

FIG 27-2 —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

while pushing it into the saw, when holding their hands too close to the blade during the cutting operation, and when waxing the saw table while the blade is turning

Helpers and take-away men are injured by coming into contact with the blade while removing scrap or the finished pieces from the table

Poor housekeeping practices are another major cause of accidents involving circular saws

Circular saws are designed to permit a wide range of operations Therefore, as is the case with most multiple-use equipment, it is difficult to design one type of guard for maximum protection for all types of operations Contact with the saw blade can be prevented through use of the proper type of spreader, hood guard, jigs, fixtures, combs, and other devices

Kickbacks can cause serious injuries or death, therefore, they must be prevented by every means possible

Kickbacks on ripsaws are usually caused by one of the following conditions

1 Failure to provide a spreader
2 Improperly conditioned (dull) saw, that permits the material to pinch on the outfeed edge of the saw and rise from the table
3 Improper alignment of the gauge or fence
4 Lumber that has not been properly conditioned or has a twisted grain

Improper design or mounting of antikickback dogs also permits kickbacks Some dogs are designed to be effective for one thickness of material and have very little holding power when used on material that is either much thicker or much thinner Other dogs have adequate holding power but are located too far back of the outfeed edge Hence, the anti-kickback dogs do not come in contact with the stock or loose splinters when in position to be thrown by the saw

Kickbacks can be minimized by avoiding the four basic causes mentioned They can be prevented by correct choice and use of a spreader, anti-kickback fingers (dogs), and by adherence to safe job procedure in the setup of the rip fence

A controlled-cut circular saw blade of proper design, and having the manufacturer's recommendation of teeth in relation to diameter, is recommended for most ripping operations

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 Supervisors and workers often object to standard guards because they cannot be used for special operations In most instances this is not a valid argument because 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 or they are likely to be removed

A table saw should be provided with a spreader, which prevents wood with internal stresses from clamping down or binding at