



Chain Saw Manual

This manual covers basic information for chain saw operators and teams

Mission Statement:

Southern Baptist Disaster Relief is a Christ-centered partnership of national, state and associational ministries serving through the local church to bring **help**, **healing** and **hope** to individuals affected by disasters.

Vision Statement:

Southern Baptist Disaster Relief will be a well-defined, unified disaster response organization, demonstrating the love of Christ by providing physical and spiritual help to those affected by disasters.



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Introduction

Southern Baptist Disaster Relief (SBDR) is a Christ-centered partnership of national, state and associational ministries serving through the local church to bring **help**, **healing** and **hope** to individuals affected by disasters. SBDR began in Texas in 1967 and has grown to be one of the largest and most respected disaster organizations in the U.S. and around the world.

This Chain Saw manual provides a brief overview of the safe operation of a chain saw team. As with any equipment, the operator should seek to gain as much knowledge and skill as possible about operating a chain saw. In addition, a chain saw volunteer should spend time in hands-on training, practicing the procedures and skills taught in this manual. It is recommended that this training be given a minimum of eight (8) hours for classroom and practical training.

This training is recommended for every SBDR volunteer serving on a chain saw team.

Unit and Team Structure

Chapter 1: Unit and Structure

Chain Saw Unit

It is recommended that the chain saw unit be a trailer. This will allow different vehicles to pull the unit. It also reduces the insurance requirements for the unit and increases the number of drivers available.

Unit Leader

The Unit Leader should wear the Blue Cap and is responsible to the Incident Management Team (IMT) for the actions of the unit.

All other team members should wear a yellow hat, no matter his/her training or qualifications.

General

- Be flexible in the assignment and ready to make adjustments. There is no way to adequately list all tasks. Teams should be prepared to meet existing needs. Remember, “It is not about production, it is about your testimony.”
- Review “Chainsaw Property Damage Assessment” (see Appendix) and “House Located on Lot Supplement” (see Appendix).
- Confirm address and have owner sign the “Property Owner Request for Assistance Form” (see Appendix) if it has not been signed.
- Be informed. Deal with information in a positive way. Never be part of misinformation.
- Be responsive in an intelligent, careful, supportive and effective manner. Misinformation by volunteers can make matters worse.

Daily Debrief and Devotion

Teams will meet for devotion and debrief each day. This leads to better team effectiveness and communication.

- Morning devotion
- Informal evening debrief

Safety

Chapter 2: Chain Saw Safety

Safety is:

- **Being careful**
- **A set of rules**
- **An attitude**

Clothing and Gear

- Personal Protective Equipment, (PPE) **requirements** include proper clothing and footwear; hand, leg (chaps), head, ear, and eye protection. All PPE should be inspected before each use.
- Clothing must not be loose fitting. Loose-fitting clothing could become tangled in brush and limbs as well as the saw. Anything that could become entangled must be secured before operating a saw.
- Proper footwear is also important. High top boots with lug soles offer superior traction and are recommended. Short pants and or tennis shoes/sneakers are not permitted.
- A key part of the PPE is the **chaps**. Chaps are constructed of material that resists cuts from the saw teeth. The internal material chokes the saw to a stop when entangled.
- Chain saw gloves are preferred. They are constructed of a material that resists saw cuts to the hands in the event of a kick back. Gloves provide a better grip and reduce fatigue caused by extended operation.
- The chain saw helmet provides protection to the head. It includes a pull-down eye shield and ear covers to reduce noise.
- Helmets (Hard Hats) are required for anyone in the work (Chain Saw) area.
- Each cleanup/recovery unit must have the required PPE for each person operating a chain saw (Appendix). These items include helmets with eye and ear protection, gloves, and chaps. **PPE must be worn whenever you are operating a chain saw.**

Operation Safety Rules

General

1. Read and understand the owner's manual
2. Watch what you are doing. Use common sense

Remember the saw blade is traveling in excess of 80 feet per second. Just a touch can result in serious injury in as little as a split second. Review these safety tips **before** operating a chain saw.

Operating Saw

1. Do not operate a chain saw when you are tired
2. Use a chain saw for cutting wood only. Do not use it on things for which it is not intended, such as cutting plastic, masonry, etc.
3. Only well-trained volunteers should operate a chain saw. Never allow anyone under age 18 to operate the saw.
4. Do not operate a chain saw:
 - While under the influence of alcohol, medication or drugs
 - Within 10 feet of highly flammable liquids or gases
 - While in a hurry
 - While in tree or on a ladder unless trained to do so

Gear

1. Wear snug-fitting clothes when operating a chain saw. Do not wear loose clothing or jewelry. They can get caught in the moving saw chain.
2. Wear **ALL** PPE when operating a chain saw.

Planning

1. Before cutting make sure you have the following:
 - Clear work area
 - Secure footing
 - Planned retreat path from falling tree (safest route is a 45-degree angle to the rear)

2. Inspect the tree carefully before cutting it down. Make sure there are no dead limbs or branches that may fall on you.

Work Area

1. Stay alert. Use common sense while operating a chain saw
2. Keep work areas clean. Cluttered areas invite injury
3. Be aware of local poisonous plants. Poison ivy, poison oak, and poison sumac are the most common poisonous plants in the United States.
4. Keep children, animals, and bystanders away from the chain saw. Only chain saw operators should be in the work area.
5. When felling a tree, have an observer watch for danger. The observer should be close enough to tap the chain saw operator on the shoulder (use stick or ax handle)
6. Do not allow anyone else within **ten feet** of the chain saw operator.
7. If two or more people perform felling operations at the same time, provide plenty of distance between operations. Provide a distance of at least twice the height of the tree being felled.

Starting Saw

1. Before starting the chain saw, make sure the chain is not touching anything and that the chain-brake is set.
2. To start a chain saw, set it on the ground, place your foot on the handle, and pull the start cord. Do not start a chain saw while holding it with one hand.
3. Grip the chain saw firmly with both hands. Never operate a chain saw with one hand. Never use the hand guard as a handle.
4. Stand at the side of the saw, not behind it, and keep your feet well braced and body balanced.

Cutting

1. Keep fingers off the trigger until ready to make a cut.
2. Keep all parts of your body away from the chain when the chain saw is running.
3. Run the engine at full throttle.
4. Do not force the chain saw while cutting. Apply light pressure. It will do the job more safely and effectively if it is used at the rate for which it was designed.
5. Cut small brush and saplings with extreme care. Slender/Splinter material may catch in the chain and be whipped toward you. This could also pull you off balance.

6. When cutting limbs or tree trunks that are under tension, use extreme caution. Be alert for wood springing back. When wood tension is released, limbs could spring back and strike the operator, causing severe injury or death.
7. Never put the chain saw over your head.
8. Try to keep the bar out of dirt and sand.

Pinched Saw

1. Should the saw become pinched, turn the saw off before trying to remove it from the tree.
2. Have wedges and a sledge hammer close by to un-pinch a saw.

Carrying Saw

To carry the chain saw from one place to another:

1. Turn the saw off.
2. Engage the chain brake.
3. Hold the front handle (never use hand guard as a handle). The bar should face the rear.

Chain Saw Maintenance

The performance of your saw can make the difference between a good day and a bad day in the field. There is nothing more frustrating, than a saw that does not operate properly once you are in the field and ready to go to work. Maintenance is very important.

Maintenance should be performed at the unit or preferably in a shop where a vise and adequate space are available.

The field is not the appropriate place to do maintenance unless absolutely necessary. If maintenance must be performed in the field, find a clear area and spread a tarp on the ground so smaller parts will not get lost.

Maintenance Procedures

1. Do a visual inspection of the complete saw.
2. Clean the air filter.
3. Inspect the spark plug.
4. Check the starter cord.
5. Check the flywheel.
6. Inspect the clutch drum and drive socket.
7. Clean the chain and bar.
8. Inspect the chain and sharpen and properly tighten as needed.

Continue to Develop Your Skills

- First aid course
- CPR course
- Disaster awareness emphasis: church, association
- Practice sessions: tools and power equipment

Websites of Interest:

- www.stihlusa.com
- www.husqvarna.com
- www.oregonchain.com
- www.fs.fed.us/t-d/php/library_card.php?p_num=0667%202C01
- www.ext.nodak.edu/extpubs/ageng/safety/ae1025w.htm
- www.ksre.ksu.edu/library/forst2/mf2103.pdf
- www.namb.net/dr
- www.training.fema.gov/EMIWeb/IS/crslist.asp (for IS-100, 200 and 700 courses)

Appendices

Chain Saw Unit Equipment List

- _____ Hope in Crisis tracts
- _____ Equipment owners manual
- _____ Fire extinguisher
- _____ First aid kit
- _____ Five-gallon gas can
- _____ 2.5-gallon can
- _____ Two-cycle oil
- _____ Bar oil
- _____ Tool box with basic tools
- _____ Wrecking bars (crow/pry)
- _____ Bolt cutters
- _____ Axes
- _____ Shovels (pointed and square)
- _____ Hack saws with extra blades
- _____ Chain saws - minimum 16" bar
- _____ Spare bar and chain
- _____ Sharpener
- _____ Chain saw safety equipment (chaps, ear/eye protection, work gloves and safety helmet)
- _____ (2) Wheelbarrows/ non-pneumatic tires
- _____ Hand trucks with large tires/non-pneumatic tires
- _____ Water coolers
- _____ Rope
- _____ Loping shears

- _____ Hand saw (bow saw)
- _____ Sectional Pole saw (manual)
- _____ Power Pole Pruner
- _____ 18-inch traffic safety cones
- _____ Rakes
- _____ Pitch fork
- _____ Pull Rope
- _____ Gas Powered Leaf Blower

Optional

- _____ Air compression with hose
- _____ Generator (minimum 3500 watts)
- _____ Floodlights with extension cords
- _____ Extension ladder/Recommend wood or fiberglass
- _____ Wet/dry vacuum

Assessor		Job Number	
Phone #		Job Priority	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>
Work Needed: (Enter Completion Date) <input type="checkbox"/>		Chainsaw <input type="checkbox"/>	Flood <input type="checkbox"/> Roof <input type="checkbox"/> Fire <input type="checkbox"/>

Office Use Only

Southern Baptist Disaster Relief

Property Owner Request for Assistance

THIS IS NOT A CONTRACT



Date _____

Property Owner _____ Occupant (If Different) _____

Address

House # _____ Street _____

City _____ County or Parrish _____ State _____ Zip _____

Latitude _____ Longitude _____

Phone 1 _____ Phone 2 _____ Phone 3 _____

Special Needs

Wheelchair Hearing Impaired Visually Impaired Mentally Impaired Responder

Other (Explain) _____

Does property have... Homeowner's Insurance? Flood Insurance?

Is this your primary residence? Yes No

Can work be done without the property owner present? Yes No _____ Initial

Permission granted for team to take photos of property and persons Yes No _____ Initial

Electricity is... On Off

Water is ... On Off

Gas is ... On Off

Provide a brief description of the work that needs to be done:

I (Print Name) _____ hereby release from liability and agree to hold harmless the Southern Baptist Convention Disaster Relief volunteers, their representatives, agents and or employees for any damage or injury that may occur on my property, including personal property or to my person, which may occur during the cleanup operation. I further understand and agree that there is no warranty, implied, written or oral, for any work performed on my property by said volunteers. **I understand that the Southern Baptist Disaster Relief is a volunteer organization that has limited volunteers, limited financial and material resources, and makes no guarantee that said service will be provided.** Additionally, I further understand **THAT THIS IS NOT A CONTRACT TO PROVIDE SERVICES!**

Property Owner's Signature _____

Dated: this _____ day of _____ 20__

Attach appropriate assessment forms to this document

Work Completed (Date)		Unit Director	
Assessor		Phone #	Job #:
Last Name		Address:	

Southern Baptist Disaster Relief Chain Saw Assessment Form



Type of team needed:

A <input type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input type="checkbox"/>
Chainsaw Unit plus required equipment and trained personnel to climb and work in trees	Chainsaw Unit plus required equipment and trained personnel to work from ladders and roofs	Chainsaw Unit that only works from the ground and has all of the required equipment and trained personnel	Any Ministry other than a Chainsaw unit (i.e. Mobile Cleanout Unit) with 1 or more chainsaws

Climbers Needed Yes No

Heavy Equipment Needed Yes No

Specify _____

Priority 1

Downed trees that prevent re-establishment of power to home: Yes No

Tree(s) or limbs blocking entrance to the house or driveway: Yes No

Trees on house Yes No

Trees on roof Yes No

Is roof punctured? Yes No

Need temporary roof repair? (Attach Temporary Roof Repair form) Yes No

Special Instructions: _____

Priority 2

Tree(s) and or limbs near house, preventing necessary repairs: Yes No

Tree(s) and or limbs on well house or storage building: Yes No

Large tree(s) in yard need to be cut up to manageable size for removal: Yes No

Special Instructions: _____

Priority 3

Tree(s) in front yard needs to be cut to manageable size for removal: Yes No

Small limbs and brush removal needed: Yes No

Tree(s) in back/side yard need be cut to manageable size for removal: Yes No

Special Instructions: _____

Other Information

Can debris be stacked at curb? Yes No

If no, where should debris be placed? _____

Number and size of trees to be cut/moved: _____ 5"-15" _____ 16"-25" _____ 25"-35" _____ >35"

Notes:

Attach this document to the Property Owner Request for Assistance form

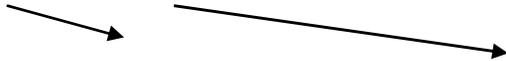
Work Completed (Date)		Unit Director	
Assessor		Phone #	Job #:
Last Name		Address:	

Southern Baptist Disaster Relief House Located on Property Form



In the space below or an additional page sketch an outline of the property, indicating the dimensions:

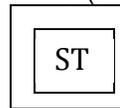
Indicate slope of land by arrows (the longer the arrow, the steeper the slope):



Locate and outline the house, garage and other buildings on property, giving dimensions:

Draw and label (by name _____ 8' _____) if possible) frontage roads (streets) adjoining property and driveway(s).

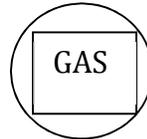
Locate and identify septic tank and drain lines:



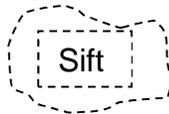
Locate and identify water source, well, cistern and water lines



Locate propane tank and line or natural gas line



Locate and identify areas to be sifted.



Identify significant trees to be saved and those to be cut down.



Suggest location for saved salvage, debris bins, hazardous waste, cut logs, brush debris

Indicate **North** direction of property on drawing with arrow and letter.



Sorry We Missed You

SOUTHERN BAPTIST DISASTER RELIEF

SORRY WE MISSED YOU

WE CAME BY TO HELP WITH YOUR REQUEST FOR ASSISTANCE. SORRY WE MISSED YOU. PLEASE CONTACT US AT THE LOCATION BELOW OR CALL:

LOCATION:

Date: _____ Time: _____ Job #: _____

Assessor



SOUTHERN BAPTIST DISASTER RELIEF

SORRY WE MISSED YOU

WE CAME BY TO HELP WITH YOUR REQUEST FOR ASSISTANCE. SORRY WE MISSED YOU. PLEASE CONTACT US AT THE LOCATION BELOW OR CALL:

LOCATION:

Date: _____ Time: _____ Job #: _____

Assessor



