

Owner's Manual

Powerwagon



MODEL NUMBER: _____

SERIAL NUMBER: _____

DATE PURCHASED: _____

Register your Generac product at:
WWW.GENERAC.COM
1-888-GENERAC
(888-436-3722)

Original Language

SAVE THIS MANUAL FOR FUTURE REFERENCE

 **WARNING**

CANCER AND REPRODUCTIVE HARM

www.P65Warnings.ca.gov

(000393a)

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Section 1: Safety Rules & General Information

Introduction

Thank you for purchasing this Generac Pro Powerwagon. This unit has been designed to provide high performance, efficient operation, and years of quality use when maintained properly.

The Generac Pro Powerwagon is designed and built for consistent, reliable use for small digging projects. It is built to withstand frequent handling under these conditions.

The information in this manual is accurate based on products produced at the time of publication. The manufacturer reserves the right to make technical updates, corrections, and product revisions at any time without notice.

Read This Manual Thoroughly



WARNING

Consult Manual. Read and understand manual completely before using product. Failure to completely understand manual and product could result in death or serious injury. (000100a)

If any section of this manual is not understood, contact the nearest Independent Authorized Service Dealer (IASD) for starting, operating, and servicing procedures.

SAVE THESE INSTRUCTIONS: The manufacturer suggests that this manual and the rules for safe operation be copied and posted near the unit installation site. Safety should be stressed to all operators and potential operators of this equipment.

Safety Rules

The manufacturer cannot anticipate every possible circumstance that might involve a hazard. The alerts in this manual, and on tags and decals affixed to the unit, are not all inclusive. If using a procedure, work method, or operating technique that the manufacturer does not specifically recommend, verify that it is safe for others and does not render the equipment unsafe.

Throughout this publication, and on tags and decals affixed to the unit, DANGER, WARNING, CAUTION, and NOTE blocks are used to alert personnel to special instructions about a particular operation that may be hazardous if performed incorrectly or carelessly. Observe them carefully. Alert definitions are as follows:

DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

(000001)

WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

(000002)

CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

(000003)

NOTE: Notes contain additional information important to a procedure and will be found within the regular text of this manual.

These safety alerts cannot eliminate the hazards that they indicate. Common sense and strict compliance with the special instructions while performing the action or service are essential to preventing accidents.

How to Obtain Service

When the unit requires servicing or repairs, contact Generac Customer Service at 1-888-GENERAC (1-888-436-3722) or visit www.generac.com for assistance.

When contacting an IASD about parts and service, always supply the complete model and serial number of the unit as given on its data decal located on the unit. Record the model and serial numbers in the spaces provided on the inside front cover of this manual.

General Hazards

⚠️ WARNING

Accidental Start-up. Disconnect the negative battery cable, then the positive battery cable when working on unit. Failure to do so could result in death or serious injury. (000130)

⚠️ WARNING

Personal injury. Keep people and pets away from work area. Failure to do so could result in death or serious injury. (000420)

⚠️ WARNING

Personal injury. Only allow qualified persons to operate unit. Operation by unqualified persons could result in death, serious injury, property or equipment damage. (000421)



⚠️ WARNING

Vision loss. Eye protection is required when servicing unit. Failure to do so could result in vision loss or serious injury. (000377)

⚠️ WARNING

Personal injury and equipment damage. Do not tamper with engine governed speed. Operating engine too fast or slow increases the risk of injury or permanent engine damage. (000254)



⚠️ WARNING

Moving Parts. Do not wear jewelry when starting or operating this product. Wearing jewelry while starting or operating this product could result in death or serious injury. (000115)



⚠️ WARNING

Moving Parts. Keep clothing, hair, and appendages away from moving parts. Failure to do so could result in death or serious injury. (000111)



⚠️ WARNING

Hot Surfaces. When operating machine, do not touch hot surfaces. Keep machine away from combustibles during use. Hot surfaces could result in severe burns or fire. (000108)



⚠️ WARNING

Risk of Fire. Hot surfaces could ignite combustibles, resulting in fire. Fire could result in death or serious injury. (000110)

⚠️ WARNING

Risk of injury. Do not operate or service this machine if not fully alert. Fatigue can impair the ability to service this equipment and could result in death or serious injury. (000215)

⚠️ WARNING

Environmental Hazard. Always recycle batteries at an official recycling center in accordance with all local laws and regulations. Failure to do so could result in environmental damage, death or serious injury. (000228)



⚠️ WARNING

Hearing Loss. Hearing protection is recommended when using this machine. Failure to wear hearing protection could result in permanent hearing loss. (000107)

⚠️ WARNING

Personal injury. Use caution when operating unit over uneven terrain or slopes. Failure to do so could result in death, serious injury, equipment or property damage. (000460)

⚠️ WARNING

Tipping hazard. Do not overload unit. Do not transport top-heavy loads. Load only to rated weight. Distribute load evenly and secure properly. Improper loading could cause death, serious injury, or equipment damage. (000495)

⚠️ WARNING

Equipment damage. Do not use as a tow or drag vehicle. Towing or dragging items behind the unit could cause serious injury, property or equipment damage. (000496)

⚠️ WARNING

Personal injury. Never remove, alter, or tamper with safety devices. Do not operate unit without safety equipment in place. Doing so could result in death, serious injury, property damage, or equipment damage. (000403)

⚠ WARNING

Personal injury. Do not ride or allow riders on the unit. Riding on and allowing riders could result in death, serious injury, or equipment damage.

(000409)

⚠ WARNING

Crushing hazard. Verify parking brake is properly secured and unit is on level ground. An unsecured unit could suddenly roll or move, and could result in death, serious injury, or equipment damage. (000352)

⚠ CAUTION

Personal injury. Wear appropriate personal protective equipment at all times while operating and servicing unit. Failure to do so could result in personal injury.

(000419)

Exhaust and Fuel Hazards



⚠ DANGER

Asphyxiation. Do not operate unit without a properly functioning exhaust system. Doing so will result in death or serious injury.

(000340)



⚠ DANGER

Asphyxiation. Running engines produce carbon monoxide, a colorless, odorless, poisonous gas. Carbon monoxide, if not avoided, will result in death or serious injury.

(000103)



⚠ DANGER

Explosion and Fire. Fuel and vapors are extremely flammable and explosive. Store fuel in a well ventilated area. Keep fire and spark away. Failure to do so will result in death or serious injury.

(000143)



⚠ DANGER

Explosion and Fire. Fuel and vapors are extremely flammable and explosive. Add fuel in a well ventilated area. Keep fire and spark away. Failure to do so will result in death or serious injury.

(000105)



⚠ DANGER

Explosion and Fire. Do not overfill fuel tank. Fill to 1/2 inch from top of tank to allow for fuel expansion. Overfilling may cause fuel to spill onto engine causing fire or explosion, which will result in death or serious injury.

(000166b)



⚠ DANGER

Risk of fire. Allow fuel spills to completely dry before starting engine. Failure to do so will result in death or serious injury.

(000174)



⚠ WARNING

Fire risk. Fuel and vapors are extremely flammable. Do not operate indoors. Doing so could result in death, serious injury, or property or equipment damage.

(000281)



⚠ WARNING

Explosion and fire risk. Do not smoke near unit. Keep fire and spark away. Failure to do so could result in death, serious injury, or property or equipment damage.

(000282)



⚠ WARNING

Explosion and Fire. Do not smoke while refueling unit. Failure to do so could result in death, serious injury, or property or equipment damage.

(000284a)

Fire Hazards



⚠ WARNING

Risk of Fire. Verify machine has properly cooled before installing cover and storing machine. Hot surfaces could result in fire.

(000109)



⚠ WARNING

Risk of fire. Never operate engine without the air cleaner installed. Operating engine without the air cleaner could result in death or serious injury.

(000249)



⚠ WARNING

Risk of Fire. Unit must be positioned in a manner that prevents combustible material accumulation underneath. Failure to do so could result in death or serious injury. (000147)

Explosion Hazards



⚠ DANGER

Explosion and fire. Fuel and vapors are extremely flammable and explosive. No leakage of fuel is permitted. Keep fire and spark away. Failure to do so will result in death or serious injury.

(000192)



⚠ WARNING

Risk of Fire. Hot surfaces could ignite combustibles, resulting in fire. Fire could result in death or serious injury.

(000110)

Safety and Operating Decals

See **Figure 1-1**. This unit features numerous safety and operating decals. These decals provide important operating instructions and warn of dangers and hazards. The following diagrams illustrate decal locations and

descriptions. Replace any missing or hard-to-read decals and use care when washing or cleaning the unit. Decal part numbers can be found in the unit parts manual at www.generac.com.

Item #	Label Description	Item #	Label Description
1	Operating instructions	5	Warning. Hot exhaust can burn you.
2	Dump bed operation	6	Warning. Read user's manual before operation
3	Speed and gear selection	7	Maintain air cleaner
4	Warning! Read and understand the operator's manual	8	Traction drive lever

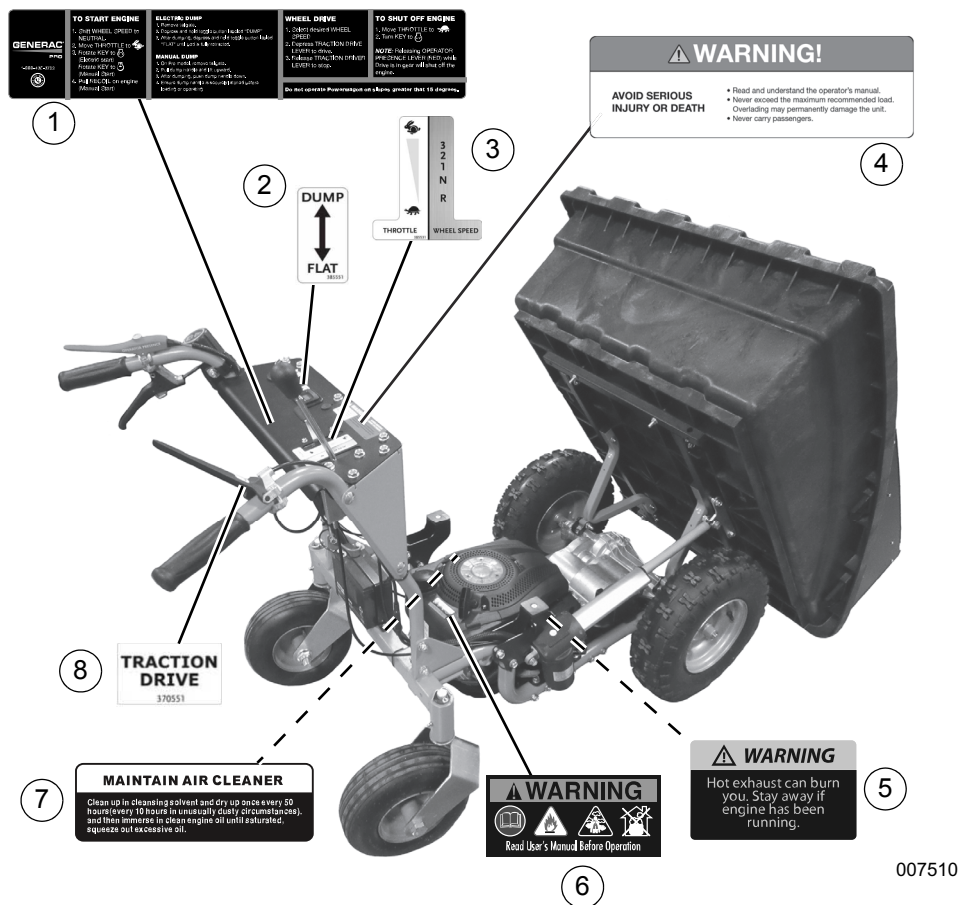


Figure 1-1. Safety and Operating Decal Locations

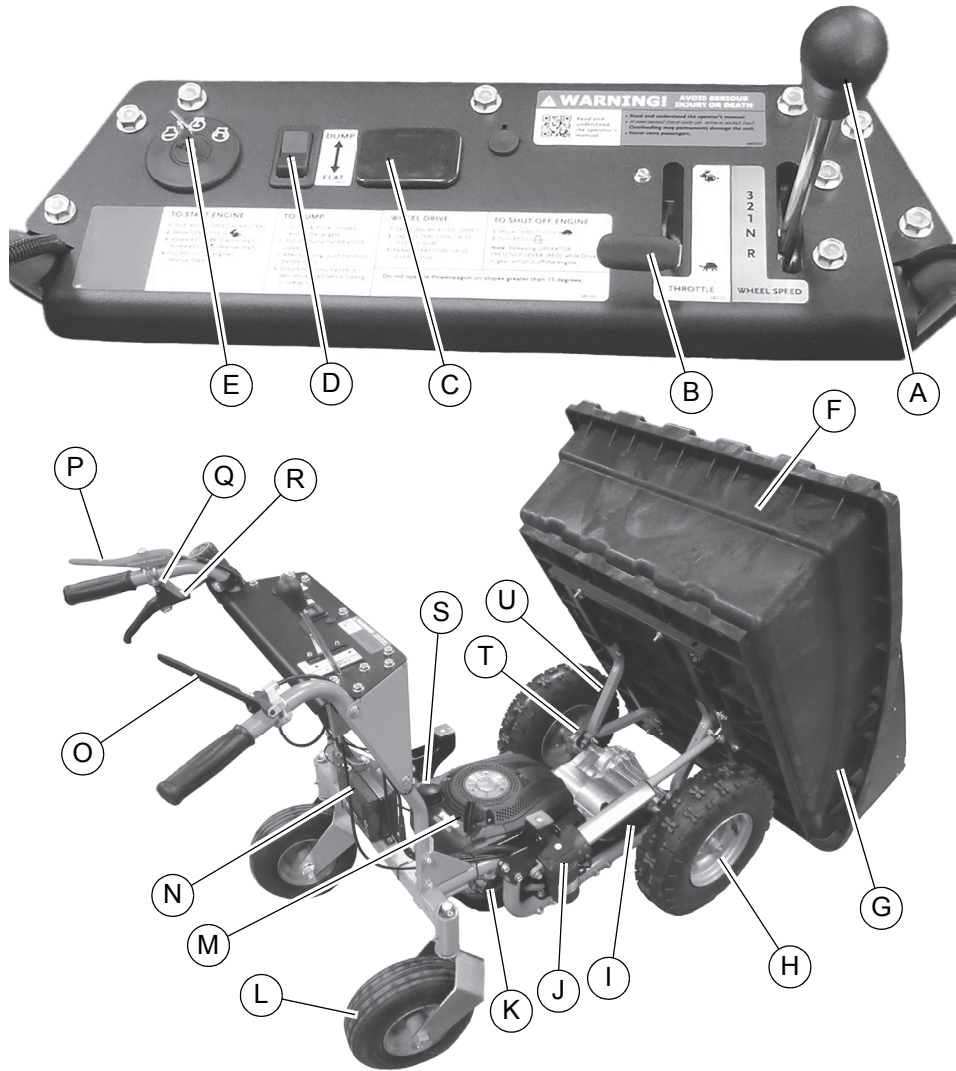
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Section 2: General Information and Setup

Specifications

ENGINE	Generac G-Force
BATTERY	12V, 9 Ah
BED	
Capacity – ft ³ (m ³)	8 (0.23)
Capacity – lbs (kg)	800 (362.9)
Bed height – in (cm)	20 (50.8)
Construction	Cellular core high strength molded polyethylene
Dump angle	60°
Latch mechanism	N/A (Actuator latches the bed)
TRANSMISSION	
Speed – mph (km/h)	Forward 3: 3.7 (5.9) Forward 2: 2.4 (3.9) Forward 1: 1.3 (2.1) Reverse: 1.4 (2.3)
Brake	Transaxle disc brake
FRAME	
Frame type	Tubular steel - 1.5 in (38.1 mm) diameter x 12 Ga thick
Skid plate	9 Ga thick
Handlebar height – in (cm)	37 (94)
ACTUATOR	
Included	Yes
Full load speed – in/S (mm/S)	0.47 (12)
Full load seconds/lift	17
No load speed – in/S (mm/S)	0.79 (20)
No load seconds/lift	10
Stroke – in (mm)	7.87 (200)
Duty cycle	10% (Approximately 1 full capacity load every 4.5 minutes)
Enclosure rating	IP65
WHEELS (Size & Type)	
Front	16 in (40.6 cm) diameter, 4 in (10.2 cm) width, Snowhog tread
Rear	11 in (28 cm) diameter, 4 in (10.2) width, Rib
DIMENSIONS	
Overall – in (cm)	63.25 x 34.5 x 41 (161 x 87.6 x 104)
Weight – lbs (kg)	240 (108.9)
Ground clearance – in (mm)	2 (50.8)

Controls and Features



006218

Figure 2-1. Component Locations

- | | | | |
|---|----------------------------|---|------------------------------|
| A | Shift lever | L | Caster wheels |
| B | Throttle control | M | Manual recoil starter handle |
| C | Maintenance meter location | N | Battery |
| D | Electric dump switch | O | Traction drive lever |
| E | Key switch | P | Operator presence lever |
| F | Bed assembly | Q | Brake lever |
| G | Sidewall and tailgate | R | Brake lock |
| H | All-terrain tires | S | Fuel cap |
| I | Brake pad assembly | T | Transaxle |
| J | Actuator | U | Dump arm |
| K | Oil fill | | |

Know Your Powerwagon



⚠️ WARNING

Consult Manual. Read and understand manual completely before using product. Failure to completely understand manual and product could result in death or serious injury. (000100a)

See **Figure 2-1**. Be familiar with the controls and features of the unit prior to operation. Read this manual thoroughly before assembling and operating this unit. Save this manual for future and immediate reference.

Emissions

The United States Environmental Protection Agency (US EPA) (and California Air Resources Board (CARB), for engines/equipment certified to California standards) requires that this engine/equipment complies with exhaust and evaporative emissions standards. Locate the emissions compliance decal on the engine to determine applicable standards. For emissions warranty information, please reference the included emissions warranty. It is important to follow the maintenance specifications in the manual to ensure that the engine complies with the applicable emissions standards for the duration of the product's life.

Assembly

See charts below for list of included parts. Verify all parts are included before assembly.

Included Parts

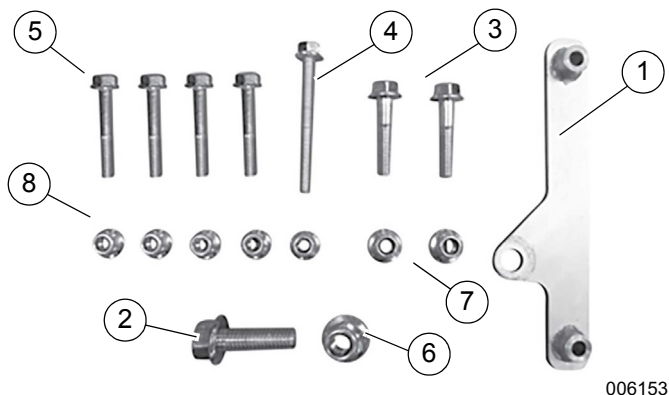


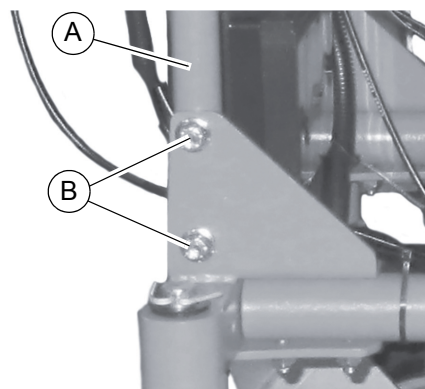
Figure 2-2. Included Parts

Item #	Description	Qty
1	Bracket, actuator, dump arm	1
2	Bolt, hex, flange, 1/2 in - 13 x 1-1/2 in, GR5, ZP	1

3	Bolt, hex, flange, 3/8 in - 16 x 1-3/4 in, GR5, ZP	2
4	Bolt, hex, flange, 5/16 in - 18 x 3 in, GR8, ZP	1
5	Bolt, hex, flange, 5/16 in - 18 x 2-1/2 in, GR8, ZP	4
6	Nut, nylon lock, flanged, 1/2 in - 13	1
7	Nut, nylon lock, flanged, 3/8 in - 16	2
8	Nut, nylon lock, flanged, 5/16 in - 18	5

Handlebar Installation

1. See **Figure 2-3**. Lift handlebar assembly (A) to operating position and install 3/8 in - 16 x 1-3/4 in flange bolt and locknut (B) on each side.



006734

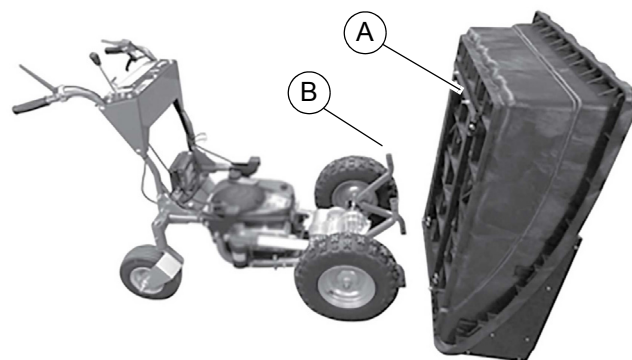
Figure 2-3. Handlebar Installation

NOTE: Verify handlebar flange bolts and lock nuts are installed as shown in **Figure 2-3**.

2. Tighten lower handlebar bolts.

Bed Assembly and Installation

1. See **Figure 2-4**. Place bed assembly (A) at front of unit, tailgate end resting on ground.



006166

Figure 2-4. Bed Assembly

2. Move bed assembly onto dump arms (B) and rotate bed backwards and onto dump arms.

NOTE: See *Figure 2-5*. The actuator bracket (C) must be positioned on the right hand side of the frame, with the mounting hole towards the actuator to complete this procedure.



Figure 2-5. Actuator Bracket

3. Secure rear of actuator bracket to frame and dump arm with a 5/16 in - 18 x 3 in flange bolt and locknut.
4. Secure front of actuator bracket with a 5/16 in - 18 x 2-1/2 in flange bolt.
5. Secure the front/right and both left side locations of bed frame to bed supports with three 5/16 in - 18 x 2-1/2 in flange bolts and locknuts.
6. Remove plastic protectors (if present) from end of actuator.
7. See *Figure 2-6*. Secure end of actuator (D) to actuator bracket with a 1/2 in - 13 x 1-1/2 in flange bolt and locknut.



Figure 2-6. Actuator Assembly

Tailgate Installation

1. See *Figure 2-7*. Install tailgate onto front of bed assembly.



006170

Figure 2-7. Tailgate Installation

NOTE: Verify guide pins are fully into the bed and tabs at both sides are locked into side walls.

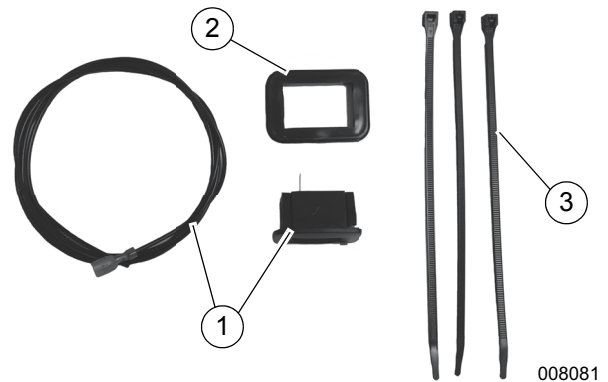
Installing Hour Meter



Accidental Start-up. Disconnect spark plug wire when working on unit. Failure to do so could result in death or serious injury.

(000102)

The hour meter is a reminder system that displays alerts at regular intervals for oil changes, and displays accumulated running times for long-term servicing needs.



008081

Parts Supplied For Hour Meter		
Item #	Description	Qty
1	Hour meter / 66 in (1.7 m) wire	1
2	Panel plug	1
3	Cable ties	3

Figure 2-8. Parts Supplied For Hour Meter

1. Remove black factory panel insert from control panel.
2. Insert panel adapter from kit into open hole in control panel. Verify flange of adapter is secured completely.
3. Insert meter into panel adapter until it snaps into place. Meter flange should be flat against the face of the adapter.
4. See **Figure 2-9**. Install sensor wire (A) into sensor wire connector (B) on the back of the hour meter.

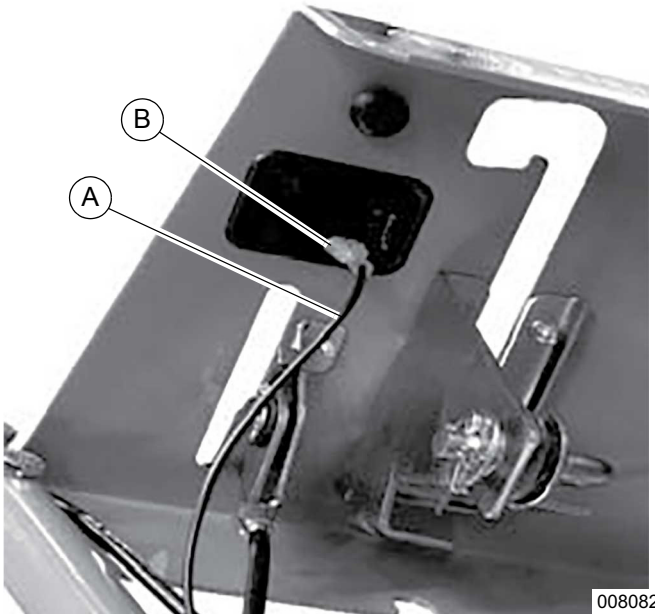


Figure 2-9. Sensor Wire Connection

5. Run the sensor wire from the hour meter to the handlebar and secure with two cable ties.
6. Route sensor wire toward the spark plug wire following the existing wiring harness. Do not over tighten cable ties. Trim any excess material from the cable ties.
7. See **Figure 2-10**. Wrap sensor wire rightly around the spark plug wire four or five turns. Secure wire to itself with a cable tie. Cut and discard unused wire.

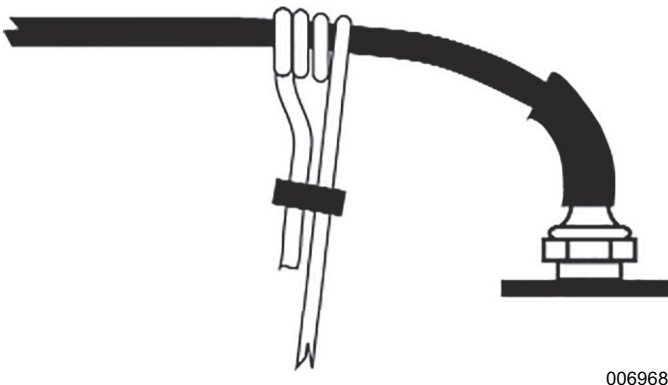


Figure 2-10. Sensor Wire installation

NOTE: Do not place sensor wire on or near a hot surface.

Engine Fluid Requirements

Engine Oil	Above 40 °F (4 °C): SAE 30 10–90 °F (-12–32 °C): 10W-30 40 °F (4 °C) or below: 5W-30
Fuel	Unleaded gasoline. Minimum 85 octane rating.

Adding Engine Oil



⚠ WARNING

Fire and explosion risk. Keep spark and flame away from liquid and vapor. Do not smoke while using. Doing so could result in death, serious injury, or equipment damage. (000341)

⚠ WARNING

Skin irritation. Avoid prolonged or repeated contact with used motor oil. Used motor oil has been shown to cause skin cancer in laboratory animals. Thoroughly wash exposed areas with soap and water. (000210)

⚠ CAUTION

Engine damage. Verify proper type and quantity of engine oil prior to starting engine. Failure to do so could result in engine damage. (000135)

IMPORTANT NOTE: The unit is shipped without oil in engine. Traces of oil may be in reservoir from factory testing. Oil must be added prior to initial operation. Use only the recommended high detergent engine oil. Refer to the engine owners manual for information.

NOTE: Use only SAE 30 high detergent oil. Refer to engine owner's manual for information. Bed must be lifted up to access oil and fuel reservoirs.

1. Place unit on a firm, level surface, and verify engine is cooled.

- See **Figure 2-11**. Remove oil dipstick/fill cap (A).

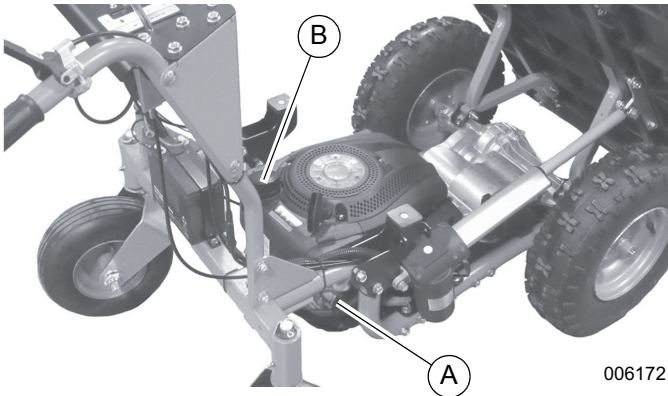


Figure 2-11. Oil Dipstick and Fuel Fill

- Add 14 oz (414 mL) of recommended high detergent oil. Wait one minute for oil to settle. See **Engine Fluid Requirements**.
- Install oil dipstick; do not screw in.
- Remove oil dipstick and check oil level. Clean oil dipstick after checking.
- Add a few ounces of oil at a time. Check oil dipstick frequently to prevent overfill. Do not overfill.

Adding Fuel



⚠ DANGER

Explosion and Fire. Fuel and vapors are extremely flammable and explosive. Add fuel in a well ventilated area. Keep fire and spark away. Failure to do so will result in death or serious injury. (000105)



⚠ DANGER

Explosion and Fire. Do not fill fuel tank past full line. Allow for fuel expansion. Overfilling may cause fuel to spill onto engine causing fire or explosion, which will result in death or serious injury. (000214)



⚠ WARNING

Explosion and Fire. Do not smoke while refueling unit. Failure to do so could result in death, serious injury, or property or equipment damage. (000284a)

NOTE: The unit is shipped without fuel. Fuel must be added prior to first starting attempt.

- Place unit on a firm, level surface, and verify engine is cooled.
- See **Figure 2-11**. Remove fuel fill cap (B).

- Fill tank with fresh, unleaded gas (with a minimum 85 octane rating) to 0.25 in (6.4 mm) from the bottom of the fill neck to allow for fuel expansion.
- Install fuel fill cap.

Connecting Battery Cables

- Remove protective caps from battery terminals.
- See **Figure 2-12**. Connect red battery cable to red battery terminal, and connect black battery cable to black battery terminal.



Figure 2-12. Battery Installation

Checking Tire Pressure

⚠ WARNING

Loss of control. Do not overinflate tires. Overinflation could cause a blow out, which could result in loss of control. Loss of control could result in death, serious injury, property or equipment damage. (000428)

- See **Figure 2-13**. Remove valve stem protective cap (A) and check tire pressure using a tire pressure gauge.

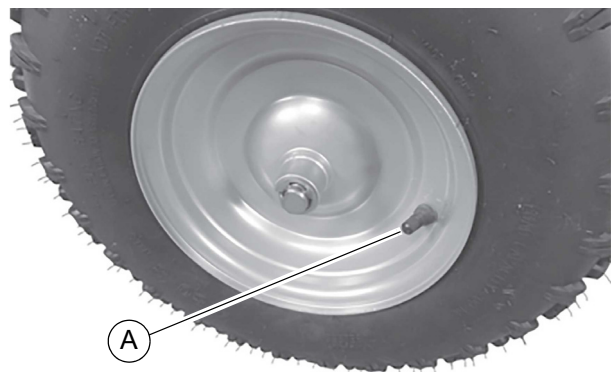


Figure 2-13. Valve Stem Protective Cap

- Verify tire pressure is in accordance with recommended pressure stamped on side of tire. Add or remove air as needed.
- Install valve stem protective cap.

High Altitude Replacement Kit

The standard carburetor air-fuel mixture is too rich at high altitudes for this unit. Performance decreases and fuel consumption increases at high altitudes. A rich mixture also fouls the spark plug and causes hard starting. Operation for extended periods of time at an altitude that differs from what the engine was certified for may increase emissions.

Install an altitude kit, when required, when operating at higher altitudes. Follow the guide below to determine when an altitude kit is required:

Altitude Range	Part Number
0–3,000 ft (0–914 m)	Not required
3,000–6,000 ft (914–1,829 m)	10000036867
6,000–8,000 ft (1,829–2,438 m)	10000036834

Kits can be obtained by contacting Generac Customer Service at 1-888-436-3722 (1-888-GENERAC), or visiting www.generac.com. Kits must be installed by a qualified individual.

NOTE: If a carburetor is replaced, the correct high altitude kit jet will need to be installed into the replacement carburetor.

The warranty may be void if necessary installation of a high altitude kit is not made for high altitude use.

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Section 3: Operation

Operation and Use Questions

Call Generac Customer Service at 1-888-GENERAC (1-888-436-3722) with questions or concerns about unit operation and maintenance.

Before Starting Engine

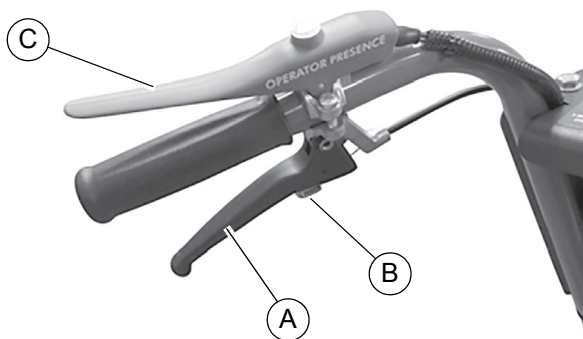
WARNING

Equipment damage. Do not attempt to start or operate a unit in need of repair or scheduled maintenance. Doing so could result in serious injury, death, or equipment failure or damage.

(000291)

IMPORTANT NOTE: Unit is shipped without oil. Add engine oil before starting. See [Adding Engine Oil](#) for instructions.

1. Check engine oil level.
2. Check fuel level.
3. Check tire pressure.
4. See [Figure 3-1](#). Set parking brake by squeezing parking brake lever (A) and lifting up parking brake lock (B), locking lever in place.



006174

Figure 3-1. Brake Lever

NOTE: The unit is equipped with an operator presence lever (C) for safety. The operator presence lever must be depressed whenever shift lever is in gear, or engine will stop. Engine will run without depressing the operator presence lever if shift lever is in neutral.

Electric Starting

CAUTION

Equipment Damage. Do not continuously crank engine for more than ten seconds. Doing so will lead to overdischarge of batteries and starter seizure.

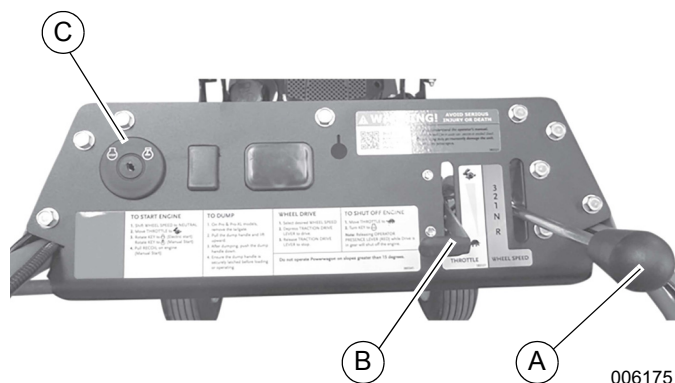
(000230)

CAUTION

Equipment damage. Do not attempt to crank or start engine before properly servicing unit with recommended oil. Failure to do so could result in engine damage.

(000320)

1. See [Figure 3-2](#). Set shift lever (A) to neutral.



006175

Figure 3-2. Control Panel

2. Set throttle lever (B) to fast (rabbit).
3. Turn key switch (C) to start. Release key when engine starts.

Manual Recoil Starting

NOTE: Manual recoil starting can be used for electric-starting models.

1. Set shift lever to neutral.
2. Set throttle lever to fast (rabbit).
3. Turn key to run.
4. Pull recoil handle slowly until resistance is felt, then pull handle with a rapid, full stroke to start engine. Repeat as necessary.

Stopping

NOTE: In an emergency situation, release operator presence lever to stop unit.

1. Release traction drive lever.
2. Set shift lever to neutral.
3. Release operator presence lever.
4. Set parking brake.
5. Set throttle control lever to slow (turtle).
6. Turn key to stop and remove key.

Operating

WARNING

Loss of control. Always drive up and down a slope. Never drive on slopes greater than 15 degrees. Failure to do so could result in death, serious injury, property or equipment damage. (000499)

WARNING

Loss of control. Operate in first gear when driving on slopes. Failure to do so could result in serious injury, property or equipment damage. (000500)

WARNING

Personal injury. Use caution when operating unit over uneven terrain or slopes. Failure to do so could result in death, serious injury, equipment or property damage. (000460)

WARNING

Loss of control. Do not park the unit on a steep grade or slope, even if using a parking brake. The unit could suddenly roll, move, or tip, which could cause death, serious injury, property or equipment damage. (000498)

The unit has a 3-speed forward transmission, and single-speed reverse. Use lower gears for slower speeds, heavy loads, or more power. Use higher gears for transport over smoother terrain. Use first gear with loads over 300 lbs (136.1 kg) and on slopes.

1. Release parking brake by squeezing and releasing brake lever.
2. Press and hold operator presence lever.
3. Set shift lever to desired gear.

CAUTION

Equipment damage. Always release the traction drive lever before shifting gears. Failure to do so could result engine and transmission damage.

(000412)

4. Squeeze traction drive lever slowly until machine moves in desired direction.

NOTE: For more controlled operation, squeeze throttle slowly. Squeezing quickly can cause unit to “jump.”

NOTE: Verify work area is clear of obstructions or loose footing before operating in reverse.

NOTE: In an emergency situation, release operator presence lever to stop unit.

Loading

WARNING

Tipping hazard. Do not overload unit. Do not transport top-heavy loads. Load only to rated weight. Distribute load evenly and secure properly. Improper loading could cause death, serious injury, or equipment damage. (000495)

WARNING

Loss of control. Operate the unit in the lowest gear required. Excessive speed could cause loss of control, resulting in serious injury or equipment damage.

(000497)

WARNING

Loss of control. Do not park the unit on a steep grade or slope, even if using a parking brake. The unit could suddenly roll, move, or tip, which could cause death, serious injury, property or equipment damage. (000498)

WARNING

Loss of control. Operate in first gear when driving on slopes. Failure to do so could result in serious injury, property or equipment damage.

(000500)

Follow the points below for safe operation of the unit.

- Recommended maximum load is 800 lbs (363 kg). Exceeding the weight limit can damage the unit.
- Apply brake slowly when traveling downhill, if needed. Applying brake quickly can cause a tipping hazard.

Slopes and Uneven Terrain

⚠️WARNING

Personal injury. Use caution when operating unit over uneven terrain or slopes. Failure to do so could result in death, serious injury, equipment or property damage.

(000460)

⚠️WARNING

Loss of control. Do not park the unit on a steep grade or slope, even if using a parking brake. The unit could suddenly roll, move, or tip, which could cause death, serious injury, property or equipment damage.

(000498)

⚠️WARNING

Loss of control. Always drive up and down a slope. Never drive on slopes greater than 15 degrees. Failure to do so could result in death, serious injury, property or equipment damage.

(000499)

⚠️WARNING

Loss of control. Operate in first gear when driving on slopes. Failure to do so could result in serious injury, property or equipment damage.

(000500)

⚠️WARNING

Personal injury. Never shift gears while operating on a slope. Doing so could result in loss of control and could cause death, serious injury, or property or equipment damage.

(000414)

⚠️WARNING

Tipping hazard. Do not overload unit. Do not transport top-heavy loads. Load only to rated weight. Distribute load evenly and secure properly. Improper loading could cause death, serious injury, or equipment damage.

(000495)

⚠️WARNING

Personal injury. Do not operate unit from outside the operator zone. Doing so could result in death, serious injury, or equipment damage.

(000440)

Unloading Bed

IMPORTANT NOTE: Never dump load while on a slope.

1. Shift to neutral and set parking brake.
2. Remove tailgate.
3. Turn key to run.
4. Hold electric dump switch in the upper DUMP position to raise bed to empty it.
5. Hold power dump switch down in the lower FLAT position to lower bed once dumping is complete.

Operating Tips

- Electric dump system allows loose materials to be distributed over an area rather than in a concentrated pile. Move unit in reverse with bed partially tipped to spread load.
- Electric dump system allows bed to be stopped at any point in the tipping range.

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Section 4: Maintenance and Troubleshooting

Maintenance

Regular maintenance will improve performance and extend engine/equipment life. Generac Power Systems, Inc. recommends that all maintenance work be performed by an Independent Authorized Service Dealer (IASD). Regular maintenance, replacement, or repair of the emissions control devices and systems may be performed by any repair shop or person of the owner's choosing. To obtain emissions control warranty service free of charge, the work must be performed by an IASD. See the emissions warranty.

Maintenance Schedule



WARNING

Hot Surfaces. When operating machine, do not touch hot surfaces. Keep machine away from combustibles during use. Hot surfaces could result in severe burns or fire.

(000108)

WARNING

Risk of injury. Do not operate or service this machine if not fully alert. Fatigue can impair the ability to service this equipment and could result in death or serious injury.

(000215)

WARNING

Accidental start-up. Disconnect negative battery terminal before servicing to prevent accidental engine rotation. Failure to do so could result in death or serious injury.

(000148a)

CAUTION

Personal injury. Wear appropriate personal protective equipment at all times while operating and servicing unit. Failure to do so could result in personal injury.

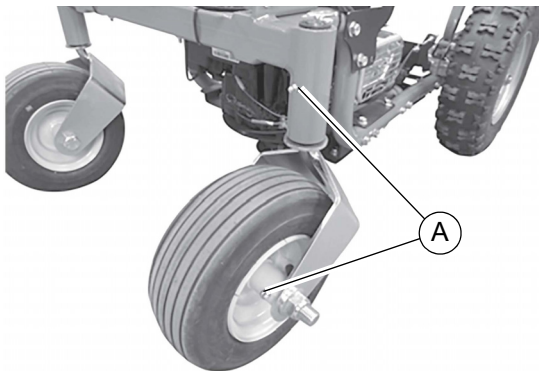
(000419)

Procedure	Before Each Use	Every 25 Hours	Every 100 Hours
Check engine oil level	●		
Inspect general equipment condition	●		
Verify tire pressure	●		
Inspect operator presence lever	●		
Lubricate caster wheel grease fittings		●	
Clean air filter and pre-cleaner		●	
Check parking brake adjustment		●	
Inspect belt tension and condition		●	
Inspect cable connections		●	
Clean engine exterior and cooling fans		●	
Change engine oil and filter	1 st time 5 hours	●	
Replace spark plug			●
Replace air filter and pre-cleaner			●

Lubrication

Caster Wheel Lubrication

See [Figure 4-1](#). Grease the four fittings (A) with #2 lithium grease every 25 hours of operation.



006177

Figure 4-1. Caster Wheel Lubrication Locations

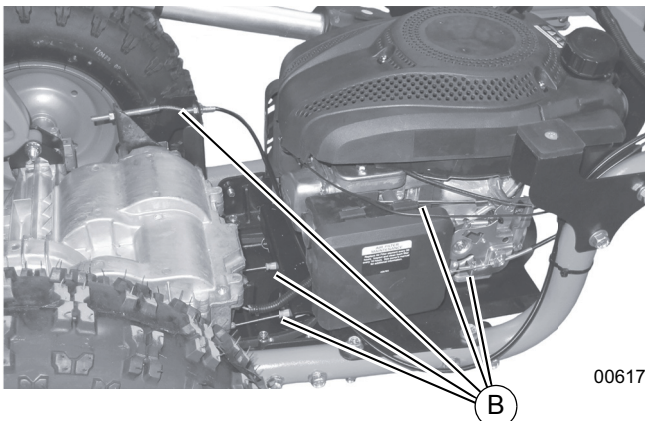
Cable Lubrication

See [Figure 4-2](#) and [Figure 4-3](#). Lubricate cable ends (B) at handlebars and control panel using SAE 30 oil. Operate levers to work lubricant into cables.



006178

Figure 4-2. Cable Lubrication Locations



006179

Figure 4-3. Cable Connection Lubrication Locations

Changing Engine Oil



WARNING

Risk of burns. Allow engine to cool before draining oil or coolant. Failure to do so could result in death or serious injury.

(000139)

WARNING

Skin irritation. Avoid prolonged or repeated contact with used motor oil. Used motor oil has been shown to cause skin cancer in laboratory animals. Thoroughly wash exposed areas with soap and water.

(000210)

CAUTION

Engine damage. Verify proper type and quantity of engine oil prior to starting engine. Failure to do so could result in engine damage.

(000135)

NOTE: Drain oil when engine is warm. Warm oil drains more completely.

1. Lift bed to upright position.
2. Remove oil dipstick/fill cap and wipe off with a clean rag.
3. Install oil dipstick/fill cap and screw in. Remove oil dipstick/fill cap and inspect oil level.
4. Insert oil pump and remove old oil. Remove oil pump.
5. Add fresh oil. See [Engine Fluid Requirements](#).
6. Install oil dipstick/fill cap and hand tighten.
7. Dispose of used engine oil in accordance with local, state, or national laws.

Inspecting Air Filter



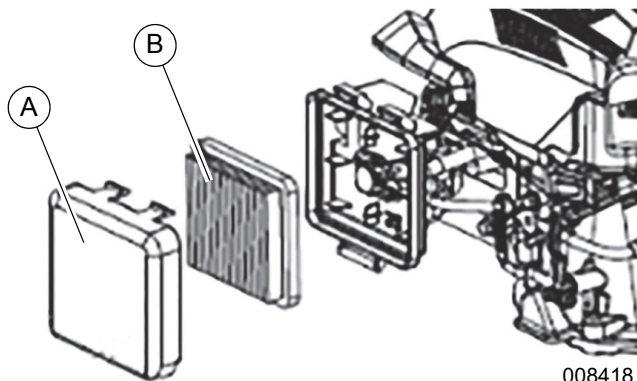
⚠ WARNING

Explosion and fire. Never clean air filter element with gasoline or low flash-point detergents. Doing so could result in death, serious injury, or equipment damage.

(000580)

Proceed as follows to service the air filter.

1. See [Figure 4-4](#). Remove air cleaner cover (A). Do not allow dirt or debris to fall into air cleaner base opening.



008418

Figure 4-4. Air Cleaner Assembly

2. Remove foam or paper element (B).
3. Inspect and clean or replace any damaged air cleaner parts.

NOTE: Clean foam element with soapy water. Blow paper element with compressed air or lightly tap off dust. Never attempt to brush element.

4. Install the air cleaner.

Inspecting Spark Plug

IMPORTANT NOTE: Use only the recommended spark plug, or equivalent. Incorrect heat range of spark plug may damage engine.

The spark plug gap must be correct with no deposits or corrosion around the spark plug. Proceed as follows to inspect and, if necessary, replace the spark plug.

1. Remove spark plug cap.
2. Clean around spark plug base with a clean, lint free cloth.
3. Remove spark plug.
4. Inspect spark plug. Clean with a steel brush. If insulator is damaged, replace spark plug.
5. See [Figure 4-5](#). Measure spark plug clearance with a feeler gauge. Clearance should be approximately 0.019–0.028 in (0.5–0.7 mm). Bend the side electrode carefully if adjustment is necessary.



008419

Figure 4-5. Spark Plug Gap

6. To avoid cross-threading, screw in spark plug by hand, then tighten with a spark plug wrench to compress the gasket.

IMPORTANT NOTE: Tighten spark plug securely to prevent overheating.

NOTE: If installing a new spark plug, do not tighten more than one half turn after the gasket is compressed.

NOTE: If installing the old spark plug, do not tighten more than 1/8–1/4 turn after the gasket is compressed.

Removing and Replacing Front Tires

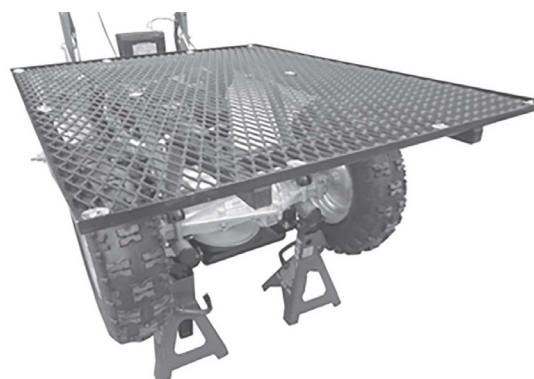


⚠ WARNING

Tipping hazard. Properly support the unit when jacking. Failure to do so could result in death, serious injury, property or equipment damage.

(000447)

1. See [Figure 4-6](#). Place unit on a firm, level surface. Support front of frame with jack stands to lift tires off the ground.



006180

Figure 4-6. Unit on Jack Stands

NOTE: Verify jack stands are not touching tires.

2. See [Figure 4-7](#). Remove tire retaining ring (A) with screwdriver. Remove washer and tire. Verify key is in axle.



006181

Figure 4-7. Wheel Retaining Ring

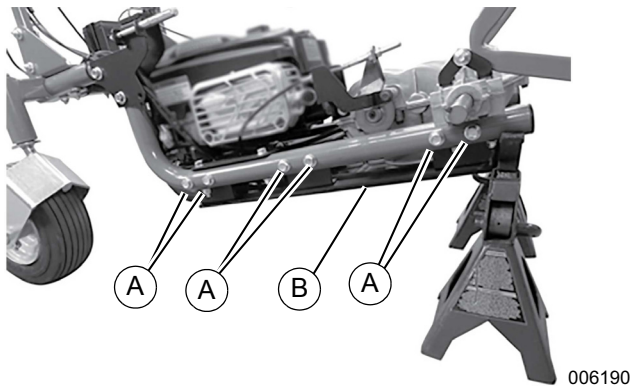
3. Align groove in tire hub to key and slide tire onto axle.
4. Install washer and tire retaining ring.

Removing and Replacing Belt

WARNING

Accidental start-up. Disconnect negative battery terminal before servicing to prevent accidental engine rotation. Failure to do so could result in death or serious injury. (000148a)

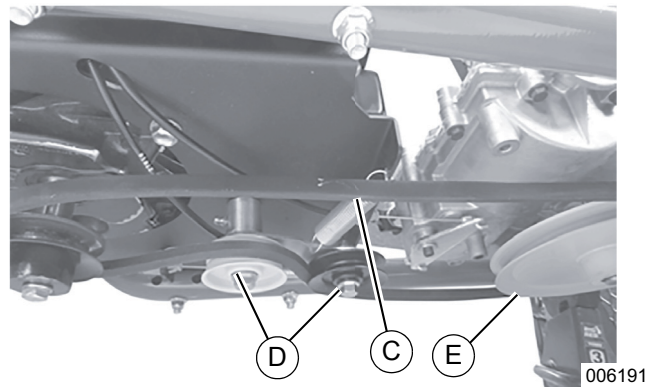
1. See [Removing and Replacing Front Tires](#). Perform steps 1 and 2 to remove front wheels.
2. Tip bed forward for better access.
3. See [Figure 4-8](#). Remove 12 (six per side) skid plate bolts (A).



006190

Figure 4-8. Skid Plate Bolt Locations

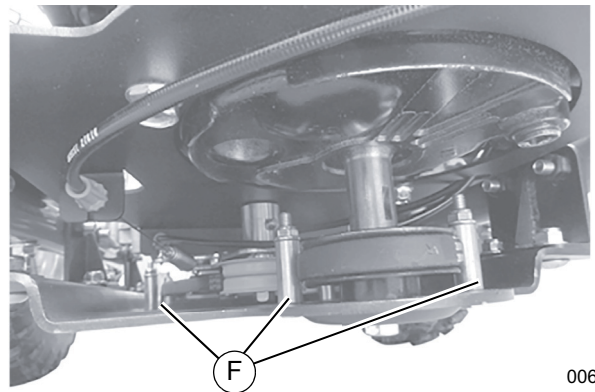
4. Remove skid plate (B).
5. See [Figure 4-9](#). Remove belt (C) from the idler/tensioner (D) and transaxle pulleys (E).



006191

Figure 4-9. Belt and Pulley System

6. See [Figure 4-10](#). Install new belt. Route belt between idler/tensioner pulleys using belt guides (F).



006192

Figure 4-10. Belt Guides

7. Install skid plate. Verify belt is on inside of all belt guides.
8. Install wheels. Verify key is in position on transaxle shafts.

Checking and Adjusting Brakes

Brakes are adjusted at the factory, but may need adjustment over time. Brakes can be adjusted at the brake arm adjustment nut and the brake cable jam nuts.

Checking Brakes

1. Place unit on a firm, level surface. Set parking brake.
2. Set shift lever to neutral.
3. Roll machine to test brakes. If unit moves, brakes must be adjusted. If unit doesn't move, brakes are properly adjusted.

Brake Arm Adjustment

NOTE: Proceed to [Brake Cable Adjustment](#) if brake arm adjustment does not produce desired results.

1. Turn brake arm adjustment nut (A) one-quarter turn clockwise to tighten brakes.

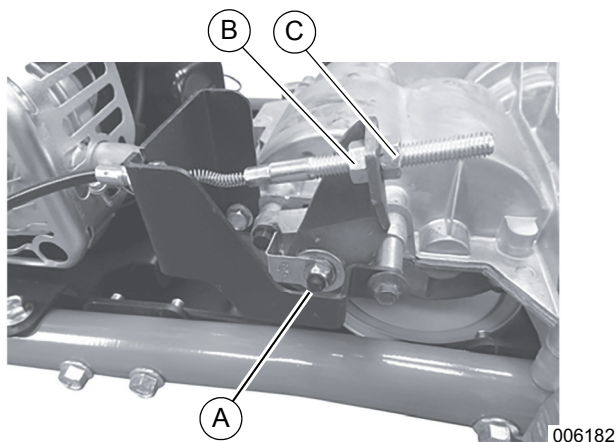


Figure 4-11. Brake Arm Adjustment

2. See [Checking Brakes](#) to test brakes. Repeat adjustment as needed.

Brake Cable Adjustment

NOTE: Proceed to [Changing Parking Brake Pads](#) if brake cable adjustment does not produce desired results.

1. Rotate inside jam nut (B) a full turn counterclockwise from brake arm.
2. Rotate outside jam nut (C) clockwise brake arm and inside jam nut.
3. See [Checking Brakes](#) to test brakes. Repeat adjustment as needed.

Parking Brake Adjustment

Verify parking brake lock works properly when brakes are adjusted. If brakes are adjusted too tight, lever will not squeeze tight enough against handle and lock will not engage, or it will not disengage.

Perform the previous adjustments in the opposite direction to loosen brake cable.

NOTE: Turn adjustment nuts only one-quarter turn at a time, and test parking brake lock to verify adjustment is correct.

Changing Parking Brake Pads

NOTE: Brake pads may need replacement if brakes have been adjusted, but unit rolls on slopes when parking brake is set.

NOTE: Removing tire provides easier access to brake caliper area.

1. Place unit on a firm, level surface in a clean work area. Do not engage parking brake. Chock wheels to prevent movement.
2. Locate brake caliper at right/front of unit.
3. See [Figure 4-12](#). Remove cable bracket bolt (A).

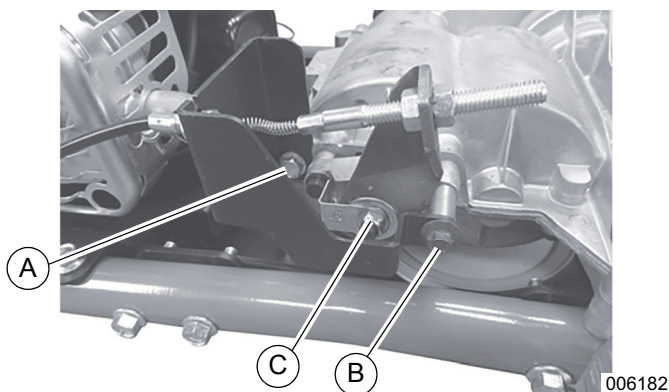


Figure 4-12. Brake Pad Assembly

4. Remove long caliper bolt (B) and spacer from transaxle.
5. Remove short caliper bolt (C) and caliper from transaxle.

NOTE: See [Figure 4-13](#). Caliper contains four small parts: brake pad (D), backing plate (E), and two actuator pins (F). Verify parts are kept in a safe place during the procedure. Clean any debris from parts and inside of caliper.

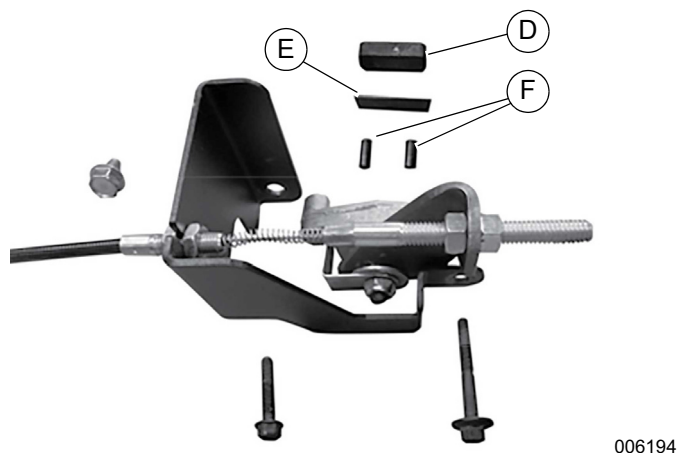


Figure 4-13. Brake Caliper Assembly

6. See [Figure 4-14](#). Remove brake disc (H) from splined shaft and remove brake pad (G).

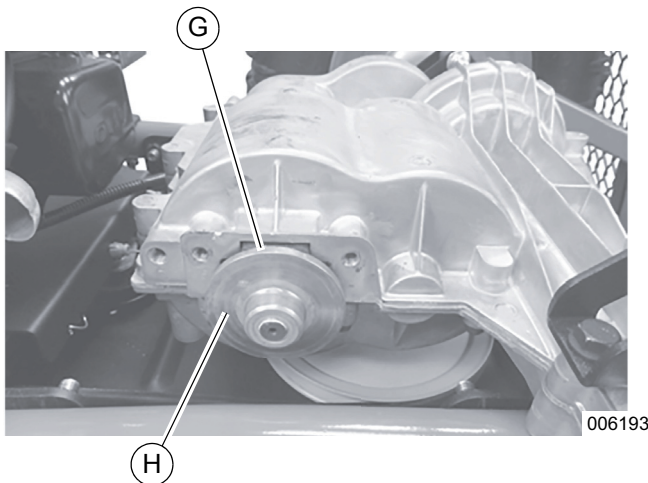


Figure 4-14. Brake Caliper

7. Install new brake pad into cavity and hold in place while installing brake disc.
8. Lightly grease actuator pins with lithium grease, and insert pins into caliper.
9. Insert backing plate with new brake pad and position caliper onto transaxle.
10. Secure caliper and cable bracket in reverse order of disassembly.
11. See [Checking and Adjusting Brakes](#) to adjust brakes to new brake pads.

Adjusting Traction Drive Cable

Tension on traction drive lever should increase when lever is nearly parallel to handlebar grip. If it does not, adjust traction drive cable as described below.

1. See [Figure 4-15](#). Locate the in-line adjuster (A) on traction drive cable (B) along the right handlebar.

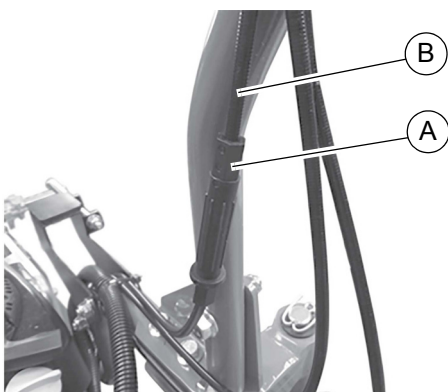


Figure 4-15. Traction Drive Cable

2. Rotate center portion clockwise while holding the ends stationary to expand the in-line adjuster and remove slack from cable.

Adjusting Shift Cables

Shift cables may need adjustment if there is “play” in the wheel speed lever, or if lever is no longer aligned with wheel speed label. Proceed as follows to adjust shift cables:

1. Locate shift cable adjustment nuts on shift lever end of cable.
2. See [Figure 4-16](#). Loosen top cable jam (A) nut.

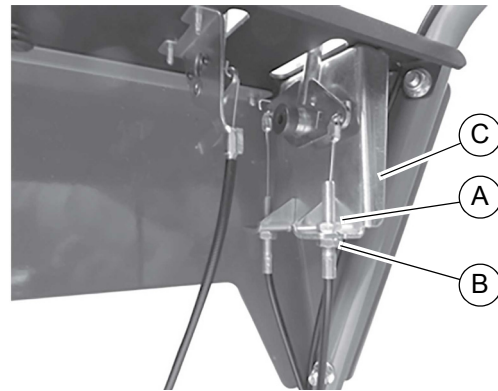


Figure 4-16. Shift Cables

3. Pull down slightly on cable sheathing, pulling out slack in cable. Tighten bottom cable adjustment nut (B) against bracket (C). Tighten top nut against bracket and bottom nut. You may need to tension one cable while loosening the other to realign lever.

NOTE: Do not overtighten. This creates a spongy feel in the shift lever.

Battery Care



WARNING

Explosion. Batteries emit explosive gases while charging. Keep fire and spark away. Wear protective gear when working with batteries. Failure to do so could result in death or serious injury.

(000137a)



WARNING

Explosion. Do not dispose of batteries in a fire. Batteries are explosive. Electrolyte solution can cause burns and blindness. If electrolyte contacts skin or eyes, flush with water and seek immediate medical attention.

(000162)



WARNING

Risk of burn. Do not open or mutilate batteries. Batteries contain electrolyte solution which can cause burns and blindness. If electrolyte contacts skin or eyes, flush with water and seek immediate medical attention.

(000163a)

⚠ WARNING

Accidental Start-up. Disconnect the negative battery cable, then the positive battery cable when working on unit. Failure to do so could result in death or serious injury. (000130)

⚠ WARNING

Environmental Hazard. Always recycle batteries at an official recycling center in accordance with all local laws and regulations. Failure to do so could result in environmental damage, death or serious injury. (000228)

Always recycle batteries in accordance with local laws and regulations. Contact your local solid waste collection site or recycling facility to obtain information on local recycling processes. For more information on battery recycling, visit the Battery Council International website at: <http://batteryCouncil.org>

Follow the recommendations below for battery's best performance.

- Do not allow battery to discharge completely or excessively. If unit is not being used, charge battery every 4–6 weeks. Operate engine for at least 45 minutes to maintain proper battery charge.
- Store unused batteries in a dry area that does not freeze.
- Do not charge a fully charged battery. A fully charged battery on a charger creates heat, which can damage the battery. A fully charged battery reads 12–13.2 volts with a voltmeter.
- Do not continue to crank engine when battery charge is low.
- Battery will not need special attention with the addition of electric dump system under normal work conditions. If operating for extended periods with frequent dumps, leave engine running during idle periods to maintain proper charge.

Charging Battery

Operate engine for at least 45 minutes to maintain proper battery charge. Use a trickle charger to recharge if battery loses charge. Trickle charger should have an output of 12V at no more than 2 amps.

- At 1 amp, battery may charge for as long as 48 hours.
- At 2 amps, battery may charge for as long as 24 hours.

NOTE: Using recoil starter and running engine will not recharge a dead or significantly discharged battery.

Connecting Battery to Trickle Charger

1. Detach battery cables from battery.
2. Attach red (+) battery charger cable to red (+) battery terminal, and black (-) battery charger cable to black (-) battery terminal.
3. Plug battery charger into outlet.

NOTE: Disconnect battery charger from outlet first, then disconnect charger cables from battery terminals when charging is completed. If battery charger cables are left connected to battery when battery charger is unplugged, battery will discharge into charger.

End of Season and Storage

**⚠ WARNING**

Risk of Fire. Verify machine has properly cooled before installing cover and storing machine. Hot surfaces could result in fire.

(000109)

Unit must be stored when not in use for extended periods of time. Perform the actions below before storage:

- Add stabilizer to fuel tank as needed. Completely fill tank with fresh, unleaded fuel and add appropriate amount of stabilizer or additive. Run engine for a short time to circulate additive.
- Change oil to eliminate sludge and acid buildup. In colder climates, use SAE 5W-30W.
- Remove spark plug and add 1 oz (29.6 ml) of engine oil into the cylinder hole. Install spark plug and pull recoil starter rope until there is strong resistance to coat the piston and seat the valves to prevent moisture buildup.
- Clean and replace air filter(s).
- Clean cylinder head cooling fins, carburetor linkage, blower housing, rotating screen, and muffler areas.
- See [Figure 4-2](#) and [Figure 4-3](#). Lubricate all grease fittings.
- Verify operator controls are moving freely. Lubricate throttle lever cable, parking brake cable, and traction control cable with SAE 30 oil if necessary. See [Cable Lubrication](#).
- Remove battery and store in a cool, dry place. Charge battery once a month, and before returning to service.
- Clean exterior of unit to remove all dirt, grease, and any other foreign material. Touch up painted surfaces that have been scratched or chipped to prevent rust.
- Store unit in a dry, protected place. Cover unit if stored outdoors.

Troubleshooting

Symptom	Possible Cause
Engine lacks power or not running smoothly	Inspect throttle travel and adjustment.
	Dirty air filter; replace air filter.
	Dirty or cracked spark plug; replace spark plug.
	If spark plug is oily, remove spark plug and hold a rag over spark plug hole. Pull recoil cord several times to blow out any oil in the cylinder. Wipe off spark plug and install.
	Old fuel; drain and replace fuel. Add stabilizer if fuel is kept for a month or longer.
	Contact an IASD if problem persists.
Hard to shift to reverse	Shift lever needs adjustment.
Wheels pulling left or right	Verify proper tire pressure.
Unit lacks traction	Uneven load. Place weight over wheels to create better traction.
	Improper gear selected. Select lower gear.
	Rough terrain; tire chains required.
Wheels do not turn	Verify unit is in gear.
	Verify parking brake is disengaged.
	Drive belt loose, dislodged, or improperly installed.
	Contact an IASD if problem persists.
Electric dump system is unresponsive	Inspect fuse under control panel; replace fuse if necessary.
	Inspect electrical connections.
	Verify key switch is in RUN.
	Verify battery charge. If key activates starter, battery is sufficiently charged. If engine does not start, charge battery and retest.
	Contact an IASD if problem persists.
Dump bed stops with switch button depressed	Release switch and try opposite direction. If dump bed moves, check area beneath dump bed for obstructions.
	If dump bed does not move in opposite direction, inspect battery and connections.
	Contact an IASD if problem persists.

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