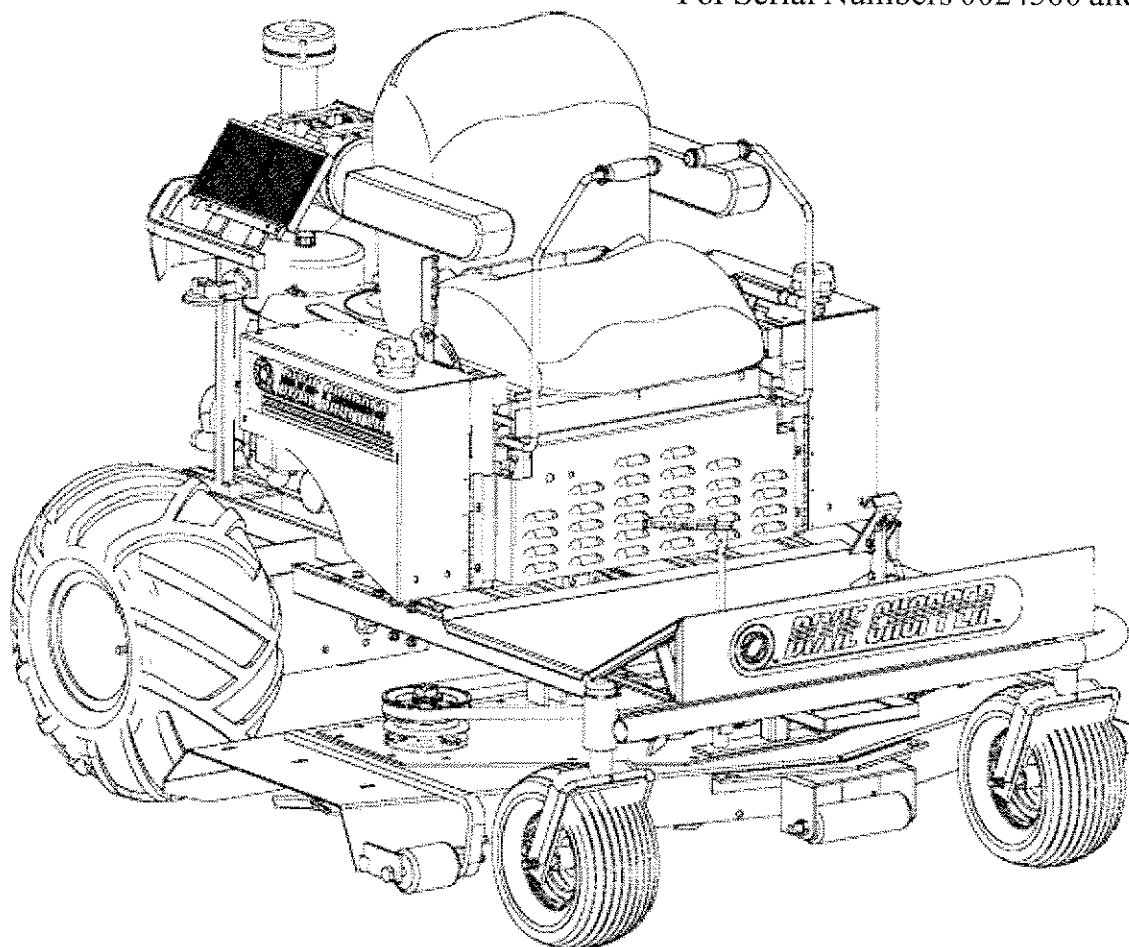


DIXIE CHOPPER

The World's Fastest Lawn Mower

For Serial Numbers 0024500 and Higher



Model # _____

Engine Model # _____

Serial # _____

Engine Serial # _____

Date Purchased _____

Engine Spec. # _____

OPERATION MANUAL

700003

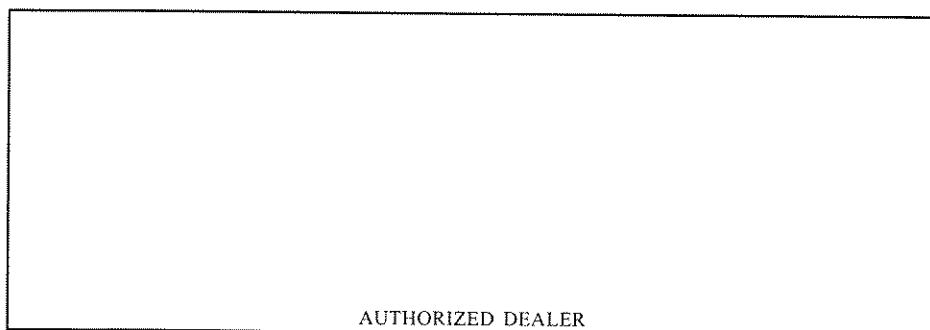
May, 2001



Congratulations on your purchase of a **DIXIE CHOPPER** lawn mower. We believe you have exercised excellent judgement, and are most appreciative of your patronage.

We recommend that you read this entire manual before operating this unit. Time spent in becoming fully acquainted with its performance will add a longer and more satisfactory life to your **DIXIE CHOPPER**.

To obtain the latest information on your Dixie Chopper lawn mower, and receive the highest quality service, please call or visit your nearest authorized Dixie Chopper Dealer.



AUTHORIZED DEALER

Dixie Chopper reserves the right to make changes or add improvements to its products at any time without incurring any obligation to make such changes to products previously manufactured. Neither Dixie Chopper, nor its dealers, accept responsibility for variations which may be evident in the actual specifications of its products and the statements and descriptions contained in this publication.

DIXIE CHOPPER

CONTENTS

Introduction.....	1
Warranty.....	1
General Safety.....	4
Mower Controls.....	6
Operating your Mower.....	8
OCDC.....	10
Mower Deck Adjustments.....	11
Mower Cleaning and Storage.....	13
Routine Maintenance.....	14
Lubrication Points.....	15
Twin Engine Load Balancing.....	17
Diesel Engine Maintenance.....	19
Notes.....	22

DIXIE CHOPPER

Introduction

Prior to operating the Dixie Chopper lawn mower you should be trained in its proper use and warned of its dangers before operating, adjusting, or servicing it. You should also read and understand this entire manual.

DANGER

This symbol if used warns immediate hazards which will result in severe personal injury or death.

WARNING

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.

CAUTION

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or product or property damage.

- Familiarize yourself with the controls and know how to stop the mower quickly.
- Inspect your work area carefully. Remove debris from the turf area to be cut.
- Avoid contact with moving parts. Keep away from whirling blades. Keep feet and hands from underneath mower deck.
- Never direct discharge of material toward bystanders nor allow anyone near the machine while in operation.
- This machine is not meant for highway or street use. It is not a recreational vehicle and you should not carry passengers.
- Never tamper with safety devices or guards. If a guard or safety device is damaged, or removed, replace before operating mower.
- Handle gasoline carefully. Never add fuel to tank while the engine is running or hot.

WARRANTY

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 understanding the proper operation and care of the Dixie Chopper unit ***Before Attempting to Operate the Machine.***

Through the terms and conditions contained herein, Magic Circle Corporation (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 one year from the date of retail purchase on behalf of the original owner of a Dixie Chopper complete unit. 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 complete unit used commercially, or for income producing purposes. Additionally, Dixie Chopper will provide to the original purchaser beyond the initial one year warranty as stated above, any main-frame 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.

DIXIE CHOPPER

WARRANTY

Drive Train

The hydrostatic drive components (pumps, wheel motors, and T-box), of the Dixie Chopper complete unit will be warranted for two years from the retail purchase date on behalf of the original owner against defects in materials or workmanship. Labor required to repair or replace components of the hydrostatic drive system will be covered by Dixie Chopper for the 1st year, and at the unit owners expense during the 2nd year from the original purchase date.

Drive Train 3-Year Extended Warranty {Optional}

Dixie Chopper offers for an additional fee (to be paid at the time of the unit purchase), a **3-year** extended warranty covering the hydrostatic drive system components of the standard warranty... plus all drive linkages, bushings, hoses, fittings, filter bases, oil reservoir, input pulley assembly, wheel hubs, and wheel rims that require replacement due to a *defect in materials or workmanship*.

{This extended warranty covers stated *parts only*... no labor.}

Engine

Engine warranty is provided by the engine manufacturer. Please refer to the engine manufacturer warranty statement included within 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 (Kohler, Kawasaki, Honda etc.) 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 and belts are considered to be consumable-wear items, and are therefore warranted for a period of 90 days against materials or workmanship defects, *not for wear or abuse*.

Transportation for Warranty Repairs

A Dixie Chopper complete unit (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 unit owner.

Limitation of Warranty

The Product Registration Card must be submitted to Dixie Chopper within 3-days of the original retail purchase date to enable validation of the warranty period provided. Proof of purchase may be required of the unit owner to substantiate any warranty claim.

All warranty work must be performed by an authorized Dixie Chopper Servicing Dealer.

This warranty covers only Dixie Chopper complete units which are properly serviced, maintained, and operated under conditions considered normal for commercial turf equipment.



WARRANTY

Expressly Not Covered

- a.) Replacement of service items, such as oil, lubricants, spark plugs, belts, rubber hoses or other items subject to normal service replacement.
- b.) Maintenance services such as cleaning, lubrication, oil change, blade sharpening etc.
- c.) Damage, defects or deterioration due to normal use, wear, or exposure to elements.
- d.) Damage or defects resulting from misuse, neglect, alteration, accident or negligence.
- e.) Use of fuels, oils, or lubricants other than as specified.
- f.) Damage or defects resulting from repairs by person(s) other than an authorized Dixie Chopper service dealer or installation of parts other than genuine Dixie Chopper parts or parts recommended by Dixie Chopper.
- g.) Repairs, alterations or installations of accessories which have an adverse affect on the operation, performance or durability of the Dixie Chopper complete unit.
- h.) Repair or replacements resulting from operations of Dixie Chopper equipment that has been modified, altered, or affected with respect to the intended use of the product.
- i.) Repair or replacement as a result of Dixie Chopper equipment operated in a manner which is not in accord with the instructions as specified in the operators manual or other instructions provided by Dixie Chopper.

Dixie Chopper Is Not Responsible for... (nor limited to the following)

- j.) Travel time, overtime, after hours time or other extraordinary repair charges or charge relating to repairs or replacements outside of normal business hours at the place of business of the authorized Dixie Chopper service dealer.
- k.) Loss, cost or expense relating to transportation of Dixie Chopper equipment from the location of owner or location where used by owner to or from any authorized Dixie Chopper service dealer.
- l.) Expenses relating to gasoline, oil, or lubricants.
- m.) Rental of like or similar equipment during the time of any warranty, or replacement work.
- n.) Any claims for lost revenue, lost profit or additional cost or expense incurred as a result of a claim of breach of warranty.
- o.) Loss or damage to person or property other than that covered by the terms of this warranty.
- p.) Any telephone, telegram, travel charges, or attorney's fees.

Disclaimer

Any and all statements or representations made by seller of this equipment, including those set forth in any sales literature or made orally by any sales representative, are superceded by the terms of this warranty. There are no representations or warranties, which have been authorized and provided to the buyer of Dixie Chopper equipment, other than as set forth in this warranty. Any affirmation of fact or promise made by Dixie Chopper or any of its representatives to the buyer which relates to the goods that are the subject of this warranty shall not be regarded as part of the basis of the bargain and shall not be deemed to create any express warranty that such goods shall conform to the affirmation or promise.



GENERAL SAFETY

1. The Dixie Chopper mower is designed for high productivity. Operators should understand its proper usage before operating the mower.
2. **Carefully read and understand this Operator's Manual before operating the mower.**
3. **NEVER** allow individuals who have not read this Operator's Manual to operate the mower. Operators less than 14 years of age are not recommended.
4. **Absolutely NO** passengers. Avoid mowing while children and others are nearby. The operator is responsible for accidents or hazards occurring during operation.
5. Always use personal protection equipment, such as, but not limited to, protection for the eyes, ears, feet and head.
6. **NEVER** operate the mower when barefoot or when wearing open sandals.
7. Thoroughly clear the work area of objects (wire, stones, sticks, bones, etc.) which may damage the mower or cause personal injury to the operator or bystanders.
8. Before attempting to start the engine, disengage the deck and all attachment clutches and position the steering levers into the neutral lock position.
9. Give complete, undivided attention to the job at hand.
10. Whenever the deck is engaged, **NEVER** direct the discharge of material toward bystanders nor allow anyone near the mower while in operation.
11. Whenever possible, avoid operating the mower in wet grass.
12. Mow only in well-lit area.
13. Use **EXTREME CAUTION** when mowing and/or turning on hill sides.
14. Reduce speed and exercise **EXTREME CAUTION** on slopes to prevent tipping over or loss of control.
15. **This mower is not recommended for use on slopes exceeding 15 degrees.**
16. To avoid tipping over, avoid sudden starts when mowing up hill.
17. 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 braking. To help re-gain control, increase ground speed and gradually turn left or right followed by a decrease in ground speed to re-gain directional control.
18. **DO NOT** mow slopes when grass is wet.
19. Be especially cautious when changing directions on slopes.
20. Stay alert for holes, rocks and roots in the terrain, which may cause the vehicle to upset.
21. Keep away from drop-offs (ponds, lakes, river banks, etc.).
22. 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.
23. Disengage power to attachments, set parking brake, and stop engine before leaving the operator position.
24. Disengage power to attachments, set parking brake, and stop engine before making any repairs or adjustments.
25. Disengage power to deck and other attachments when the mower is being transported or not in use.
26. Take all possible precautions when leaving vehicle unattended; such as disengaging deck, engaging parking brake, lowering attachments, placing steering levers into neutral lock position, stopping the engine, and removing the key.
27. **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.
28. Keep hands, feet and clothing away from rotating parts anytime the units engine is running.
29. **DO NOT** mow with mower blades that are out of balance or have eroded airlifts and/or split ends.
30. Keep mower and attachments in good operating condition, keep safety devices in place and working.
31. Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.

DIXIE CHOPPER

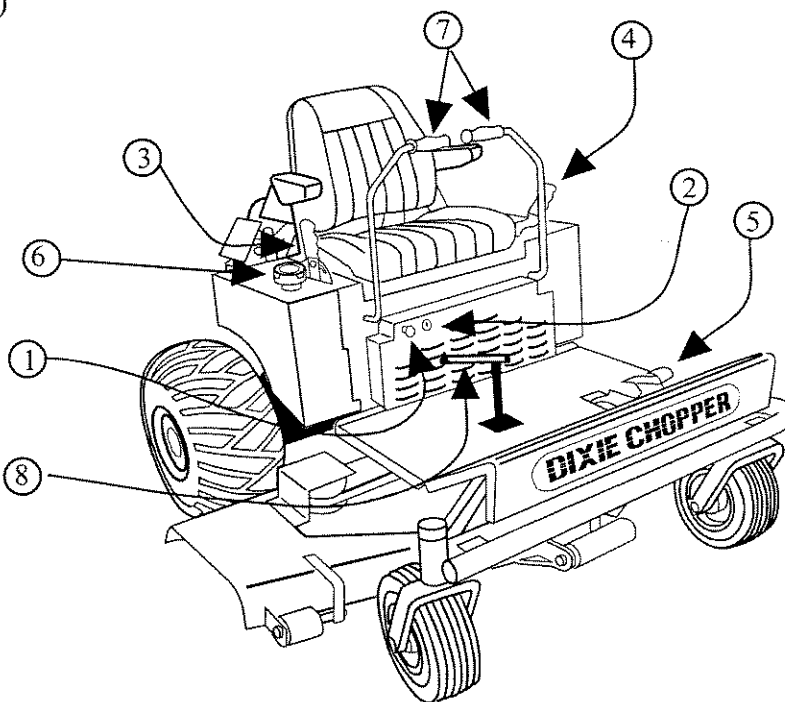
GENERAL SAFETY

32. **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 chute.
 - Before refueling.
33. **DO NOT** change the engine governor settings or overspeed the engine.
34. **Handle gasoline with care – it is highly flammable.**
 - Use approved gasoline container and place out of reach of children.
 - Use gasoline as a fuel **ONLY**. Never use as a cleaner.
 - Never remove fuel cap or add gasoline to a running or hot engine or an engine that has not been allowed to cool for at least minutes after running.
 - Never fill fuel tanks inside of buildings.
 - Always wipe up spilled fuel.
 - Absolutely, positively **NO SMOKING** around fuel.
 - Never store equipment, with gasoline in the tank, inside a building where fumes may reach an open flame or spark.
 - To reduce fire hazard, keep engine free of grass, leaves, or excessive grease.
 - Allow engine to cool before storing in any enclosure.
35. 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 counterweights when suggested in the Owner's Manual.
 - Use extreme caution on slopes.
36. Watch out for traffic when near or crossing driveways, parking lots, and roads.
37. Always run engine at idle for at least one minute for each hour of previous running, before shutting-down engine.

DIXIE CHOPPER

MOWER CONTROLS

1. Ignition Switch
2. Choke
3. Throttle
4. Parking Brake (if so equipped)
5. Deck Lift Pedal
6. Fuel Cap (1 each side)
7. Steering Control Levers
8. Deck Engaging Handle



Note* - Always set engine speed to full throttle when mowing and maintain a minimum of 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 pulls below 3500 when under load slow down the ground speed and allow the engine to recover up to proper RPM.



MOWER CONTROLS

1. 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.

2. 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.

3. CHOKE CONTROL

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.

4. MOWER LIFT PEDAL

The mower foot lift pedal is located on the left side of the floor pan. 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.

6. FUEL TANK VALVES

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.

SAFETY INTERLOCK SYSTEM

Each machine has safety interlock switches. Switches are actuated by the seat. The seat switch 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:

1. Engine should **NOT** start if seat is not occupied.
2. With engine running, test operate seat switch by rising off seat. Engine should shut off.

CORRECT ENGINE OPERATION

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.

WARNING

Care should be taken to avoid inhaling exhaust gases as they contain carbon monoxide gas, which is colorless and odorless. Carbon monoxide is a dangerous gas that can cause unconsciousness and is potentially lethal. Do not run the engine in confined areas such as a closed garage.

DIXIE CHOPPER

OPERATING YOUR MOWER

STARTING 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. 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 Checklist.

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 ENGINE

To stop the engine, move the throttle lever to the idle position and turn ignition key to the OFF position. If the engine has been working hard or the engine is hot, allow the engine to idle for one minute for each hour of running before turning the key off. This practice will help cool the engine before stopping.

Note: In case of emergency, engine may be stopped by turning the ignition key to the OFF position.

CAUTION

Always remove the key when leaving the machine unattended, even if for just a few minutes. Prevent accidents; don't give children or unauthorized persons an opportunity to operate this machine.

THROTTLE CONTROL

Throttle control regulates the speed of the engine as measured in RPM (Revolutions Per Minute). This control should not be used to regulate the ground speed.

The engine has been designed with a special governor that limits engine RPM. Unlike an automobile, this governor allows the engine to operate most efficiently at a set speed and protects it from damage caused by excessive RPM. Always operate the machine with the throttle control set at 3/4 to full speed.

CHOKE CONTROL

The choke control activates a "butterfly" valve in the carburetor. When the choke is partially or completely closed, less air is admitted to the engine. This results in a higher fuel-to-air (richer) mixture that is required when the engine is started cold. Warm engines may not need choking.

CAUTION

Handle fuel with care. It is highly flammable. Use only approved fuel containers. Never add fuel while the engine is running. Fill fuel tanks outdoors with extreme care. Never fill fuel tanks indoors. Replace fuel tank cap securely and wipe up all spilled fuel.

CORRECT PUMP OPERATION TO GO FORWARD OR REVERSE

The machine is equipped with a separate pump for each rear wheel. The pumps are controlled by the motion control levers, one for each wheel.

CAUTION

Sudden starts can be damaging to the equipment and could cause loss of operator control. For safe operation, never move the motion control levers too rapidly, especially on grades.

To go forward, push both levers forward evenly.
To go in reverse, pull back on both levers evenly.



OPERATING YOUR MOWER

CORRECT PUMP OPERATION TO CHANGE SPEED OR DIRECTION

To change direction of the machine, slowly move lever to neutral and move levers in the direction you want to go. The further the levers are moved away from neutral position, the faster the machine will travel. To turn the machine left or right, slow the speed of the wheel in the direction you want to turn.

CORRECT PUMP OPERATION TO STOP

To stop the machine, return both levers evenly to the neutral position.

CAUTION

Read the manuals provided with attachments before operating. These manuals give a more detailed description of operation and point out other areas of caution. Familiarize yourself thoroughly with equipment before attempting to use it.

OPERATION OF THE MACHINE WITH MOWER DECK

IMPORTANT

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, and removing ignition key.

For best operation on average lawns, operate engine at full throttle; control ground speed with motion control levers. Average lawns usually cut at a height between 2 and 3 inches (5-7.6cm). 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.

MOWING SPEED

The mower is designed to operate most efficiently at maximum blade speeds. The speed of the machine should allow the mower deck blades to maintain this maximum speed while mowing across turf. Slow the machine 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 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 2 to 3 inches (5-7.6cm).

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.

DIXIE CHOPPER

OCDC

OPERATOR CONTROLLED DISCHARGE CHUTE

OPERATION

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

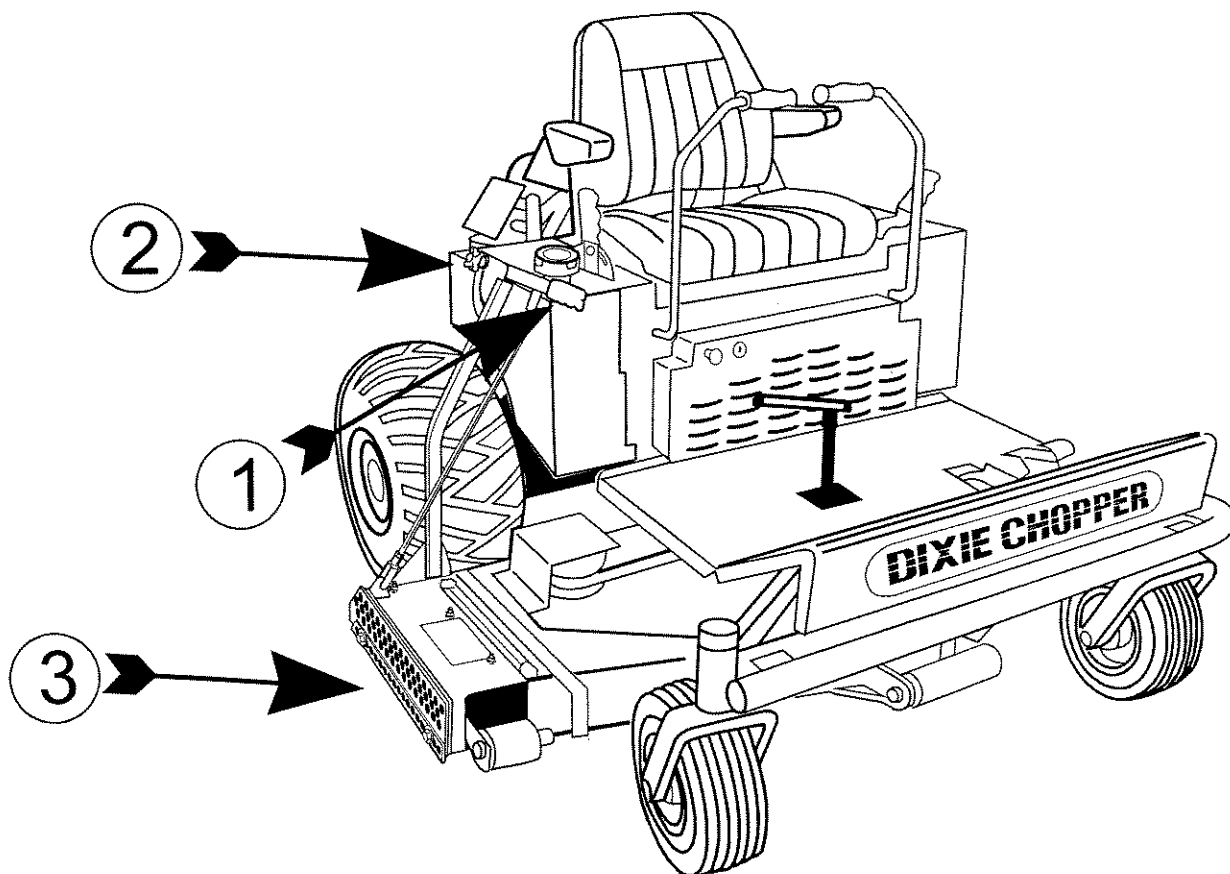
In the full closed position it will serve to keep some of the clipping materials under the mower deck for a longer period of time in order to enhance the mulching capabilities as well as functioning as a discharge safety shield. This discharge chute should **ALWAYS BE OPERATED IN THE DOWN POSITION WHEN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

Mulching may not be possible in some cutting conditions. In extremely wet conditions you may have to run the OCDC in the open position to facilitate proper material discharge and avoid wind-rowing.

CONTROLS

1. Handle - Used to raise and lower discharge chute.
2. Friction Nut - Used to adjust friction drag. May also be used to hold upper screen between full open or full closed.
3. Upper Screen with bolt on lower screen.

NOTE: SAFE OPERATION OF THIS VEHICLE IS THE SOLE RESPONSIBILITY OF THE OPERATOR. SAFETY IS AN ATTITUDE AND IT STARTS WITH YOU!



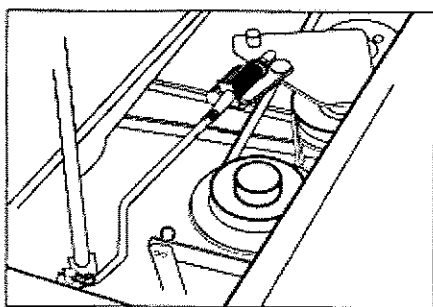
DIXIE CHOPPER

MOWER DECK ADJUSTMENTS

GENERAL DECK ADJUSTMENTS

Drive and spindle belts

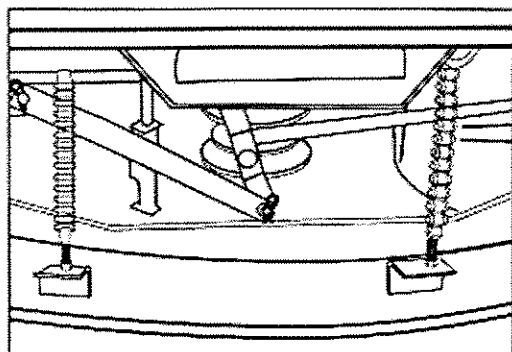
- Check that all belts seat in pulleys
- Check that connecting arm spring height is 2 inches in the "engaged" position. Adjust turnbuckle if necessary.



Mower Deck Drive and Spindle Belts

LEVEL MOWER DECK

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 level a 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 surface is the same.

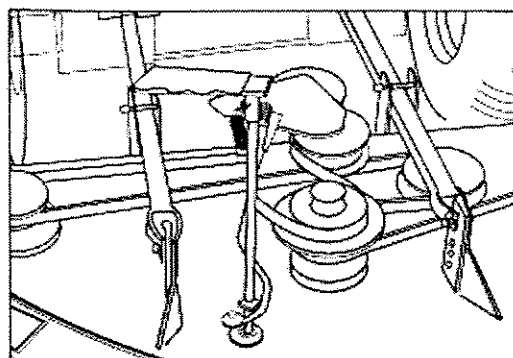


Side-to-Side Level Adjustment

Mower level front-to-rear is adjusted by changing the stabilizer bar positions. Always adjust each side evenly. Adjust at rear or middle of stabilizer bar by removing the hairpin cotters and clevis pins and raising or lowering the stabilizer bar position, changing the mower deck pitch.

To mow in the 2.5" to 4.0" cutting height range, leave as shipped. For cutting below 2.5", it may be necessary to lower the rear of the deck.

Note: NEVER allow rear of deck to be lower than the front unless cutting height is in the fully raised position (6"), and you are mowing tall weeds. This is the **ONLY** exception and will happen automatically with the deck at the fully raised position.



Front-to-Back Level Adjustment

CAUTION

Sharp edges of mower deck blades can cut you during blade maintenance or adjustment. Use suitable covering over cutting edges of blade to prevent bodily harm.

To obtain optimum mower results, mower blades should be kept sharp and well balanced. To sharpen blades, simply lift front of machine and support it with jack stands or floor jack. Remove blade attaching bolts and washers from end of spindles and remove blades. A short piece of 2x4 lumber may be placed between side of mower deck and blade to "lock" it in position when loosening attaching hardware.



MOWER DECK ADJUSTMENTS

BLADE MAINTENANCE (Cont'd)

Re-install the blades with air lift area, (turned up section), facing the underside of the mower deck. Tighten blade attaching bolts to a torque of 80-100 ft. lbs. (112-140 nm).

UNDERSIDE CLEANING

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

MOWER DECK DRIVE BELT REPLACEMENT

Be sure to purchase genuine Dixie Chopper belts for replacement purposes, as these belts are designed specifically for each application.

Mower Deck Drive Belt Removal

Please thoroughly read the safety section of this manual before attempting any repairs or service.

- Remove connecting arm bracket at the triangle plate. This is done by removing the hairpin cotter and the washer pin on the triangle plate.
- Remove the belt from the top pulley of the center deck spindle.
- Remove the triangle plate from its stand at the rear of the mower deck.
- Loosen the engine belt guides by loosening the nuts on the all-thread near the engine between the wheel motor boxes and letting the belt guides swing down.
- Remove the belt from the double sheaved engine pulley.
- Remove the flat idler pulley from the triangle plate, allowing belt removal. Note the location of shim under pulley.

For mower deck drive belt installation, reverse the sequence of removal procedures.

MOWER SPINDLE BELT REPLACEMENT

Be sure to purchase genuine Dixie Chopper belts for replacement purposes as these belts are designed specifically for each application.

Mower Deck Spindle Belt Removal

Please thoroughly read the safety section of this manual before attempting any repairs or service.

- Remove connecting arm bracket at the triangle plate
- Remove the engine to deck belt from top sheave of the center deck spindle.
- Make note of wrapping procedure of the belt to insure proper placement of new belt.
- Grasp belts on both sides of either outboard deck spindle and pull belt away from pulley until it is possible to remove the belt. Once this is done remove from remaining pulleys and discard.

For mower deck spindle belt installation, reverse the sequence of removal procedures.



MOWER CLEANING AND STORAGE

CLEANING AND STORAGE

After 30 days, painted surfaces may be waxed to protect the luster of the original finish. The machine should be washed 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. Aerosol cans of touch-up paint are available through your Authorized Dixie Chopper Dealer.

When the machine will not be used for an extended period of time, the following steps will help insure minimum difficulty when unit is returned to service:

- Perform required maintenance steps called for in the "Routine Maintenance" section of this manual.
- Check tires for proper inflation.
- Wash machine and re-paint all bare metal surfaces.
- Start machine and engage mower for approximately one minute, to remove excess water from belts and pulleys. Let engine run out of gas. As gasoline grows old, it becomes less volatile and forms harmful gum and varnish deposits in the carburetor and fuel system.

DO NOT STORE GASOLINE FOR MORE THAN 2 MONTHS.

- If applicable, charge battery. In temperatures above 40 degrees Fahrenheit (4 C) water level should be checked and battery "trickle charge" every 30 days (more often in higher temperatures). Battery must be fully charged to prevent freezing and internal damage in weather below 32 degrees Fahrenheit (0 C).
- Remove key from machine.
- Cover seat relay and solenoid from direct water spray.



Routine Maintenance

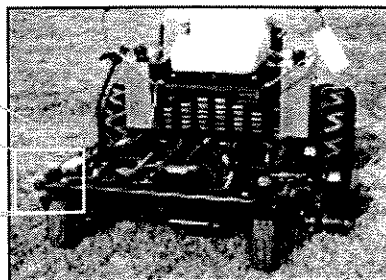
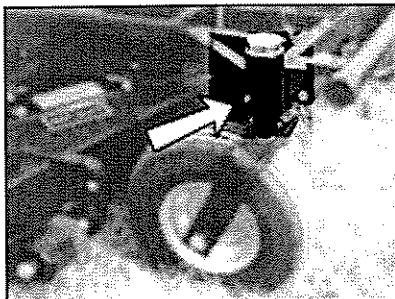
Daily Checks	Check Engine Oil Level Use oil in accordance with engine manufacturers recommendations	Check Hydraulic Oil Level Dixie Chopper VTC Hydraulic Oil	Check Tire Pressure Rear 5-7 psi - 6 preferred Front 12-18 psi
Every 100 Hours	Change Engine Oil Normal - 10W30 Cold - Consult Engine Manual	Clean Kohler Air Filter (DO NOT BLOW OUT WITH COMPRESSED AIR)	Check Engine to Transmission Belt Tension 1" from idler to frame
	Check Battery Fluid Level (If applicable)	Check Engine Idler Spring Tension (XXW4000 only)	Lube Deck Spindle Assemblies
Every 200 Hours	Lube Center Drive Shaft (3 pumps max) (XXW4000 only)	Clean Donaldson Air Filter End Cap (DO NOT BLOW OUT WITH COMPRESSED AIR)	Lube Steering Levers
Every 1000 Hours or Annually	Change Hydraulic Filters	Change Amsoil Filter	Remove Belts and Check Spindle Bearings, Idlers, and Pulleys.
	Lube Front Caster Bearings	Clean or Replace Spark Plugs	Check Steering for Creep in the Neutral Position
	Check Front and Rear Tires for Tread Wear	Replace Engine Fuel Filter(s)	Change Hydraulic Drive Oil Dixie Chopper VTC Hydraulic Oil
	Change Hydraulic Drive Oil DO NOT USE HYDRAULIC OIL, HYTRAN, OR AUTOMATIC TRANSMISSION FLUID. USE ONLY A HIGH GRADE 10W50, 15W40, 15W50, 20W50 MOTOR OIL THAT MEETS THE MINIMUM VISCOSITY REQUIREMENTS OF: 89 SUS or BETTER @ 212 DEGREES FAHRENHEIT.		

Note: The recommended Hydraulic Drive oil for your Dixie Chopper Machine is D/C VTC Hydraulic Oil (Part# 4940002106). We strongly urge that you use this oil in the event that you should need to refill or add to your hydraulic reservoir.

Engine Oil : Normal Mowing Conditions - 10W30
Cold Weather Operation - Consult Engine Manual
Lube Grease: High Temp. Lithium Grease

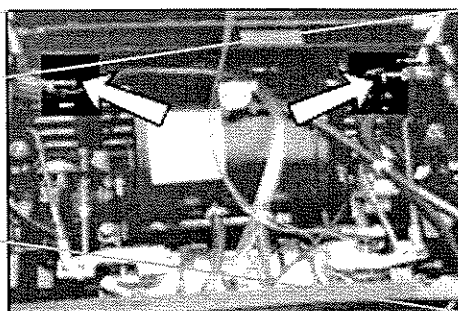
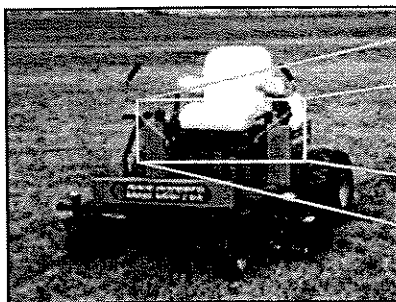
DIXIE CHOPPER

LUBRICATION POINTS



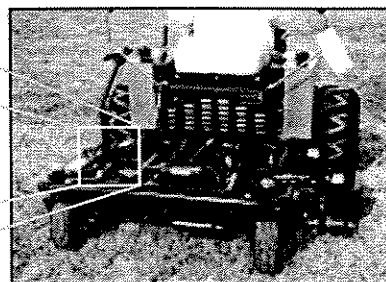
**Every 1000
Hours or
annually**

**Front Caster Assembly
(1 each side)**



**Every 200
Hours**

**Steering Lever Pivots
(Under Seat)**

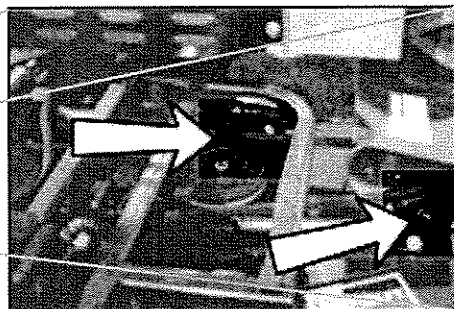


**Every 100
Hours**

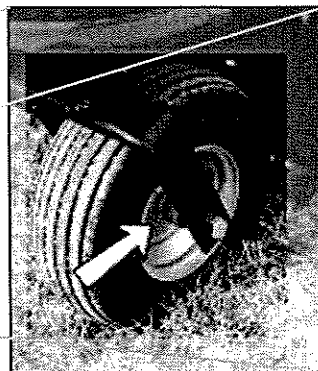
**Right Side Deck Drive
Hub**

DIXIE CHOPPER

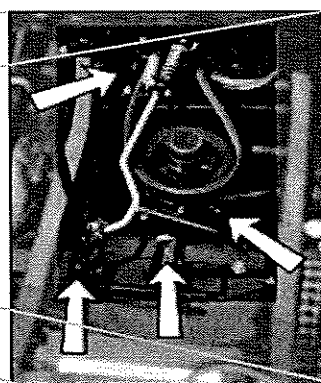
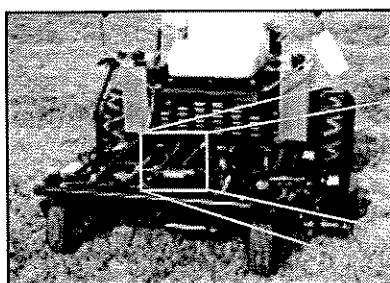
LUBRICATION POINTS



Every 100 Hours	Idler Arm Pivot Left Side Deck Drive Hub
----------------------------	---



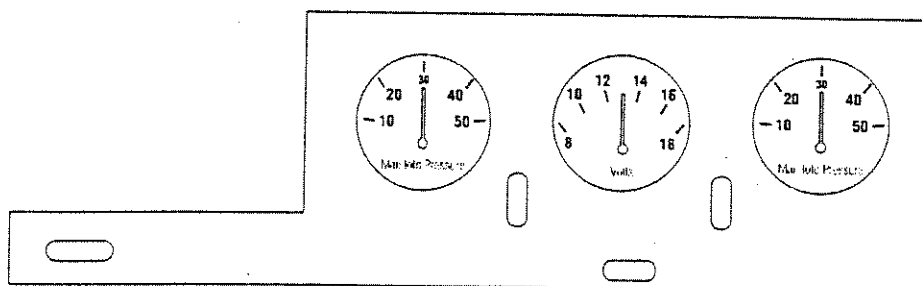
Every 100 Hours	Front Wheel Bearing 1 Each Front Wheel
----------------------------	---



Every 100 Hours	Deck Engaging Swing Arm Scissor Linkage Pivot Center Deck Drive Hub Deck Engaging Rod
----------------------------	--

DIXIE CHOPPER

Engine Load Balancing Procedure

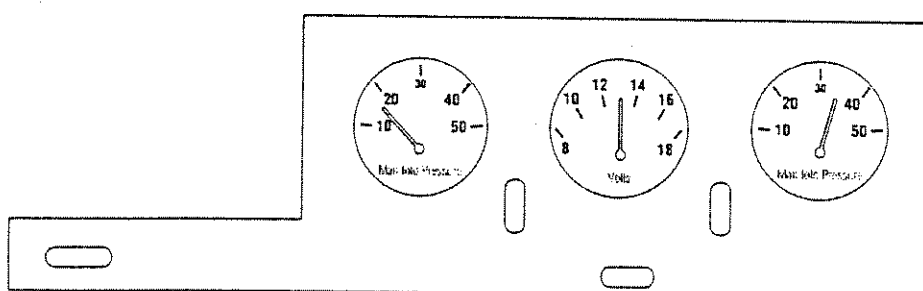


Ideal Engine Balance

Both Manifold Pressure Gauges Parallel

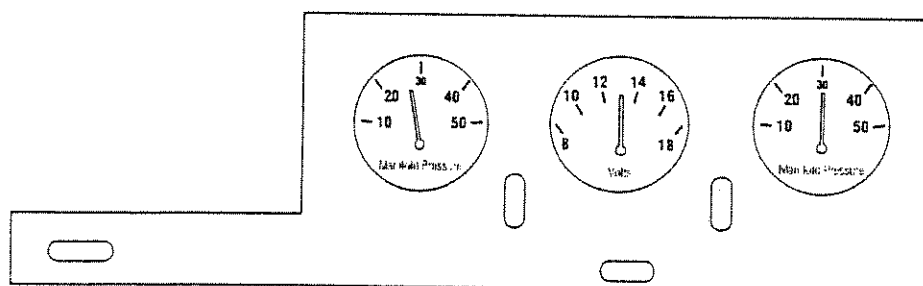
NOTE - The gauges may read 15 or they may read 25 or 30.*

The actual number is not important but the key is that they are as equal as possible.



Unacceptable Engine Balance

Manifold Pressure Gauges have more than + or - 2 differential



Acceptable Engine Balance

Left Engine Manifold Pressure Gauge reads 28 and the right gauge reads 30.

This reading falls within the prescribed + or - range.

This is an acceptable setting. It is not ideal, but acceptable.

DIXIE CHOPPER

Diesel Engine Maintenance Procedures

General

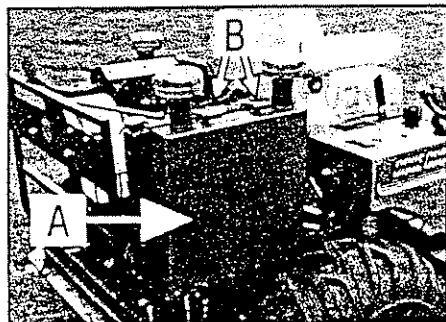
The Dixie Chopper Diesel Engine machines are equipped with several features that have special operating and maintenance procedures. Please read and fully understand these before operating your machine.

All diesel models are liquid cooled and are equipped with a radiator. The radiator screen and cooling fins should be cleaned and checked on a daily basis.

Cooling System

The radiator air intake screen (A) should be visually inspected and cleaned on a daily basis. The screen may be cleaned by simply running your hand over it to remove the accumulated chaff.

The radiator cooling fins should be cleaned weekly by blowing compressed air through the fins. This is accomplished by releasing the rubber straps (B) and allowing the air intake screen to open outward as pictured in figure 2. The air intake screen seal (C) should be inspected for a proper seal.



Warning Horn

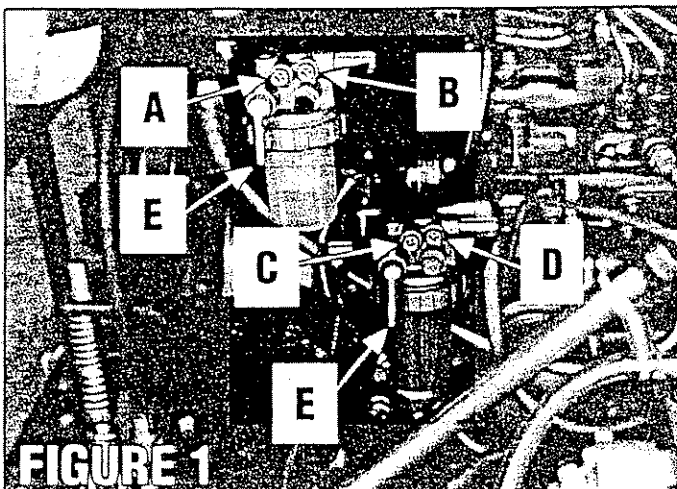
The diesel powered Dixie Chopper machines are equipped with a warning horn that will sound in the event of low oil pressure or excessive coolant temperature. This horn will sound for a short period of time when the engine is first started. If the horn should sound after start-up. You should maneuver the machine to a safe stopping area immediately and shut off the engine as quickly as possible to avoid severe engine damage.

Fuel System

The fuel system is equipped with many safety features to prevent engine damage. If you should run out of fuel **YOU MUST FOLLOW THE PROPER PRIMING, BLEEDING, AND STARTING PROCEDURES OR SEVERE ENGINE DAMAGE WILL OCCUR!!!!** Please read and understand the following procedures to avoid potential problems.

Priming Procedure - XWD 2600 Series

This diesel engine has a manual prime and bleed fuel system. Please follow the procedure below should you run the engine out of fuel. Locate the fuel shut-off petcock on the water separator and fuel filter as shown in letter "E" in photo figure 1 below. Be certain that they are in the run or down position as shown. Loosen the four phillips head bleed screws on the water separator and fuel filter. These are identified as A,B,C,D, in figure 1.



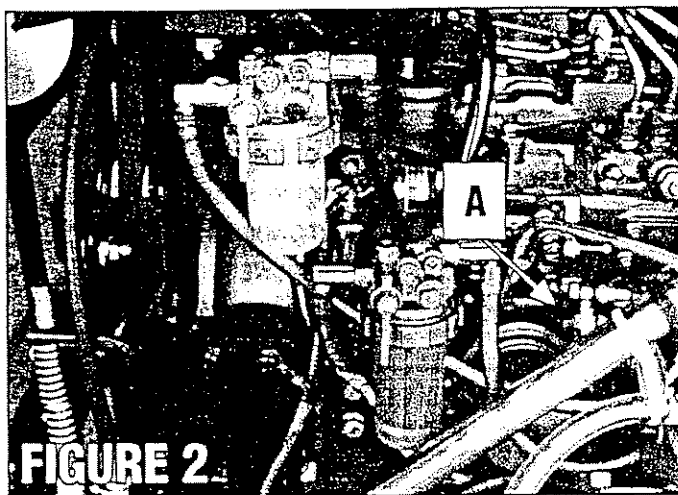
Radiator removed for clarity of photo.

DIXIE CHOPPER

Diesel Engine Maintenance Procedures

Priming Procedure - XWD2600 Series

Locate the manual fuel pump lever located on the fuel delivery pump as identified by letter "A" in figure 2. Pump the handle in an up and down motion until you see fuel coming out of bleed screw "A" at the water separator. Once you have fuel at screw "A", tighten screw. Continue pumping while the water separator fills. Once it is full of fuel you will see fuel coming from bleed screw "B". You may then tighten screw "B".



Continue pumping the lever until you have fuel at bleed screw "C". Once you have fuel at screw "C" you may tighten it. Continue pumping and observe the fuel filter filling with fuel. Once the filter is full you will see fuel coming from bleed screw "D". Once you have fuel coming from screw "D", you may tighten it.

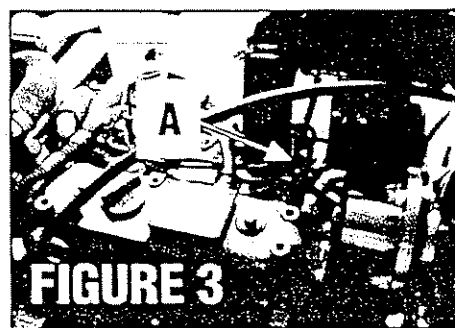
At this point you are ready to start the engine.

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 30 SECONDS AT ONE TIME WITHOUT RELEASING THE KEY. FAILURE TO OBSERVE THIS PROCEDURE WILL RESULT IN PERMANENT DAMAGE TO THE FUEL SOLENOID.**

The engine should start and run normally at this point. If it does not, proceed to the "Bleeding the Injector" section in the following paragraph.

Bleeding The Injector

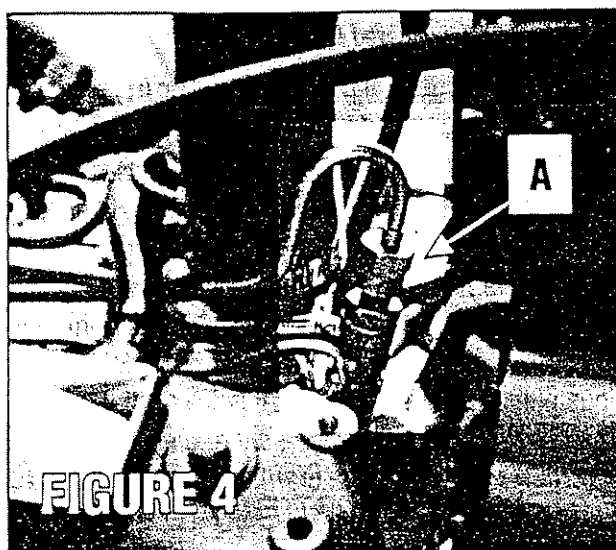
Locate the rear injector as shown by letter "A" in figure 3 below.



Loosen the injector fuel supply line as shown in figure 4 by turning counterclockwise. Crank engine until fuel spray is visible from the injector fuel supply line.

Remember not to exceed 30 seconds of cranking time without releasing the ignition switch.

Once you have fuel spray at the injector nozzle, stop cranking and tighten the fuel supply line. If your engine does not start and operate normal, repeat the injector bleeding procedure as needed until all air is removed from the supply line.

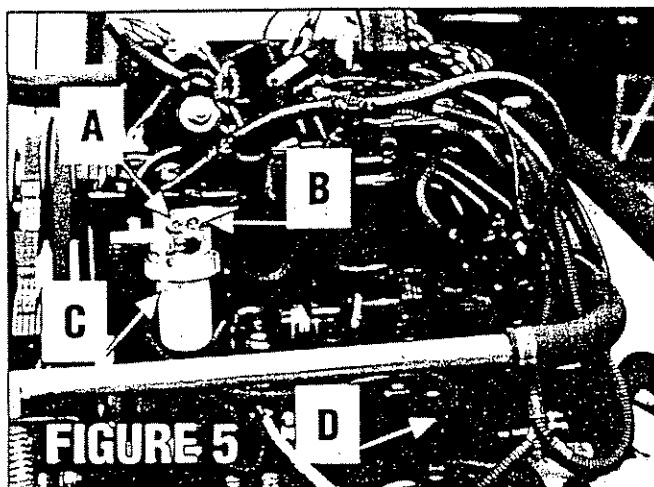


DIXIE CHOPPER

Diesel Engine Maintenance Procedures

Priming Procedure - XXWD5000 Series

The XXWD 5000 series diesel machine is equipped with a self bleeding fuel delivery system and should only need to be primed manually if it should run out of fuel. Locate the fuel shut-off petcock on the water separator and fuel filter as shown in letter "C" in photo figure 1 below. Be certain that it is in the run or down position as shown. Loosen the two phillips head bleed screws on the water separator. These are identified as A, and B in figure 5.



Radiator removed for clarity of photo.

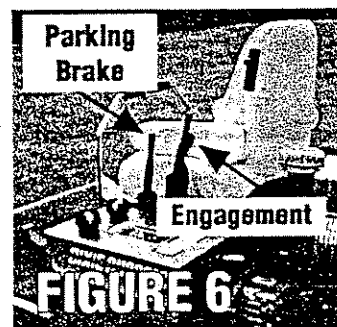
Locate the manual fuel pump lever located on the fuel delivery pump as identified by letter "D" in figure 5. Pump the handle in an up and down motion until you see fuel coming out of bleed screw "A" at the water separator. Once you have fuel at screw "A", tighten screw. Continue pumping while the water separator fills. Once it is full of fuel you will see fuel coming from bleed screw "B". You may then tighten screw "B". Continue pumping until the fuel 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 30 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 XW2600 and the XXW5000 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 6 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 simply pull up toward you.



Routine Maintenance

For lubrication and filter information please see the routine maintenance section on pages 5,6,7.



DIXIE CHOPPER

NOTES

DIXIE CHOPPER

NOTES

DIXIE CHOPPER

NOTES

DIXIE CHOPPER

NOTES



6302 E. County Road 100 North
Coatesville, IN. 46121
Phone 1-765-CHOPPER
www.dixiechopper.com

Dixie Chopper, Magic Circle, and the Magic Circle Atom Logo are all trademarks of Magic Circle Corporation and may not be reproduced without permission.

Printed In USA

Specifications and instructions subject to change without notice.

Print Date 3/01