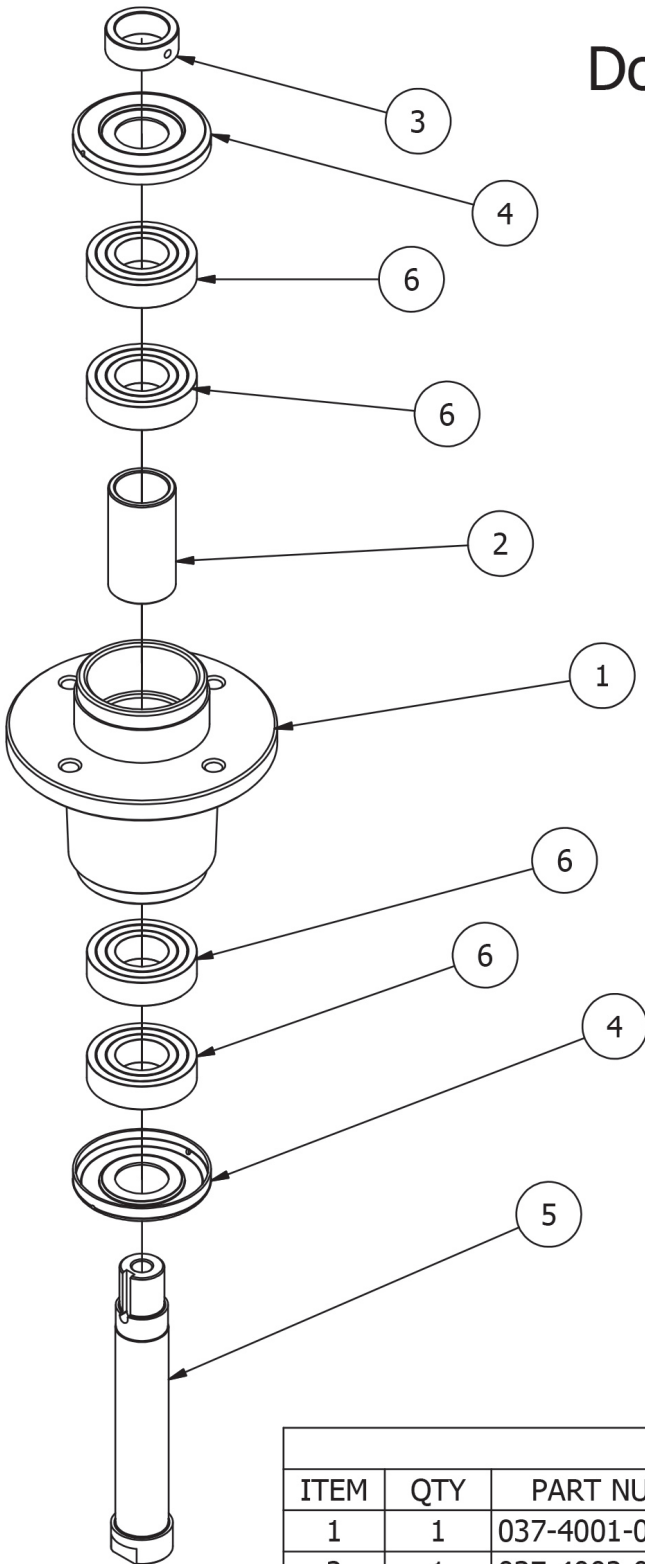
Outlaw 72" Deck





Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	060-7250-00	2015 72" Deck
2	4	033-7201-00	5-3/4 Idler Pulley
3	32	013-8050-00	1/2-13 Nylon Flange Nut-Orange
4	2	018-2018-00	1/2 x 3 1/2 Flange Bolt Grade 8
5	2	025-5338-00	.502 ID X .75 OD X 1.500 Leng
6	1	018-1050-00	1/2 x 2" Carriage Bolt
7	1	034-2020-00	2015 Deck Idler Spring Outlaws
8	1	018-5311-00	5/8" x 4" Hex Bolt
9	2	019-6017-00	.635 ID Plastic Washer
10	1	013-5301-00	5/8-11 Nylon Insert Jam Half Nut
11	3	018-5250-00	3/8" x 3/4" Hex Bolt
12	3	013-5201-00	3/8" Flange Nut
13	12	019-5037-00	3/8 Lockwasher Zinc
14	12	013-6014-00	3/8-16 Hex Nuts Zinc
15	1	060-7211-00	72" Deck Adjustable Front (Right)
16	1	060-7210-00	72" Deck Adjustable Front (Left)
17	8	018-3003-00	1/2" x 1 1/4 Carriage Bolt
18	2	018-2007-00	5/16" x 1" Bolt
19	3	019-4807-00	5/8" Lock Washer
20	3	018-6020-00	5/8" x 1 1/2" Gr8 Hex Bolt (Fine)
21	3	038-7230-00	72" High Lift Fusion Blade
22	3	018-6019-00	1/2"-20 x 1 1/2 - Grade 5 Fine Thread Bolt
23	3	019-6020-00	1/2 Belleville Washer
24	3	033-7203-00	7" Deck Pulley
25	3	030-0050-00	5/16 Set Screw
26	3	019-5007-00	1/2" Lock Washer
27	3	042-6030-00	1/4" x 1" Key
28	1	206-6017-00	Discharge Chute Hanger (deck mounted)
29	1	039-4864-00	60" Discharge Chute Upper Hanger
30	1	210-6005-00	Rubber Discharge Chute
31	1	039-4863-00	60" Discharge Lower Bracket
32	2	019-6042-00	.360 ID Plastic Washer
33	5	018-4703-00	5/16" x 1 1/4" Carriage Bolt
34	7	013-8049-00	5/16" Flange Nut Zinc W/Serrations
35	6	018-0010-00	Deck Wheel Bolt
36	6	022-1000-00	Anti-Scalp Rollers
37	1	025-5339-00	1 3/4" Pulley Spacer
38	5	018-5019-00	1/2" x 4" Bolt (Grade 8)
39	4	013-0004-00	Acorn nut-pulley Cover
40	4	019-6050-00	.360 ID Plastic Washer-Black
41	16	019-8054-00	.505 Nylon Spacer
42	8	018-6037-00	1/2-13X 2-1/4 GR Hex Bolts
43	8	013-5300-00	1/2" Flange Nut
44	4	039-2125-00	Deck_Hanging_Tab
45	3	037-4000-50	OUTLAW SPINDLE ASSEMBLY
46	12	018-5040-00	3/8" x 1 1/4" Hex Bolt
47	1	041-0202-00	B202 Belt for 72" Outlaw
48	2	048-7020-00	Body
49	2	013-0008-00	3/4-10 Left-Handed Hex Nuts Zinc
50	2	013-0007-00	3/4-10 Hex Nuts Zinc
51	8	032-2000-00	Bushing
52	4	032-2001-00	Sleeve
53	2	048-7022-00	Turn Left-Handed
54	2	048-7021-00	Right-Handed End
55	5	024-6034-00	1/4" Press in Grease Fitting
56	1	039-6945-00	Deck Idler
57	1	018-7016-00	1/2-13 x GR 5 Hex Bolt Zinc
58	1	025-5203-00	3/4 OD x 1/2 ID x 3/4 Length
59	2	014-7204-00	72 Spindle Cover
60	12	058-6000-00	Black, Round Stick-On Rubber Bumpon
61	1	019-0007-00	.517 Square Hole Round Washer
62	1	048-7000-00	Turnbuckle Assembly
63	1	039-6945-98	Deck Idler Assembly - Includes parts: 3,9,59,60,61

037-4000-50 Double Bearing Spindle



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	037-4001-00	4000 Series Spindle Housing
2	1	037-4002-00	4000 Series Spindle Spacer
3	1	037-9050-00	Locking Collar w/ 1/4"-20 Set Screw
4	2	037-8002-00	Spindle Dust Cap
5	1	037-6026-00	ZT-AOS Spindle Shaft
6	4	037-6023-00	Bearing - 6206

FOR ALL OF YOUR PARTS NEEDS CALL



TOLL FREE: 855.888.7278

EMAIL: info@badboymowerparts.com