

4425 COMBINE



JOHN DEERE

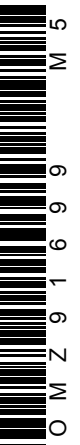
OPERATORS MANUAL

4425
COMBINE

OMZ91699 M5 English

JOHN DEERE WERKE ZWEIBRÜCKEN
OMZ91699 M5

LITHO IN THE U.S.A.
ENGLISH





INTRODUCTION



This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

Your operator's manual contains SI metric measurements which are followed immediately by the U.S. customary units of measure.

"Right-hand" and "left-hand" sides are determined by facing in the direction the combine will travel when in use.

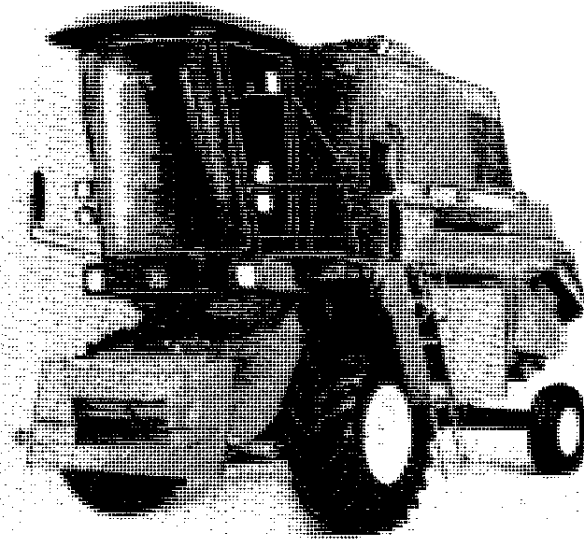
Record identification number(s) in space provided at the end of this manual. Accurately record "ALL" of the letters and numbers in case a computer is used to trace a stolen machine or for ordering parts from a dealer. Make an additional copy of the numbers and file it in a safe place.

The warranty on this combine appears on your copy of the purchase order which you should have received from your dealer when making your purchase. This warranty provides you the assurance that JOHN DEERE will back its products where defects appear within the warranty period. In some circumstances, JOHN DEERE also provided field improvements, often without charge to the customer, even if the product is out of warranty.

The tire manufacturer's warranty supplied with your machine may not apply outside the U.S. and Canada.

Warranty and field improvements are a part of JOHN DEERE's product support program for customers who operate and maintain their equipment as described in this manual. Should the equipment be abused or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.

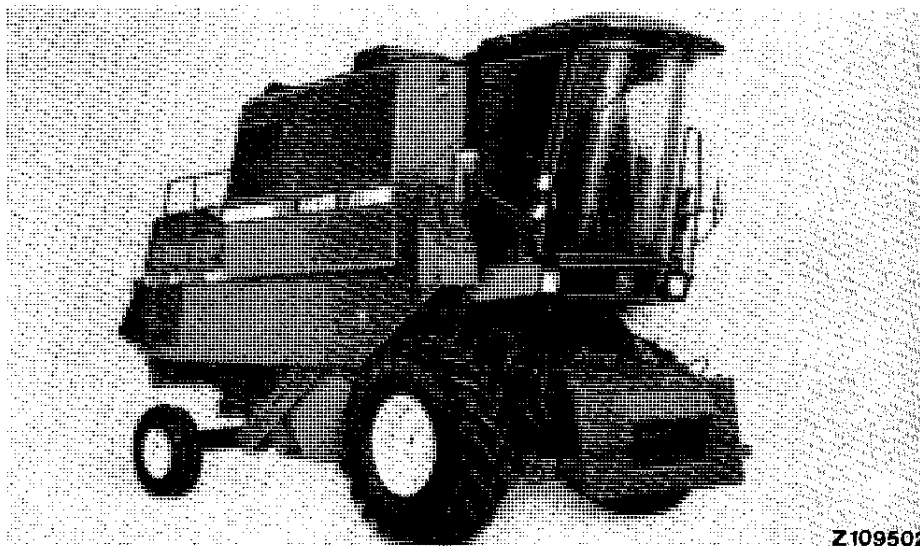
Identification Views



Z109501

*Left-Hand View, 4425 Combine with Cab, without Header;
Straw Spreader in Transport Position*

Z109501-4425AZE-300985



Z109502

*Right-Hand View, 4425 Combine with Cab, without Header;
Straw Spreader in Transport Position*

Z109502-4425AZE-300985

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Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

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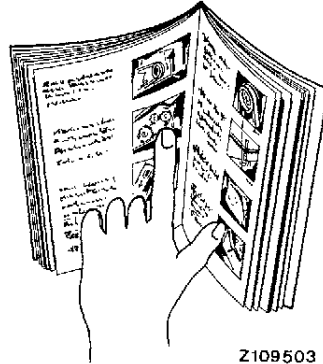
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Safety Rules

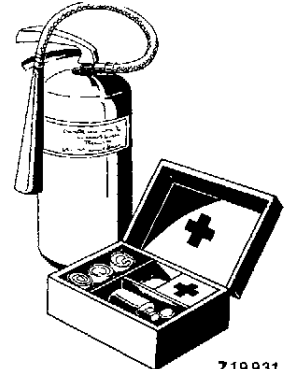
READ THIS MANUAL

1. Do not put this operator's manual away unread. Read the manual carefully regardless of your previous experience. Allow yourself this time, it will save you time and labor later on.

2. Be prepared in case of accident or fire. Keep a first aid kit and fire extinguisher handy. Be acquainted with correct handling of the fire extinguisher.



Z109503



Z19931

Z109503,Z19331-4425AZE-300985

SAFETY DECALS



CAUTION, WARNING or DANGER: Decals with these headings and symbol indicate the possibility of personal injury.

IMPORTANT: Decals with this heading indicate the possibility of damage to the machine.

Decals are located in areas where they apply.



H28488 N
H28488N-4425AZE-300985

AVOID CONTACT WITH MOVING PARTS

Keep guards and shields in place at all times while operating the combine. Always disengage separator and shut off engine before removing guards or shields.

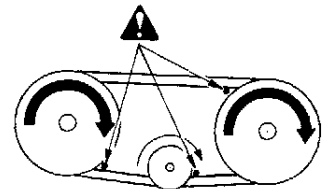
Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

Keep hands, feet and clothing away from power-driven parts.

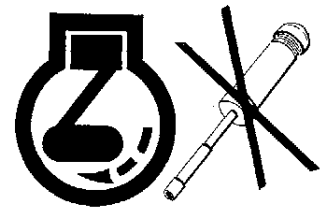
Never clean, lubricate or adjust the combine when it is running unless it is specifically stated to do so.

Everyone must be clear before starting engine or running combine.

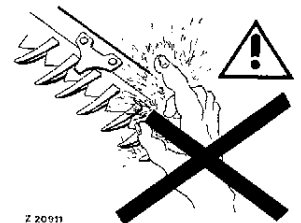
Never attempt to clear obstructions off the header or unplug or clean separator unless the separator is disengaged and the engine is shut off.



Z 22 032



Z 20 919

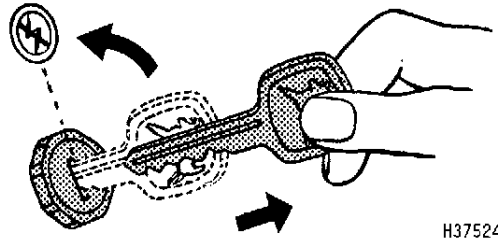


Z 20 911

Z22032,Z20919,Z20911-4425AZE-300985

LEAVING COMBINE UNATTENDED

Before leaving the combine unattended, turn off engine and remove keys, support the header with either the hydraulic cylinder safety stop, or lower it to the ground. The gearshift lever must be in neutral and the parking brake engaged. Lock cab doors.



H37524

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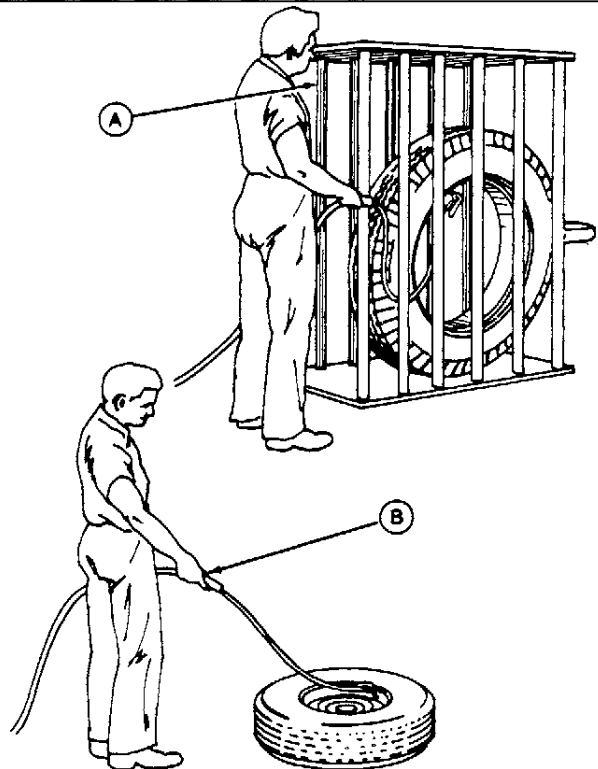
SERVICE TIRES SAFELY

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your JOHN DEERE dealer or a qualified tire repair service.

When seating tire beads on rims, never exceed maximum inflation pressures* specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead, and reinflate.

Detailed tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks, available through your JOHN DEERE dealer. Such information is also available from the Rubber Manufacturers Association and from tire manufacturers.

* See also specifications

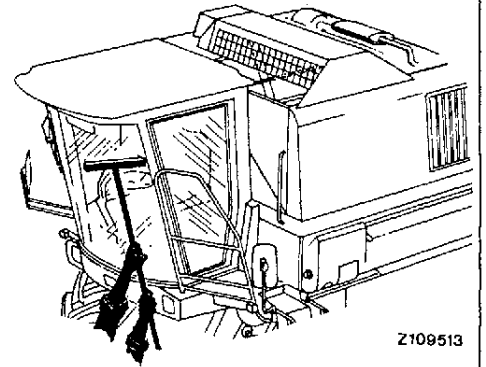


- A—Use a safety cage if available
- B—Do not stand over tire. Use a clip-on chuck and extension hose.

TSO123-4425AZE-300985

WASHING FRONT CAB WINDOW

To wash front window of cab, stand on ground and use a long handled squeegee or mop to reach top of window. Do not stand on feeder house or header top beam, as this could result in a fall.

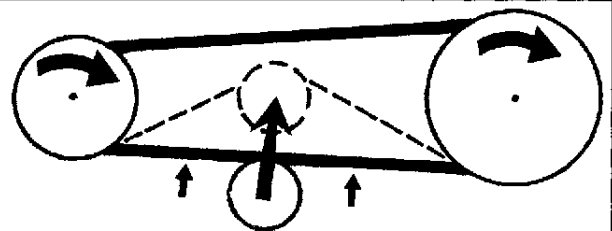


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SERVICING DRIVES AND DRIVE RELATED AREAS

Shut off engine and remove key before servicing the combine in either a belt driven area or any area receiving power from a belt drive. Some drives, due to their clutching and declutching characteristics, can be engaged when the engine is running by the applying or removing of outside forces.



H37564

Replace any shields that were removed.

H37564-4425AZE-300985

OPERATE SAFELY

Clothing worn by operator must be fairly tight and belted. Loose jackets, shirts, or sleeves must never be worn.

Disengage separator lever, move gearshift lever to neutral and sound horn before starting engine.

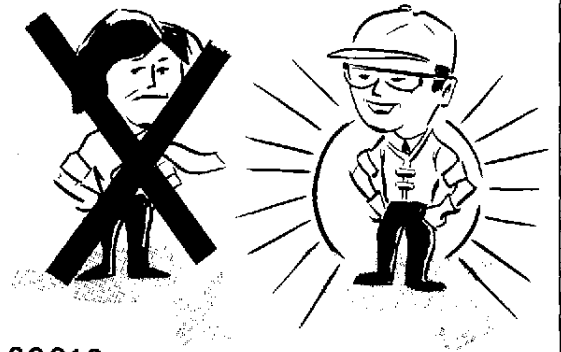
Be careful when operating on hillsides so the combine will not tip. Always keep the combine in gear when going down hills.

Do not ride or attempt to climb rear ladder while combine is moving.

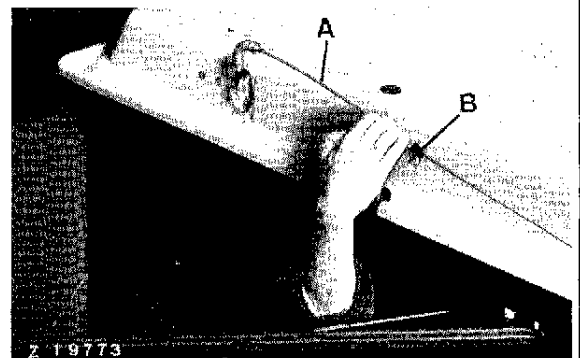
Do not adjust cleaning fan when combine is moving.

When operating combine in extremely muddy conditions, swing ladder up to prevent it from being bent when backing up.

The radio antenna (A) must be bent forward and secured with clip (B) any time the combine may come into contact with a high voltage wire or when combine is transported.



Z 20912



Z 19773

Z20912,Z19773-4425AZE-300985

Safety Rules

BATTERIES

Batteries generate explosive gases. Keep sparks, flames, burning cigarettes, or other ignition sources away at all times. Always shield eyes when working near batteries. Always wear safety glasses.

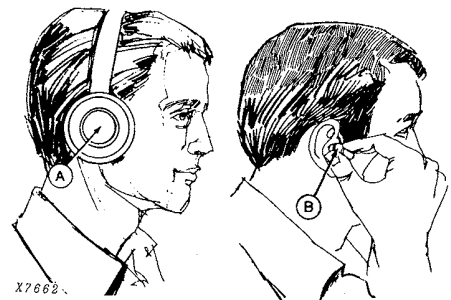
Do not connect or disconnect live circuits.
Turn off charger before attaching or removing a lead from the battery.
Ventilate the area when charging.



H36842-4425AZE-300985

NOISE

Keep cab doors and windows closed. This ensures sufficient noise protection.
Prolonged exposure to loud noise can cause impairment or loss of hearing.
Wear a suitable hearing protective device such as earmuffs (A) or earplugs (B) to protect against objectionable or uncomfortable loud noises.



A--Earmuffs

B--Earplugs

X7662-4425AZG-300985

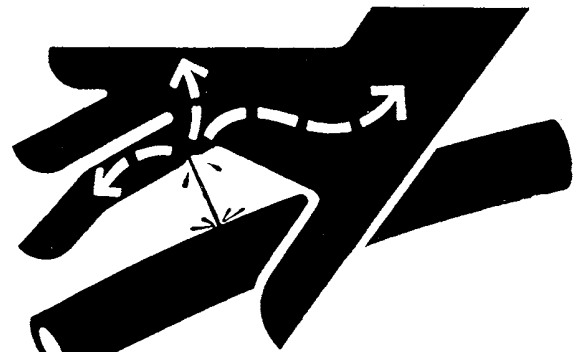
AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pin holes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks. Do not use your hand.

If any fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type of injury or gangrene may result.

Cracking hydraulic line fittings to lower the feeder house results in an instantaneous dropping of feeder house or feeder house and header.

The air conditioning system is pressurized. Improper servicing may cause refrigerant to penetrate eyes and skin or cause burns. Special equipment and procedures are required to service air conditioning system.
(See your JOHN DEERE dealer).



L 102 134

L102134-4425ALE-300985

Safety Rules

FIRE EXTINGUISHER

Have a multipurpose dry chemical fire extinguisher filled and handy. Know how to use it.

DO NOT refuel with the engine running.

DO NOT smoke or use a lantern when refueling.

The part number of the extinguisher is AT62018. See Pre-Starting Checks for installation instructions.



RW2389-4425AZE-300985

TRANSPORT SAFELY

Never ride or allow anyone on the operator's platform.

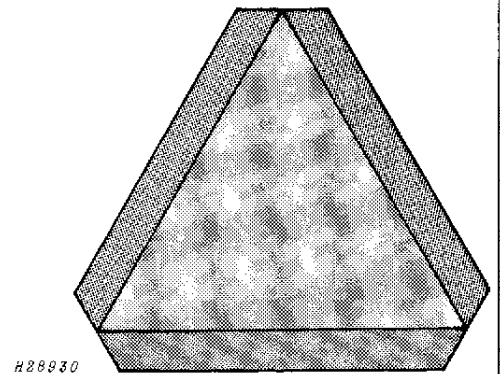
Be extra careful when transporting the combine in hilly country. Never transport with grain in tank and always lock brake pedals together.

When transporting the combine on a road or highway, use accessory lights and devices for adequate warning to the operators of other vehicles. In this regard, check local governmental regulations. Always check width laws.

The radio antenna must be bent forward and secured with clip when transporting combine. This prevents the antenna coming into contact with a high voltage wire.



CAUTION: Do not tow combine with rope. Energy stored in rope, if it should break, could cause bodily injury. Always use a suitable chain when towing combine. Attach chain to towing eye on front axle.

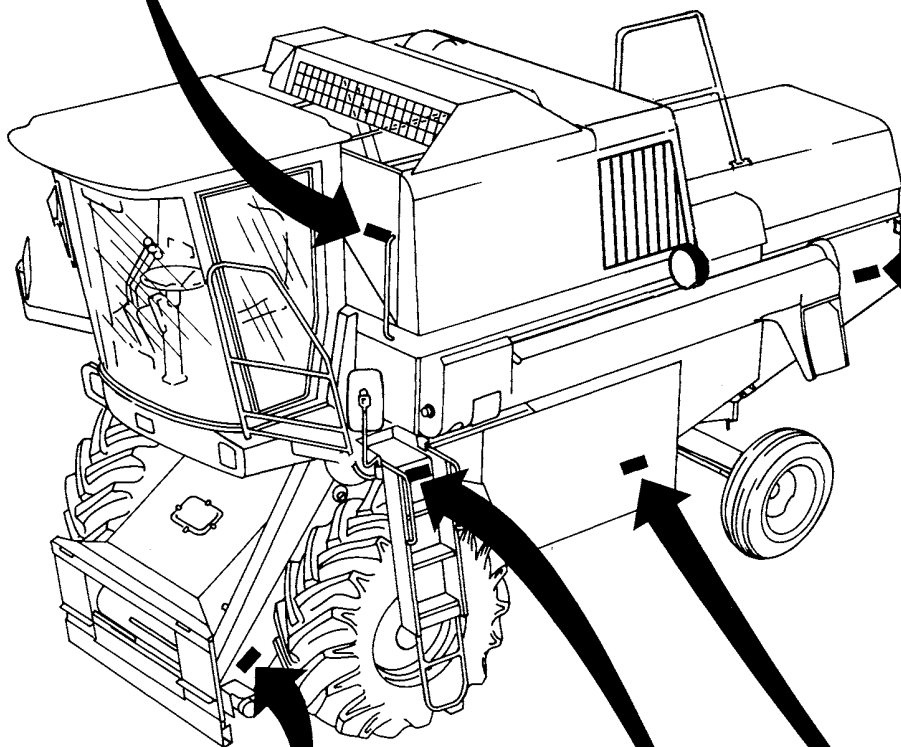


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DANGER, WARNING DECALS L.H.

! WARNING
Do Not enter grain tank
when engine is running

! DANGER
Stay clear



! WARNING
Do Not Stand Behind Chopper
Or Make Adjustments While
Engine Is Running

! WARNING
To avoid bodily injury from fall of raised header or feeder house, completely raise feeder house, stop engine, remove start key, and set safety stop on lift cylinder rod before getting under header or feeder house. Safety stop is located above one of the feeder house lift cylinder rods.

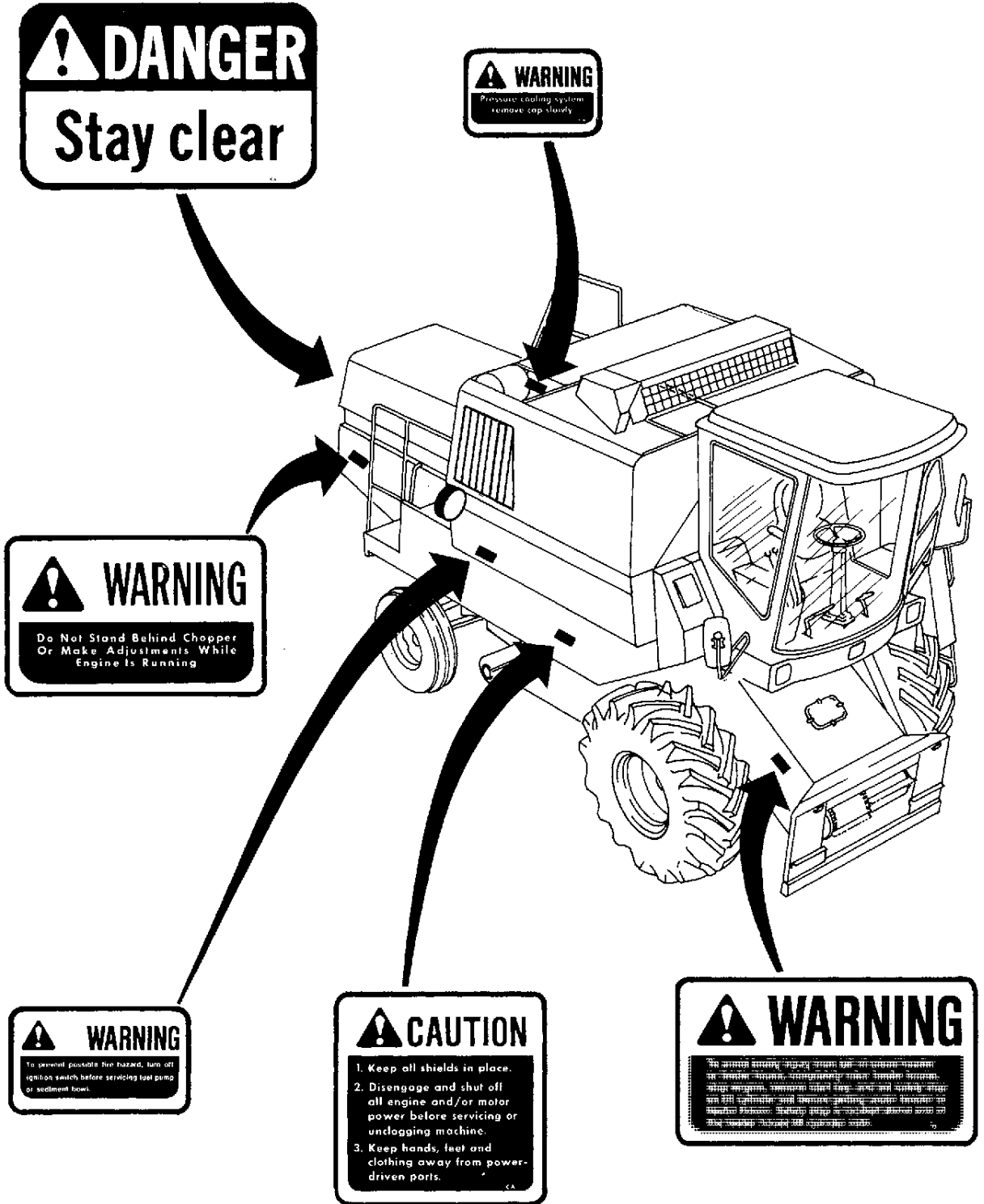
! WARNING
Avoid injury from falls.
Do not ride ladder while
combine is moving.

! CAUTION
1. Keep all shields in place.
2. Disengage and shut off all engine and/or motor power before servicing or unlogging machine.
3. Keep hands, feet and clothing away from power-driven parts.

Z110121

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DANGER, WARNING DECALS R.H.



Z110122

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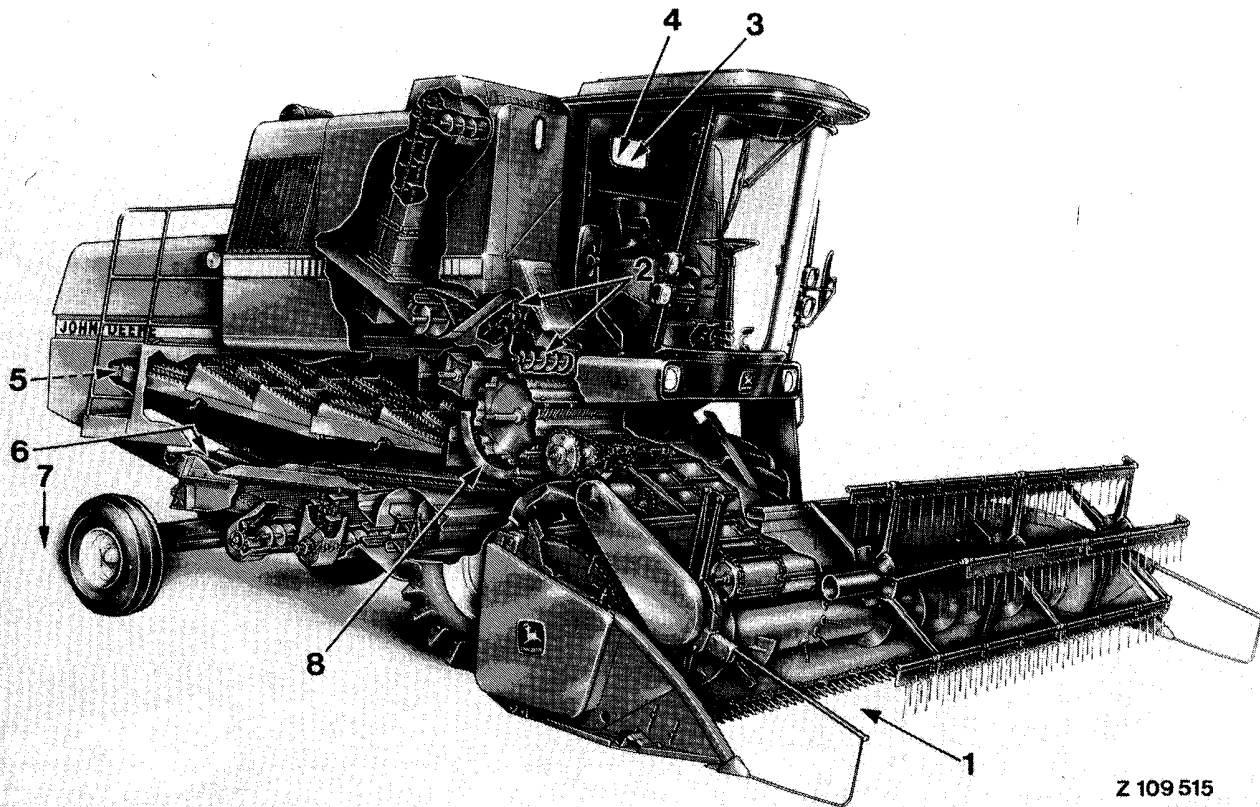
Fundamentals of Combine Harvesting

CHOICE OF HARVESTING TIME

Make sure crop is ripe enough to be harvested, otherwise smooth harvesting operation may be impaired.

GRUNDOM-1065AZE-150883

AVOIDING GRAIN LOSSES



Loss of grain or grain damage contribute to loss of profits. Depending upon harvesting conditions and crop moisture content, perform all necessary adjustments.

Pay particular attention to the following:

1. Grain losses in front of header.
2. Excessive tailings.
3. Cracked grain in grain tank.
4. Chaff in grain tank.
5. Grain loss from straw walkers.
6. Grain loss from sieves.
7. Grain losses on the ground.
8. Poor de-awning action

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HEADER OPERATION

Header operation is described in a separate operator's manual.

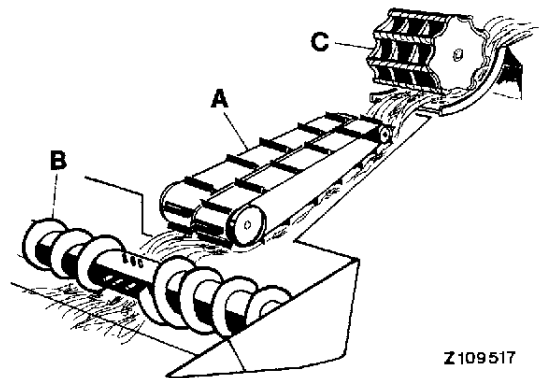
Follow the instructions given in this manual.

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FEEDER HOUSE

Operation

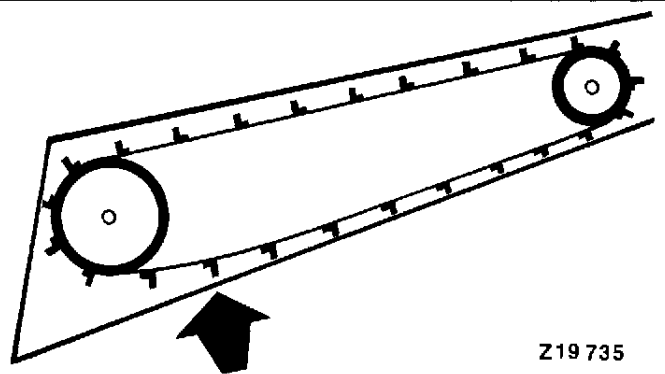
Conveyor chain (A) receives the crop from auger (B) and forwards it to the cylinder (C).



Z109517
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Conveyor Chain Adjustment

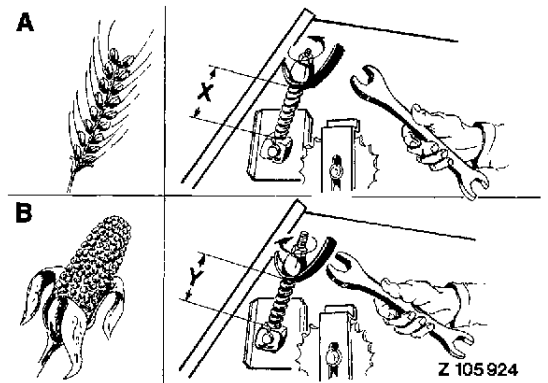
Adjust tension of conveyor chain so that chain just touches bottom of housing.



Z19 735
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Adjusting Lower Feed Drum

- A-Grain crops
- B-Corn crops
- X-140 mm (5-1/2 in.)
- Y-110 mm (4-5/16 in.)

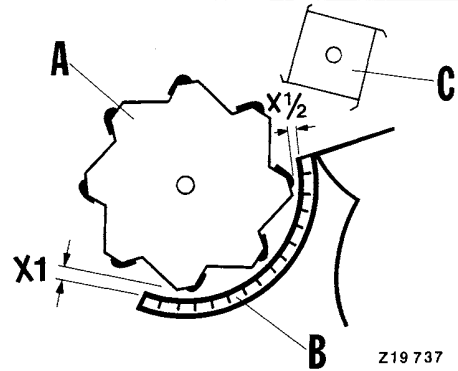


Z 105924
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SEPARATOR

The separator is the most important component of the combine and should therefore be adjusted with the greatest care.

A—Threshing cylinder
B—Concave
C—Beater



Z19 737

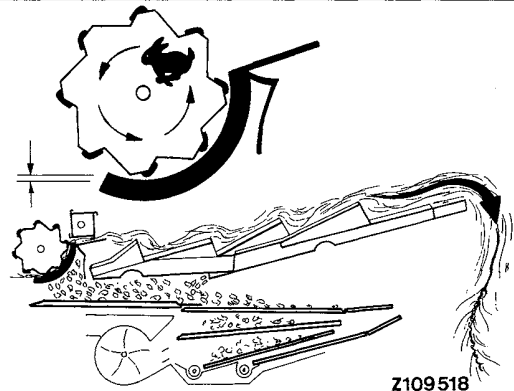
Z19737-1065AZE-150883

FUNDAMENTALS OF ADJUSTMENT

1. High cylinder speed and narrow concave spacing
– good threshing action –

Extreme adjustment:

Cylinder speed too high
Concave spacing too narrow
– overthreshing –

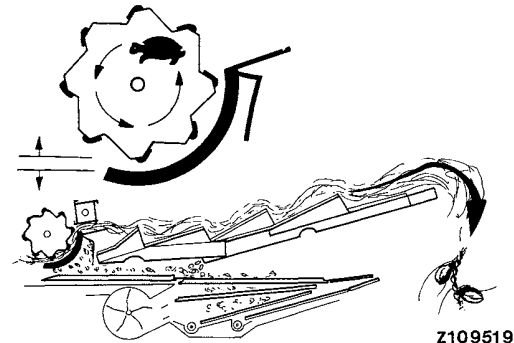


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2. Low cylinder speed and wide concave spacing
– poor threshing action –

Extreme adjustment:

Cylinder speed too low
Concave spacing too wide
– underthreshing –



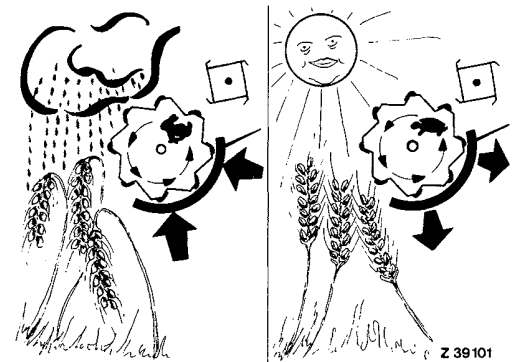
Z109519

3. Basic adjustment

– Moist crop: Increase cylinder speed and/or reduce concave spacing.

– Dry crop: Reduce cylinder speed and/or increase concave spacing.

IMPORTANT: Cylinder speed and concave adjustments are the most important factors in obtaining good results.



Z 39101

Z109518,Z109519,Z39101-4425AZE-300985



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ADJUSTING CONCAVE AND CYLINDER SPEED, DEPENDING UPON CROP

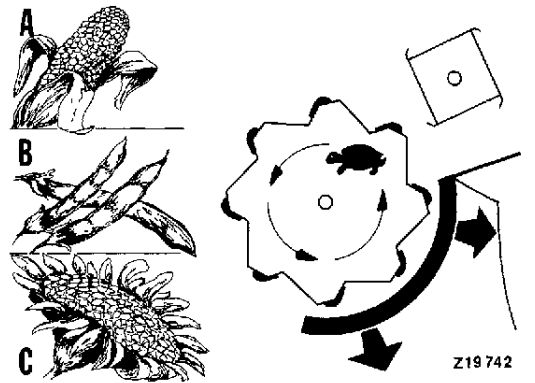
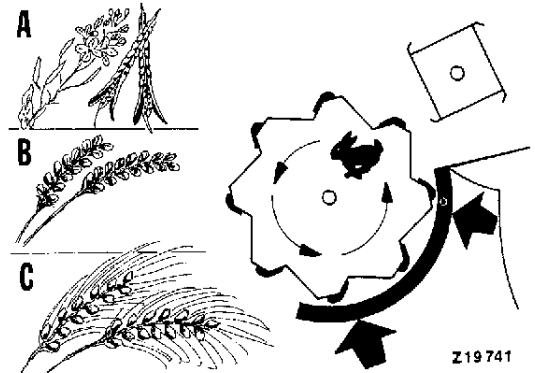
Fine seeds and normal grain crops:
High cylinder speed and narrow concave spacing

- A-Rape
- B-Wheat
- C-Barley

Coarse crops, like corn or beans:

Low cylinder speed and wide concave spacing

- A-Corn
- B-Beans
- C-Sunflowers



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SEPARATING PROCESS

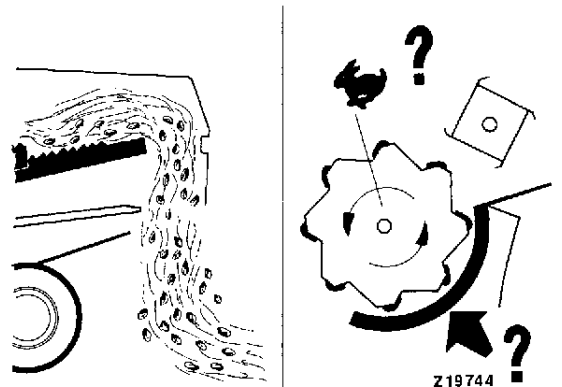
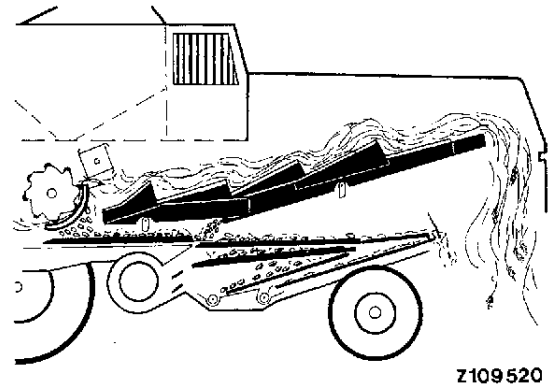
The threshed straw with the remaining grain is deflected by the beater and thrown onto the straw walkers. The agitating straw walker action removes the remaining grain which falls onto the grain pan. Finally, the straw reaches the last walker step and falls to the ground.

Avoid "underthreshing" (overloaded straw walkers, separating action too fast).

The grain passes out of the combine with the mass of straw.

Check:

- Concave spacing narrow enough?
- Cylinder speed high enough?



Z109520, Z19744-4425AZE-3C0985

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