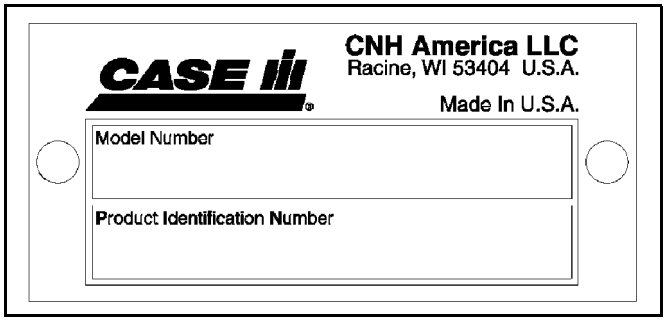
PRODUCT IDENTIFICATION AND SERIAL NUMBERS

Write your machine model number and Product Identification Number (P.I.N.) and Serial Numbers of major components on the lines provided. If needed, give these numbers to your dealer when you need parts or information for your machine.

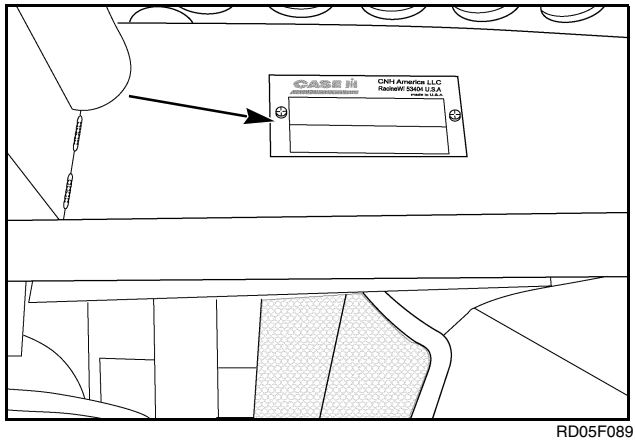


RH04E016

MODEL NUMBER AND PRODUCT IDENTIFICATION NUMBER PLATE

Identification Number Locations

Product Identification Number



RD05F089

RIGHT FRONT OF COMBINE

⚠ Battery Safety ⚠

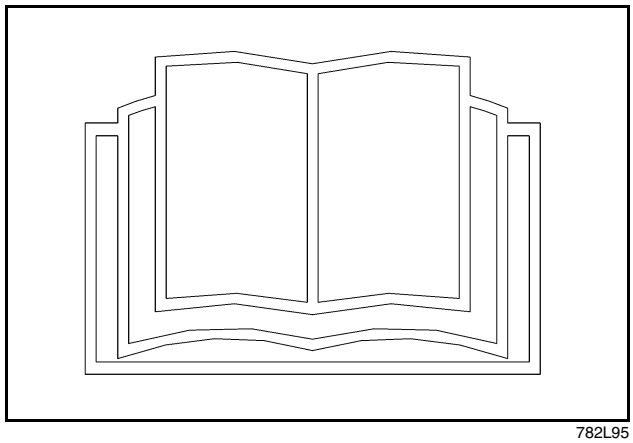
- DO NOT make sparks or use an open flame near the battery.
- When disconnecting battery terminals, remove the Negative (-) cable first; then remove the Positive (+). When connecting cables, connect the Positive (+) first, then connect the Negative (-).
- Disconnect the battery (both terminals) before welding on any part of the machine. Failure to do so may cause damage to sensitive electrical components.
- BATTERY ACID CAUSES SEVERE BURNS. Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Antidote: EXTERNAL - flush with water. INTERNAL - Drink large quantities of water or milk. DO NOT induce vomiting. Seek medical attention immediately. EYES - Flush with water for 15 minutes and seek medical attention immediately. BATTERIES PRODUCE EXPLOSIVE GASES. Keep sparks, flame, cigars and cigarettes away. Ventilate when charging or using in enclosed area. Always wear eye protection when working near batteries. Wash hands after handling. KEEP OUT OF REACH OF CHILDREN.
- When working around storage batteries, remember that all of the exposed metal parts are “live”. Never lay a metal object across the terminals because a spark, short circuit, explosion or personal injury may result.
- Battery posts, terminals and related accessories contain lead and lead compounds. **Wash hands after handling.**

⚠ Maintenance Safety ⚠

- Always keep safety and informational decals clean and visible. Replace decals that are damaged, lost, painted over or can not be read.
- When assembling, operating or servicing the machine, wear protective clothing and personal safety devices that are necessary for the particular procedure. Some personal safety devices that may be necessary are protective shoes, face and/or eye protection, hard hat, heavy gloves, filter mask and hearing protection.
- Do Not wear jewelry or loose fitting clothing that may get caught in moving parts. Always wear close fitting clothing. Keep hands, feet, clothing and hair away from moving parts.
- Never attempt to clear obstructions or objects from the machine while the engine is running.
- Always stop the engine and remove the key from the key switch when leaving the operator’s seat or the machine.
- When servicing the machine, always have the machine on a firm level surface.
- If shields or guards are removed or opened for service, always replace shields or guards before operating the machine. Never operate machine with missing or open shields or guards.
- Keep the area used for servicing the machine clean and dry. Wet or oily floors are slippery. Wet spots can be dangerous when working with electrical equipment. Be sure all electrical outlets and tools are properly grounded.

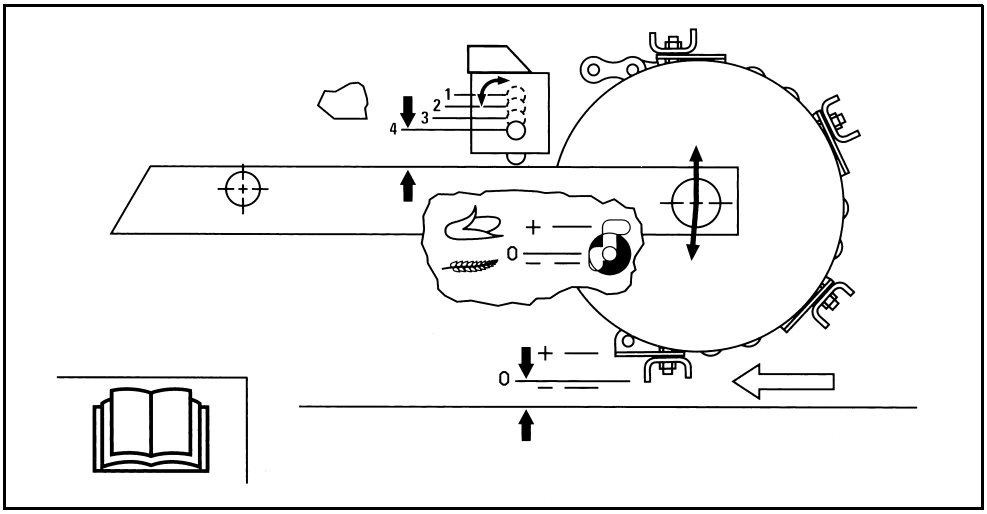
INFORMATIONAL DECALS

Decal which display the “Read Operator’s Manual” symbol are intended to direct the operator to the Operator’s Manual for further information regarding maintenance, adjustments and/or procedures for particular areas of the Combine. When a decal displays this symbol refer to the appropriate page of the Operator’s Manual. Refer to the Information Decals section in this manual, located in front of the Specifications Section.



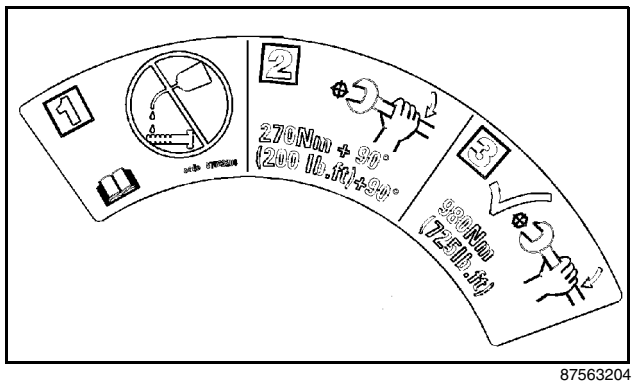
782L95

“READ OPERATOR’S MANUAL”



175783A1

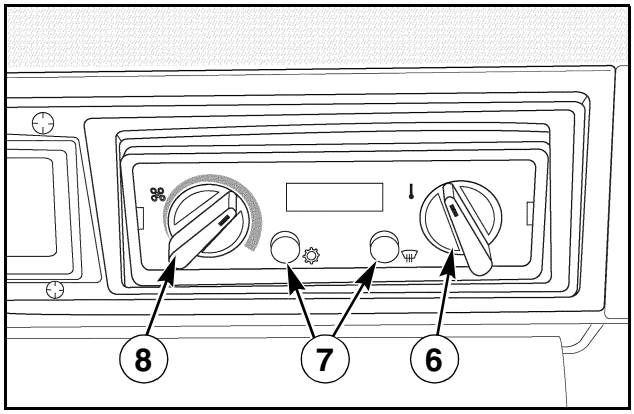
FEEDER DRUM ADJUSTMENT - WITH STONE RETARDER



87563204

BOLT TORQUE

Automatic Temperature Control (ATC)

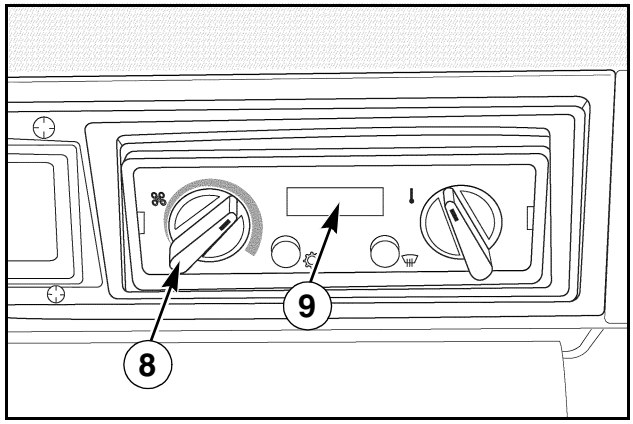


RD05D054

6. **TEMPERATURE CONTROL** - Turn the dial clockwise to increase cabin temperature. Turn the dial counterclockwise to decrease cabin temperature. Automatic temperature control is achieved with the solid blue or red bands. When the control is turned fully clockwise or counterclockwise into the area with the bands of red or blue, the HVAC system will be in maximum mode and will provide maximum capacity regardless of the cab inside air temperature.

7. **CLIMATE CONTROL SWITCH** - Press the switch to turn ON the automatic function of the climate control. Press the switch again to turn OFF the climate control. **DEFOG CONTROL SWITCH -** Press the switch to turn ON the window defog operation. Press the switch again to turn OFF the defog operation.

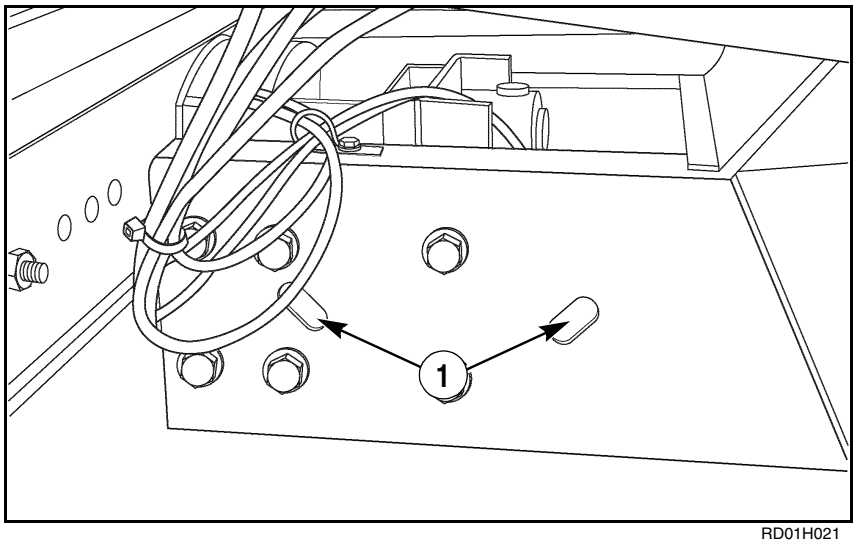
8. **BLOWER CONTROL** - To select the blower speed, turn the control clockwise from low to high. The blower speed is infinitely adjustable throughout its control range. In the automatic mode, the system will determine and adjust blower speed. If the blower speed is adjusted while in automatic mode, the blower speed will no longer be automatically controlled. The HVAC system will still attempt to control temperature, but may not be able to do so if the blower speed is set too low. To reset automatic blower speed, cycle the climate control switch (6) from auto to off and back to auto again.



RD05D054

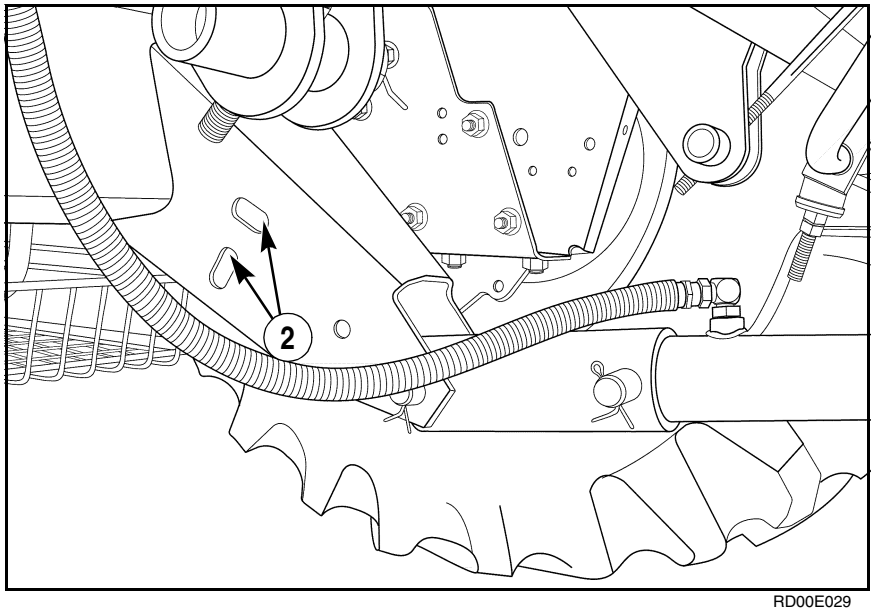
9. **DISPLAY -** Refer to next page for additional information.

TIE DOWN LOCATIONS



RD01H021

- Left and Right side of Steering Axle - Steering Axle Support (1).



RD00E029

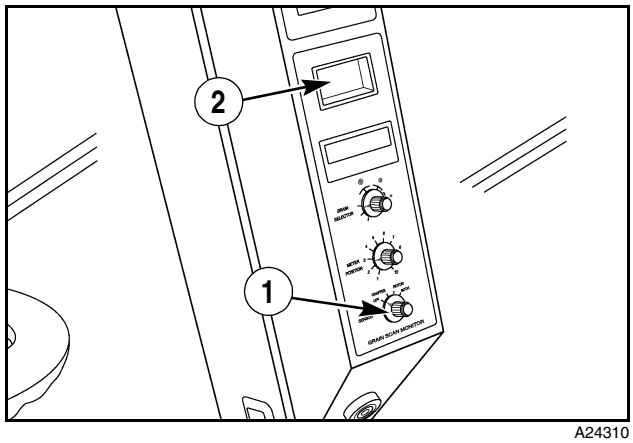
- Left and Right side of Drive Axle - Feeder Lift Support (2).

Comparing Rotor/Chaffer Loss

To compare the rotor loss to the chaffer loss during the harvesting operation, turn the SENSOR switch (1) to ROTOR and to CHAFFER. Look at the meter (2) needle deflection for each position. If the rotor position indicates an increase in grain loss, the cause can be improper threshing. If the chaffer position indicates an increase in grain loss, the air flow or the sieves are not adjusted correctly.

NOTE: *Variation in ground and crop conditions can affect losses in both the rotor and the chaffer.*

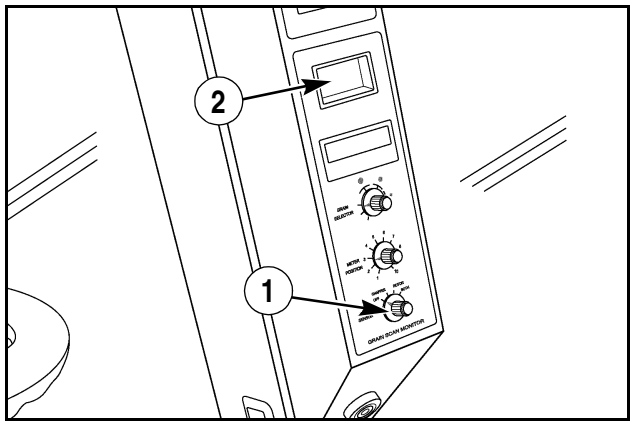
NOTE: *If the chaffer sensor brackets fill with straw and chaff during Combine operation, remove the sensor seed combs.*



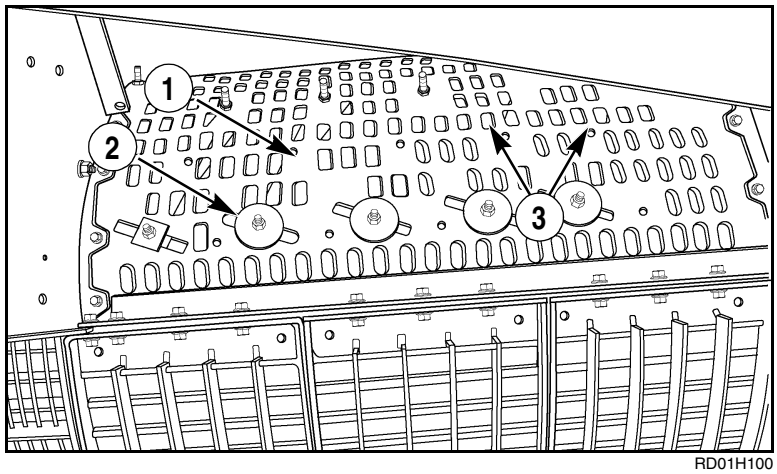
A24310

Checking Monitor Operation

1. Turn the sensor switch (1) to OFF.
2. Turn the key switch to ON but do not start the engine.
3. Turn the sensor switch (1) to CHAFFER. All four sensor indicator panels will illuminate for approximately one second. The meter(2) needle will raise to the Right side of the scale and then drop back to the Left side. This sequence occurs as an indication that the monitor console is operating correctly. If this sequence does not occur, see your dealer.



A24310

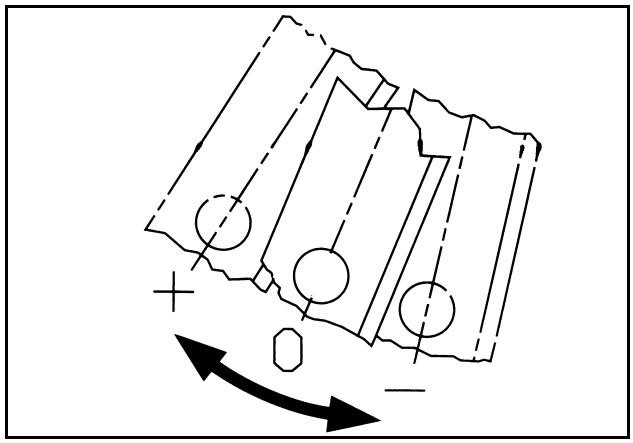


RD01H100

1

1. TRANSPORT VANE
2. LOWER END
3. POSITIONING HOLES FOR MIDDLE POSITION ONLY

3. Move the lower ends of the transport vanes forward or rearward as required. The transport vanes over the grate area can be moved individually. The transport vanes over the concave area are connected in pairs with tie plates.



175784A1

Forward (Advance) Position.....Vane to front of hole
Middle Position .....Vane centered under hole
Rear (Retard) Position..... Vane to rear of hole

4. Put a punch through the vane positioning hole to check for middle position only.

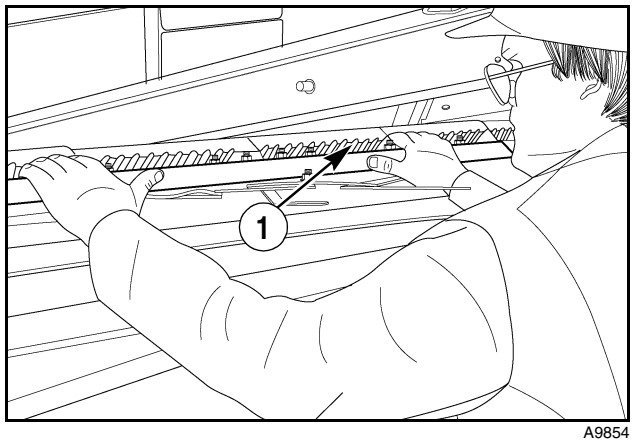
5. Tighten the nuts on the transport vanes. Tighten the center nuts first. Tighten the nuts on the lower ends second and tighten the nuts on the upper ends last. Tighten the nuts to a torque of 47 to 54 Nm (35 to 40 lb. ft.).

6. Install the Left separator side panels.

Chaffer Sieve Installation

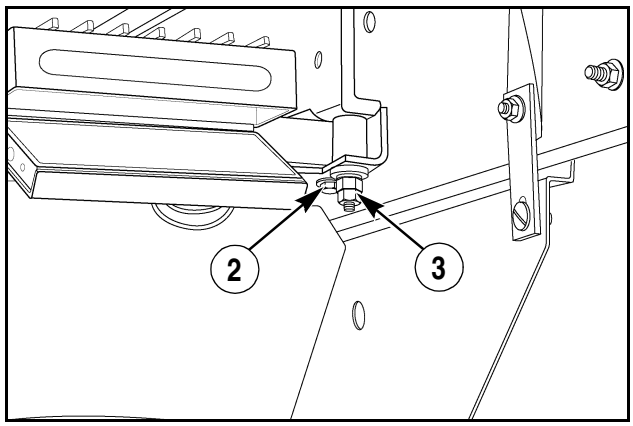
Install the chaffer sieve as follows:

1. Install the chaffer sieve (1).



A9854

2. Raise the sieve and the support angles. Install the support angle mounting bolt (3) and the chaffer sieve mounting bolt (2) on each side of the sieve.



A9852

SEED LOSS

New standards have been written for reduced field losses, improved grain quality and simplified machine operation. The AXIAL-FLOW® Combine has performed in harvesting conditions previously thought to be too adverse for successful Combine operation. With minimal field losses as his goal, the AXIAL-FLOW® operator has more latitude to adjust for maximum Combine efficiency. Understanding crop flow and functions previously discussed makes adjustment for field losses easier. A spontaneous adjustment, without thorough analysis and diagnosis of specific reason for crop loss could lead the operator away from the correct machine adjustment. A universal harvesting rule is to set your Combine to manual specifications first, then adjust. See Initial Crop Settings in this manual. Make only one adjustment at a time, then reevaluate.

When adjusting a Combine, it is important to note that no Combine will save every seed. Combines can be operated at speeds and settings which range from almost zero loss to extremely heavy losses. Each operator must determine what loss to accept for the field condition and time available for harvest. He must adjust the Combine and travel speed accordingly. Losses should be checked in several spots and averaged to eliminate the effects of any uneven feeding.

When checking loss it is important to determine the source of the loss before making adjustments. Checking losses where the separator empties without considering whether they originate from preharvest causes, header causes or the separator can lead to unnecessary or erroneous adjustments.

The formula below has three major areas of loss:

Preharvest Loss + Header Loss + Separator Loss = Total Loss

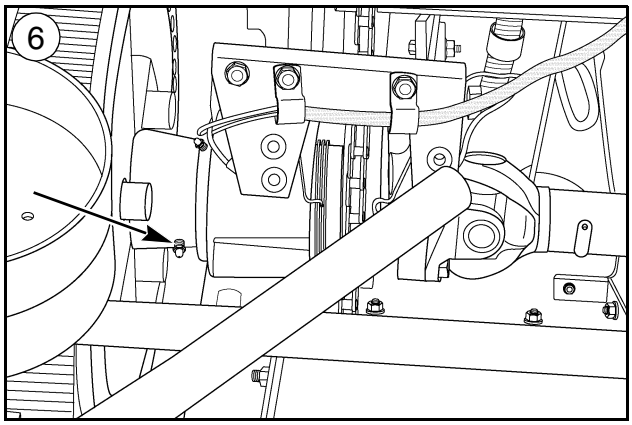
When measuring losses, take a full cut with the header at your regular operating speed without using the spreaders. Stop the Combine in an area of the field that represents an average of the field. Do not use rows that are near the edges of the field and do not make your measurements near the end of the field. Allow the Combine to clear after stopping and back up a distance equal to its length. You can then check all loss points without starting and stopping again.

IMPORTANT: *Be sure machine is shut down and all moving components completely stopped before starting evaluation.*

Minimize Your Pre-Harvest Losses

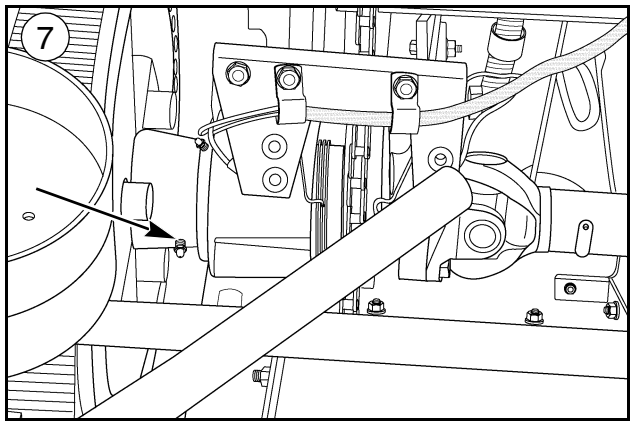
This is loss that is present before you harvest the crop. This loss is kernels or seeds on the ground due to weather, insect damage and other adversity. These losses cannot be recovered no matter how efficient the Combine is.

To determine the amount of preharvest losses, look in the unharvested crop for kernels, seeds, seed heads, ears of corn, etc. on the ground that the header would be unable to gather. To measure the amount of loss in bushels, refer to the Seed Loss Tables.



RD02E164

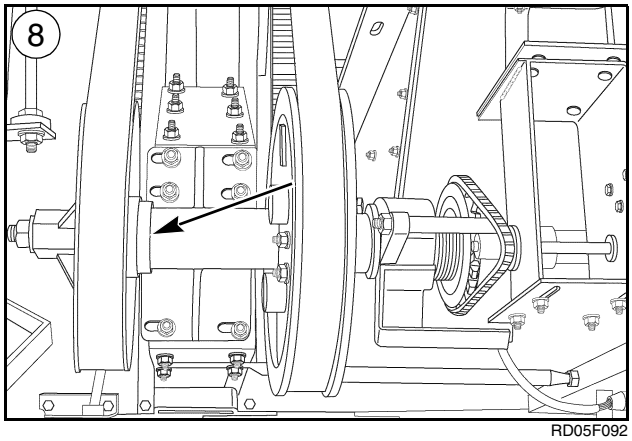
Rotor Drive Pulley (1)



RD02E164

Rotor Speed Control - Rear (1), two pumps only

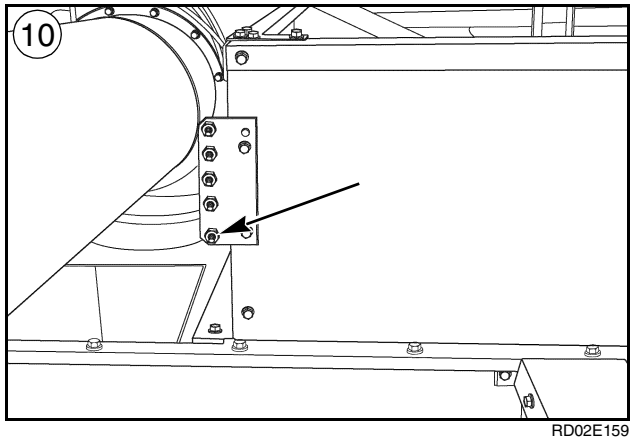
100 Hours



RD05F092

Separator Jackshaft (1)

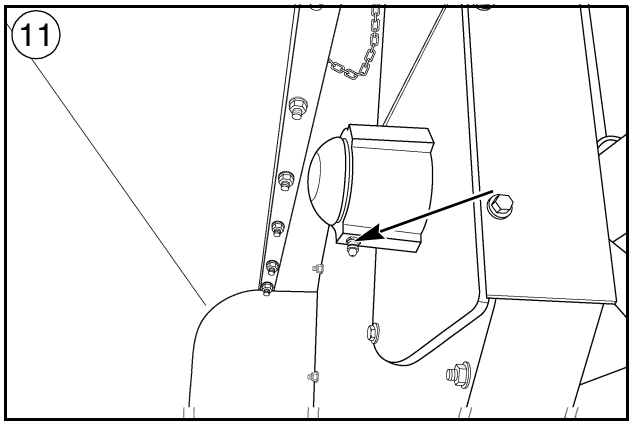
NUMBER 9 - Not used in this application.



RD02E159

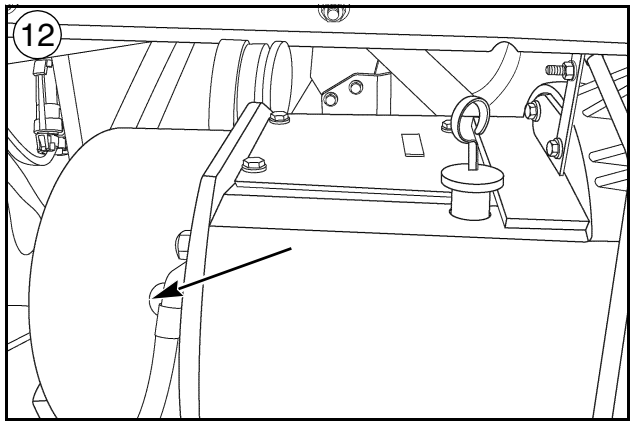
Unloader Auger Upper Elbow Gearbox On Lube Bank Bottom (1)

500 Hours



A1338.35

Inclined Auger Lower Bearing (1)



RD01H114

Auxiliary Pump Pulley Hub (1)

Greasing Procedure

ATTENTION: *Use filtered lubricant only. Dirt and foreign material will contaminate the system.*

1. Use a manual pump with a gauge. Fill the pump with clean filtered CASE 251H EP Grease or equivalent NLGI No. 2 Multi-Purpose Grease common to the system. Connect the manual pump into the inlet of the primary divider valve and slowly operate pump. If system will not cycle freely below 103.4214 bar [10342.14 kPa] (1500 PSI), refer to Step 2.

2. With pressure on the primary as outlined in Step 1, remove one at a time each supply line (if the supply lines cannot be removed, remove outlet fittings starting from the bottom and working towards the valve inlet) and attempt to operate manual pump after each line is removed DO NOT exceed 137.8951 bar [13789.51 kPa] (2000 PSI). If pressure drops and primary cycles freely after a line is removed then blockage is downstream in the area that is being served from that outlet. Refer to Step 3. If all supply lines are removed and primary will not cycle, blockage is in this divider valve.

Contamination

If dirt, foreign material or any other form of contamination is found as the source of the blockage, clearing the blockage will only temporarily solve contamination blockage problems. **The source of the contamination must be eliminated for satisfactory service.** The reservoir must be inspected and cleaned if necessary. The reservoir filling method should be reviewed to eliminate any chance of foreign material entering the reservoir during filling. All lubricating systems require filtered lubricant.

Grease Separation Blockage

If a hard wax or soap like material is found in the valve outlets, grease separation is occurring. This means that the oil is being squeezed from the grease at normal system operating pressure and the grease thickener is being deposited in the divider valve. Cleaning the divider valve will usually result in only temporarily solving the problem. Consult your dealer or lubricant supplier for recommendations on alternate lubricants and to verify compatibility with centralized lubricating systems.

NOTE: *When a supply line of blocked area is removed a small shot of trapped lubricant will usually surge out of this outlet as the inlet pressure on the divider valve drops. If testing in Step 2 indicates a blockage in the primary divider valve, this divider valve must be replaced.*

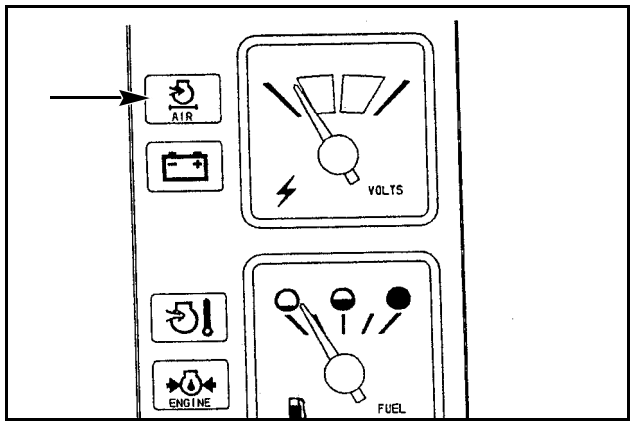
3. Test accomplished in Step 2 has indicated the lockage is downstream of the primary divider valve. Reinstall the supply line into the primary valve and proceed to downstream secondary divider valve and repeat Step 2 on the secondary valve. If lubricant can be discharged freely through the secondary valve, the blockage is in the supply line between the primary and secondary valve.

4. If high pressure exists on one of the secondary outlets, blockage has been located. Look for crushed line, tight bearing, improperly drilled fittings and/or lubrication inlet port. Correct as necessary.

AIR INDUCTION SYSTEM

Air Filter Restriction Indicator

When the Air Filter Restriction Indicator is ON and the audible alarm is ON, the primary air filter element needs service. The indicator is turned on by an air restriction switch. This switch is activated at an air restriction of 6.20 kPa (25 inches) of water. Refer to Air Filter Service for more information.



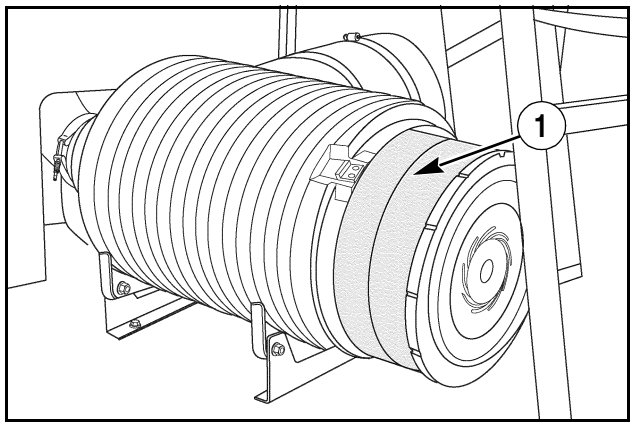
RH97H011

Air Filter

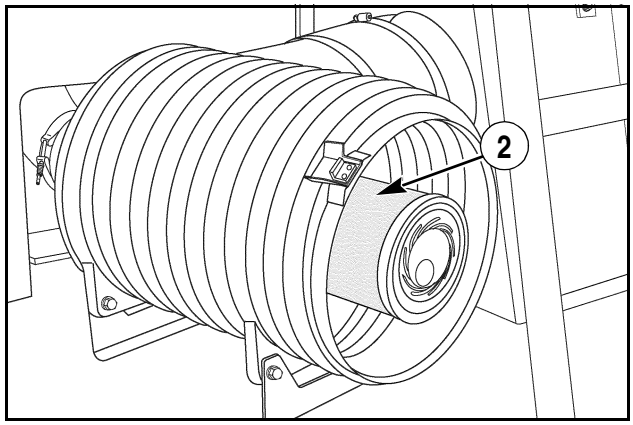
The Combine is equipped with a two-stage air filter system consisting of a primary (1) (outer) filter and a secondary (2) (inner) filter.

The primary filter is a high capacity filter designed to provide optimum protection to the engine. The primary filter can be cleaned or washed as required between filter changes (Refer to Air Filter Service for more information).

The secondary (inner) filter gives extra protection to the engine if there is damage to the primary filter. The secondary filter cannot be cleaned or washed. Replace the filter if the filter has damage or is dirty. This filter might look clean but is in fact very dirty. It collects very small dirt particles that cannot be seen with the naked eye.

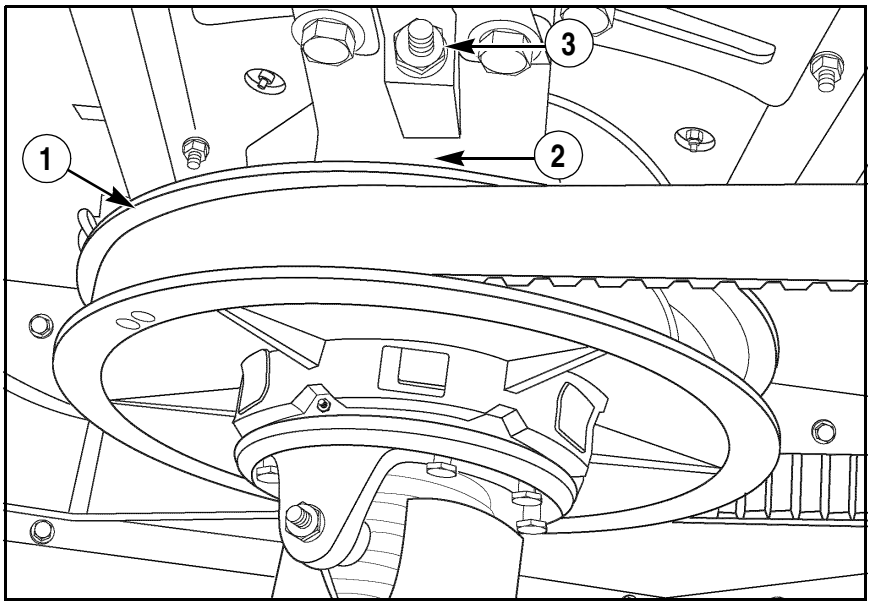


RD02E151



RD02E152

ROTOR GEAR CASE



RD05F091

1. FLUID LEVEL CHECK, DRAIN
2. VENT PLUG
3. BREATHER ADAPTER FITTING

Fluid Level

To check the fluid level put the Combine on level ground. Check the fluid level on the dipstick (1). If the fluid level is at or below the ADD mark on the dipstick, add the recommended fluid to the gear case to raise the fluid level to the FULL mark. Install the fluid through the fill passage by removing the breather adapter fitting (3). Loosen vent plug (2) to bleed air from the system.

Fluid Change

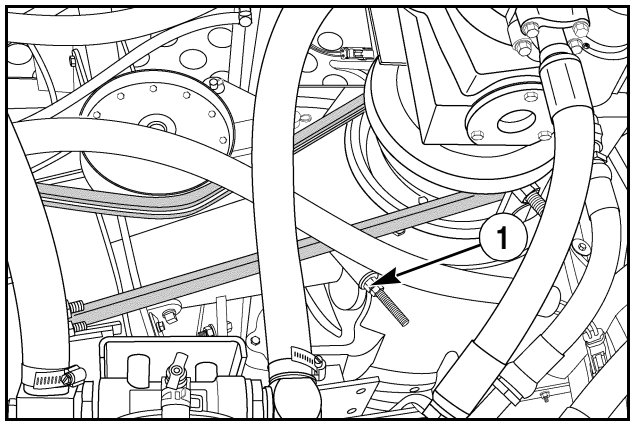
To change the fluid, put the Combine on level ground. Remove the screws that hold the dipstick tube in place. Loosen the dipstick tube and drain the gear case fluid. Install the dipstick tube in its proper location. Fill the gear case to the FULL mark on the dipstick with the recommended fluid.

AUXILIARY PUMP DRIVE BELT

Belt Removal

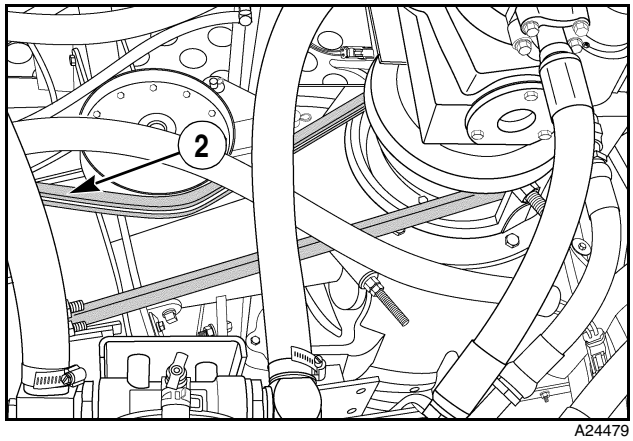
1. Remove the grain tank unloader drive belt from the unloader drive pulley.

2. Loosen the nuts (1) on the tension adjuster for the drive belt on the auxiliary hydraulic pump jackshaft.



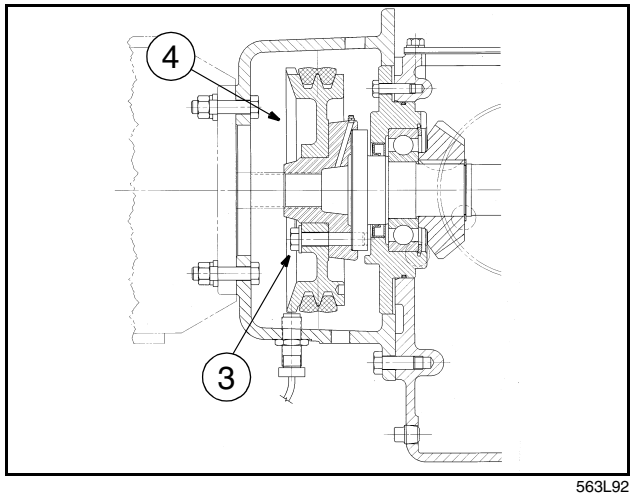
A24479

3. Remove the auxiliary hydraulic pump jackshaft drive belt (2) from the jackshaft driven pulley.



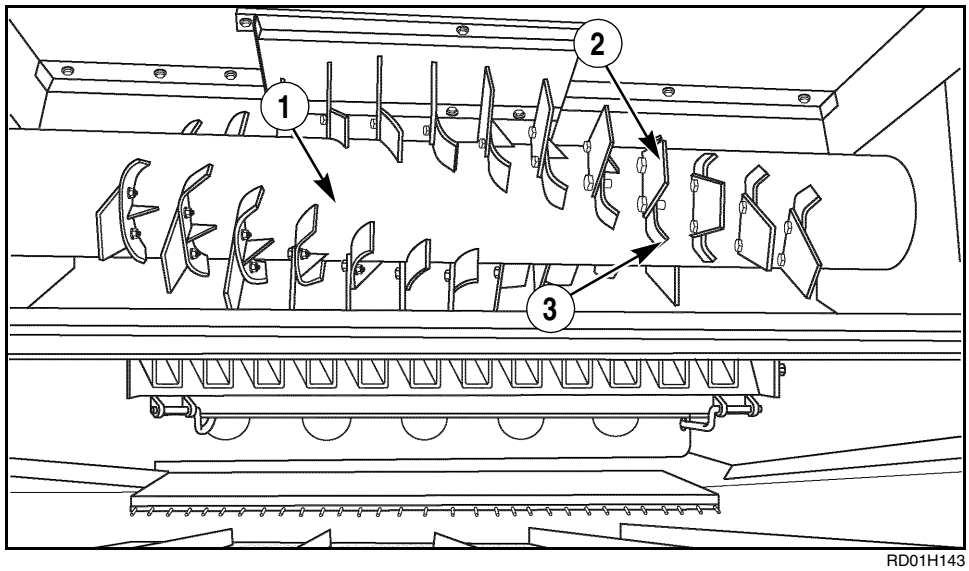
A24479

4. Remove the three mounting bolts (3) holding the pump drive pulley (4) to the PTO shaft.



563L92

Rotor Blade Replacement



RD01H143

1. ROTOR 2. ROTOR BLADE 3. ROTOR BLADE SUPPORT

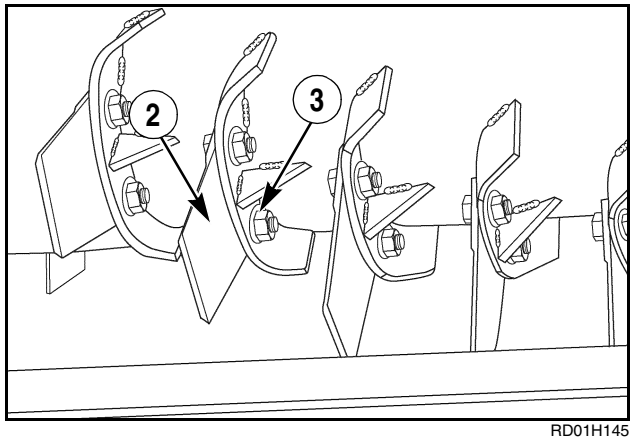
Stop the engine and remove the key from the switch to prevent anyone from starting the Combine.

The straw chopper rotor blades can be reversed for increased wear. Place each blade on the original blade support when reversing the rotor blades. Position the nut against the support and tighten the bolts from the blade side to a torque of 102 to 115 Nm (75 to 85 pound foot).

Replace the straw chopper rotor blades in sets of two. When replacing a straw chopper rotor blade, make sure that the straw chopper rotor blade opposite the one that is being replaced, is also replaced to maintain a balanced straw chopper rotor.

Use 1/2 x 1 inch hex head, Grade 5 bolts and flange lock nuts. Position the nuts against the support and tighten the bolts from the blade side to a torque of 102 to 115 Nm (75 to 85 lb. ft.). The rotor must be balanced if too much vibration occurs after reassembly. See your dealer.

NOTE: *Do not remove the bolts on the balancing disc at the ends of the straw chopper rotor.*



RD01H145