

GIN SAFETY LESSON PLANS



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HOW TO CONDUCT GIN SAFETY LESSONS

The gin safety lesson plans in this packet are intended to aid in training gin workers about gin safety. You can present safety lessons by simply reading these plans, but lessons will be much more effective if you spend some time preparing for the lesson. Add your own ideas. Use examples from your gin, and emphasize areas which are important in your situation. These plans are designed for 5 to 10 minute lessons; they can be longer if you get questions or discussion.

Always remind your employees that safety procedures are only effective if properly implemented. Work place safety is dependent in large measure upon the employees' attitudes and work habits. Without employee cooperation, the use of safety measures is no guarantee of work place safety. Proper direction from management can greatly affect worker cooperation and attitude.

The National Cotton Ginners Association does not warrant or guarantee the suggested safety practices contained in the lesson plans but offers them as a helpful guide.

The following suggestions can make lessons more effective:

- Safety meetings should be held at regular intervals during the season. Safety is a state of mind and regular reminders can make gin workers more conscious of dangers.
- Meeting should be held at a time which is convenient for all workers.
- Each lesson should be conducted in the area of the gin that is most applicable.
- Select a place near the equipment being discussed where people can be comfortable and are free of distractions.
- If you are talking about portable equipment such as ladders and hand-tools, have them with you so you may refer to them as you are discussing them.
- Don't let anything interrupt the meeting. Before you start, make arrangements for someone to answer your phone and take messages.
- Let your employees know in the beginning that you are limiting the meeting to between 5 and 10 minutes. If discussion gets hot and heavy, continue it at the next meeting.
- You may want to read the lesson or present it in your own words; or you may state the subject of the discussion and ask questions to develop the discussion.
- After your presentation, encourage discussion between employees about the subject. Review recent on-the-job accidents. Then ask for suggestions about how the accident could have been prevented or the violation corrected. Be sure not to criticize anyone by name in front of your group.
- Encourage employees to recall "near misses" — situations when they came close to having an accident. Try to get the group to learn from these experiences.
- Keeping a record of the lesson could be the most important part. The job is not done until you fill out the back of the lesson plan and put it on file. This record could be critical to the gin in the future.

Remember, accidents are costly. Talk is cheap. Invest a little talk and time in safety programs.

GIN SAFETY LESSONS

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1. LIFTING TECHNIQUES

Back injury is the leading lost work time injury in industry. Eight out of ten persons in the United States will consult a physician for back problems sometime in their lives. About 400,000 people suffer disabling back injuries each year. Experience has shown that prevention programs can significantly reduce the incidence of back injury. However, there is no cookbook formula that will solve all lifting problems.

Lifting objects that are too heavy is a problem in some jobs, but 90 percent of back injuries due to lifting occur while lifting light objects.

Many back problems can be prevented or cured with exercise, weight control, and proper use of the back. The stresses placed on the back during manual lifting are due to a combination of the weight of the object being lifted and the lifting techniques.

Avoid lifting where possible and practical by pushing, pulling, rolling or sliding the object to be moved. Use mechanical aids (hand trucks, carts, winches, forklifts, etc.) or request help from other employees when necessary, particularly when you find yourself in a difficult or awkward lifting situation.

When lifting heavy objects from the floor/ground can't be avoided, here are some basic principles to prevent back pain and injury:

- Lift only loads you can safely handle.
- Establish good footing.
- Keep the load close to the body.
- Bend at the knees as you grasp it.
- Get a full hand grip and keep your body erect.
- Lift smoothly by straightening the legs (avoid jerky or snatching lifts).
- Avoid the lift and twist action. When turning, shift the position of your feet rather than twisting your body at the waist.
- Reverse the procedure to set the object down.

Remember, the secret to proper lifting is to bend your knees, not your back, and let your powerful leg muscles do most of the work.

NOTE: You may want to let everyone demonstrate with a light load that they understand proper lifting techniques.

Remember, a failure to follow safety procedures properly or to pay attention to workplace safety could result in injury to you or your fellow workers.

2. USING LADDERS

There are three basic types of ladders used in gins: step, portable/extension, and fixed. Many of the same safety rules apply to each type. Ladders are involved in many accidents in and around gins because they are used quite often to reach the high gin equipment.

The first part of safe ladder usage is to select only good quality, heavy duty ladders. Inspect them regularly. Quickly observe the general condition of a ladder before you climb that first step. See that no rungs are broken or missing, there is no oil or grease on the ladder, and the side rails are not damaged. If it does not look safe to you, let your supervisor know.

The second part of safe ladder usage is the use of good safety practices.

- Place the ladder so the distance between the wall to the foot of the ladder is about equal to 1/4 the length of the ladder. This means that the foot of a 12' ladder should be 3' away from the wall.
- The top of the ladder should extend 3 feet beyond the lading to allow you safe hand support to step off of and back onto the ladder.
- Never step on a rung above the upper support because it could make the base of the ladder "Kick Out."
- The ladder should be long enough so you can work standing no higher than the 4th rung from the top. This allows you to comfortably grasp the side rails.
- When you have set the ladder in place, check to see that the footing is level and firm. Make sure the area around the base is free of oil, grease, water, or tools which could cause a fall or slip. Check to see that the extension ladder locks are both in position.
- If you are working on a ladder higher than 15 feet off the ground, make sure that it is securely latched or a helper is facing the ladder and holding it with both hands.
- Climb down off the ladder to move it each time you need to reach a new work area.
- Do not lean from the ladder.
- Do not overreach from the ladder.
- Do not straddle the space between the ladder and another object.
- Never place the ladder in front of a door unless the door is locked, blocked, or guarded.
- Always face the ladder when going up or coming down. Keep both hands free for climbing.
- Only one person at a time should be on a ladder.
- Never stand ladders on boxes, barrels, or other makeshift objects to increase their height.
- Always use a ladder which is the proper length.
- When you carry a ladder, balance it on your shoulder near the center. Keep the front end high enough to clear a man's head and the back end near the ground.
- Do not use metal ladders around electrical equipment. Use wood or fiberglass ones instead.
- Never lean a ladder against unsafe backing, such as loose boxes, etc.
- Ladders should be stored where they will not be exposed to the weather and where there is good ventilation. They can be hung on brackets against a wall.

NOTE: Use a good ladder to demonstrate the safe way. And don't fall, it would be quite embarrassing.

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3. FIRE IN THE GIN

Fire can be very serious in a gin because the two things required to cause a fire - air and combustible material - are readily available. Fire can “flash” across cotton very quickly, especially when a blast of air hits it. Fire from the cotton can then ignite clothing, cause burns and cause lung damage due to smoke inhalation.

Following are some suggestions for preventing and dealing with fires in the gin.

- Do not smoke in the gin, particularly in trailers and in the overflow.
- Know where fire extinguishers and other fire fighting equipment are located and learn how to effectively use them.
- Be aware of the smell of burning cotton and report it immediately.
- As soon as a gin fire is discovered: a) stop the flow of cotton into the plant, b) pull the gin stand's breasts so the seed cotton will run out on the floor where you can extinguish the fire, c) let the lint system empty into the press, d) shut down the gin machinery, e) tie out the “tire bale” and get it away from the gin or combustible material, and f) thoroughly check inside all the machines for fire on tags or remaining cotton.
- Bales ginned prior to and after discovery of fire could be “fire-packed” and should be separated and observed for several days.
- Keep fire fighting equipment, fire lanes, and fire exits clean and ready for immediate use.
- Solvents and flammable liquids are a major source of fire. Use as little as is necessary to do the job. Keep solvents in self-closing containers and do not use solvents around sparks, flame or excessive heat.
- Never work with blow torches, welding or flame-cutting equipment near flammable vapors, gases or liquids, and protect work areas from sparks and hot metal.
- If you see a fire hazard and can't do anything about it yourself, report it at once to your supervisor.

NOTE: Hold a fire drill or use an “imaginary” fire to teach employees the proper actions to take when a fire is detected.

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4. MACHINE GUARDS AND SAFETY DEVICES

Protective guards and safety devices prevent many accidents and are required by government OSHA and state regulations. Gins that have guards and safety devices in place are much safer than gins that do not. Even with guards and safety devices in place, you should be alert and cautious when working on or around gin machinery.

- Never operate any piece of gin machinery while the guard is off.
- Never “fix” any safety device so it will not operate as intended. They are there for your protection.
- The job is not finished until the guard is replaced. If you take it off - put it back.

NOTE: Get employees to talk about the consequences of getting a hand caught in a V-belt or roller chain drive.

Also, talk about the consequences of “fixing” the tramper door limit switch so the tramper will run with the door open and someone puts a hand inside or even puts his head inside to look. This has happened.

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5. SHUT IT OFF AND LOCK IT OUT

Before you work on or attempt to clean or unchoke a machine in the gin, turn the power off and lock the electrical switch in the off position. Otherwise, someone else can come along and start the machine while you are working on it.

Several major accidents have happened in gins due to failure to lock out equipment. Machines have been turned on while workers are completely inside seed cotton cleaning machinery and presses.

- Never work on any equipment while it is running.
- Before you get into a dangerous position in or around machinery, put a lock on the electrical switch and take all the keys with you. Never give anyone a key to your lock.
- After locking out, always test the lock out by trying to start the equipment. You could have locked the wrong switch.
- The entire gin should be shut down when any machine needs repair. Economic studies show that energy costs make it cheaper to shut down a gin rather than allowing it to idle if it is down for ____ minutes.
- Be aware of machines which start and stop automatically. They are especially dangerous to work on since it takes a special effort to determine if the power switch is off or if the machine is only in the pause operational phase.
- Think for a moment what it would be like to have your arms up inside a seed cotton cleaner, or to be inside the press box and the power is turned on. Just thinking about something this awful should be plenty of motivation to **TURN ALL EQUIPMENT OFF AND LOCK IT OUT BEFORE CLEANING OR REPAIRING MACHINERY.**

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6. GIN HOUSEKEEPING

Good housekeeping can be extremely important in keeping a gin safe. Housekeeping can also be an indication of the attention that is given to safety.

Good housekeeping is the foundation for a safe, healthful and pleasant place to work.

The general rule for good housekeeping is: "A place for everything and everything in its place".

- Keep materials and equipment out of aisles, passageways and off stairways.
- Have a place to store spare parts - - not in the corners.
- Return tools and equipment to the proper storage place after use.
- Keep floors dry and avoid spilling liquids, especially oils. Clean up all spills immediately.
- Oily rags, old paint cans, oil containers, etc. that have held flammable liquids are a fire hazard.

Properly dispose of these as soon as you can.

- Throw trash and scrap in proper waste containers; place oily materials in covered metal containers.
- Keep your work area clean.

NOTE: Point out the specific areas in your gin that need immediate attention and/or relate experience where better housekeeping would have made a difference

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7. COMPRESSED AIR PRECAUTIONS

Compressed air is quite handy around a gin, but it can be dangerous if not used properly. Most shop air is under high pressures, often exceeding 100 p.s.i. Yet a blast of air under only 40 p.s.i. from four inches away can rupture an eardrum or cause a brain hemorrhage. As little as 12 p.s.i. can “pop” an eyeball from its socket. Air can enter the navel, even through a layer of clothing, and inflate and rupture the intestines. And there are reports that compressed air under 80 p.s.i. struck a small hand wound and inflated the arm, causing shooting pains from the fingers to the shoulder. Compressed air can cause bubbles of air in the blood stream.

One authority estimates that as little as 4 p.s.i. can rupture the bowel. Directed at the mouth, it can rupture the lungs and intestines. It can be dangerous to use compressed air to blow dust or dirt off clothing or body parts. Horseplay is never funny when it causes an accident, and fooling around with compressed air can be lethal.

The following guidelines can help reduce the risk of injury when using compressed air:

- Examine all hoses, connections, and equipment to see that they are in good condition before turning the pressure on.
- Never point an air hose nozzle at any part of your body or at any other person. NO HORSEPLAY WITH THE AIR HOSE.
- Never kink the hose to stop the air flow — turn it off at the control valve.
- When using compressed air for cleaning, make sure the pressure is no higher than 30 p.s.i.
- Always wear eye protection when using compressed air to clean.
- Before using compressed air, make sure that dirt will not be blown onto other workers in the area. Only the user should be in the vicinity.
- Turn off the valve on both the tool and the air line when the job is finished.

NEVER LOOK INTO THE BUSINESS END OF A COMPRESSED AIR DEVICE OR APPARATUS AND NEVER POINT IT AT ANY PART OF THE BODY. When you do, you convert an everyday work tool into a lethal weapon.

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8. GIN YARD SAFETY

When the gin is running, there is a lot of traffic on the yard. Cotton is coming in from the field, trailers or modules are being moved to the section shed or module feeder, employees are going to and from work, bales and seed are being hauled away, and general traffic from associated people may be high. There are many people and vehicles to watch out for. Some of the most important precautions are:

- Always be on the lookout for people or vehicles.
- Don't go too fast! Go even slower on rough or slick spots.
- Slow down when making a turn.
- On short turns, look behind you to make sure that the towing vehicle does not hit the towed equipment.
- Never spin a tractor around by using one brake.
- Both brakes should be used when stopping a heavy load. If only one is used, your direction will be changed and if you are moving fast enough, the rig could jack-knife and cause a serious accident.
- Before moving any load, make sure that no one is in your path. Look back to see that no one has gotten under the trailer to work on it, to eat lunch, or take a nap.
- Know safe operating rules before you drive a tractor. If you have not had safe tractor operation training and tractor driving experience, tell your supervisor.
- Do not drive close to fences, trees, ditches, vehicles, buildings, or other obstacles. Look forward, backward, and to the side before you move. While you are moving, constantly scan the area around you in all directions for hazards.
- Do not operate a tractor from anywhere other than the driver's seat.
- Do not allow anyone to ride on a tractor other than the driver.
- Be very careful when hitching to a trailer. Use a safety hitch pin and always be sure the device to keep the pin in position is in place.
- Never mount or dismount a tractor while it is moving.
- Do not stand on the ground and start a tractor.
- When you stop a tractor, set the brakes. Before you dismount, shift the transmission into a low gear and wait until the engine has completely stopped turning.
- If the vehicle you are operating needs repair or adjustment, tell your supervisor.
- If a tractor has a ROPS (roll bar), fasten the seatbelt while you are operating it.

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9. PERSONAL PROTECTIVE EQUIPMENT

It takes guts to wear personal protective equipment. The first baseball catcher to wear a face mask was laughed out of the game. Fielders who wore mitts were jeered by the crowds. Football helmets were worn only by “sissies”. Personal protective equipment has proven itself, and the people who use it are the smart ones - the ones who know the risks.

A crash helmet and seatbelt are mighty comforting when you’re zipping around an auto race track at 150 miles per hour.

A helmet, shoulder pads, and kidney pads make life a lot more enjoyable when you’re being cut down by a 275 pound tackle.

In a gin it is smart to use personal protective equipment. Complaints about wearing personal protective equipment include excuses that they are uncomfortable or unnatural. But think how uncomfortable and unnatural a hearing aid or a glass eye would be.

- Every gin worker should use the personal protective equipment which the gin recommends or furnishes. It is your responsibility to use the equipment properly by following the instructions on the package or carton. You are only cheating yourself if you wear the equipment improperly. Use the equipment wisely and avoid waste so that the supplies will be available when needed.
- Disposable equipment, such as ear plugs and dust masks, are often used for much shorter periods of time than they could be used. Dust masks are approved for a full shift’s use. Write your name on the mask and store it in a clean location so that it can be suitable for your use another time. Sponge rubber ear plugs can be kept clean in your pocket using the plastic wrapper. Do not use unapproved hearing protection, such as cotton or cottonseed, as ear plugs.
- Gloves can protect your hands, particularly when handling bale ties at the press. However, their use presents a real danger if you forget to take them off when working around other moving machinery such as gin stands and lint cleaners.
- Think about first-aid equipment also. Most of the first-aid supplies are sealed in sanitary wrappers for individual dosages. If you use first-aid supplies, close the package and latch the first-aid box shut to keep dust and other contaminants out of the kit. This preserves the supplies in a sanitary condition.

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SAFETY MEETING REPORT

GIN Name: _____

Conducted by: _____

Date: _____

Time: _____

I have attended GIN SAFETY LESSON #9 and I understand the lesson materials and suggested safety practices contained in them. I realize that failure to follow proper safety practices and exercise caution in the workplace could result in injuries to myself or my fellow workers.

Signatures of Participants _____

Instructor (signature) _____

10. DRESS FOR SAFETY

When you come to work at the gin, wear ordinary clothing which is clean, in good repair, and fits properly. Trousers should not be too long, shirttails should be tucked in, and sleeves buttoned on long sleeved shirts. If you wear a jacket, make certain that the sleeves or other parts are not so loose that they could become caught in the machinery. Keep your work clothes clean, as dusty or dirty clothing can cause skin rash and irritation.

- Wear clothes made of cotton or wool. Synthetic fabrics can melt and cause severe burns when they are worn near a flame or intense heat.
- Wear comfortable, well fitting shoes or boots. Don't buy poorly made or low quality shoes. Well made shoes or boots cost more, but they fit better, last longer and are safer and more comfortable. Slippery shoe soles may cause slip and fall injuries when pushing bales off a bale wagon or stepping up to the seat of the tractor.
- Don't wear anything that could get caught in a machine and pull you in. It may seem unlikely, but serious amputations and other injuries have resulted from wearing rings, necklaces, or other jewelry.
- If your hair is long, tuck it under a cap or net. Long hair can become entangled in machinery and pull your head in. Also long facial hair can prevent the dust mask from providing its intended protection.
- At social activities it's great to be dressed "fit to kill". However, at the gin, be sure not to dress "fit to BE killed". Wear the appropriate clothing and use safety equipment.

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11. EYE PROTECTION

Eye protection is necessary for many jobs in the gin. Let me hear some suggestions on what kind of jobs . . . (listen for about 5 suggestions). Correct! Eye protection is required for operations involving chipping, hammering on metals and concrete. It is also required when grinding, drilling, and using the wire brush and pneumatic impact tools.

It is absolutely necessary to use special glasses when working around electric arc welding or cutting or gas welding. Looking directly at arc welding can damage your eyes even when you are some distance away. Many reptiles have transparent protective sheaths that can be drawn over the eyes for protection and still enable them to see. The camel has a similar mechanism to protect his eyes from blowing sand. You do not have this natural protection. Your protection is your brain - use it to protect your body!

- Think ahead of time about the eye injury hazards. If you are chipping, put the safety goggles on before you start. If you are working under a piece of equipment, put your safety glasses on first.
- If you feel you don't have the proper kind of eye protection for the job, please ask me and I'll make sure you get it.

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12. SAFETY IN THE SUCTION SHED

There is a lot of activity in the suction shed. Tractors, trucks, trailers, and modules moving around create conditions for accidents to happen. Also, distractions from visitors, gin office workers, and people delivering cotton to the gin contribute to the dangers in this area. These rules can help make the suction area safer.

- Be very careful while climbing up and down cotton wagons or modules. Trailers should have ladders built on them. The gin should have a good ladder to use on modules or trailers without ladders.
- Never climb (either up or down) on a trailer or module that is moving.
- When climbing on a trailer, hold the rails firmly. In case someone accidentally bumps the trailer, you could be thrown off.
- Do not jump from the top of a trailer, module or ladder.
- When you push the suction pipe into the raised position to change loads, use the palm of your hand to avoid cutting your fingers on jagged metal edges that may be on the inside section.
- Watch for vehicles which are moving around the yard.
- Avoid being crushed between two trailers if a full trailer or a vehicle is used to push an empty trailer from under the section.
- Do not carry any metallic objects in your pockets. They can get in the gin machinery and cause a fire.
- When working on modules or fuel trailers, always start in the center and work out to keep from falling off the edge. Push the pipe rather than pulling it so if you slip, you will not fall off.
- Don't wear your favorite cap or your toupee!

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13. LINT CLEANER SAFETY

Some of the most serious gin accidents happen around lint cleaners. Most common are fingers and hands getting caught in the lint cleaner saw or feedworks.

Many of these accidents happen when gin workers attempt to clean the grid bars while the machine is running. When a stick touches the saws, it can be snatched so quickly that a person cannot turn it loose before his hand contacts the saw. Once the saw contacts flesh, you cannot pull it out. Think for a minute about lint cleaner saws working on your hand. NOW are you interested in keeping this from happening?

These guidelines can help keep a terrible accident from happening to you, but ultimately you must be responsible for keeping all parts of your body out of gin machinery.

- When maintaining, inspecting, cleaning or adjusting lint cleaners, cut off and lock out all power at the master disconnect switch. Put your personal lock on the machine and put the keys in your pocket.
- The saw cylinder will continue to turn for a few minutes after its power is shut off. Do not open any guards or doors or insert your hands or gin stick until all movement has stopped.
- Be sure that all safety interlocks, and specifically interlocks on doors giving access to the saw, are operating properly. Even when an interlock is present and functioning, look to be sure motion has stopped before opening doors or guards.
- Be sure that all drive guards are properly installed and in the position to protect.
- Gins should have an audible warning device which is routinely sounded prior to starting any piece of equipment. All gin workers should be familiarized with the sound and instructed to immediately clear themselves from machinery when this sound is heard. **PRIOR TO STARTING UP ANY EQUIPMENT, MAKE CERTAIN THAT EVERYONE IS CLEAR OF ALL MACHINERY.**
- Do not wear loose clothing or jewelry when working about lint cleaning or other gin machinery. Keep long hair covered.
- Read all operating instructions before operating the lint cleaner. If you do not completely understand the instructions, ask your supervisor for an explanation.
- Obey all warning signs.
- Stay alert at all times. Come to work rested and ready to work. If you are not in a safe working condition, don't come. We need you at the gin, but only if you can do the job safely.
- Use the personal protective equipment (ear plugs, dust masks, etc.) which your supervisor suggests or furnishes.

NOTE: Lint cleaner accidents are usually serious. DON'T GET CAUGHT UP IN ONE.

Remember, a failure to follow safety procedures properly or to pay attention to workplace safety could result in injury to you or your fellow workers.

14. PRESS OPERATION SAFETY

There is a lot of activity around a cotton gin press. Several people are moving around doing their job, and in many gins, automatic press equipment can go into operation without warning. All gin employees need to know general press operation and safety precautions even if they are not working on the press.

The following guidelines can help keep a serious accident from happening to you, but you must be responsible for keeping parts of your body from coming in contact with gin machinery.

- Read and understand operating instructions before you operate any equipment in the gin.
- Become familiar with warning devices (horns, buzzers, etc.) before you go to work in any part of the gin. Ask your supervisor if you have any questions about what each warning device means or how it is to be used.
- Obey all warning signs.
- Prior to startup, make certain that all personnel are clear of the machinery. Sound the warning device and wait long enough for other workers to get clear of machinery before starting the press.
- Before you inspect, clean, adjust, or maintain any gin machinery, cut off the lock out all power at the master disconnect switch. Put your personal lock on the switch box and put all the keys in your pocket. After lockout, do not reach inside the guards or machine until you are certain all motion has stopped.
- Be sure that interlocks on tramper doors are operational. Never put any part of your body inside the press box unless the master disconnect switch is locked out.
- Do not place any part of your body beneath the follow block while the ram is in motion.
- Do not enter a press pit while power is on. Where possible, the same holds true for any platform on the press.
- Stand back from rotating press circle and automatically opening doors.
- Stay at least five feet from freshly strapped bales before ram is released because of the possibility of straps breaking.
- Stand clear as bales are ejected and conveyed through the gin.
- If you are manually strapping a bale or working close to a strapped bale, wear protective clothing and gloves in case a fresh tie or strap breaks.
- When automatic strapping heads are in use, do not place any part of your body between the heads and the end or center column.
- Never attempt to make hydraulic system repairs with a bale in the press or with the ram in any position other than the lowest.
- Bleed off pressure and then use extreme caution when disconnecting flexible hose and other hydraulic fittings. Do not alter settings on relief valves or pressure switches. Use only recommended oils and fluids in hydraulic systems. Do not use highly volatile fluids for cleaning.

Remember, many presses are automated and can start into motion at any time, without warning. Don't go near a gin press without safety instructions.

NOTE: Extreme forces are required to compress a bale of cotton. Respect these forces. Keep your body out of dangerous places. If you don't understand how something operates or the safe way to operate it, ask your supervisor.

Remember, a failure to follow safety procedures properly or to pay attention to workplace safety could result in injury to you or your fellow workers.

15. SAW GIN STANDS SAFETY

Serious accidents have occurred around gin stands. The saws that separate the cotton fiber from the seed are very sharp and they will mutilate human flesh instantly. If your finger or hand gets in contact with a running gin saw, very serious damage will be done. Think for a minute about those saws working on your hand and arm. NOW are you interested in preventing this?

These guidelines can help keep a terrible accident from happening to you, but you must be responsible for keeping parts of your body from coming in contact with gin machinery.

- When maintaining, inspecting, cleaning or adjusting gin stands, cut off and lock out all power at the master disconnect switch. Put your personal lock on the switch box and put the keys in your pocket. Saws continue to turn after the power is turned off. After lock-out, do not reach inside the guards or machine until you are certain all motion has stopped.
- Be sure that all guards are in place and permanently installed that preclude contact with gin saws while they are in motion. Check to see that the saws do not project through the ribs when the breast is in the "out" position. If you do not fully understand, ask your supervisor.
- Read all operating and safety instructions before operating the gin.
- Do not put your hand in the roll box while a gin stand is operating.
- Use compressed air to remove congestion in the huller front, roll box, seed fall area, and moting and brush areas. Never use your hands near the saws while they are moving.
- When using a gin where the gin breast comes to the "out" position when there is no cotton in the feeder, do not work on the gin until the power has been cut off. Do not put your hand or even a gin stick into the roll box area while the breast is out. The breast might come in automatically and injure your hand and arm.
- Stay alert at all times. Come to work rested and ready to work. If you are not in a safe working condition, don't come. We need you at the gin, but only if you can do the job safely.
- Use the personal protective equipment (ear plugs, dust masks, etc.) which your supervisor suggests or furnishes.
- Do not wear loose clothing or jewelry around any machinery. If you have long hair, keep it covered so it will not get entangled in machinery and pull you in.

NOTE: Gin accidents can be serious. **DON'T GET CAUGHT UP IN ONE.**

Remember, a failure to follow safety procedures properly or to pay attention to workplace safety could result in injury to you or your fellow workers.

16. ELECTRICAL SAFETY

In the modern cotton gin, electrical safety is the personal responsibility of each worker. Wherever there are possible electrical hazards to people, equipment, or property, your personal safety depends on understanding and practicing the following:

- Dangers of electricity
- Safe working conditions and practices
- What to do in an emergency

Most have received an electrical shock at one time or another. Electrical shocks can occur when an electrical current travels through your body to ground. Serious injury, or even death, may occur from an electrical shock. You are likely to get a shock when you accidentally touch a live wire or come into contact with electrical current passing through a poorly insulated power tool, electrical device, or a faulty electrical cord. You could also receive a shock when you plug a cord into an outlet while standing in water, or when your hands are wet. Other electrical hazards include sparks from electric motors or faulty cords, and fires or explosions from electrical panels and switches. Fires or explosions can also result from improper storage of flammable liquids too close to electrical panels.

To protect yourself from electrical hazards, you should be aware of the following ground rules for electrical safety:

- Never overload an outlet or motor
- Don't let grease, dirt or dust build up on gin machinery
- Don't use a household grade extension cord to operate power tools or heavy equipment
- Don't run extension cords along the floor where they can be damaged or run over
- Don't touch electrical powered equipment with wet hands
- Never put anything into an electrical outlet except an electrical plug
- Don't use temporary wiring in place of permanent wiring
- Never touch downed power lines
- Don't use power equipment that smells, smokes, or sparks
- Stay away from exposed electrical parts, unless you are a qualified worker
- Never use frayed electrical cords
- Be sure the equipment you operate is grounded
- Leave at least 3 feet of workspace around electrical equipment for instant access
- Keep work area clean. Be especially careful with oily rags, paper, cotton lint, dust or anything that could burn
- Check the clearance of overhead power lines when operating tall machinery or working on a ladder outdoors
- Use extension cords only when necessary and only if they are rated high enough for the job
- Follow manufacturer's instructions for electrical equipment
- Leave electrical repairs to qualified personnel

In case of shock, shut the power off and immediately call for medical help.

Remember, a failure to follow safety procedures properly or to pay attention to workplace safety could result in injury to you or to your fellow workers.

17. FIRE EXTINGUISHERS

There is no second chance when it comes to fire. Work related fires have taken the lives of hundreds of people, and injured countless others.

Fires spread very quickly. In a split second, they can do extensive damage and people can get seriously injured or killed. It is important to determine the type and size of fire, and whether or not to fight it yourself. You should only fight a fire if it is small and confined to the immediate area. Be sure the fire extinguisher you have on hand is the right kind for the type of fire.

Using the wrong type of extinguisher on a fire can make the situation worse. These are the main types of fire extinguishers:

- Class A- for fighting fires of ordinary combustible materials, such as wood, paper, cotton lint, cotton bales, cloth, gin byproducts, and cottonseed piles.
- Class B-f or fighting fires of flammable liquids, such as grease, gasoline, diesel, paints, solvents, and hydraulic oil.
- Class C- for fighting electrical fires on electrical equipment, such as switches, motors, and power tools.
- Class A, B, C- for combination fires
- Class D- for fighting fires on combustible metals, such as magnesium
- Halon- for fighting fires on live electrical equipment, such as control panels and computers

To properly use a fire extinguisher, use the PASS method:

- P- Pull the safety pin.
- A- Aim the nozzle at base of fire.
- S- Squeeze the trigger, while holding the extinguisher upright.
- S- Sweep the extinguisher from side to side, covering the area of the fire.

For your safety, you should remember the following when fighting a fire with a fire extinguisher:

- Know where the fire extinguishers are located in your gin.
- Check the letter on the extinguisher to make sure it is the proper type for the location in the gin. (For example, do not place a Class A near the electrical panel)
- Inspect fire extinguishers monthly.
- Don't continue to fight a fire if it continues to spread.
- Don't use water to fight flammable liquid or electrical fires.
- Turn off electrical power in the area before fighting an electrical fire.
- Don't try to fight a fire, unless you have been trained in the proper use of fire extinguishers.
- Keep a clear path of retreat behind you to prevent getting trapped.

Remember, failure to follow safety procedures properly or to pay attention to workplace safety could result in injury to your or your fellow workers.

18. BALE HANDLING SYSTEMS

There may be several people working around the bale handling system. In addition to the press crew, it could also include forklift operators who normally work outside. They may enter the area to move bales to the yard or place on transport trailers. It is important to train all workers in the gin on the known hazards that could be associated with the bale handling system. It should be considered a restricted area to workers not normally assigned. Visitors should enter the building through a designated doorway, and should not be allowed near the bale handling system.

Additional precautions to consider when evaluating your operation, or for training purposes:

- Wear proper personal protective equipment, e.g. safety glasses, face protection, gloves
- No loose clothing, e.g. tuck in shirt tails, long sleeves buttoned
- Report to your Supervisor warning devices that do not operate, e.g. lights, buzzers, emergency stop
- Be aware of tripping hazards if the system is equipped with a bale conveyor to transport the bale from the press to the bale handling system
- Stand clear of the bale conveyor while it is motion
- Stand clear of the robot cart while it is motion
- Do not “walk through” or stand between ram/bale bagger/weight scale openings
- Take proper precautions when handling the needle to sew end of bale bagging
- Do not stand in front of the bale pusher while sewing or placing the bale tag
- Do not lean against bale handling rollers
- Keep hands clear of bale conveyor or belt conveyor nip points
- Press operator must oversee and remain at controls if workers remove broken wire ties from the bale
- Forklift operator should wait to move bales until workers are clear

Remember, a failure to follow safety procedures properly or to pay attention to workplace safety could result in serious injury to you or your fellow workers.

19. MODULE RETRIEVERS (TRUCK AND TRACTOR UNITS)

Around the gin yard, there is great potential for serious injury, even death. One of the most serious areas of concern is the module truck or module retriever. Many of the injuries associated with this equipment can be avoided by following a few simple rules:

- Do not wear loose clothing and keep long hair tucked under a cap or hard hat
- Prior to operation each day, check the truck/tractor/retriever to be sure it can be safely operated, e.g. lights, brakes, tire inflation, wheel bolts, guards in place, hydraulic hoses, equipped with fire extinguisher, etc.
- Watch out for other people or traffic, especially on the yard
- Fasten your seat belt in a truck, or if the tractor is equipped with rollover protection
- Do not stand between truck/tractor and retriever unless truck/tractor engine is turned off and brake set— use park lock if equipped
- No passengers are allowed to ride on a tractor or retriever
- Do not mount or dismount the tractor using the PTO drive as a step
- Do not step on bare fuel tanks, rear frame wheels, battery, or tool boxes
- Give extra attention when making turns to avoid striking objects with the back end of the module mover
- Watch your speed— slow down when making turns and around ditches, or when crossing slopes, slick/muddy surfaces, standpipes, etc.
- Do not start removing module ties or tarp until a module has been completely unloaded and retriever is clear
- Stay clear of retriever when chains are in operation
- When performing repairs, prevent sudden movement or operation, e.g. chock wheels, remove key from ignition
- Do not stand on bed chains while they are in motion to oil or clean the chains
- Never get under the module truck unit while the engine is running
- Do not stand or work under the bed until safety bar/devices are in place
- Watch for and report cotton contamination, e.g. hydraulic leaks, module ties, etc.
- Do not smoke while loading or unloading modules
- If the truck/tractor/retriever is “stuck” in muddy conditions, use appropriately rated equipment to pull it out of the mud

Remember, a failure to follow safety procedures properly or to pay attention to workplace safety could result in injury to you or your fellow workers.

