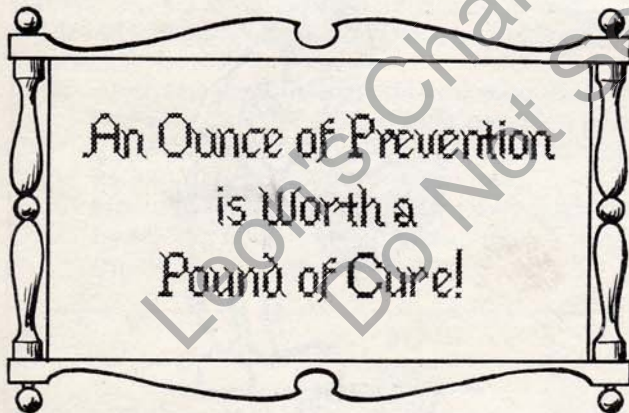


INSTRUCTIONS

for INSTALLATION and USE



**HOMELITE'S NEW
ANTI-KICKBACK
CHAIN SAW DEVICE**



Weights about an ounce.

Prevents chain saw kickback when properly installed.

Helps speed up limbing and clearing.

Helps to protect the saw chain.

Extends safe range of operator control.



Homelite supplies a SAFE•T•TIP® in the owner's kit as part of your purchase of any HOMELITE® chain saw which is prepacked with the cutting attachments. In addition, the SAFE•T•TIP and a new series of longer length HOMELITE® hard nose and Power Tip® guide bars, for use with SAFE•T•TIPS, are available on order from your dealer.

The SAFE•T•TIP consists of the one-piece tip and a mounting screw. It can be installed or removed in just a few seconds.



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HOMELITE

TEXTRON

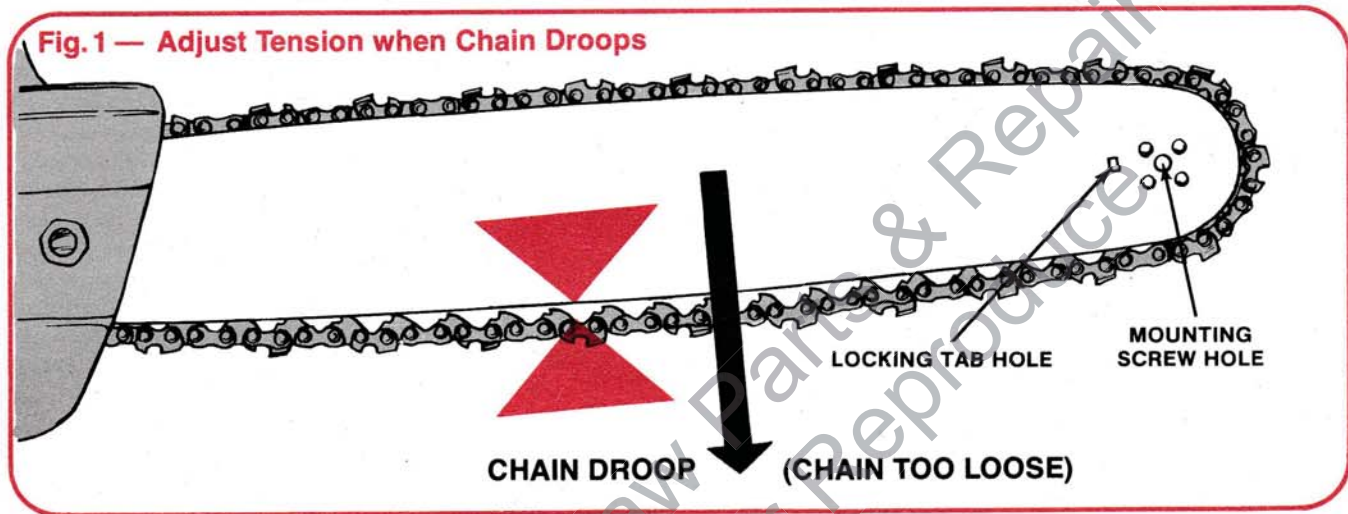
Homelite Division of Textron Inc.

INSTALLING GUIDE BAR AND CHAIN

1. Follow instructions in your Owner's Manual for assembly of the bar and chain on the saw, and for adjusting the chain tension.
2. Whether you are cutting *with* or *without* the SAFE•T•TIP, maintenance of proper chain tension is extremely important, because a loose chain is damaging to the saw and also dangerous to cut with. A loose chain can jump right off the guide bar. Furthermore, the pounding which a loose chain takes from the sprocket and the wood results in stiff chain joints,

NOTE: This is not an owner's manual. For additional operating information refer to your chain saw Owner's Manual.

- premature chain breakage and guide bar damage. If you are not using a SAFE•T•TIP, the potential of violent kickback is increased by loose chain.
3. After the first four or five cuts with a new chain, shut off the engine and readjust the chain tension. From then on, keep watch of the amount of chain droop. Reset proper chain tension as soon as chain droop develops to the amount illustrated in Figure 1.



INSTALLING THE SAFE•T•TIP® (Pat. Pending)

WARNING

The SAFE•T•TIP was designed for installation on specific Homelite guide bars described in paragraph 1. (below). Homelite does not recommend anyone installing the SAFE•T•TIP on any other guide bar. If you are in doubt as to whether your guide bar will accept a SAFE•T•TIP, ask a Homelite Servicing Dealer.



1. A part number is stamped near the engine end of each bar. It is important for you to know that a SAFE•T•TIP can be fitted only onto guide bars having a round mounting screw hole and a square locking tab hole as shown in Figure 1. Bars which bear, the letter "A" or "B" or "C" as part of the part number do not have these features. They are incorporated into all bars beginning with the suffix letter "D", (as in part no. PT-16381-D5).
2. The first time that a new SAFE•T•TIP is to be put on the bar, you must open up the screw threads (chase the threads) of the tip. To do this, install the mounting screw tightly and remove it several times using a wrench (see Figure 2). This prepares the threads for proper tightening of the mounting screw. Maintaining the correct tightness of the screw is very important, because a loosened SAFE•T•TIP may hit the chain and fly off the saw.

IMPORTANT NOTICE

Before each period of operation, tighten the SAFE•T•TIP mounting screw as instructed below. These are specially hardened screws. If the screw cannot be installed tightly, replace both the screw and the SAFE•T•TIP before further operation.

3. Although the SAFE•T•TIP is reversible on the bar, we recommend mounting it on the flush-cutting side of the guide bar as shown in Figure 3. On either side, the SAFE•T•TIP, when properly installed and tightened, covers the chain at the nose section of the bar to eliminate kickback. It also protects the chain at the nose section from running into the ground or stones.
4. Put the SAFE•T•TIP locking tab into the square hole in the nose of the guide bar. Insert the mounting screw with your fingers only (see Figure 3).
5. Now follow the appropriate screw-tightening instructions for either "SMALL SAFE•T•TIP" or "LARGE SAFE•T•TIP", according to the size tip your saw uses.

TIGHTENING INSTRUCTIONS FOR SMALL SAFE•T•TIP®

(Used on Guide Bars of the XL®, XL®-2, Super 2 and VI Super 2 Family of Saws)

The 8-32 x 7/16 mounting screw for this size SAFE•T•TIP requires use of an *open-end, box or adjustable* type wrench. The recommended fastening torque is 35 (minimum) to 45 (maximum) pound-inches. A tightness within this range may be achieved (without a torque wrench) by the following method.

- a) After chasing the threads and mounting the SAFE•T•TIP in position (see previous paragraphs 2, 3 and 4) tighten the screw as much as you can with your fingers only.
- b) Now achieve proper tightness with a wrench by adding from 3/4 turn (minimum) to one turn (maximum). (See Figure 4.)

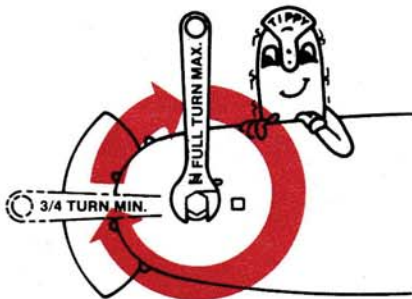


Fig. 4 — Tightening Small SAFE•T•TIP

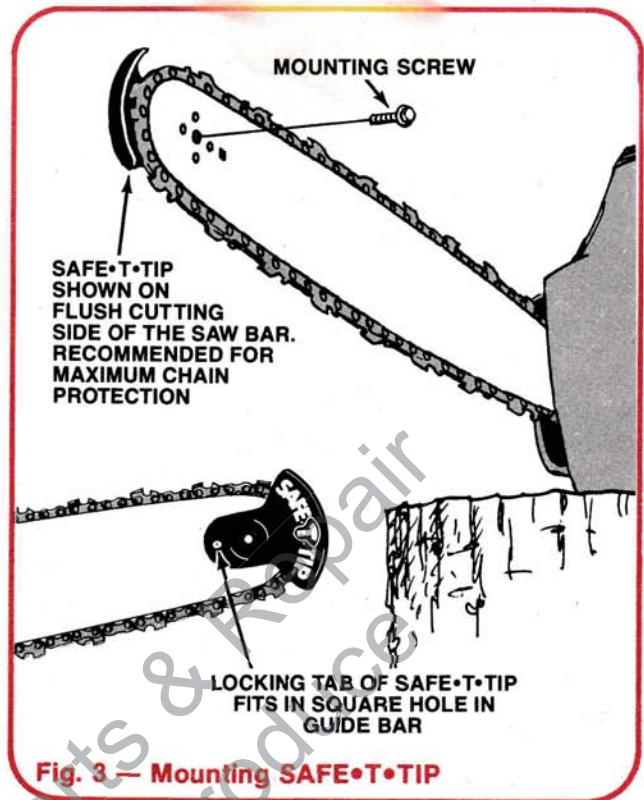


Fig. 3 — Mounting SAFE•T•TIP

TIGHTENING INSTRUCTIONS FOR LARGE SAFE•T•TIP®

(Used on 150, XL®-12, SXL-AO and all EZ/Mini Series)

The 1/4-20 x 5/8 mounting screw for this large size SAFE•T•TIP requires a 3/8 inch wrench (or an adjustable wrench), to achieve the recommended tightness of 70 to 100 pound-inches. A tightness within this range may be achieved (without a torque wrench) by the following method.

- a) After chasing the threads and mounting the SAFE•T•TIP in position (see previous paragraphs 2, 3 and 4) tighten the screw as much as you can with your fingers only.
- b) Now achieve proper tightness with a wrench by adding from 1/2 turn (minimum) to 3/4 turn (maximum). (See Figure 5.)

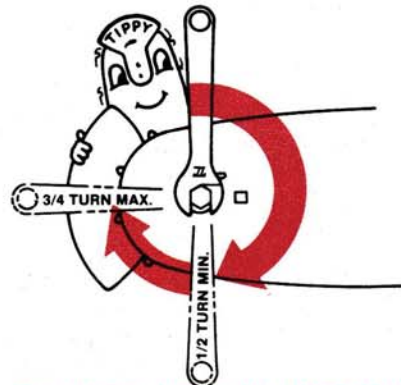


Fig. 5 — Tightening Large SAFE•T•TIP

HOW TO OPERATE WITH A SAFE•T•TIP® (Pat. Pending)

1. Remember! The SAFE•T•TIP protects against kickback but is not a general insurance against "accidents" with a chain saw. Therefore, wear proper attire and protective articles. Practice correct positioning of the saw, correct posture and stance, and use the proper grip on the saw handles at all times. These things are covered in your Owner's Manual. Also see Figure 16 and all information on pages 6 and 7 in these SAFE•T•TIP instructions when cutting without a SAFE•T•TIP.
2. Because the SAFE•T•TIP is wider than the saw chain and cannot go *into* or be pulled *through* a cut, it will obstruct cutting unless it clears the wood completely. Figure 7 illustrates the maximum diameter of wood which can be cut when the SAFE•T•TIP is on the saw. Always check that there is clearance. If in doubt that there is enough, remove the SAFE•T•TIP before making the cut. There are situations when it is dangerous to use the SAFE•T•TIP. These include any time a wedge has to be used to control the fall or hold open the cut, and any situations where the nose of the saw must be used for cutting, or the blade pulled through after completion of the cut.



Fig. 6 — Correct Grip, Protective Articles, and Positioning

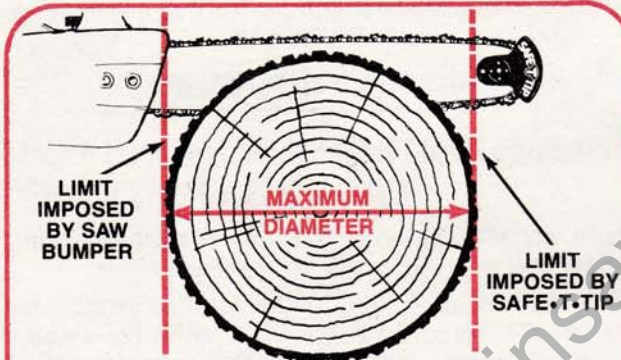


Fig. 7 — Maximum Diameter of Cut with SAFE•T•TIP Installed



Fig. 8 — SAFE•T•TIP Used as Bumper or Spur

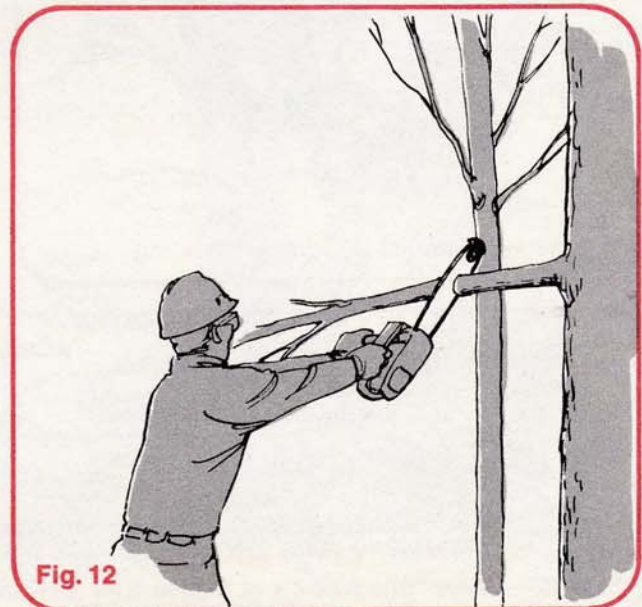
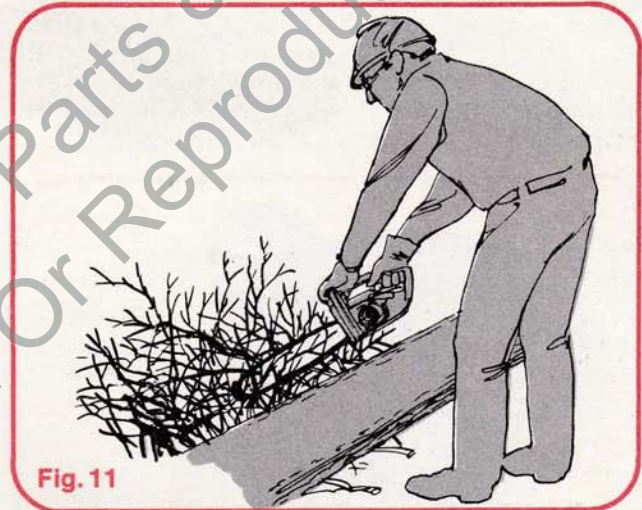
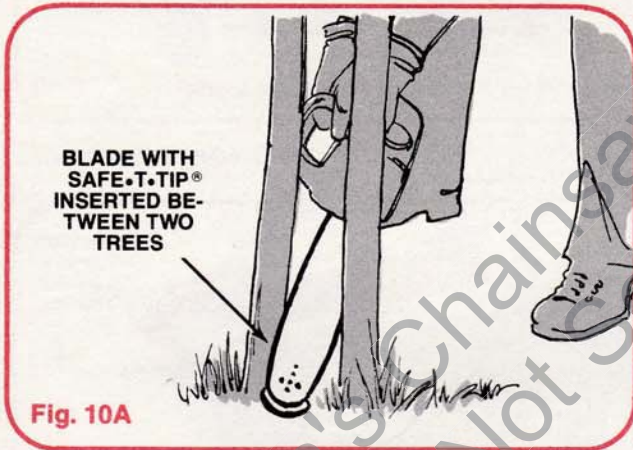


Fig. 9 — SAFE•T•TIP Rested Against Obstruction

DANGER

During felling, if a tree starts to fall causing your saw to bind, leave the saw and save yourself. The saw can be replaced—you cannot!

3. As illustrated in Figure 8, you can use the SAFE•T•TIP up against a tree trunk when limbing or pruning. You can use the SAFE•T•TIP as a spur or work rest when cutting off small branches. And, as in Figure 9, you can rest the SAFE•T•TIP against an obstruction or the bare ground as a guide.
4. Refer to Figures 10A, 10B and 10C. Each shows a "tight situation" cut which is hazardous to make without a SAFE•T•TIP. These techniques of cutting in close quarters can be applied to situations encountered when bucking or limbing as well as when felling.
5. When cutting piled up brush, don't stick the saw blade into the pile unless it has a SAFE•T•TIP. (See Fig. 11.)
6. Reaching above chest height to cut is extremely hazardous. Even with a SAFE•T•TIP you must maintain good position of your feet so as to keep your balance. Twisting and falling limbs are a hazard which you must always watch out for. (See Figure 12.)



WHAT IS CHAIN SAW KICKBACK?

Kickback can cause loss of chain saw control.

In the operation of a chain saw, engine torque is transferred to the chain. This energy is then used to cut wood. If the chain suddenly hits a solid object (or takes too large a cut) and is stopped for an instant, the engine torque is transferred to the guide bar and chain saw as a rotation around the center of mass.

The direction of the reaction force depends on where the contact is made along the guide bar. *If made at the upper 90° quadrant of the bar nose, the reaction will be in an upward arc toward the operator.* This arcing movement of the saw blade is called *kickback*. (See Figures 13, 14 and 16.) Kickback is the most dangerous of the reactions which cause loss of control. When properly installed, the **SAFE•T•TIP®** prevents kickback.

Along the bottom rails of the bar, the reaction will be felt as a *pull* away from the operator. Along the top rails of the bar, the saw will tend to *push* toward the operator. (See Figure 15.)

The degree of violence with which a saw will kick back is increased by a) dull chain, b) too low a chain depth gauge setting, c) too loose chain tension, d) making chain contact at the upper quadrant of the bar nose section, and e) blind-cutting or boring with the bar nose at less than full throttle speed.

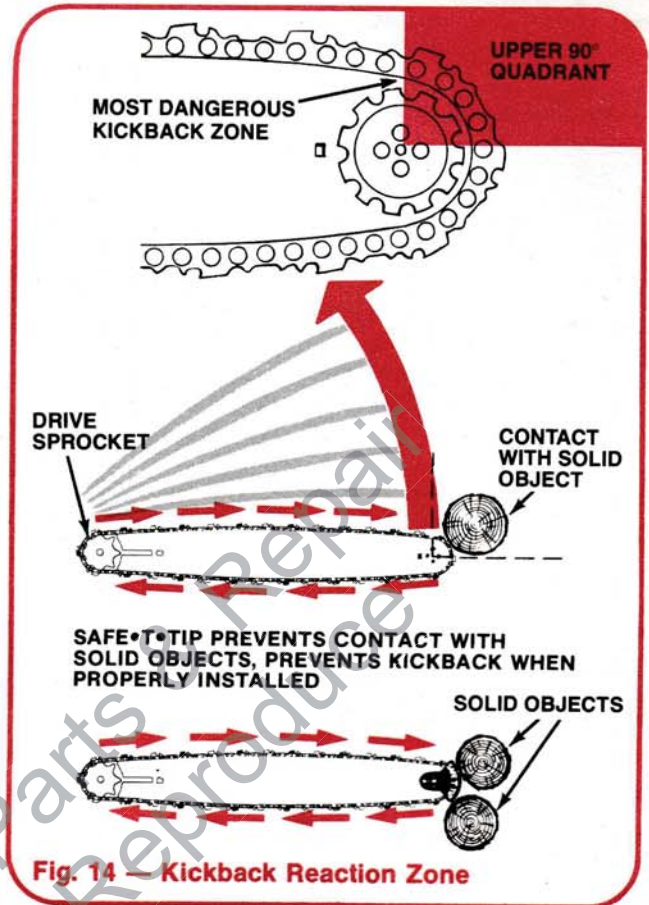


Fig. 14 — Kickback Reaction Zone

THE **SAFE•T•TIP** DOES NOT PREVENT OR REDUCE PUSH AND PULL REACTIONS.

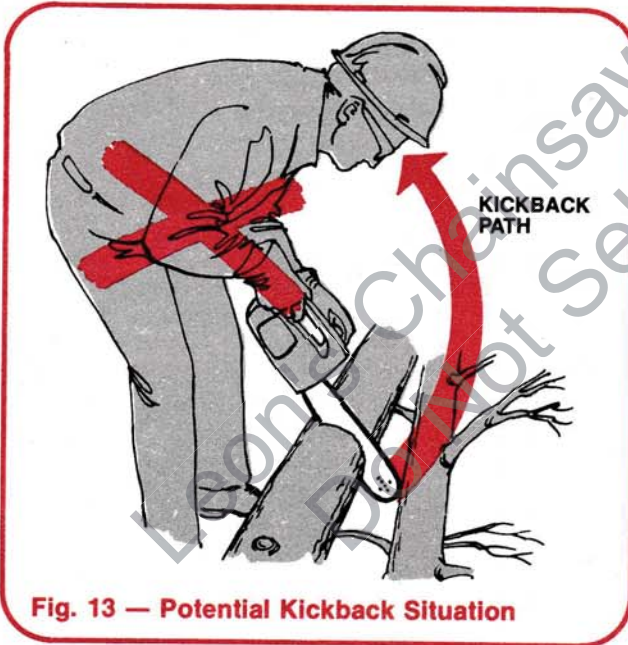


Fig. 13 — Potential Kickback Situation

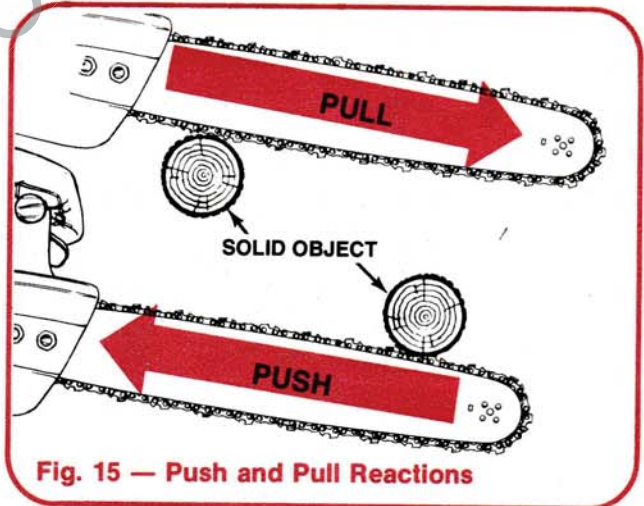


Fig. 15 — Push and Pull Reactions



Fig. 16 — Situations Known to Cause Saw to Kick Back Towards Operator

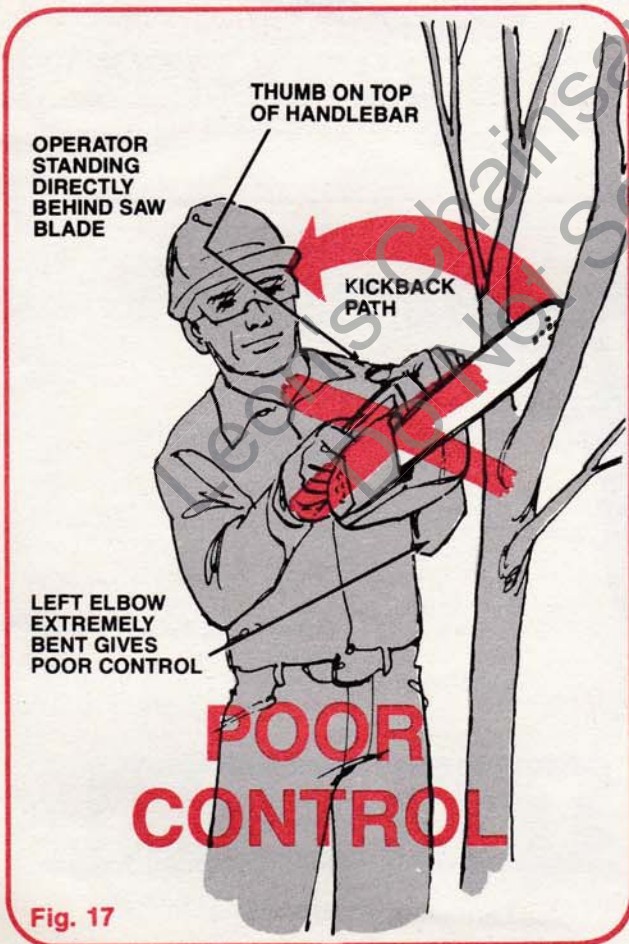
HOW TO OPERATE WHEN SAFE•T•TIP® (Pat. Pending) HAS TO BE REMOVED

If the SAFE•T•TIP must be removed for any operation requiring use of the nose section for cutting, or for drawing the nose through a cut, beware of the danger of kickback! (See Figures 13, 14 and 16.) Read your Owner's Manual.

Check out your technique for cutting with an unguarded guide bar nose, because you cannot do safely without the SAFE•T•TIP what you can do with it. The rules for cutting without a SAFE•T•TIP are as follows:

1. Maintain proper stance and grip. (See Figure 18.)
2. Keep your body to the *left* of the guide bar. (See Figure 18.)
3. Avoid letting the nose of the saw dip into the ground or touch obstructions.
4. When necessary to bore with the saw tip, you are most vulnerable to kickback. Begin at full throttle, making first contact at the bottom quadrant of the nose section, or further back on the straight portion if there is room.

5. In the small percentage of cases where it is absolutely necessary to bore with the upper section of the nose, it is best to let a trained tree man do the job. If you are an experienced operator, angle the saw blade to be sure that no part of your body is in the plane of chain rotation.
6. Limit your cutting to the range within which you can control the saw fully. Don't reach way out so as to lose your balance. Don't make any cut above shoulder height, because you cannot control the saw well when held higher than this.
7. Make limbing and pruning cuts one at a time. The tree shearing or electric razor technique of debranching (limbing felled trees) should not be practiced without the SAFE•T•TIP®, because you can too easily hit an obstruction which will cause kickback. Whenever possible, stand on the opposite side of the tree from the branches being cut, so that the tree offers a barrier between you, the saw, and the branches.



THE SAFE•T•TIP® ON YOUR SAW DOES THESE THINGS FOR YOU

PREVENTS KICKBACK WHEN PROPERLY INSTALLED

SAFE•T•TIP covers the nose area of the bar and chain where the kickback reaction is generated. No chain contact in this area — no kickback worries.

LETS YOU USE THE SAW IN TIGHT SITUATIONS WHERE YOU COULD NOT AVOID OBSTRUCTIONS WITH A BARE-NOSED BAR.

Can prevent accidental scarring of shade trees when pruning branches close to trunk.

HELPS YOU AVOID ACCIDENTAL CONTACT OF CHAIN (AT BAR NOSE) WITH THE GROUND, OR OBSTRUCTIONS SUCH AS OTHER TREES, STONES, OR MASONRY WALLS.

SAFE•T•TIP can be used as a bumper plate against the obstructions during cutting.

HELPS TO PREVENT ACCIDENTAL DULLING OF CHAIN BY KEEPING NOSE CLEAR OF ABRASIVE OBSTRUCTIONS.

PERMITS USE OF LONGER LENGTH GUIDE BARS.

Controllability of the saw provided by the SAFE•T•TIP permits equipping the saw with the longest bar and chain combination the engine can power. A long bar permits making bucking and clearing cuts close to ground level from a stand-up position. This saves you back strain.

SPEEDS UP BRUSH CUTTING AND CLEARING OUT OPERATIONS.

Operation in a semi-scything action is limited only to maintenance of controllability over *push* and *pull* reaction forces.



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