

Owner / Operator Manual



HEAVY DUTY SINCE 1944

6001 E. Hwy 27 - Ozark, AL 36360 334.795.6603 - Fax: 334.795.3029

www.brownmfgcorp.com



Before operating your machine, stop and read this owners manual. Do not attempt to operate the unit until you fully understand the material covered in this manual. Without the knowledge contained in this manual, injury or death can result.

Copyright Information

Copyright ©2000 Brown Manufacturing Corporation, Ozark, Alabama. All photos and illustrations are property of Brown Manufacturing Corporation. This publication may be freely reproduced, either in whole or in part, provided that the content herein is not altered. We encourage you to make copies of this manual and to distribute it to every operator of the machine. Additional copies are also available from Brown Manufacturing Corporation or via our web site at <u>www.brownmfgcorp.com</u>.

Cover

Illustrated: Model HTS3-3640BA

Disclaimer

Due to engineering improvements and revision of product specifications, the information contained in this manual is subject to change without notice.

Contents

Warranty	4
Registration	6
Equipment Safety	9
Assembly	18
Operation	20
Maintenance	22
Troubleshooting	
Specifications	29
Replacement Parts	

BROWN MANUFACTURING CORP.

Limited Warranty

1. LIMITED WARRANTIES

- 1.01. Brown Manufacturing Corp. warrants for one year from the purchase date to the original non-commercial, governmental, or municipal purchaser ("Purchaser") and warrants for ninety (90) days to the original commercial or industrial purchaser ("Purchaser") that the goods purchased are free from defects in material or workmanship.
- 1.02. Manufacturer will replace for the Purchaser any part or parts found, upon examination at its factory, to be defective under normal use and service due to defects in material or workmanship.
- 1.03. This limited warranty does not apply to any part of the goods which has been subjected to improper or abnormal use, negligence, alteration, modification, or accident, damaged due to lack of maintenance or use of wrong oil or expendable items such as blades, shields, guards, or tires except as specifically found in your Operator's Manual.
- 1.04. Except herein, no employee, agent, Dealer, or other person is authorized to give warranties of any nature on behalf of the Manufacturer.
- 2. REMEDIES AND PROCEDURES
- 2.01. This limited warranty is not effective unless the Purchaser returns the Registration and Warranty Form to Manufacturer within 30 days of purchase.
- 2.02. Purchaser claims must be made in writing to the Authorized Dealer ("Dealer") from whom Purchaser purchased the goods or an approved Authorized Dealer ("Dealer") within 30 days after Purchaser learns of the facts on which the claim is based.
- 2.03. Purchaser is responsible for returning the goods in question to the Dealer.
- 2.04. If after examining the goods and/or parts in question, Manufacturer finds them to be defective under normal use and service due to defects in material or workmanship, Manufacturer will:
- (a) Repair or replace the defective goods or part(s) or
- (b) Reimburse Purchaser for the cost of the part(s) and reasonable labor charges (as determined by Manufacturer) if Purchaser paid for the repair and/or replacement prior to the final determination of applicability of the warranty by Manufacturer. (The choice of remedy shall belong to Manufacturer).
- 2.05. Purchaser is responsible for any labor charges exceeding a reasonable amount as determined by Manufacturer and for returning the goods to the Dealer, whether or not the claim is approved. Purchaser is responsible for the transportation cost for the goods or part(s) from the Dealer to the factory.
- 3. LIMITATION OF LIABILITY
- 3.01. . MANUFACTURER DISCLAIMS ANY EXPRESS (EXCEPT AS SET FORTH HEREIN) AND IMPLIED WARRANTIES FOR A PARTICULAR PURPOSE.
- 3.02. MANUFACTURER MAKES NO WARRANTY AS TO THE DESIGN, CAPABILITY, CAPACITY, OR SUSTAINABILITY FOR USE OF THE GOODS.
- 3.03. EXCEPT AS PROVIDED HEREIN, MANUFACTURER SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO PURCHASER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS, OR DAMAGE CAUSED OR ALLEGED TO BE CAUSED DIRECTLY OR INDIRECTLY BY THE GOODS INCLUDING, BUT NOT LIMITED TO, ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES RESULTING FROM THE USE OR OPERATION OF THE GOODS OR ANY BREACH OF THIS WARRANTY. NOT WITHSTANDING THE ABOVE LIMITATIONS AND WARRANTIES, MANUFACTURER'S LIABILITY HEREUNDER FOR DAMAGES INCURRED BY PURCHASER OR OTHERS SHALL NOT EXCEED THE PRICE OF THE GOODS.
- 3.04. NO ACTION ARISING OUT OF ANY CLAIMED BREACH OF THIS WARRANTY OR TRANSACTIONS UNDER THIS WARRANTY MAY BE BROUGHT MORE THAN TWO (2) YEARS AFTER THE CAUSE OF ACTION HAS OCCURRED.
 4. MISCELLANEOUS
- 4.01. Proper venue for any lawsuits arising from or related to this limited warranty shall be only in Dale County, Alabama.
- 4.02. Manufacturer may waive compliance with any of the terms of this limited warranty, but no waiver of any terms shall be deemed to be a waiver of any other term.
- 4.03. If any provision of this limited warranty shall violate any applicable law and is held to be unenforceable, then the invalidity of such provision shall not invalidate any other provisions herein.

4.04. Applicable law may provide rights and benefits to Purchaser in addition to those provided herein.

KEEP FOR YOUR RECORDS (ATTENTION: READ YOUR OPERATOR'S MANUAL)

ATTENTION: Purchaser should fill in the blanks below for his reference when buying repair parts and/or for proper machine identification when applying for warranty.

Brown Model

Date Purchased

Dealer

Brown Manufacturing Corp. 6001 E. Hwy 27 Ozark, AL 36360 800-633-8909 brown@brownmfgcorp.com



Serial Number

TO THE OWNER/OPERATOR/DEALER

In addition to the standard Limited Warranty shown on the facing page, Brown Manufacturing Corp. also provides:

- 1.) ONE-YEAR (12 months) {or 90 days for Commercial/Industrial Users} LIMITED WARRANTY on the hydraulic drive components provided they have been properly maintained[†] and have not been subjected to abuse or misuse.
- 2.) One year (12 months) LIMITED WARRANTY* on Bearing Block components provided they have been properly maintained[†] and have not been subjected to abuse or misuse except as limited below.

* WARRANTY LIMITATIONS - Bearing Block

- A) Warranty is ONE-YEAR (12 months) for Seals (After one year, seals are considered to be WEARING PARTS and replacement is user's responsibility).
- B) User's Bearing Blocks may be rebuilt by Brown Manufacturing Corp. or replaced by new or rebuilt Bearing Blocks at the option of Brown Manufacturing Corp.

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

A) Running Bearing Blocks with the proper amount of the correct lubricant.

To keep your implement running efficiently and safely read your manual thoroughly and follow these directions and the Safety Messages in this Manual. The Table of Contents clearly identifies each section where you can easily find the information you need.

The OCCUPATIONAL SAFETY AND HEALTH ACT (1928.51 Subpart C) makes these minimum safety requirements of tractor operators:

REQUIRED OF THE OWNER:

- 1. Provide a Roll-Over-Protective Structure that meets the requirements of this Standard, and
- 2. Provide Seat belts that meet the requirements of this paragraph of this Standard and SAE J4C; and
- 3. Ensure that each employee uses such seat belt while the skid steer is moving; and
- 4. Ensure that each employee tightens the seat belt sufficiently to confine the employee to the protected provided by ROPS.

REQUIRED OF THE OPERATOR:

- 1. Securely fasten seat belt of skid steer.
- 2. Where possible, avoid operating the skid steer near ditches, embankments, and holes.
- 3. Reduce speed when turning, crossing slopes, and on rough, slick, or muddy surfaces.
- 4. Stay off slopes too steep for safe operation.
- 5. Watch where you are going especially at row ends, on roads, and around trees.
- 6. Do not permit others to ride.
- 7. Operate the skid steer smoothly no jerky turns, starts, or stops.
- 8. Hook up the Tree Saw properly and inspect all mechanical connections for proper fit.
- 9. When the skid steer is stopped, set brakes securely and use park lock, if available.

Please complete the form below and mail to: Brown Mfg. Corp. - 6001 E. Hwy. 27 - Ozark, AL 36360

BROWN MANUFACTURIN	G CORP. ® WAR	RANTY REGISTRATION INF	ORMATION
Brown Model	Serial No	Purchase Date (mm/dd/y	y)//
Purchaser Last Name		First Name	M.I
Street & No., RFD,			
Box, &/or Apt. No			<u> </u>
City:		State or Province:Z	ip
Dealer:			
City:		State or Province	Zip

I have informed the Purchaser of this product of Warranty terms, provisions, and procedures that are applicable, reviewed the contents of the Operator's Manual including safety equipment, safe operation, and maintenance, reviewed the Safety Signs on implement (and Skidsteer if possible), and Purchaser's responsibility to train his operators in safe operation.

IMPLEMENTS: I have explained that Deflectors must be maintained in good repair and installed except in areas where persons, vehicles, livestock, or other property will not be endangered by thrown objects and where such safety equipment would prevent the TreeSaw's reasonable performance of its assigned task.

Dealer's Signature:

6

I have been instructed on the paragraphs above, received and have been instructed on the contents of the Operator's Manual including safety signs, safety equipment, safe operation, maintenance, and the potential hazards of unauthorized alterations or modifications of the product. I have been informed of the warranty provisions and know that the warranty is not in effect until this form is received by Brown Manufacturing Corp.

I understand the Implement Guarding statements above and the potential hazards of operating without such guards. I understand that the operator is responsible for the safety of others in the area. I have examined the product and accept it as being complete and in satisfactory condition with all required guards.

CUSTOMER COPY

Purchaser's Signature:

Date:

Date:

PRE-DELIVERY SERVICE CHECK AND ADJUST OR LUBRICATE AS REQUIRED

See Operator's Manual for Details

Inspection performed — Warranty and Safety Procedures Explained — Installation Complete

Bearing Block (Grease Level)	
	Bearing Block Vent Plugs (Location and Operation)
	Deflectors Front and Rear
	Correct Blade Rotation Direction
All Lubrication Points Greased	□ All Bolts — Pins and Nuts (Proper Torque)
	Cutting Height
□ Protective Shields (Operation and Installation)	
□ Safety Decals (Installed)	□ Operator's Manual (Supplied)
	□ S.M.V. Emblem (Installed if Needed)

Purchaser's Signature_

__Date____

BROWN MANUFACTURI	NG CORP. ® WA	RRANTY REGISTRATIO	ON INFORMATION
Brown Model	Serial No	Purchase Date (m	m/dd/yy)//
Purchaser Last Name		First Name	M.I
Street & No., RFD,			
Box, &/or Apt. No			
City:			Zip
Dealer:			
City:		State or Province	Zip
	-		ions, and procedures that are
applicable, reviewed the con	-		
tion, and maintenance, review	-		id steer if possible), and
Purchaser's responsibility to			
IMPLEMENTS: I have exp			• •
except in areas where person			e ;
thrown objects and where su	ch safety equipm	ent would prevent the Tree	e Saw's reasonable perfor-
mance of its assigned task.		01	
Dealar's Signature:		Da	to:
Dealer's Signature:	norographs abou	Da	
I have been instructed on the			eration, maintenance, and the
potential hazards of unauthor			
of the warranty provisions ar		-	
Brown Manufacturing Corp.		warranty is not in criect un	the this form is received by
I understand the Implement		nts above and the notentia	l hazards of operating with-
out such guards. I understand		-	
have examined the product a	· · ·	-	-
required guards.	nd decept it as be	ang complete and in satisfi	congregation with an
CUSTOMER COPY			
Purchaser's Signature:		D	pate:

Please complete the form below and mail to: Brown Mfg. Corp. - 6001 E. Hwy. 27 - Ozark, AL 36360

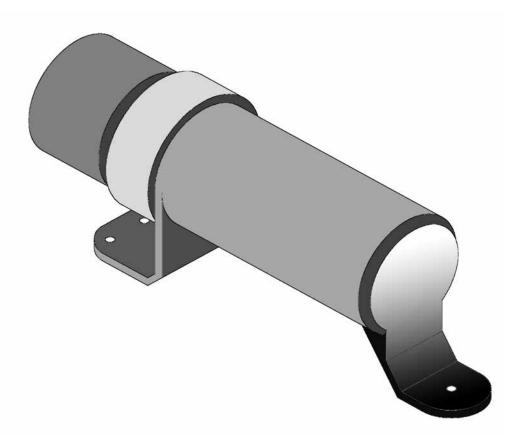
PRE-DELIVERY SERVICE CHECK AND ADJUST OR LUBRICATE AS REQUIRED

See Operator's Manual for Details

Inspection performed — Warranty and Safety Procedures Explained — Installation Complete

inspection performed and survey i	1 1
Bearing Block (Grease Level)	□ Drivelines (Proper Length and Lubrication)
	□ Bearing Block Vent Plugs (Location and Operation)
	Deflectors Front and Rear
	Correct Blade Rotation Direction
All Lubrication Points Greased	□ All Bolts — Pins and Nuts (Proper Torque)
	Cutting Height
□ Protective Shields (Operation and Installation)	
□ Safety Decals (Installed)	Operator's Manual (Supplied)
	□ S.M.V. Emblem (Installed if Needed)

IMPORTANT NOTICE: OWNER'S MANUAL STORAGE CONTAINER

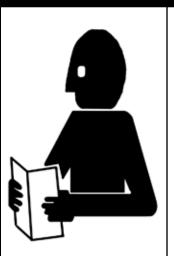


- * Brown Manufacturing provides an Owner's Manual storage container on all equipment.
- *This holder is mounted in a convenient location and provides the owner with the proper safety and operation information.
- *Two (2) copies are provided with each unit.
- *One copy is for the owner to have at office for review when not operating the equipment.
- *Second copy is to stay with the unit at all times. This will provide the operator the information needed for safe and proper operation of the unit.
- *If the Owner's Manual becomes lost or damaged, contact Brown Mfg. or your local Brown dealer for free replacement, or it can be downloaded and printed from our web site www.brownmfgcorp.com.

Warning: Read this manual before operation.

Operators of the equipment must read and understand this manual. Failure to read this manual and follow these safety and operating instructions could result in serious bodily injury or even death.

WARNING



Before operating your machine, stop and read this owners manual. Do not attempt to operate the unit until you fully understand the material covered in this manual. Without the knowledge contained in this manual, injury or death can result.

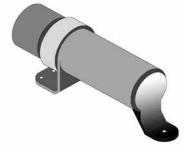
Each operator of the equipment should review this manual every six (6) months. You are encouraged to duplicate this manual and to distribute it to each operator of the equipment for their training and reference. Additional copies are available from Brown Manufacturing Corporation.

IMPORTANT NOTICE:

OWNER'S MANUAL STORAGE CONTAINER

- * Brown Manufacturing provides an Owner's Manual storage container on all equipment.
- *This holder is mounted in a convenient location and provides the owner with the proper safety and operation information.
- *Two (2) copies are provided with each unit.
- *One copy is for the owner to have at office for review when not operating the equipment.
- *Second copy is to stay with the unit at all times. This will provide the operator the information needed for safe and proper operation of the unit.
- *If the Owner's Manual becomes lost or damaged, contact Brown Mfg. at 800-633-8909 or your local Brown

dealer for free replacement, or can be downloaded and printed from our web site www.brownmfgcorp.com.



Recognize safety information

This is the safety alert symbol. When you see this symbol on your equipment or in this manual, be alert to the potential for personal injury or injury to others.

Understand signal words

DANGER indicates an imminently hazardous situation which, if not avoided, <u>will</u> result in <u>death or serious injury</u>

WARNING indicates a hazardous situation which, if not avoided, <u>could</u> result in <u>serious injury or death.</u>

CAUTION indicates a potentially hazardous situation which, if not avoided, <u>may</u> result in <u>minor or moderate injury</u>.

NOTICE indicates information considered important but not directly hazard related. (e.g. security, hygiene, equipment or property damage).

Follow safety instructions

- Read owner/operator manual.
- Replace missing or damaged safety decals.
- Safety decals and this manual must be considered a permanent part of your equipment.
- Should ownership of the equipment be transferred, this manual must also be transferred.
- Unauthorized modifications to the equipment are not recommended. This could impair the function, safety, and life of the machine.
- For any part of this manual that you do not understand, contact your dealer or Brown Manufacturing Corporation at (800) 633-8909.
- All implements with moving parts are potentially dangerous. Due to this fact, there is no substitute for a safe, knowledgeable operator. It is important that all persons operating this equipment read, understand, and follow the instructions provided in this manual.

DO NOT OPERATE THIS UNIT IF YOU ARE UNDER THE INFLUENCE OF ALCOHOL, ILLEGAL DRUGS, OR ANY PRESCRIPTION OR OVER THE COUNTER MEDICATIONS THAT COULD CAUSE DROWSINESS, DIZZINESS, DISORIENTATION AND/OR IMPAIR YOUR ABILITY IN ANY WAY TO SAFELY OPERATE THE UNIT.

DO NOT OPERATE THIS UNIT IF YOU SUFFER FROM ANY PHYSICAL CONDITION OR DISABILITY THAT WOULD IMPAIR YOUR ABILITY TO OPERATE IT SAFELY.



NOTICE

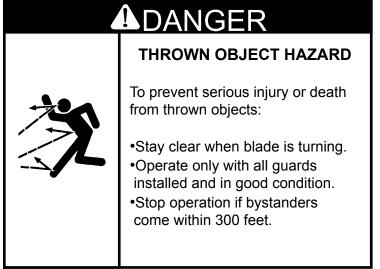
10

Safety Decals

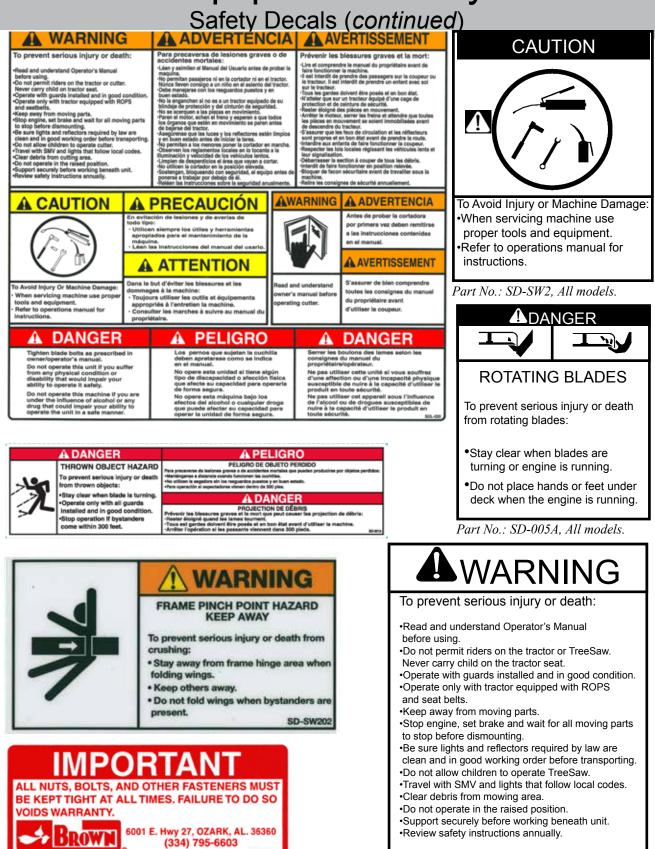
The following safety decals should be attached to the equipment at all times. Should any decals become damaged or lost, it is the responsibility of the owner to replace it. Additional decals may be obtained from the dealer or Brown Manufacturing Corporation.

	Antes de probar la unidad por primera vez deben remitirse a las instrucciones contenidas en el manual.
Read and understand owner's manual before operating unit.	

Part No.: SD-010, All models.

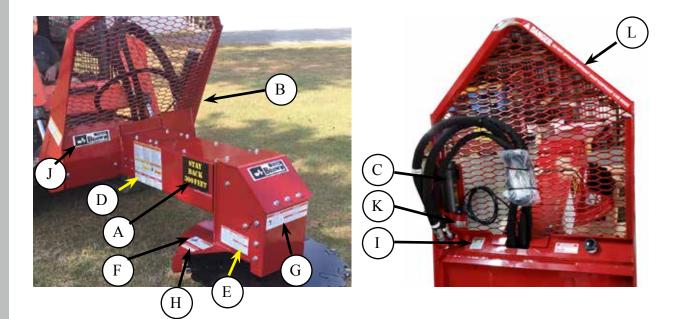


Part No.: SD-001A, All models.



Part No.: SD-009A, All models.

Safety Decals (continued) Safety decals must be positioned as illustrated below. Use this diagram to correctly identify missing, damaged, or illegible decals for replacement.



DO NOT OPERATE WITHOUT SHATTERPROOF CAB DOOR DANGER A DANGER A

Ref. No.	Part No.	Qty	Description	
А	237-0020	2	Safety Decal: Stay Back 300 Feet (Both Sides)	
В	SD-020	2	Safety Decal: Inspect and tighten all fasteners.	
С	MH-01	1	Safety Manual Holder	
D	SDL-020	1	Safety Decal: Multiple decals on one sheet - includes SD-101, SD002, SD-009A and SD-SW2	
Е	SD-005A	2	Safety Decal: DANGER Rotating Blade. (Both Sides)	
F	SD-SW202	2	Safety Decal: Pinch Hazard (Both Sides)	
G	SD-001A	1	Safety Decal: DANGER Thrown Object Hazard.	
Н	237-0009	3	afety Decal: No Step. (Both Sides and Rear)	
Ι	237-0002	2	Safety Decal: High Pressure Fluid Hazard (Both Sides)	
J	DC-3-11-002	3	Brown Logo (Sides and Front)	
K	Serial Plate	1	Tree Saw Serial Plate	
L	237-SDW2	1	Danger Decal: Do Not Operate Without Shatterproof Cab Door (On Brush Guard)	

Warning! Transport with care.

Before transporting to a new location, make certain that the slow-moving vehicle (SMV) emblem is installed and is clearly visible. Use flashing lights and follow local traffic regulations.

Danger! Protect bystanders, clear work area of debris.

Do not operate the unit near people. Debris can be thrown hundreds of feet. Clear work area of foreign objects such as wire, glass, and other debris. Debris thrown by the unit can cause serious injury or death.

Warning! Parking and dismounting. The rotating parts of this unit continue to rotate even after the hydraulics have been disengaged. The operator should remain seated until rotation has stopped. He should then set the brake, turn off the engine, and remove the key. See skid steer manual

Caution! Avoid fires.

for proper parking procedure.

Keep the machine clean of debris, trash, and any other flammable material.



Transport with care. Use slow-moving vehicle emblem and flashing light. Follow local traffic regulations.

Do not operate unit near bystanders. Clear work area of debris before operating.



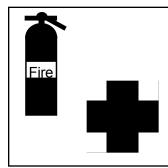
Wait for all rotation to stop before dismounting skid steer.



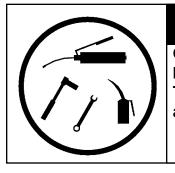
Keep machine clean of debris. Flammable debris on machine poses fire hazard.

Warning! Fasten Seatbelt! Before Starting Engine! Always Wear Your Seatbelt.





Prepare for emergencies. Keep fire extinguisher and first aid kit available.



Check equipment before operation. Tighten all nuts and bolts.

Rotating blades.

Keep hands and

feet from under

TreeSaw deck.

AWarning! Prepare for emergencies.

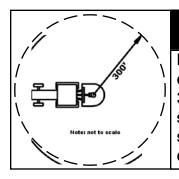
Keep fire extinguisher and first aid kit available. Inspect fire extinguisher and check for charge daily. Check first aid kit for expired contents and keep stocked.

AWarning! Check equipment before operating.

Tighten all nuts and bolts before operating. Make certain that equipment is lowered to ground before attempting to make adjustments or perform maintenance. Replace or repair any safety device, bolts, etc., if damaged or worn.

ADanger! Stay clear of rotating blade.

The TreeSaw is designed to cut trees and brush up to six inches in diameter. Keep hands and feet away from blade!



Maintain safety distance of at least 300 ft. Failure to do so may cause serious injury or death.

Danger! Maintain safety distance.

The TreeSaw creates a serious discharge hazard. Always maintain a safety distance of at least 300 ft. Never operate TreeSaw with bystanders present!

A DANGER DO NOT OPERATE WITHOUT SHATTERPROOF CAB DOOR DANGER A



Wear close-fitting clothing and other protective devices appropriate for the job.

Image: Control of the second seco

Wear protective clothing.

Warning! Roll-over protection.

Do not operate the TreeSaw on any tractor not equipped with a certified roll-over protective structure (ROPS).



Use only with skid steer equipped with a certified roll-over protective structure.

Warning! Slopes and rough terrain.

When operating on slopes or rough terrain, decrease travel speed. Do not operate in an area where the tractor could roll over. **Be sure to fasten safety belt when operating skid steer!**



Blade tip bolts may loosen with use and must be tightened. Follow maintenance instructions in this manual (see page 23). If the TreeSaw is operated with loose blade bolts, blade and blade hub will be damaged. Operation with loose blade bolts, damaged blade or blade hub will lead to blade ejection and will cause serious injury or death.



Slow travel speed when operating on slopes or rough terrain.



Tighten blade bolts as prescribed in owners manual. Ejection of blade will cause serious injury or death.



Riders can be injured or killed. Keep riders off machine.

ADanger! Keep riders off machine.

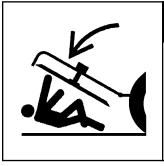
Riders can be seriously injured or killed by entanglement or by falling.



- Relieve pressure on system before repairing or adjusting or disconnecting.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair. 237-0002

Warning! High Pressure Fluid Hazard.

The Hydraulic Tree Saw is equipped with hydraulic hoses and cylinders, use all safety precautions when working around hydraulic componenents.



Exercise caution while working under TreeSaw deck. Failure to heed warnings may lead to serious injury or death.

AWarning! Hazardous service conditions.

While working under the TreeSaw, be aware of safety hazards. Follow safety precautions specified in this manual (see page 22). Failure to exercise caution may lead to serious injury or death.

DO NOT OPERATE THIS UNIT IF YOU ARE UNDER THE INFLUENCE OF ALCOHOL, ILLEGAL DRUGS, OR ANY PRESCRIPTION OR OVER THE COUNTER MEDICATIONS THAT COULD CAUSE DROWSINESS, DIZZINESS, DISORIENTATION AND/OR IMPAIR YOUR ABILITY IN ANY WAY TO SAFELY OPERATE THE UNIT.

DO NOT OPERATE THIS UNIT IF YOU SUFFER FROM ANY PHYSICAL CONDITION OR DISABILITY THAT WOULD IMPAIR YOUR ABILITY TO OPERATE IT SAFELY.

Cutting Attitude

Barking up a tree the correct way!



The blade level with the ground.



If you have to bark up a tree do it this way. Make sure the tree falls away from you.



Don't try this at home, or on the range. This is **NOT** recommended at any time.

If you feel you must, BACK UP ONLY! Use the smallest angle you can. This can cause injury and/or damage to your machine if done incorrectly!

Assembly



BROWN MFG. AT 1-800-633-8909

Operation

Before hitching Tree Saw to your Skid steer, make sure all safety devices are installed on both the Tree Saw and the Skid steer.



Please follow all safety instructions and procedures.

Attach Equipment to Skid steer.

Be sure the Skid steer is equipped with the correct attachment points. Be extremely careful when positioning skid steer for attachment to equipment. Do not allow personnel between skid steer and equipment when positioning to attach.



CAUTION Never allow anyone between the Skid steer and equipment during the hitching process.

Be certain that the Tree Saw has been lubricated properly and check grease level in bearing block prior to use.

Adjust Cutting Height.



Be certain that Skid steer engine is stopped, park brakes are set, key is removed, and all rotation of the Tree Saw has ceased before dismounting to making adjustments.

Your Brown Tree Saw is designed to cut at ground level, however for optimum blade and tip life adjust to approximately 1" above ground level.

Herbicide Tank and Pump

Your Tree Saw is equipped with a 5 gallon spray tank and 12 volt electric pump for use with water based herbicides. Please follow herbicide manufacturer's directions for mixing ratios and treatment amounts. The spray tip is adjustable from stream to mist. The pump is actuated remotely from the cab. After the tree is cut, spray the stump to halt regrowth of the vegetation. The spray tip is directly behind the blade, in a recessed guard.

Operation

Starting Tree Saw

Power for operating the Tree Saw is supplied from the Skid steer hydraulics. Refer to your Skid steer manual for instructions on engaging and disengaging the hydraulic remote.

Operating Speed

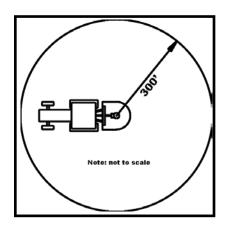
Proper operating speed for equipment will depend upon the height, density, and type of the material to be cut. Regardless of chosen ground speed, always operate the Tree Saw at the recommended RPM when cutting.

General Operation

Warning! Avoid personal injury or death. Walk the area before operation begins. Remove or flag all rocks and any other hazardous debris from site.

Observe the following guidelines when operating the Tree Saw:

- Never lower the Tree Saw onto material.
- Avoid tight turns near trees or other objects. The unit may be damaged by side impact.



Remember: The safe operation of this equipment is the responsibility of the operator. The operator should be familiar with both the skid steer and the equipment. The operator must read and understand all applicable operator manuals and follow all safety practices.

Warning! Avoid personal injury or death. Never operate machine around bystanders. Always maintain a distance of at least 300 feet.

DO NOT OPERATE THIS UNIT IF YOU ARE UNDER THE INFLUENCE OF ALCOHOL, ILLEGAL DRUGS, OR ANY PRESCRIPTION OR OVER THE COUNTER MEDICATIONS THAT COULD CAUSE DROWSINESS, DIZZINESS, DISORIENTATION AND/OR IMPAIR YOUR ABILITY IN ANY WAY TO SAFELY OPERATE THE UNIT. DO NOT OPERATE THIS UNIT IF YOU SUFFER FROM ANY PHYSICAL CONDITION OR DISABILITY THAT WOULD IMPAIR YOUR ABILITY TO OPERATE IT SAFELY.

Maintenance

Safety When Working Under TreeSaw

Never work under the Tree Saw until:

- The Tree Saw is sufficiently braced and supported
- The Skid steer engine is off, brake is set, and key is removed
- Tracks have been secured with chocks
- The Tree Saw has cooled

Danger! Failure to follow these safety guidelines will result in serious injury or death.



Initial Maintenance

Warning! These maintenance practices must be followed every hour for the first eight hours of operation; the practices must also be performed every hour for the first eight hours following the removal/replacement of any of the components named in this section. Check daily thereafter.

- 1. Check for debris deposited between the blade and the deck. Debris found jamming or locking the blade must be removed.
- 2. Check torque on carbide tip bolts (should be 25 ft/lbs min.) and check for any play in the blade/ bearing block.

Warning! Failure to tighten blade tip bolts and blade bar nut can cause blade tips, blade tip bolts, blade, or output shaft to break, which can result in injury or death.

- 3. Check for debris deposited around the output shaft.
- 4. Tighten bearing block mounting bolts.

Caution! Failure to keep the bearing block bolts tightened can cause the blade to strike the bottom of the Tree Saw or break the output shaft of the bearing block.

Daily Maintenance

- 1. Repeat all steps listed under the "Initial Maintenance" section on a daily basis after the initial maintenance has been performed.
- 2. Check and maintain the proper amount of lubricant in the bearing block. The recommended lubricant for the bearing block is Mobiltemp SHC 32 Grease.
- 3. Check the blade and blade tips; replace blade tips as necessary.

Warning! Use only blades and blade tips supplied by Brown Manufacturing Corporation. Failure to do so will void all warranty and can cause injury or death. Only Brown has access to the engineering and test data necessary to produce a high-quality blade that meets all safety and quality requirements.

Maintenance

Tightening Carbide Tip Bolts

Inspect carbide tip screws each hour for the first eight hours of use for proper torque. Repeat hourly inspections each time the carbide tips are removed/replaced.

- 1. Disengage hydraulics; be certain that all rotation has stopped.
- 2. Lift Tree Saw high enough to place suitable supports under the Tree Saw deck.
- 3. Turn Skid steer engine off; remove key; lock transmission and brakes; chock wheels or tracks.
- 4. Disconnect hydraulic lines.

Warning! Failure to keep blade bolts tight can and will cause: blade breakage; warping of blade; and/or ejection of blade from TreeSaw. These hazards can cause serious injury or death.

Warning! If blade tip bolts are allowed to run loose, the obvious danger is for the bolts to come out, allowing the blade tips to be ejected from the Tree Saw.

A The described occurrences will cause the blade to break and be ejected. An ejected blade can and will cause serious injury or death.

Proper Bearing Block Lubrication

Connect grease gun, with proper lubricant (Mobiltemp SHC 32 Grease), onto grease fitting on bearing block. Pump grease into unit until grease comes out of pressure vent in the opposite side of the bearing block. Do not overgrease. Make certain both fittings are tightened securely before operating.

Ordering replacement parts

Please contact the nearest Brown dealer for replacement parts. Or call Brown Mfg. at 800-633-8909 for parts or technical information. Please have model and serial number available when ordering parts.

Maintenance

Ordering replacement parts Please contact the nearest Brown dealer for replacement parts. Or call Brown Mfg. at 800-633-8909 for parts or technical information. Please have model and serial number available when ordering parts.

THE TEN COMMANDMENTS OF OPERATION

- 1. ALWAYS Read and understand the owners manual before operating this or any other equipment.
- 2. ALWAYS Attach this product to a skid steer that has suitable safety equipment properly installed .
- 3. ALWAYS Operate this equipment with all safety equipment properly installed on this equipment.
- 4. ALWAYS Start the cutting process by inspecting, walking, flagging or removing all foreign material from job site.
- 5. ALWAYS Do NOT allow riders or bystanders within 300 feet of this unit during operation.
- 6. ALWAYS Check all bolts, fasteners, fittings and oil levels before operating this equipment.
- 7. NEVER Allow blades to make contact with rocks, unit was not designed for this type of operation.
- 8. NEVER Allow an untrained operator to operate this equipment.
- 9. ALWAYS Install genuine Brown replacement parts, all other replacement parts will void warranty.
- **10.ALWAYS REMAIN in cab until the blade has stopped rotating and all skid steer shut down procedures have been completed.**

THESE ARE ONLY A FEW OF THE SAFETY PROCEDURES THAT MUST BE FOLLOWED TO INSURE THE SAFE OPERATION OF THIS EQUIPMENT – MANY OTHER SAFETY RELATED POINTS ARE STATED THROUGHOUT THIS MANUAL

WARNING: FAILURE TO FOLLOW THE TEN COMMANDMENTS CAN AND WILL CAUSE SERIOUS INJURY OR DEATH

IF YOU HAVE ANY SAFETY, MAINTENANCE OR OPERATIONAL QUESTIONS – PLEASE CALL BROWN MFG. BEFORE USING THIS EQUIPMENT AT 1-800-633-8909

Maintenance Log

Maintenance/Repair Log

Please record all maintenance and repair services performed on the TreeSaw. This log may help identify reoccurring problems with your TreeSaw and may be requested by the manufacturer when making warranty claims. Additional log pages may be copied or ordered from Brown Mfg. Corp.

Date	Function	Part(s) Involved	Initials
	Initial Maintenance		
	⑦ 1 st Hour		
	[®] 2 nd Hour	Bearing block, blade, blade carrier bolts, blade retaining bolt.	
	(b) 3 rd Hour	bons, blade retaining bon.	
	I 4 th Hour		
	© 5 th Hour		
	① 6 th Hour]	
	⑦ 7 th Hour		
	② 8 th Hour		

Notes

Ordering replacement parts Please contact the nearest Brown dealer for replacement parts. Or call Brown Mfg. at 800-633-8909 for parts or technical information. Please have model and serial number available when ordering parts.

Troubleshooting

Problem	Possible Cause(s)	Possible Solution(s)
Excessive vibration	 Loose bearing block bolts Loose blade hub Blade not freely spinning Broken, bent, or warped blade Blade hub not seated properly on shaft 	 Tighten bolts Tighten blade hub nut or blade bolts Clear blade of obstruction or replace blade. Replace blade Remove blade; clean hub and shaft; lubricate with anti-sieze, reseat
Overheating bearing block	 Insufficient lubricant level Improper lubricant Debris build-up around bearing block Worn Bearings 	 Fill to full level Replace with correct lubricant Remove debris Rebuilt Bearing Block/Consult Dealer
Noisy bearing block	 Worn bearings Insufficient lube level 	 Replace bearing Add lube.
Leaking Bearing Block	 Damaged grease seal Bent shaft Grease seal installed incorrectly Grease level too high Shaft rough or pitted in grease seal area Shaft bore worn in casting Loose bolts 	 Replace seal Replace seal and shaft Replace seal Replace vent plug (vent is blocked) Replace shaft Replace casting or bearing block Tighten bolts.
Short carbide life	 Cutting too low Cutting in sandy or rocky conditions Inadequate carbide tips Ground speed too fast 	 Increase cutting height Increase cutting height Replace with Brown carbide tips Slow ground speed
Not cutting clean	 Dull carbide tips Insufficient hydraulic flow TreeSaw not level Ground speed too fast Blade not spinning freely Low engine RPM 	 Sharpen and balance or replace blade tips Use correct hydraulic flow Adjust TreeSaw Reduce ground speed Clear blade of obstruction Maintain RPM to correct blade speed

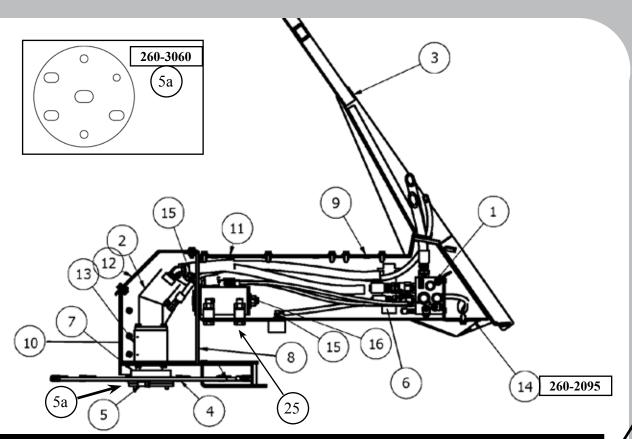
Specifications

Model	Bearing block		Weight	
HTS3-3640BA	C-Frame	36"	lbs.	

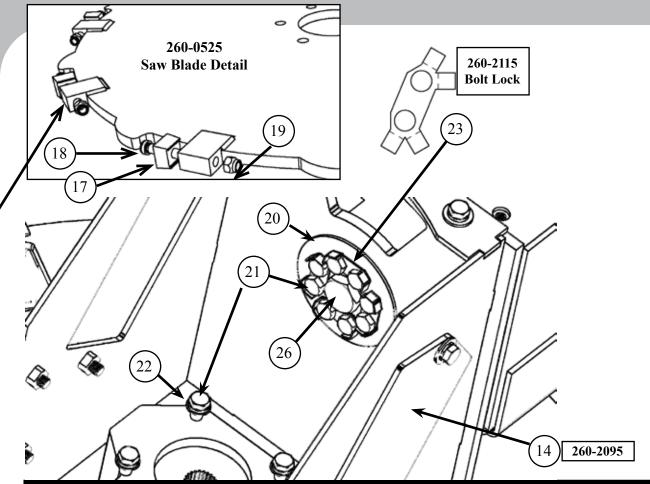
Standard Features			
All welded, steel frame			
An welded, steel frame	 	 	

Ordering replacement parts

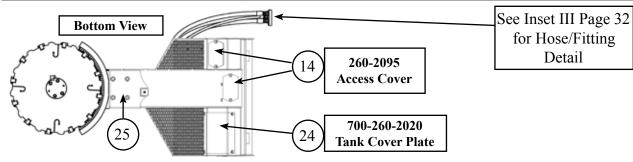
Please contact the nearest Brown dealer for replacement parts. Or call Brown Mfg. at 800-633-8909 for parts or technical information. Please have model and serial number available when ordering parts.



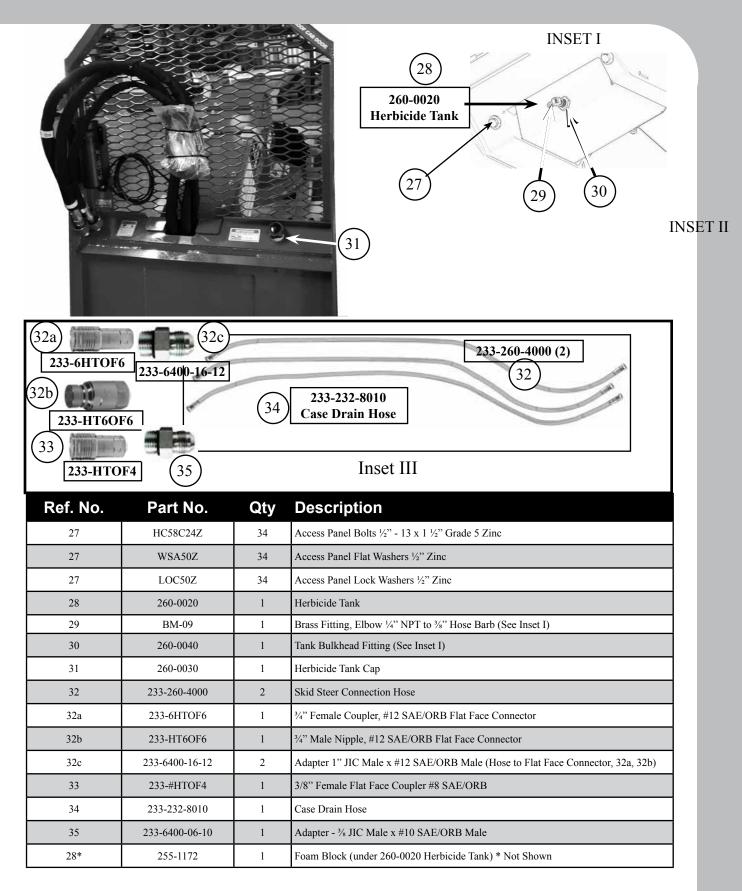
Ref. No.	Part No.	Qty	Description
1	233-260-2515	1	Hydraulic Control Block installed with HC56C16Z Bolt and WUS38Z flat washer
2	233-260-3080C	1	High Flow Piston Motor
3	260-2090	1	Tree Saw Base Weldment
4	260-0525	1	36" Blade with Cutting Tips, Through Hole Design (See Page 34 for install.)
5	260-0650	1	Blade Cover Plate
5a	260-3060	1	Blade Lock Plate (above #5, against blade)
6	260-1210	1	Herbicide Pump 1.0 GPM See Page 33 for further info.
7	260-2041	1	Saw Tapered Hub with Keyway
8	260-2065	1	36" Saw Head Weldment
9	260-2070	1	Top Access Cover
10	260-2110	1	Saw Head Front Cover
11	260-2080	1	Rotator Access Panel
12	260-2105	1	Saw Head Top Cover
13	260-4000	1	Overhung Load Adapter
14	260-2095	4	2 Bolt Access Cover
15	260-550-KIT	1	Spray Nozzle Kit (See Page 33, Inset IV for details)
16	233-260-5000	1	Hydraulic Rotary Actuator See Page 33 for hose details



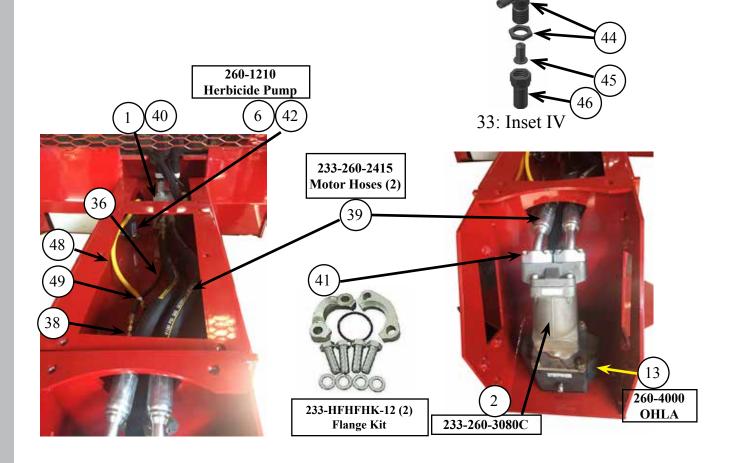
Ref. No.	Part No.	Qty	Description
17	255-2601	10	Carbide Overlay Tooth, Flat Bottom
18	HS86S5C24	10	Hex Socket Shoulder ³ / ₈ " x 1 1/2" NC Grade 8
19	NNF85CZ	10	Nylock Flange Nut 5/16" NC Grade 8
20	260-2100	1	Center Rotator Locking Spacer
21	HC88C24Z	18	Bolt, ¹ / ₂ "-13 x 1 ¹ / ₂ " Grade 8 Zinc (4 Bearing Block Mounting, 4 Hyd. Motor Mounting)
22	WSA50Z8	8	Flat Washer SAE, ¹ / ₂ " Grade 8 Zinc (4 Bearing Block Mounting, 4 Hyd. Motor Mounting)
23	260-2115	4	Rotator Bolt Lock
24	700-260-2020	1	Base Bottom Cover Plate
25	HC816C64Z	4	1"-8 x 4" Bolt Grade 8 (Rotator Mounting Bolts)
25	NNE81CZ	5	1"-8 Nylock Nut Grade 8 Zinc
25	WSA81Z	5	Washer, Flat SAE 1" Grade 8 Zinc
26	HC816C176Z	1	Bolt 1"-8 x 11" HCS Grade 8 - Zinc with NNE81CZ and WSA81Z

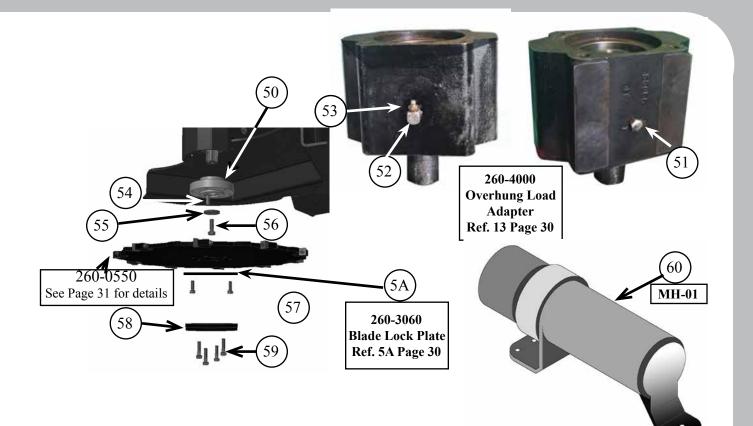


31



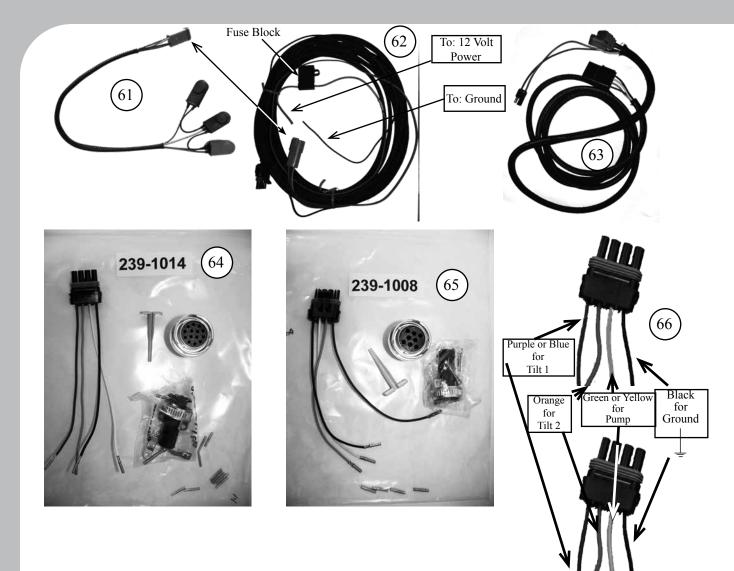
Ref. No.	Part No.	Qty	Description
36	233-260-4220	1	Rotator Control Hose #1
37	233-260-4225	1	Rotator Control Hose #2 (not shown, on left side)
38	233-6801-04-04	2	Rotator Fitting ¹ /4" JIC Male x #4 SAE/ORB Male 90°
39	233-260-2415	2	Hoses, Control Block to Motor
40	233-S16-J16-JF16	2	1" JIC Male x 1" JIC Female In-Line Full Flow Swivel Joint (at Control Block)
41	233-HFHFHK-12	2	³ ⁄ ₄ " Code 62 Flange Kit
42	HC54C20Z	4	Herbicide Pump Bolts with HN514CZ nut and WUS14Z
43			
44	BM-07	1	Nozzle Body, barb 3/8" 90° Brass
45	260-50SS	1	50 Mesh SS Check Valve Strainer
46	260-5500	1	Adjustable Conejet Tip
47			
48	260-38600	7 ft.	3/8" 600 PSI PVC Spray Hose (Yellow)
49	260-7640	4	No. 8 Worm Gear Mini Hose Clamp SS (On Spray Hose)





Ref. No.	Part No.	Qty	Description
50	260-2041	1	Saw Blade Hub
51	255-1401	1	1/4" Vent PTF Relief Fitting Straight
52	255-1418	1	Adapter Fitting 1/4" Male x 1/8" Female NPTF Zinc 90°
53	255-1899	1	Grease Fitting 1/8" PTF Zinc Straight
54	700-260-2005	1	³ / ₈ " x 1.5" Hub Key
55	700-260-3630	1	Hub Retaining Washer
56	HC810F32Z	1	5%"-18 x 2" HCS Grade 8 Bolt
57	HC88C24Z	2	¹ / ₂ "-13 x 1 ¹ / ₂ " Grade 8 Zinc Bolt
57a	WSA50Z8	86	Flat Washer SAE, ¹ / ₂ " Grade 8 Zinc, (Use on Items 57 and 59)
58	260-0600	1	Bottom Wear Plate
59	HC88C32Z	4	¹ / ₂ "-13 x 2" Grade 8 Zinc Bolt
60	MH-01	1	Manual Holder Tube (Located on rear of Limb Guard)
60	CB5516C12Z	2	Manual Holder Attaching Bolt 5/16-18 x 3/4" Gr5 USS Zinc Carriage Head Bolt
60	NNE516CZ	2	Manual Holder Attaching Nut Nylon Lock 5/16-18 Zinc
60	WUS516Z	2	Manual Holder Attaching Washer Flat USS 5/16 Zinc

Electrical Connections HTS



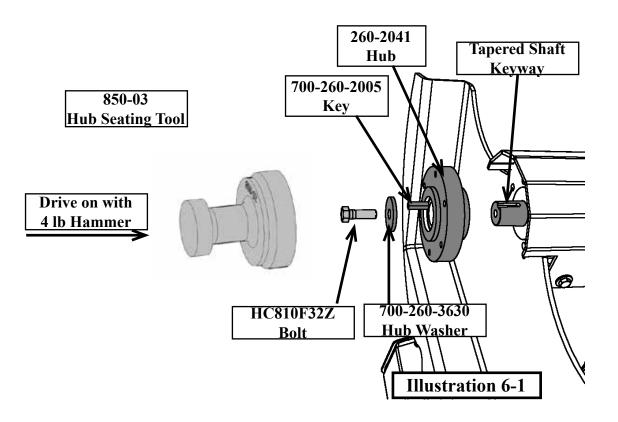
Ref. No.	Part No.	Qty	Description
61	260-4005	1	Cab 3 Button Wiring Harness (In-Cab Wiring Harness) optional
62	260-4015	1	Intermediate Wiring Harness (Into Cab) optional
62a	239-78075	1	7.5 Amp ATO/ATC Fuse
61,62,62a	260-4005-KIT	1	Includes 260-4005, 260-4015, and 239-78075 Complete Into Cab Wiring Harness)
63	260-4045	1	Internal Wiring Harness
64	239-1014	1	14 Pin Cab Connection (optional based on Skid steer Model)
65	239-1008	1	8 Pin Cab Connection (optional based on Skid steer Model)
66	239-10XX DIA	1	Wiring Diagram For 8 or 14 Pin Electrical Connections

Hub/Blade Installation

SECTION 6 – Hub Install

Place the tree saw blade hub (**260-2041**) on the tapered shaft on the bottom of the overhung load adapter while aligning the keyway slots that are on both (**Illustration 6-1**). With the keyway slots aligned, fully insert 3/8" square key (**700-260-2005**) into the slot, and seat hub with hammer and hub seating tool. Place the hub retaining washer (**700-260-3630**) over the circular opening in the center of the hub; apply blue Loctite to a $5/8-18 \times 2$ " Gr. 8 bolt (**HC810F32Z**) and thread into center hole of hub. Torque bolt to **106 ft/lbs**, re-seat hub with hammer and hub seating tool, and then torque to **106 ft/lbs**.

NOTE: DO NOT PROCEED TO NEXT STEP UNTIL YOU ARE CERTAIN THAT HUB HAS BEEN SEATED PROPERLY.



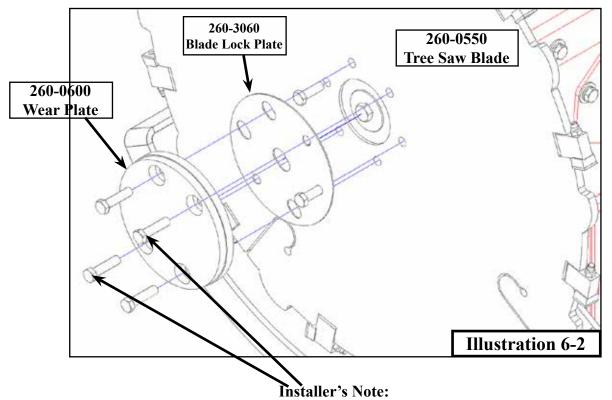
Ordering replacement parts

Please contact the nearest Brown dealer for replacement parts. Or call Brown Mfg. at 800-633-8909 for parts or technical information. Please have model and serial number available when ordering parts.

Hub/Blade Installation

SECTION 6 – Blade Install

- 1. Align the center slot of 260-3060 Blade Lock Plate with the 5/8" bolt holding the hub on. be sure that the 6 holes on the hub are fully visible. If they are not visible, tighten the 5/8" center bolt until they are.
- 2. With the hub properly seated on the overhung load adapter's tapered shaft and the carbide teeth attached to the saw blade (260-0550), check the center hole of the saw blade for fitment on the hub (reference Illustration 6-2). The fit between the two needs to be tight but not "force on" tight. Die grinding the center hole of the blade will be required if binding occurs; if possible, only use flapper wheel to do this grinding. Confirm the fit between blade and hub, then set blade on hub. Install the blade onto the hub, line all 6 holes up with the hub and blade, install and tighten ONE 1/2"x 1.5" grade 8 bolt.
- 3. Line up a slot on the **260-3060 Blade Lock Plate** over the 1/2" bolt head and 5/8" bolt head. the blade lock plate should sit flat against the blade bar. if the lock plate does not sit flat, tighten the 1/2" bolt until both slots line up and the lock plate sits flat against the bar.
- 4. Install the second 1/2"x 1.5" grade 8 bolt in the opposite **round** hole to hold the blade lock plate in place.
- 5. Align **260-0650** (Wear Plate, Bottom, 4 bolt) so that all 4 holes are aligned and the wear plate sits flat against the **260-3060 Blade Lock Plate**.
- 6. Install four 1/2"x 2" grade 8 bolts with blue Loctite and torque to 80 ft/lbs.



Rotate Head 90°. Use two 1/2" x 13 TPI 3" studs for ease of installation of blade. Replace with bolts.

Notes

Ordering replacement parts Please contact the nearest Brown dealer for replacement parts. Or call Brown Mfg. at 800-633-8909 for parts or technical information. Please have model and serial number available when ordering parts.

Revisions

Date	Page	Revision Change Made

For use with the following starting serial numbers: Model Serial Number HTS3-3640BA 0100



6001 E. Hwy 27 - Ozark, AL 36360 334.795.6603 - Fax: 334.795.3029

Version 1000.0.0 October 2019