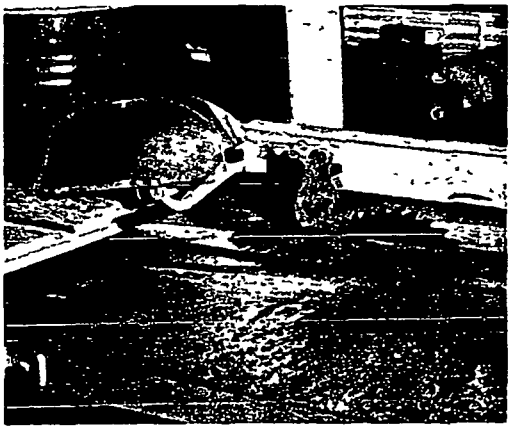


FIG 30–1 —A hood guard fabricated of ¼-in clear plastic can be mounted on the spreader Anti-kickback dogs help control kickbacks

Courtesy U S Naval Civil Engineering Laboratory, Port Hueneme, Calif

and the following of a safe procedure will keep kickbacks to a low level Careful selection of the kind of lumber stock being cut can reduce kickbacks

Guards. Guards that greatly reduce the likelihood of injury are available and in common use If they are not furnished with a saw, it is necessary to provide them when the saw is installed The majority of work done on table saws can be done with standard guards in place The protection gained by using guards on most work makes them essential It is, however, important that the guards be practical and correct for the job being done, or else they may be removed

A table saw should be provided with a spreader, which prevents wood with internal stresses from clamping down or binding at the outfeed edge of the saw blade A spreader thus helps prevent kickbacks It also keeps chips and slivers away from the back of the saw where they might be caught by the saw teeth and thrown

It should be mounted rigidly, not more than ½ in in back of the saw blade, and should be at least 2 in wide at table level The spreader should conform to the radius of the saw as nearly as practicable and be high enough above the table to penetrate the full thickness of the stock The spreader shall be attached so it will remain in true alignment with the saw blade, even when the table or arbor is tilted

A circular table saw should be guarded by a hood that covers the part of the saw projecting above the stock, adjusts itself to the thickness of the stock, and rides on the stock

The hood shall be of adequate strength to resist blows incidental to reasonable operation, adjusting, and handling It should be made of material that will not shatter when broken, be nonexplosive, and no more flammable than wood The hood must remain in true alignment with the saw blade to be effective, even if the table or arbor is tilted

The hood may be suspended from above, either from the ceiling or, more commonly, from a post attached to the side of the machine, or supported on the spreader (Fig 30–1) The mounting must be secured and supported, so that it will not wobble and strike against the saw blade In both strength and design, it must protect the operator against flying slivers or broken saw teeth, and keep his hands away from the blade

Tilt table and tilt arbor. The part of the saw blade underneath the table should be completely enclosed The enclosure, which may be an exhaust hood, should be so constructed that saw blades can be easily changed Preferably, it should have a hinged cover, so that the blades can be changed without removal of the enclosure

A circular table saw used for ripping should be provided with antikickback fingers (dogs), with points riding on the stock to oppose the tendency of the saw to force the stock upward and toward the operator (Fig 30–2) Anti-kickback fingers should be inspected frequently and kept sharp

On rabbeting and dadoing jobs, it is impossible to use a spreader and often impracticable to use the standard hood guard These operations can be effectively guarded by a jig that slides in the grooves of the transverse guide The work is locked in the jig, and the operator's hands are kept well away from the saws or cutting head

Because of variation in rabbeting and dadoing jobs, special jigs may have to be made The hazard in these operations, particularly