

Operator Manual

MF2100

Series Large Square Baler

Models: 2140 / 2140 CE / 2150 / 2150 CE / 2160 / 2160 CE / 2170 /
2170 CE / 2190 / 2190 CE



VISION INNOVATION LEADERSHIP QUALITY RELIABILITY SUPPORT PRIDE COMMITMENT



MASSEY FERGUSON



MASSEY FERGUSON[®]

TO OUR CUSTOMER:

Congratulations on your selection of a Massey Ferguson[®] Product. We believe you have exercised excellent judgment in the purchase of your Massey Ferguson[®] machine. We are most appreciative of your patronage.

Your Dealer has performed the pre-delivery service on your new machine.

He will discuss with you the operating and maintenance instructions given in this manual, and instruct you in the proper and varied applications of this machine. Call on him at any time when you have a question or need equipment related to the use of your machine.

We recommend that you carefully read this entire manual before operating the unit. Also, time spent in becoming fully acquainted with it's performance features, adjustments, and maintenance schedules will be repaid in a long and satisfactory life of the product.

This equipment is covered by a written warranty which will be provided to you by your Massey Ferguson[®] Dealer at time of purchase.

AGCO[®] reserves the right to make changes or add improvements to its products at any time without incurring any obligation to make such changes to products manufactured previously. AGCO[®], or its dealers, accept no responsibility for variations which may be evident in the actual specifications of its products and the statements and descriptions contained in this publication.

Massey Ferguson[®] is a worldwide brand of AGCO Corporation, Duluth, Georgia

**CALIFORNIA
Proposition 65 Warning**

WARNING: Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm. Wash hands after handling.

MASSEY FERGUSON®
2140 / 2140 CE / 2150 / 2150 CE / 2160 / 2160 CE / 2170 /
2170 CE / 2190 / 2190 CE
700734990 E Rev.
CONTENTS

SAFETY	A-1
GENERAL INFORMATION	B-1
PREPARATION	C-1
ELECTRONICS	D-1
OPERATION	E-1
ADJUSTMENTS	F-1
LUBRICATION AND MAINTENANCE	G-1
TROUBLESHOOTING	H-1
SPECIFICATIONS	J-1
ACCESSORIES AND OPTIONS	K-1
ASSEMBLY	L-1
INDEX	M-1

SAFETY

Contents

Safety Alert Symbol	A-3
Safety Messages	A-3
Informational Messages	A-3
Safety Signs	A-4
A Word To The Operator	A-4
Operator Manual	A-5
Prepare For Operation	A-5
Operation	A-6
General Information	A-6
Personal Protection Equipment	A-7
Seat Instructions	A-7
Shields and Guards	A-8
Exhaust Warning	A-8
Flying Debris	A-9
Handrails	A-9
Agricultural Chemicals	A-9
Travel On Public Roads	A-10
Maintenance	A-11
General Information	A-11
Fire Prevention and First Aid	A-13
Checking for High Pressure Leaks	A-14
Tire Safety	A-14
Text Safety Signs and Information Signs	A-15
Left-hand Side of the Baler	A-15
Under the Left-hand Shield	A-22
Rear of the Baler	A-24
Right-hand Side of the Baler	A-27
No-Text Safety Signs and Information Signs	A-32
Safety Signs, Hazard and Avoidance	A-32
Left-hand Side of the Baler	A-33
Under the Left-hand Shield	A-41
Left-hand Rear of the Baler	A-43
Right-hand Side of the Baler	A-46

SAFETY ALERT SYMBOL

FIG. 1: The safety alert symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!


Look for the safety alert symbol both in this manual and on the safety signs on this baler. The safety alert symbol will direct you to information that involves your safety and the safety of others.




FIG. 1

SAFETY MESSAGES

FIG. 2: The words DANGER, WARNING or CAUTION are used with the safety alert symbol. Learn to recognize these safety alerts and follow the recommended precautions and safety practices.

 **DANGER:** Indicates an imminently hazardous situation that, if not avoided, will result in DEATH OR VERY SERIOUS INJURY.

 **WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in DEATH OR SERIOUS INJURY.

 **CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in MINOR INJURY.



FIG. 2

INFORMATIONAL MESSAGES

The words IMPORTANT and NOTE are not related to personal safety, but are used to give additional information and tips for operating or servicing this equipment.

IMPORTANT: Identifies special instructions or procedures which, if not strictly observed, could result in damage to or destruction of the machine, process, or its surroundings.

NOTE: Identifies points of particular interest for more efficient and convenient repair or operation.

SAFETY

SAFETY SIGNS



WARNING: DO NOT remove or obscure Danger, Warning or Caution signs. Replace any Danger, Warning or Caution signs that are not readable or are missing. Replacement signs are available from your dealer in the event of loss or damage. The actual location of the safety signs is illustrated at the end of this section.

Keep signs clean by wiping off regularly. use a cleaning solution if necessary.

If a used machine has been purchased, make sure all safety signs are in the correct location and can be read. See Safety Sign Location in this section for illustrations.

Replace any safety signs that can not be read or are missing. Clean the machine surface thoroughly with a cleaning solution before replacing signs. Replacement safety signs are available from your dealer.

A WORD TO THE OPERATOR

FIG. 3: It is YOUR responsibility to read and understand the safety section in this manual and the manual for all attachments before operating this machine. Remember YOU are the key to safety. Good safety practices not only protect you, but also the people around you.

Study the features in this manual and make them a working part of your safety program. Keep in mind that this safety section is written only for this type of machine. Practice all other usual and customary safe working precautions, and above all REMEMBER - SAFETY IS YOUR RESPONSIBILITY. YOU CAN PREVENT SERIOUS INJURY OR DEATH.

This safety section is intended to point out some of the basic safety situations that may be encountered during the normal operation and maintenance of your machine. This section also suggests possible ways of dealing with these situations. This section is NOT a replacement for other safety practices featured in other sections of this manual.

Personal injury or death may result if these precautions are not followed.

Learn how to operate the machine and how to use the controls properly.

Do not let anyone operate the machine without instruction and training.

For your personal safety and the personal safety of others, follow all safety precautions and instructions found in the manuals and on safety signs affixed to the machine and all attachments. Use only approved attachments and equipment.

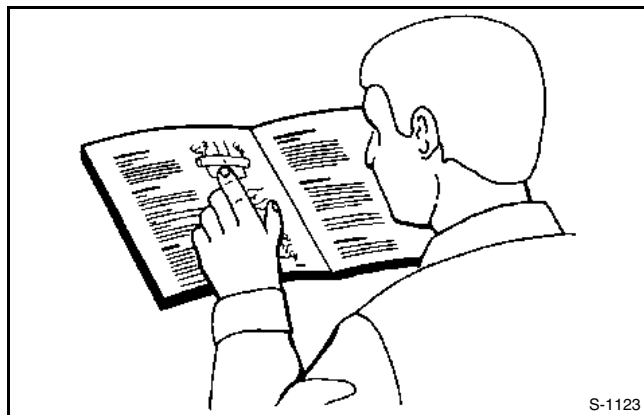


FIG. 3

Make sure your machine has the correct equipment needed by the local regulations.



WARNING: An operator should not use alcohol or drugs which can affect their alertness or coordination. An operator on prescription or 'over the counter' drugs needs medical advice on whether or not they can properly operate machines.



CAUTION: If any attachments used on this equipment have a separate Operator Manual, see that manual for other important safety information.

OPERATOR MANUAL

This manual covers general safety practices for this machine. The Operator Manual must always be kept with the machine.

Right-hand and left-hand, as used in this manual, are determined by facing the direction the machine will travel when in use.

The photos, illustrations, and data used in this manual were current at the time of printing, but due to possible inline production changes, your machine can vary slightly in detail. The manufacturer reserves the right to redesign and change the machine as necessary without notification.



WARNING: In some of the illustrations or photos used in this manual, shields or guards may have been removed for clarity. Never operate the machine with any shields or guards removed. If the removal of shields or guards is necessary to make a repair, they **MUST** be replaced before operation.

FIG. 4: The Operator Manual is stored in the holder (1) on the machine. After using the Operator Manual, return the manual to the storage location.

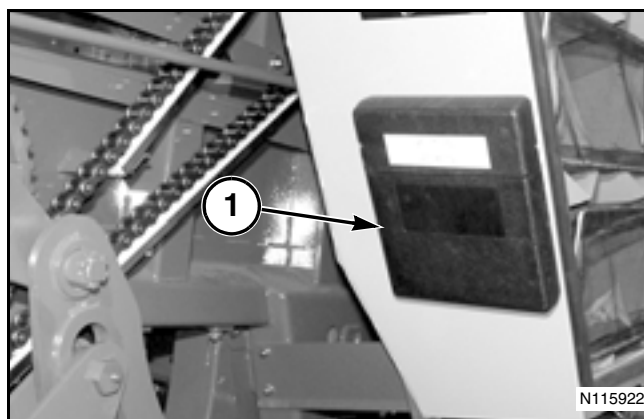


FIG. 4

PREPARE FOR OPERATION

Read and understand all operating instructions and precautions in this manual before operating or servicing the machine.

SAFETY

Make sure you know and understand the positions and operations of all controls. Make certain all controls are in neutral and the parking brake is applied before starting the machine.

Make certain all people are well away from your area of work before starting and operating the machine. Check and learn all controls in an area clear of people and obstacles before starting your work. Be aware of the machine size and have enough space available to allow for operation. Never operate the machine at high speeds in crowded places.

Emphasize the importance of using correct procedures when working around and operating the machine. Do not let unqualified persons to operate the machine. Keep others, especially children, away from your area of work. Do not permit others to ride on the machine.

Make sure the machine is in the proper operating condition as stated in the Operator Manual. Make sure the machine has the correct equipment required by local regulations.

All equipment has a limit. Make sure you understand the speed, brakes, steering, stability, and load characteristics of this machine and the tractor before you start.

OPERATION

General Information

FIG. 5: When parking, park the machine and the tractor on a solid level surface. put all controls in neutral and apply the tractor parking brake. Stop the tractor engine and take the key with you.

Make sure the tractor and implement are in the proper operating condition according to the operator manuals. Make sure the tractor brakes and the machine brakes are adjusted correctly.

The tractor must have enough weight and braking capacity, especially when operating on roads and terrain that is not even. Use a tractor of recommended size and weight to tow the machine. See the Specifications section in this manual for the minimum tractor size and weight.

Tractor must be equipped with rollover protective structure (ROPS) and a seat belt. use seat belt during operation.

Do not dismount from moving machinery.

Always operate the machine with the control console turned on.

Never start the tractor with the PTO engaged or control console turned on.

Where possible avoid operating the baler near ditches, embankments and holes. Reduce speed when turning, crossing slopes, and on rough, slippery, or muddy surfaces.

Stay off slopes too steep for operation.

Be aware of the size of the equipment and have enough space available to allow for operation.

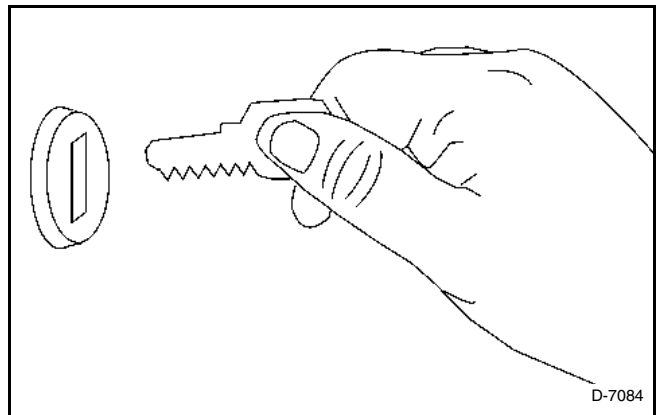


FIG. 5

Make sure all persons are clear of the rear of the bale chute when raising and lowering the chute, ejecting or dumping a bale.

Do not stand between the tractor and the implement to install the hitch pin when the tractor engine is running.

FIG. 6: Avoid contact with electrical power lines. Contact with electrical power lines can cause electrical shock, resulting in very serious injury or death.

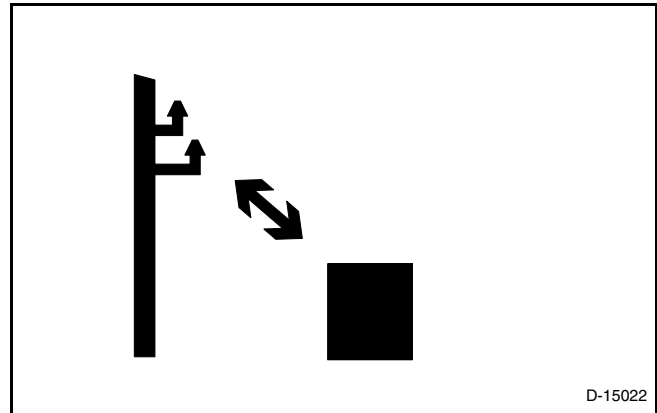


FIG. 6

Personal Protection Equipment

FIG. 7: Wear all personal protective equipment (PPE) and protective clothing issued to you or called for by job conditions and country/local regulations. PPE includes, but is not limited to, equipment to protect eyes, lungs, ears, head, hands and feet when operating, servicing or repairing equipment.

Always keep hands, feet, hair, and clothing away from moving parts. Do not wear loose clothing, jewelry, watches, or other items that could entangle in moving parts.

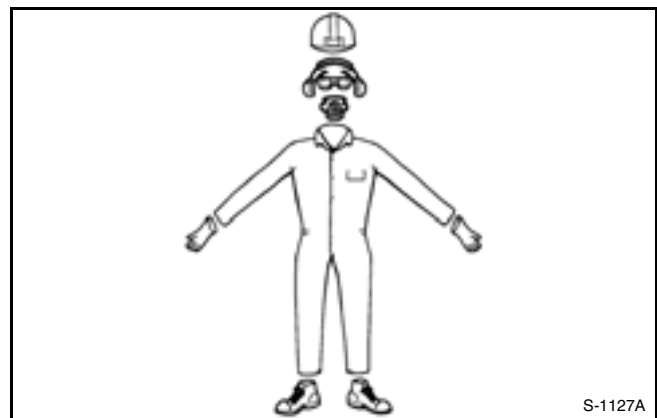


FIG. 7

Seat Instructions

FIG. 8: Securely fasten the seat belt before operating the machine. Always remain seated and have the seat belt fastened while operating the machine. Replace the seat belts when they become worn or broken.

Never wear a seat belt loosely or with slack in the belt system. Never wear the seat belt in a twisted condition or pinched between the seat structural members.

When using the instructional seat, if equipped, securely fasten the seat belt. The instructional seat is to be used only to train new operators or diagnose a problem. The instructional seat is only intended for short periods of use. Extra riders, especially children, are not permitted on the machine.

When the instructional seat is used the machine must be driven at a slower speed and on level ground. Avoid quick starts, stops, and sharp turns. Avoid driving on highways or public roads.

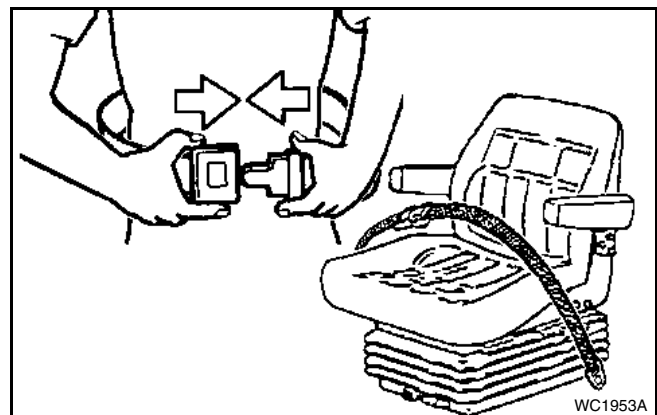


FIG. 8

SAFETY

Shields and Guards

FIG. 9: All shields and guards must be in the correct operating position and in good condition.

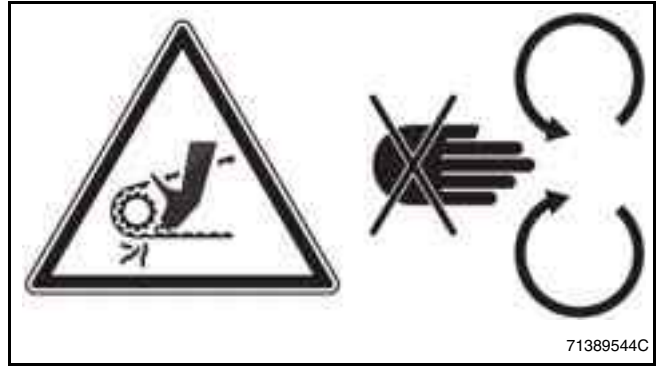


FIG. 9

FIG. 10: Do not operate the machine with the drive shaft shields open or removed. Entanglement in rotating drive shafts can cause serious injury or death. Stay clear of rotating components.

Make sure rotating guards turn freely.

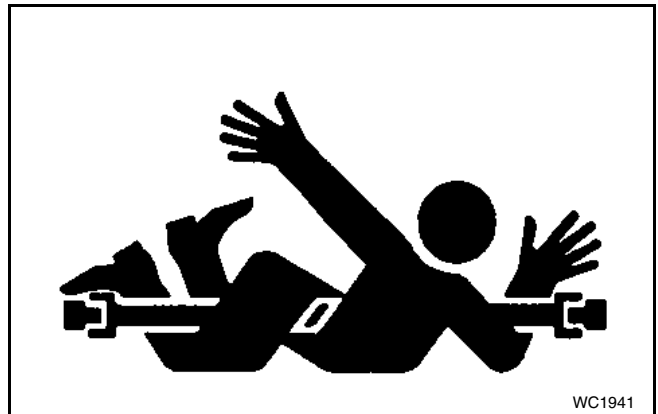


FIG. 10

Exhaust Warning

FIG. 11: Never operate the engine (if equipped) in a closed building unless the exhaust is vented outside.

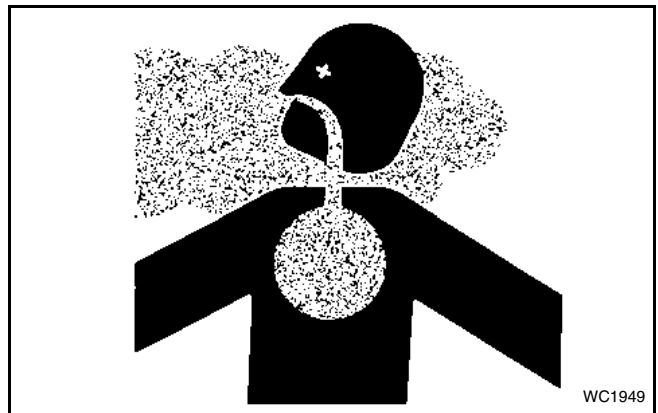


FIG. 11

Flying Debris

FIG. 12: Never stand near the machine during operation. Debris can be thrown from the machine during operation possibly resulting in injury.

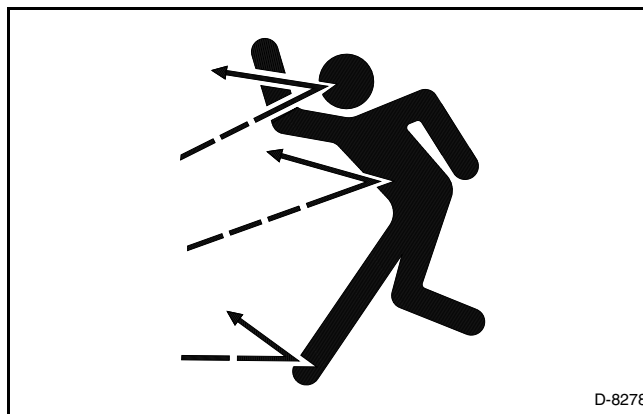


FIG. 12

Handrails

FIG. 13: Face the ladder and use the handrails when getting on or off the machine.



FIG. 13

Agricultural Chemicals

Agricultural chemicals can be very hazardous. Improper use of fertilizer, fungicides, herbicides, insecticides and pesticides can injure people, plants, animals, soil and other people's property.

Always read and follow all manufacturers' instructions before opening any chemical container.

Even if you think you know the instructions, read and follow instructions each time you use a chemical.

Use the same precautions when adjusting, servicing, cleaning or storing the machine as are used when installing chemicals into the hoppers or tanks.

Inform anyone who comes in contact with chemicals of the potential hazards involved and the safety precautions required.

Stand upwind and away from smoke from a chemical fire.

Store or dispose of all unused chemicals only in a manner as specified by the chemical manufacturer.

SAFETY

TRAVEL ON PUBLIC ROADS

FIG. 14: Make sure you understand the speed, brakes, steering, stability, and load characteristics of this machine and the tractor before you travel on public roads.

Use good judgement when traveling on public roads. Maintain complete control of the machine at all times. Never coast down hills.

The maximum speed of farm equipment is governed by local regulations. Adjust travel speed to maintain control at all times. See Specifications for the maximum speed for this machine.

Make sure the tractor is in the proper operating condition according to the tractor operator manual. Make sure the tractor brakes and the machine brakes, if equipped, are adjusted correctly. The tractor must have enough weight and braking capacity, especially when operating on roads and terrain that is not even. To achieve proper braking capacity, use tractor of recommended size and weight to tow the machine. See Specifications for the minimum tractor weight.

Familiarize yourself with and obey all road regulations that apply to your machine. Consult your local law enforcement agency for local regulations regarding movement of farm equipment on public roads. Use headlights, flashing warning lights, taillights and turn signals, day and night, unless prohibited by local law.

Make sure all the flashers are operating prior to driving on the road. Make sure reflectors are correctly installed, in good condition, and wiped clean. Make sure the Slow Moving Vehicle (SMV) emblem, if equipped, is clean, visible, and correctly mounted on the rear of the machine.

Do not operate the baler on the road with a bale in the chamber.

Be aware of other traffic on the road. Keep well over to your own side of the road and pull over, whenever possible, to let faster traffic pass.

Be aware of the overall width, length, height, and weight of the equipment. Be careful when transporting the machine on narrow roads and across narrow bridges.

Always install the safety transport chain between the implement and the tractor drawbar.

- Use a safety transport chain with a strength rating equal to or more than the gross weight of the towed machines.
- Connect the safety transport chain to the tractor drawbar and use a retainer on the hitch pin.
- Supply only enough slack in the safety transport chain to permit turning.
- Do not use the safety transport chain as a tow chain for towing.

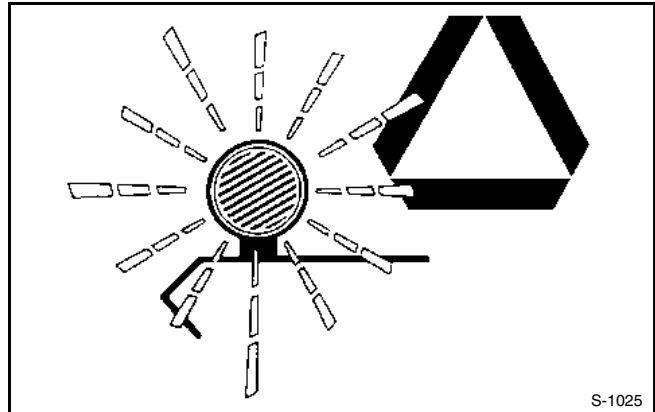


FIG. 14

FIG. 15: Watch for overhead wires and other obstructions. Avoid contact with electrical power lines. Contact with electrical power lines can cause electrical shock, resulting in very serious injury or death.

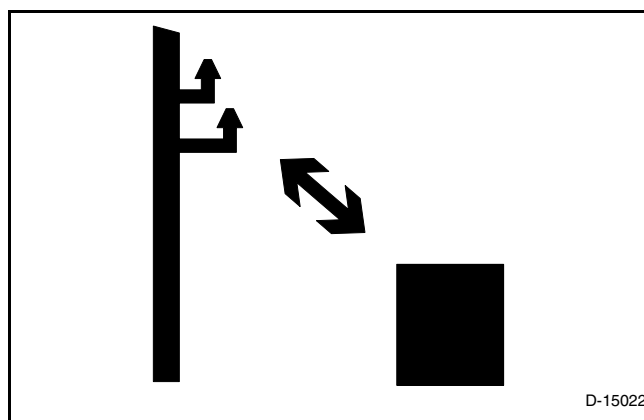


FIG. 15

MAINTENANCE

General Information

FIG. 16: Before doing any unplugging, lubricating, servicing, cleaning, or adjusting:

- Park the machine on a solid level surface.
- Disengage the tractor PTO.
- Put the tractor transmission in PARK and apply the tractor parking brake.
- Turn off the control console.
- Stop the tractor engine and take the key with you.
- Apply the baler flywheel brake.
- Apply the baler parking brake (if equipped).
- Look and Listen! Make sure all moving parts have stopped.
- Put blocks in front of and behind the wheels of the machine and the tractor before working on or under the machine.

Do not leave the tractor or implement unattended with the engine running.

Do not pull crop, twine, or any other object from the machine while the tractor engine is running. Moving parts can pull you in faster than you can move away.

Do not attempt to service or adjust the machine until all moving parts have stopped.

Check all nuts and bolts periodically for tightness, especially wheel mounting hardware.

After unplugging, lubricating, servicing, cleaning, or adjusting the machine make sure all tools and equipment have been removed.

Make sure electrical connectors are clean and free of dirt or grease before connecting.

Check for loose, broken, missing, or damaged parts. Make sure the baler is in good repair. Make sure all guards and shields are in position.

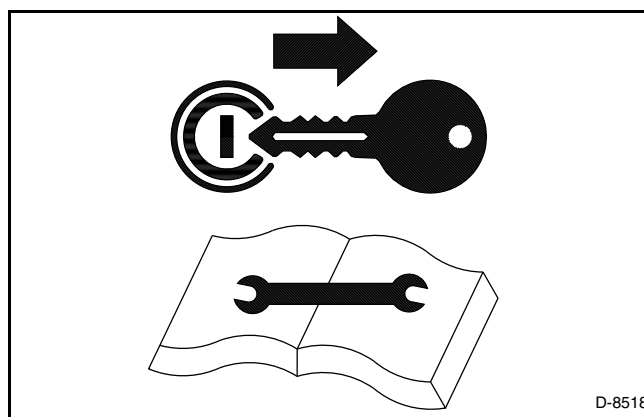


FIG. 16

SAFETY

Be aware of the size of parts when doing service work. Never stand under or near a part being moved with lifting equipment.

FIG. 17: Never service, check or adjust the drive chains or belts while the tractor engine is running.

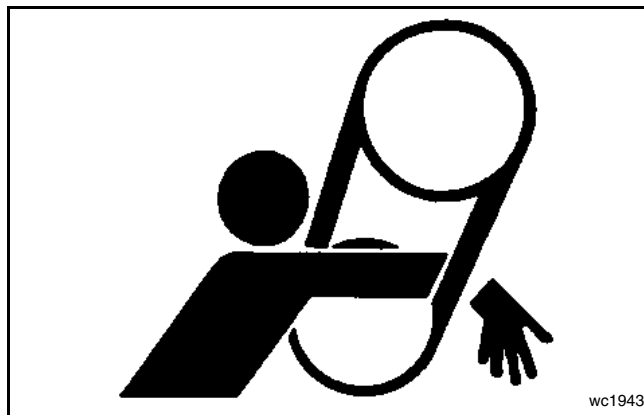


FIG. 17

FIG. 18: Do not operate the machine with the drive shaft shields open or removed. Entanglement in rotating drive shafts can cause serious injury or death.

Stay clear of rotating components.

Never start the tractor with the PTO engaged.

Make sure rotating guards turn freely.

A loose yoke can slip off the tractor PTO shaft and result in injury to persons or damage to the machine.

When installing a quick disconnect yoke, the spring activated locking pins must slide freely and be seated in the groove on the PTO shaft.

Pull on the implement driveline to make sure the quick disconnect yoke cannot be pulled off the PTO shaft.

FIG. 19: Disengage the tractor PTO. Turn off the tractor engine. Remove the key. Take the key with you. Apply the flywheel brake. Engage the knotted/needle lockout before threading the needles, threading the knotters or adjusting the twine tensioners.

Serious injury can result from threading the needles, threading the knotters or adjusting the twine tensioners with a baler running.

The needle frame and the knotters can move without putting hay in the baler.

When working with or around the needles or knotters always engage the knotted/needle lockout.

Do not try to remove twine from the bale chamber or knotted while the baler is running.



FIG. 18

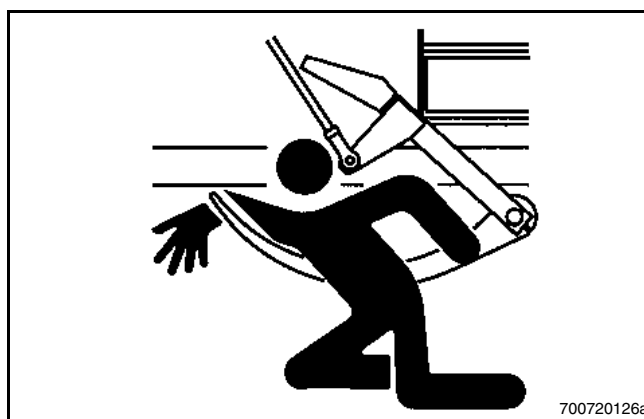


FIG. 19

Fire Prevention and First Aid

FIG. 20: Be prepared for emergencies.

Keep a first aid kit handy for treatment of minor cuts and scratches.

Always carry one or more fire extinguishers of the correct type. Check fire extinguishers regularly as instructed by the manufacturer. Make sure fire extinguishers are properly charged and in operating condition.

Due to the nature of the crops this machine will operate in, the risk of fire is of concern. Use a water type fire extinguisher or other water source for a fire in crop.

For fires involving anything other than crop, such as oil or electrical components, use a dry chemical fire extinguisher with an ABC rating.

Mount fire extinguishers within easy reach of where fires can occur.

Frequently remove accumulated crop material from the machine and check for overheated components. Check the machine daily for any noises that are not normal. Such noises could indicate a failed component that can cause excess heat.

If any flame cutting, welding, or arc welding is to be done on the machine or attachments, make sure to clear any crop material or debris from around the area. Make sure the area below the work area is clear of any flammable material as falling molten metal or sparks can ignite the material.

At the end of each season, or if the baler will sit for more than 48 hours after baling high moisture crops, remove all crop from the bale chamber using the bale ejector, if equipped, or fill the bale chamber with dry crop.

FIG. 21: If fire occurs stand upwind and away from smoke from the fire.

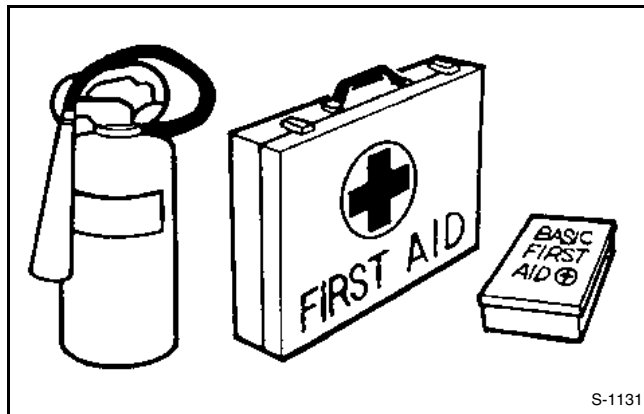


FIG. 20



FIG. 21

SAFETY

Checking for High Pressure Leaks

FIG. 22: Fluid leaking from the hydraulic system or the fuel injection system under high pressure can be very hard to see. The fluid can go into the skin causing serious injury.

Fluid injected into the skin must be surgically removed within a few hours. If not removed immediately, serious infection or reaction can develop. Go immediately to a doctor who knows about this type of injury.

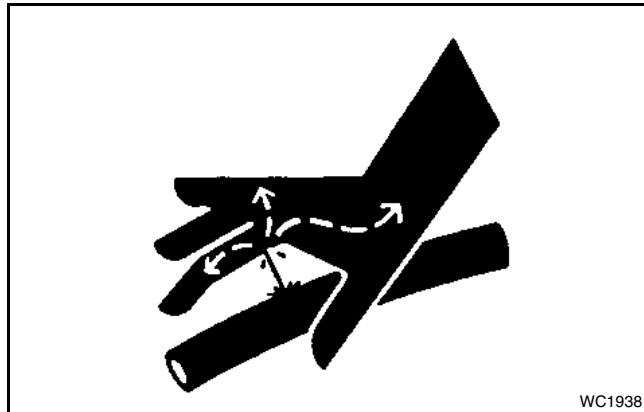


FIG. 22

FIG. 23: Use a piece of cardboard or wood to look for possible leaks. Never use your bare hands. Wear leather gloves for hand protection and safety goggles for eye protection.

Relieve all pressure before loosening any hydraulic lines. Relieve the pressure by lowering raised equipment, shutting off accumulator valve, if equipped, and shutting off the engine. Tighten all connections securely before applying pressure.

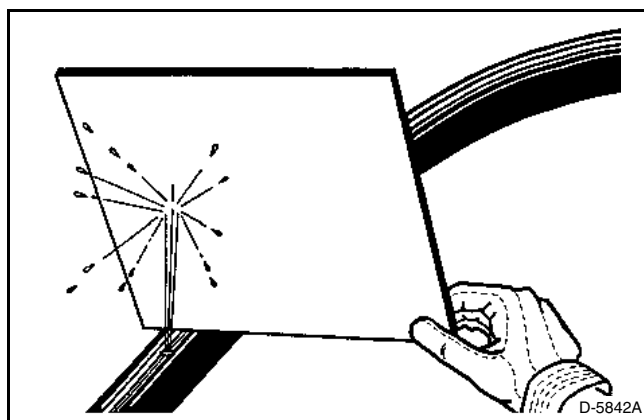


FIG. 23

Tire Safety

FIG. 24: Check tires for cuts, bulges, and correct pressure. Replace worn or damaged tires. When tire service is needed, have a qualified tire mechanic service the tire. Tire changing can be very hazardous and must be done by a qualified tire mechanic using proper tools and equipment. See the Specifications section for the correct tire size.

Tire explosion and/or serious injury can result from over inflation. Do not exceed tire inflation pressures. See the Specifications section for the correct tire pressures.

Do not inflate a tire that is seriously under inflated or has been run flat. Have the tire checked by a qualified tire mechanic.

Do not weld on the rim when a tire is installed. Welding will make an air/gas mixture that can cause an explosion and burn with high temperatures. This danger applies to all tires, inflated, or deflated. Removing air or breaking the bead is not enough. The tire must be completely removed from the rim prior to welding.

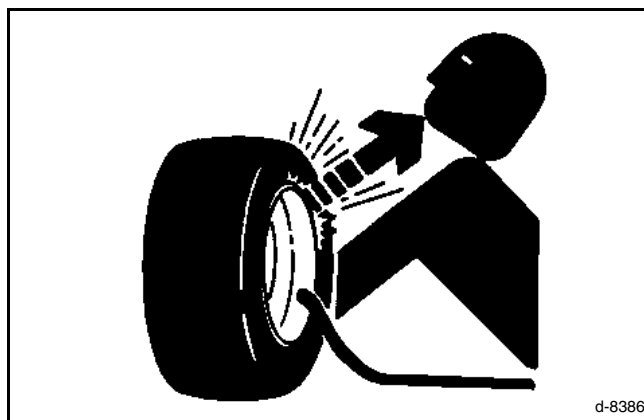


FIG. 24

TEXT SAFETY SIGNS AND INFORMATION SIGNS

Left-hand Side of the Baler

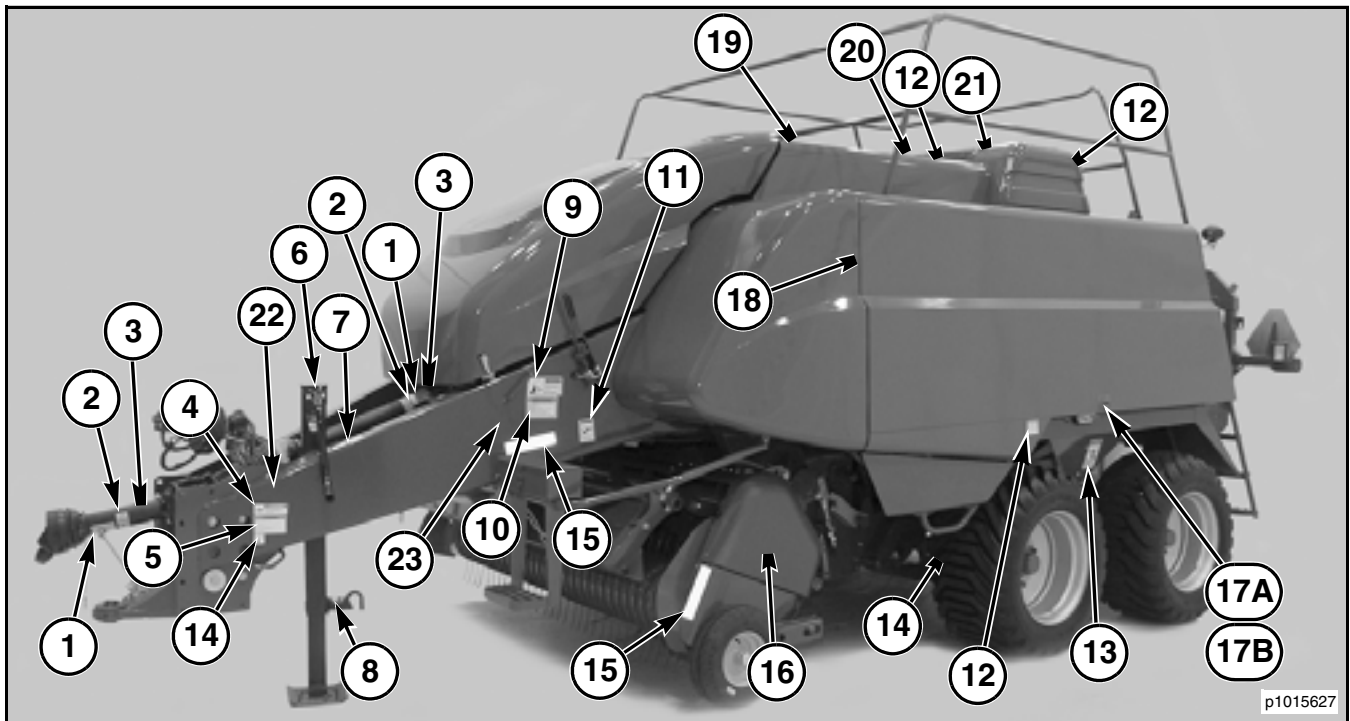


FIG. 25

FIG. 25: Safety and informational signs on the left-hand side of the baler. Some signs can be in different locations than is shown in this figure. Some signs can be No Text.

FIG. 26: Danger - safety sign (1)

Rotating driveline

Contact can cause death

Keep away!

Do not operate without -

- All drivelines, tractor and equipment shields in place
- Drivelines securely attached at both ends
- Driveline shields that turn freely on driveline

This decal is on the driveline cover.



FIG. 26

SAFETY

FIG. 27: Safety sign (2)

- (A) Entanglement hazard. Rotating shaft/PTO driveline
- (B) Do not reach into areas of moving parts
- (C) General safety alert
- (D) Read the Operator Manual for safety information and operating instructions before operating the machine

This decal is on the driveline cover.

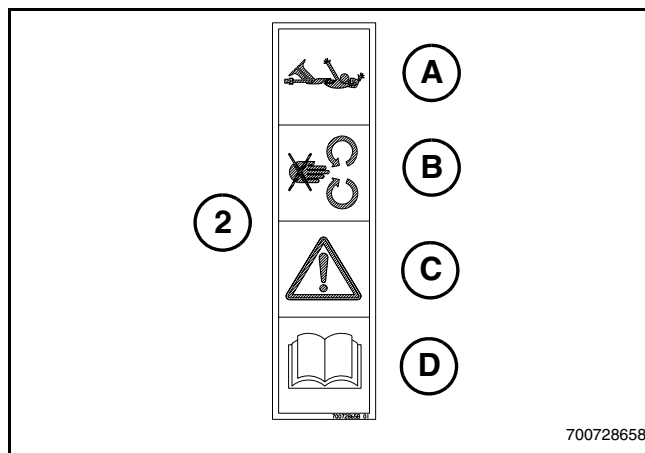


FIG. 27

FIG. 28: Danger - safety sign (3)

- Shield missing
- Do not operate

This decal is under the driveline covers, on the driveline.



FIG. 28

FIG. 29: Danger - safety sign (4)

- Keep away from rotating driveline.
- Keep driveline shields, implement shields, and tractor PTO master shield in place and in good repair.
- Operate only with 1000 rpm PTO.

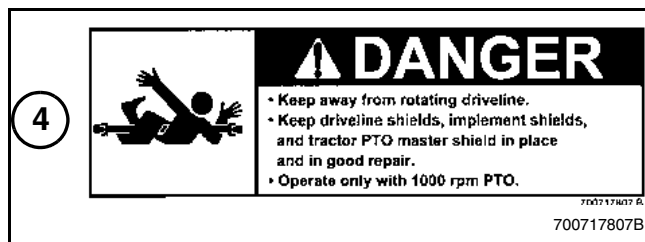


FIG. 29

FIG. 30: Warning - safety sign (5)

Personal injury or property damage may result from loss of control.

- Always use large enough tractor with sufficient braking capacity. Weight of fully loaded implement should not be more than 1.5 times weight of tractor.
- Maximum recommended towing speed is 25 mph (40 km/hr).
- Use flashing amber warning lights and SMV emblem when on public roads, except where prohibited by law.
- Refer to tractor and implement Operator's Manuals for weights and further information.

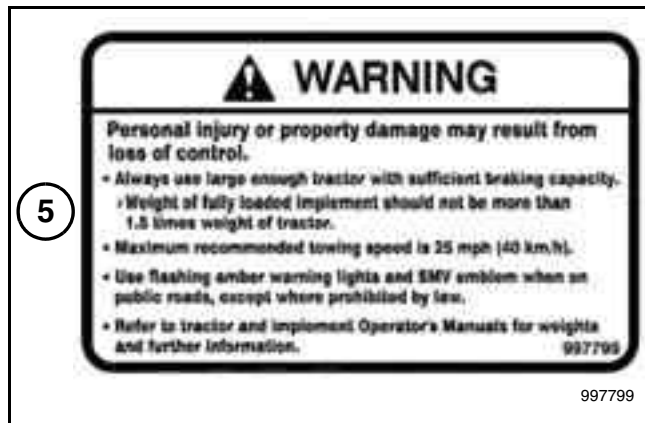


FIG. 30

FIG. 31: Warning - safety sign (6)

Read and understand instructions before operating jack.

Never attempt to move pull pin when there is any load on the jack. Doing so could cause the trailer to move suddenly.

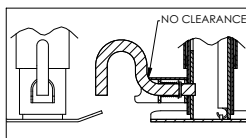
Spring return drop leg will naturally retract very quickly. Non-spring return drop leg will naturally fall. Keep clear of moving drop leg.

READ & UNDERSTAND INSTRUCTIONS BEFORE OPERATING JACK

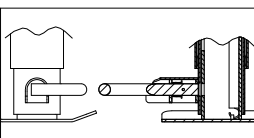
⚠ WARNING ⚠

NEVER ATTEMPT TO MOVE PULL PIN WHEN THERE IS ANY LOAD ON THE JACK. DOING SO COULD CAUSE THE TRAILER TO MOVE SUDDENLY.

SPRING RETURN DROP LEG WILL NATURALLY RETRACT VERY QUICKLY. NON-SPRING RETURN DROP LEG WILL NATURALLY FALL. KEEP CLEAR OF MOVING DROP LEG.



DROP LEG PULL-PIN ENGAGED (CLOSED)



DROP LEG PULL-PIN DISENGAGED (OPEN)

6

Spring Return Drop Leg Operation:
WARNING: Drop leg will naturally retract very quickly.

- 1) Verify that the jack is not supporting any load.
- 2) If extended, place your foot on foot plate to control the return of the drop leg.
- 3) Disengage drop leg pin by rotating to the disengaged position.
- 4) Carefully move the drop leg to the desired position using your foot.
- 5) Engage the drop leg pin by rotating it to the engaged position and into the desired adjustment hole.
- 6) Verify that the drop leg pin is fully inserted into the jack by checking for no clearance between the drop leg pin and housing. If you see clearance, you must adjust the drop leg to fully seat the pin into the hole location. If you are unable to fully seat the pin, DO NOT USE.

Non-Spring Return Drop Leg Operation:
WARNING: Drop leg will naturally fall.

- 1) Verify that the jack is not supporting any load.
- 2) If retracted, grasp the handle of foot plate to control the fall of the drop leg.
- 3) Disengage drop leg pin by rotating to the disengaged position.
- 4) Carefully move the drop leg to the desired position.
- 5) Engage drop leg pin by rotating to the engaged position and into the desired adjustment hole.
- 6) Verify that the drop leg pin is fully inserted into the jack by checking for no clearance between the drop leg pin and housing. If you see clearance, you must adjust the drop leg to fully seat the pin into the hole location. If you are unable to fully seat the pin, DO NOT USE.

To obtain instruction sheet contact:
 Cequent-Trailer Products, Inc.
 (800)604-9466 0926035 (C)

0926035

FIG. 31

FIG. 32: Warning - safety sign (7)

Jack will support vertical loads only. Block the wheels and support the tongue on blocks when the baler is not hitched to tractor.

⚠ WARNING

JACK WILL SUPPORT VERTICAL LOADS ONLY. BLOCK WHEELS & SUPPORT TONGUE ON BLOCKS WHEN NOT HITCHED TO TRACTOR.

879197 D

879197 D

FIG. 32

FIG. 33: Caution - safety sign (8)

Pinchpoint. Watch your hands and fingers.

⚠ CAUTION ⚠

8



**PINCHPOINT
WATCH YOUR
HANDS AND
FINGERS**

0926034 (C)

0926034

FIG. 33

SAFETY

FIG. 34: Warning - safety sign (9)

Disengage all drives, shut off Tractor engine and apply the flywheel brake before attempting any maintenance, lubrication or replacement of shear bolt.

Release Flywheel brake before engaging PTO.

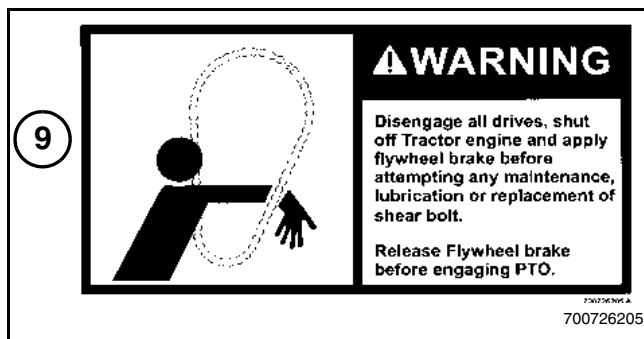


FIG. 34

FIG. 35: Warning - safety sign (10)

To prevent serious injury or death:

1. Read the Operator's Manual before operating machine.
2. Keep all shields in place.
3. No Riders.
4. Make certain everyone is clear of machine before starting engine or operation
5. Stop engine and operation before adjusting, lubricating, cleaning, or unclogging.
6. Use the flashing warning lights and slow moving vehicle emblem when transporting on highways.



FIG. 35

FIG. 36: Warning - safety sign (11)

Stop engine

Remove key before entering this area

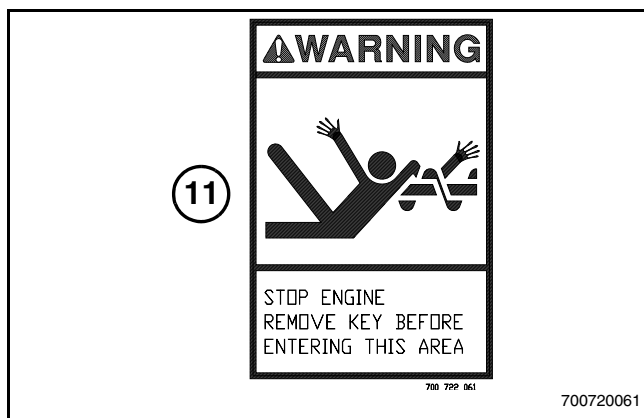


FIG. 36

FIG. 37: Danger - safety sign (12)

To avoid serious injury or death, keep shields in place when machine is running.

Shut off engine and wait for all motion to stop before cleaning or servicing.



FIG. 37

FIG. 38: Danger - safety sign (13)

Stuffer arm can move without putting hay in the baler. Shut off PTO and tractor engine.



FIG. 38

FIG. 39: Tie down location (14)

Single axle and tandem axle balers will have different tie down locations.

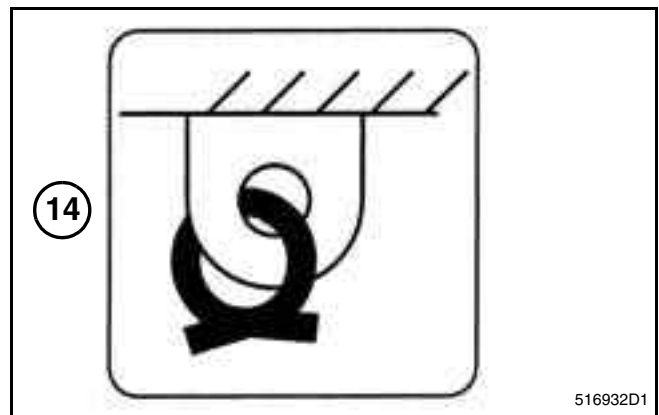


FIG. 39

FIG. 40: Yellow reflector strip (15)

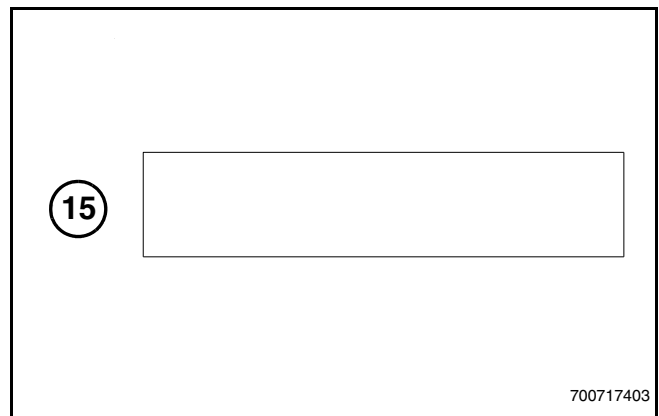


FIG. 40

FIG. 41: Pickup chain drive routing (16)

This decal shows the chain routing for the chains on the left-hand side of the pickup.

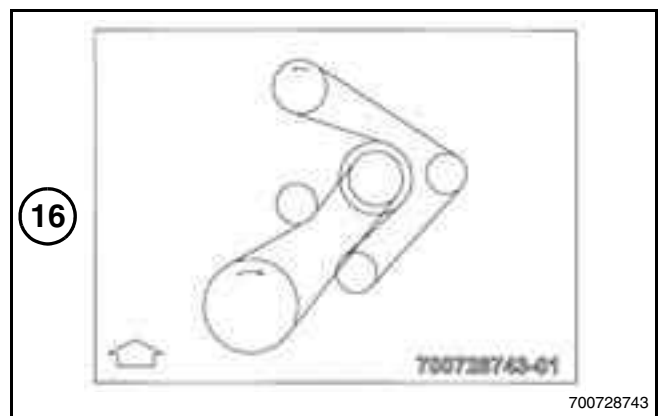


FIG. 41

SAFETY

FIG. 42: Tire pressure and lug nut torque values (17A)

This decal shows the correct tire pressures and lug nut torques for 2140 and 2150 balers.

NOTE: All of the torque values are for oiled lugs.

Size	Pressure	Torque Nm
21.5L X 16.1	2.8 bar (40 psi)	350 Nm (260 lb-ft)
500/50 X 17	2.1 bar (30 psi)	350 Nm (260 lb-ft)
600/50-22.5	2.1 bar (30 psi)	350 Nm (260 lb-ft)

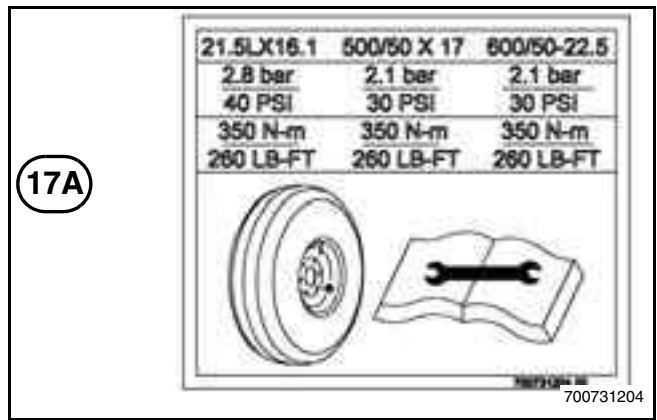


FIG. 42

FIG. 43: Tire pressure and lug nut torque values (17B)

This decal shows the correct tire pressures and lug nut torques for 2160, 2170 and 2190 balers.

NOTE: All of the torque values are for oiled lugs.

Size	Pressure	Torque Nm
500/45-22.5	3.2 bar (46 psi)	350 Nm (260 lb-ft)
28L X 26	2.2 bar (32 psi)	475 Nm (350 lb-ft)
700/50-22.5	2.2 bar (32 psi)	475 Nm (350 lb-ft)

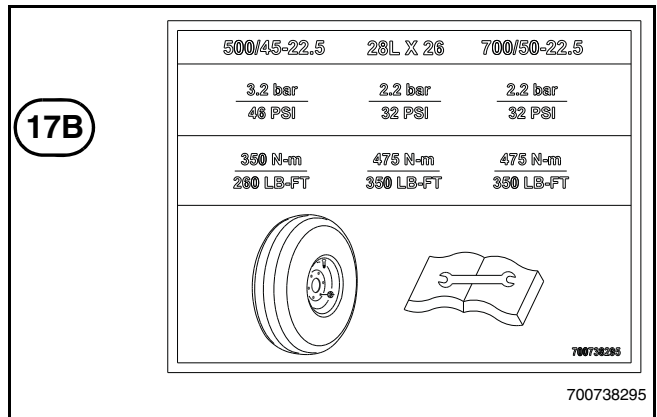


FIG. 43

FIG. 44: Twine box routing for four and six twine balers (18)

See the Preparation section for a larger view with instructions on how to route the twine. The top view is for four twine balers. The bottom view is for six twine balers.

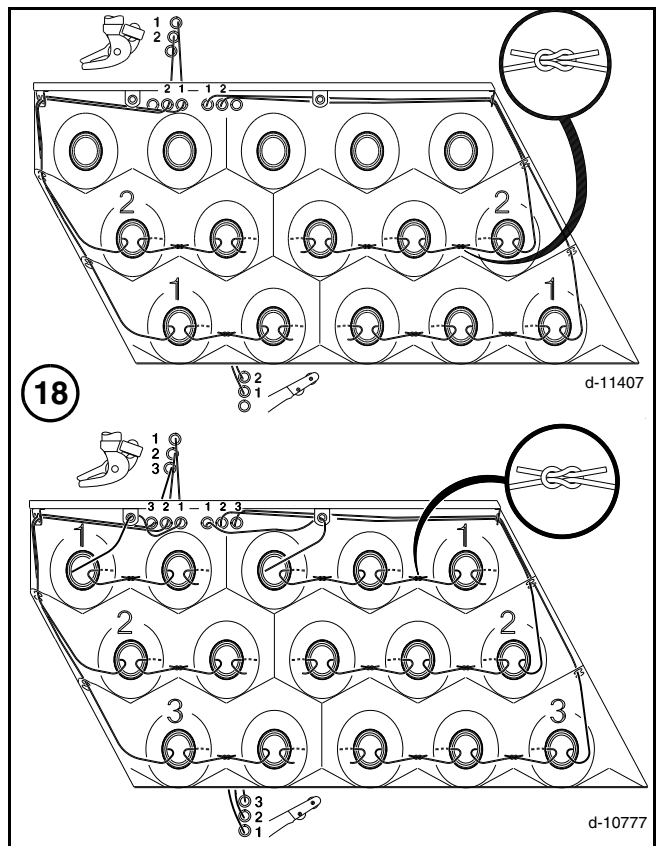


FIG. 44

FIG. 45: Lift location (19)

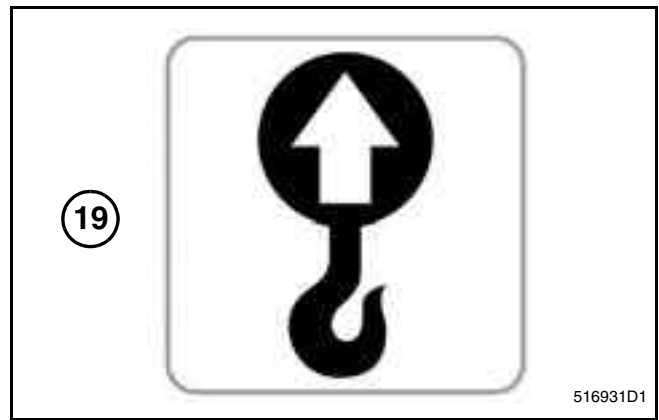


FIG. 45

FIG. 46: Twine routing and tension into knotter area (20)
Adjust twine tension to 50 N to 70 N (12 lbf to 15 lbf).

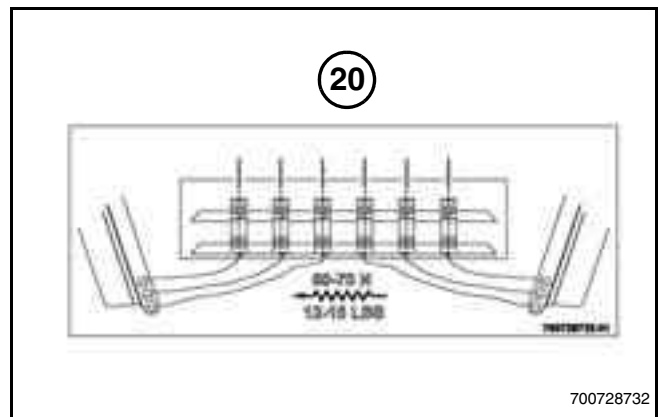


FIG. 46

FIG. 47: Twine routing through upper tensioners, upper slacker arms and tucker arms (21)

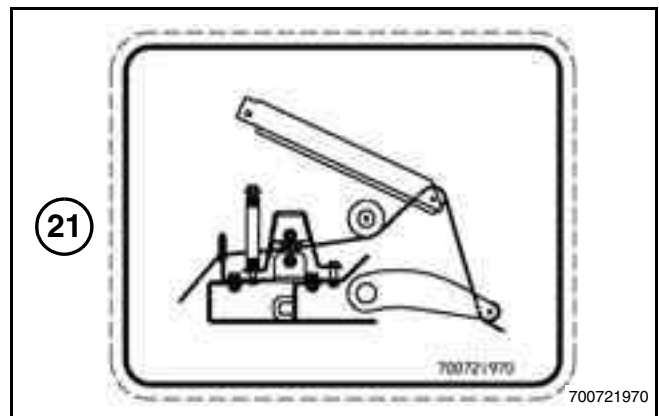


FIG. 47

SAFETY

FIG. 48: Equal Angle Drive 1000 RPM (22)

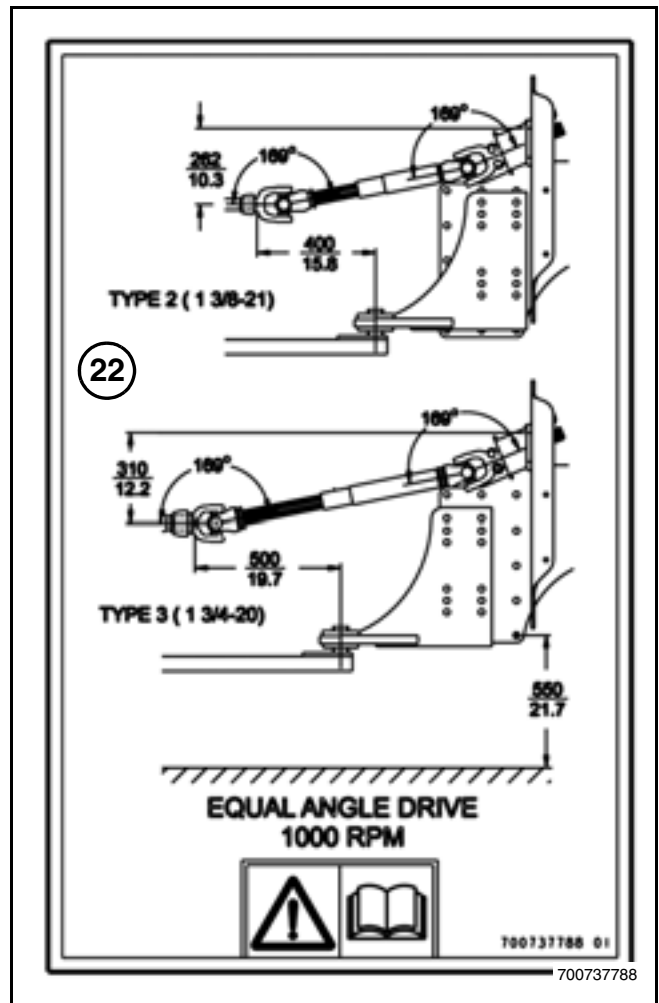


FIG. 48

FIG. 49: Safety sign (23)

Hazard (A) - General safety alert.

Avoidance (B) - Read the Operator Manual for safety information and operating instructions before operating the machine.

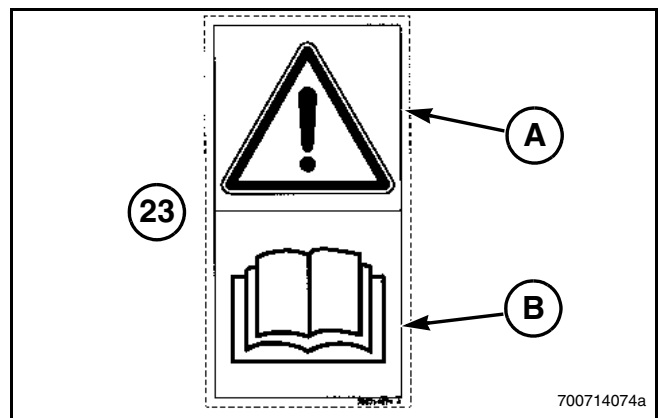


FIG. 49

Under the Left-hand Shield

FIG. 50: Informational signs on the left-hand side of the baler under the left-hand shield.

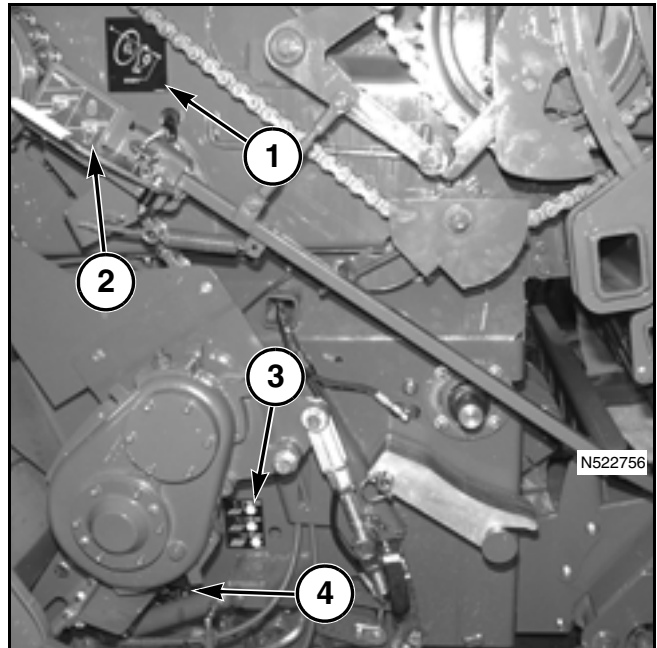


FIG. 50

FIG. 51: Main drive sprocket shearbolt (1)

The cap screw must go through with the nut on the inside. Tighten the nut to 145 Nm (105 lbf ft).

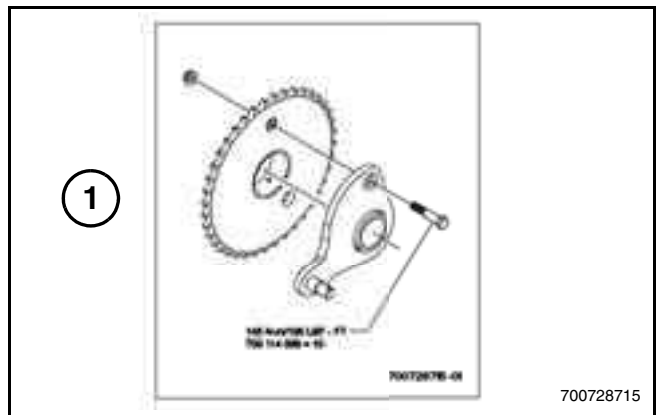


FIG. 51

FIG. 52: Stuffer latch lock (2)

(A) Push in on the handle in to engage the latch.

(B) Pull out on the handle to allow operation.

Always have the stuffer latch lock in the locked location when you do maintenance on the baler.

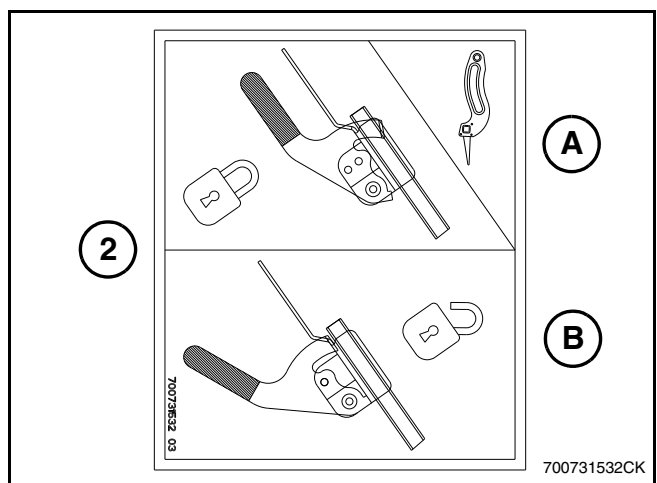


FIG. 52

SAFETY

FIG. 53: Knife Spacing (3)

- (A) Use two spacers for 192 mm (7.6 in) between knives.
- (B) Use one spacer for 96 mm (3.8 in) between knives.
- (C) Use no spacers for 48 mm (1.9 in) between knives.

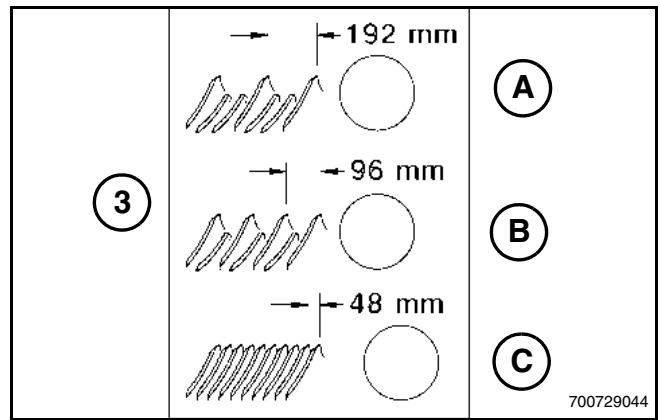


FIG. 53

FIG. 54: Knife lock (4)

- (A) Lift the handle to lock the knives in location.
- (B) Lower the handle to release the knives.

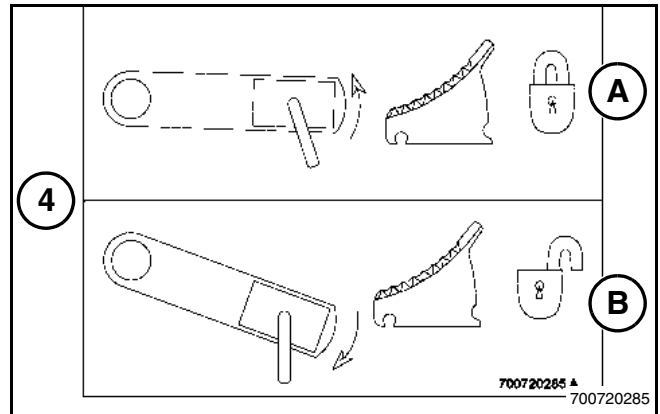


FIG. 54

Rear of the Baler

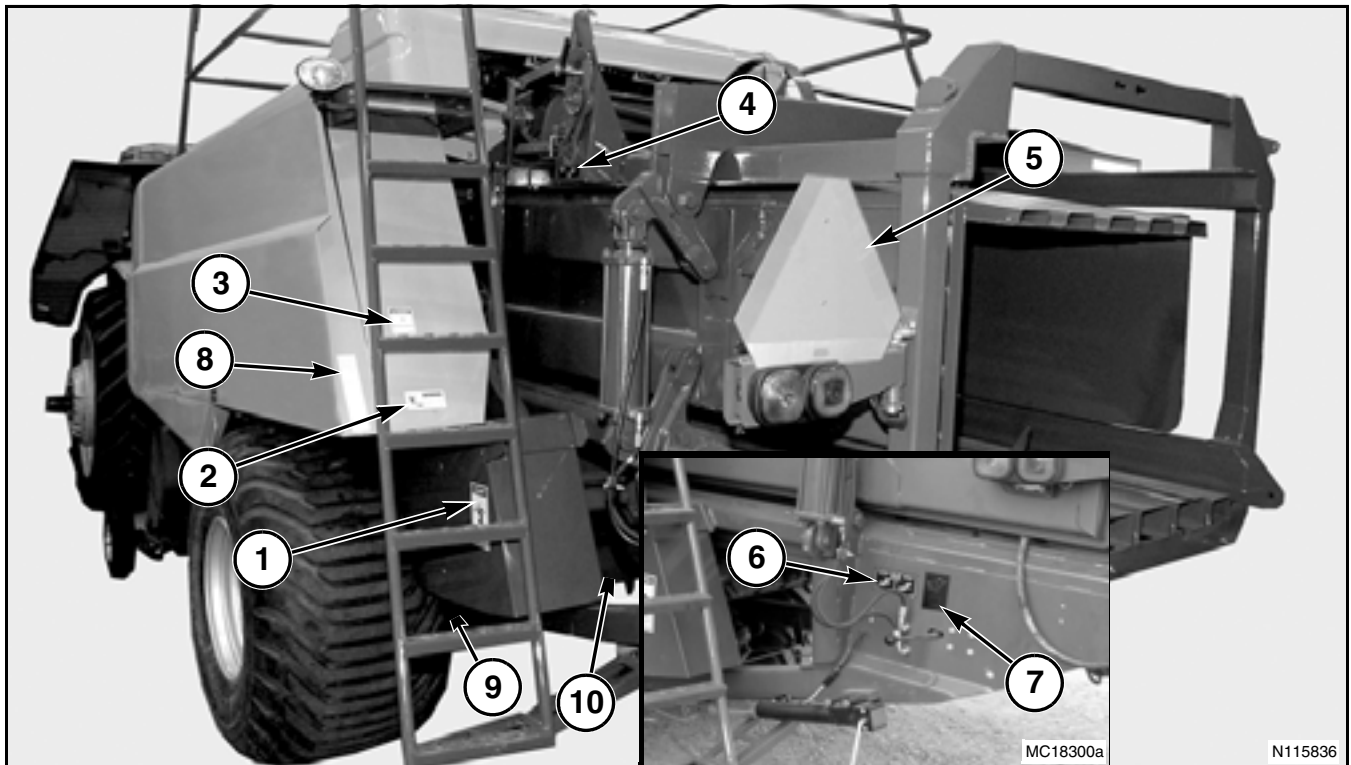


FIG. 55

FIG. 55: Safety and informational signs on the rear of the baler. Some signs can be in different locations than is shown in this figure.

FIG. 56: Danger - safety sign (1)

Needle frame can move without putting hay in the baler. Shut off PTO and tractor engine and engage needle lockout before threading needles or adjusting twine tensioners.

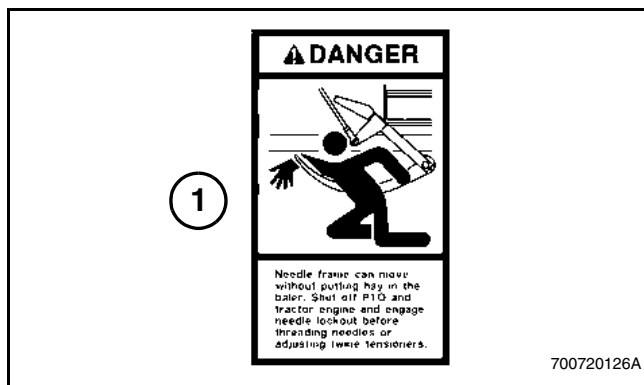


FIG. 56

FIG. 57: Warning - safety sign (2)

Do not climb or ride on any part of machine while machine is operating or moving.



FIG. 57

FIG. 58: Danger - safety sign (3)

- Keep clear of overhead electrical wires.
- Serious injury or death could result from contact.

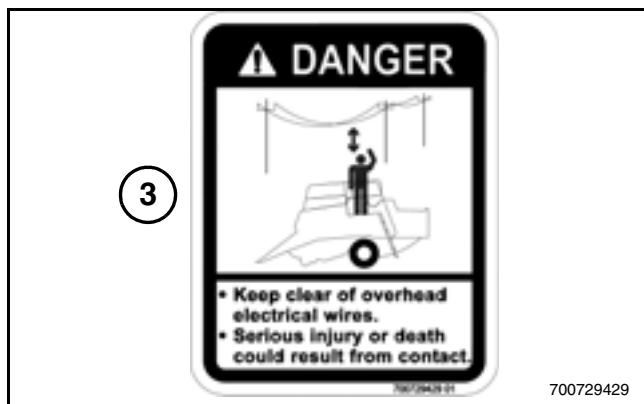


FIG. 58

FIG. 59: Safety sign (4)

(A) Push the handle forward to unlock the knotter/needle lockout.

(B) Pull the handle backward to lock the knotter/needle lockout.

(C) The knotter/needle lockout controls the knotters and the needles.

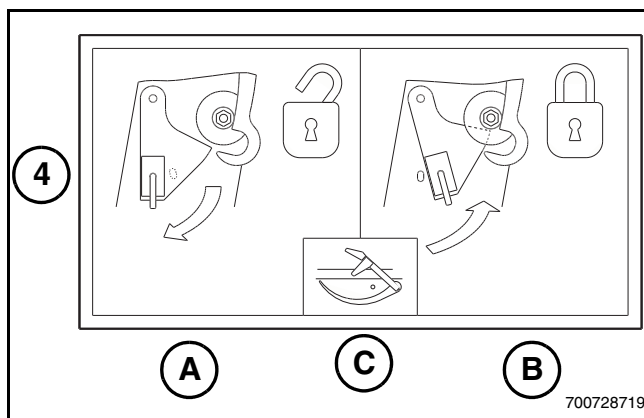


FIG. 59

SAFETY

FIG. 60: SMV (Slow Moving Vehicle) emblem (5)

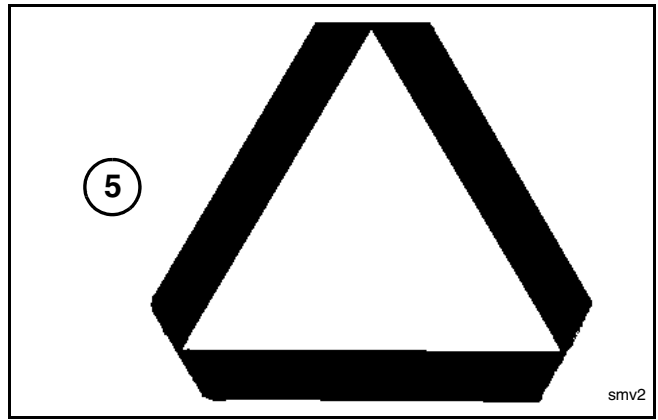


FIG. 60

FIG. 61: Parking brake (6) (if equipped)

(A) Turn the handle counterclockwise to release the parking brakes.

(B) Turn the handle clockwise to apply the parking brakes.
Do not use more than 40 daN (90 lbf) on the handle.

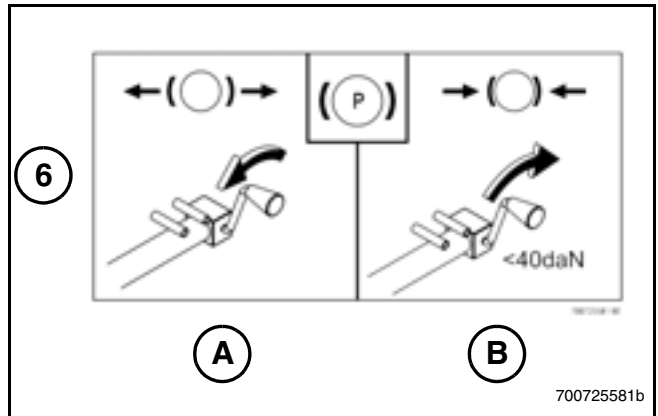


FIG. 61

FIG. 62: Ejector and roller bale chute (7)

The decal will only be on ejector equipped balers.

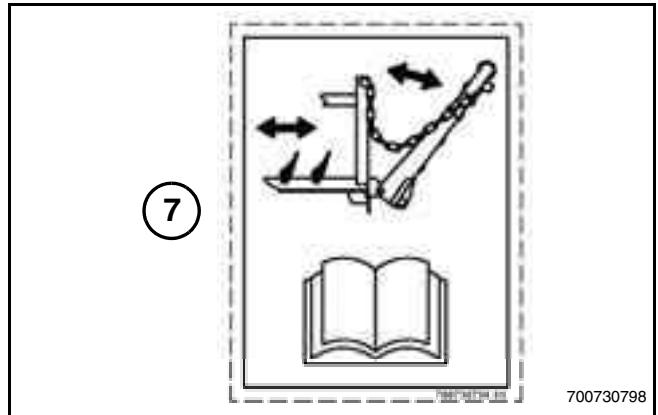


FIG. 62

FIG. 63: Yellow reflector strip (8)

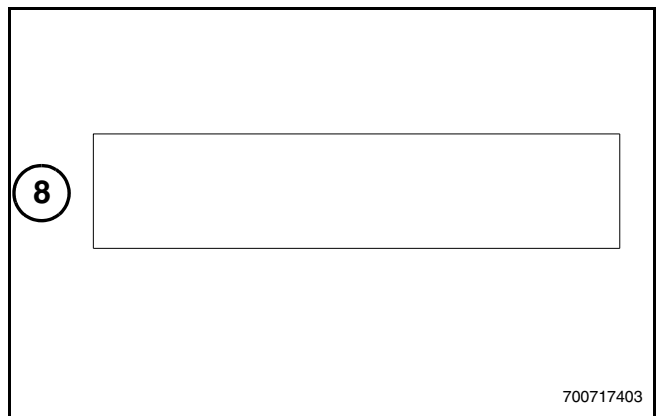


FIG. 63

FIG. 64: Jack point sign (9)

Shows the location to apply a jack.

Single axle and tandem axle balers have different jack points.

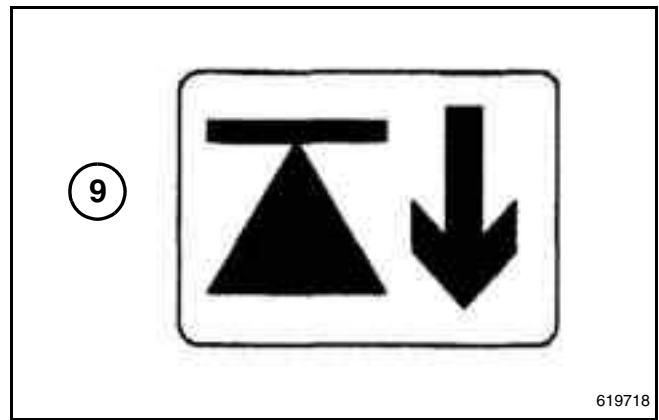


FIG. 64

FIG. 65: Needle twine routing and tension (10)

This sign is on the rear of the beam under the lower tensioners on a tandem axle baler.

This decal shows the twine routing from the twine box, down through the tensioners, through the lower slacker arms and to the needles.

Adjust twine tension to 70 N (15 lbf).

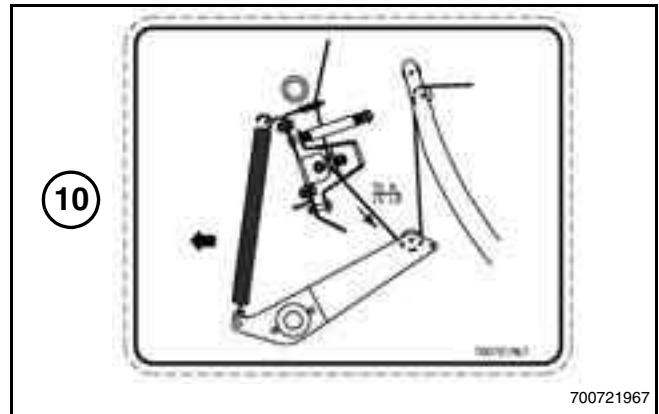


FIG. 65

Right-hand Side of the Baler

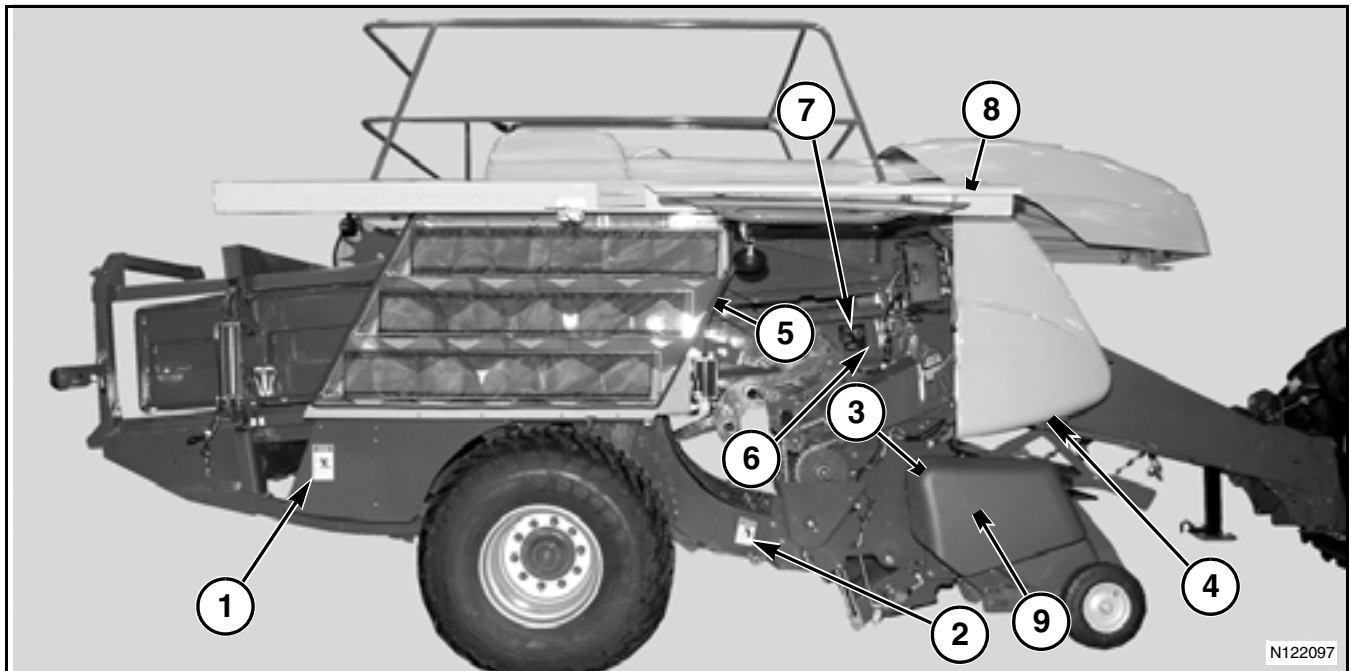


FIG. 66

FIG. 66: Safety and informational signs on the right-hand side of the baler. Some signs can be in different locations than are shown in this figure.

SAFETY

FIG. 67: Danger - safety sign (1)

Needle frame can move without putting hay in the baler. Shut off PTO and tractor engine and engage needle lockout before threading needles or adjusting twine tensioners.

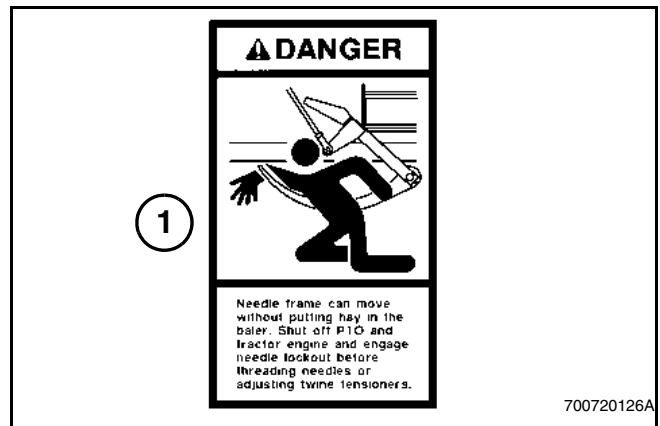


FIG. 67

FIG. 68: Danger - safety sign (2)

Stuffer arm can move without putting hay in the baler. Shut off PTO and tractor engine.



FIG. 68

FIG. 69: Warning - safety sign (3)

Pinch point - stay clear of this area. Hands and feet can be crushed causing severe injury.



FIG. 69

FIG. 70: Warning - safety sign (4)

Stop engine. Remove key before entering this area.



FIG. 70

FIG. 71: Twine box routing for four and six twine balers (5)

See the Preparation section for a larger view with instructions on how to route the twine. The top view is for four twine balers. The bottom view is for six twine balers.

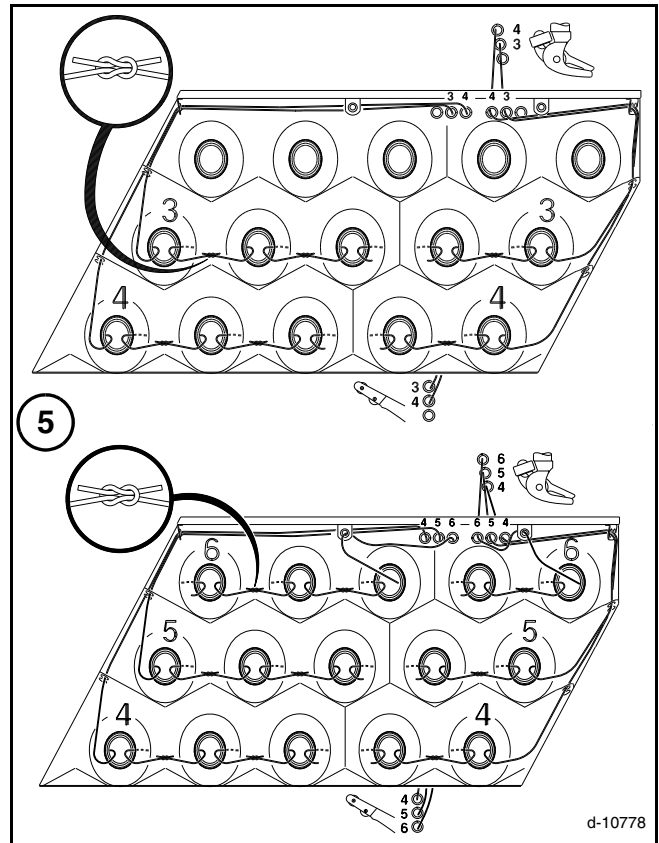


FIG. 71

SAFETY

FIG. 72: Balers after serial number *****CHB0X001 and Up have a bale density valve assembly with a density bleed valve (6)

The decal shows how to operate the density bleed valve. Pull down and twist until the valve locks to release pressure (A).

Twist the valve stem until the valve goes back up into the bale density valve block to return to automatic operation (B).

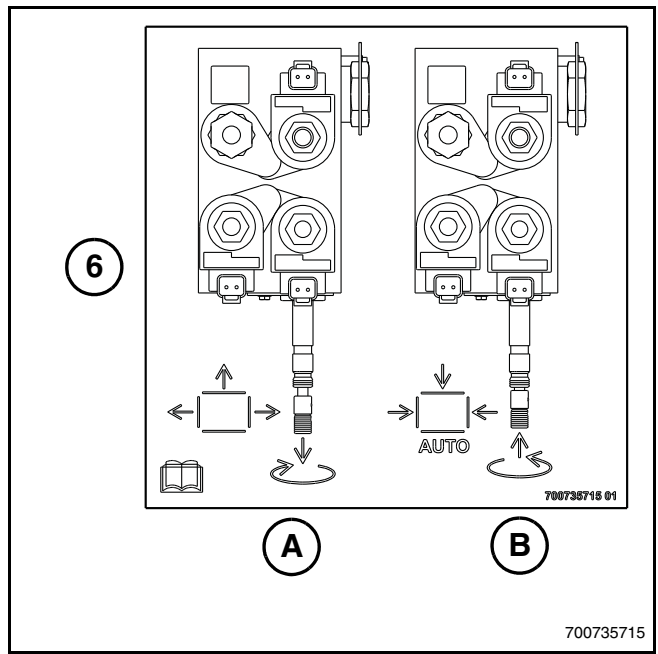


FIG. 72

FIG. 73: Stuffer clutch adjustment (7)

The decal shows the springs to adjust.

Go to the Adjustment section in this Operator Manual for more information.

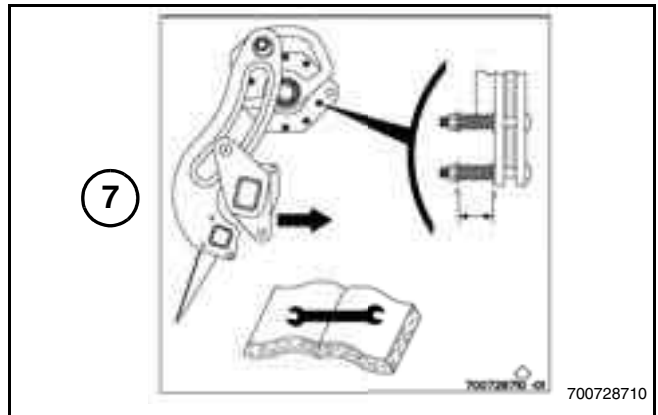


FIG. 73

FIG. 74: Hydraulic reservoir fill location (8)



FIG. 74

FIG. 75: Right-hand pickup chains routing (9)

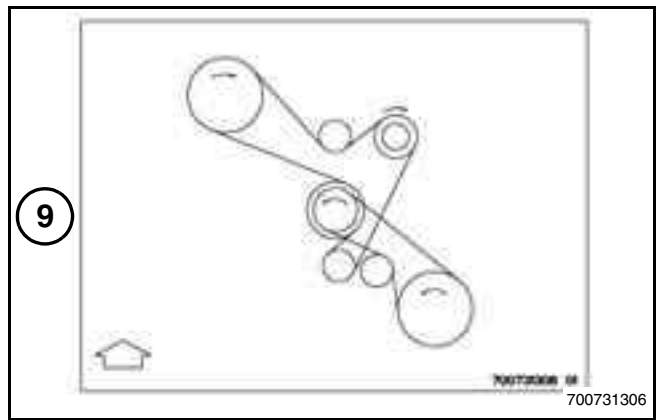


FIG. 75

SAFETY

NO-TEXT SAFETY SIGNS AND INFORMATION SIGNS

Safety Signs, Hazard and Avoidance

FIG. 76: Most of the safety signs on this machine consist of two panels. The hazard panel (A) depicts the consequence of encountering the hazard. The avoidance panel (B) depicts the action required to avoid the hazard.

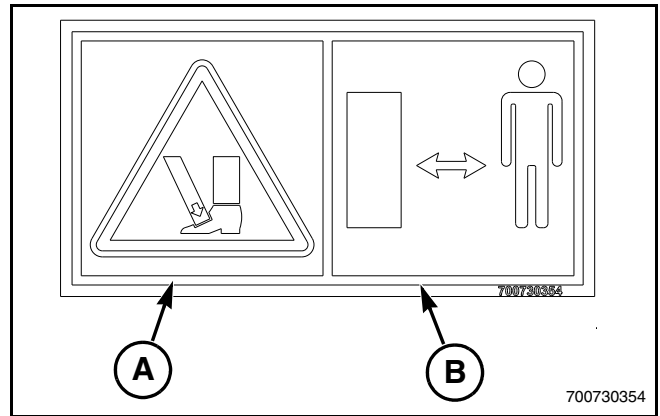


FIG. 76

Left-hand Side of the Baler

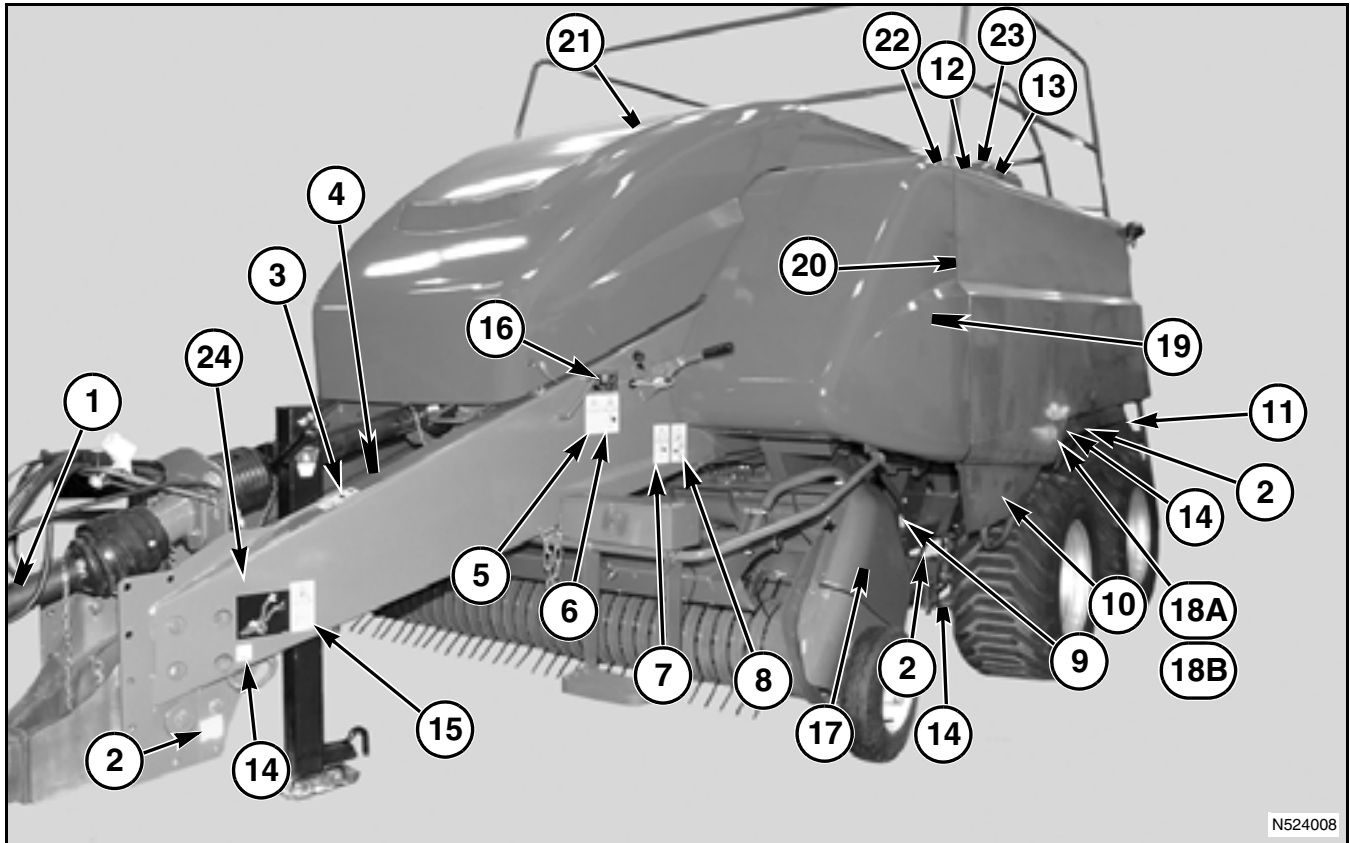


FIG. 77

FIG. 77: Safety and informational signs on the left-hand side of the baler. Some signs can be in different locations than is shown in this figure. Some signs can have text.

FIG. 78: Safety sign (1)

Hazard (A) - Entanglement hazard - rotating shaft/PTO driveline.

Avoidance (B) - Do not reach into areas of moving parts.

Hazard (C) - General safety alert.

Avoidance (D) - Read the Operator Manual for safety information and operating instructions before operating the machine.

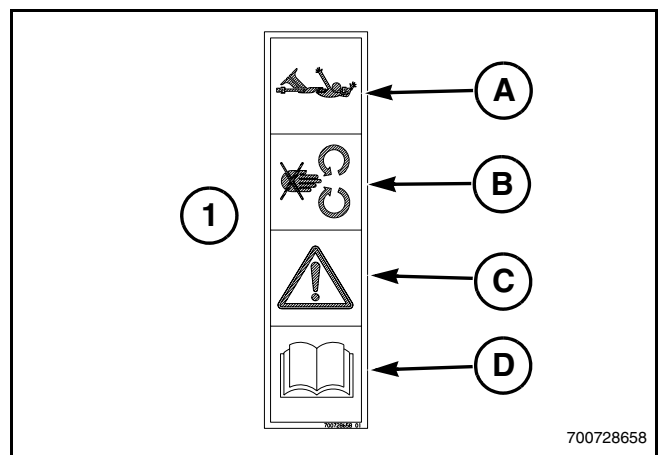


FIG. 78

SAFETY

FIG. 79: Amber reflector (2)

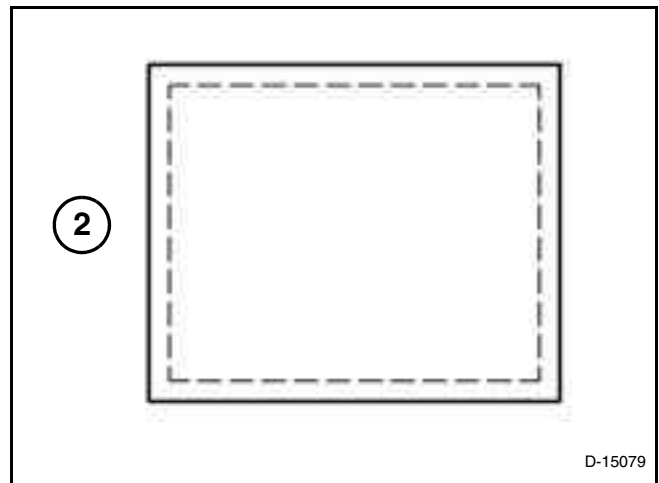


FIG. 79

FIG. 80: Safety sign (3)

Hazard (A) - Crushing hazard - risk of personal injury to feet.

Avoidance (B) - Keep a safe distance.

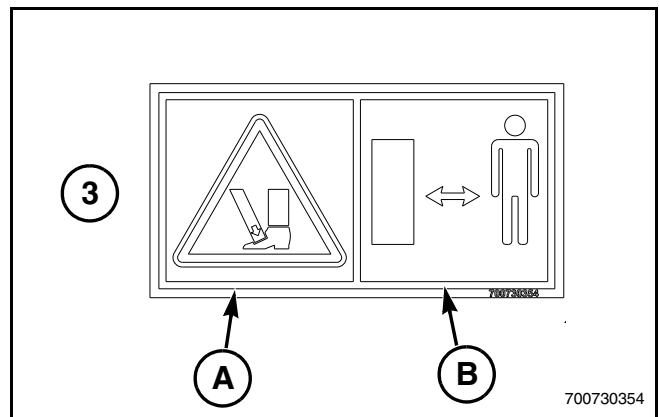


FIG. 80

FIG. 81: Safety sign (4)

Hazard (A) - Explosion hazard - accumulator contains gas and oil under pressure that can penetrate skin and cause serious injury.

Avoidance (B) - Shut off engine, remove key, and relieve pressure before performing maintenance or repair work. See the Service Manual for proper repair procedures.

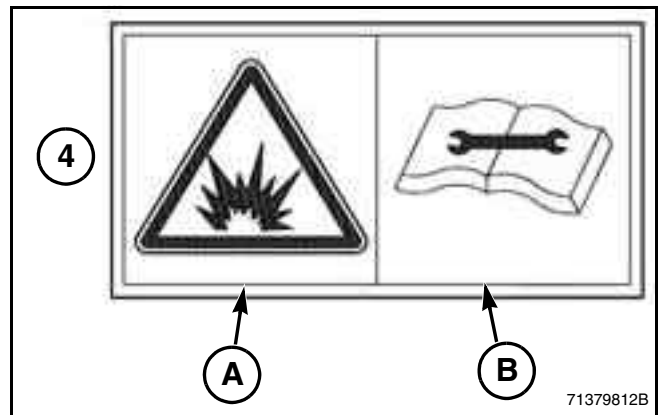


FIG. 81

FIG. 82: Safety sign (5)

Hazard (A) - General safety alert.

Avoidance (B) - Read the Operator Manual for safety information and operating instructions before operating the machine.

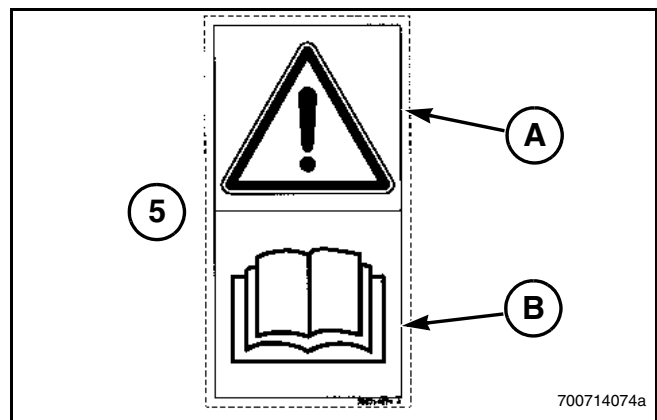


FIG. 82

FIG. 83: Safety sign (6)

Hazard (A) - General safety alert.

Avoidance (B) - Stop the engine and remove the key before doing maintenance or repair work.

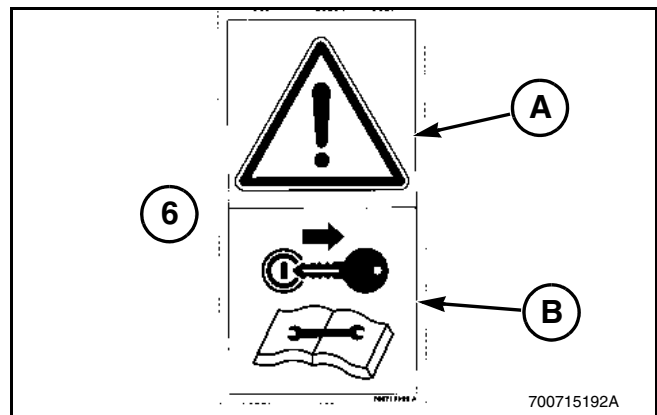


FIG. 83

FIG. 84: Safety sign (7)

Hazard (A) - Entanglement hazard in baler intake area.

Avoidance (B) - Never reach into the pickup area with the tractor running and PTO connected. Stop the engine and remove the key before doing maintenance or repair work.

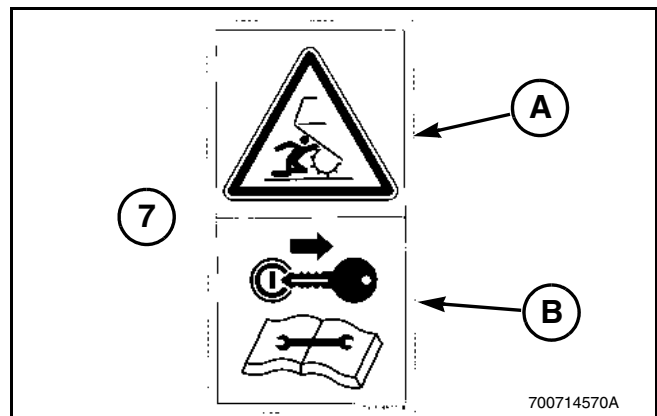


FIG. 84

FIG. 85: Safety sign (8)

Hazard (A) - Entanglement hazard in rotating auger.

Avoidance (B) - Do not reach into area of moving parts.

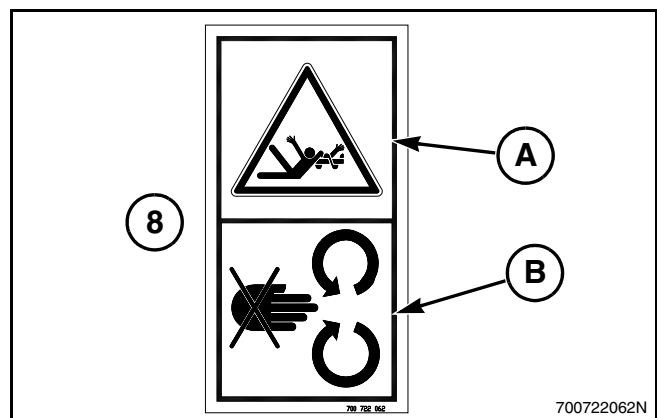


FIG. 85

SAFETY

FIG. 86: Safety sign (9)

Hazard (A) - Crushing hazard - risk of personal injury. The stuffer can trip without putting hay into the baler.

Avoidance (B) - Never reach into the stuffer area with the tractor running and the PTO connected. The stuffer can trip without putting hay into the baler. Stop the engine and remove the key before doing maintenance or repair work.

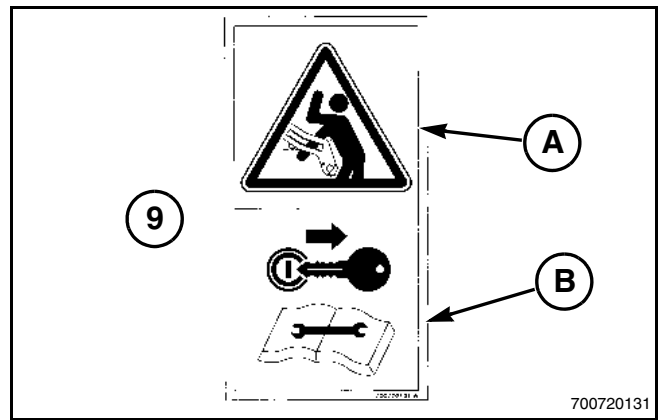


FIG. 86

FIG. 87: Safety sign (10)

Hazard (A) - Crushing hazard - risk of personal injury to hands.

Avoidance (B) - Wait until all movement has stopped before opening/servicing/unplugging.

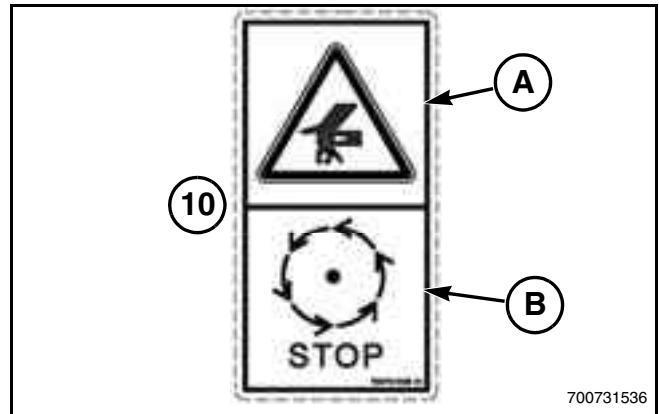


FIG. 87

FIG. 88: Safety sign (11)

Hazard (A) - Crushing hazard - risk of personal injury. Needle frame can move without putting hay in the baler.

Avoidance (B) - Turn off PTO and tractor engine and engage knottor/needle lockout before threading needles, threading knotters or adjusting twine tensioners. Lock the needles and knotters before doing maintenance or repair work.

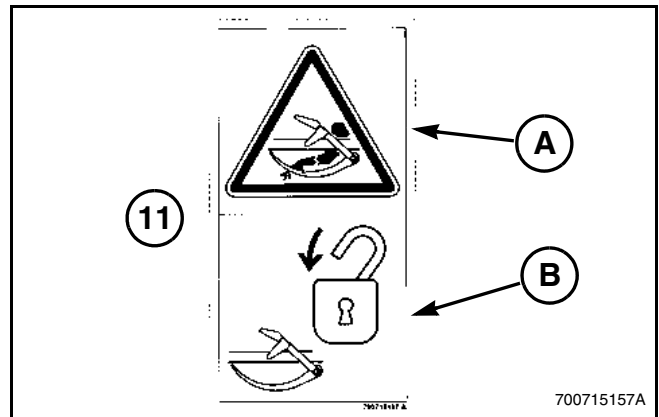


FIG. 88

FIG. 89: Safety sign (12)

Hazard (A) - Hand entanglement hazard. Knottor assembly can move without putting hay in the baler.

Avoidance (B) - Close the knottor shield before operating the baler.

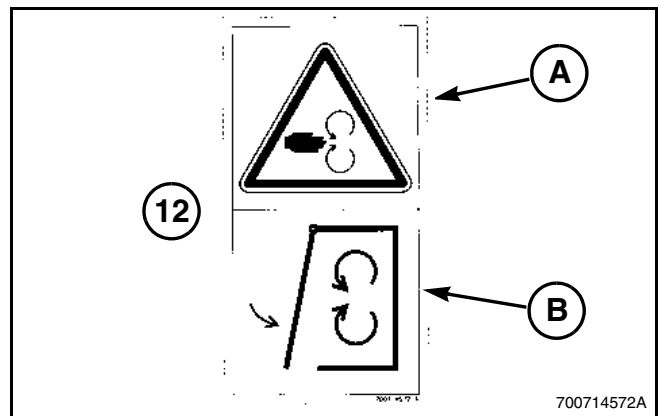


FIG. 89

This as a preview PDF file from best-manuals.com



Download full PDF manual at best-manuals.com