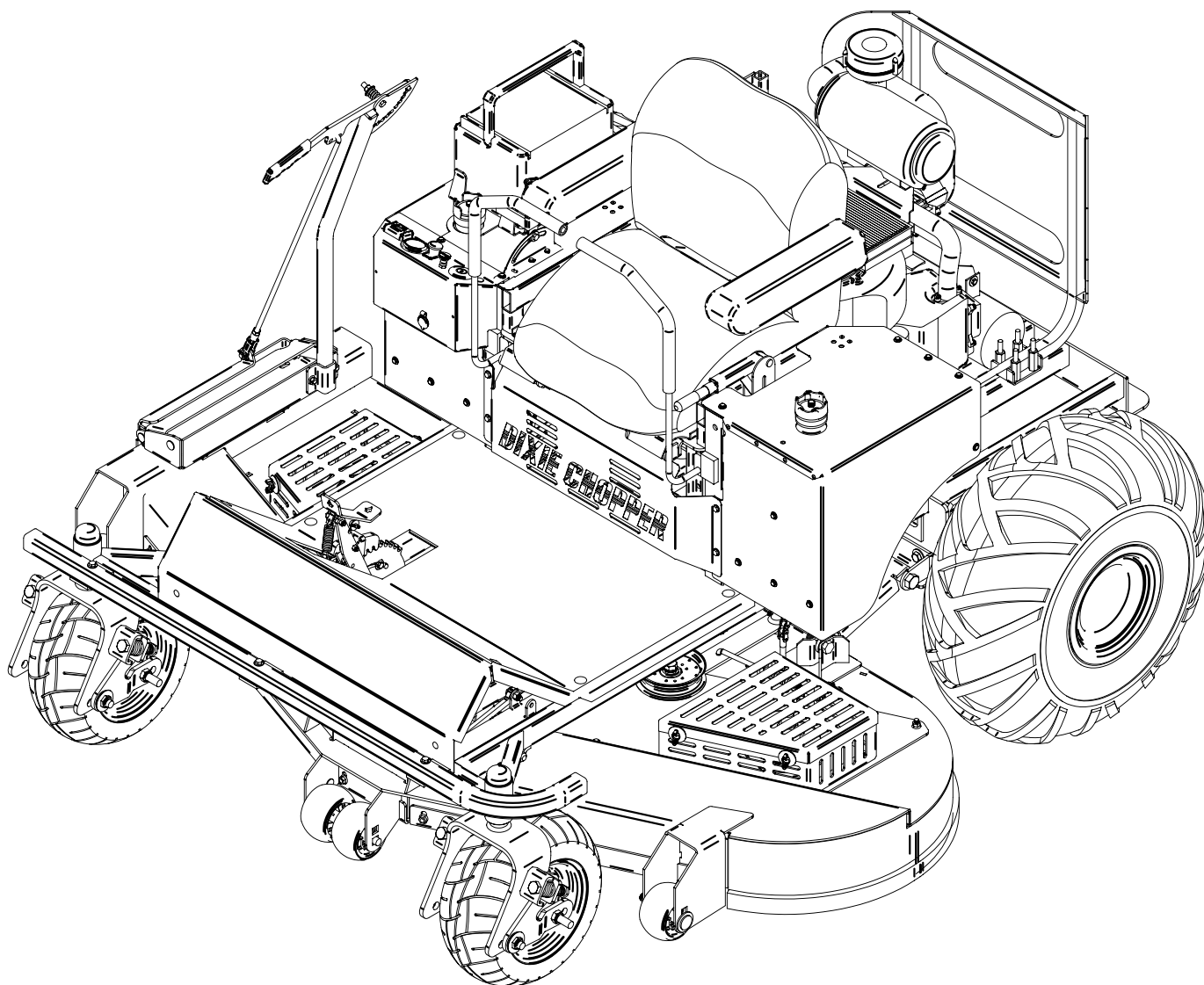


# DIXIE CHOPPER

*The World's Fastest Lawn Mower*



Model # \_\_\_\_\_

Engine Model # \_\_\_\_\_

Serial # \_\_\_\_\_

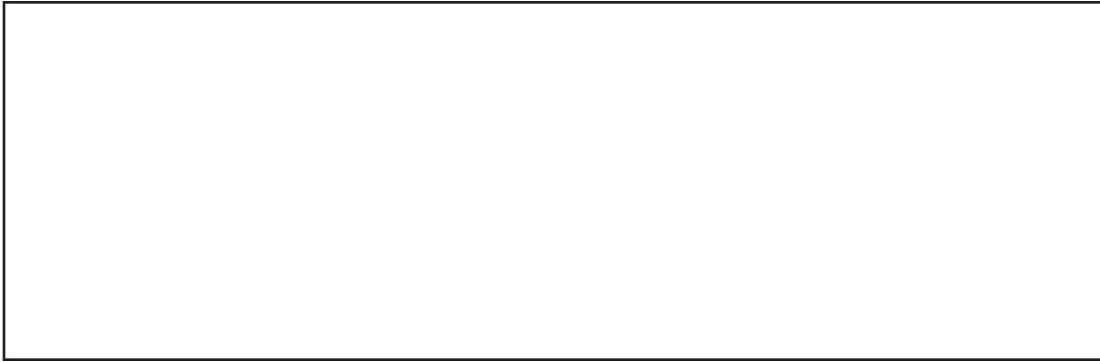
Engine Serial # \_\_\_\_\_

Date Purchased \_\_\_\_\_

Engine Spec. # \_\_\_\_\_

## Industrial Owner's Manual

## ABOUT THIS MANUAL



### AUTHORIZED DEALER

This owner's manual is considered a permanent part of the mower. It must be available to all of the operators and/or person(s) servicing the mower. Should the mower be resold, this manual must remain with the mower.

All information, illustrations, and specifications contained in this manual were in effect at the time of publication. Dixie Chopper reserves the right to change, modify, and/or discontinue specifications and/or design without notice. If there is a change that has been made to your mower which is not shown or reflected in this manual, please see your authorized Dixie Chopper Mower dealer before operating and/or servicing the equipment.

Congratulations on the purchase of your new Dixie Chopper commercial mower. We at Dixie Chopper are confident that this mower will provide you with years of excellent performance, durability, and trouble free service when operated and maintained as directed in this manual.

Should you ever have any questions regarding the operation, maintenance, or safety of your mower, please contact your authorized Dixie Chopper Mower dealer who has been specially trained on operation and service of Dixie Chopper Mowers.

A space has been provided on the cover and below to record information about your new Dixie Chopper Mower. Please take time to record such information for future reference, especially when you contact an authorized Dixie Chopper Mower dealer with questions.

Date Purchased:	_____
Model Number:	_____
Serial Number:	_____
Purchased From:	_____

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There are no understandings, agreements, representations, or warranties expressed or implied (including but not limited to any regarding the merchantability or fitness for a particular purpose), not specified herein, regarding the equipment which is the subject of this warranty.

#### **Owner/Operator Knowledge Responsibility**

As a condition of the Dixie Chopper warranty, the owner and operator(s) are fully responsible for having read, and reasonably understood the proper operation and care of the Dixie Chopper Mower before attempting to operate the mower.

Through the terms and conditions contained herein, Magic Circle Corporation and Dixie Chopper warrants that it will adjust, repair, or replace any factory original part used in the manufacturing of a Dixie Chopper complete unit, found to be defective in material or workmanship.

#### **Complete Unit**

The warranty period is limited to two years from the date of retail purchase on behalf of the original owner of a Dixie Chopper Mower. This warranty will provide the cost of repair or replacement (at the discretion of Dixie Chopper) of the defective part, including labor. This warranty applies in like form to the original retail purchaser of a Dixie Chopper Mower used commercially, or for income producing purposes. Additionally, Dixie Chopper will provide to the original purchaser beyond the initial 2 year warranty as stated above, replacement of any main frame, front fork and castor bearings, steering levers and linkages due to breakage, or any stainless steel body due to rust, for the useful life period of the machine. This additional "lifetime warranty" covers stated parts only...no labor.

#### **Deck Spindle Assembly**

Parts and labor for the replacement of the complete deck spindle assembly (deck hub, deck spindle bearings, deck hub spacer, and blade spindle shaft), of the Dixie Chopper Mower will be warranted for three years from the retail purchase date on behalf of the original owner against defects in materials or workmanship.

#### **Hydro-Drive-Train**

Hydro-drive components (pumps, wheel motors, and T-box), of the Dixie Chopper Mower will be warranted for two years from the retail purchase date on behalf of the original owner against defects in materials or workmanship.

#### **Generac Engine**

The Generac engine used on the Dixie Chopper Mower is warranted for period of three years from the retail purchase date on behalf of the original owner against defects in materials or workmanship. Labor required for engine warranty will be covered by Dixie Chopper for the first two years and at the unit owners expense during the third year.

#### **Engine (excluding Generac)**

The engine warranty is provided by the engine manufacturer. Please refer to the engine manufacturer warranty statement included with the ownership materials provided with the unit. Dixie Chopper is not authorized to handle warranty adjustments on engines. Engine warranty claims must be filed with the appropriate engine manufacturer for necessary warranty repairs. In general, engines used on Dixie Chopper units are warranted by the respective engine manufacturer for a period of **two years** from the retail purchase date on behalf of the original owner.

#### **Tires, Blades, and Belts**

Tires, blades, clutch shoes, and belts are considered to be consumable wear items, and are therefore warranted for an initial period of 90 days against materials or workmanship defects, not for wear or abuse.

Replacement Parts (Customer proof of purchase required)

Dixie Chopper replacement parts are warranted for 90 days against defects in materials & workmanship. (Hydro pumps and motors must be dealer installed). Coverage is for parts replacement only...no labor, and does not pertain to improper installation or abuse.

#### **Battery Warranty**

Dixie Chopper original equipment batteries are warranted against OEM factory defects in materials or workmanship ("discharged only and abuse" are not covered). If battery failure occurs within six months of mowers original retail purchase date, purchase of battery will be reimbursed (\$30-\$50 depending on model). Battery failures occurring beyond six months but less than one year from original retail purchase date will be reimbursed at 50% of the cost of the standard replacement battery.

#### **Transportation for Warranty Repairs**

A Dixie Chopper Mower (including any defective part(s) requiring warranty repair, must be returned to an authorized Dixie Chopper Service Dealer within the warranty period. The expense of transporting the unit to and from the dealer for warranty work will be the responsibility of the mower owner.



## WARRANTY POLICIES (cont'd)

### Limitation of Warranty

The Product Registration/Dealer Delivery Certification must be mailed to Dixie Chopper within three days of the original retail purchase date to enable accurate validation of the warranty period provided. Proof of purchase may be required ( invoice & copy of product registration) from the unit owner to substantiate any warranty claim.. All warranty work must be performed by an authorized Dixie Chopper Servicing Dealer, using only Dixie Chopper OEM parts.

This warranty covers only Dixie Chopper Mower complete units that are registered with the factory when purchased new, properly maintained, and operated under conditions considered normal for commercial turf equipment.

## OPTIONAL EXTENDED WARRANTY PROGRAMS

### 5 Year Extended Generac-Engine Warranty (\$895) (5 Year Coverage from Purchase Date)

This is an extension of the original three year warranty issued by Dixie Chopper and is subject to the same limitations. Please see Guardian Generac Engine owner's manual for details of the original warranty. This warranty will be administered by the Dixie Chopper Service/Warranty Department (800-307-2667). Dixie Chopper will, at its discretion, pay for (parts only), the replacement of the engine, or any of its components that fail due to defects in material or workmanship, for a period of five years from the original date of purchase.

### Five-Year Extended Hydro-Drive-Train Warranty (\$599)\* (5-Years Coverage from Purchase Date)

Dixie Chopper offers a three-year extended parts warranty covering hydro-drive-train components. Purchasing the three-year extended parts warranty provides to the original purchaser from date of purchase...

2 years Parts & Labor, plus an additional 3-years Parts Only warranty coverage. This means for 5 years, if hydro-drive-train components (wheel motors, pumps & pulleys, T box & pulley, hydro hoses, fittings, gaskets, drive linkages, bushings, wheel hubs, or wheel rims), as part of the machine, require replacement due to a defect in materials or workmanship, Dixie Chopper will cover the cost of needed replacement part(s) is included. During the first 2 years of warranty coverage, labor for the necessary replacement of the part(s) is included. During years 3 through 5, labor for the necessary replacement of the part(s) will be the responsibility of the machine owner.

**Five Year Extended Deck Spindle Asm. Warranty(\$199)\*** (5-Years Coverage from Purchase Date) This five year extended warranty covering the complete deck spindle assembly (deck hub, deck spindle bearings, deck hub spacer, and blade-spindle shaft), of the Dixie Chopper complete unit will be warranted for **five years** from the retail purchase date on behalf of the original owner against **defects in materials or workmanship. The 4th and 5th year are parts only, no labor.**

Dixie Chopper will replace all or part of the assembly at its discretion.

**Purchase all three Extended Warranties at time of original retail purchase for  
\$1495**

**Purchase Hydro and Spindle Warranties at time of original retail purchase for  
\$798**

# SAFETY INFORMATION

Read This Manual Carefully And Thoroughly Before Operating The Mower!

## Training

1. Carefully and thoroughly read the owner's manual. Allow adequate time to fully understand the controls and operation of the equipment.
2. Never allow anyone to operate the mower that has not read and fully understood the owner's manual.
3. Do not carry passengers. Avoid mowing while people, especially children and pets are nearby, since rotating blades can throw rocks and other items with enough force to cause serious injury.

## Before Use of Equipment

### Operator:

Wear protective clothing while mowing. Long trousers and safety glasses will help reduce the risk of injury from thrown objects. It is recommended that steel toe shoes with aggressive soles or some other type of substantial footwear be worn to help protect your feet and maintain traction on slopes or uneven ground. Always wear hearing protection.

### Mowing Area:

Thoroughly inspect the area where the equipment is to be used. Look for items such as stones, sticks, wire and other foreign objects. When struck by the mower, these and other objects may become projectiles that could lead to serious injury and/or death.

### Mower:

For your safety and the long life of your mower, always inspect the mower before each use. Before inspection, make sure it is on a flat and level surface, the blades are disengaged, the ignition switch off with the key removed, and the spark plug wire is off of the spark plugs.

### General Condition:

- Walk around the mower looking for any fluid spills or leaks on or underneath the mower. Remove any and all excessive debris, dirt, and/or fluids.
- Look for signs of damage or excessive wear. Check the tightness of all nuts, bolts, pins, and screws. Tighten any that may be loose and replace any that may have been lost during use.
- Be sure the safety interlock seat switch is operating properly so that the engine can not be started unless the operator is in the seat with the blades disengaged.
- Check the mower blades for any damage or abnormal wear and replace in sets so that they are balanced.
- Check the tire pressure on all four tires.
- Check all belts for proper wear and correct tension.
- Check engine oil and air filters as recommended in the engine manufacturers' operators manual.

## GENERAL SAFETY PRECAUTIONS

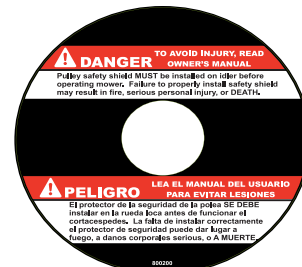
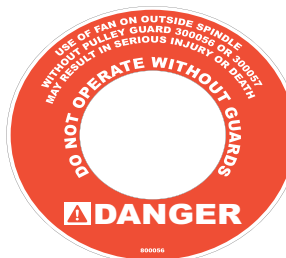
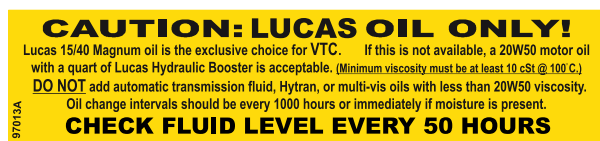
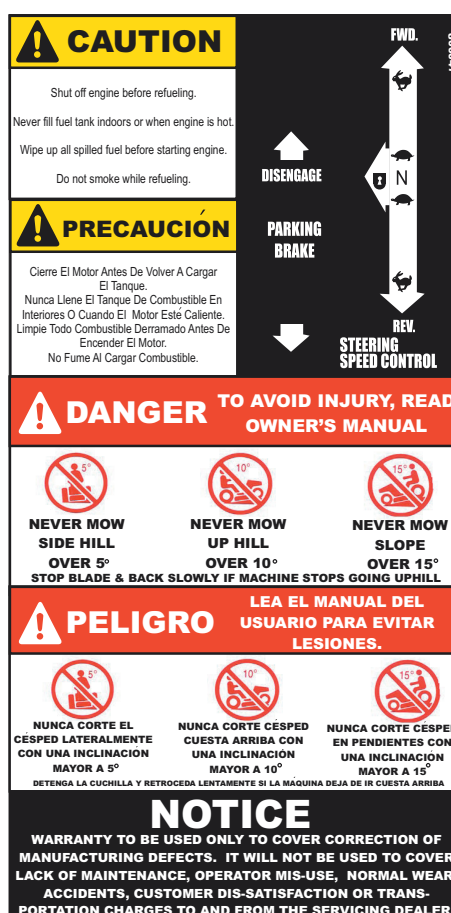
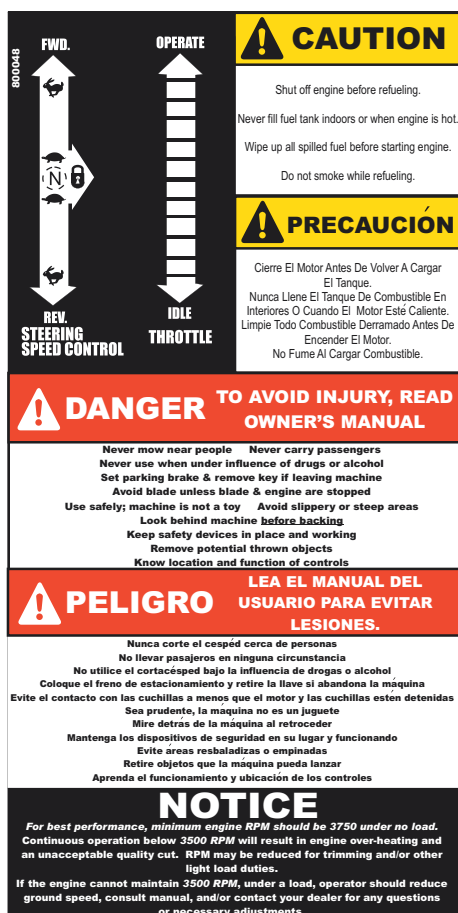
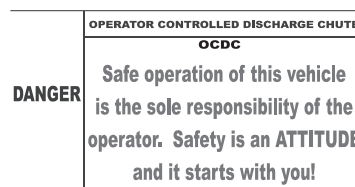
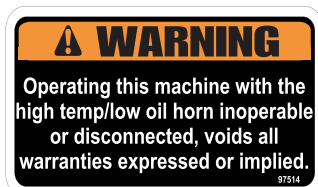
1. Never allow individuals who have not read this Operator Manual to operate the mower.
2. Never allow children to operate mower. This mower is intended for adult use only.
3. Never operate the mower when barefoot or when wearing open sandals.
4. Thoroughly clear the work area of objects (wire, stones, sticks, bones, etc.) which may damage the mower or cause personal injury to the operator, bystanders, or other property.
5. Before attempting to start the engine, engage parking brake, disengage the deck and all attachment clutches and position the steering levers into the neutral lock position.
6. Give complete, undivided attention to the job at hand.
7. Whenever the deck is engaged, NEVER direct the discharge of material toward bystanders nor allow anyone near the mower while in operation.
8. Whenever possible, avoid operating the mower in wet grass.
9. Mow only in well lit areas.
10. Use EXTREME CAUTION when mowing and/or turning on hill sides.
11. Reduce speed and exercise EXTREME CAUTION on slopes to prevent tipping over or loss of control.
12. Never operate mower on slopes exceeding 15 degrees.
13. To avoid tipping over, avoid sudden motion when mowing uphill.
14. When mowing downhill, loss of traction may occur. Weight transfer to the front wheels may cause drive wheels to slip and result in loss of control. To help re-gain control, increase ground speed and gradually turn left or right followed by a decrease in ground speed to regain directional control.
15. Do not mow slopes when grass is wet.
16. Be especially cautious when changing direction on slopes.
17. Stay alert for holes, rocks and roots in the terrain, which may cause the mower to upset.
18. Keep away from drop-offs.
19. Do not operate the mower near any body of water, (lakes, ponds, riverbanks, etc.).
20. When backing up, make sure the area behind you is clear. Dixie Chopper's zero turning radius nearly eliminates the need for backing up. Simply turn the mower around within its own dimension and proceed forward.
21. Disengage power to attachments, set parking brake, and stop engine before leaving the operator position.
22. Disengage power to attachments, set parking brake, and stop engine before making any adjustments.
23. Disengage power to deck and other attachments when the mower is being transported or not in use.
24. Take all possible precautions when leaving mower unattended; such as disengaging deck, engaging parking brake, lowering attachments, placing steering levers into the neutral lock position, stopping the engine, and removing the key.
25. Never operate the mower with defective guards, shields, or covers. Always have safety shields, guards, switches, and other devices in place and in proper working condition.
26. Place ODCD in the down or operating position when discharge is toward road, street, property, or bystanders.
27. Keep hands, feet and clothing away from rotating parts anytime the mower engine is running.
28. Do not mow with damaged or worn blades. Make sure blades are properly balanced.

## GENERAL SAFETY PRECAUTIONS

29. Stop the engine, set parking brake, and remove the key:
  - After striking a foreign object. Inspect the mower for damage and make any repairs before starting and operating the mower.
  - Before making any adjustments or repairs.
  - Before unclogging discharge chute.
  - Before refueling.
  - Before exiting the mower.
30. Do not change the engine governor settings or overspeed the engine.
31. Use care when pulling loads or using heavy equipment.
  - Use only approved drawbar hitch points.
  - Limit loads to those you can safely control
  - Do not turn sharply.
  - Use care when backing.
  - Use extreme caution on slopes.
  - Loads should not be pulled down slopes. Load may exceed braking capabilities of the mower causing serious injury or death.
32. Use caution when near or crossing driveways, parking lots, roads, and sidewalks.
33. Always run engine at idle for at least one minute (five minutes maximum) for each hour of previous running, before shutting down engine.

# SAFETY INFORMATION DECALS

The following decals are intended to alert you to potential hazards and to provide you with important safety information. Should these decals become difficult to read or are missing from the mower, contact your Dixie Chopper dealer for a replacement.



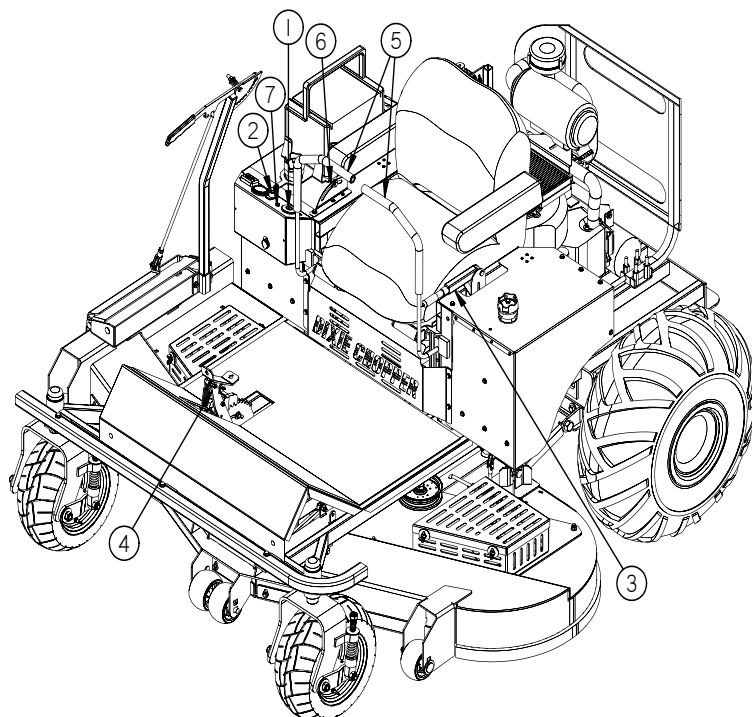


# MOWER CONTROLS

It is recommended that before you operate the mower, you allow adequate time to fully understand the controls and operation of the equipment. When reading this manual, it is recommended that you do so with the equipment nearby for quick orientation, reference of controls and maintenance adjustments.

## Operating Controls

Before continuing to read the manual, it is recommended that you take adequate time to identify the controls of the mower.



1. Ignition Switch
2. Electric Clutch Switch
3. Parking Brake
4. Deck Lift Pedal
5. Steering Control Levers
6. Throttle
7. Choke (Excluding Diesel)



# MOWER CONTROLS

## 1. IGNITION SWITCH

The ignition switch is located on the right side of front panel just below the seat. The ignition switch has three positions: (1) OFF, (2) RUN, (3) START. To start the engine, turn the key all the way to START. Release the key when engine starts and it will automatically return to the RUN position. Turn the switch to the OFF position to stop the engine.

## 2. ELECTRIC CLUTCH SWITCH

Controls operation of the mower deck blades. Pull switch up to engage the mower blades, and push it down to disengage the mower blades.

## 3. PARKING BRAKE

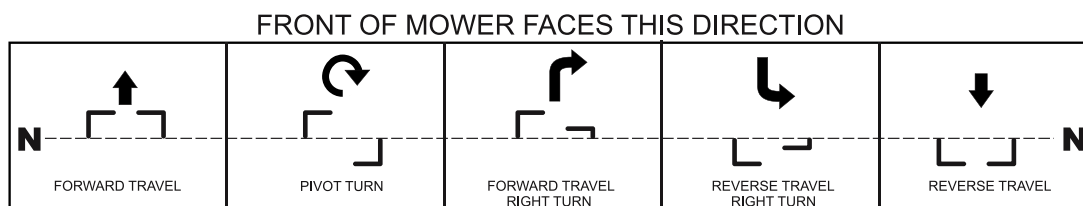
Applies the brake to hold the mower in a stationary position. Pull the lever up to set the brakes and push it down to release the brakes.

## 4. DECK LIFT PEDAL

The mower foot lift pedal is located on the right or left side of the floor pan depending on model. To lower the mower deck, first push up on the foot pedal lock, then, push down and rotate foot to move bottom of the pedal down. Remove foot from pedal when desired height is obtained. Lastly, push down on the foot pedal lock to lock the pedal into position.

## 5. RIGHT AND LEFT MOTION CONTROL LEVERS

To enter the seat, move the levers all the way left and right into the neutral lock position. Enter the seat and move the levers in toward the center of the machine. Left lever controls the left rear wheel and the right lever controls the right rear wheel. To go forward, push both levers forward evenly; the further forward the levers are pushed, the faster the machine will travel. To go in reverse, pull both levers to the rear evenly; the further the levers are pulled towards you, the faster the machine will travel. To turn, slow the machine down and slow speed of wheel in the direction you want to turn.



N = Neutral Position

Direction of arrows indicate direction of mower movement.

## 6. THROTTLE CONTROL

Throttle is located on top of right fuel tank just ahead of the fuel cap. Move throttle forward all the way to operate machine. Move throttle all the way to the rear before shutting engine off.

## 7. CHOKE CONTROL (Excluding Diesel)

The choke control is located on the right side of the front panel next to the ignition switch. Pull the choke knob out when starting the engine. Slowly push the knob in after engine starts. If the engine is warm and has been running, choking may not be necessary to restart engine.

## FUEL TANK

Fuel tank valves are located at the bottom of each fuel tank. Fuel tank valves are normally left open except when service on the fuel system becomes necessary. Fuel tank vents located on fuel cap.

## SAFETY INTERLOCK SYSTEM

Each machine has safety interlock switch. Switches are actuated by the seat. The seat will stop engine when seat is vacated with the engine running. Seat must be occupied. If the machine will not start, check that the seat is occupied. The safety interlock system must be tested periodically. To test operation, the following functions must be performed by an Authorized Dixie Chopper Dealer for your protection:

# OPERATING THE MOWER

## Starting The Engine:

DANGER: DO NOT OPERATE THE ENGINE IN A CONFINED SPACE WHERE DANGEROUS CARBON MONOXIDE FUMES CAN COLLECT. CARBON MONOXIDE IS ODORLESS, TASTELESS, COLORLESS, AND CAN BE FATAL.

CAUTION: BEFORE STARTING THE ENGINE, BECOME FAMILIAR WITH ALL CONTROLS. READ THIS OPERATOR'S MANUAL THOROUGHLY. ALWAYS CHECK ENGINE OIL LEVEL BEFORE STARTING THE ENGINE.

To start the engine, occupy the seat. Move throttle control lever halfway to operate position. Pull choke control all the way out to cold position. Insure gas cap vents are open. Turn ignition key to start position to engage the starter. When engine starts, release key. Switch is spring-loaded and will return to the run position automatically. If the engine fails to start after 10 seconds of continuous cranking, turn the key to the OFF position and allow the starter motor to cool. Check for the cause of hard starting; consult the troubleshooting list. Once the engine has started, slowly return the choke control to its normal position. If the engine stalls at low speeds, or hesitates during acceleration, choke should be applied as necessary until engine reaches normal operating temperature.

## Stopping The Engine:

1. Always stop the engine while on flat level ground. Never stop engine on slopes.
2. Move the throttle lever to the idle position.
3. Turn ignition key to the OFF position. (Allow one minute of idle for each hour of running... maximum of five minutes).
4. Remove key before exiting mower. (**Note:** In case of an emergency, engine may be stopped by turning the ignition key to the OFF position.)

## Moving Mower With Stalled Engine

If it becomes necessary to move the mower when the engine is inoperative, the hydraulic pumps are equipped with bypass valves. Before moving the unit, turn 11/16" jam nut and 5/16" nut counter clockwise one or two turns or until it releases. Always make certain the two bypass valves are returned to their operating position before starting the engine.

## Throttle Control:

Throttle control regulates the speed of the engine as measured in RPM. This control should not be used to regulate the ground speed. The engine has been designed with a special governor that limits engine RPM.

Always operate mower at full throttle when mowing. Ensure engine operation between 3600 RPM and a maximum of 3750 RPM as it provides necessary airflow through the engine cowling to prevent overheating as well as maintaining blade speed for a satisfactory quality of cut. If engine RPM goes below 3500 when under load slow ground speed until engine maintains RPM as listed above. If at any time the engine does not operate consistently between the set parameters; contact your authorized Dixie Chopper dealer.

# OPERATING THE MOWER

## Operation Of The Mower With Mower Deck

Keep all shields and mower deck discharge chute, or OCDC, in place. Never attempt to clear discharge areas or mower deck blades without disengaging mower deck, setting parking brake, shutting off engine, and removing ignition key.

For best operation on average lawns, operate engine at 3600-3750 rpm; control ground speed with motion control levers. Average lawns usually cut at a height between two and three inches (5-7.6 cm). Tall grass and weeds should be cut with the mower in its highest position, making a second pass cutting to height desired. Always keep mower deck blades sharp and balanced.

## Mowing Speed

The mower is designed to operate most efficiently at maximum blade speed (engine 3600-3750 rpm). The speed of the mower should allow the mower deck blades to maintain this maximum speed while mowing across turf. Slow the mower for cutting tall grass, grass that is heavy with moisture, or when moving uphill. If ground speed is too fast, or blade speed is too slow, mowing will be uneven because mower blades will not be able to lift grass into cutting position as mower passes over the ground.

## Mowing Height

The best cutting height for your lawn has probably been established from previous experience. The first time you mow, set the mower to cut a little higher than you have in the past. This will help you determine the best approach to uneven areas, to be sure a wider cut does not result in scalping the high spots. In general, recommended cutting height is two to three inches (5-7.6 cm).

Very tall grass can be cut without difficulty by using a little care. Set mower in its highest cutting position and enter area slowly. If necessary, take a cut one half width of mower, overlapping previously cut area on each pass. Then, with mower set to desired height, make a finish cut over entire area.

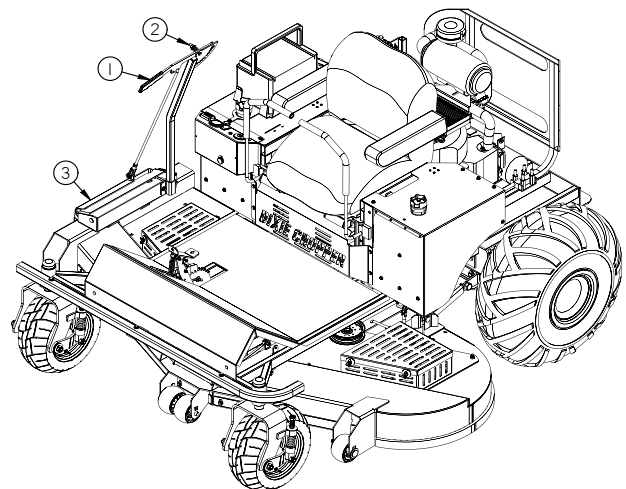
## OCDC (Operator Controlled Discharge Chute) Operation

This mower may be equipped with an Operator Controlled Discharge Chute. This discharge chute has a variable adjustment from full open to full closed.

In the full closed position it will serve to keep some of the clipping material under the mower deck for a longer period of time, in order to enhance the mulching capabilities, as well as functioning as a discharge safety shield. This discharge chute should ALWAYS BE OPERATED IN THE DOWN POSITION WHEN MOWING, WHILE PEOPLE ARE PRESENT IN THE IMMEDIATE VICINITY.

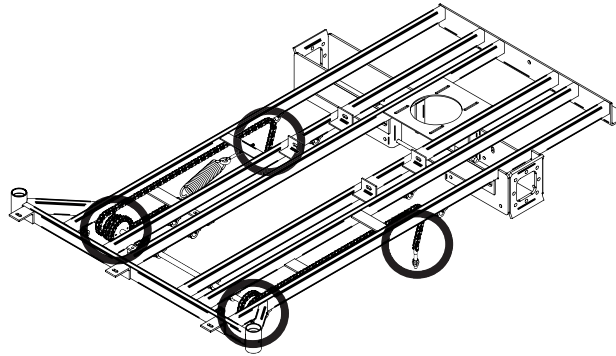
## OCDC Controls

1. Handle - Used to raise and lower discharge chute.
2. Slotted Adjustment - Used to adjust position of upper screen. May also be used to hold upper screen between full open or full closed. To adjust OCDC screen, move handle to raise or lower screen to desired position.
3. Upper Screen with optional bolt-on lower screen on some models.



**SAFE OPERATION OF THIS MOWER IS THE SOLE RESPONSIBILITY OF THE OPERATOR!  
BE AWARE OF SURROUNDINGS AT ALL TIMES!**

# MOWER DECK ADJUSTMENTS

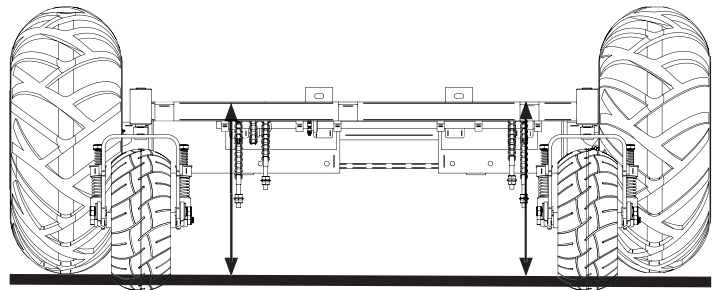


This mower uses 4 chains to raise and lower the deck at a constant level.

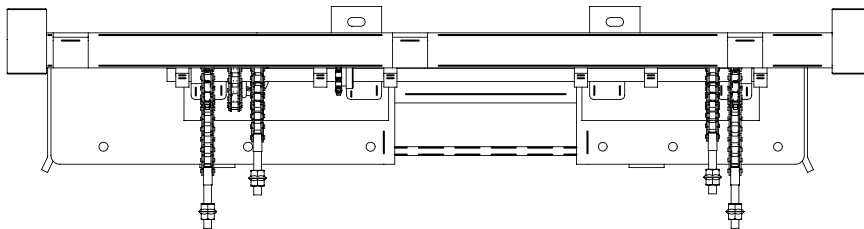
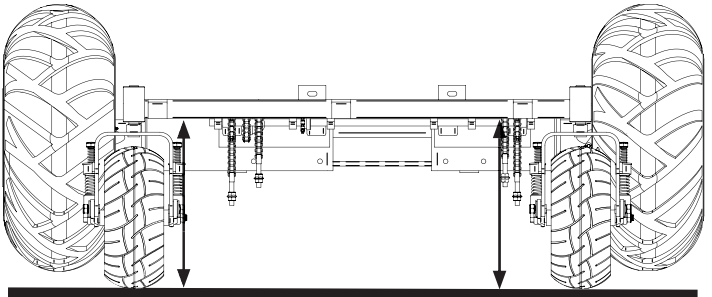
## LEVEL MOWER DECK

Before making any adjustments to the mower deck, tire size, style, and pressure must be checked.

Measure from the ground to the top of the frame rails at the rear of the mower. Adjust the rear tire pressure to achieve the same height side-to-side.



Measure from the ground to the bottom of the frame rails at the front of the mower. Adjust the front tire pressure to achieve the same height side-to-side.



Change the pitch of the deck by adjusting the two rear chains.

Change the height of the deck by adjusting the two front chains.

Side-to-side leveling of the mower deck is accomplished by lowering the mower deck and adjusting the threaded eyebolts at the front of the deck. Park mower on a level surface and place a level across the front of the mower deck or position the mower blade tips side-to-side. Adjust the eyebolts, so that the mower deck is level or the distance between the right and left blade tip ends and the surface of the ground is the same.

# Basic Mower Adjustments, Maintenance, and Repairs

## Blade Replacement

**CAUTION** *Never work with mower blades while mower is running. Make sure that ignition switch is off and key removed, PTO switch is disengaged, steering speed control levers are in neutral lock, and parking brake is on. Failure to comply will result in personal injury or death.*

**WARNING** *Disconnect the spark plug wire and place the wire where it cannot contact spark plug when setting up, adjusting, doing repairs on, or transporting your mower. Mower can accidentally start if spark plug wire is connected. Failure to comply can result in personal injury or death*

**CAUTION** *Use caution when handling mower blades during replacement or maintenance. Wear appropriate protective gloves and clothing and cover the sharp cutting edges of the blades. Failure to comply can result in personal injury.*

1. Lift front end of mower and support it with a jack or jack stands with a sufficient safe working load capacity.
2. Wedge a short piece of 2x4 lumber between the mower blade and the mower deck to immobilize the blade while removing attaching hardware.
3. Remove bolts, washers, and spacer attaching blade to blade shaft, and remove blades.
4. Apply anti-seize compound to threads of attaching bolts before installation.
5. In reverse order as removed, install new or sharpened blade with spacer, washers, and bolts. Make certain to keep the air lift area (turned up section) of blade facing the underside of mower deck. Ensure that the fiber washer (which acts as a vibration damper) is against the blade.
6. Tighten bolts to a torque of 80-100 ft-lbs (108-135 N•m).

## Blade Sharpening

**CAUTION** *Use caution when handling mower blades during replacement or maintenance. Wear appropriate protective gloves and clothing and cover the sharp cutting edges of the blades. Failure to comply can result in personal injury.*

**CAUTION** *Newly sharpened blades must be balanced using a blade balancer before reinstalling them. Failure to comply can result in severe damage to equipment.*

**NOTE:** Replacing the mower blades is the preferred method of ensuring your mower blades are sharp. Sharpening blades yourself is not recommended. However, if you choose to do so, the blades **must** be balanced after being sharpened.

1. Remove blades as outlined in Blade Replacement procedure.
2. Sharpen the blades using a hand grinder.
3. Balance the blades using a cone blade balancer following the instructions supplied with balancer.
4. Install newly sharpened blades as outlined in Blade Replacement procedure.



# Basic Mower Adjustments, Maintenance, and Repairs (Continued)

## Under Deck Cleaning

**DANGER** Never attempt to make any adjustments to mower deck or work under it while mower is running. Make sure that ignition switch is off and key removed, PTO switch is disengaged, steering speed control levers are in neutral lock, and parking brake is on. Failure to comply will result in personal injury or death.

**CAUTION** Do not clean the underside of the deck with a pressure washer. Water can get in and under seals and cause damage to equipment.

Clean the underside of the deck frequently. Accumulation of matter clippings seriously impairs the mower's ability to "lift" the grass into cutting position and discharge the clippings evenly. Matted grass clogging the underside of the mower deck is often the cause of uneven cutting.

## Deck Level Check

**DANGER** Never attempt to make any adjustments to mower deck or work under it while mower is running. Make sure that ignition switch is off and key removed, PTO switch is disengaged, steering speed control levers are in neutral lock, and parking brake is on. Failure to comply will result in personal injury or death.

An uneven or lopsided cut may be caused by an out-of-level mowing deck. If the quality of your cut is not optimum, check for an out-of-level deck as follows:

1. Park mower on level surface.
2. Check tire pressure to make sure they are inflated to the proper pressure levels. Both front tires should be inflated to 12 psi, and both rear tires should be inflated to 7 psi.
3. If any tire's pressure is not correct, correct the pressure(s) to the appropriate pressure level

Make another pass with the mower to check the evenness of cut.

4. If cut is still uneven, check levelness of blades. Adjust deck height to the level for a 3-inch cut. Refer to Controls and Indicators page 12. Make sure deck height stop is turned so that the wide side faces the rear.
5. Make sure that the blades are positioned with the tips of blades pointing toward front and back of mower. On right-hand side, measure the distance from front tip of blade to ground. Note measurement. Repeat this process for the left-hand side blade. Both front blade tips should measure 3 inches, +/- 1/8 inch, from tip to ground.
6. On the right-hand side, measure the distance from back tip of blade to ground. Repeat this process for the left-hand side blade. Both front blade tips should measure 3 inches, +/- 1/8 inch from tip to ground.

**NOTE:** There can be a 1/4-inch variation between the forward pitch of the front and back blade measurements. For example, both front blade tips could measure 3 inches from the ground, and both back blade tips could measure 3-1/4 inches from the ground.

7. If blade to ground measurements are even, but cut is uneven, consult the Service Department of your authorized Dixie Chopper dealer.



# Basic Mower Adjustments, Maintenance, and Repairs (Continued)

## Drive Belt Adjustment

**DANGER** Never attempt to make any adjustments to mower deck or work under it while mower is running. Make sure that ignition switch is off and key removed, PTO switch is disengaged, steering speed control levers are in neutral lock, and parking brake is on. Failure to comply will result in personal injury or death.

There are two drive belts that can need periodic adjustment: the drive belt from the engine to the pumps, and the drive belt from the engine to the mower deck.

These belts may be adjusted as follows:

1. Gain access to the underside of mower.
2. Adjust the drive belt from engine to pump at the spring tensioner located near the left rear wheel. Tighten the jamnut until spring measures 2 inches.
3. Adjust the drive belt from engine to mower deck at the spring tensioner located at the back of the mower deck. Tighten the jamnut until spring measures 3 inches.

## Drive Belt Replacement

**DANGER** Never attempt to make any adjustments to mower deck or work under it while mower is running. Make sure that ignition switch is off and key removed, PTO switch is disengaged, steering speed control levers are in neutral lock, and parking brake is on. Failure to comply will result in personal injury or death.

Replace the drive belts if they show signs of cuts, tears, burns caused by slipping, or excessive wear. Refer to the Routine Maintenance section of this manual for a schedule of replacement.

1. Gain access to underside of mower.
2. Loosen the tension on the vertical/ horizontal idler pulley by pulling it away from belt.
3. Roll belt off the pulley, noting the routing of belt.
4. Roll new belt onto pulley, routing it in the same configuration as belt just removed. Manipulate pulley as needed.

## Parking Brake Adjustment

1. Set the parking brake to off (handle down).  
  
If brake looseness is equal on both sides of mower, perform steps 2 and 3 only. If brake looseness is on only one side or the other, skip to step 4.
2. Lift mower seat.
3. Tighten the front brake linkage adjustment nut.
4. Remove applicable tire.
5. Remove cotter pin.
6. Pull out brake link.
7. Loosen jamnut.
8. Turn brake link two revolutions clockwise.
9. Tighten jamnut.
10. Replace brake link.
11. Install cotter pin.
12. Install tire. Torque tire lug nuts to 100 ft-lbs.

## Steering Linkage Adjustment

1. Place steering speed control levers in the neutral lock position.
2. Chock front tires.
3. Jack up mower enough so that back tires are off the ground. Use a jack with a sufficient safe working load capacity of at least 1/2 ton.

# Basic Mower Adjustments, Maintenance, and Repairs (Continued)

4. With the motor running, loosen steering linkage jamnut.
5. Pull cotter pin.
6. Pull clevis pin out of yoke in pump control arm.

**NOTE:** Early Silver Eagle models include a flat washer. If your unit is so equipped, be certain to keep washer with clevis pin on the outside edge.

7. Adjust pump control arm until wheel stops turning.
8. Adjust the hole in the yoke on steering linkage to align with the hole in the pump control arm.
9. Install clevis pin.
10. Install cotter pin.
11. Remove wheel chocks.
12. Lower mower from jack.

## Mercury Switch Replacement

<b>WARNING</b>	<i><b>This component contains mercury, a chemical known to be toxic to human beings. Dispose of switch only in accordance with local, state, and federal EPA regulations.</b></i>
----------------	---

1. Remove fasteners from control panel and remove panel.
2. Remove mercury switch from its holder.
3. Cut both wires extending from mercury switch a few inches from switch.
4. Retain old mercury switch for proper recycling in accordance with state regulations.
5. Splice wires of new mercury switch onto electrical harness wires.
6. Install switch into holder.
7. Install control panel with fasteners.

# Basic Mower Adjustments, Maintenance, and Repairs (Continued)

## Battery Maintenance

Follow the instructions provided with the Kohler engine manual.

During off-season storage, use a trickle charger to maintain the battery.

**CAUTION** Do not jump-start the battery. A charge of 1.75 amps or more, as with a jump start, will damage the fuel-injection computer. Use a trickle charger of 1.5 amps or less to keep battery charged.

## Mower Cleaning and Off-Season Storage

After 30 days of use, painted surfaces of the mower may be waxed to protect the luster of the original finish. Wash the mower regularly with a mild automotive type detergent and water. Exposed bare metal surfaces should be coated with oil, or a light coating of grease, to prevent rust until permanent repairs can be made. Touch-up paint is available through your authorized Dixie Chopper dealer.

Clean and store the mower at the end of the mowing season as follows:

1. Perform steps as applicable under Routine Maintenance.
2. Remove all grass, dirt, and debris from tractor and mower. Wash mower and repaint all bare metal surfaces.
3. Thoroughly lubricate machine according to lubrication instructions.
4. Check hydraulic oil level. Add oil if necessary. Change oil and filter if not done in last 500 hours. Refer to Routine Maintenance.
5. Check tires for proper inflation.

**CAUTION** Do not store gasoline for more than 2 months. Failure to comply can cause damage to equipment or personal injury.

6. Start mower and engage mower for approximately one minute to remove excess water from belts and pulleys. Let engine run out of gas. Gasoline forms harmful gum and varnish deposits in the carburetor and fuel system as it becomes old.

7. Fully charge battery to prevent freezing and internal damage in weather below 32°F (0°C). In temperatures above 40°F (4°C), check water level and trickle charge battery during storage.

Prepare the engine for storage at the end of the mowing season as follows:

1. Run engine for 15 minutes or longer.
2. Drain oil while engine is still warm.
3. Refill crankcase with fresh oil. Refer to Routine Maintenance for proper oil type.
4. Drain fuel tanks and run engine until it runs out of gas.
5. Remove and replace fuel filter if not done in the previous 100 hours of operation.
6. Remove spark plugs. Pour a tablespoon of engine oil into each spark plug hole and install plugs. Do not connect plug leads.
7. Crank engine with starter at least a dozen revolutions to distribute oil over cylinder walls and valve mechanism.
8. Clean exterior surfaces of engine and spread a light coat of oil over any exposed metal surfaces of engine subject to corrosion.
9. Clean dirt and chaff from the cylinders, fins, blower housing, and muffler.
10. Check oil filler and fuel tank caps to make sure they're securely in place.

## Mower Preparation for New Mowing Season

Prepare the stored mower for the new mowing season as follows:

1. Clean mower and remove any debris and dirt accumulation.
2. Check the hydraulic and engine oil levels.
3. Fill fuel tanks with fresh gasoline.
4. Run the engine at half speed for 5 minutes and check the operation of the steering speed control levers. Then, stop engine and check for oil leaks, loose fittings, etc.
5. Install all safety shields (if removed) and review the General Safety Precautions listed in the front of this manual.
6. Check air pressure in tires. If needed, inflate to proper pressure: front tires 12 psi and back tires 7 psi.

# ROUTINE MAINTENANCE

SERVICE AT INTERVALS INDICATED	WEEKLY OR 100 HOURS	MONTHLY OR 500 HOURS	ANNUALLY OR 1000 HOURS
Verify safety interlock system		Daily	
Visually inspect unit for loose hardware and/or damaged parts (2)		Daily	
Visually inspect tires		Daily	
Check fuel level and seal compromise		Daily	
Check Engine to Deck Belt Tension		Daily	
Check blades for wear and fitment		Daily	
Check OCDC in Lowest Position		Daily	
Check oil level, engine (1) (4)		Daily or every 4 hours	
Check oil level, hydraulic (3)		Daily or every 4 hours	
Check oil level, gear box		Every 50 hours (Excluding Diesel)	
Clean Donaldson Air Filter End Cap	X		
Clean Engine Air Filter (4)	X		
Check Engine to Transmission Belt	X		
Change Engine Oil Filter (4)	X		
Lube Deck Spindle Assemblies	X		
Lube Deck Engaging Swing Arm	X		
Lube Scissor Linkage Pivot	X		
Lube Deck Engaging Rod	X		
Lube Front Wheel Bearings	X		
Lube Deck Idler Arm Pivot	X		
Lube Steering Lever Blocks		X	
Replace Donaldson Air Filter Element		X	
Change Hydraulic Filters (3) (5)			X
Change Amsoil Filter (5)			X
Change Hydraulic Drive Oil (3) (5)			X
Change Engine Oil (1) (4) (5)			X
Lube Front Caster Bearings			X
Clean/Replace Spark Plugs (4)			X
Check Steering for Creep in Neutral			X
Check Front and Rear Tires for Wear			X
Remove Belts and Check Spindle Bearings, Idlers, and Pulleys			X

## NOTES:

1. Initial oil change is after 5 hours of operation. Thereafter, change oil after every 100 hours of operation. Change more often under dusty or dirty conditions and during hot weather periods.
2. Torque initially and after first 2 hours of operation.
3. Perform initial hydraulic filter change after 50 hours of operation.
4. Change engine oil filter per the engine manufacturer's recommendations. Refer to Engine Owner's Manual for recommendations and other maintenance items.
5. Service more often under dusty or dirty conditions.

## ROUTINE MAINTENANCE

### Verify Safety Interlock System

With parking brake on, steering levers in the neutral lock position, and deck blades disengaged, start mower while sitting in the seat. When engine starts, lift up off the seat. The engine should shut down. If engine continues to run, see an authorized Dixie Chopper dealer to service the safety interlock system.

### Visually Inspect Unit for Loose Hardware and/or Damaged Parts

Walk around mower to visually inspect and tighten, if necessary, all hardware. Refer to Part Manual for proper torque specifications. Pay particular attention to wheel axle nuts, lug nuts, and blade bolts. Visually inspect tires

Front tire pressure is 12-18 psi. Rear tire pressure is 5-7psi.

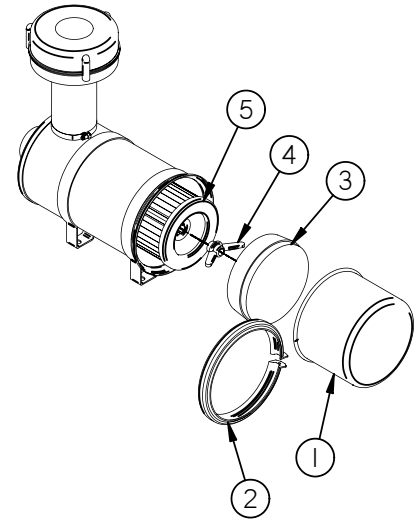
### Engine to Deck Belt Tension

The engine to deck belt tension is regulated by the deck engaging rod adjustment. Please refer to the Part Manual for location. Proper adjustment is accomplished by tightening or loosening the nut so that the spring measurement is between 1.75" and 2.00" while in the deck engaged position. See image at right for reference.



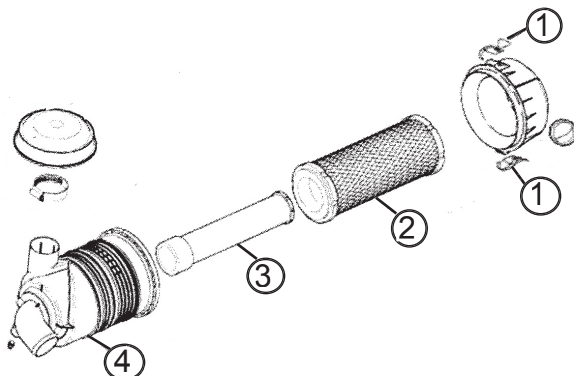
### Clean Donaldson Air Filter End Cap & Engine Air Filter

In order to clean the Donaldson air filter end cap and engine air filter you must first Remove the (2) air cleaner cannister clamp. Next, remove the (1) air filter cup housing. The next step is to remove the (3) Donaldson air filter end cap, and using a shop vac or a household vacuum, vacuum clean the end cap. Lastly, remove the (4) air filter wing nut and take the (5) air filter out and clean it, also using a shop vac or household vacuum. All that's left is reassembly. See image at the right for reference.



### Nelson Air Filter

In order to clean the Nelson air filter remove clips (1). The next step is to remove primary filter (2) and safety filter (3). The next step is to use household vacuum on the filters and housing (4). All that's left is reassembly. See image at the bottom of page for reference.





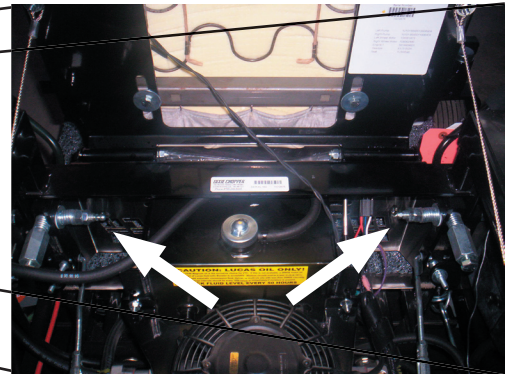
# ROUTINE MAINTENANCE

## LUBRICATION POINTS



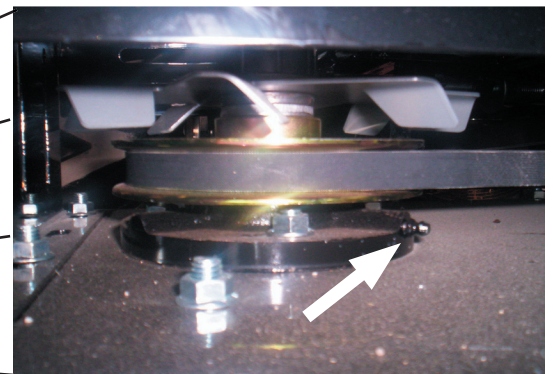
Every 1000  
Hours or  
Annually

Front Caster Assembly  
1 each side)



Every 200  
Hours

Steering Lever Pivots  
(Under Seat)



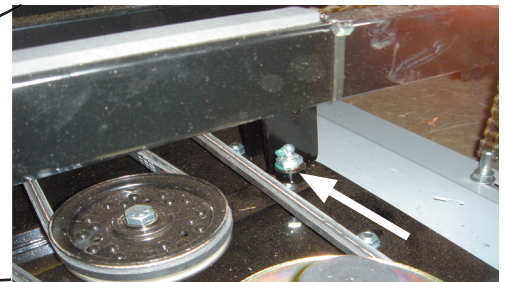
Every 100  
Hours

Right & Left Side Deck  
Drive Hub



# ROUTINE MAINTENANCE

## LUBRICATION POINTS



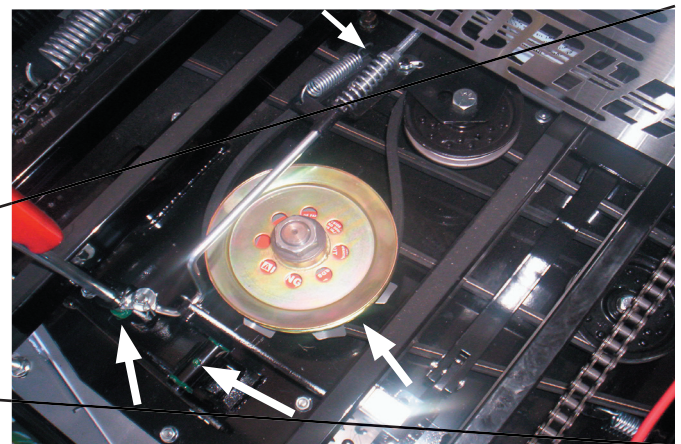
Every 100  
Hours

Idler Arm Pivot



Every 100  
Hours

Front Wheel Bearing  
1 Each Front Wheel



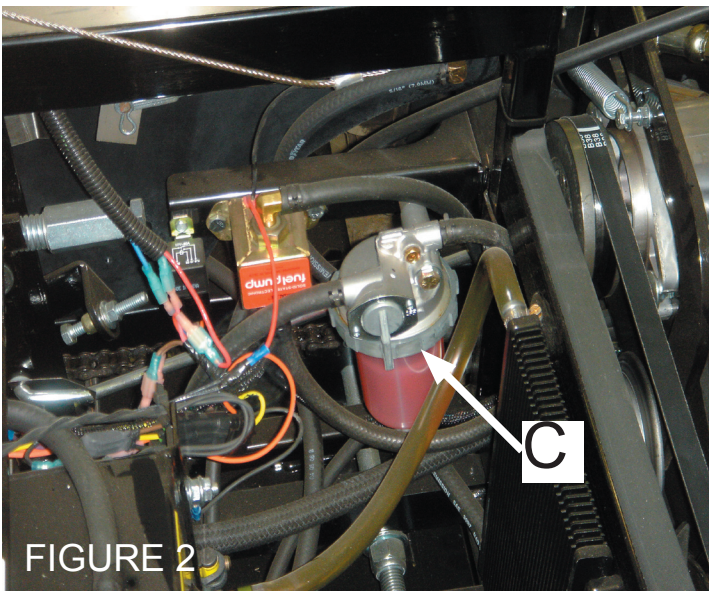
Every 100  
Hours

Deck Engaging Swing Arm  
Scissor Linkage Pivot  
Center Deck Drive Hub  
Deck Engaging Rod

# DIESEL ENGINE MAINTENANCE PROCEDURES

## Priming Procedure - 3500 Series

The 3500 series diesel machine is equipped with a self bleeding fuel delivery system. Locate the fuel shut-off petcock on the water separator and fuel filter as shown in letter "C" in photo figure 2 below. Be certain that it is in the run or down position as shown. Turn the key to the run position to allow fuel to fill up the filter.



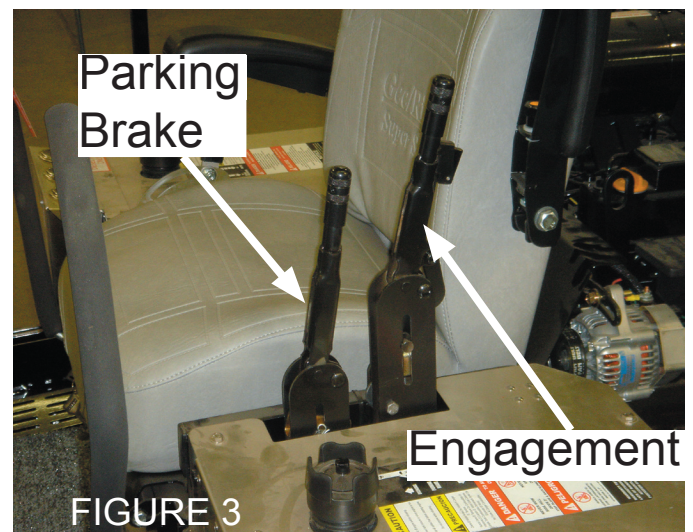
Continue pumping until the filter is full of fuel. At this point you are ready to start the engine. Be extremely cautious while cranking the engine. **DO NOT USE ETHER IN AN ATTEMPT TO START THIS ENGINE. DO NOT CRANK THE ENGINE FOR MORE THAN THIRTY SECONDS AT ONE TIME WITHOUT RELEASING THE KEY. FAILURE TO OBSERVE THIS PROCEDURE WILL RESULT IN PERMANENT DAMAGE TO THE FUEL SOLENOID.**

## General Operating Instructions

Please refer to the general operating and safety information included in the forward section of this book. The following is informational procedure that is unique to the 3500 diesel machines only. Do not attempt to operate these machines until you have read and thoroughly understand these instructions and the ones included in the general operation and safety sections in the front of this book.

## Deck Engagement / Parking Brake

The mower deck engaging lever and parking brake lever are located to the left of the seat as shown in figure 3 below. Position engine speed at idle and depress the button on the mower engaging handle and push forward to engage mower deck. To set parking brake simple pull up toward you.



## Routine Maintenance

For lubrication and filter information please see the routine maintenance section.



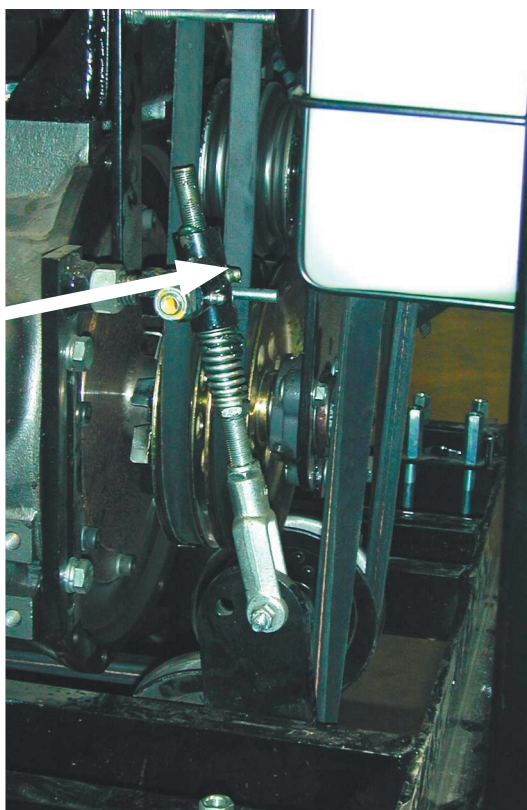
# DIESEL ROUTINE MAINTENANCE

## LUBRICATION POINTS

CHECK PAGES 20 AND 21 FOR FURTHER DIESEL LUBRICATION POINTS.

**Diesel Updrive  
Assembly**

**Every 100  
Hours**



For Dixie Chopper Discount Parts Call 606-678-9623 or 606-561-4983

## NOTES

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***DIXIE CHOPPER***

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