

# RENEGADE DIESEL OUTLAW

# **ZERO-TURN MOWER**

OWNER'S OPERATOR SERVICE AND PARTS MANUAL

For additional information, please see us at

www.badboymowers.com



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### THIS MANUAL APPLIES TO THE FOLLOWING EQUIPMENT:

#### **BAD BOY RENEGADE SERIES**

BRN 6100 61" 1100cc Perkins

### **COMMONLY USED ITEMS AND PART NUMBERS**

61" Dlada	Hi-Lift Fusion	Gator Blade	Wave Blade				
61" Blade	038-6080-00	038-6090-00					
Hydraulic Filter	063-8014-00						
61" Deck Belt		041-0222-00					
Pump Belt	041-8000-00						
Oil Filter	063-2010-00						
Air Filter	Inner Filter 063-2060-00		Outer Filter 063-2050-00				
Fuel Filter	063-2011-00						
Motor Oil	15W-40 Motor Oil - Bad Boy Synthetic Blend Motor Oil Recommended. (Approximately 3.5 Quarts)						
Hydraulic Oil	20W-50 Motor Oil-Bad Boy Hydrostatic Oil Recommended (Approximately 2.5 Quarts per side) 085-6000-00						



# **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 Diesel engines use 15W-40 engine oil.
- 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 the front tires and 8 psi rear tires.
- 1.5 Perkins engines hold approximately three and a half (3.5) quarts of motor oil. Be careful not to over fill engine oil. Refer to 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 nontransferable. **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 the seat. 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 Mowers 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.



# **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.
- 2.22 Prevent fires by keeping engine and exhaust areas clear of grass clippings and other debris. Do not park or back mower over or immediately adjacent to flammable materials. Do not mow on or into piles of leaves. This may cause the leaves to become lodged around the engine and muffler and catch fire.



### **SETTING DECK HEIGHT**

- 2.23 If your machine is equipped with an actuator motor, raise the deck using the raise /lower switch. Refer to section 7 (Controls). When deck is raised, set desired height with the deck height control dial, then lower deck with the raise / lower switch.
- 2.24 If your machine is equipped with a foot pedal, press foot pedal to raise deck, select your desired deck height with the deck height dial, then slowly release foot pedal.

### **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. Bad Boy Mowers recommends always evaluating the terrain and slop conditions prior to operating on or near a slope to ensure the mower is operated in a safe manner. Under proper conditions your Bad Boy Mower may be able to mow a maximum slope of 5 degrees transversely, across the slope, and a 10-degree slope if driving up the slope, and a maximum of 15 degrees if driving down the slope. Following are some general guidelines Bad Boy Mowers recommends following.

- 2.25 Mow up and down slopes, not across.
- 2.26 Watch for holes, ruts, bumps, rocks, or other hidden objects that tall grass can obscure. Uneven terrain could overturn the machine.
- 2.27 Choose a low ground speed when operating the machine on a slope.
- 2.28 Do not mow on wet grass, the tires may lose traction.
- 2.29 Do not attempt to coast down a slope in the neutral position.
- 2.30 Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly, straight down the slope.
- 2.31 Keep all movement on slopes slow and gradual. Sudden changes in speed or direction could cause the machine to roll over.
- 2.32 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.
- 2.33 Do not try to stabilize the machine by putting your foot on the ground.
- 2.34 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.
- 2.35 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.

- 2.36 Keep children out of the mowing area and in the watchful care of a responsible adult other than the operator.
- 2.37 Maintain Alertness and turn machine off if a child enters the area.
- 2.38 Before and while backing, look behind and down for small children.
- 2.39 Never carry children, even with 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.
- 2.40 Never allow children to operate the machine.
- 2.41 Never leave the key in the ignition, especially around children.
- 2.42 Use extreme care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child



### **TOWING**

Max. pulling weight: 500 lbs.

Max. at 5°: 440 lbs.

Max tongue weights: 54" = 75 lbs.; 61" = 80 lbs.; 72" = 90 lbs.

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

### **SERVICE**

### **SAFE HANDLING OF FUEL**

To avoid personal injury or property damage, use extreme care in handling fuel.

- 2.48 Extinguish all cigarettes, cigars, pipes, and all other sources of ignition.
- 2.49 Use only an approved fuel container.
- 2.50 Never remove fuel cap or add fuel with the engine running.
- 2.51 Allow engine to cool before refueling.
- 2.52 Never fuel the machine indoors.
- 2.53 Do not store machine near open flame or source of ignition, such as a water heater or furnace.
- 2.54 Remove 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 fuel dispenser nozzle.
- 2.55 Never fill fuel 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.
- 2.56 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. Always allow any spilled fuel to completely dry before attempting to start the mower.
- 2.57 If fuel is spilled on clothing, change clothing immediately.
- 2.58 Never overfill fuel tank. Replace fuel cap and tighten securely. **Tank is full when level reaches** bottom of fill tube.

### **GENERAL SERVICE**

- 2.59 Never operate machine in a closed area where dangerous carbon monoxide fumes can collect.
- 2.60 Keep all nuts and bolts tight to be sure the equipment is in safe working condition. Never operate a poorly maintained machine.
- 2.61 Do not touch hot areas of the machine.
- 2.62 Never interfere with the intended function of a safety device or reduce the protection provided by a safety device. Check their proper operation regularly.
- 2.63 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.
- 2.64 Allow machine to cool before storing.
- 2.65 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.
- 2.66 Never make any adjustments or repairs with the engine running.



- 2.67 Check grass catcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary.
- 2.68 Mower blades are sharp. Wrap the blade or wear gloves before servicing them.
- 2.69 Check parking brake operation frequently. Adjust and service as required.
- 2.70 Maintain or replace safety and instruction labels, as necessary.
- 2.71 Do not attempt to mount a tire without the proper equipment and experience to perform the job.
- 2.72 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.
- 2.73 Park machine on level ground. Never allow untrained personnel to service machine. Understand service procedure before doing work.
- 2.74 Mower deck, frame, and engine compartment should remain free of debris to prevent premature parts failures or fire hazards.

### 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.

- 2.75 With the parking brake engaged, bring lever arms to their inward position Attempt to start the machine with the blade actuator in off position. The engine should not start.
- 2.76 On a level surface, disengage the parking brake and place lever arms to their outward position. Then, attempt to start the machine with the blade actuator in off position. The engine should not start.
- 2.77 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.
- 2.78 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)**

This machine is equipped with ROPS from the factory. It is vital that the rules below are adhered to. ROPS, when used correctly, dramatically decrease the fatality rate in roll-over instances.

- 2.79 Periodically ensure the bolts that attach the ROPS to the machine are securely fastened.
- 2.80 Always operate the machine with the ROPS secured in the upright position.
- 2.81 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.
- 2.82 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.
- 2.83 Always wear the provided seat belt when ROPS are utilized. Failure to use the seat belt severely handicaps the safety benefits of the ROPS.
- 2.84 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 If your machine has been equipped with a ROPS (Roll Over Protection System) then you must fasten seatbelt.
- 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.
- 3.15 Always engage PTO at full throttle.
- 3.16 Start engine with throttle position between half and full throttle.

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**

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Maintenance	Daily	First 8 Hours	Every 50 Hours or Annually*	Every 100 Hours or Annually*	Every 250 Hours	Section
Check and add engine oil	•					Section3
Check all belts for proper alignment	•					Section 2 (Pump) 6 (Deck)
Check tire pressure and wheel lug nuts	•					Section 5
Check battery terminal connections	•					Section 4
Check condition of blades	•					Section 6
Check for fuel and oil leakage	•					Section 3
Check deck and engine compartment for debris and clean as necessary	•					
Check air filters	•					
Initial oil change		•				Section 3
Tighten nuts and screws			•			
Change engine oil and filter			•			Section 3
Initial change of hydraulic oil and filter			•			Section 1
Grease mower				•		Section 5
Replace air element and pre-cleaner◆				•		Section3
Replace fuel filter*				•		Section 3
Clean or replace spark plugs and set gap				•		Section 3
Change hydraulic oil and filter					•	Section 1
Clean combustion chamber <sup>Dealer</sup>					•	
Check and adjust valve clearance Dealer					•	
Clean and lap valve seating surface Dealer					•	

<sup>\*</sup>Maintenance by hour or annually whichever comes first

# SECTION 5: MOWER STORAGE & TRANSPORTATION

- 5.1 Keep machine from collecting debris by storing in a covered area while not in use.
- 5.2 Disconnect the negative battery cable when machine will be stored for more than 30 days.
- 5.3 Always secure machine properly when transporting machine.
- 5.4 Do not load machine on trailer with blades engaged.
- 5.5 Do not use ramps to load the machine.
- 5.6 Make sure Parking Brake is in "up" position.
- 5.7 In wet conditions tires may spin while loading / unloading. If necessary, wait for dry conditions before loading/unloading.
- 5.8 Make sure mode of transportation is suitable to bear the weight of mower.
- 5.9 Deck height should be set at maximum before attempting to load.
- 5.10 Secure mower with at least two straps capable of securing weight of mower.
- 5.11 Always ensure mower engine and exhaust has cooled prior to parking inside building.

<sup>\*</sup>Check air and fuel filter more often in dusty conditions

Dealer Get maintenance performed at a registered dealership



# **MAINTENANCE LOG**

Date:	Hours:	Performed:
Date:	Hours:	Performed:



# **SECTION 6: TROUBLESHOOTING**

#### 6.1 Q: How do I prevent an uneven cutting pattern and increase the quality of cut?

**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?

**A:** Check battery charge and connection (grounds), check your fuel level, drain fuel/water separator, bleed air from fuel filter, 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 fuses; also check for any bare wires and/or bad connections.

#### 6.3 Q: What should I do if the blades won't engage?

**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. Also check PTO fuse underneath operator console (10-amps)

#### 6.4 **Q:** What type of fuel is recommended for my mower?

**A:** We recommend that you use a name brand low sulfur diesel fuel to ensure quality.

#### 6.5 **Q:** Do you offer touch-up paint for your mowers?

**A:** Touch-up paint is available. Contact your local dealer for more information.

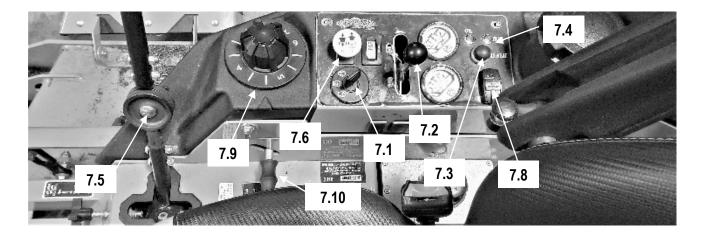
#### 6.6 **Q:** How do I clean my mower?

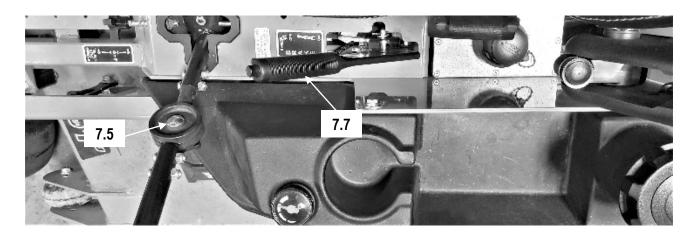
**A:** It is recommended that you use an air hose or blower to remove dust and debris from the mower, to ensure there is not a buildup of grass on the mower deck and engine compartment, which could become a fire hazard. If you must wash the mower, ensure you run the engine to operating temp to dry water and engage the blades to spin off any standing water on the pulleys. Avoid spraying water onto electrical components and bearings, to prevent premature failure of these parts.



# **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, and 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 **Pre-Heat Button:** This mower is equipped with a glow plug pre-heater. To activate turn ignition to the ON position and hold button for five seconds before starting the engine.
- 7.4 **MIL:** EFI machines contain a malfunction indicator light located in place of the choke control knob. This light indicates a malfunction in the electronic fuel injection system and requires **immediate** dealer service.
- 7.5 **Control Levers:** These levers control the mower's speed, direction, and neutral lock. These levers are used to steer, accelerate, decelerate and change direction.
- 7.6 **Blade Engage Switch:** This switch engages the blades. Pull the switch up to engage the blades and push the switch down to disengage the blades.
- 7.7 **Parking Brake:** This lever engages the parking brake. Pull back fully to engage the parking brake; push forward to disengage.
- 7.8 **USB Charging Port:** Your mower is equipped with a USB charging port for your accessory needs.
- 7.9 **Deck Height Control:** The deck height dial is used to set the cut of the deck.
- 7.10 **Deck Travel Lock:** The deck travel lock holds the deck in a transport position.

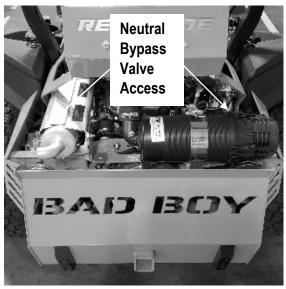


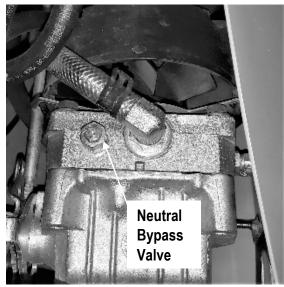




# **SECTION 8: MOVING INOPERABLE MOWER**

- 8.1 Do not tow machine. Use a winch to load on a trailer for transporting.
- 8.2 If it becomes necessary to move an inoperable mower, the drive pumps are equipped with bypass valves that allow the drive tires to rotate freely. These bypass valves are located on top of the pumps. Each require a quarter turn to allow for proper bypass.





Your Bad Boy Mower Weighs:

RENEGADE SERIES: 1790 lbs.

\*\*\*Weights fluctuate with the addition of accessories.

- 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.
- 8.4 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 **Coolant Temperature Gauge:** The Renegade diesel is equipped with a coolant temperate gauge for monitoring engine temperature.
- 9.2 **Oil Pressure Gauge:** The Renegade diesel is equipped with a oil pressure gauge for monitoring engine oil pressure.
- 9.3 **Electronic Hour Meter:** Registers Hour increments up to 9,999.9 total hours. This meter records the cumulative time the engine is running.
- 9.4 **Oil Light:** Alerts the operator that there is a low oil pressure situation inside the engine.
- 9.5 **Check Engine Light:** Alerts the operator that the ECM has detected an issue with the engine



# **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: EQUIPMENT LUBRICATION**

- 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: NLGI grade #2 multi-purpose gun grease.
- 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 into the fitting until grease seepage is observed. Be mindful of over-pressurization. Do not force the lever arm if there is strong back pressure as this can lead to reduced life of the component(s). 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 fuel
- •In the spring, don't use that old fuel unless you properly used a fuel stabilizer, it can cause a number of problems. Better to use fresh fuel 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,



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 its 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**

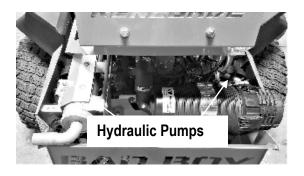
### **SECTION 1: HYDROSTATIC SYSTEM**

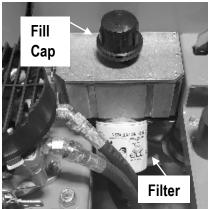
The hydro reservoir tank on the Outlaw Renegade model is located just behind the seat, on each side of the frame. There is a sight tube on the rear of the tank that indicates the current hydraulic oil level. The oil level should be filled until the level reaches the bottom of the upper fitting. Do not overfill. If an air bubble is present in the tube, add oil until the level reaches the fitting and the air bubble is no longer visible. Use only 20W-50 motor oil in this tank. Conventional or synthetic oil may be used. Bad Boy Hydrostatic Oil is recommended. Bad Boy recommends that the hydraulic oil and filters be changed within the first 50 hours of use; then at intervals of 250 usage hours. It is also recommended to use Bad Boy replacement filters. Use of any filter not designed for this application could result in damage of the hydraulic system and void the warranty. Each side requires approximately two quarts of oil to refile the system.

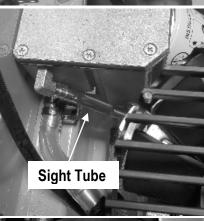
# THE FOLLOWING MAINTENACE IS TO BE PERFORMED ON A LEVEL SURFACE.

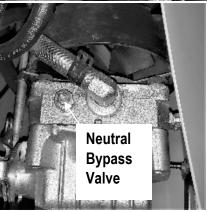
#### **CHANGING YOUR HYDRAULIC OIL AND FILTER**

- Place an oil drain pan (12" or more in diameter and 8 qt. capacity is optimal) beneath the oil filter. Remove the oil filter from the oil reservoir to drain the oil.
- 2. After the oil has drained from the reservoir, install new oil filter. Tighten ¾ turn past gasket contact.
- 3. Fill the reservoir with new 20W-50 motor oil through the fill cap. The oil level should be filled until the level reaches the bottom of the upper fitting. Do not overfill. If an air bubble is present in the tube, add oil until the level reaches the fitting and the air bubble is no longer visible.
- Drain the old oil filter of all free-flowing oil prior to disposal. Place used oil in appropriate containers and deliver to an approved recycling collection facility.
- 5. Proceed to the purge procedure.







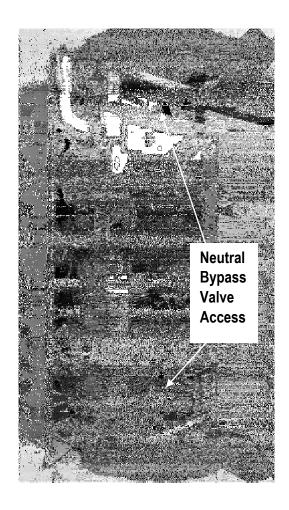




#### **PURGING PROCEDURE**

Due to the effects air has on the efficiency in hydrostatic drive applications, it is critical that the air is purged from the system. These purge procedures should be implemented any time a hydrostatic system has been opened to facilitate maintenance or any additional oil has been added to the system.

- 1. Lift the rear tires of the mower off of the ground and chock your front tires so they do no move.
- 2. With the bypass valve open (To open bypass valve, loosen ½ to 1 full turn) and the engine running, slowly move the directional drive arms in the forward and reverse directions (5 to 6 times), as air is purged from the unit, the oil level will drop.
- 3. With the bypass valve closed and the engine running, slowly move the directional drive arms in the forward and reverse directions (5 to 6 times). Caution: the tires will rotate during this procedure. Turn off engine. Check the oil level, and add oil as required after stopping the engine.
- 4. It may be necessary to repeat steps 1 through 3 until all the air is completely purged from the system. When the tires move forward and reverse at normal speed purging is complete.



To adjust the tracking on the mower, lengthen or shorten the push rods shown in the picture to the right. Lengthening the push rod will increase the speed of the pump. Shortening the push rod will decrease the speed of the pump. On-the-fly adjustments can be made by turning the adjustment knob in front of either steering arm until the desired effect is achieved.

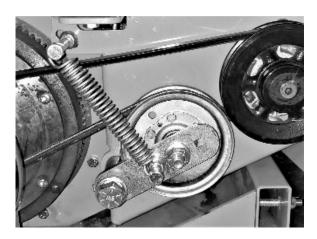


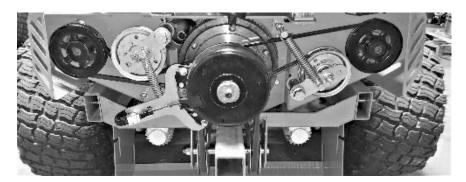




### **SECTION 2: DRIVE BELT**

The Renegade drive belt utilizes a two-belt system with auto adjusting tensioners. The use of a 3/8 ratchet and short extension may be required for installation or removal of a drive belt.





To access the rear of the pump plate, loosen the nuts holding the rear cover in place  $1\frac{1}{2}$  turns using a 9/16 wrench. Once loosened slide the rear cover rearward until it stops. Then the rear cover will pivot down giving access to the pump belts, clutch, and oil filter.





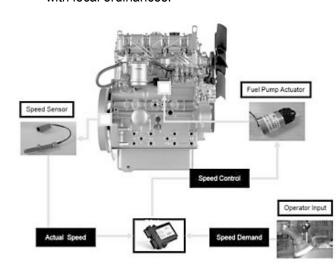
### **SECTION 3: ENGINE**

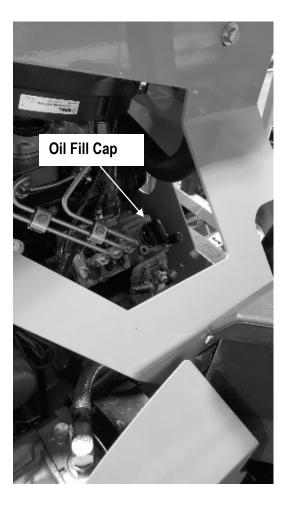
The oil drain is located on the bottom of the engine oil pan. Bad Boy recommends that the engine oil and filter be changed after the initial 8hrs of break in. After the initial engine oil service, Bad Boy recommends changing the engine oil and filter every 100 hours of use or once annually whichever comes first. Please refer to the engine owner's manual for oil capacity. 15W-40 engine oil is recommended for maximum protection.



#### **CHANGING YOUR ENGINE OIL AND OIL FILTER**

- Place an oil drain pan (12" or more in diameter and 8 qt. capacity is optimal) beneath the oil drain plug. Remove oil drain plug and allow oil to drain completely.
- 2. The oil filter is located on the right side of the engine block. Clean area around oil filter. Remove oil filter and clean sealing surface. Lubricate oil filter seal. Install new oil filter and tighten 3/4 turn past gasket contact.
- Fill crankcase with approximately 3.25 quarts of new oil. Level should reach top of indicator on dipstick.
- 4. Start engine; check for oil leaks. Stop Engine; correct oil leaks if present. Recheck oil level.
- 5. Dispose of used oil and filter in accordance with local ordinances.





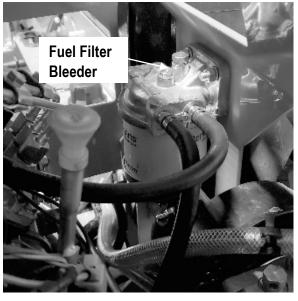


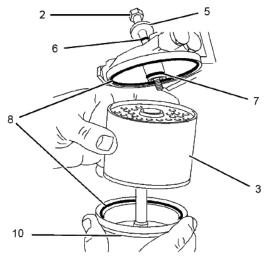
### **Fuel System**

When servicing the fuel system on the Diesel, it is necessary to purge the air from the system by loosening the 9/16" bolt on top of the fuel filter and turn the ignition to the ON position. This will activate the electric fuel pump. Tighten 9/16 bolt after air bubbles are no longer visible. Turn ignition to OFF.

#### **CHANGING YOUR FUEL FILTER**

- 1. Your 1100cc Diesel has two fuel system filters. The first is a filter/water separator.
- Open the drain on the bottom of the fuel/water separator. Catch the draining fluid in a suitable container. Dispose of the drained fluid correctly.
- 3. Close drain.
- 4. The second fuel filter is a canister located above the fuel/water separator.
- 5. Close the fuel supply valve.
- 6. Clean the outside of the fuel filter assembly.
- 7. Remove the filter housing bolt from the bottom of the filter.
- 8. Remove the canister. Ensure that any fluid is drained into a suitable container.
- 9. Assemble the following items: seals (8), seal (7), canister (3), and bowl (10). Place washer (5) and seal (6) on setscrew (2).
- 10. Fasten the assembly to the fuel filter base with housing bolt (2).
- The fuel system will need to be primed after the new filter is installed. Refer to air purging instructions at top of page.



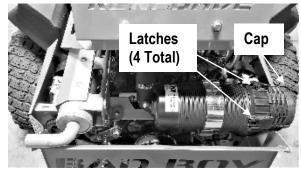






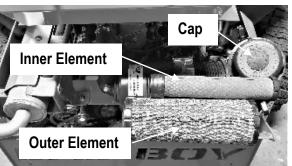
#### **Air Cleaner**

The air cleaner is the engine's only defense against damaging foreign particles. It is very important that the air cleaner element is inspected prior to each use. Remove the element and tap its sides in order to remove debris. Do not blow the filter out using compressed air. Doing so will greatly reduce the air cleaner's effectiveness. Replace yearly; more often in dusty environments. Adhering to these practices will help prevent loss of power and premature engine failure.



#### **CHANGING THE AIR CLEANER**

- Locate the air filter and unbuckle all of the air filter cover latches.
- Remove the cover and take out the outer white element and the inner blue element.
- 3. Clean or replace elements.
- Reattach the cover.



#### **Radiator Debris Screen**

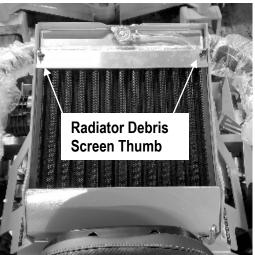
The radiator is equipped with a removable screen that must remain free of debris at all times to ensure proper engine cooling. Check screen hourly during dry conditions.

#### **Cleaning the Radiator Debris Screen**

- 1. Allow radiator to cool.
- 2. Remove thumb screws and screen hold down bracket.
- 3. Slide screen back and up.
- 4. Clean screen thoroughly of all debris using high pressure air or water as necessary.
- Reinstall in reverse order.



This mower is equipped with a coolant expansion tank. The proper coolant level is at the "L" mark when the coolant is cold and at the "H" mark when the coolant is hot. Check coolant level before mower operation.







### **SECTION 4: ELECTRICAL SYSTEM**

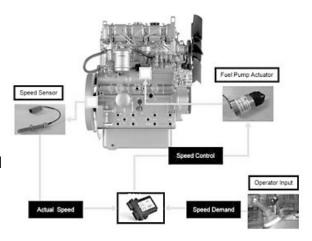
This mower is equipped with multiple protective fuses. Ensure all fuses are clean and well connected.

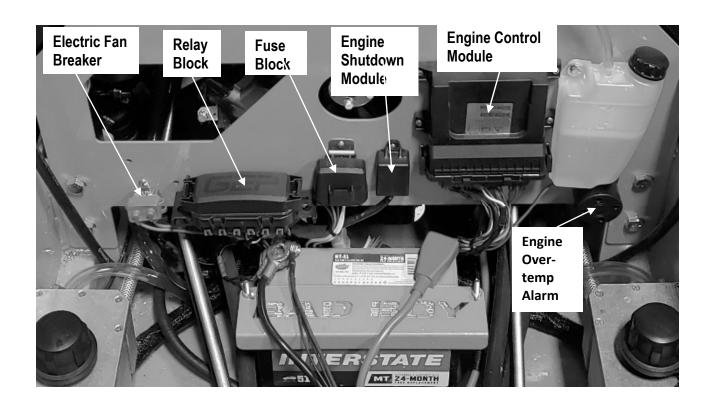
A blown fuse usually indicates a problem within the electrical system or an electrical component. Ensure the battery terminals are tightly fastened. Never replace a fuse with one of a higher amperage rating or 'bypass' a fuse in any way. Doing so creates a significant fire hazard and can cause severe damage to the mowers electrical components. If a fuse is repeatedly blowing, contact your Bad Boy dealer.

Check the condition and connection of the relays. 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.

If you are having issues starting your mower ensure the signal wire is connected to your starter solenoid.

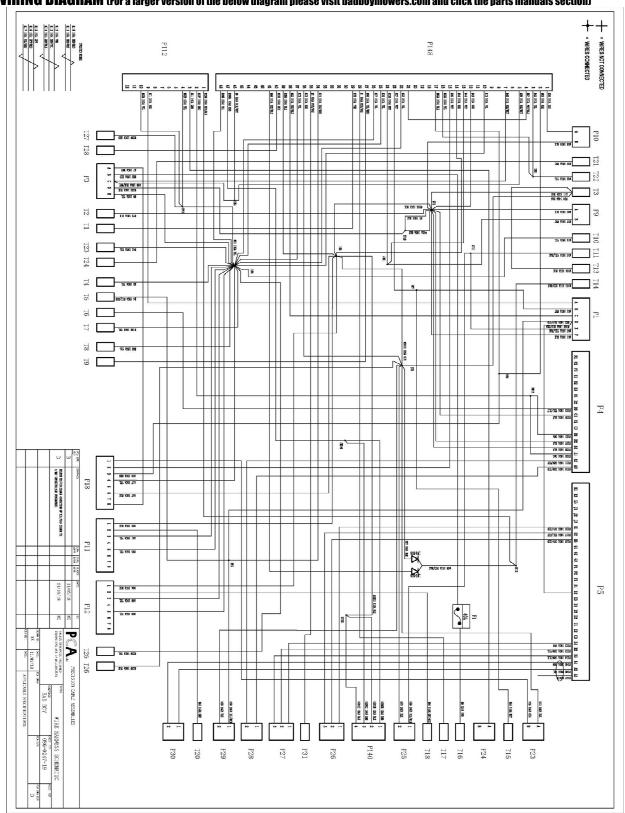






#### ELECTRICAL SYSTEM (CONTINUED)

### WIRING DIAGRAM (For a larger version of the below diagram please visit badboymowers.com and click the parts manuals section)





### **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. To access the recessed front fork nuts, remove the dust cap by prying gently using a flat-head screwdriver. Once cap is removed, a 17/16 in socket will be needed for top nut. You will need to secure the bottom nut with a 1 1/2" wrench. Once you have torqued the nuts to 40 ft.-lbs., reapply the dust cap by gently tapping around its edges. Do NOT hit center of cap.

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

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

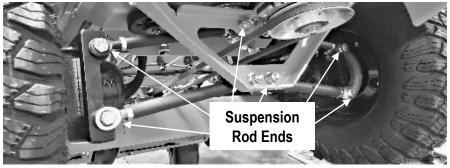
The control arm actuators have grease fittings located on each tube. Grease one time a year.

There are two grease fittings located on each of the two turnbuckles (4 total). Grease at every oil change.

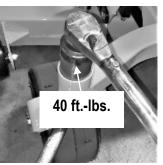


There are 10 spherical rod ends located in the rear suspension system that do not require adjustment, but do require periodic cleaning and lubrication. Bad Boy recomends using a spray lubricant on these joints. Do this at evey oil change and once annualy.

















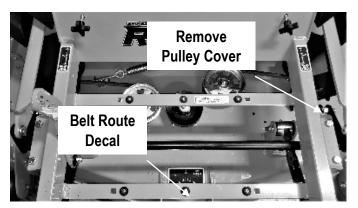
### **SECTION 6: CUTTING DECK**

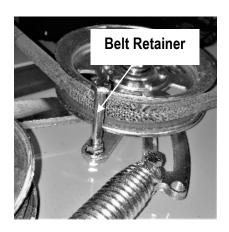
#### **DECK BELT REMOVAL**

- 1. Remove ignition key.
- 2. Raise the deck to its highest position.
- 3. Remove the right pulley cover.
- 4. Remove belt retainer bolt.
- 5. Remove clutch bracket and pigtail.
- 6. 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.

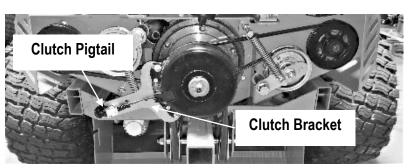
#### **DECK BELT INSTALLATION**

- 1. Remove ignition key.
- 2. Raise the deck to its highest position. If needed loosen the deck belt tensioner to its weakest installed position.
- 3. Take off both pulley covers and route the belt by following the belt route decal. (The easiest way to finish running the belt is routing the belt through the deck pulleys leaving it off the left deck pulley. Slip it onto the clutch then carefully slip it onto the left deck pulley.)
- 4. Install belt retainer bolt.
- 5. Install clutch bracket and pigtail.
- 6. Verify that the belt is routed properly as improper routing can damage the spindles as well as the engine. Improper routing can also increase the potential of a personal injury hazard.
- 7. Check belt tension and adjust if needed.
- 8. Reinstall both pulley covers.









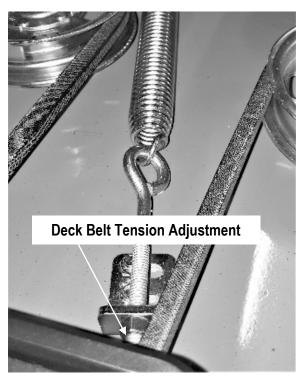


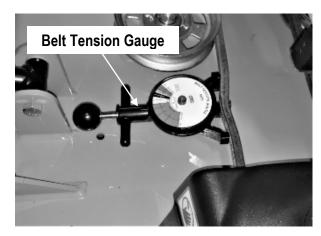
#### **ADJUST DECK BELT TENSION**

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.

Spring tension adjustments can be made by using a 3/4" wrench to adjust the two jam nuts. Belt tension should be 60-65 lbs. with the deck at its lowest setting.

Use a belt tension gauge to ensure the proper tension. Your dealer or service center will have a belt tension gauge or you can buy one (Part Number 041-9999-00).





#### **BLADE SHARPENING**

The blade on the top (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.



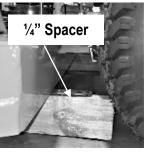


#### **LEVELING THE DECK**

Before leveling the deck, please verify linkage bar is secured properly as described in the picture to the right.

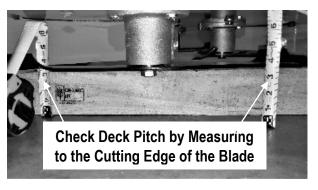
- 1. Start on a flat, level surface and set the air pressure in front tires to 12 psi. and the rear tires to 8 psi. Measure the deck at all four corners. The deck should be level from left to right but should be pitched downward front to back. The deck pitch is achieved by measuring from the cutting edge of the blade to the ground. Bad Boy recommends having a ¼" pitch down in the front measured from the cutting edge of the blade. Adjustments can be made by adjusting the deck hangers in their slots.
- 2. Using a pair of approximately 3 ft. long 2x4's, stand the boards on edge and slide them under the deck from front to back as shown. Making sure the deck wheels and blade bolts do not rest on the 2x4's, and that the front and back edge of the deck rest on the 2x4's.
- 3. Lower the deck down onto the 2x4's using either the deck lift pedal or the electric actuator, whichever your mower is equipped with. The deck should now be approximately 3.5" off the ground. to achieve the proper 1/4" pitch down in the front it may be necessary to use some 1/4" spacers under the rear of the deck as shown.
- 4. Using a pair of 3/4 wrenches, loosen all deck hanger bolts on the top of the deck. These are the lower bolts in the slots of the deck as shown. Do not loosen the upper bolts that attach the deck hangers to the actuator lift bars.
- 5. The deck is now loose from the frame and movement of the lift pedal or electric actuator should only move the hanger bolts up and down in the deck slots. At this point a different deck height may be chosen on the cutting height dial. choosing a lower number will raise the decks cutting height. Choosing a higher number will decrease the decks overall cutting height. Remember, you should be approximately in the 3.5" range on your selection.
- 6. After setting the deck dial to the desired position, tighten all deck hanger bolts in their slots starting from the rear of the deck then moving to the front. Lift the deck to the highest position. measure all four corners of the deck again to ensure that no further adjustments are necessary.
- 7. Recheck belt tension before mowing.







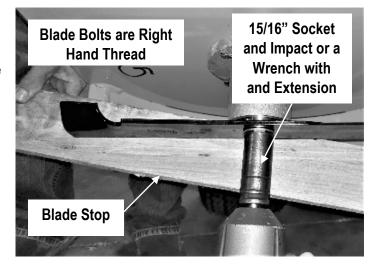






#### **BLADE REMOVAL**

To change blades, it may be best to use a piece of wood positioned between the blade and mowing deck to keep the blade from turning. Use a 15/16" socket and impact wrench capable of and output torque of at least 220 ft-lbs. A box wrench and extension can be used, though component damage potential may be increased. A 3/4" wrench can be used on the spindle shaft above the blade to keep the shaft from turning. The bolt has right-handed threads.



Re-torque the blade bolts to 90-110 lbs. upon reinstallation.

The blade spindles contain a sealed ball bearing inside the top and bottom of the spindle. The bearings are replaceable for a more cost-effective repair. Factors such as water introduction into the bearing will have a major impact on bearing life.

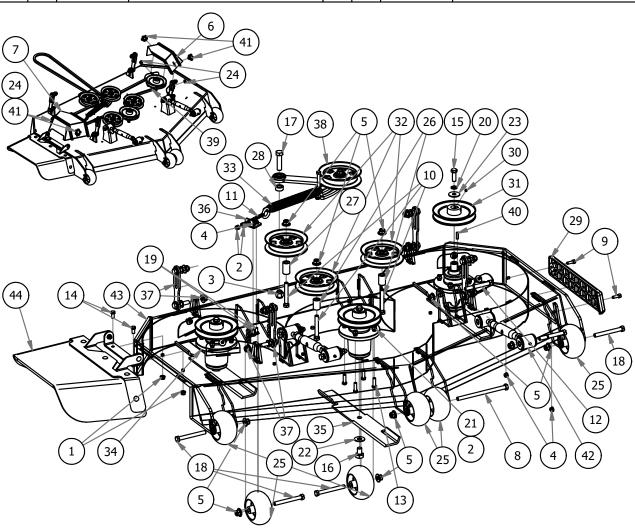






# **PARTS SECTION: 61" DECK ASSEMBLY**

			Parts List	Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION	
1	2	013-5201-00	3/8" Flange Nut	23	3	019-6020-00	1/2" Belleville Washer	
2	14	013-6014-00	3/8" Hex Nut	24	4	019-6050-00	.360 ID Plastic Washer-Black	
3	1	013-7021-00	5/8 Std NC Nylock Nut	25	6	022-1001-00	2019 Deck Wheel	
4	4	013-8049-00	5/16" Nylon Flange Nut	26	2	025-5338-00	.502 ID X .750 OD X 1.500 Long Spacer	
5	12	013-8050-00	1/2-13 Nylon Flange Nut	27	1	025-5339-00	1 3/4" Pulley Spacer	
6	1	014-5052-00	2019 61" Outlaw Gen2 Pulley Cover Left	28	1	025-7020-00	5/8" x 1/" Collar W/One Set Screw	
7	1	014-5053-00	2019 61" Outlaw Gen2 Pulley Cover Right	29	1	029-7036-00	REVISED TRIM BUMPER_20180226	
8	1	018-0046-00	1/2-13 x 8 Hex Bolt Grade 5	30	3	030-0050-00	5/16 Set Screw	
9	2	018-2007-00	5/16-18 x 1 GR 5 Hex Bolt Zinc	31	3	033-6004-00	6 1/4" Drive Pulley	
10	3	018-2018-00	1/2 x 3 1/2 Flange Bolt Grade 8	32	3	033-7201-25	5-3/4 Idler Pulley	
11	1	018-4707-00	4" 3/8-16 Eye Bolt	33	1	034-2030-00	2019 Outlaw Gen2 Deck Spring	
12	4	018-5019-00	1/2" x 4" Bolt (Grade 8)	34	3	037-4000-00	OUTLAW SPINDLE ASSEMBLY	
13	12	018-5040-00	3/8" x 1 1/4" Hex Bolt	35	3	038-6080-00	61 inch Fusion Blade	
14	2	018-5250-00	3/8" x 3/4" Hex Bolt	36	1	039-0144-00	2019 Deck Eye Bolt Tab	
15	3	018-6019-00	1/2"-20 x 1 1/2 - Grade 5 Fine Thread Bolt	37	4	039-2125-17	Deck Hangar Assembly	
16	3	018-6020-00	5/8" x 1 1/2" Grade 8 Hex Bolt (Fine)	38	1	039-6946-17	2019 Renegade Deck Idler	
17	1	018-6059-00	5/8" x 2 1/2" Grade 5 Hex Bolt (Coarse)	39	1	041-0222-00	Deck Belt for 61" Renegade	
18	4	018-7050-00	1/2" x 4 1/2" Bolt	40	3	042-6030-00	1/4" x 1" Key	
19	2	018-8066-00	5/16" x 7/8" Carriage Bolt	41	4	045-6043-00	5/16" Knob	
20	3	019-5007-00	1/2" Lock Washer	42	2	048-7000-00	Turnbuckle	
21	12	019-5037-00	3/8" Lock Washer	43	1	060-6151-19	2019 Sloped 61" Deck	
22	3	019-5038-00	5/8" Flat Washer	44	1	210-7000-98	2019 Outlaw Gen2 Chute Assembly	





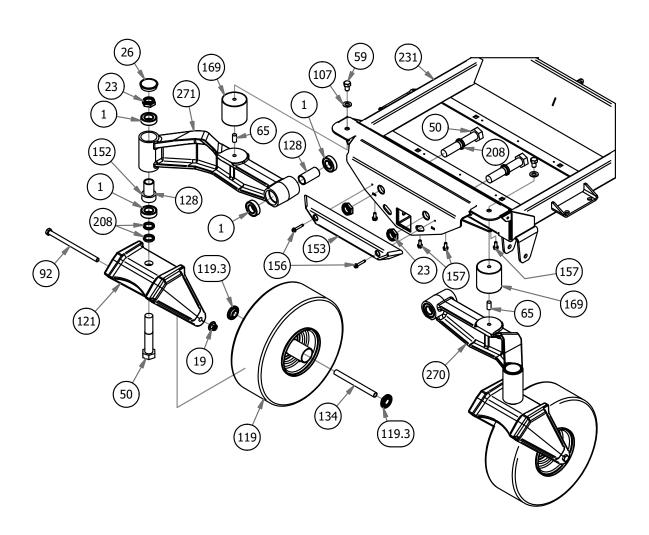
### **PARTS SECTION: DECK SUB-ASSEMBLIES**

ITEM C							
ITEM   C		1	037-4000-00 Parts List	$\bot$			048-7000-00 Parts List
	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
	1	037-4000-01	4000 Series Spindle Housing	21	1	013-0007-00	Hex Nut, 11/16-12
-	1	037-4002-00	4000 Series Spindle Spacer	22	1	013-0008-00	Hex Nut, 11/16-12 Left Handed
-	1	037-9050-00	Locking Collar w/ 1/4"-20 Set Screw	23	2	024-6034-00	1/4" Press in Grease Fitting
4	2	037-8002-00	Spindle Dust Cap	24	4	032-2000-00	Polyeurethane Bushing
5	1	037-6026-00	Spindle Shaft	25	2	032-2001-00	Sleeve
6	4	037-6023-00	Bearing - 6206	26	1	048-7020-00	2015 Outlaw Toplink Body
			039-2125-17 Parts List	27	1	048-7021-00	2015 Outlaw Toplink RH End
TEM C	QTY	PART NUMBER	DESCRIPTION	28	1	048-7022-00	2015 Outlaw Toplink LH End
7	2	013-5300-00	1/2" Flange Nut				210-7000-98 Parts List
8	2	013-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	ITEM	QTY	PART NUMBER	DESCRIPTION
9	2	018-6037-00	1/2-13X 2-1/4 GR Hex Bolts	29	7	013-8049-00	5/16" Nylon Flange Nut
10	4	019-8054-00	.505 Nylon Spacer	30	5	018-4703-00	5/16" x 1 1/4" Carriage Bolt
11	1	039-2125-00	Deck_Hanging_Tab	31	2	018-8066-00	5/16" x 7/8" Carriage Bolt
			039-6946-17 Parts List	32	2	019-6042-00	.360 ID Plastic Washer
тем с	QTY	PART NUMBER	DESCRIPTION	33	1	039-4893-00	2019 Upper Chute Bracket
12	4	013-5201-00	3/8" Flange Nut	34	1	039-4894-00	2019 Lower Chute Bracket
13	1	013-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	35	1	206-6018-00	2019 Chute Hanger
14	1	018-4700-00	3/8-16x3 grade 5 hex bolt	36	1	210-6025-00	2019 Belted Chute with Logo
15	1	018-6012-00	3/8 x 1.5" Bolt		•	•	
16	1	018-6036-00	1/2" x 2 3/4" Hex Bolt				(13)
17	1	025-5203-00	Spacer 3/4 OD x 1/2 ID x 3\4 Length				
18	1	026-0167-00	Belt Tensioner Retainer Plate	$\neg$			
19	1	033-8050-00	5" Idler Pully				
-	1	039-6946-00	2019 Deck Tensioner	_			(19)
6	)_		8 7 11			12	18
6	) }		039-2125-17			14)	9-6946-17
2			039-2125-17 Deck Hangar Assembly			14)	(16)
(2) (1) (6) (4) (4) (7)			039-2125-17 Deck Hangar Assembly  23  24  27  21  26	25)		14)	9-6946-17
(2) (1) (6) (4) (5)		37-4000-00	039-2125-17 Deck Hangar Assembly  23  24  27  21  26  28  28			14 03 2019 Ren	89-6946-17 egade Deck Idler  31 33 36 36 210-7000-98
2 1 6 4 5			039-2125-17 Deck Hangar Assembly  23  24  27  21  26  28  28			14 03 2019 Ren	89-6946-17 egade Deck Idler  31 33 36 36 32



# **PARTS SECTION: FRONT END**

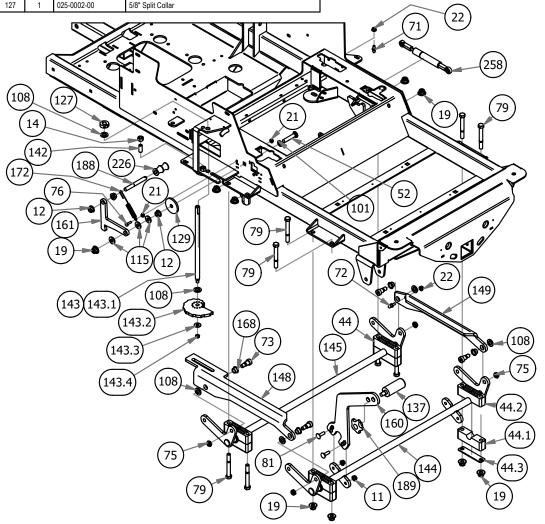
	Parts List					Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION			
1	8	010-1050-00	1641 BEARING W/2 CONTACT RUBBER SEALS	128	4	025-0003-00	2016 Front Bearing Spacer			
19	2	013-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	134	2	025-5202-00	Front Wheel Spanner			
23	4	013-9004-00	1" Fine Thread 1/2 Nylock Nut	152	2	029-7050-00	Rubber Stabilizer (Front Forks) [R series]			
26	2	014-2025-00	2017 Bearing Cover	153	1	029-8000-00	2017 XP Bumper			
50	4	018-0026-00	1-14 x 5.5 Hex Bolt Grade 8 Zinc Yellow	156	2	030-7039-00	1/4" x 1 1/2" Self Tapping Screw			
59	2	018-1055-00	1/2" x 3/4" Hex Bolt	157	4	030-7042-00	5/16 x 3/4 washer head type F screw			
65	2	018-2009-00	1/2-13 x 1" Stud	169	2	032-8999-00	Vibration Mount-Blue Dot			
92	2	018-7010-00	1/2" x 9" GR 5 Hex Bolt	208	6	058-1000-00	Spacer, 1x1.375x.25			
107	2	019-5702-00	1/2" Washer (Grade 8)	231	1	070-5374-19	2019 Horizontal Diesel Frame			
119	2	022-0003-00	2019 15x6.00-6 Non Pneumatic Black Front Assembly	270	1	250-0032-00	2019 Front I-Beam Left			
119.3	1	022-7010-00	1-3/4" Bearing-Large Bore Front Rim	271	1	250-0033-00	2019 Front I-Beam Right			
121	2	023-0004-00	2019 Rebel, Rogue, Renegade Front Fork							





# **PARTS SECTION: ACTUATORS & TRAVEL LOCK**

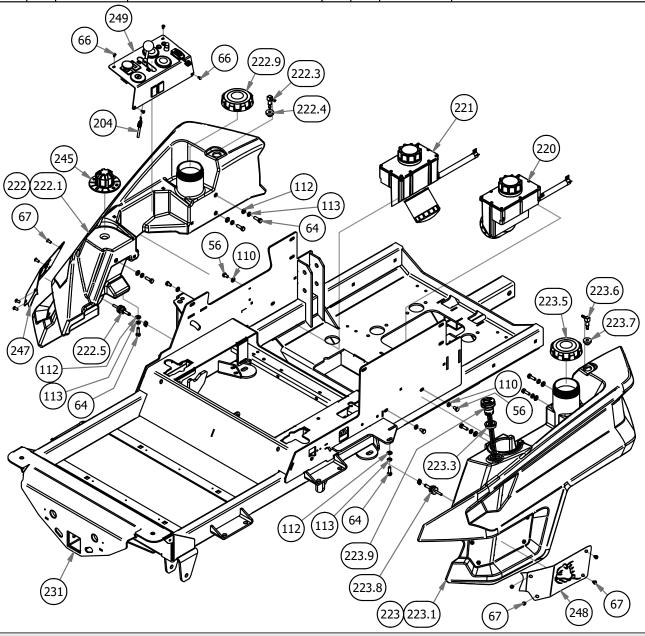
	Parts List					Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION			
11	2	013-5202-00	3/8-16 NYLON INSERT FLANGE LOCKNUT (GR.F) ZINC	129	1	025-0025-00	MZ Deck Idler Spacer			
12	3	013-5300-00	1/2" Flange Nut	137	1	026-0026-00	Knurled Pedal			
14	1	013-7018-00	1/2" Hex Nut	142	1	028-0008-00	Dial Rod Plunger			
19	9	013-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	143	1	028-0015-19	2019 Outlaw Gen2 Deck Height Dial Rod Assy			
21	2	013-9001-00	1/4-20 Hex Flange Nuts Zinc w/Serrations	143.1	1	028-0015-00	2019 Outlaw Gen2 Dial Rod			
22	2	013-9002-00	5/16" Flange Nut	143.2	1	026-1101-00	2019 Deck Height Cam			
44	4	017-9075-00	Pillow Block Assembly	143.3	1	019-5029-00	3/8" Flat Washer			
44.1	1	017-9000-00	Two Piece Pillow Block (Male)	143.4	1	018-4011-00	3/8-24 Nylon Insert jam locknut			
44.2	1	017-9050-00	Two Piece Pillow Block (Female)	144	1	028-0026-00	2019 Outlaw Actuator - Front			
44.3	1	017-9025-00	Two Piece Pillow Block Strap	145	1	028-0027-00	2019 Outlaw Actuator - Rear			
52	1	018-0043-00	1/2 x 2-1/2 Carriage Bolt	148	1	028-6075-00	2019 Actuator Linkage - Right			
71	1	018-2050-00	10mm Damper Ball Stud-Steering	149	1	028-6076-00	2019 Actuator Linkage - Left			
72	1	018-2055-00	10mm Damper Ball Stud-XP Linkage	160	1	031-0120-00	Foot Lift Upright Lever			
73	4	018-3001-00	5/8" x 5/8" Shoulder Bolt	161	1	031-0125-00	2019 Outlaw Deck Travel Lock			
75	4	018-4010-00	1/2" Nylcock Nut (1/2 Jam)	168	4	032-5052-00	Bronze Bushing - SF - 2024-8			
76	1	018-4702-00	1/4-20 x 1-1/4 GR 5 Hex Bolt	172	1	034-1025-00	Brake Spring			
79	8	018-5019-00	1/2" x 4" Bolt (Grade 8)	188	1	044-4000-00	Seat Bracket Pin			
81	2	018-5043-00	3/8" x 1 1/4" Carriage Bolt	189	1	045-6044-00	Foot Pedal Knob 1/2-13			
101	1	019-0007-00	.517 Square Hole Round Washer	226	1	069-4011-00	Travel Lock Rubber Grip			
108	6	019-6017-00	.635 ID X 1.120 OD X .140 THICK FLAT WASHER NYLON	231	1	070-5374-19	2019 Horizontal Diesel Frame			
115	3	019-8054-00	.505 Nylon Spacer	258	1	087-6100-00	250lb Gas Spring - 61" Deck			
127	1	025-0002-00	5/8" Split Collar			^	$\widehat{}$			





# **PARTS SECTION: TANKS**

			Parts List	Parts List			Parts List
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
56	4	018-0057-00	5/16"-18 x 1/2 GR5 Hex bolt zink	222.9	1	067-9905-00	Diesel Fuel Cap
64	8	018-2007-00	5/16" x 1" Bolt	223	1	067-9995-50	2019 Left Renegade Fuel Tank (Diesel)
66	4	018-2010-00	10-32 x 3/8" Button Socket Head Bolt	223.1	1	067-9995-50	2019 Left Fuel Tank (Diesel)
67	8	018-2012-00	1/4" x 1/2" BS C/S 18-8 SS	223.5	1	067-9905-00	Diesel Fuel Cap
110	4	019-7040-00	1/4" Flat Washer	223.6	1	024-9903-00	90 Degree Elbow Fitting
112	8	019-8044-00	5/16" Flat Washer	223.7	1	032-9902-00	Nitrile Bushing
113	8	019-8051-00	5/16" Lock Washer	223.8	1	067-9901-00	Fuel Pick-up
204	1	055-8018-75	Diesel Throttle Cable	223.3	1	067-6056-00	Fuel Gauge Grommet
220	1	067-8053-18	LH Rogue Hydro Tank Assy	223.9	1	067-4080-00	Fuel Gauge
221	1	067-8054-18	RH Rogue Hydro Tank Assy	231	1	070-5374-19	2019 Horizontal Diesel Frame
222	1	067-9990-50	2019 Right Renagade Fuel Tank (diesel)	245	1	077-9001-00	2019 Deck Height Dial
222.1	1	067-9990-50	2019 Right Fuel Tank (Diesel)	247	1	079-3290-00	2019 Outlaw Fuel Tank Insert - Right
222.3	1	024-9903-00	90 Degree Elbow Fitting	248	1	079-3291-00	2019 Outlaw Fuel Tank Insert - Left
222.4	1	032-9902-00	Nitrile Bushing	249	1	079-3480-19	Renegade Control Panel Assembly
222.5	1	067-9901-00	Fuel Pick-up	273	2	072-8076-00	2 EAR CLAMP 12.5mm-15mm





## PARTS SECTION: REAR COVER & HYDRAULIC COOLERS

	PART NUMBER	Parts List				
7 12 0	PART NUMBER	T UTIO EIOC				Parts List
		DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
11 4 0	113-2050-00	1/4-20 Hex flang lock nut	96	8	018-8052-00	1/4" x 3/4" Hex Bolt
	113-5202-00	3/8-16 NYLON INSERT FLANGE LOCKNUT (GR.F) ZINC	110	4	019-7040-00	1/4" Flat Washer
9 1 0	13-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	131	1	025-0028-00	2019 Pulley Spacer .75 x .5 x 4.375
0 2 0	13-8051-00	1/4" Wing Nut	135	2	025-5203-00	Spacer 3/4 OD x 1/2 ID x 3\4 Length
1 0	14-5063-00	2019 Horizontal Battery Hold Down Cover	139	1	026-2224-00	2019 Horizontal Suspension Rear Cover
1 0	118-0040-00	1/2" x 8 1/2 GR 5 Hex Bolt	151	2	029-7038-00	8" Rubber Bumper
4 0	18-0044-00	3/8" x 2 1/2" Carriage Bolt	171	2	033-7027-00	2019 Outlaw Horizontal Rear V Pulley
4 0	118-4702-00	1/4-20 x 1-1/4 GR 5 Hex Bolt	213	1	064-4000-00	Red Battery Cable - Diesel
2 0	118-8051-00	1/4" x 1" Carriage Bolt	214	1	064-4001-00	Black Battery Cable - Diesel
			219	2	067-8052-19	Renegade Oil Cooler Assembly
		<b>∉</b>	219.1	1	067-8052-00	2019 12" Oil Cooler With Fittings
			219.2	1	051-8063-14	3/8" Clear Hose
	(20)		219.3	1	051-8063-24	3/8" Clear Hose
	(20)	STA GOVE	219.4	4	072-8065-00	3/8" Hose Clamp
			224	1	068-8050-00	Battery - Diesel/Renegade Models PF-516
(	30		231	1	070-5374-19	2019 Horizontal Diesel Frame
			231)			



PARTS SECTION: FLOORBOARD, ROPS, & RADIATOR 63 (210.5 (210.4 106 (210.6 (238) 210.3 〔18〕 265 (83 (201 **DETAIL C** (31 (241 (106) 113 (112 98 210.7 (261) (210.1 (218) (183 (273 (212 80 6 (210.2 210.8 140 250) 86 (18 (267) 49 96 (210.10 39 (210.9) (109 (202 (111 96 109 (273 (246) 8 8 68 68 35 97 (150 (155) 82 (260) DETAIL B (82) [19]

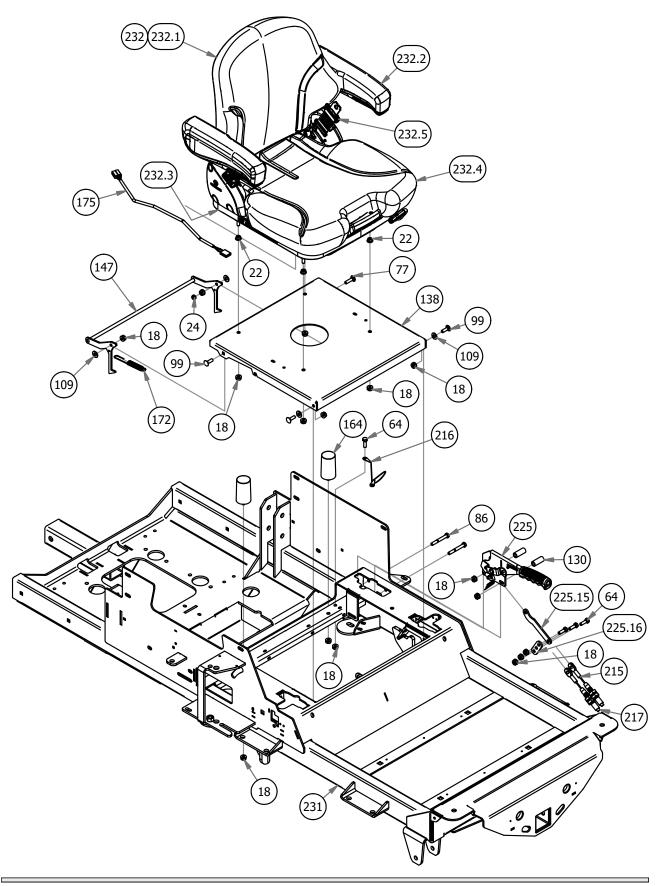


# PARTS SECTION: FLOORBOARD, ROPS, & RADIATOR

			Parts List	Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION	
2	4	013-0005-00	1/2" Center Lock Nut	155	6	030-3050-00	#10 x 1/2" Self Tapping Screw	
6	6	013-0054-00	1/4-20 Cage Nut	183	14	040-6080-00	Ratchet Fastener	
7	6	013-2050-00	1/4-20 Hex flang lock nut	201	1	051-8069-00	5/16 Clear Hose x 42"	
8	8	013-5019-00	10-24 Nylon Insert Locknut	202	3	051-8075-00	5/16 Fuel Line Hose - Priced Per Foot	
9	2	013-5041-00	3/8 Nylock Nut	210	1	061-5001-98	2019 Diesel Radiator Kit	
18	2	013-8049-00	5/16-18 Nylon Flange Nut	210.1	1	061-5001-00	2019 Diesel Radiator	
19	2	013-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	210.2	1	014-3005-00	Electric Fan for 2019 Diesel Radiator	
31	1	014-5065-00	2019 Diesel Upper Rear Cover	210.3	1	015-0104-00	radiator cap	
33	1	015-0007-00	Caterpillar Fuel Bowl Kit	210.4	1	026-2008-00	Screen Rentention Plate for 2019 Diesel Radiator	
35	1	015-0015-00	Auto Shut Down for Cat Diesels	210.5	2	030-0090-00	1/4-20 x 3/4 Thumb Screw	
37	1	015-0111-00	overflow Reservoir- 27Kaw & 28/35Hp Diesel	210.6	1	024-0015-00	1/4 Barb to 3/16 NPT Overflow Fitting	
39	1	015-4000-00	Electric Fuel Pump	210.7	1	015-0098-00	1/4 NPT Drain Plug	
40	1	015-4010-00	ECM for 1100cc Diesel	210.8	4	019-8040-00	1/4" x 3/4" Carriage Bolt	
49	2	018-0024-00	M6-1.0 X 16MM Hex Bolt	210.9	4	019-4008-00	1/4" Lock Washer	
57	2	018-0067-00	1/2-13 x 3 Carriage Bolt Grade 5	210.10	4	013-8039-00	1/4-20 Hex Nut	
63	1	018-2006-00	5/16 x 1 1/4 Hex Bolt	212	1	063-2011-00	Fuel Filter	
68	4	018-2018-00	1/2 x 3 1/2 Flange Bolt Grade 8	218	1	066-8075-00	Reservoir Tank Cap-Overflow	
74	2	018-4007-00	1/4-20 x 1 GR 5 hex bolt zinc	231	1	070-5374-19	2019 Horizontal Diesel Frame	
80	2	018-5040-00	3/8" x 1 1/4" Hex Bolt	233	1	072-0001-00	3/8 Cable Clamp-Black Nylon	
82	4	018-5200-00	10-24 X 5/8 BS Button Head Bolt	238	1	072-8067-00	5/8 Hose Clamp	
83	4	018-5250-00	3/8" x 3/4" Hex Bolt	241	1	072-8090-00	Diesel Clamp 1 3/4" Vinyl	
86	1	018-5344-00	5/16" x 2 1/2" Bolt	246	1	079-3155-00	2019 Outlaw Floorboard	
96	6	018-8052-00	1/4" x 3/4" Hex Bolt	250	1	081-0050-00	OUTLAW2019_FLOORMAT	
97	4	018-8058-00	10-24 x 1 BS C/S 18-8 SS	251	1	081-0051-00	FLOORMAT_OUTLAW_2019	
98	6	018-8063-00	5/16" x 3/4" Hex Bolt	252	2	084-4015-00	Rubber Trim	
106	4	019-5037-00	3/8" Lock Washer	254	1	086-0247-19	2019 24.7 Diesel Harness	
109	2	019-6042-00	.360 ID Plastic Washer	260	4	088-1999-00	2019 Outlaw Counter Weight	
111	2	019-8040-00	1/4" x 3/4" Carriage Bolt	261	1	089-0006-00	2019 2X2 Folding ROPS	
112	11	019-8044-00	5/16" Flat Washer	265	1	094-5088-00	Radiator Screen - Diesel	
113	6	019-8051-00	5/16" Lock Washer	266	1	201-8025-00	2019 Diesel Radiator Mount - Front	
118	1	021-8059-00	Heat Warning Piezo Buzzer	267	1	201-8026-00	2019 Diesel Radiator Mount - Right	
140	1	026-2230-00	2019 Outlaw Adjustable Foot Plate	268	1	201-8027-00	2019 Diesel Radiator Mount - Left	
150	6	029-4010-00	Button Bumper	273	6	072-8076-00	2 EAR CLAMP 12.5mm-15mm	



## **PARTS SECTION: SEAT & BRAKE**



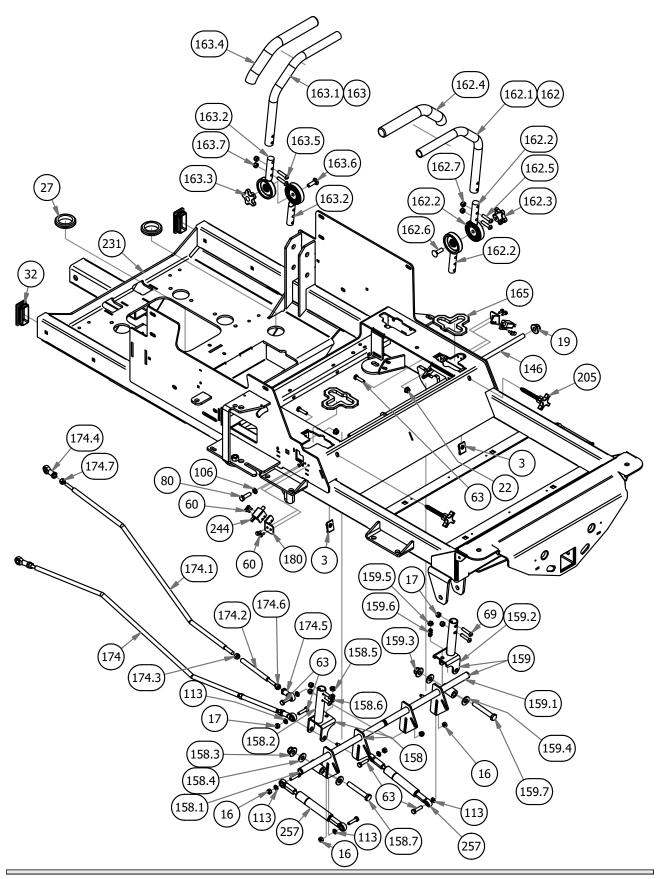


## **PARTS SECTION: SEAT & BRAKE**

Parts List Parts List			Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
18	16	013-8049-00	5/16-18 Nylon Flange Nut	215	1	064-8054-00	2019 Short Brake Cable-Suspension Models
22	4	013-9002-00	5/16" Flange Nut	216	1	064-8081-00	Seat Cable
24	1	013-9005-00	5/16-18 Nylock Jam Nut 1/2 Nut	217	1	064-9002-00	2019 Long Brake Cable-Renegade, Rogue
64	4	018-2007-00	5/16" x 1" Bolt	225	1	069-0001-00	2019 Brake Handle Assembly
77	1	018-4703-00	5/16" x 1 1/4" Carriage Bolt	225.15	1	039-2136-00	2019 Brake Load Balancer - Upper Tab
86	2	018-5344-00	5/16" x 2 1/2" Bolt	225.16	1	039-2138-00	2019 Brake Load Balancer - Lower Tab
99	3	018-8065-00	5/16" x 1" Carriage Bolt	231	1	070-5374-19	2019 Horizontal Diesel Frame
109	4	019-6042-00	.360 ID Plastic Washer	232	1	071-5065-00	2019 Renegade Seat
130	2	025-0027-00	2019 Outlaw Brake Handle Spacer .625 x 1.5	232.1	1	071-5065-03	Backrest Cushion
138	1	026-2019-00	2019 Outlaw Seat Plate	232.2	1	071-5065-06	Arm Rest Kit
147	1	028-0090-00	Seat Latch Rod Assembly	232.3	1	071-5065-05	Slave & Adjuster
164	2	032-0001-00	2019 Bad Boy X Cylindrical Seat Mount	232.4	1	071-5065-04	Seat Cushion
172	1	034-1025-00	Brake Spring	232.5	1	071-5065-02	Seat Belt
175	1	036-5300-00	Seat Switch Adapter	232.6	1	071-5065-07	Seat Switch



### **PARTS SECTION: CONTROL ARMS**



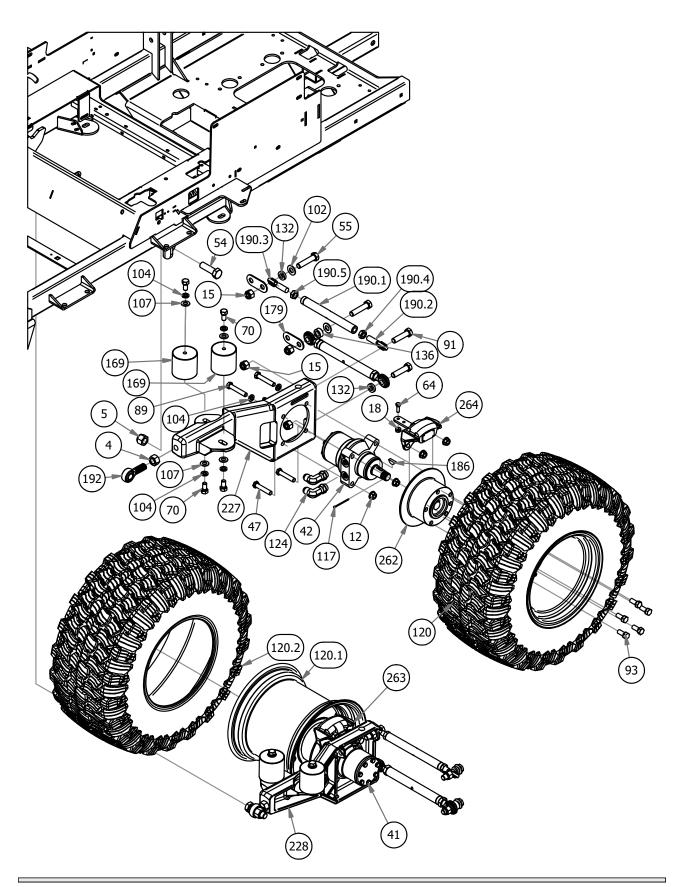


## **PARTS SECTION: CONTROL ARMS**

	Parts List				Parts List		
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
3	2	013-0021-00	Extruded Nut 3/8"-16 3/4" Hole Center With Patch	162	1	031-9005-70	2019 Left Hand ADJ. Steering Arm Kit
16	4	013-8043-00	5/16" Nut	162.1	1	031-9006-00	2019 Steering Arm Grip
17	6	013-8047-00	*Varies*	162.2	2	031-9005-00	2019 Steering Arm Adjuster Casting
19	1	013-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	162.3	1	045-5000-00	Black Knob for Adjustable Steering Arm
22	2	013-9002-00	5/16" Flange Nut	162.4	1	069-4010-00	Black Steering Arm Grip
27	2	014-2052-00	2019 2" x .25 Rubber Grommet	162.5	2	018-2020-18	5/16-18 UNC X 1-3/8" BHCS, TORX DRIVE, GR 5
32	2	014-9003-00	1 1/2 x 3 Frame Plug	162.6	1	018-5043-00	3/8" x 1 1/4" Carriage Bolt
60	8	018-1080-00	12-24x 1/2 HWH Bolt	162.7	2	013-8047-00	5/16-18 Nylock Insert Locknut
63	8	018-2006-00	5/16 x 1 1/4 Hex Bolt	163	1	031-9055-70	2019 Right Hand ADJ. Steering Arm Kit
69	4	018-2020-18	5/16-18 UNC X 1-3/8" BHCS, TORX DRIVE, GR 5	163.1	1	031-9006-00	2019 Steering Arm Grip
80	1	018-5040-00	3/8" x 1 1/4" Hex Bolt	163.2	2	031-9005-00	2019 Steering Arm Adjuster Casting
106	1	019-5037-00	3/8" Lock Washer	163.3	1	045-5000-00	Black Knob for Adjustable Steering Arm
113	6	019-8051-00	5/16" Lock Washer	163.4	1	069-4010-00	Black Steering Arm Grip
146	1	028-0051-00	2019 Steering Actuator Rod	163.5	2	018-2020-18	5/16-18 UNC X 1-3/8" BHCS, TORX DRIVE, GR 5
158	1	031-0030-19	2019 R Series RH Arm Rod Assembly	163.6	1	018-5043-00	3/8" x 1 1/4" Carriage Bolt
158.1	1	031-0030-00	2019 Drive Arm Actuator right	163.7	2	013-8047-00	5/16-18 Nylock Insert Locknut
158.2	1	031-0014-00	Drive Arm Pivot	165	2	032-0002-00	Snap-In Bushing-2019
158.3	1	013-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	174	2	035-0005-00	2019 Outlaw Gen2 Horizontal Push Rod Assembly
158.4	2	019-8054-00	.505 Nylon Spacer	174.1	1	035-0005-01	2019 Outlaw Gen2 Horizontal Push Rod
158.5	1	013-0017-00	3/8-16 Half Jam Nut	174.2	1	035-0006-00	2019 Outlaw Gen2 Horizontal Push Rod Adjuster
158.6	1	018-0063-00	3/8-16 x 1 Set Socket Set Screw Cup Point	174.3	1	013-6051-00	3/8" Fine Threaded Jam Nut
158.7	1	018-0050-00	1/2-13 x 3.25 GR 5 Hex Bolt Zinc	174.4	1	048-3003-00	Spherical Rod End - Outlaw
159	1	031-0031-19	2019 R Series LH Arm Rod Assembly	174.5	1	048-3002-00	Spherical Rod End - Outlaw
159.1	1	031-0031-00	2019 Drive Arm Actuator left	174.6	1	013-6050-00	5/16" LH Fine Threaded Jam Nut
159.2	1	031-0014-00	Drive Arm Pivot	174.7	1	013-6049-00	5/16" RH Fine Threaded Jam Nut
159.3	1	013-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	180	2	039-2160-00	2019 Arm Switch Bracket
159.4	2	019-8054-00	.505 Nylon Spacer	205	2	057-5800-00	Speed Limiting Knob 3/8-16X 3"
159.5	1	013-0017-00	3/8-16 Half Jam Nut	231	1	070-5374-19	2019 Horizontal Diesel Frame
159.6	1	018-0063-00	3/8-16 x 1 Set Socket Set Screw Cup Point	244	2	077-8073-00	Safety Switch
159.7	1	018-0050-00	1/2-13 x 3.25 GR 5 Hex Bolt Zinc	257	2	087-0002-00	2019 SROID Damper With Spherical Rod Ends



### **PARTS SECTION: REAR SWING ARMS**



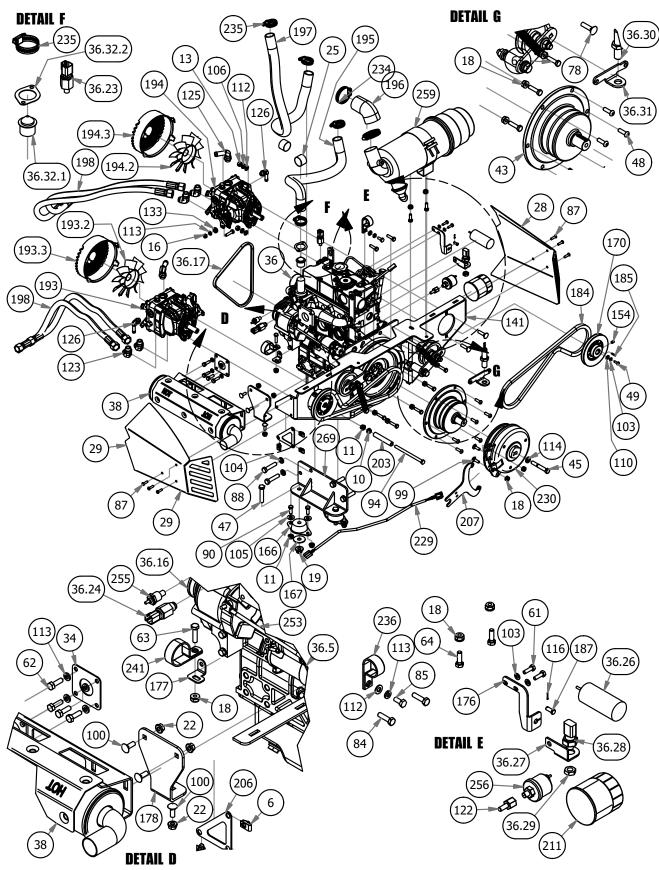


## **PARTS SECTION: REAR SWING ARMS**

			Parts List				Parts List
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
4	2	013-0022-00	3/4"-16 Fine Full Nut	136	2	025-7020-00	5/8" x 1/" Collar W/One Set Screw
5	2	013-0023-00	3/4" Course Thread Nylon Lock Nut	169	4	032-8999-00	Vibration Mount-Blue Dot
12	8	013-5300-00	1/2" Flange Nut	179	2	039-2145-00	2019 Suspension Gusset Outlaw
15	8	013-7021-00	5/8 Std NC Nylock Nut	186	2	042-7041-00	Woodruff Key
18	2	013-8049-00	5/16-18 Nylon Flange Nut	190	2	048-6061-00	2019 Suspension Radius Rod Assembly
41	1	015-4600-00	18cc Parker Wheel Motor- Right	190.1	1	048-0001-00	2019 Suspension Link Body
42	1	015-4601-00	18cc Parker Wheel Motor- Left	190.2	1	048-6062-00	2019 RH 5/8" Heim
47	4	018-0015-00	1/2" x 3" Hex Bolt	190.3	1	048-6063-00	2019 LH 5/8" Heim
54	2	018-0045-00	3/4 x 2 1/2 Course Thread Bolt	190.4	1	013-0019-00	5/8-11 HEX JAM NUT ZINC
55	4	018-0049-00	AS 2465 - 5/8 x 2 3/4 UNC	190.5	1	013-0020-00	NUT, 5/8-18LH
64	2	018-2007-00	5/16" x 1" Bolt	191	2	048-6064-00	2019 Suspension Radius Rod Assembly
70	8	018-2030-00	1/2" x 1" Hex Bolt	191.1	1	048-0002-00	Rear Radius Rod, 3/4 Body
89	4	018-6036-00	1/2" x 2 3/4" Hex Bolt	191.2	1	048-6065-00	3/4-16 x 5/8 RH Heim
91	4	018-6059-00	5/8" x 2 1/2" Grade 5 Hex Bolt (Coarse)	191.3	1	048-6066-00	3/4-16 x 5/8 LH Heim
93	10	018-7033-00	1/2-20 x 1-1/2 Lug Bolts Zinc	191.4	1	013-0027-00	3/4-16 HEX JAM NUT ZINC
102	4	019-0009-00	5/8" Flat Washer SAE Spec Grade 8	191.5	1	013-0028-00	3/4-16 LH HEX JAM NUT ZINC
104	12	019-5007-00	1/2" Lock Washer	192	2	048-7001-00	3/4-16 RH Male Rod End
107	8	019-5702-00	1/2" Washer (Grade 8)	227	1	070-0001-00	2019 Left Trailing Arm
117	2	020-7022-00	1/8x2-1/4 cotter pin Zinc	228	1	070-0002-00	2019 Right Trailing Arm
120	2	022-4090-00	2019 Assy-26x12-12 Reaper Turf -10.5" Rim	231	1	070-5374-19	2019 Horizontal Diesel Frame
120.1	1	022-4086-00	2019 10.5" Wheel	262	2	092-5201-00	Brake Disk
120.2	1	022-4085-00	2019 26x12-12 Reaper Turf Tire	263	1	092-7000-00	XP/AOS Right Brake Caliper
124	4	024-2065-00	2019 Rouge/Renegade Wheel Motor 90* Fitting #6801-10L	264	1	092-7001-00	XP/AOS Left Brake Caliper
132	4	025-0071-00	Spacer 1.125OD x .625 ID x .250 Length				



### **PARTS SECTION: ENGINE BAY**



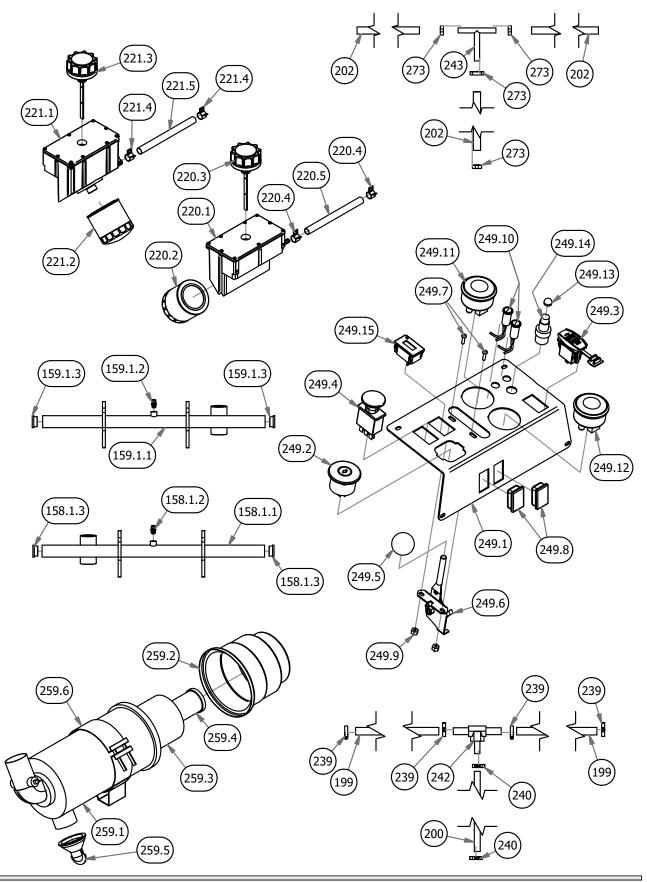


## **PARTS SECTION: ENGINE BAY**

			Parts List	Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION	
6	6	013-0054-00	1/4-20 Cage Nut	113	7	019-8051-00	5/16" Lock Washer	
10	3	013-5201-00	3/8-16 HEX SERRATED FLANGE NUT HARD/ZINC	114	1	019-8053-00	7/16" Lock Washer	
11	11	013-5202-00	3/8-16 NYLON INSERT FLANGE LOCKNUT (GR.F) ZINC	116	1	020-2000-00	3/32 X 1/2 Cotter-pin	
13	4	013-6014-00	3/8" Hex Nut	122	1	024-0070-00	8mm x 1/8 mpt Adaptor	
16	2	013-8043-00	5/16" Nut	123	4	024-2052-00	2019 Outlaw 90 Degree Pump Fitting #6801-10-08	
18	10	013-8049-00	5/16-18 Nylon Flange Nut	125	2	024-5002-00	90 Degree Fitting, 1/2 x 3/4, 4601-8-8	
19	6	013-8050-00	1/2-13 NYLON INSERT FLANGE LOCKNUT ZINC	126	2	024-5206-00	90 Degree Fitting, 3/8 s 9/16	
22	3	013-9002-00	5/16" Flange Nut	133	2	025-2001-00	ACS Spacer 3/4x3/8x1/4	
25	2	014-1053-00	2019 Plastic Mesh Hose Loom	141	1	026-8050-00	2020 Diesel Pump Plate Weldment - Painted	
28	1	014-5060-00	2019 Horizontal Pump Cover - Right	154	2	030-0075-00	5/16-24 X 3/8 Set Screw	
29	1	014-5061-00	2019 Horizontal Pump Cover - Left	166	4	032-4050-00	Rubber Compression Mount	
34	1	015-0010-50	Diesel Muffler Gasket	167	4	032-4051-00	Snubbing Washer	
36	1	015-0096-00	24.7 hp Perkins Engine	170	2	033-5011-00	5" Pump Pulley	
36.5	1	015-0096-08	Starter	173	2	034-9000-00	ZT and ACS Handle Spring	
36.16	1	015-0096-09	Altenator	174	2	035-0005-00	2019 Outlaw Gen2 Horizontal Push Rod Assembly	
36.17	1	041-0010-00	Diesel Engine Belt	174.1	1	035-0005-01	2019 Outlaw Gen2 Horizontal Push Rod	
36.23	1	015-0096-06	Oil Pressure Sensor	174.2	1	035-0006-00	2019 Outlaw Gen2 Horizontal Push Rod Adjuster	
36.24	1	015-0096-07	Coolant Temperature Sensor	174.3	1	013-6051-00	3/8" Fine Threaded Jam Nut	
36.26	1	015-0096-05	Fuel Shutdown Solenoid	174.4	1	048-3003-00	Spherical Rod End - Outlaw	
36.27	1	015-0096-04	Barometric Pressure Sensor Bracket	174.5	1	048-3002-00	Spherical Rod End - Outlaw	
36.28	1	015-0096-03	Barometric Pressure Sensor	174.6	1	013-6050-00	5/16" LH Fine Threaded Jam Nut	
36.29	1	013-4000-00	Pressure Sensor Nut for 1100cc Diesel	174.7	1	013-6049-00	5/16" RH Fine Threaded Jam Nut	
36.30	1	015-0096-01	Crank Sensor w/ nut	176	1	039-1010-00	Diesel Throttle Bracket 4 Tier	
36.31	1	015-0096-02	Crank Sensor Bracket	177	1	039-1015-00	Diesel Radiator Hose Clamp Bracket	
36.32.1	1	015-0070-00	1100cc Diesel Thermostat	178	1	039-1025-00	2019 Diesel Muffler Bracket	
36.32.2	1	015-0071-00	1100cc Diesel Thermostat Gasket	181	1	039-6950-98	2019 Renegade Belt Tensioner LH	
38	1	015-1019-00	2019 Renegade 1100cc Diesel Muffler	182	1	039-6950-99	2019 Renegade Belt Tensioner LH	
43	1	017-3001-00	2019 Diesel Stub Shaft Double V	184	2	041-8000-00	2019 Renegade Pump Belt	
45	1	018-0007-00	7/16"-20 x 3" Hex Bolt Gr. 8	185	2	042-5012-00	5mm x 1.25" Key	
46	2	018-0010-00	1/2-13 X 90MM HEX FLANGE BOLT W/SHOULDER (GR.8) ZINC	187	1	044-2006-00	1/4-5/8 Clevis Pin	
47	4	018-0015-00	1/2" x 3" Hex Bolt	193	1	050-3001-00	2019 Rogue/Renegade Left Pump 16cc	
48	6	018-0016-00	5/16-18 x 1 Button Head Torx	193.2	1	015-9999-00	Hydraulic Fan	
49	2	018-0024-00	M6-1.0 X 16MM Hex Bolt	193.3	1	014-5600-00	Fan Guard 6" Fits wheel Motor Pumps	
58	2	018-1010-00	3/8-16 X 3-1/2 HEX CAP SCREW (GR.5) ZINC	194	1	050-3003-00	2019 Outlaw Renegade Right Pump 16cc	
61	2	018-2000-00	M6x1.0x 20mm 8.8 Hex Bolt	194.2	1	015-9999-00	Hydraulic Fan	
62	4	018-2001-00	M8 x 1.25 x 25mm Hex Head Bolt	194.3	1	014-5600-00	Fan Guard 6" Fits wheel Motor Pumps	
63	8	018-2001-00	5/16 x 1 1/4 Hex Bolt	195	1	051-3003-00	2019 Diesel Radiator Hose Upper	
64	2	018-2007-00	5/16" x 1" Bolt	196	1	051-3004-00	2019 Diesel Air intake Hose	
78	4	018-4706-00		197	1	051-3005-00	2019 Diesel Radiator Hose Lower	
	2		3/8 x 1 1/2 Carriage Bolt	198	4	051-6007-00	2019 Renegade Hydro Hose	
84		018-5320-00	M8 x 1.25 x 30mm Hex Head Bolt	203	1	051-8076-00	3/8 hose 4" long	
85	1	018-5321-00	M8x1.20x20MM Hex head bolt	203	2	057-5915-00	Pump Plate Clip Nut Holder	
87	6	018-6014-00	Hexagon Socket Button Head Cap Screw	_	1			
88	8	018-6022-00	12mm Bolt- Diesel	207		057-5919-00	2019 Outlaw Renegade Clutch Bracket	
90	8	018-6049-00	3/8" x 1" Hex Bolt	211	1	063-2010-00	CAT Oil Filter	
94	1	018-7060-00	3/8-16 x 5 1/2 Hex Bolt	229	1	070-2000-00	Clutch Pigtail	
99	2	018-8065-00	5/16" x 1" Carriage Bolt	230	1	070-5040-00	Clutch for Diesel/Vanguard	
100	3	018-8066-00	5/16" x 7/8" Carriage Bolt	234	2	072-2002-00	2-1/2" Hose Clamp	
103	4	019-4008-00	1/4" Lock Washer	235	4	072-2003-00	1 1/8" Hose Clamp	
104	8	019-5007-00	1/2" Lock Washer	236	1	072-5000-00	Diesel Hydraulic Hose Clamp	
105	8	019-5029-00	3/8" Flat Washer	241	1	072-8090-00	Diesel Clamp 1 3/4" Vinyl	
106	4	019-5037-00	3/8" Lock Washer	253	1	086-0003-00	Red Battery Cable Alternator to Starter Cable	
108	2	019-6017-00	.635 ID X 1.120 OD X .140 THICK FLAT WASHER NYLON	255	1	086-7003-00	Coolant Temperature Sender	
110	2	019-7040-00	1/4" Flat Washer	256	1	086-7004-00	Oil Pressure Guage with Sender	
112	5	019-8044-00	5/16" Flat Washer	259	1	088-1010-50	Enginaire Canister VLR-Complet	
				269	2	201-8030-00	2019 Diesel Motor Mount - Weldment	



## **PARTS SECTION: SUBS**



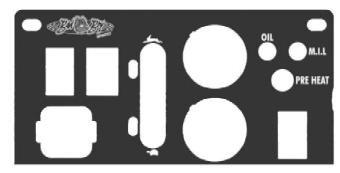


## **PARTS SECTION: SUBS**

			Hydro Tanks	Fuel Line			
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
220	1	067-8053-18	LH Rogue Hydro Tank Assy	202	3	051-8075-00	5/16 Fuel Line Hose - Priced Per Foot
220.1	1	067-8053-00	2019 Left Outlaw Gen2 Hydro Tank Suspension Only	243	1	073-8070-00	5/16 x 5/16 x 1/4 Fuel Line T
220.2	1	063-8014-00	Hydraulic Filter	273	4	072-8076-00	2 EAR CLAMP 12.5mm-15mm
220.3	1	066-8050-00	Hydraulic Tank Cap W/Dipstick				
220.4	2	072-8066-00	1/2 Hose Clamp				
220.5	1	051-8064-21	1/2 Clear Braded Hose Priced/Foot				
221	1	067-8054-18	RH Rogue Hydro Tank Assy				079-3480-19
221.1	1	067-8054-00	2019 Right Outlaw Gen2 Hydro Tank Suspension Only	ITEM	QTY	PART NUMBER	DESCRIPTION
221.2	1	063-8014-00	Hydraulic Filter	249	1	079-3480-19	Renegade Control Panel Assembly
221.3	1	066-8050-00	Hydraulic Tank Cap W/Dipstick	249.1	1	079-3480-00	2019 Diesel Control Panel
221.4	2	072-8066-00	1/2 Hose Clamp	249.2	1	077-8076-00	Ignition Switch
221.5	1	051-8064-21	1/2 Clear Braded Hose Priced/Foot	249.3	1	077-2076-00	USB Port
				249.4	1	056-8058-00	PTO Switch
				249.5	1	055-2013-00	Throttle Knob
			031-0031-00	249.6 1 055-2012-00 Universal Throttle			
ITEM	QTY	PART NUMBER	DESCRIPTION	249.7	2	018-5200-00	10-24 X 5/8 BS Button Head Bolt
159.1	1	031-0031-00	2019 Drive Arm Actuator left	249.8	2	018-1040-00	Light Plug
159.1.1	1	031-0031-10	2019 Drive Arm Actuator left - Weldment	249.9	2	013-5019-00	10-24 Nylon Insert Locknut
159.1.2	1	024-6034-00	1/4" Press in Grease Fitting	249.10	2	089-1000-00	Oil Light
159.1.3	2	031-0032-00	2019 Drive Arm Bushing	249.11	1	086-7000-00	2" Oil Pressure Gauge
				249.12	1	086-7001-00	2" Water Temperature Gauge
				249.13	1	014-6000-00	Start Switch Boot - Diesel
			031-0030-00	249.14	1	077-6000_00	Momentary Start Switch
ITEM	QTY	PART NUMBER	DESCRIPTION	249.15	1	083-4013-00	Hour Meter
158.1	1	031-0030-00	2019 Drive Arm Actuator right				
158.1.1	1	031-0030-10	2019 Drive Arm Actuator right - Weldment				
158.1.2	1	024-6034-00	1/4" Press in Grease Fitting				Fuel Return Line
158.1.3	2	031-0032-00	2019 Drive Arm Bushing	ITEM	QTY	PART NUMBER	DESCRIPTION
				199	2	051-8067-00	1/4 Fuel Line Hose - Priced Per Foot
				200	1	051-8068-00	3/16 Fuel Line x 36"
L			088-1010-50	239	4	072-8069-00	1/4 Fuel Hose Clamp
ITEM	QTY	PART NUMBER	DESCRIPTION	240	2	072-8070-00	3/16 Vinyl Clamp
259	1	088-1010-50	Enginaire Canister VLR-Complet	242	1	073-2000-00	Brass fuel line T
259.1	1	088-1018-00	Canister for All Diesel Models				
259.2	1	088-1017-00	Enginaire Air canister cap				
259.3	1	063-2050-00	Diesel Air Filter- Outer				
259.4	1	063-2060-00	Diesel Air Filter- Inner				
259.5	1	088-1020-00	Debris Plug-Enginaire Filter				
259.6	1	088-1019-00	Mounting Bracket For Diesel Air Filter				



### **PARTS SECTION: DECALS**



091-4016-00 RENEGADE (DIESEL) CONTROL PANEL DECAL



091-0313-00 **LOGO DECAL** 



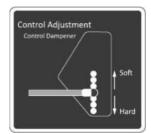
091-8001-00 **DECK IMPACT PATENT DECAL** 



Deck Lock

091-4037-00

091-4038-00 **CONTROL ROD DECAL** 



091-4039-00 **CONTROL DAMPENER DECAL** 



091-1114-00 STEERING CONTROL DECAL

OFF

ON

STEERING

SPEED

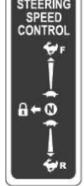
CONTROL

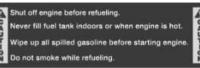
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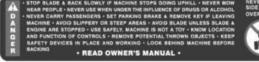
091-1101-18 **BRAKE DECAL** 

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091-3150-00 **WARNING DECAL** 



091-4015-00 RENEGADE COOLER COVER DECAL



### **PARTS SECTION: DECALS**



091-4012-00 1100cc Decal



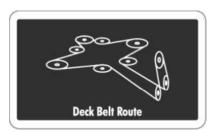
091-3012-00 DANGER DECAL



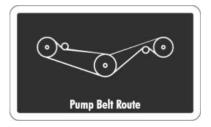
**091-0017-00 PERKINS Decal** 



091-1020-00 Hydraulic Decal



091-4033-00 RENEGADE DECK BELT DECAL



091-4032-00 RENEGADE PUMP BELT DECAL



091-0917-18 61" DECK DECAL



# 2020 LIMITED WARRANTY

# BAD BOY COMMERCIAL MOWER (WALK-BEHIND, COMPACT OUTLAW, REVOLT, REBEL, ROGUE, and RENEGADE)

#### 1. WHAT THIS WARRANTY COVERS, AND FOR HOW LONG:

Bad Boy, Inc. will, at its option, repair or replace, without charge, any part covered by the warranty which is found to be defective in material and/or workmanship for two (2) years \* after the date of sale to the original retail purchaser <u>unless the product is used for rental purposes, in which case</u> this warranty is limited to ninety (90) days.

The leading edge of the deck shell will be warranted for the entire lifetime of the machine to the original purchaser against defects in materials and workmanship. Labor required to repair or replace the leading edge of the deck shell will be covered by Bad Boy Inc. for two years and at the unit owner's expense during the balance of the lifetime of the machine.

Belts are warranted for a period of ninety (90) days against materials or workmanship defects.

Seats are warranted for a period of (6) months against material or workmanship defects.

At Bad Boy, Inc.'s request, customer will make the defective part available for inspection by Bad Boy, Inc. and/or return the defective part to Bad Boy, Inc., transportation charges prepaid.

#### 2. WHAT THIS WARRANTY DOES NOT COVER:

- A. This warranty does not cover defects caused by depreciation or damage caused by normal wear, accidents, improper maintenance, improper use or abuse of the product, alterations, or failure to follow the instruction contained in the Owner's Manual for operation and maintenance.
- B. The customer shall pay any charges for making service calls and/or for transporting the mower to and from the place where the inspection and/or warranty work is performed.

#### Bad Boy Inc will not be responsible for the pickup and delivery of a machine for warranty purposes.

- C. Engines are warranted separately by their respective manufacturer. The available warranties covering this item are furnished with each mower. Bad Boy, Inc does not assume any warranty obligation, liability or modification for this item, which is covered exclusively by the stated warranty of the respective manufacturers.
- D. Tires, blades, deck anti-scalping wheels, and dust covers are considered to be consumable wear items and are therefore not warranted.
- E. Batteries are warranted for six months (free replacement) from the retail purchase date against materials or workmanship defects. The battery warranty must be obtained through the battery manufacturer.
- F. Normal maintenance services such as oil change, cleaning, lubrication, adjustment.
- G. Replacement of services, items, such as oil, lubricants, spark plugs, belts, rubber hoses or other items subject to normal service replacement.

#### 3. HOW TO OBTAIN SERVICE UNDER THIS WARRANTY:

- A. Warranty service can be arranged by contacting the dealer where you purchased the mower. Proof of the date of purchase may be required to verify warranty coverage. Warranty repairs must be completed by an authorized Bad Boy center.
- B. Warranty claims will not be reviewed or paid unless the warranty registration is received by Bad Boy, Inc. within 30 days of the retail purchase date.
- C. Warranty claims requiring parts returned will be settled upon return of parts to Bad Boy for inspection.
- D. All warranty issues must be handled through an authorized service center or dealership.

#### 4. WARRANTY LIMITATION:

- A. THERE IS NO OTHER EXPRESS WARRANTY. ANY WARRANTY THAT MAY BE IMPLIED FROM THIS PURCHASE INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IS HEREBY LIMITED TO THE DURATION OF THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
- B. BAD BOY, INC. WILL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES AND/OR EXPENSES IN CONNECTION WITH THE PURCHASE OR USE OF THE MOWER. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you.
- C. Only the warranty expressed in this limited warranty shall apply and no dealer, distributor, or individual is authorized to amend, modify, or extend this warranty in any way. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by Bad boy, Inc., and should not be relied on.
- D. This warranty extends only to turf equipment operated under normal conditions and properly serviced and maintained. The warranty expressly does not cover (i) any defects, damage or deterioration due to normal use, wear and tear, or exposure; (ii) normal maintenance services such as oil change, cleaning, lubrication, adjustment; (iii) replacement of services, items, such as oil, lubricants, spark plugs, belts, rubber hoses or other items subject to normal service replacement; (iv) damage or defects arising out of or relating to misuse, neglect, alteration, negligence or accident; (v) repair or replacement arising from operation of or use of the turf equipment which is not in accordance with operating instructions as specified in the operator's manual or other operational instructions provided by Bad Boy Inc.; (vi) repair or replacement arising as a result of any operation from turf equipment that has been altered or modified so as to, indetermination of Bad Boy, Inc., adversely affect the operation, performance or durability of the equipment or that has altered, modified or affected the turf equipment so as to change the intended use of the product; (vii) repair or replacement necessitated by use of parts, accessories or supplies, including gasoline, oil or lubricants, incompatible with the turf equipment or other than as recommended in the operator's manual or other operational instructions provided by Bad Boy, Inc.; (viii) repairs or replacements resulting from parts or accessories which have adversely affected the operation, performance or durability of the turf equipment; or (ix) damage or defects due to or arising out of repair of turf equipment by person or persons other than an authorized Bad Boy, Inc., service dealer or the installation of parts other than genuine Bad Boy, Inc., recommended parts.

As a condition to this warranty, customer shall have read the operator's manual and ensured the mower has been registered within 30 days of purchase.

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



BAD BOY, INC.

102 INDUSTRIAL DRIVE

BATESVILLE, AR 72501

WWW.BADBOYMOWERS.COM

Technical Support:	techsupport@badboymowers.com
Warranty:	warranty@badboymowers.com
Parts:	partsdept@badboymowers.com

## **WARRANTY REGISTRATION**

Ensure selling dealership has registered mower within 30 days of purchase to validate warranty.

Please record your serial number, date of purchase and dealership information
or your records.
Serial #
Date of Purchase
Dealer Information

NOTES:	
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NOTES:	



### www.badboymowers.com

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