Underslung cutoff saws

An underslung cutoff saw is usually operated by a treadle, and its forward movement is fast It should be completely enclosed in the idling position (Fig. 25-8). For general work it should also be covered by a movable hood guard that slides forward or drops to rest on the stock when the saw is cutting A treadle guard ensures that application of the foot on the treadle is intentional

Underslung cutoff saws are commonly used to cut knots out of such narrow pieces as flooring and molding The stock is placed by hand, and the hands are customarily held close to the line of the cut on either side The movable guard gives little protection, because the action of the saw is so fast that the guard can ride over the top of the hands

On either side of the line of travel a barrier guard can be constructed with enough clearance between the guard and the table top to admit the stock, but not the hands or fingers of the operator With practice an operator can feed stock rapidly under this type of guard

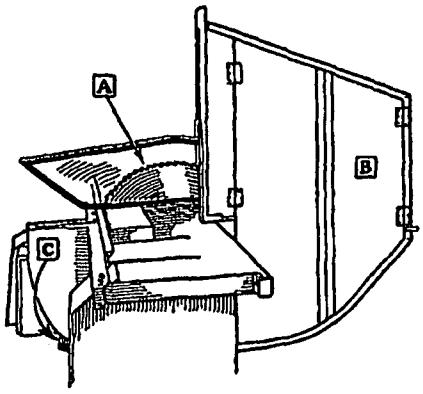


Fig. 25-8 Guards for an underslung saw Hood "A" moves forward ahead of the saw travel. Hood "B" encloses the saw in the idling position Cover "C" over treadle prevents accidental forward movement of the saw.

Radial saws

Radial saws, like straight line pull cutoff saws, require many adjustments to permit their full variety of uses These adjustments create additional hazards for the user

The head of a radial saw may be tilted to cut a bevel, or the supporting beam and track may be swung at an angle to make a diagonal cut. Both adjustments may be used to cut a compound bevel or miter Likewise, the head may be turned parallel to the length of the table and the saw used for ripping In this case it is an overhead, stationary saw against which the stock is fed by hand

Obviously, a saw with so many adjustments should be operated only by a skilled woodworker who has had good training and wide experience An inexperienced person can be taught to operate a straight line cutoff saw with safety, but he might have serious difficulty adjusting a radial saw and using it safely on some of the more difficult operations for which these saws are intended A hard and fast rule should forbid making adjustments while the saw is running

Ripping should never be done with a radial saw unless a spreader and anti-kickback fingers are used Also, it is important that the saw rotate in the correct direction, that is, upward toward the operator The direction of the saw blade rotation must be conspicuously marked on the hood

The upper half of the saw, including the arbor end, should always be guarded, and the lower rising and falling guard should be used whenever possible (Fig 25-9)

The radial saw should be installed so that its arm or beam is raised slightly at the free end. This slight inclination of the arm is to prevent "creep" of the cutting head toward the operator during crosscut operations However, the tilt should not be enough to cause rebound

Prospective purchasers of the radial saw, perhaps intrigued by the apparent advantages of a single saw to do many kinds of work, should give careful consideration to these hazards In most shops, two or three saws, each intended for a special kind of work, will be safer and more efficient.

Power-feed ripsaws

A power-feed ripsaw should be guarded with a hood guard that covers the top and