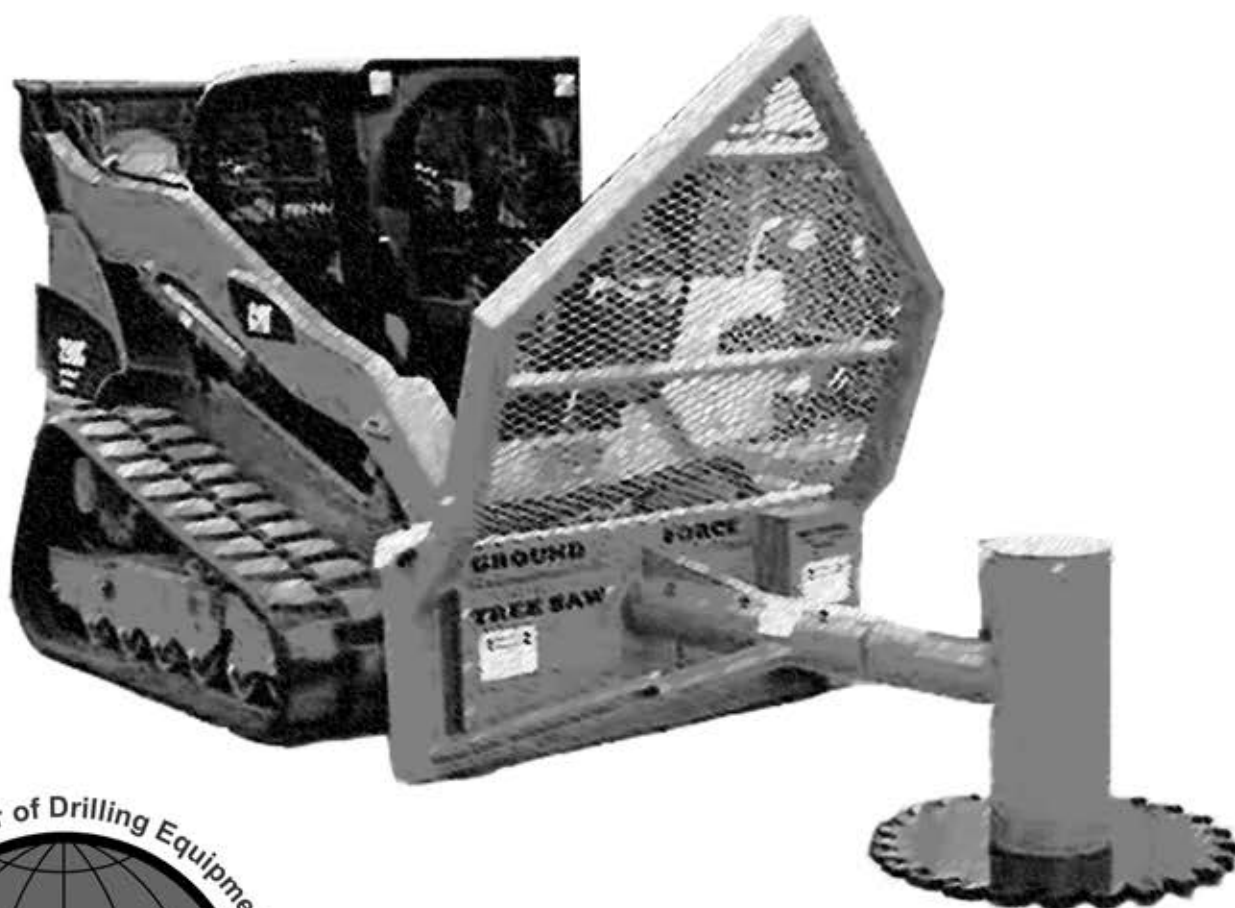


GROUND FORCE

TREE SAW

HP970F42

Operation and Safety Manual



**BULLET PROOF GLASS
DOOR REQUIRED ON
MACHINE**

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Specifications



HP970 - Fixed Position

Saw is designed to be run on hydraulic systems with 20-45 GPM and up to 4500 PSI

Mounting.....	Skid Steer Universal Quick Attach
Blade.....	1" Thick Carbon Steel Blade with 24 Indexable Carbide Teeth
Blade RPM.....	375 - 475 High Torque
Planetary Drive.....	14,000 Pound Radial Load Spindal Output Shaft
Skid Steer Recommendations.....	65 - 110 HP

Safety Symbols & Equipment Signs



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.



This symbol means to take notice. Following this symbol is useful and important information.

Warning



Before using your new machine, you and all other operators should completely read through this manual. Failure to fully understand how to operate this machine and take safety precautions could lead to serious injury and death.



These signs should remain on the machine always, DO NOT remove. If the signs ever become lost or damaged they should be replaced.

DANGER

**ROTATING SAW
STAY BACK
100 FEET!**

General Safety Instructions



Read through entire manual



Always keep the manual in a safe and easily accessible place.



Check bolts for tightness periodically.



Make sure to replace all missing or damaged decals.



Do not make unauthorized modifications to machine which could decrease its stability and life or cause injury and possibly death. We also encourage you to only use authorized replacement parts from Harleman Mfg. which were made specifically for this machine.



If there is any part of this guide you do not understand feel welcome to call our shop any time during normal business hours Mon-Fri 8am-4:30pm. The number is 417-876-3011.



Never use alcohol or drugs while using this machine, doing so could lead to serious injury or death.



Anyone under the age of 18 should not operate this machine.



Always wear relevant safety apparel. If using a skid steer with an open cab you should always wear safety glasses and protective head gear. You never know when stray debris may ricochet your way.

Attaching the machine

Part A



Attaching the machine

Part B



The skid steer must be equipped with a compatible Standard Universal Quick Mount Hitch and Front Auxiliary Hydraulics to connect and operate the machine.



The skid steer must be equipped with an Operator Front Protective Door. Serious injury or death can result from a thrown object hitting an unprotected operator.

Securing Equipment to the Skid Steer

1. With the engine completely shut down and the parking brake set, rotate the skid steer latch handles upward to the unlatched position. The latch handles must be completely raised to fully retract the hitch lock pins.
2. Start the skid steer and tilt the hitch mounting plate forward while guiding the mounting plate crest under the attachment saddle of the Tree Saw. Raise and roll back the mounting plate until the Tree Saw hitch plate is securely seated flat against the skid steer mounting plate.
3. With the Tree Saw fully supported by the skid steer boom, lower it to ground level. Slightly tilt the front of the Tree Saw upward about 2" from ground level. Turn off the engine, set the parking brake, and exit the skid steer. Push both latch handles downward to engage the hitch pins into the Tree Saw hitch retaining tabs. Now the Tree Saw hitch is securely attached to the mounting plate of the skid steer.

Attaching the Hydraulic Lines

1. Before you connect hydraulic lines to the skid steer be sure that the hydraulic lines and quick couplers are of the same size and type.
2. With the skid steer completely shut down and secured in position and the Tree Saw resting at ground level, relieve auxiliary hydraulic pressure by moving the control levers back and forth several times.
3. When connecting the skid steer hydraulic lines to the Tree Saw, keep hoses, quick couplers, and swivels free of contamination. Clean dirt and other debris from the connections with a clean rag to prevent contamination of the hydraulic oil.
4. The Tree Saw will only operate with oil fed through in one direction. If the Tree Saw does not operate when the auxiliary hydraulics are engaged, oil is probably being fed through the motor in the reverse direction. To correct this problem, reverse the hydraulic line connection between the Tree Saw and skid steer and engage the hydraulics again or try engaging the auxiliary hydraulic lever in the opposite direction.

How to operate

1. After thoroughly reviewing the safety manual and the attachment procedures are complete, your Tree Saw is ready to use.
2. The Ground Force Tree Saw was built with durability and efficiency in mind and as such is capable of cutting below ground level to eliminate as much of the stump as possible.
3. The blade spins in a clockwise motion therefore always come into a tree on the right side 1 o'clock position and then drive forward through the tree.
4. Stay alert and watch for power lines and solid ground objects.
5. Always remain aware of your surroundings and which way the trees are going to fall.



While cutting into a tree never tilt the saw blade under the trunk of the tree in an effort to push it over. Never use the saw blade to push or lift anything or you risk bending the blade and throwing the saw off balance.

Storage



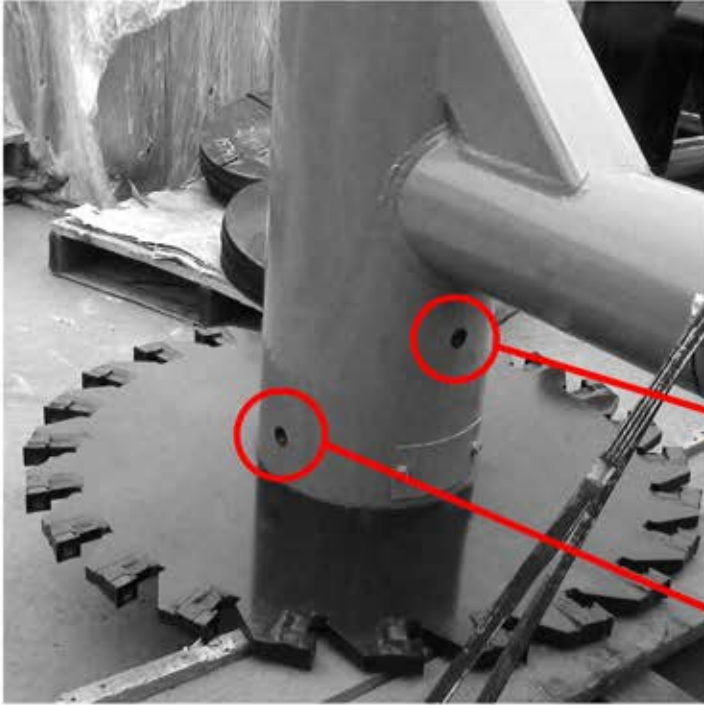
Properly Cleaning and Storing your new machine is critical to maintaining it's appearance and ensuring years of service.

1. Thoroughly clean all debris off the Tree Saw to prevent damage.
2. Check the Tree Saw for worn and damaged parts periodically. Perform repairs and make replacements immediately to prevent potential hazards.
3. Make sure to store the Tree Saw in a clean, dry place.
4. Keep the hydraulic hose ends from sitting in water, dirt and other contaminants. Connect the Tree Saw hydraulic lines together to prevent dirt and other contamination from entering the hydraulic system.
5. You can use spray touch-up enamel where necessary to prevent rust and to maintain the appearance of the Tree Saw.



When not in use always make sure the machine is positioned flat on the ground.

Changing Oil



Since our equipment ships ready to use there is no need to fill the drive with oil. The drive is prefilled prior to shipping.

REFILL

DRAIN

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