

FORESTRY DISC MULCHER

20-30 GPM	30-44 GPM	32-44 GPM	45-60 GPM
FDM44	FDM44	FDM60	FDM60

DANGER STAY &

OPERATION AND PARTS MANUAL

Read and understand the manual. This manual provides information and procedures to safely operate and maintain the Forestry Disc Mulcher.



NOTE: THE FORESTRY DISC MULCHER REQUIRES A CASE DRAIN FOR OPERATION



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INTRODUCTION **1.1 WELCOME**

Congratulations on your choice of an IronCraft Forestry Disc Mulcher. This equipment has been designed and manufactured to meet the needs of discerning users. Many features incorporated into this disc mulcher are the result of suggestions made by customers like you.

Read this manual carefully to learn how to operate the disc mulcher safely and how to set it to provide maximum mulching efficiency. By following the operating instructions, in conjunction with a good maintenance program, your IronCraft disc mulcher will provide many years of trouble-free service.

Safe, efficient, and trouble-free operation of your disc mulcher requires that you, and anyone else who will be using or maintaining the unit, read and understand the information contained within the Owner's Manual. Use this manual for frequent reference and to pass on to new operators or owners.

Upon reading this manual, all users should sign the "Safety Acknowledgement Form" at the end of this manual. Please record your model and dealer information on page 5. You will be asked to provide this information when ordering parts or requesting service. If you need more information on this product, contact your local dealer or visit www.ironcraftusa.com.

WARNING READ AND UNDERSTAND MANUAL.

To prevent personal injury or even death, be sure you read and understand all of the instructions in this manual and other related OEM equipment manuals! The disc mulcher, if not used and maintained properly, can be dangerous to users unfamiliar with its operation. Do not allow operating, maintaining, adjusting, or cleaning of this disc mulcher until the user has read this manual and has developed a thorough understanding of the safety precautions and functions of the unit. This disc mulcher is designed for the specific purpose of tree removal. DO NOT modify or use this disc mulcher for any application other than that for which it was designed. Disc mulchers maintained or operated improperly or by untrained personnel can be dangerous; exposing the user and/or bystanders to possible serious injury or death.



1.1 WELCOME

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1.2 SAFE OPERATION



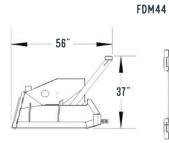
1.3 MODEL COMPARISON

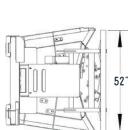
FORESTRY DISC MULCHER							
	20-30 GPM 30-44 GPM 32-44 GPM 45-60 GPM						
MODEL	FDM44		FDM60				
WORKING WIDTH	44" Quadco Disc 60" Q		60" Qua	dco Disc			
DEFLECTOR PLATE	1" Hinged						
TREE DIAMETER	Cuts up to 8" Cuts up to 14"						

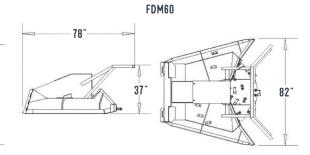
1.4 SPECIFICATIONS

	FDM44		FDM60	
MODEL	20-30 GPM	30-44 GPM	32-44 GPM	45-60 GPM
WEIGHT (LB)	2,0	2,060 2,468		2,468
MSS/ CTL LIFT WEIGHT (LB)	10,000			
MSS/CTL LIFT CAPACITY (LB)	3,000			
MSS/CTL POWER	90 HP			
MOTOR SIZE	100 CC	150 CC	150 CC 200 CC	
MULCHING CAPACITY	4"			6"
TREE CUTTING CAPACITY	8" DIAMETER		14"]	DIAMETER
DISC SIZE	44"		60"	
DISC WEIGHT	532 LBS 940 LBS		940 LBS	

Specifications subject to change without notice.







1.3 MODEL COMPARISON

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PURCHASE DATE DEALER NAME ADDRESS PHONE NUMBER MODEL SERIAL



WE USED TO ASK OURSELVES THE SAME THING ...

You need to register your new product within 30 days of delivery. Without registration, your warranty claims will not be honored.

Registering your machine means you get the full benefits of the warranty terms we offer.

Scan this code for an easy-peasy registering process. You'll be glad you did.

https://www.ironcraftusa.com/warranty/register-warranty/

1.5 REGISTER THIS PRODUCT

1.5 REGISTER THIS PRODUCT



SAFETY INFORMATION

2.1 INTRODUCTION

The following terms are used interchangeably throughout this manual.

FORESTRY DISC MULCHER	SKID STEER	OPERATOR
implement, attachment, machine, disc mulcher, mulcher, mulching head	skid steer loader, skid steer tractor, loader, prime mover	user, personnel

The Forestry Disc Mulcher is designed and manufactured with safety in mind. However, improper use and operator error can result in death or serious injury. It is important that you read and fully understand the safety instructions and operating procedures presented in this manual before operating this mulcher. Accident prevention is a combination of good judgement, common sense, awareness and proper training!

BEFORE YOU OPERATE THIS DISC MULCHER:

- 1. KNOW how to safely operate your skid steer loader.
- 2. READ and UNDERSTAND the safety instructions and operating procedures contained in this manual.
- 3. ACKNOWLEDGE your understanding of all safety instructions presented in this manual by signing the "Safety Acknowledgement Form" at the end of this manual.

Although every effort has been made to ensure a safe product, every possible circumstance that could pose a potential hazard cannot be anticipated. The safety warnings in this manual and on this product, are therefore not all-inclusive.

In addition to the safety messages presented in this section, you must also read and understand the safety messages presented in the other sections of this manual.



This is the safety alert symbol and will be accompanied with a descriptive pictorial. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

This manual contains DANGERS, SAFETY INSTRUCTIONS, CAUTIONS, IMPORTANT NOTICES, and NOTES which must be followed to prevent the possibility of improper service, damage to the equipment, personal injury, or death. The following key words call the readers' attention to potential hazards. Hazards are identified by the "Safety Alert Symbol" and followed by a signal word such as "DANGER", "WARNING", or "CAUTION".



DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.



WARNING

serious injury.



CAUTION

moderate injury.

NOTICE

Indicates that equipment or property damage can result if instructions are not followed.

SAFETY INSTRUCTIONS

Note: Contains additional information important to a procedure.

2.1 INTRODUCTION

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2.2 SAFETY ALERT SYMBOLS

Indicates a potentially hazardous situation which, if not avoided, could result in death or

Indicates a potentially hazardous situation which, if not avoided, may result in minor or

Safety instructions (or equivalent) signs indicate specific safety-related instructions or procedures.

2.3 SAFETY PICTOGRAMS

Pictograms are graphic symbols meant to alert you of a potential hazard. Read and understand the hazard description for each of these symbols.



PINCH HAZARD:

Keep clear of skid steer and disc mulcher machine to prevent death or serious injury from pinching of moving parts.



FLYING DEBRIS HAZARD:

ONLY operate this machine using a skid steer that has a shatter proof cab to prevent death or serious injury from objects being thrown.



OPERATING MANUAL:

Operators must read and understand the safety instructions in the operating manual to prevent death or serious injury.



EYE PROTECTION & CARDBOARD:

Operators and Maintenance personnel must wear proper eye protection and use cardboard or wood to investigate hydraulic leaks to prevent death or serious injury from being injected with high pressure hydraulic fluid.



HIGH PRESSURE FLUID

INJECTION HAZARD:

Operators and maintenance personnel must not place fingers or hands directly over a hydraulic leak to prevent death or serious injury from being injected with high pressure hydraulic fluid.



NO BYSTANDERS:

DO NOT operate this machine near bystanders. Bystanders must stay back at least 300 feet from the machine to prevent death or injury from objects being thrown.



CRUSH HAZARD:

DO NOT place any part of the body under the machine or skid steer arms to prevent death or serious injury from being crushed.

SAFETY CHAIN:

Must be installed to prevent the mower deck from being raised more than 2 feet from ground level.

2.4 GENERAL SAFETY INSTRUCTIONS

Below are general safety instructions that relate to the overall operation and maintenance of this machine. It is important that you read and understand each message to prevent serious injury or death.



ALWAYS

watch for overhead power lines.



place hands or feet under mower deck while blades are spinning.



operate this brush cutter when bystanders are within 300 feet of your work area. Flying debris could cause serious injury or death.



NEVER

position your body or limbs under an unsupported cutter deck.



DO NOT

allow this machine to contact buildings, utilities, large rocks or tree stumps or you may loose control of the skid steer loader.



DO NOT

allow riders on the skid steer loader or on this attachment.



use drugs or alcoholic beverages while operating or servicing this machine.



ALWAYS

ALWAYS

operate this attachment during daylight or well-lit areas.

wear work gloves when handling cutter blades as they are often very sharp.



DO NOT

operate this machine during lightning or severe weather conditions.

2.4 GENERAL SAFETY INSTRUCTIONS

2.3 SAFETY PICTOGRAMS

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INSTALL

this brush cutter on a skid steer loader equipped with a thermoplastic polycarbonate door panel and side panels only.



PREVENT

the skid steer loader and implement from rolling forward, by stopping the engine and setting the parking brake when exiting the skid steer loader.



MISSING OR DAMAGED HARDWARE

Replace missing or damaged hardware prior to using this machine.

this equipment at any time. Store this

implement in an area not frequented



DO NOT allow children to play on or around



ALWAYS

by children.

wear the proper personal protection equipment while operating or servicing this machine.



 $(\bigcirc$

NEVER

operate or service this machine with bare feet, sandals, or other light footwear.



ALWAYS

use eye protection while operating or servicing this machine.

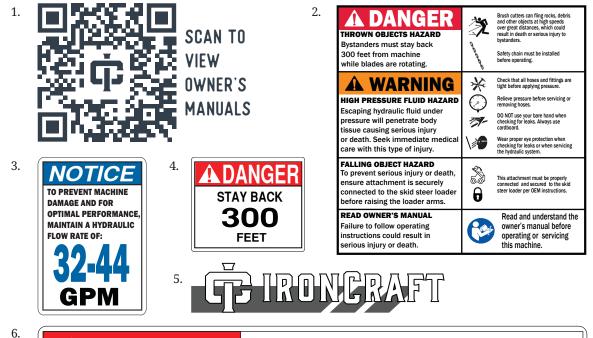


DO NOT

speed! Keep your driving speed between 2 and 5 mph.

SAFETY SIGNS AND LABELS 3.1 SAFETY DECALS

The safety decals affixed to this machine are in place to keep you safe. DO NOT ignore these decals. Read and understand each decal's safety message. The following safety decals are affixed to this machine:



A DANGER STAY BACK 300 FEET

SAFETY INSTRUCTIONS /!\

- Decals must be kept clean and legible at all times.
- Operators must inspect the machine for safety decals.
- Replace missing, worn or damaged decals immediately.
- Use care when cleaning the machine. When using a hot pressure washer make sure water jet is not too close to the decal as this may cause the decal to peel.
- When replacing parts, be sure safety decals are in place prior to using the machine.
- Make sure metal surface is dry and free of dirt and grease before applying a new decal to this machine.
- Contact your local dealer to order replacement decals.

3.1 SAFETY DECALS

ITEM	ТҮРЕ	DESCRIPTION	QTY.
1	INSTRUCTIONAL	Scan to View Owner's Manual (not shown)	1
2	NOTICE	Danger Combo Label	1
3	NOTICE	Auxiliary Hydraulic Flow Not to Exceed Notice Label Note: When ordering, choose the proper decal for your model.	1
4	NOTICE	Stay Clear 300 Feet Warning Label (6" x 6")	1
5	LOGO	IronCraft Logo Decal (not shown) Note: Non-Safety Decal	1
6	NOTICE	Stay Clear 300 Feet Warning Label	2

3.2 SAFETY SIGN LOCATIONS

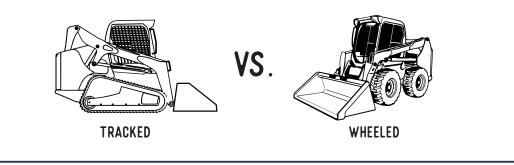
3.2 SAFETY SIGN LOCATIONS



3.3 SKID STEER LOADER REQUIREMENTS

NOTICE

A skid steer equipped with tracks (COMPACT TRACK LOADER) will provide superior stability in this application.



WARNING

Ensure your skid steer loader is in good operating condition. The Forestry Disc Mulcher should only be used on Skid Steer Loaders that meet the following requirements:

REQUIREMENTS				
Skid Steer Lift Capacity	3,000 lbs			
Skid Steer Loader Weight	10,000 lbs			
Impact Resistant Cab Enclosure				

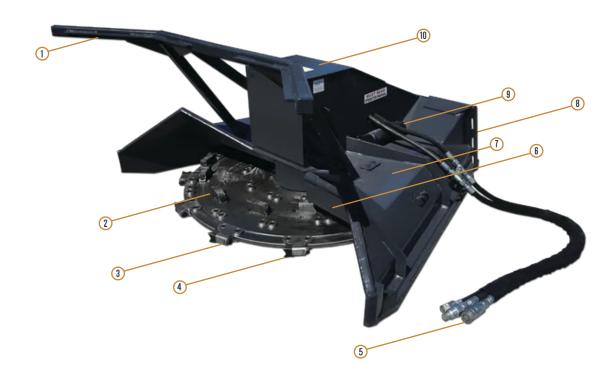
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Follow the operating instructions in your skid steer operator's manual.

PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS



All operators should wear hearing protection, safety glasses, hand protection and dust mask while operating this machine.



ITEM	DESCRIPTION
1	Push Bar
2	Disc Assembly
3	Mulcher Disc Holder
4	Tooth
5	Hydraulic Hoses
6	Deflector
7	Deck
8	Attachment Bracket
9	Document Canister
10	Motor Cover

3.3 SKID STEER LOADER REQUIREMENTS

NOMENCLATURE

DESCRIPTION

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OPERATING PROCEDURES

4.1 UNPACKING YOUR FORESTRY DISC MULCHER

Your attachment arrives from the factory strapped to a wood pallet, and requires no final assembly. Use a pair of tin snips to remove the steel strapping.



CAUTION

Shipping straps are under great tension, and could lash out uncontrollably when cut causing injuries to your body or bystanders. Wear safety glasses and gloves while removing the steel straps.



Refer to your skid steer operator's manual for specific instructions on how to mount and dismount your attachment.

GENERAL ATTACHMENT METHOD

- 1. Enter operator's cab and start skid steer loader.
- 2. Tilt the skid steer loader quick attach coupler slightly down and drive forward to the rear of the mulcher until the top edge of the quick attach coupler connects into the attachment bracket. See figure 4.2a.
- 3. Slightly tilt the skid steer quick attach coupler up until the coupler and attachment bracket fully engage. See figure 4.2b.
- 4. Activate the coupler pin mechanism to lock the pins into the attachment bracket. If your skid steer does not have this mechanism, shut skid steer engine off and exit the cab.
- 5. Push the skid steer quick attach locking levers down until you can see the coupler pins extend into the slots on the attachment bracket.



WARNING

detaching from prime mover.

6. Connect hydraulic hoses and the case drain hose to the auxiliary supply couplers located on your skid steer loader lift arm.

NOTICE

To keep contaminants from entering the hydraulic system, use a clean cloth to wipe away dirt and grease from the hydraulic couplers.

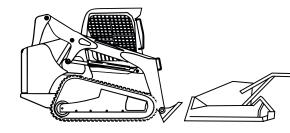


Figure 4.2a Mulcher Mounting

4.2 HOW TO MOUNT DISC MULCHER

4.1 UNPACKING YOUR FORESTRY DISC MULCHER 14

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4.2 HOW TO MOUNT DISC MULCHER

To avoid serious injury or death, ensure coupler pins fully extend through the slots on the attachment bracket and that levers are down in the locked position to prevent cutter from

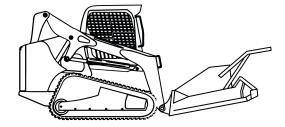


Figure 4.2b Coupler to Bracket

4.3 HOW TO DISMOUNT DISC MULCHER

1. Turn off auxiliary hydraulic circuit; relieve hydraulic pressure.

- 2. Park skid steer on a flat and level surface then lower disc mulcher to the ground.
- 3. Set parking brake and disengage lock pins using the lock lever switch (if installed).
- 4. Turn off skid steer engine.
- 5. Disconnect hydraulic hoses.
- 6. Pull latch handles to disengage lock pins.
- 7. Re-enter cab and start skid steer engine.
- 8. Tilt mounting coupler forward until mounting bracket is free from mounting plate.
- 9. Drive skid steer backward to clear mulcher

4.4 HOW TO START AND STOP THE DISC MULCHER

FORESTRY DISC MULCHER CONTROLS

Your Forestry Disc Mulcher is designed to run off the skid steer loader's auxiliary hydraulic system, and is activated and deactivated by a control in the operator's cab. The height and tilt functions of your disc mulcher are operated with the control handles or pedals in the cab. Consult your skid steer operator's manual for instructions regarding these functions.

HYDRAULIC FLOW REQUIREMENTS

When operating the cutter, set the skid steer engine RPM to a speed that will produce the required flow. Your skid steer dealer can measure the flow available on your machine and recommend a throttle setting that is compatible with this attachment.

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NOTICE

DO NOT exceed the designed flow rate (GPM) of your disc mulcher. Place a check mark in the box next to your model for reference:

FDM44 =
$$20-30$$
 GPM
FDM44 = $30-44$ GPM

FDM60 = 32 - 44 GPMFDM60 = 45 - 60 GPM

4.3 HOW TO DISMOUNT DISC MULCHER

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STARTING THE DISC MULCHER



WARNING



MOUNT THE DISC MULCHER Complete steps 1-6 on page 15.



ACTIVATE

Once brush cutter ramps up to speed, increase skid steer engine to full throttle. Ensure mulcher is running smoothly.

NOTICE

If mulcher vibrates while increasing RPM's, switch off the auxiliary hydraulic circuit and investigate the cause. Refer to the Troubleshooting Chart on page 40.

4.4 HOW TO START AND STOP THE DISC MULCHER 17

To avoid serious injury or death from thrown objects and flying debris, ensure no bystanders are within 300 feet of the work area before starting this disc mulcher.



Activate skid steer auxiliary hydraulic circuit.



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STOPPING THE DISC MULCHER

RAISE THE MULCHER SLIGHTLY and set skid steer's engine to idle.

SWITCH OFF the auxiliary hydraulic circuit.



ALLOW TIME

for the mulcher to slow down.



WARNING

After switching off the auxiliary hydraulic circuit, keep hands and feet clear of the cutter deck until disc rotation has come to a complete stop.

4.5 INITIAL USE PROCEDURE

NOTICE

Before operating mulcher, check the hydraulic fluid level in the skid steer and add oil if necessary.

NOTICE

Make sure the case drain hose is properly attached to the prime mover's case drain connection. Warranty may be void if attachment is ran without the case drain hose connected. Excessive hydraulic pressure can blow out seals and damage the motor.

Verify that hydraulic hoses are securely locked to the skid steer hydraulic couplers before starting the disc mulcher.

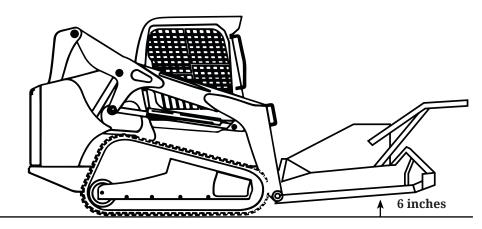


Figure 4.5: After starting skid steer, lift attachment 6 inches off the ground surface



WARNING

To avoid serious injury by hydraulic fluid injection into your skin, never use your hand or other body parts to locate a hydraulic leak. Detect leaks with a piece of wood or card board.



SWITCH ON the auxiliary hydraulic circuit.



RUN THE MULCHER

for 30 seconds to purge air from the system, then switch off the auxiliary hydraulic circuit and allow cutting disk to come to a complete stop.



to the ground, shut off skid steer engine and exit the cab.



CHECK

the hydraulic oil level in the skid steer, add oil if necessary.



the disc mulcher hydraulic plumbing for noticeable leaks. Fix before continuing.



RESTART

skid steer, and set engine RPM to slightly above idle.



RAISE THE DISC MULCHER



FULL THROTTLE

Once disc mulcher ramps up to speed, increase skid steer engine to full throttle.

4.5 INITIAL USE PROCEDURE

4.6 GENERAL OPERATING TIPS

LEARN

what the mulcher deck looks like in a level position when you are seated in the skid steer. Knowing what a level mulcher deck looks like will prevent you from damaging the cutting teeth and disc by mulching too close to the ground.

SLOW

the skid steer if the engine "bogs" down or if the disc speed is too slow because of too much load.

LISTEN AND FEEL

If you feel a strong vibration while cutting, slow the skid steer and see if the vibration stops. If not, stop the mulcher, turn off the skid steer engine and investigate the cause. Refer to the "Troubleshooting Chart" on page 32.

ALWAYS

be aware of your surroundings and pay attention to obstacles and terrain in front of you.



WARNING

continuing.

ADJUSTING MULCHER HEIGHT & LEVEL

Use the skid steer loader's lift and tilt controls to adjust the height and level of the mulcher deck. Refer to your skid steer operator's manual for instructions on these controls.



CAUTION

in minor or serious Injury.

4.6 GENERAL OPERATING TIPS

To prevent serious injury or death from flying debris, do not operate this mulcher if you can see the cutting disc while seated in the operator's seat. Lower the attachment before

Use care when operating on uneven terrain or any type of sloped surface. Keep your cutter low to the ground when working in these conditions to avoid a roll over that could result

4.7 TREE CUT PROCEDURES

When planning your cutting operation consider your mulcher's cut capacity as shown in the chart below.

CUT CAPACITIES			
MODEL MATERIAL SIZE TREE SIZE			
FDM44	4"	8" DIA	
FDM60	6"	14" DIA	



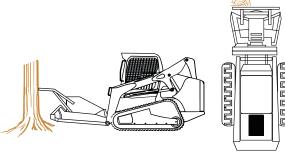
CAUTION

Always inspect work area before starting the cutter. Locate and mark any utilities, steel posts, rocks or any other objects that could damage the mulcher during operation. Never assume the work area is safe.

HOW TO CUT TREES (NO MULCHING)

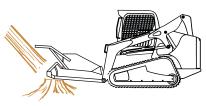


With the mulcher deck a few inches above ground and in a level position cut the tree using the left side of the cutting head.





Continue to push the tree away from the skid steer with the push bar.



For larger diameter trees make a notch cut on one side of the tree then drive skid loader to opposite side of the tree to finish the cut and push the tree away from the skid loader.



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CUT AND MULCH METHOD



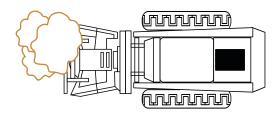
Slowly drive the skid loader forward so that the right side of the mulching disc cuts the tree.

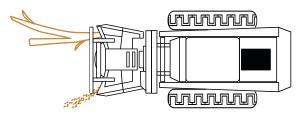
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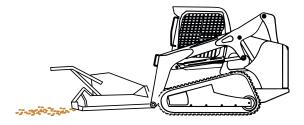
While cutting, continue driving forward and tilt the mulcher back to feed tree into top of mulching disc.

Tilt the front of the mulcher deck down and back drag over remaining branches to to refine the mulch.

4.7 TREE CUT PROCEDURES



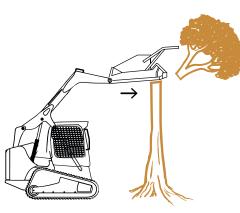




VERTICAL MULCH METHOD



Raise the skid loader arms and tilt the mulcher forward. Cut the top of the tree on the left side of the cutting disc and push the top of tree away from the skid loader.

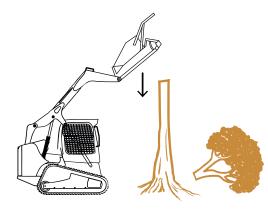


CAUTION

Do not operate the mulcher with the skid loader arms fully raised on uneven or sloped terrain as the skid loader may roll over resulting in serious injury.

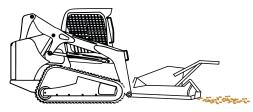


Tilt the back at a 45 degree angle and drop the mulcher onto the tree by lowering the skid loader arms.



3

Tilt the front of the mulcher deck down and back drag over remaining stump and branches to to refine the mulch.



TIPS

- 3. Allow the mulcher to come up to operating speed before making a cut.
- 4. Use the vertical mulch method when mulching trees larger than 6" in diameter.

REMOVING JAMMED MATERIAL

1. Switch off the auxiliary hydraulic circuit.

4.8 TREE CUTTING TIPS

1. Wait until the disc is up to speed before cutting to prevent material from jamming in the disc.

2. Slow down when mulching or cutting thick material to prevent machine from "bogging" down.

2. Place the outside edge of the mulching disc on a tree and rotate skid loader so the disc turns opposite of its cutting direction allowing the jammed material to back out the feed side of the mulcher.

MAINTENANCE PROCEDURES

5.1 MAINTENANCE OVERVIEW

The maintenance procedures described in this manual should only be carried out by qualified mechanics who have been trained to repair this machine.

Some procedures require special tools and skills to complete. DO NOT attempt to repair or perform service work on this machine unless you have the skills and tools to do so. Contact your local dealer for maintenance and repair services.

WELDING REPAIRS

Contact your dealer before performing any type of welding repair to this cutter, as this may void warranty.

All authorized welding repairs must be performed by qualified welders in accordance to the American Welding Society (AWS) standards. Welding procedures performed by unqualified welders may deem this cutter unsafe to operate.

PARTS

Only use genuine IronCraft OEM replacement parts on this machine. IronCraft will not be liable for any damages or injuries caused by the use of after market parts on this machine.

SAFETY INSTRUCTIONS

Obey the following safety instructions when servicing or repairing this machine.



WEAR proper Personal Protective

Equipment (PPE) while working on this machine, which may include safety glasses, hard hats, steel toe boots, gloves, etc.



WEAR

a welding helmet when welding to protect your eyes, face and neck from flash burn, ultra-violet radiation and heat.



ENSURE

all jack stands, lifts and hoists are in good working condtion and have the rated load capacity to support the load.

5.1 MAINTENANCE OVERVIEW

SERVICE

If servicing is performed while the disc mulcher is attached to the skid steer, turn engine off, set parking brake and chock wheels to prevent skid steer from moving.



ONLY

perform service work in a well-lit area.

ALLOW

the machine to cool down before servicing this machine. Hot oils can burn your skin.



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NEVER

work under an unsupported cutter deck.

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NOTICE

Improper maintenance or modifications to the design or performance of this machine will void the warranty.

5.2 MAINTENANCE SCHEDULE

The IronCraft Forestry Disc Mulcher will provide years of dependable service if routine maintenance procedures are performed. The maintenance tasks listed below are based on normal operating conditions. More frequent maintenance may be necessary with intense use or when operating in adverse environmental conditions.

MAINTENANCE TASK

Check skid steer loader hydraulic fluid level. A

Check that all fasteners (nuts, bolts., washers, place. Tighten as necessary.

Inspect and replace any worn, torn, or missing

Inspect hydraulic plumbing (hoses and connec leakage. Repair or replace hydraulic items as no

Check condition of disc and teeth. Replace dam

Check oil level in gear box motor. Add fluid as

Change gear box oil every 2,500 hours.

Disassemble and inspect disc assembly every 1

Check mulcher for major scratches and dings. these areas to prevent rust damage. Use a paint equipment which can be found at your local ha

MAINTENANCE LOG

Document all maintenance and service activities performed on this disc mulcher using the maintenance log included at the end of this manual.

5.2 MAINTENANCE SCHEDULE

	BEFORE Each USE	WEEKLY	YEARLY
add fluid as necessary.	•		
pins, keepers) are in	~		
g safety decals.	~		
ctors) for damage or necessary.	~		
naged or worn teeth.	~	~	~
necessary.	~	~	
			~
1,000 hours.			~
Sand and repaint nt formulated for farm nardware store.			~

5.3 STORAGE TIPS

To get years of quality use out of your disc mulcher, follow these tips when storing your disc mulcher:



THOROUGHLY WASH

then dry your disc mulcher. Ensure disc mulcher is free of debris, dirt, grime and grease.



STORE

your disc mulcher in a dry area such as in a shed or garage.



COVER

your disc mulcher with a waterproof tarp if storing outside.





Refer to the appropriate Disc Assembly Manual for detailed maintenance procedures. These manuals contain very important information that you must be familiar with.



WARNING

5.3 STORAGE TIPS

5.4 MULCHING DISC MAINTENANCE

Visit www.ironcraftusa.com/parts/ or scan the QR code to view or download the Disc Assembly Manual.

To avoid serious injury or death, please read and understand the additional safety instructions shown on the Disc Assembly Manual.

5.5 GEAR BOX MAINTENANCE

NOTICE

Maintenance procedures for gear boxes and drive bearing housings require special tools and skills. DO NOT attempt to service drive bearings or gear boxes unless you have the tools and skills to do so.

CHECKING FLUID LEVEL

- 1. Check the oil level weekly. Refill with ISO 150 EP grade gear oil.
- 2. Gear box must be level when checking the oil level.

3. Check the oil level by removing the oil filler plug. The oil level should be to the bottom of the oil filler plug.



NOTICE

Change oil every 2,500 hours. More frequent oil changes may be necessary if operating this mulcher in extreme hot conditions.

Refill with ISO 150 EP grade gear oil (approx oil filler port.

into an approved waste oil container.

4. Reinstall oil filler plug.

NOTICE

Gear box oil needs to be completely replaced yearly or at 2500 hours of use (which ever comes first).

NOTICE

Properly dispose of used oil. Visit <u>www.Earth911.com</u> to search for the nearest used oil recycling center near you.





GEAR BOX OIL CHANGE PROCEDURE

1. Remove oil filler plug and insert one end of a discharge hose into the oil filler port and the other end

2. Using a fluid removal pump, remove the old oil from the gear box unit.

3. Refill with ISO 150 EP grade gear oil (approx 5.0 quarts) until fluid level is up to the bottom of the



TROUBLESHOOTING

PROBLEM	CAUSE	RESOLUTION	
	Deck is not leveled properly	Refer to page 21 for leveling information	
	Dull Cutting Teeth	See Cutting Disc Manual	
Mulcher bogs down or loses power	Foreign material is "balling" under deck	Remove foreign material from under cutter deck	
	Cutter speed too slow or ground speed too fast	Increase engine RPMs and reduce ground speed	
	Oil flow too slow	Look for hydraulic leaks, and repair	
	Missing, loose, damaged or unbalanced cutting disc	Replace cutting teeth with new or Re-sharpened teeth	
	Damaged Disc	See Cutting Disc Manual	
Excessive Vibration	Gearbox loose on deck	Tighten and torque gearbox mounting bolts. Replace damaged bolts	
	Cutting height too low for cutting in sandy or rocky soils	Raise mulcher height	
Teeth get dull too quickly	Teeth have contacted solid objects	Clear cutting area of solid objects	
Teeth breaking	Excessive shock loads	Avoid hitting solid objects (rock, steel pipes, large tree stumps, etc.)	
Hydraulic oil level drops during operation	Motor seal leak; leak at mulcher motor or other plumbing; leak in skid steer hydraulic system	Ensure case drain is connected Investigate and repair	
Disc does not rotate when activating the	No oil flow	Confirm that quick disconnects are fully seated in their mating connector	
auxiliary hydraulic circuit	Motor or drive shaft have failed	Contact your dealer for repair or replacement services	

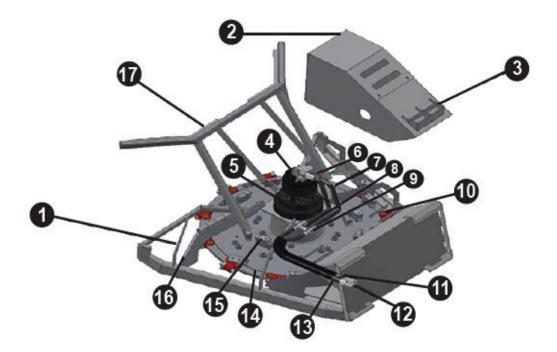
Factory fresh parts specifically designed for your implement are readily available. For hassle free service and to ensure you receive the correct parts for your implement, please provide your dealer with the following information.

MODEL	
SERIAL NUMBER	
GPM REQUIREMENTS	
DATE OF OWNERS MANUAL (Bottom Right Corner of Cover Page)	
PARTS DIAGRAM PAGE NUMBER	
PART DESCRIPTION	
REFERENCE NUMBER	
QUANTITY DESIRED	
SHIP TO INFORMATION	
BILL TO/PAYMENT INFORMATION	

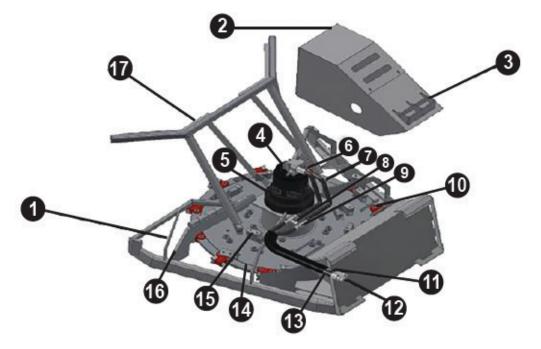
Use Genuine Parts from IronCraft.

5.5 GEAR BOX MAINTENANCE

PARTS INFORMATION



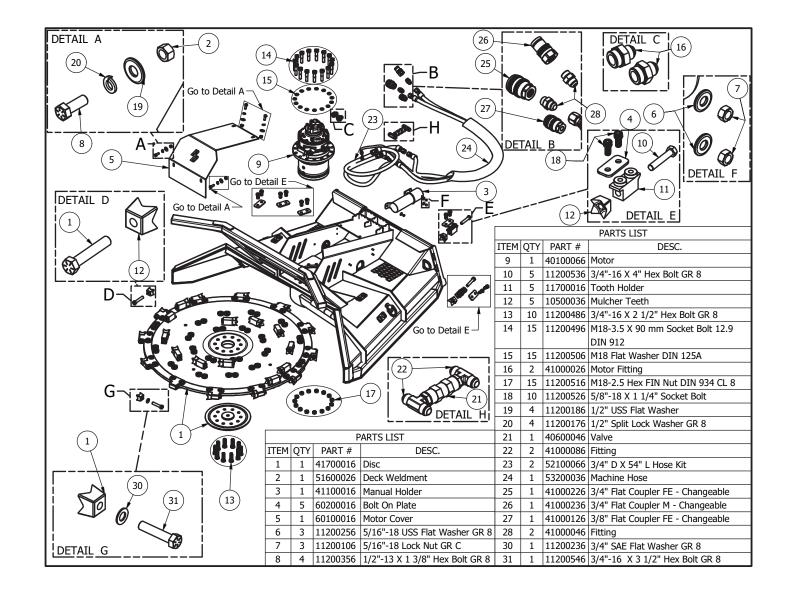
FDM44 PARTS			
REF	DESCRIPTION	QTY.	PART #
1	Deck Weldment (deck and sides invisible)	1	CID3001
2	Motor Cover Assembly	1	
3	Motor Cover Step	1	
4	Motor	1	
5	Gearbox	1	
6	JIC Adapter (motor to case drain hose)	1	HY1068
7	Hose (Motor to Tee)	1	CID1117
8	Tees	1	HY1105
9	H-Valve assembly (one way check with tees)	2	CID3047
10	Deck Grip Strips	1	
11	Hose (H-Valve assembly to main quick disconnect)	2	CID1010
12	Main quick disconnect set 3/4"		CID8004
13	Hose (H-Valve assembly to main quick disconnect)	3	CID1010
14	Mulching Disc	3	CID2078
15	Deck Mounted Teeth	2	CID2051
16	Deflector	1	
17	Pusher Bar Assembly	1	



FDM60 PARTS			
REF	DESCRIPTION	QTY.	PART #
1	Deck Weldment (deck and sides invisible)	1	CID3001
2	Motor Cover Assembly	1	
3	Motor Cover Step	1	
4	Motor	1	
5	Gearbox	1	
6	JIC Adapter (motor to case drain hose)	1	HY1068
7	Hose (Motor to Tee)	1	CID1117
8	Tees	1	HY1105
9	H-Valve assembly (one way check with tees)	2	CID3047
10	Deck Grip Strips	1	
11	Hose (H-Valve assembly to main quick disconnect)	2	CID1010
12	Main quick disconnect set 3/4"		CID8004
13	Hose (H-Valve assembly to main quick disconnect)	3	CID1010
14	Mulching Disc	3	CID2078
15	Deck Mounted Teeth	2	CID2051
16	Deflector	1	
17	Pusher Bar Assembly	1	

PARTS INFORMATION

PARTS LIST



IronCraft (the Manufacturer) warrants, only to the original Purchaser, this equipment will be free from defects in material and workmanship, under normal use and service, for one (1) year from the date of purchase providing this equipment is purchased for individual use only. Commercial use of this equipment is not covered under any warranty. This warranty does not apply to any equipment which has been damaged or which has been subjected to change, misuse, negligence, abnormal wear and tear, alterations, tampering, or failure to follow operating instructions. This warranty does not cover any product or parts not manufactured by IronCraft.

IronCraft disc mulchers have a five (5) year Limited Warranty* on gearbox components provided they have been properly maintained** and have not been subjected to abuse or misuse except as limited below.

* Gearbox warranty limitations:

sponsibility.

iii. Shearbolts must be approved Grade 2, 1/2 " x 3 " shearbolts.

**NOTE : "properly maintained" specifically includes, but is not limited to:

- i. Running gearboxes with the proper amount of correct lubricant.
- ii. Adjusting slip clutches correctly to provide proper protection for gearbox components and drive line.

Under this warranty, the Manufacturer will repair or replace any part which the Manufacturer determines has failed during the period of the warranty due to defects in material or workmanship. After written approval by the manufacturer, the equipment or defective part must be returned to IronCraft.

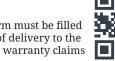
Warranty coverage and performance is expressly conditioned upon the return of the completed registration form to: IronCraft, 7 Rocky Mt Rd, Athens, Tennessee 37303. Registration can be found on our website www.ironcraftusa.com

IronCraft reserves the right to make improvements and changes in specifications without notice or obligation to modify previously sold units. The Owner's Manual describes the proper assembly procedures for your implement and furnishes operating and maintenance recommendations to help you obtain long and satisfactory service.

PURCHASER'S EXCLUSIVE REMEDY FOR BREACH OF WARRANTY, OTHER DEFECT, OR CONDUCT GIVING RISE TO LIABILITY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT SOLD, AND THE MANUFACTURER UNDER NO CIRCUMSTANCES SHALL BE LIABLE FOR ECONOMIC LOSS OR INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE MANUFACTURER DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR PURPOSE.

Purchaser and IronCraft hereby (a) submit to the non-exclusive jurisdiction of the courts of competent jurisdiction in Meigs County, Tennessee, and the United State District Court for the Eastern District of Tennessee for resolution of any dispute concerning this Limited Warranty or the rights or obligations of Purchaser and/or IronCraft; (b) agree that any litigation commenced in Tennessee in connection with this Limited Warranty shall be venued in either the Meigs County, Tennessee District

REGISTER



This registration form must be filled out within 30 days of delivery to the purchaser or future warranty claims will not be honored.



www.ironcraftusa.com/warranty/register-warranty/

MAKE CLAIM This form is for dealer use only. Do not use for warranty labor or

parts reimbursement.



www.ironcraftusa.com/warranty/claim-warranty/

LIMITED WARRANTY

LIMITED WARRANTY

i. Warranty is one (1) year for seals unless seals are damaged from debris wrapped around the input and or output shaft of the gearbox. After one year, seals are considered to be wearing parts, and the replacement is the owner's re-

ii. Gearboxes that are subject to warranty may be replaced with new or rebuilt gearboxes at the discretion of IronCraft



Court, or the United States District Court, Eastern District of Tennessee, Southern Division, and (c) waive any objection it may have as to any such action or proceeding brought in such court that such court is an inconvenient forum. Nothing herein shall limit the right of Purchaser or IronCraft (or the right of any permitted successor or assign of either) to bring proceedings against the other in the courts of any other jurisdiction wherein any assets of such other party may be located.



REIMBURSEMENT

This form is for dealer use only. Apply for warranty labor or parts reimbursement here.



https://www.ironcraftusa.com/warranty/reimbursement-form

SAFETY ACKNOWLEDGEMENT FORM

ATTN ALL OPERATORS: Print your name, sign and date in the boxes below to acknowledge that you have read and fully understand the safety instructions presented in this manual, and have been trained on how to safely operate this attachment.

OPERATOR NAME	SIGNATURE	DATE
		<u> </u>

Use this log sheet to document all routine maintenance and repair services performed on this machine.

DESCRIPTION OF MAINTENANCE	SERVICED BY	DATE

MAINTENANCE LOG

FIRONCRAFT

7 ROCKY MT RD Athens. Tennessee 37303

(P) 423-405-5150
(F) 423-405-5904
WWW.IRONCRAFTUSA.COM



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