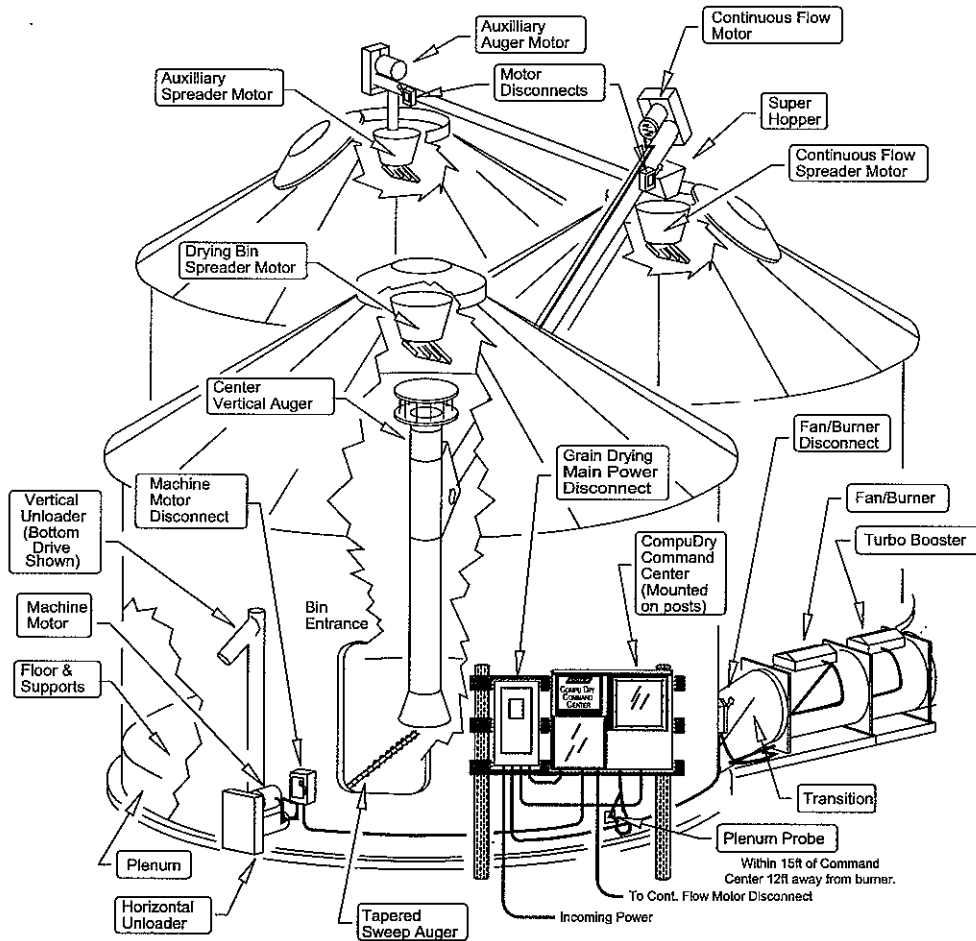




OPERATOR'S SAFETY MANUAL

WITH BIN UNLOADING PROCEDURE



**READ AND UNDERSTAND THIS MANUAL BEFORE
OPERATING SHIVERS EQUIPMENT!**

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P-10001

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TABLE OF CONTENTS

	PAGE #
SAFETY	1-2
DEFINITIONS	3-4
PROPER USE OF SAFETY LOCKS AND DISCONNECTS	5-7
LOCATION OF SAFETY DECALS	8-23
LIST OF OPERATING MANUALS	24
BIN UNLOADING PROCEDURE	25-29

SAFETY

The operator of this machinery must assume the responsibility for his own safety, and that of those who are working with him. He must also make sure the equipment was installed properly. Factors that contribute to the overall safety of operation are: proper use, maintenance, and frequent inspection of the equipment. All of these are the operator's responsibility.

If any items covered in this manual are not completely understood, or there is a concern with the safety of the product, contact Shivvers Mfg, Inc. at the address shown on the front page.

Shivvers is genuinely interested in providing the safest practical equipment to our customers. If you have a suggestion which you believe will enhance the safety of this product, please write us and let us know.



TAKE NOTE ANYTIME THIS SAFETY ALERT SYMBOL APPEARS. YOUR SAFETY, AND THAT OF PERSONS AROUND YOU IS AT STAKE.

The safety alert symbol will be accompanied by one of three signal words whose definitions are given as:

DANGER: Red and white. Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

WARNING: Orange and black. Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION: Yellow and black. Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Anytime you are working with your drying unit, be sure to observe these common sense rules:

- 1). All units must be equipped with a main power disconnect switch. This disconnect switch must shut power off to the complete drying system. It must have the capability of being locked into the OFF or OUT position. Disconnect and **LOCK OUT** this main power disconnect switch before conducting any inspection, maintenance, repair, adjustment, or cleaning of the drying system. When you must have the electrical power on to troubleshoot equipment, do it from a safe distance, and always from outside the bin.
- 2). Keep the bin entrances locked at all times. To unlock the bin, first lower the Level-Dry (if so equipped), then shut the main power disconnect off. Take the safety lock off the bin entrance and place it on the main power disconnect before opening the bin entrance. **Never enter the drying bin unless the Level-Dry (if so equipped), is completely lowered, and all power is disconnected and locked out.**
- 3). Always keep all shields and guards in place. If shields or guards must be removed for inspection or maintenance, replace them before unlocking and turning the power back on.
- 4). Be sure everyone is clear of all the drying and transferring equipment, and outside of all bins, before unlocking and turning the power on. Some equipment may run upon re-application of power.
- 5). Make sure that all decals are in place and are easy to read. Do not operate the equipment with missing or illegible decals. If replacements are needed, contact Shivers Mfg, Inc. or your dealer.
- 6). Prior to use, inspect all equipment to insure that it is in good operating condition. Do not operate with missing, damaged, or worn parts. Use only Shivers approved replacement parts.
- 7). Metal edges can be sharp. Wear protective clothing and handle equipment and parts with care.
- 8). Keep children and bystanders away from drying and transferring equipment at all times.
- 9). If going up the bin ladder and/or performing maintenance on the top of the bin, take precautions to prevent accidental falls. When on top of the bin, wear a safety harness or other safety device.
- 10). At least annually, review all operating and safety manuals with any personnel working with this equipment. Always train new employees before they operate the drying equipment. Insist that they read and understand the operating and safety manuals.

DEFINITIONS

There have been many pieces of equipment manufactured by Shivers over the years, and new equipment is being introduced every year. Also, many drying systems use a combination of equipment from different companies. Therefore, always refer to the specific equipment operating manuals for more detailed definitions and proper operating procedures. The following definitions are mainly for systems with Shivers drying equipment.

DRYING SYSTEM - All grain drying components, from the input of wet grain to the storage of dry grain, including all spreaders, fans, and burners. Many control panels have interconnected control circuits.

DRYING BIN - The grain bin equipped with fan(s) and burner(s) for removing most of the moisture from the grain. This bin has the tapered sweep auger(s) on the floor.

CIRCULATOR - A machine which takes grain from the bottom of a drying bin with one or two tapered sweep augers and elevates it up a center vertical auger. The drive motor for a circulator is located outside the bin. A horizontal unloader is also provided for emptying the bin.

DRI-FLO - A machine that takes grain from the bottom of a drying bin with one or two sweep augers and discharges the grain through the horizontal unloader located under the drying floor. The drive motor for a Dri-Flo is located outside the bin. A Dri-Flo looks just like a Circulator except it doesn't have a center vertical auger.

JUNIOR/STIR-A-MATIC - A machine which takes grain from the bottom of a drying bin with one tapered sweep auger and elevates it up a center vertical auger. The drive motor for a Junior/Stir-A-Matic is located inside the bin on top of the center vertical. It does not include a horizontal unloader.

MACHINE- The mechanism which removes the dried grain from the drying bin. It could be a Circulator, Dri-Flo, or Junior/Stir-A-Matic.

3 JAW CLUTCH - A mechanism used to engage the drive of the tapered sweep augers.

CLUTCH PIN - A mechanism used to engage the drive of the horizontal unloader auger. It will also engage a bottom drive vertical unloader.

CONTINUOUS FLOW AUGER - A transfer auger, usually inclined, coming from the center of a drying bin equipped with a center vertical.

AUXILIARY AUGER - Any transfer auger other than the continuous flow auger which takes dry grain from the drying bin to storage. Also known as horizontal transfer augers.

CIRCUITROL - This is the main non-computerized auger motor control station for a Shivers drying system. It is the control box that contains electrical contactors which control motors for the tapered sweep auger(s), continuous flow augers, and auxiliary augers. It also controls the heat under the drying bin floor. There are many different specific models related to power, voltage, phase, and features. For the purpose of this manual, Circuitrol can be used interchangeably with Compact Control Center, Deluxe Circu-Trol, Small Circu-Trol, Econ-A-Trol, and others.

COMPUDRY COMMAND CENTER- This is the computerized auger motor control station for a Shivers drying system. It replaces the Circuitrol.

MAIN POWER DISCONNECT or MAIN DISCONNECT SWITCH - The electrical switch that shuts off power to the complete drying system. When this switch is shut off and locked out, it will be electrically safe to work on any piece of drying equipment. It controls all auger motors and fan motors in the drying system.

VERTICAL UNLOADER - An auger located outside the drying bin that picks up grain from the horizontal unloader and raises it vertically so grain can be loaded into a truck. It may be driven from the top with a separate motor, or may be driven from below with the horizontal unloader motor.

GRAIN SPREADER - A device that spreads the incoming wet grain in an even layer in the bin, usually by slinging it. They are usually located in the drying bin and in the storage bins.

LEVEL-DRY - A device that spreads the incoming wet grain in an even layer in the drying bin with an auger. Grain is dropped into the center of the drying bin where the Level-Dry auger picks it up and spreads it to the outside wall. It then rotates around the bin.

HOPPER BOX - A box located on the intake end of a auxiliary transfer auger to allow grain to be picked up by the auger. A slide gate can be pulled to allow grain to fall through the box into another auger or into a storage bin.

DROP OUTLET - An outlet between the ends of continuous flow or auxiliary auger with a slide gate which can be pulled to drop most of the grain into a storage bin.

AUXILIARY SWEEP AUGER - Also called a clean sweep auger. It is an auger that is attached to single sweep Circulator I's or Dri-Flo I's, to speed emptying the bin of stored grain. It is not left on during normal operation.

PROPER USE OF SAFETY LOCKS AND DISCONNECTS

The three main sources of potential energy for a drying system include electricity, gravity, and fuel. Take time to identify ALL sources of energy for your drying system, and understand how to isolate or otherwise disable them to prevent injury.

Before doing any service or maintenance, always place the equipment in a state of zero potential energy and lock out the source of potential energy to prevent unauthorized re-application of power. This includes doing any adjustment, inspection, cleaning, maintenance, or repairs that involves the removal of guards, shields, or spouts. This also includes operating the drive clutches or getting close to any parts that rotate. For functional purposes, the augers inside the drying bin cannot be guarded. Therefore, the bin shell acts as the guard. Do not enter the bin for any reason until the equipment in the bin is placed in a state of zero potential energy, and those sources are locked out.



Under certain conditions, the exposed augers inside the bin can suddenly whip around so fast it would be impossible to get out of the way, resulting in serious or fatal injury.

Under certain conditions, equipment can start up suddenly, at any time, and without warning, resulting in serious or fatal injury.

All electrical wiring shall be installed in compliance with the latest edition of the ANSI/NFPA STANDARD 70, NATIONAL ELECTRICAL CODE, as a minimum requirement, and in compliance with local wiring codes as applicable.

Wiring must be done by a competent electrician. A licensed electrician is recommended, and must be used when required by local or state statutes.

ELECTRICAL ENERGY: Because there are so many motors and interconnected controls, and because of the distances involved between the control panels and the motors, the only safe way to wire the drying system is with one main power disconnect switch. Other disconnects may be required, but there should be one shut off that will make it electrically safe to work on any piece of the drying system. This main disconnect should be labeled with Shiver's safety decal P-10811.

The main disconnect switch must be located within sight of the CompuDry Command Center or Circuitrol (auger motor(s) control) panel. This disconnect switch must also shut power off to the fan(s) because control circuits from the fan(s) go into the CompuDry Command Center or Circuitrol. It should also be in close proximity to the grain drying bin's entry door and if possible, within sight of the sweep auger drive motor. It must have the capability of being individually locked into the OFF or OUT position.

Disconnect and **LOCK OUT** the main disconnect switch before conducting any inspection, maintenance, repair, adjustment, or cleaning of the drying system. Try to operate the equipment to verify that the power is indeed de-energized. Before working with electrical wiring, verify the power is off with a good voltmeter. Check all terminals. When you must have the electrical power on to troubleshoot equipment, do it from a safe distance, and always from outside the bin. Call a qualified service man if the problem is more than you can handle, or if you are unsure about what you are doing.

If you don't have a main power disconnect switch for the drying system, have one installed before operating the equipment. Make sure you understand the wiring for your system. Make sure switches are labeled. If you have questions, contact your electrician.

A safety lock kit, (Shivvers part #632-191A), or similar should be installed on each drying bin entrance point. This locking mechanism should be tested yearly to make sure entrance into the drying bin is denied with the lock in place. This lock may be used to lock out the main power disconnect switch.

GRAVITY ENERGY: If the drying bin is equipped with a Level-Dry, before going into the drying bin or working on the Level-Dry winch, make sure the Level-Dry is in the lowest possible position. Then, shut off the main power disconnect box. Remove the lock from the bin entrance and lock it on the main power disconnect box. The Level-Dry cannot fall, and the electrical energy is locked out. Frequently inspect the wire rope and supporting members of the Level-Dry winch system for wear or damage. Do not operate equipment with worn or damaged parts.

If there is grain in the bin, make sure it is not crusted over or caked on the bin sidewalls which could cause it to collapse. If there is grain in the bin, wear a safety harness and line, and a dust respirator. Station a person outside the bin to help. Never go into a bin of grain alone.

FUEL ENERGY: The main source of fuel energy is usually the fuel burnt to heat the drying air. Make sure the source of the fuel is shut off and locked out, then allow the fuel to burn out of the line, before doing any work on the burner pipe trains.

Another source of fuel can be grain dust. Maintain a clean operation, and keep equipment (especially bearings) in good repair. Be especially careful when doing any welding or cutting around grain dust to prevent explosions or fires. Keep a fire extinguisher close by.

RESTORING ENERGY: After performing the desired cleaning, maintenance, service, or inspection, make sure all guards, spouts, and shields are back in place. Make sure everyone is clear of **ALL** the drying system equipment, and outside of the drying bin. Remove the lock(s) from the main power sources and place back on the drying bin entrance. When it is safe, restore the power. Some equipment may energize and run when power is restored.

DON'T TAKE CHANCES!

SLOW DOWN AND DO IT RIGHT!

AUTOMATIC CONTROLS CAN START EQUIPMENT AT ANY TIME!

ACCIDENTS ARE FOREVER!

LOCATION OF SAFETY DECALS

Safety decals are mounted at the factory whenever possible, but it is your responsibility to make sure other decals are installed in the proper places. It is also your responsibility to insure that the decals remain in good, legible condition. You must replace safety decals if they are missing or become illegible. Also, if any new equipment components are installed during repair, the current safety decals are required to be affixed to the replaced component.

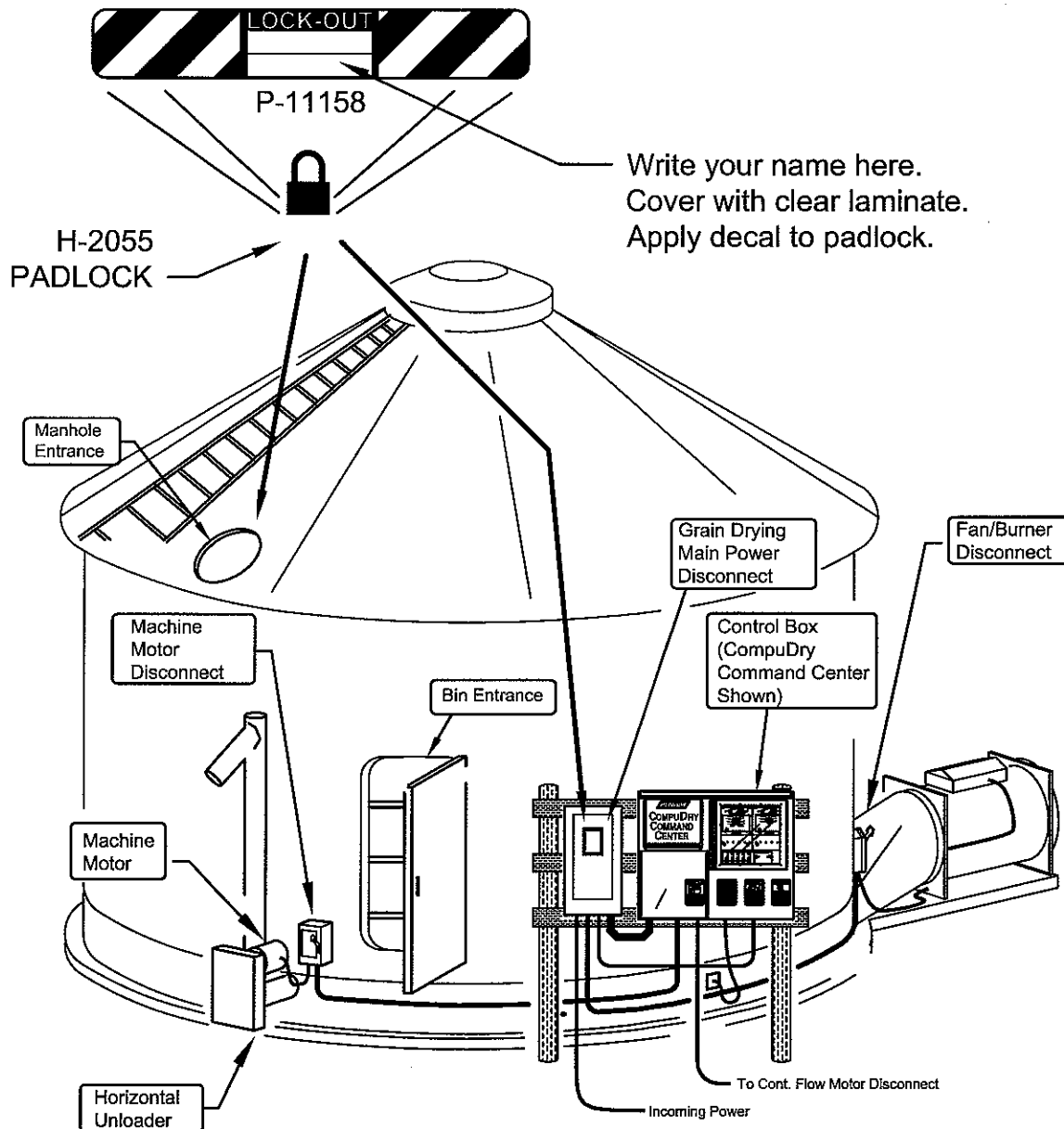
IMPORTANT: If suggested decal locations, or factory applied decals, are not clearly visible, place decals in a more suitable area. Contact Shivvers Mfg, Inc. for free replacement decals. The part numbers start with a "P-", such as P-10717.

Before applying decals, make sure the mounting surfaces are clean (not oily) and dry.

Review the following decals, and verify that they are in place, are easily readable, and clearly identify the dangers present. Contact Shivvers Mfg, Inc. for free replacement decals or for clarification of any questions you may have. Refer to the specific equipment manuals for more details on factory applied decals.

P-11158 - Field Installed

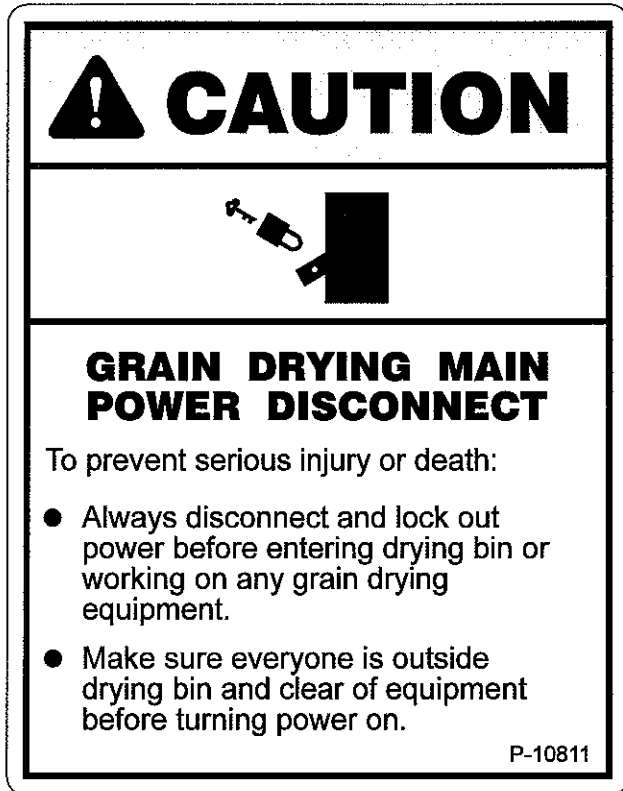
Two 632-191A (Safety Lock Kits) are provided with each Shivers dryer. This kit includes an H-2055 Padlock, P-11158 Self Laminating Lockout Decal, and hardware which will allow locking of any bin entrance point. Write your name on the decal. Cover the printing with the clear laminate, then apply the decal to the padlock. These locks can then be used to lock out power sources when working on the drying equipment. Keep the bin entrances locked when operating the equipment to prevent unauthorized access to potential dangers. The locks will also remind you to disconnect and lock out power sources before entering the bin.



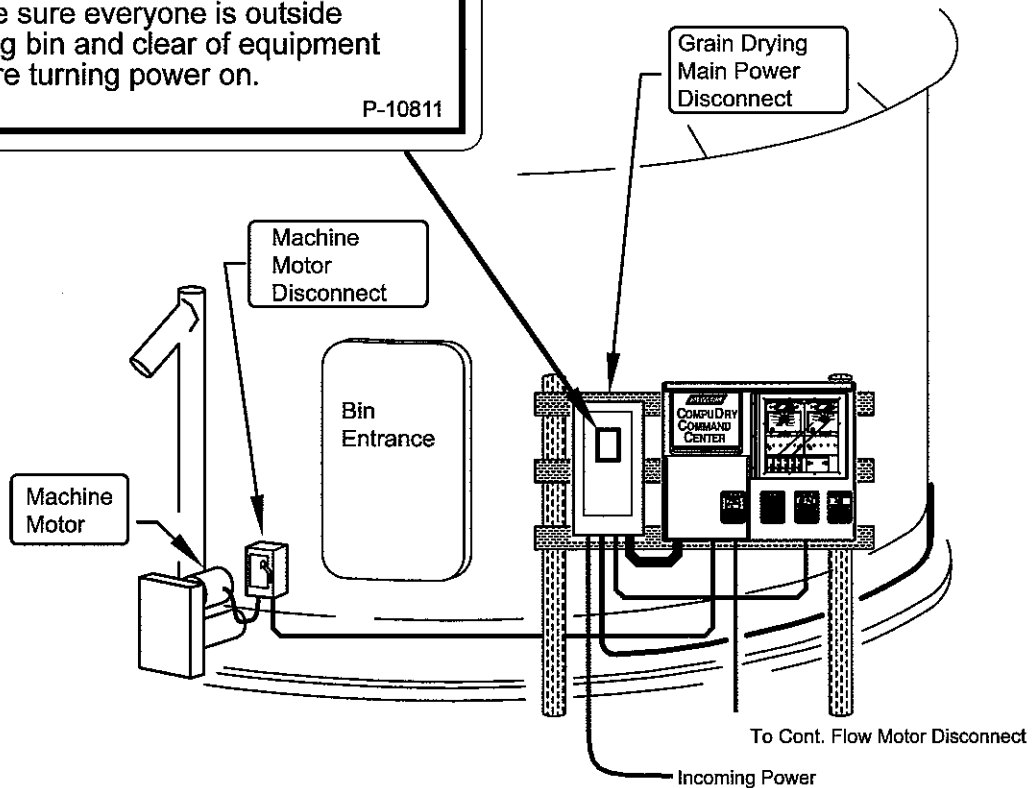
P-10811 - Field Installed

1.) ON MAIN POWER DISCONNECT SWITCH BOX

Put it only on the disconnect that shuts power off to the complete drying system (every motor, fan, and burner). Don't put it on any other disconnect.



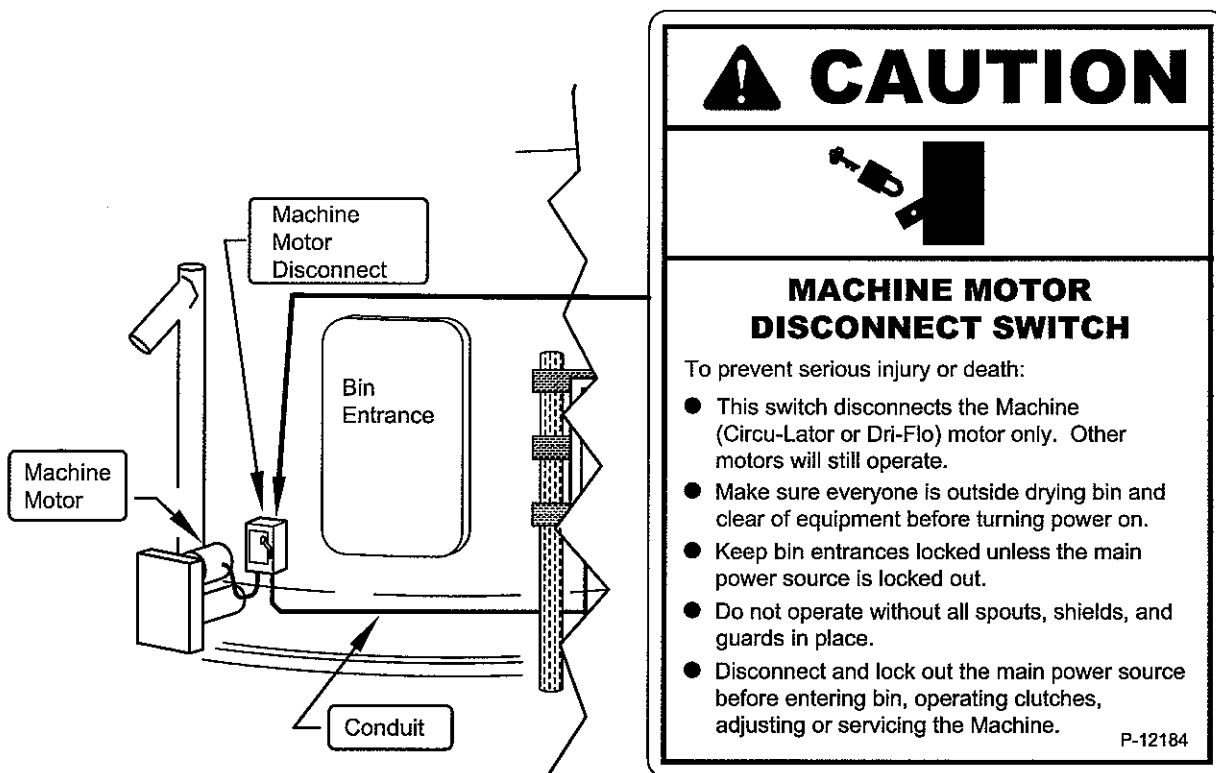
"CAUTION" Decal
Shivvers# P-10811



P-12184 - Field Installed

A Machine (Circu-Lator or Dri-Flo) Motor disconnect switch must be located adjacent to the bin entrance door. It must be of sufficient capacity to safely switch the Machine Motor, usually 10 or 15 Hp. This switch must also have the capability of being locked into the OFF position.

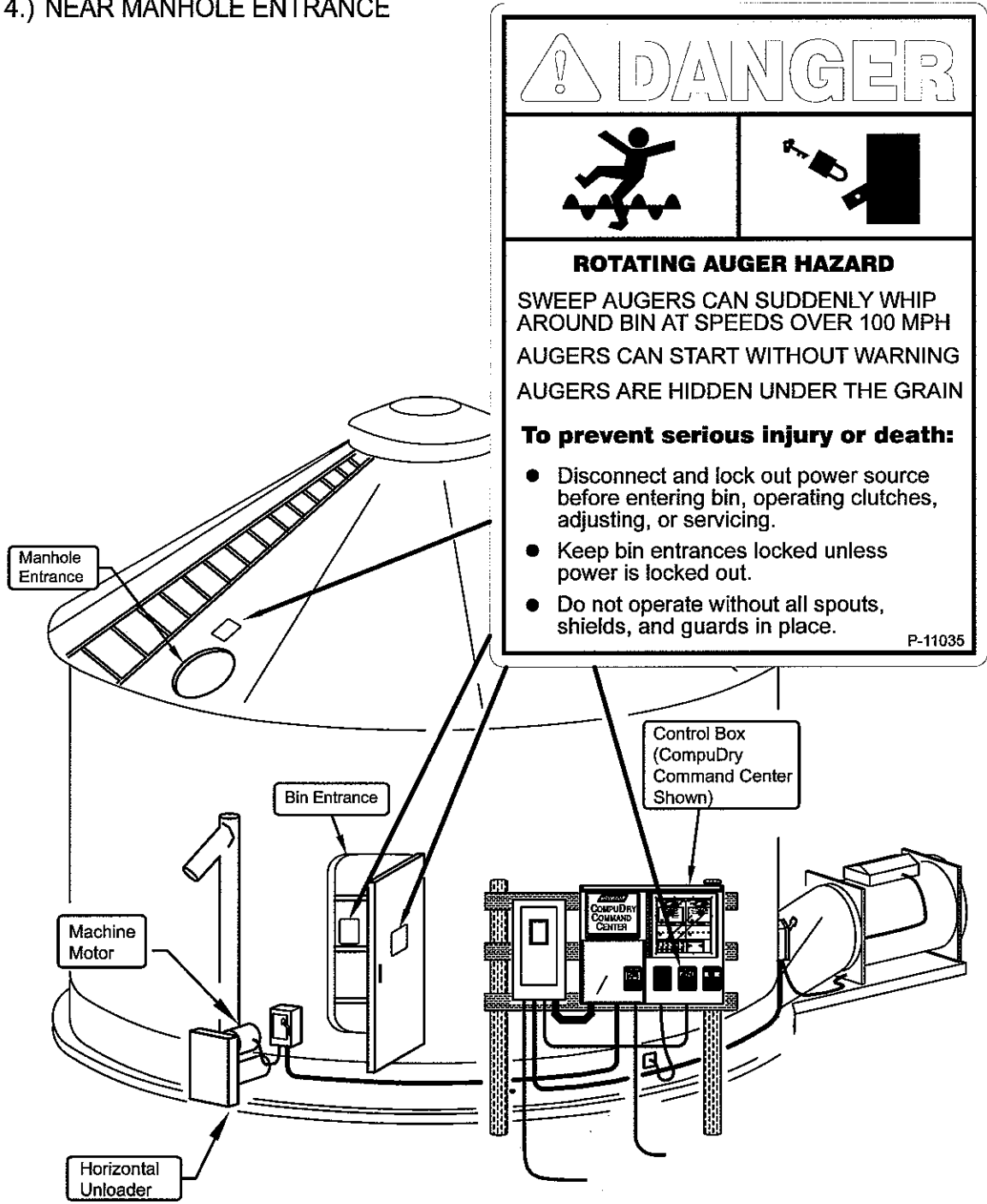
Make sure the safety decal P-12184 is applied on or near the machine motor disconnect.



"CAUTION" Decal
Shivvers# P-12184

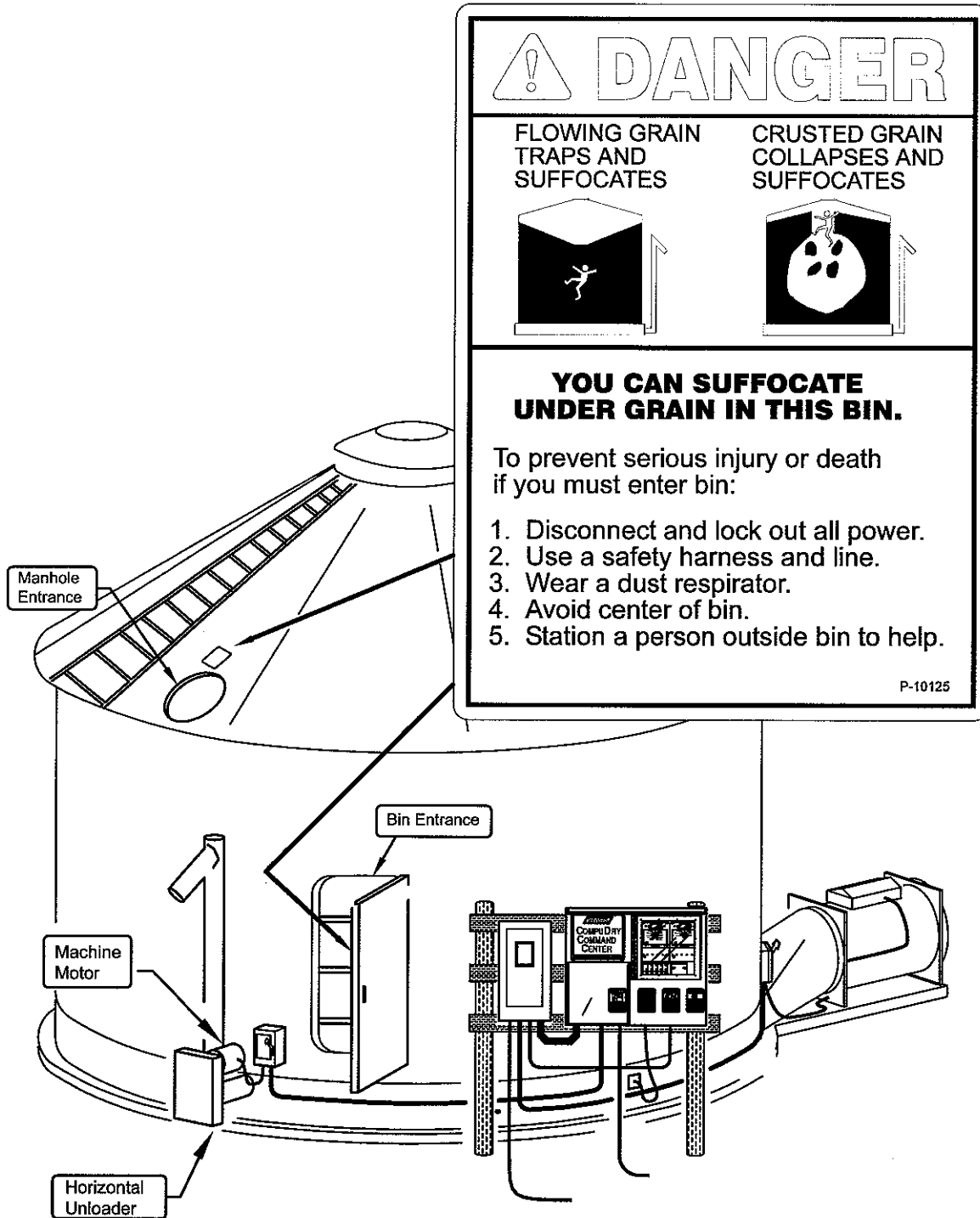
P-11035 - Field Installed

- 1.) ON ALL CONTROL BOXES THAT CONTROL TAPERED SWEEP AUGERS (Circuitrol, Comp-U-Dry, etc.) (Factory Installed).
- 2.) OUTSIDE OF OUTER BIN DOOR ENTRANCE
- 3.) OUTSIDE OF INNER BIN DOOR ENTRANCE
- 4.) NEAR MANHOLE ENTRANCE



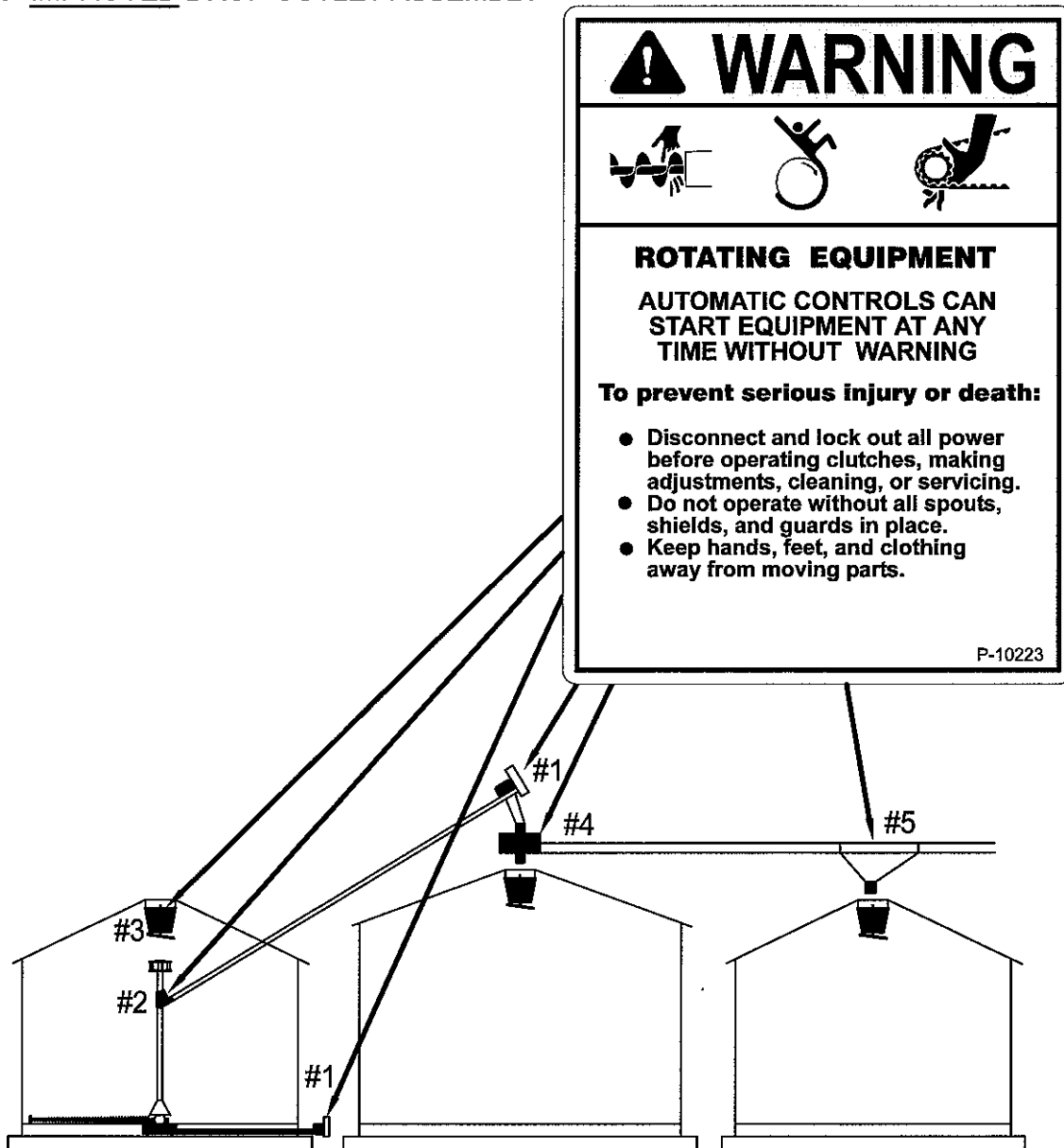
P-10125 - Field Installed

- 1.) INSIDE OF OUTER BIN DOOR ENTRANCE ON ALL BINS
- 2.) NEAR MANHOLE ENTRANCE ON ALL BINS





10223 - Factory Installed

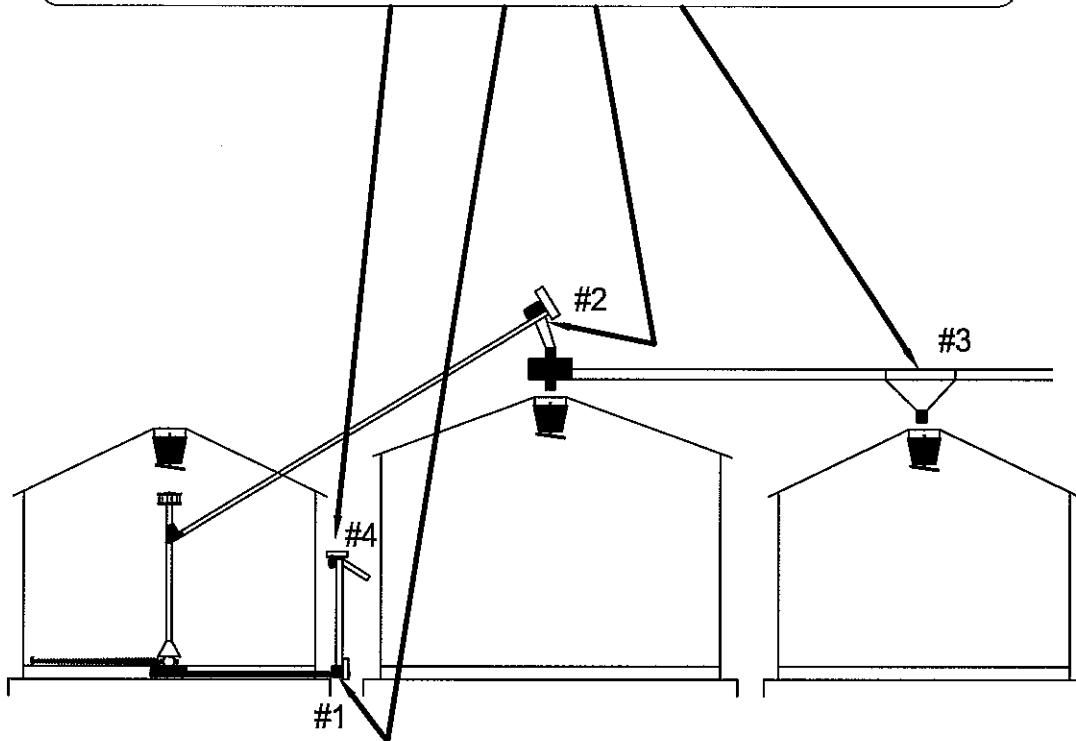
- 1.) ALL BELT SHIELDS (Horizontal Unloaders, Continuous Flow Augers, Auxiliary Augers, etc.)
- 2.) ALL CENTER VERTICAL BOOT ASSEMBLIES (Continuous Flow and High Angle)
- 3.) GRAIN SPREADERS
- 4.) HOPPER BOXES
- 5.) 6" IMPROVED DROP OUTLET ASSEMBLY



P-8792 - Factory Installed

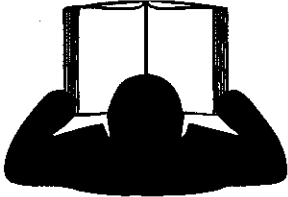

- 1.) HORIZONTAL UNLOADERS
- 2.) CONTINUOUS FLOW & AUXILIARY TRANSFER AUGERS (outlet end)
- 3.) DROP OUTLETS
- 4.) TOP DRIVE VERTICAL UNLOADERS

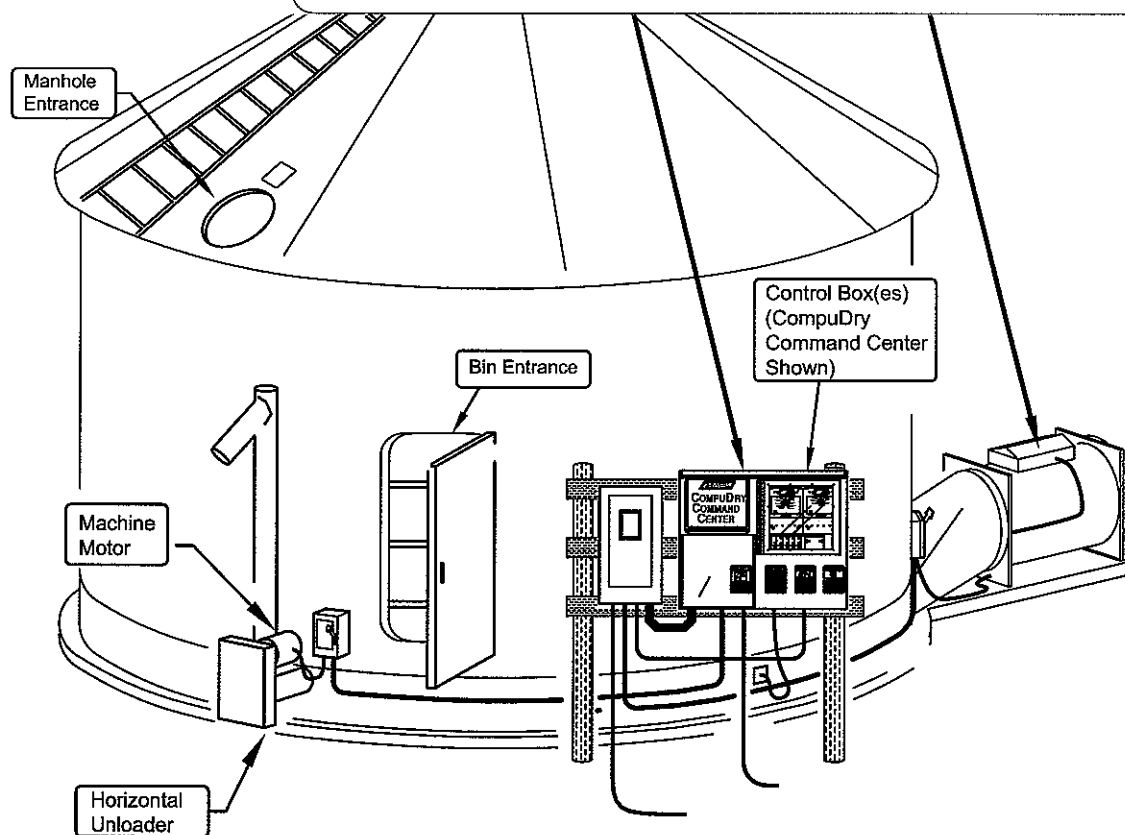
 <h1 style="margin: 0;">WARNING</h1>	
	<p>AUGER DISCHARGE OPENING To prevent serious injury or death:</p> <ul style="list-style-type: none">● A guard or spouting must be in place during operation to prevent contact with auger.● Keep hands, feet, and clothing away from moving parts. <p style="text-align: right;">P-8792</p>



P-10367 - Factory Installed

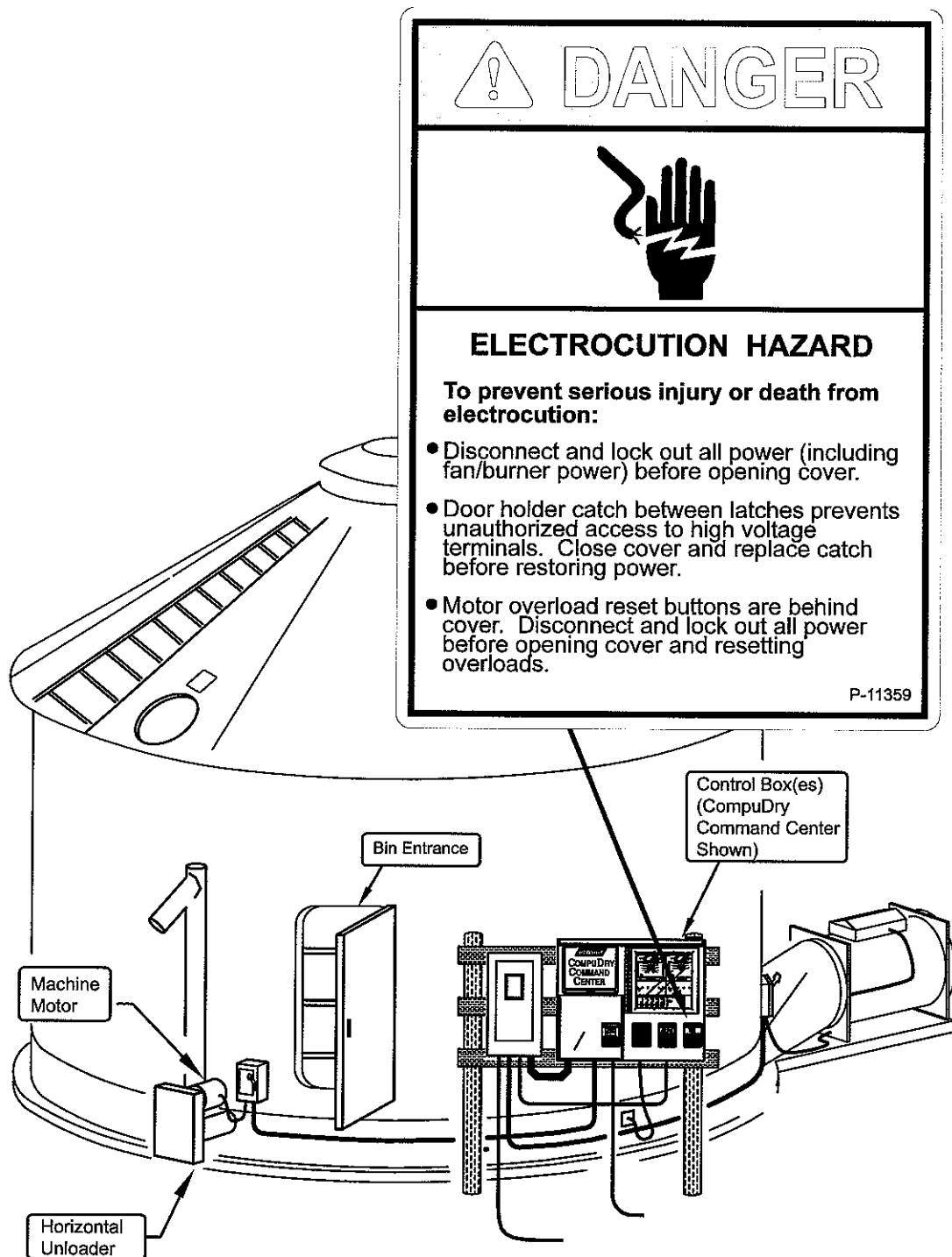
- 1.) ON CONTROL BOXES (Circu-trol, CompuDry, Controlled Flow Grain Spreader, Level Dry, EZ Check, etc.)
- 2.) ON FAN AND BURNER CONTROL BOX

 <p>P-10367</p>	<h3> WARNING</h3> <p>To prevent Serious Injury or Death:</p> <ul style="list-style-type: none">• Avoid unsafe operation or maintenance.• Do not operate or work on equipment without reading and understanding the operator's manual.• If manuals or decals are missing or difficult to read, contact Shivers Manufacturing, Inc. Corydon, IA 50060 for replacements.
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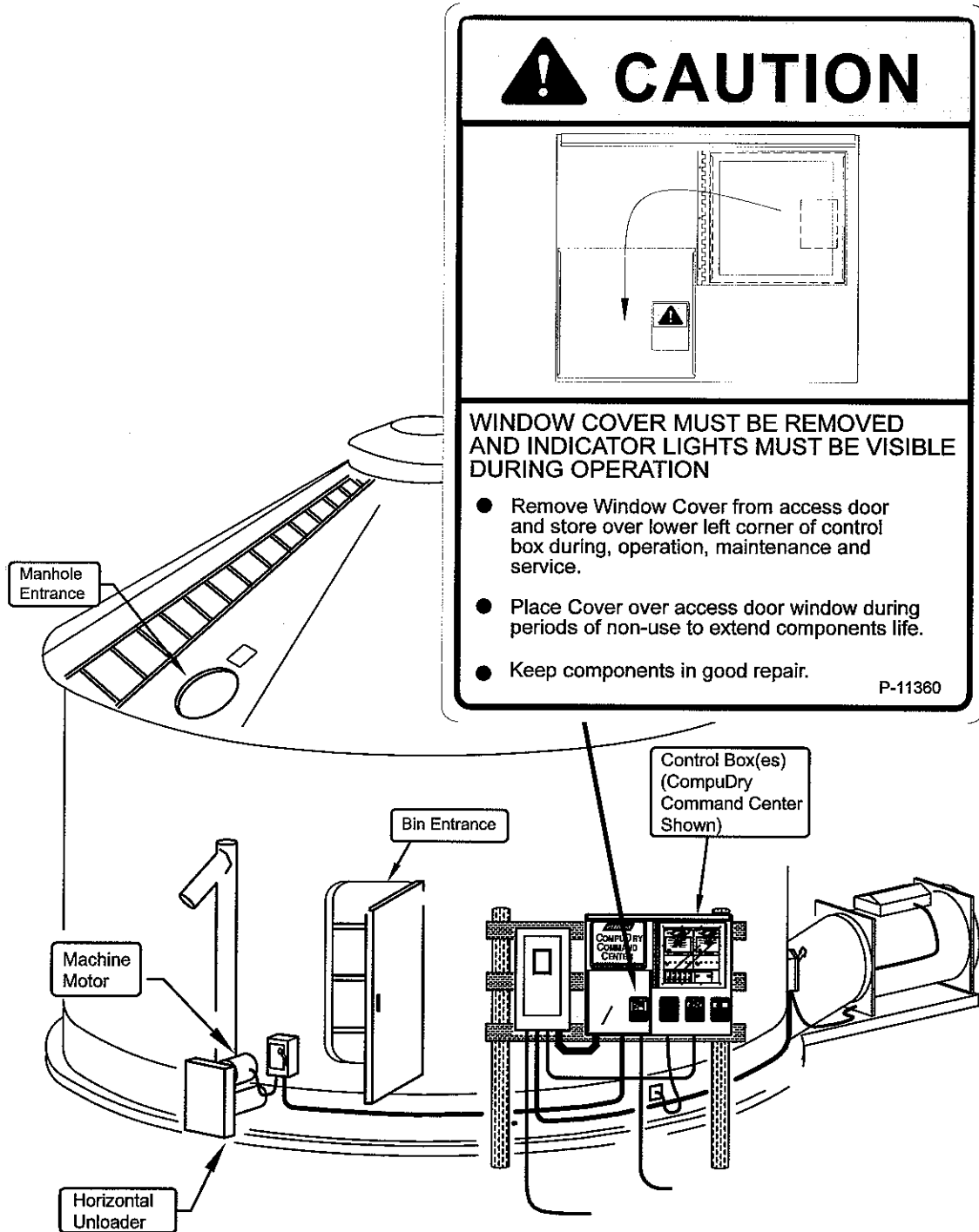
P-11359 - Factory Installed

1.) ON COMPUDRY COMMAND CENTER CONTROL BOX (If installed)



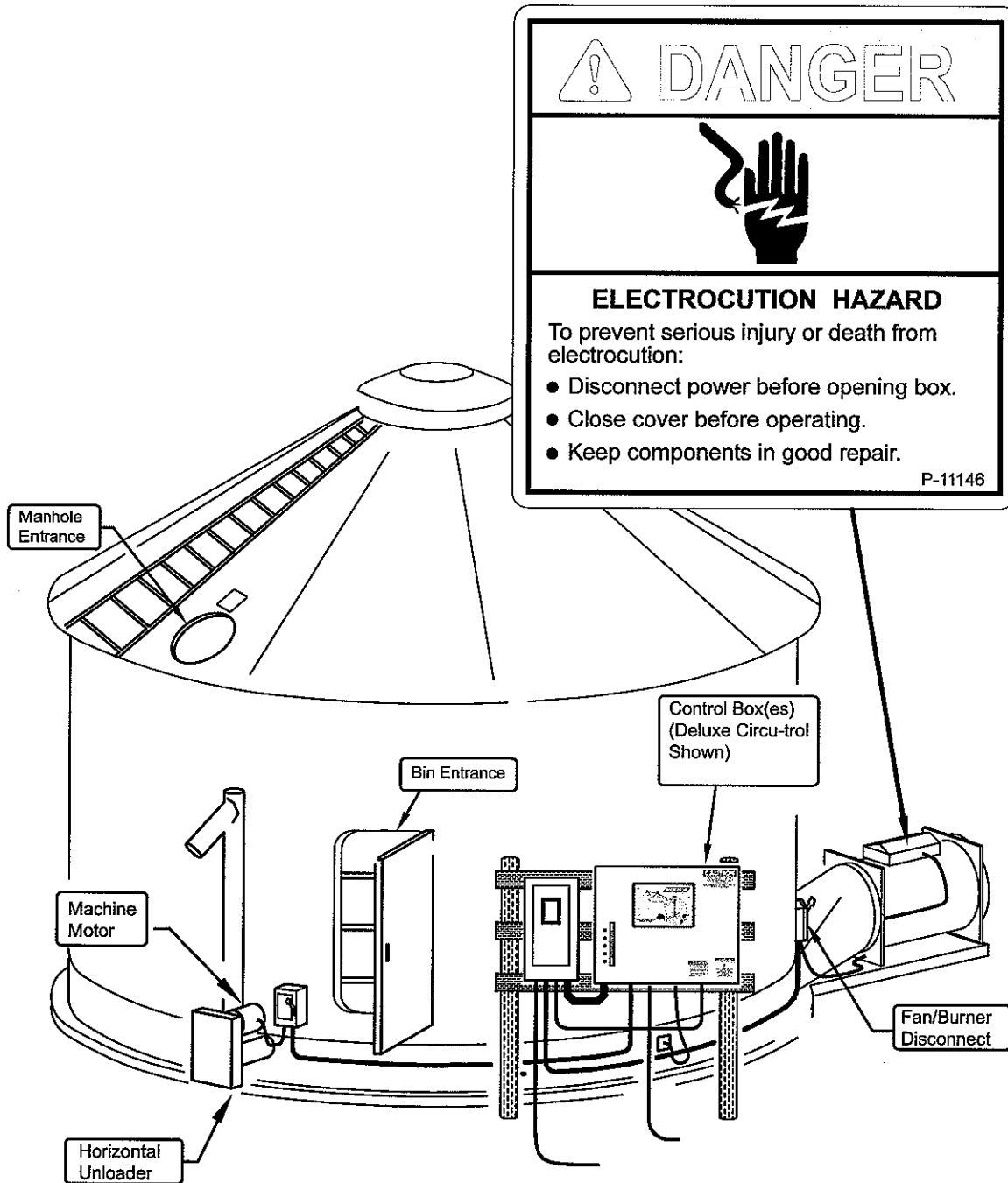
P-11360 - Factory Installed

1.) ON COMPU DRY COMMAND CENTER WINDOW COVER



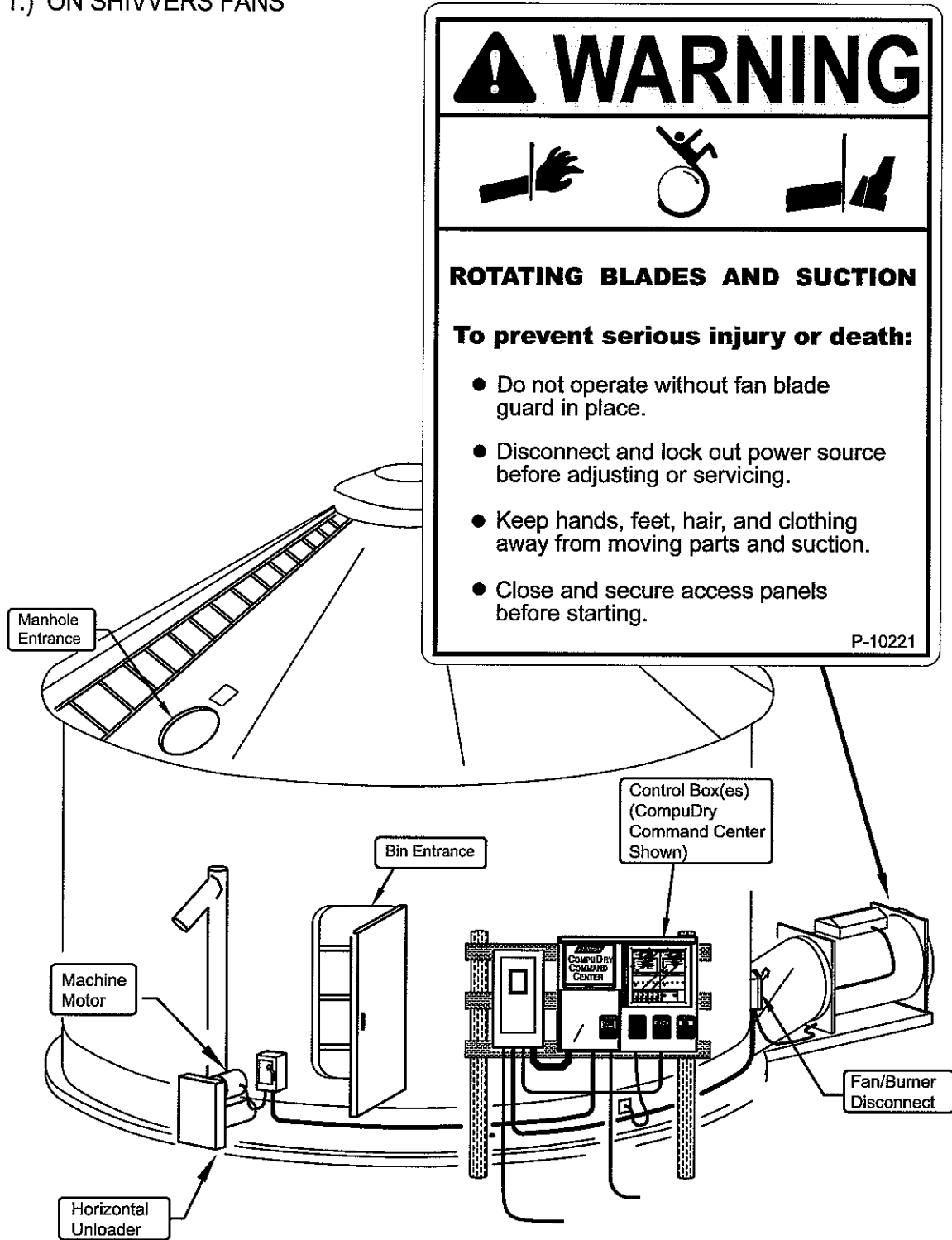
P-11146 - Factory Installed

- 1). ON CIRCUITROL CONTROL BOX (on inside cover)
- 2). ON FAN AND BURNER CONTROL BOX
- 3). ON LEVEL-DRY CONTROL BOX (If installed)



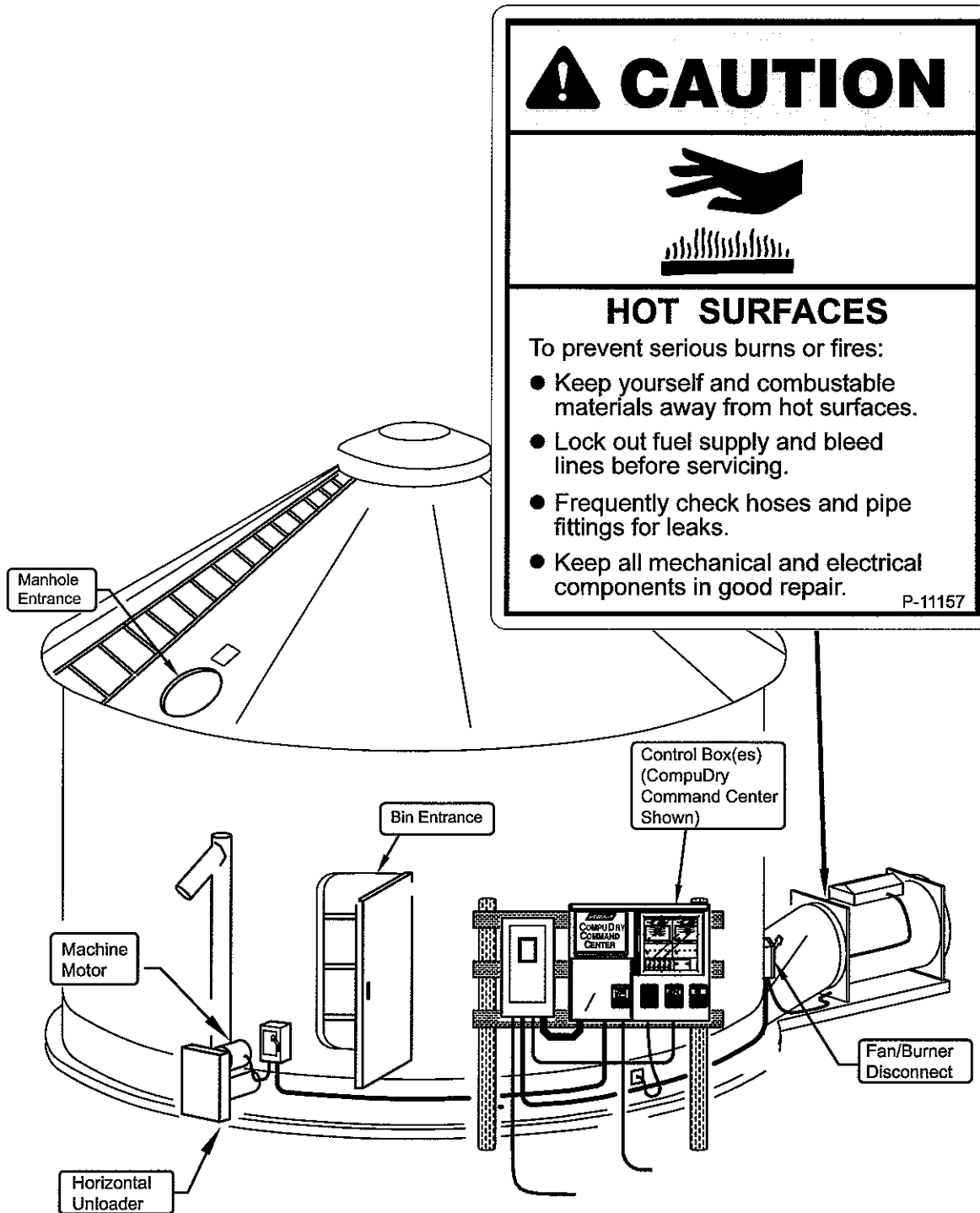
P-10221 - Factory Installed

1.) ON SHIVVERS FANS



P-11157 - Factory Installed

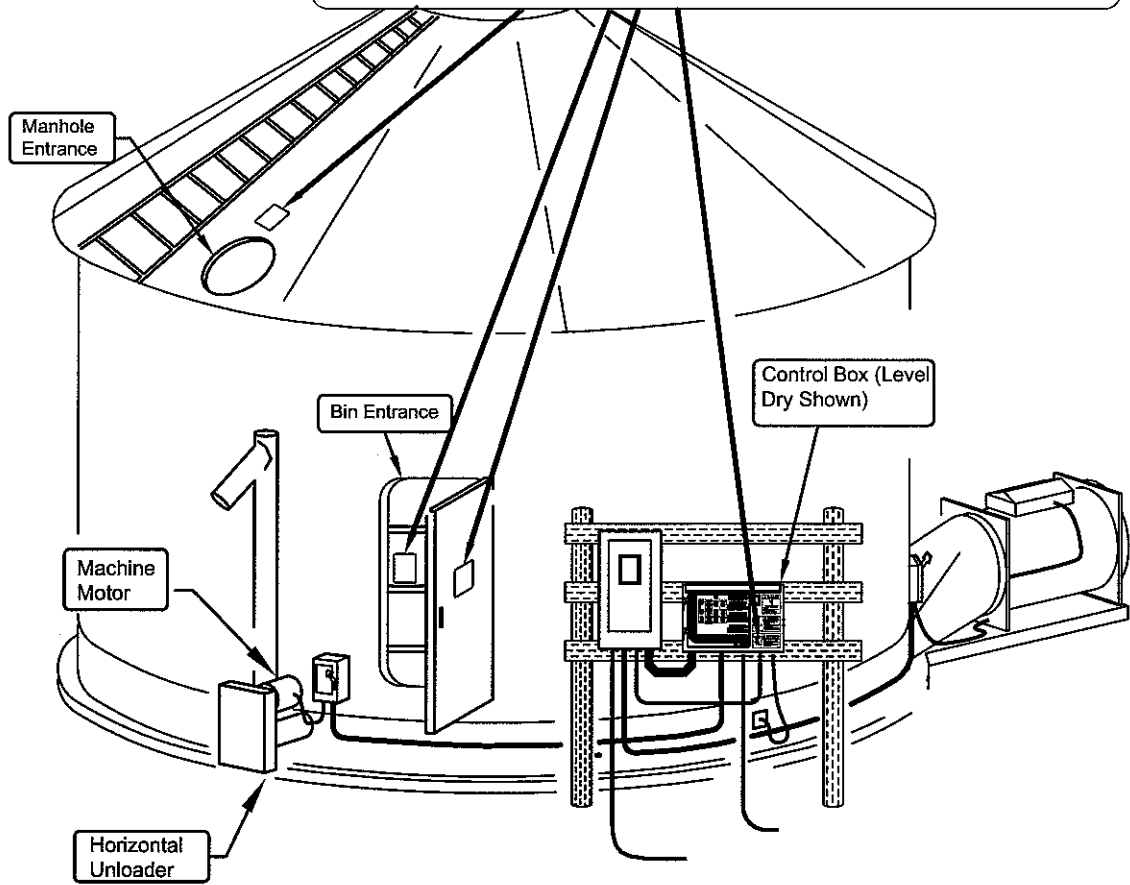
1.) ON BURNERS (Axial and Centrifugal)



P-10717 - (if equipped with a Level-Dry) - Field Installed

- 1.) MANHOLE ENTRANCE
- 2.) BIN OUTSIDE ENTRANCE
- 3.) BIN INSIDE ENTRANCE
- 4.) LEVEL-DRY CONTROL BOX (Factory installed)

	<p>! DANGER</p> <p>LEVELING AUGER CAN FALL CAUSING DEATH OR INJURY.</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none">● Lower leveling auger completely before entering bin.● Never work under leveling auger unless supported with safety straps or blocks. <p>P-10717</p>
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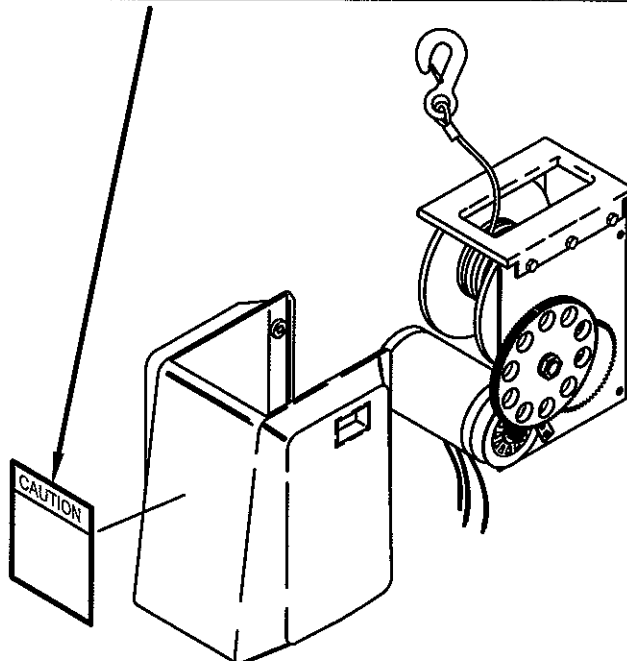
P-10816 - (if equipped with a Level-Dry) - **Factory Installed**

1.) ON ELECTRIC WINCH SHIELD

⚠ CAUTION

- Keep hands clear.
- Remove load and lock out power before working on winch.
- Automatic controls can start winch at any time without warning.
- Never guide rope with hands.
- Keep winch cover in place.
- Inspect wire rope frequently and replace when frayed.
- Lubricate wire rope and pulleys before and after each drying season.
- Avoid rapid starting and stopping.
- Do not use for more than 10 seconds at a time. Let cool for at least 30 seconds before starting again.
- Maintain a minimum of four wraps of wire rope around winch drum.
- Keep wire rope wound tightly on drum.

P-10816



LIST OF OPERATING MANUALS

Below is a partial list of current Shivvers equipment operating manuals. If your equipment is not listed here, contact Shivvers Mfg, Inc. for assistance in identifying the proper manual. If you do not have a current copy, request one from your dealer or from Shivvers Mfg, Inc. Have every operator read the manuals before running the equipment. Review the operating manuals for each piece of equipment before the drying season.

PART #	DESCRIPTION
P-10001	Operator's Safety Manual
P-8860	Circu-Lator or Dri-Flo Operating Instructions
P-8433	Blue Flame Dryer Owner's Manual - Manufactured before 2003
P-11778	Blue Flame Dryer Owner's Manual - Manufactured after 2003
P-11010	Blue Flame II Burner for C-Fans
P-11338	Compudry Command Center Operating Instructions
P-11577	Controlled Flow Grain Spreader Operating Instructions
P-10798	Level-Dry Deluxe Operating Instructions

Shivvers also offers a compact disc (CD) with the Shivvers dryer manuals.

PART #	DESCRIPTION
P-12255	Shivvers Dryer Manuals CD w/ Case

Shivvers also has several video tapes available that show the installation, operation, or maintenance of equipment. Contact the factory for a complete list.

PART #	DESCRIPTION
Z-177	Circu-Lator & Dri-Flo Start-Up Video (with Circu-trol)
Z-178	Circu-Lator, Floor, & Blue Flame Installation Video
Z-179	Level-Dry Installation & Operation Video
Z-181	Circu-Lator Pre-Season Maintenance Video
Z-263	CompuDry Command Center Operation Video
Z-264	CompuDry Command Center Operation DVD

BIN UNLOADING PROCEDURE

When using the horizontal unloader to empty the drying bin of stored grain, follow these three steps. For cleaning out the bin in the middle of the drying season, (to remove fines off the floor and increase drying speed), follow step #3.

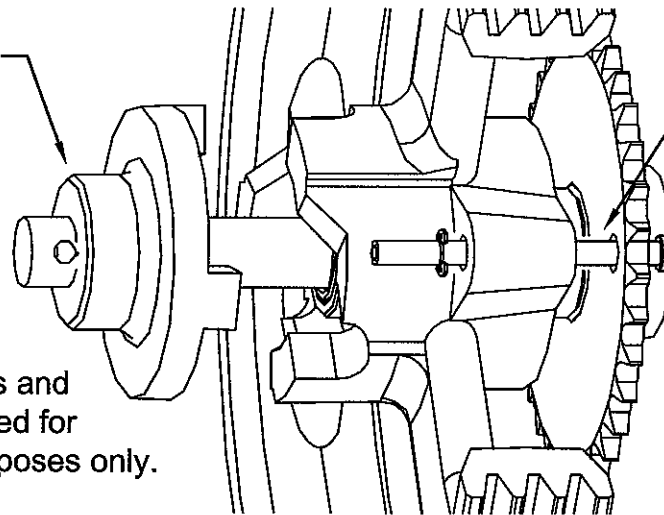


Disconnect and lock out all power before attempting to change the drive clutches. Automatic controls can start equipment at any time without warning.

STEP 1. UNLOADING BY GRAVITY

- a.) **Disconnect** all electrical power to the drying system at the main disconnect switch. Try momentarily turning on the augers to make sure power is disconnected. Take the safety padlock off the bin entrance and **LOCK OUT** the main disconnect switch.
- b.) Disengage the three jaw clutch from the pulley wheel. Engage the clutch pin or shoulder bolt into the sprocket hole. This drives the horizontal auger flitting without driving the gearbox or sweep auger(s).

Three jaw clutch.
Disengage (out).



Clutch pin or
shoulder bolt.
Engage (in).

NOTE: Guards and shields removed for illustration purposes only.

- c.) Unlock the main power and place the safety lock back on the bin entrance. Make sure everyone is clear of all drying equipment and turn the power on. Turn the machine on at the control panel and slowly pull the control rod to open the slide gate in the center well. In some cases, the machine may plug if the slide gate is opened too far. If this occurs, partially close the slide gate until the machine runs freely.

- d). Unload from the center well until grain stops flowing, then open the slide gates of any intermediate wells to continue unloading by gravity. Always drain the center well first, before opening any intermediate wells. This will help eliminate damage to the grain bin and drying equipment caused by uneven pressure of flowing grain.

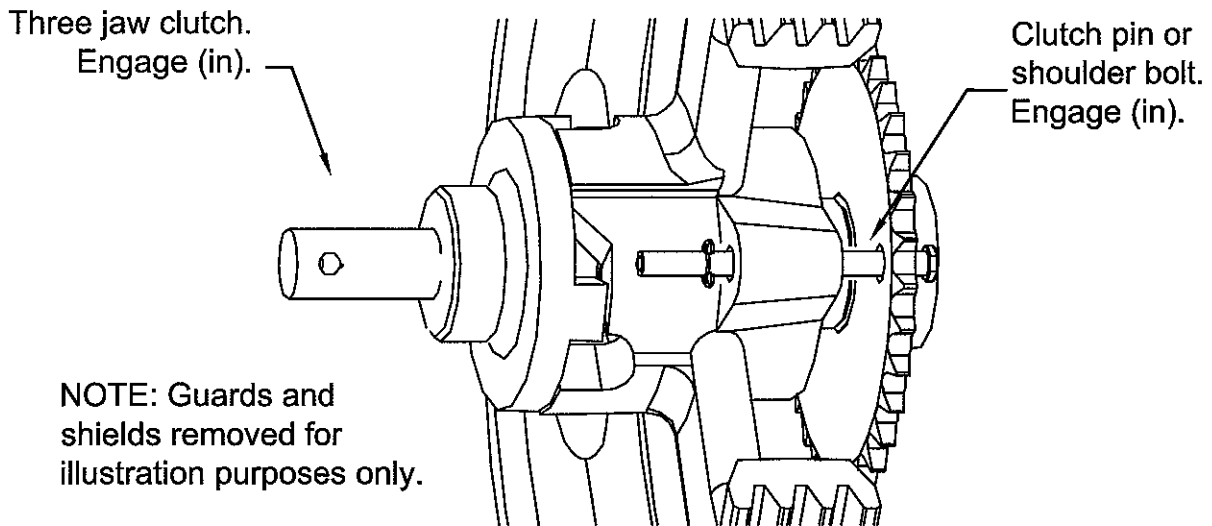
STEP 2. POWER UNLOADING WITH SWEEP AUGERS

After the grain has been unloaded to the angle of repose (no more grain will flow by gravity), an auxiliary sweep auger may be added if the main gearbox is designed for this option. Refer to instructions with the auxiliary sweep auger for its proper installation and operation. Use the following procedure to engage the tapered sweep auger(s) for further unloading.



Disconnect and lock out all power before attempting to change the drive clutches. Automatic controls can start equipment at any time without warning.

- a). **Disconnect** all electrical power to the drying system at the main disconnect switch. Try momentarily turning on the augers to make sure power is disconnected. Take the safety padlock off the bin entrance and **LOCK OUT** the main disconnect switch.
- b). Engage the three jaw clutch to the pulley wheel on the horizontal unloader. This will allow the gearbox in the center of the bin to drive the tapered sweep auger(s) and the auxiliary sweep auger (if installed). Engage the clutch pin into the sprocket hole. This drives the horizontal auger flighting. Keep the center and intermediate wells open.

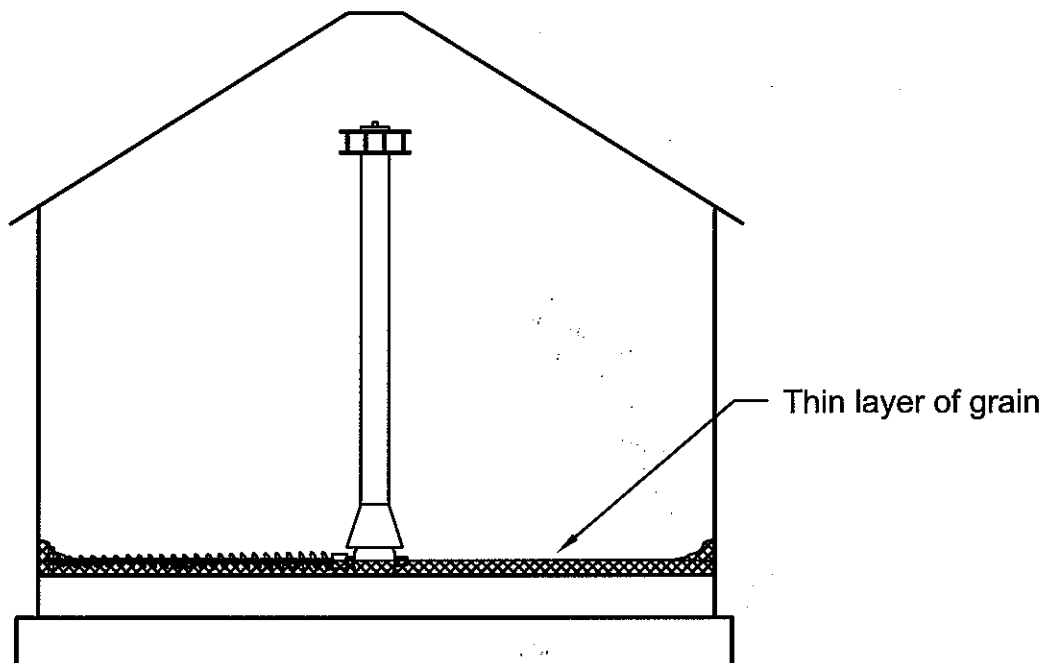


Never enter the drying bin unless all power is disconnected and locked out. Failure to heed can result in death or severe personal injury.



A mechanical malfunction, or a jamming of the center vertical auger by spoiled grain or a foreign object, could cause the sweep auger to suddenly swing around the bin at speeds over 100 mph.

- c). Make sure everyone is outside the drying bin then unlock the main power and place the safety lock back on the bin entrance, locking the door closed. Make sure everyone is clear of all drying equipment and turn the power on. Turn the machine on at the control panel. The sweep augers and the under floor horizontal unloader will operate to unload the remaining grain in the drying bin. When you hear the sweep auger(s) making a revolution around the bin in less than about 10 seconds, or if the grain output rate noticeably slows, shut the machine off. A thin layer of grain will be left on the floor and should be removed by the final cleaning of the floor procedure.



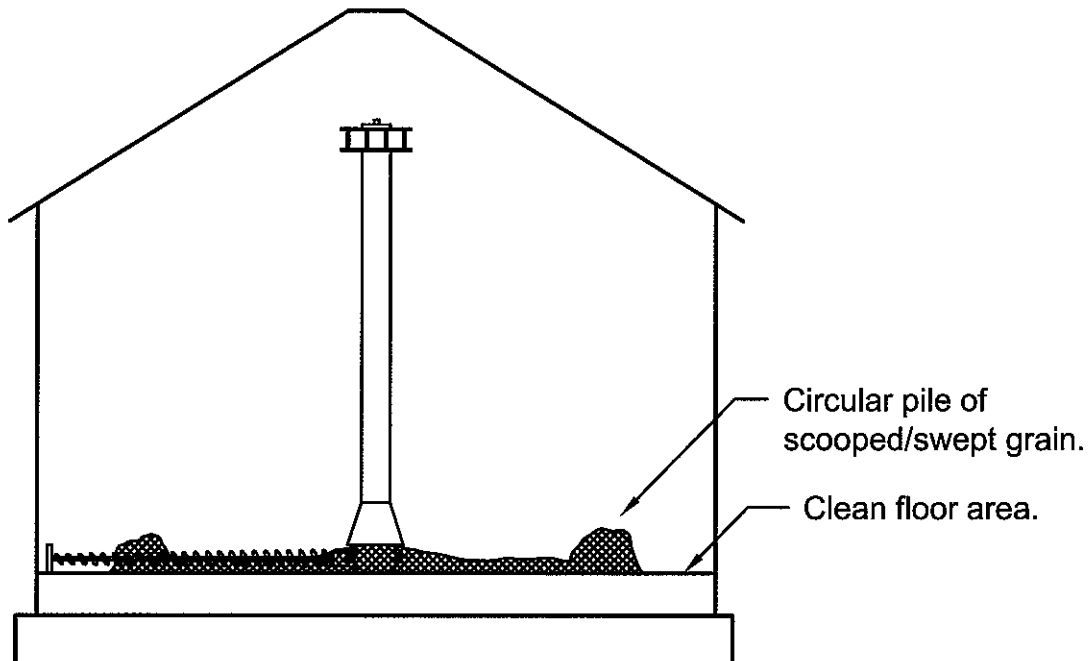
STEP 3. FINAL CLEANING OF THE FLOOR

Use the following procedure to clean the floor of the drying bin after most of the grain has been removed by the tapered sweep auger(s). A single sweep machine with a center vertical is shown, but the same procedure will work with dual sweep machines, and with bottom unloading Dri-Flo type machines. When you can hear the sweep auger(s) making a revolution around the bin in less than approximately 10 seconds, or if the grain output rate noticeably slows, it is time to start this procedure. If some type of auxiliary or clean sweep auger is used, follow the directions provided with that equipment.



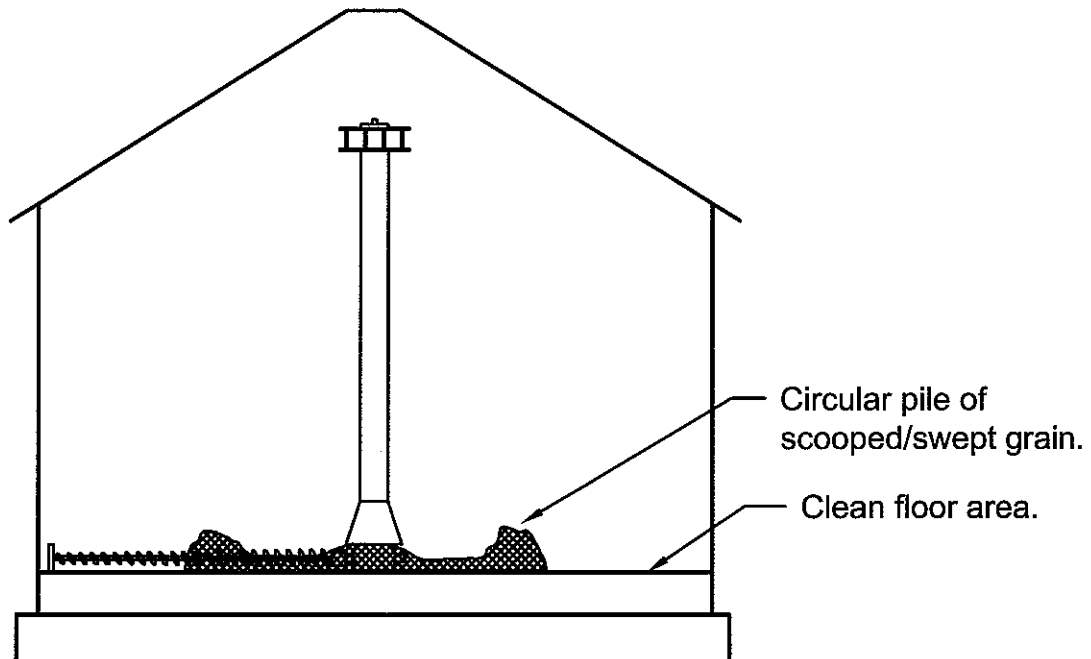
Sweep augers can suddenly whip around the bin at speeds over 100 MPH. Automatic controls can start augers at any time without warning.

- a). If bin is equipped with a Level-Dry, make sure it is completely lowered. **Disconnect** all electrical power to the drying system at the main disconnect switch. Try momentarily turning on the augers to make sure power is disconnected. Take the safety padlock off the bin entrance and **LOCK OUT** the main disconnect switch.
- b). While wearing a dust respirator, and with someone stationed outside the bin, clean the outer three to six feet of the bin floor. Shovel and/or sweep the grain into a circular pile as shown.



- c). Get out of the bin. Shut the bin entrance.

- d). Take the lock off the main power disconnect and put it back on the bin entrance, locking the door closed. Make sure everyone is clear of all the drying equipment then turn the power back on. Note: Under certain conditions, equipment may run upon re-application of power so make sure everyone is clear of **ALL** drying equipment. Turn the augers on to unload the grain. When you can hear the sweep augers going rapidly around the bin, (less than 10 seconds per revolution), or if the grain output rate noticeably slows, shut the augers off.
- e). **Disconnect** all electrical power to the drying system at the main disconnect switch. Try momentarily turning on the augers to make sure power is disconnected. Take the safety padlock off the bin entrance and **LOCK OUT** the main disconnect switch.
- f). While wearing a dust respirator, and with someone stationed outside the bin, clean the next three to six feet of the bin floor. Shovel and/or sweep the grain into a circular pile as shown.
- g). Get out of the bin. Shut the bin entrance.
- h). Repeat steps (d) through (g) until the floor is completely cleaned.



 **DANGER**

Never enter the drying bin unless all power is disconnected and locked out. Failure to heed can result in death or severe personal injury.

