K970 III Rescue Saw (K12)

An Introduction





Buxton Fire-Rescue



K970 III Rescue

- Will be located at Groveville Station on Ladder 414.
- Replacing our old Stihl K12 saw from L424.



K12

- A specialty saw that has many potential uses.
- May require several different circular saw blades.
- K12 saws can cut metal, masonry/asphalt, wood, rubber roofing.



K12 Uses

- Special rescues/RIT
- Extrication
- Forcible Entry (steel and/or commercial doors/locks)
- Ventilation



Types of Blades

There are many types of blades that are capable of cutting one, or more materials.

These will be located on Ladder 414.

- Carbide Tip Wood Blade
- Demolition Blade
- Abrasive Metal Blade



Carbide Tip Wood Blade

- Used for cutting through wood.
- Primary uses would be vertical ventilation of roofs constructed of wood.
- Also referred to as the "warthog blade".
- This will be an accessory blade stored on Ladder 414 available to personnel.
- Our "go to" saw for ventilation of wood roofs should still be the cutters edge.

Carbide Tip Wood Blade



Demolition Blade

- Tungsten Carbide Tooth Blade
- Cuts sheet metal, wood, asphalt shingles, tar/gravel roofing and fiberglass.
- Very strong "good all around" blade.
- Will not cut thicker gauge metals beyond sheet metal.

Demolition Blade



Abrasive Metal Blade

- Aluminum Oxide Blade (Cutting Wheel)
- Very strong aluminum alloy that is meant to cut strong steel or heavier gauge metals.
- Very cost effective compared to other blades. Less than \$10 per/blade.
- Abrasive blades will cut through steel, aluminum, tin, rebar, and other metals.
- Great for breaching metal/commercial steel doors.
- Cutting garage doors or trailer trucks.
- These blades reduce in size after using them.
- These are the blades that will be placed on our K12.

Abrasive Metal Blade



Saw Features

- On/off switch
- Choke
- Pull Cord
- Blade Guard
- Reversible Cutting Head. Allows for cutting up against walls or ground level.
- Drive Belt (Powers/spins the blade).
- This saw starts just like any conventional chain saw, and our vent saws.

Changing out Blades

- Use wrench kept with saw for changing out blades.
- Remove Spindle & Pin w/washers
- Once blade is on put on spindle/pin and tighten.
- Some blades need to rotate a certain direction.
- Ensure blade is secured and rotating the correct direction.

Spindle & Pin



Blade/Cutting Safety

- Use the portion of the blade that is closest to the bottom of the cutting wheel and guard. (Bottom $\frac{1}{3}$ of the blade is the safest to use for cutting).
- Inspect blades prior to cutting for chips, damdage, dullness, or loose blades.
- Be mindful of feet/lower extremities when making low cuts. Be mindful of hands and arms near blade when making higher cuts.
- Different blades react differently when cutting through materials.

Blade Specification Plate

- Located on the blade guard.
- Max RPMs 4700
- 20mm pin hole on blade to match the saw.
- 14 inch diameter blades.
- Please refer to this plate before replacing blades.



Cleaning & Maintenance

- Manufactured recommends spraying with clean water after use to remove debris.
- Air hose can be used for cleaning, but do not use on air filter, it may damage the filter.
- Clean after each use.
- Inspect blades after each use (replace if needed).
- Refuel with 50:1 mixed fuel or 50:1 TruFuel.
- We strive to use ethanol free Tru-Fuel, but still have some mixed fuel on the trucks. So either is fine.
- Ensure blades, nuts and bolts are all tightened prior to use.
- Ensure drive belt is properly tensioned and not loose.

Operators Manual and Training

- There will be further training in the near future on this saw, and its uses.
- Please Contact Capt. Freeman or Capt. Desjardins with any questions or info.
- The Operators manual will be located at Bar Mills with the saw and ladder truck until they are placed in service at Groveville Station.
- Please feel free to reference the Operator's manual at any time.