Link Product / Engine

Product	Market Product	Engine
CR10.90 Revelation Stage IV Tires [7F2007000 -]	Europe	F3JFE613A*B004
CR10.90 Revelation MY19 tracks [8F2007000 -]	Europe	F3JFE613A*B004
CR10.90 Revelation MY19 tracks [8F2007000 -]	Middle East Africa	F3JFE613A*B004
CR10.90 Revelation Tier 4B Tires [7F2007000 -]	North America	F3JFE613A*B003
CR10.90 Revelation Wheeled (tires) [2015 -]	Latin America	F3JFE613A*B004
CR10.90 Revelation Tier 4B Tracks [8F2007000 -]	North America	F3JFE613A*B003
CR10.90 Revelation Tracks [2015 -]	Latin America	F3JFE613A*B004
CR10.90 Revelation Tier 2 Tires [2J2007000 -]	Middle East Africa	F3JFA613D*E001
CR10.90 Revelation Tier 2 Tires [2J2007000 -]	Australia New Zealand	F3JFA613D*E001
CR10.90 Revelation Tier 2 Tires [2J2007000 -]	Asia Pacific	F3JFA613D*E001
CR10.90 Revelation Tier 2 Tires [2J2007000 -]	Latin America	F3JFA613D*E001
CR10.90 Revelation Tier 2 Tracks [2K2007000 -]	Latin America	F3JFA613D*E001
CR10.90 Revelation Tier 2 Tracks [2K2007000 -]	Australia New Zealand	F3JFA613D*E001
CR10.90 Revelation Tier 2 Tracks [2K2007000 -]	Middle East Africa	F3JFA613D*E001
CR10.90 Revelation Tier 2 Tracks [2K2007000 -]	Asia Pacific	F3JFA613D*E001
CR7.80 Revelation Stage IV Tires [7G2007000 -]	Europe	F2CFE613A*B042
CR7.90 Revelation Stage IV Tires [7H2007000 -]	Europe	F2CFE613A*B042
CR8.80 Revelation Stage IV Tires [7B2007000 -]	Europe	F3GFE613B*B003
CR8.80 Revelation Stage IV Tires [7B2007000 -]	Middle East Africa	F3GFE613B*B003
CR8.80 Revelation Stage IV Tracks [8B2007000 -]	Middle East Africa	F3GFE613B*B003
CR8.80 Revelation Stage IV Tracks [8B2007000 -]	Europe	F3GFE613B*B003
CR8.90 Revelation Stage IV Tires [7C2007000 -]	Europe	F3HFE613A*B009
CR8.90 Revelation Stage IV Tracks [8C2007000 -]	Europe	F3HFE613A*B009
CR9.80 Revelation MY19 [7D2007000 -]	Europe	F3HFE613A*B009

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Engine - Remove

CR10.90 Revelation	

Prior operation:
Remove the left-hand side shielding and left-hand side rear shield. Refer to **Side shields - Remove (90.105)**.

⚠ WARNING

Hot surface possible!
Wait for all components to cool before performing any operation.
Failure to comply could result in death or serious injury.

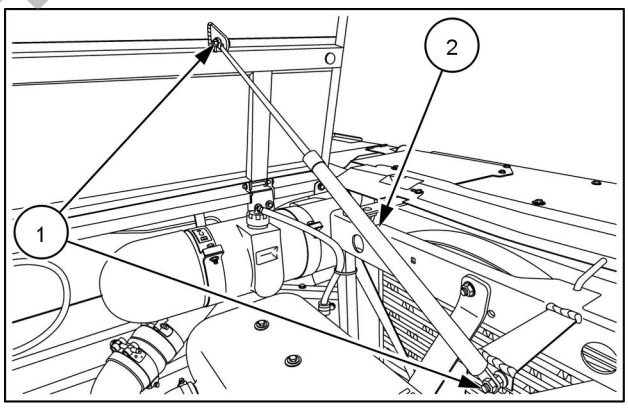
W0251A

NOTICE: *Clean the engine thoroughly before removing parts to prevent dirt ingress into engine critical parts, refer to the operator's manual.*

NOTICE: *Make sure that the area around the hydraulic connectors is clean before disconnecting lines. Dirt contamination will cause hydraulic component damage and/or failure.*

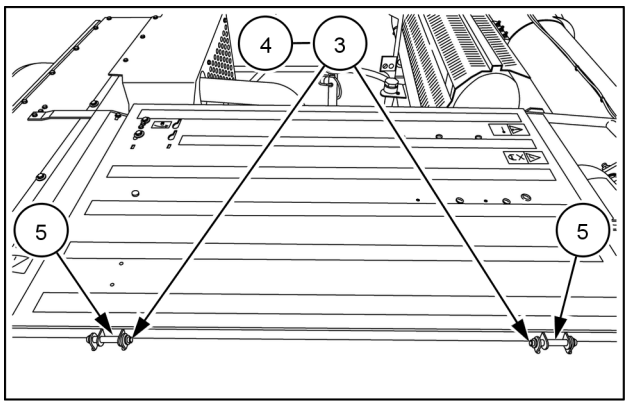
Engine cover

1. Attach the engine cover to a suitable lifting device.
2. Open the engine cover. Make sure the engine cover is held in place by the lifting device.
3. Remove the lock nuts **(1)** and remove the gas strut **(2)**.



ZEIL15CR00029AA 1

4. Close the engine cover in a controlled way with the help of the lifting device.
5. Remove the retaining rings **(3)**, the washers **(4)** and the pins **(5)**.
6. Use the suitable lifting device to remove and to transport the engine cover to the ground.



ZEIL15CR00006AA 2

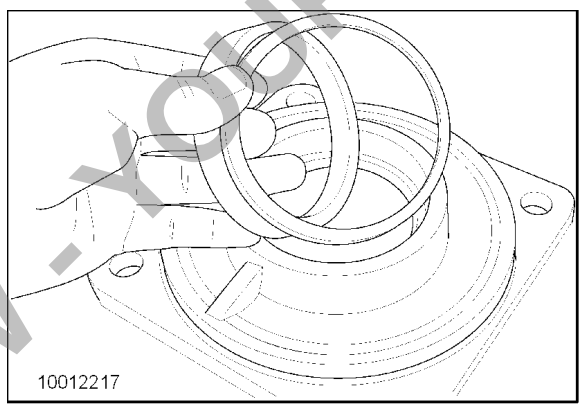
PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

Main gearbox and drive - Torque

Item	Torque
Thresher shaft rolling torque	**1250 - 1500 Nmm** (**11-13 in. lbs**.)
Thresher shaft spur gear cap screws	**110-120 N·m** (**81-88 ft. lbs**.)
Hydraulic pump drive housing	**190-210 N·m** (**140-155 ft. lbs**.)
Hydraulic pump drive rolling torque	**300 - 400 Nmm** (**2-3 in. lbs**.)
Engine flange cap screws	**80-90 N·m** (**59-66 ft. lbs**.)
Input shaft rolling torque	**1400 - 1500 Nmm** (**12-14 in. lbs**.)
Clutch housing cover cap screws	**45-50 N·m** (**33-37 ft. lbs**.)
Main clutch cylinder cap screws	**35 N·m** (**26 ft. lbs**.)
Unload clutch piston cap screws	**35 N·m** (**26 ft. lbs**.)
Clutch housing spur gear cap screws	**45-50 N·m** (**33-37 ft. lbs**.)

Main gearbox and drive - Shimming

If a tapered roller bearing requires replacement, the outer race must also be replaced at the same time.
Some outer races are inserted on top of shim packs. These packs are installed to provide a preload to the bearings. The original shim pack should be used when replacing the bearing and race. Perform the measurement to determine if proper preload exists, and adjust the thickness of the shim pack appropriately.
All of the tapered roller bearings used in this gearbox are installed using an interference fit. Most bearings can be removed and installed using bearing pullers and presses. The thresher shaft bearings are heat shrunk onto the shaft. To install new bearings onto the shaft, heat them in a bearing oven, **80-85 °C** (**170-180 °F**) for **30-45 minutes**. Remove the bearing from the oven and carefully slide it onto the shaft in the proper orientation. Ensure that the bearing slides on evenly. When the bearing is in contact with the shaft, it will cool very quickly and start to shrink.



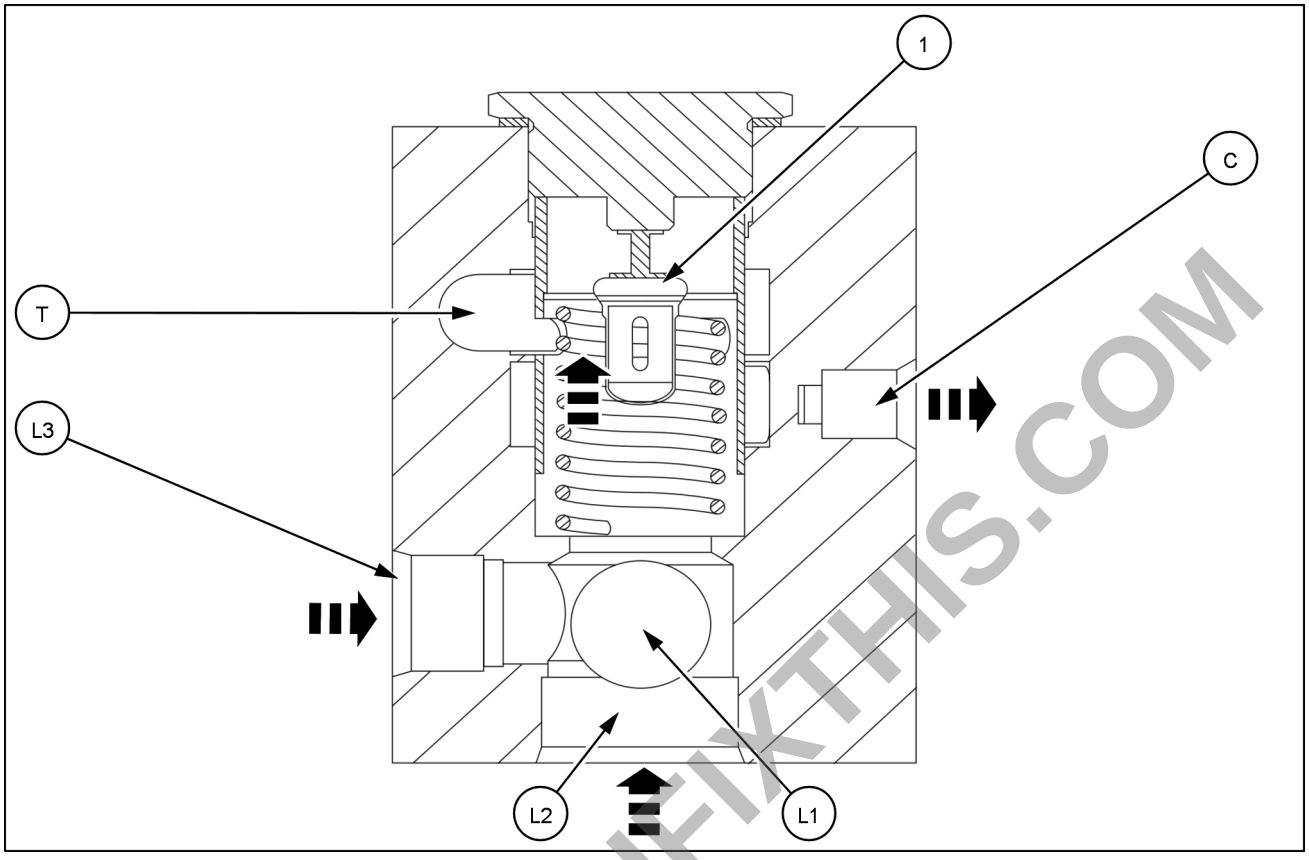
10012217 1

Main gearbox and drive - Special tools

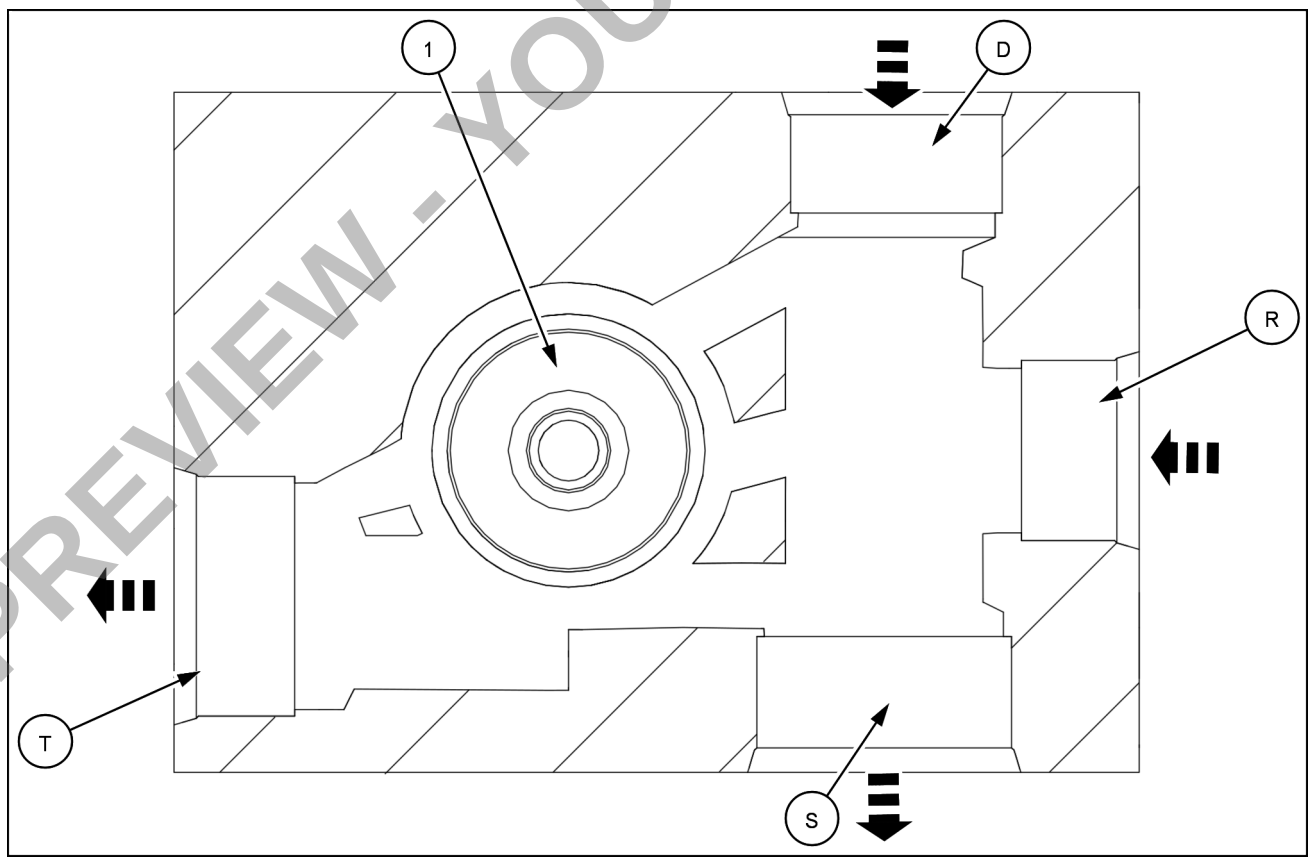
Modified chisel - The modified chisel shown should be used to disengage the lock nuts installed on various components in the gearbox. An unmodified tool will not have the capability to pull the indentation from the shaft slot, and will make removal more difficult. If a tool similar to the one shown is not available, carefully cut the lock nut free of the shaft. Any damage to the shaft threads caused by this operation must be repaired prior to installation of the new lock nut.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



ZEIL18CR00369FA 1



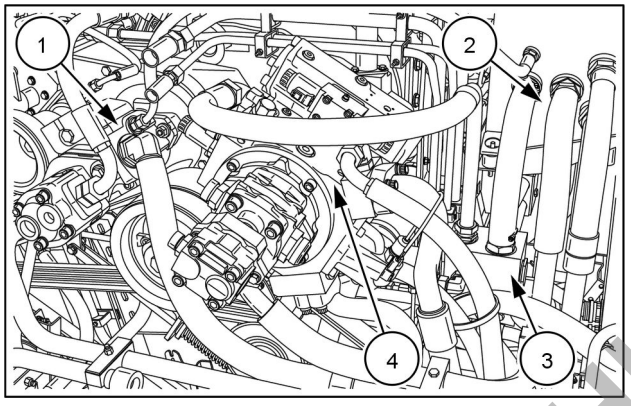
ZEIL18CR00370FA 2

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

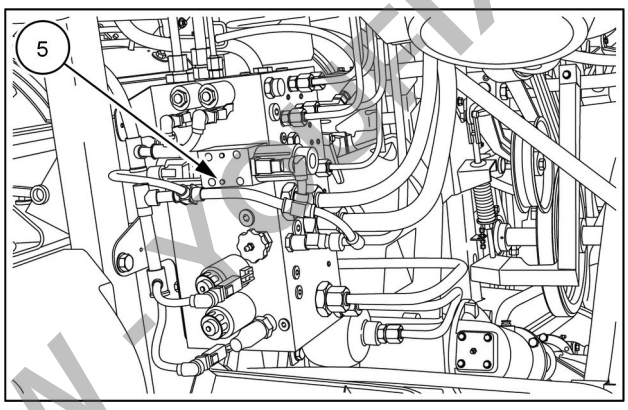
Hydraulic systems - Static description - High pressure circuit

The high pressure circuit (**210 bar** (**3045 psi**)) operates all of the work hydraulics and steering. The circuit is fed by a Closed Centre Load Sensing (CCLS) variable displacement pump **(1)**. Oil is drawn by the pump, from the main reservoir **(2)**, shared with the hydrostatic system, through the thermostatic manifold **(3)**.



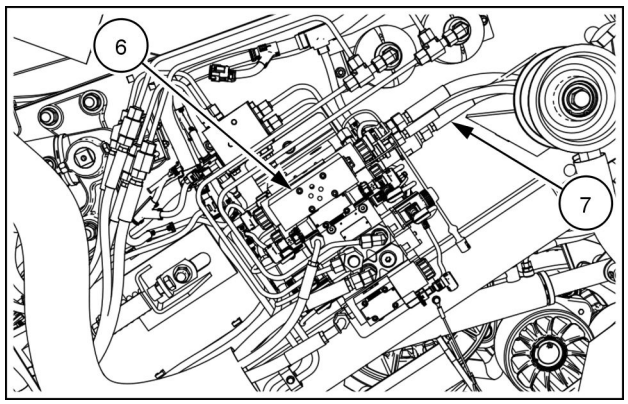
ZEIL18CR00770AA 1

The oil enters the main frame valve block **(5)**. The oil is split, dependant on demand, to the steering valve, which has priority, or to the other hydraulic functions (see **Stacked control valves - Detailed view (35.359)** for more information).



ZEIL18CR00740AA 2

The feeder and header reverser, lateral flotation control, reel vertical and horizontal adjustment and reel speed control are served by the feeder valve manifold **(6)**. The feeder valve manifold **(6)** is an extension of the main valve manifold and is connected with pressure, return, and load sensing lines via quick release couplings **(7)**.



ZEIL18CR00778AA 3

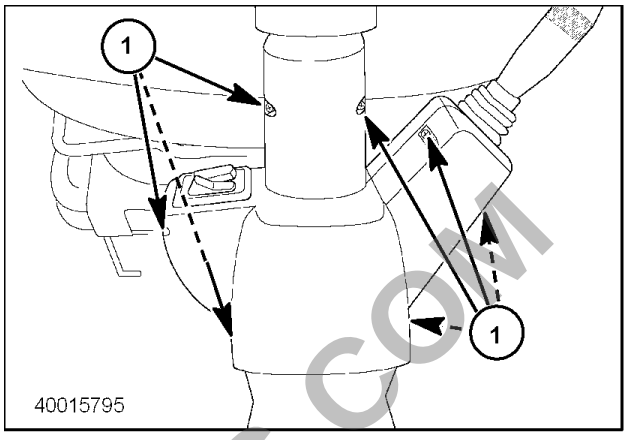
The last section of the feeder valve manifold is a flush valve. This valve allows a very small oil flow through the feeder valve manifold, when no services are being operated, allowing warm oil to gradually bring the feeder valve manifold up to temperature.

Download full manual at youfixthis.com
PREVIEW - YOUFIXTHIS.COM

Steering column - Disassemble

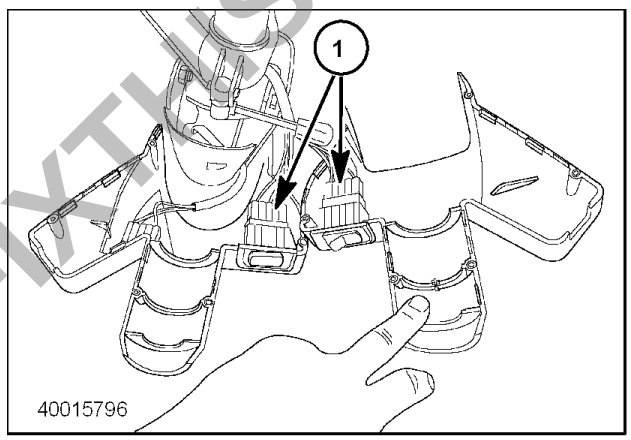
1. Cover Removal
   Turn out seven screws **(1)** and pull the two halves of the cover from the steering column.

NOTE: *Raise the steering wheel to gain access to the top screws.*



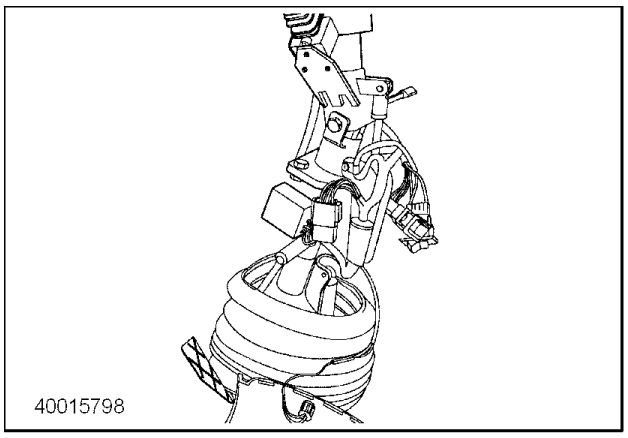
40015795 1

2. Pull the switches **(1)** from the cover halves.



40015796 2

3. Remove the screws fixing the lower cover halves and take the cover halves from the steering column.
4. With the covers removed, all internal steering column components can be accessed.



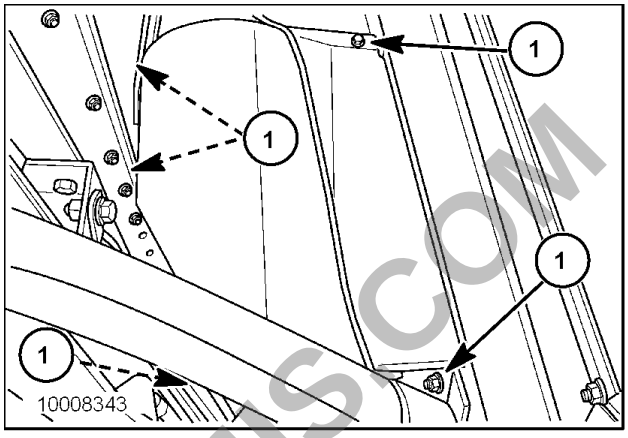
40015798 3

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

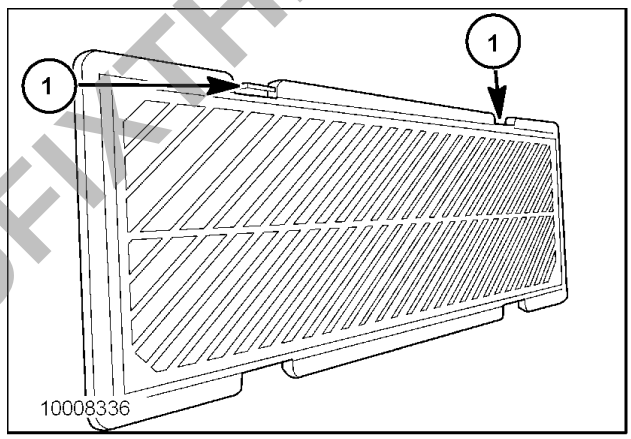
Heater core - Remove

1. Shut the heater core supply and return valves located at the engine.
2. Turn out the five cap screws **(1)** holding the ventilation system shield in place. Lift the shield from the combine.



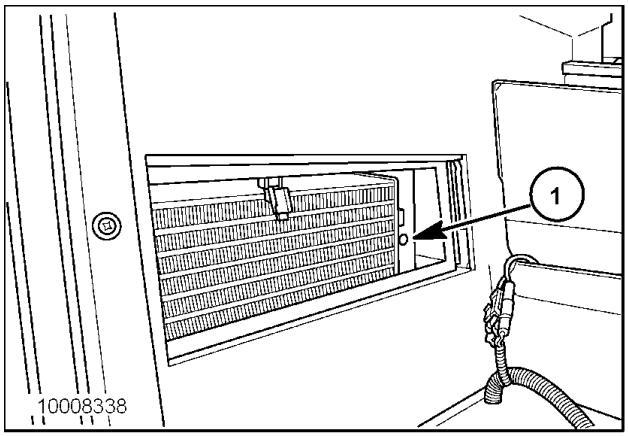
10008343_1067 1

3. Simultaneously push down while pulling out on the locking tabs **(1)** A prying device may have to be used. Pull the grate and filter from the cavity.



10008336_1068 2

4. Turn out mounting cap screw **(1)**.



10008338_1069 3

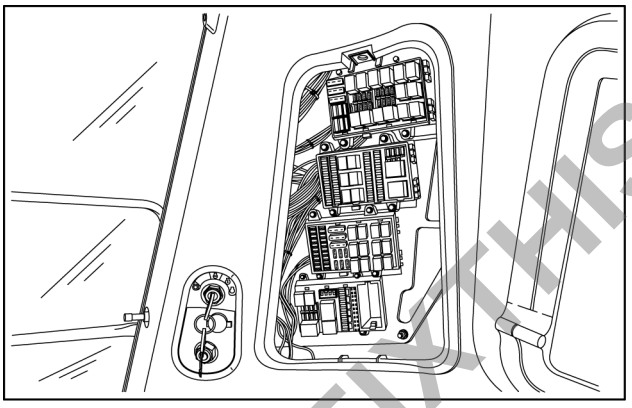
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Electrical system - General specification

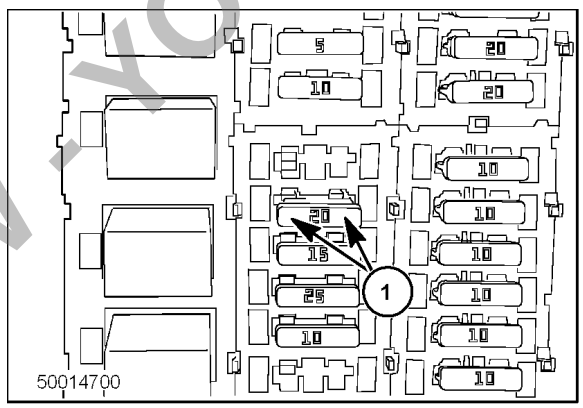
FUSES

Fuses protect circuits with thin pieces of metal and wire which heat up and melt to open up the circuit when too much current flows through them. The unit fuse panel **(1)** is located in the left rear corner of the cab, behind a removable panel.
Fuses are used to protect the circuit from overload. This can occur in the event of a short circuit or by connecting equipment which demands a current greater than the circuit is designed to carry.
There are several types of fuses, but they all consist of a metal conductor which is capable of carrying a limited current. If the specified current is exceeded then the metal conductor will overheat, causing it to melt and break. This will in turn cause an open circuit.



ZEIL14CR00090AA 1

The rating of the fuse relates to the current that the fuse can carry continuously.
If a fuse blows, it must be replaced with a fuse of the correct rating, and if it blows again, then the cause must be investigated.
A fuse may be tested by checking continuity across the fuse on the two exposed terminals **(1)**.



50014700 2

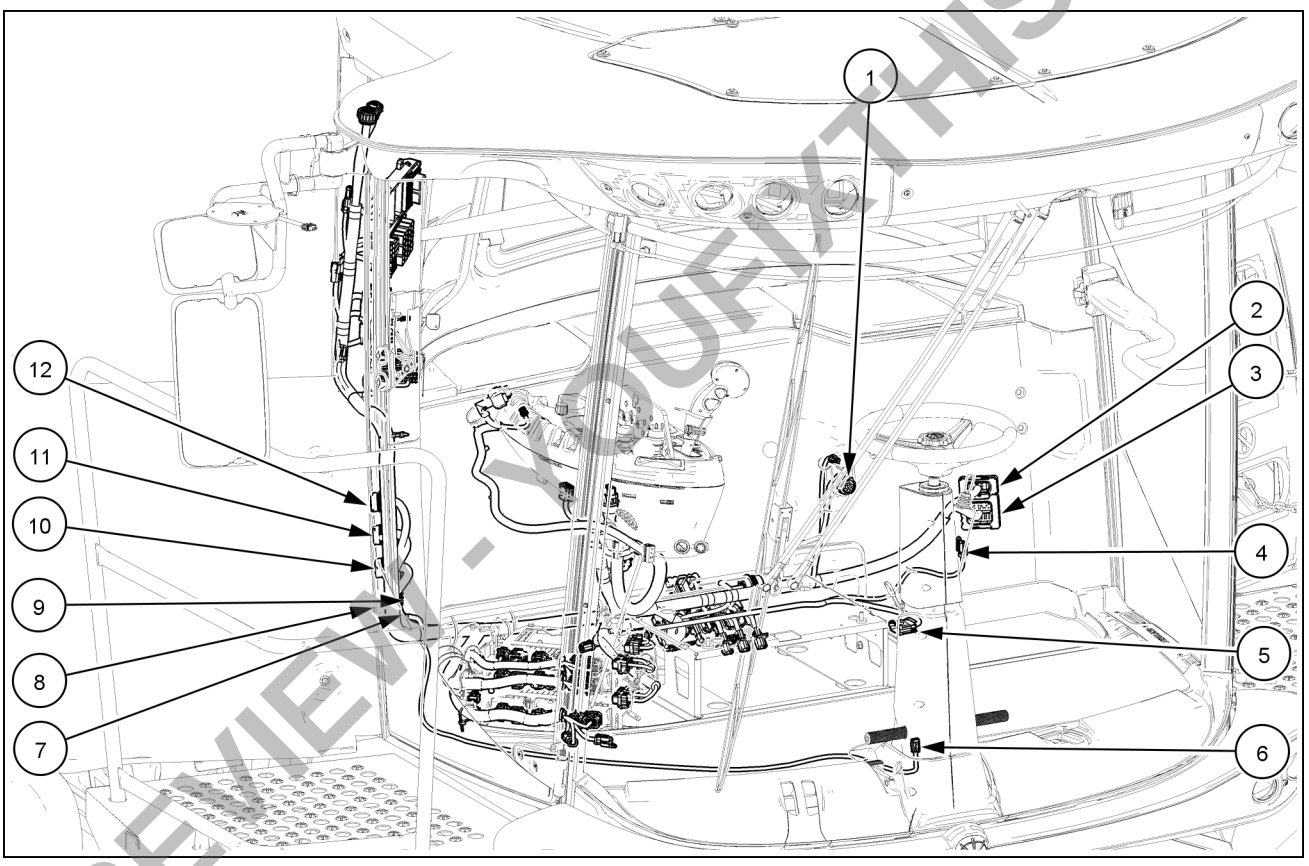
SWITCHES

Switches are a vital part of an electric circuit, providing a method of controlling the circuit itself. One switch can control a number of different circuits at the same time. This is achieved by having several separate connections and/or multi-connector switches (several switch positions).
There are several types of switches, and they may incorporate a warning light.

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

Wiring harnesses - Overview Cab main (CM)

Item	Connector number	Description
1	**X-524**	Diagnostic outlet Controller Area Network (CAN) 1 & CAN 2
2	**X-1046P**	Left-hand main frame to cab main (B)
3	**X-1045P**	Left-hand main frame to cab main (A)
4	**X-609**	Fridge
5	**X-1051R-A**	Cab to telematics
6	**X-101**	Cab to right-hand main frame (C)
7	**X-521C**	Unswitched B+
8	**X-521B**	Unswitched B+
9	**X-521A**	Unswitched B+
10	**X-1014P**	Cab to right-hand main frame (C)
11	**X-1025P**	Cab to right-hand main frame (B)
12	**X-1026R**	Cab to right-hand main frame (A)



BAPH14CR00028FB 1

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Engine starting system - Dynamic description Theory of operation - Starting/Charging system

All the devices included in the starting and charging system

- Top battery

- Charged by the alternator.

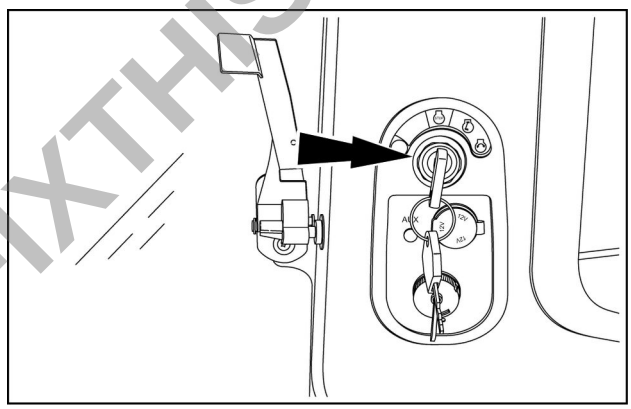
- Provides power to the **12 V** the main combine electrical systems.

- Lower battery

- Charged by the P/S battery relay

- Provides power to the **24 V** electrical system, which consist of the starter circuit.

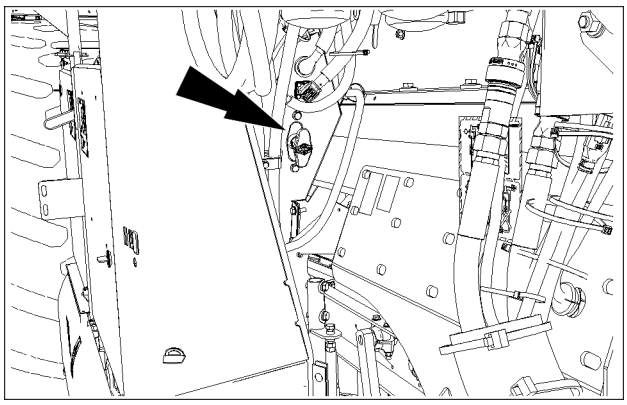
- Ignition switch



ZEIL14CR00059AA 1

- Battery disconnect switch

- Must be in ON position to jump start or charge batteries.



ZEIL18CR00295AA 2

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

E0001-03 - Grain Tank Covers Closed Sensor - Shorted to high source

Control Module: UCM1

Context:
The Universal Control Module 1 (UCM1) **A-001** monitors the operation of the grain tank covers closed sensor **B-191**.

Cause:
UCM1 **A-001** is sensing a signal level greater than **8.2 V** in the grain tank covers closed sensor **B-191** signal circuit.

Possible failure modes:

1. Faulty grain tank covers closed sensor **B-191**.
2. Faulty electrical wiring shorted to voltage source.
3. Faulty UCM1 **A-001**.

Solution:

1. Verify that the fault is present and active.

   Use the display monitor diagnostic capability to view parameter status to check the voltage level.

   For additional information about the monitor diagnostic capability, see **Electrical system - Dynamic description Theory of operation - Display monitor diagnostic screens (55.000)**.

   A. If the voltage reading is greater than **8.2 V**, continue to Step **2**.

   B. If the voltage reading is less than **8.2 V**, the fault may intermittent and not currently active. Continue to Step **6**.
2. Verify that the grain tank covers closed sensor **B-191** functions properly.

   Disconnect the grain tank covers closed sensor **B-191** from the grain tank front (GTF) harness at connector **X-191**.

   Check the display monitor for other fault codes.

   A. If fault code **E0001-03 – Grain Tank Covers Closed Sensor - Shorted to high source** is still present, continue to Step **3**.

   B. If fault code **E0001-05 – Grain Tank Covers Closed Sensor - Line disconnected** is present, the circuit wiring functions properly. However, the grain tank covers closed sensor **B-191** has failed internally. Replace the grain tank covers closed sensor **B-191**.
3. Check for a short to high condition.

   Place the ignition switch in the ON position.

   Use a multimeter to check for voltage:

From	To	Result
Grain tank front (GTF) harness side of connector **X-191** pin 2	Chassis ground	Should be approximately **8.2 V**

   A. If the voltage reading is greater than **8.2 V**, continue to Step **5**.

   B. If there is approximately **8.2 V**, continue to Step **4**.
4. Check for an open condition.

   Place the ignition switch in the OFF position.

   Use a multimeter to check for continuity:

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

E0264-03 - Feedrate Longitudinal Inclination - Shorted to high source

Control Module: UCM2

Context:
The Universal Control Module 2 (UCM2) **A-002** monitors the operation of the longitudinal inclination sensor **B-107**.

Cause:
UCM2 **A-002** is sensing a signal level greater than **4.95 V** in the longitudinal inclination sensor **B-107** signal circuit.

Possible failure modes:

1. Faulty longitudinal inclination sensor **B-107**.
2. Faulty electrical wiring shorted to voltage source.
3. Faulty UCM2 **A-002**.

Solution:

1. Verify that the fault is present and active.

   Use the display monitor diagnostic capability to view parameter status to check the voltage level.

   For additional information about the monitor diagnostic capability, see **Electrical system - Dynamic description Theory of operation - Display monitor diagnostic screens (55.000)**.

   A. If the voltage reading is greater than **4.95 V**, continue to Step **2**.

   B. If the voltage reading is less than **4.95 V**, the fault may intermittent and not currently active. Continue to Step **6**.
2. Verify that the longitudinal inclination sensor **B-107** functions properly.

   Disconnect the longitudinal inclination sensor **B-107** from the harness at connector **X-107P**.

   Check for other fault codes on the display monitor.

   A. If fault code **E0264-05 – Feedrate Longitudinal Inclination - Line disconnected** is present, the longitudinal inclination sensor **B-107** has failed internally, and the circuit wiring is functioning properly. Replace the longitudinal inclination sensor **B-107**.

   B. If fault code **E0264-03 – Feedrate Longitudinal Inclination - Shorted to high source** is still present, continue to Step **3**.
3. Check the circuit wiring.

   Place the ignition switch in the ON position.

   Use a multimeter to perform the following:

From	To	Result
Harness side of connector **X-107P** pin A, wire CPL-683CBB (PK)	Chassis ground	Should be approximately **5.0 V**
Harness side of connector **X-107P** pin C, wire CPL-678 (YE)	Chassis ground	Should be approximately **4.95 V**

   A. If the voltage reading is correct, continue to Step **4**.

   B. If the voltage reading is incorrect, continue to Step **5**.
4. Check the ground reference.

   Place the ignition switch in the OFF position.

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

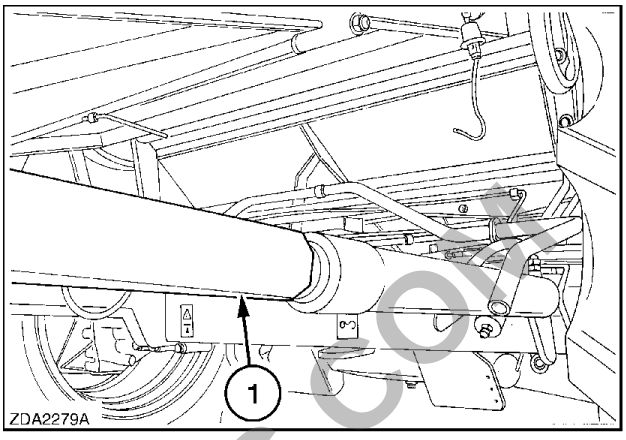
Shafts - Remove

1. Raise the straw elevator completely, install the safety latch **(1)** and stop the engine.

⚠ WARNING ⚠

ALWAYS shut OFF engine, remove the key and engage header or feeder safety locks in position on lift cylinder before working under or around header or feeder. Failure to comply could result in death or serious injury.

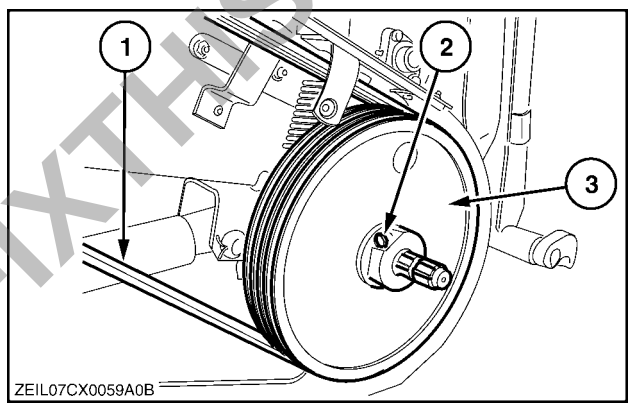
M184D



ZDA2279A 1

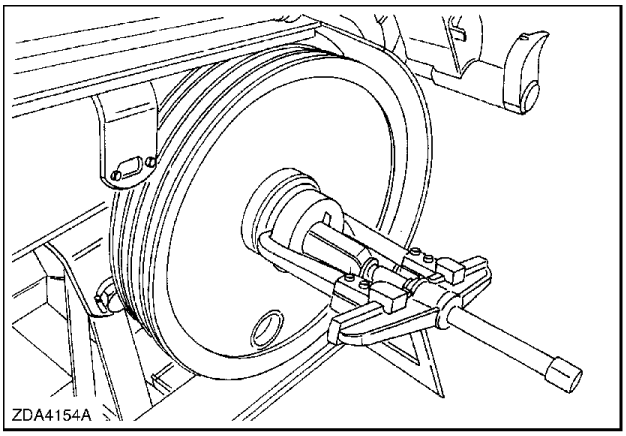
2. Remove the shielding and drive belt **(1)** on the right-hand side of the straw elevator.
   Remove bolt **(2)**.

NOTE: *Mark the position of pulley **(3)** on the shaft.*



ZEIL07CX0059A0B 2

3. Remove the pulley from the shaft with a puller as shown.



ZDA4154A 3

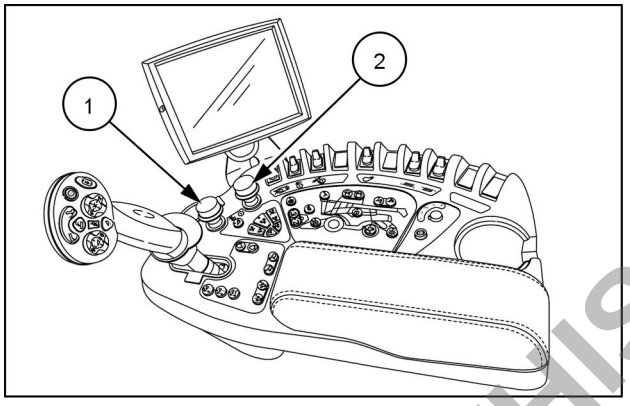
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Threshing - Logical diagram

Feeder/Thresher Circuit - Engagement

The feeder engage **(1)** and thresher engage **(2)** circuits are linked together, and share the same power supply from fuse **F-067** and the Thresher Latching relay **K-033**. Power from the fuse **F-067** is supplied to the work terminal #3 of the Thresher Latching relay **K-033** and also to connector **X-819**, pin 3 of the Thresher engage switch **S-819**.



ZEIL14CR00105AA 1

Both the thresher and feeder engage switches have a mechanical lock internally that prevents accidental engagement of the switch. In order to engage the switch, the yellow button on top of the switch must be depressed before the switch may be pulled up to engage the threshing or feeder drive circuit. When this yellow button is depressed, it not only releases the mechanical lock in the switch, but it also connects pins 3 & 2 in the switch.
When pins 3 & 2 are connected, power flows through the switch to the normally open terminal #5 of the thresher latching relay **K-033** and also to terminal #1 to energize the relay. Once the relay is energized, it powers itself (self-energized) through the wiring from terminal #5 to terminal #1.
When the threshing engage switch is pulled upwards, the connection between pins 3 & 2 in the switch is broken, and a connection is made between pins 5 & 6. Since the thresher latching relay has remained energized, it now supplies power to pin 6 of the switch. Power flows through the switch to UCM2, pin 1 and 8 (connector **X-002C4A**) to signal the module to start the thresher engagement process, as well as to pin 6 of the feeder engage switch **S-818**.
When the threshing switch is shut off, power from the thresher latching relay **K-033** can no longer flow through the switch, shutting off the input signal/supply to the module for threshing engagement. However, the thresher latching relay will remain engaged until the key is shut off, killing power available through the fuse **F-067**.
Key-off protection is provided by the thresher latching relay; if the combine is shut off, such as when doing a kill-stall, power is lost through the fuse **F-067** and to the thresher relay **K-033**. Since the relay was self-energizing, when it loses power, the relay de-energizes, and power is no longer supplied to the thresher switch S-30, even when the combine is started back up again. This forces the operator to cycle the switch off and back on again to re-engage the threshing mechanism, and prevents unexpected start-up of the threshing drives.
The feeder engage switch **S-818** is the same type of switch as the thresher engage switch, however, it does not require any connections to pins 2 & 3, since it receives its power only when the thresher switch is engaged. When the feeder switch is engaged, pins 5 & 6 are connected, and power flows through the switch to UCM1, pin 1 and 8 (connector **X-001C4A**) to signal the module to start the feeder engagement process.

If the feeder switch is left in the “On" position, and the thresher switch is then engaged, power will be sent directly through the feeder switch to the UCM1 module. However, the software will prevent the feeder output from being engaged when the signal arrives at the module at the same time as the thresher signal arrives. This “locks out" the feeder output until the operator shuts off the feeder switch, and re-engages it after the thresher has been engaged.
The feeder and thresher engage circuits are unique in that the power supplied through the switch not only signals the module to begin the appropriate engagement process, but the power is also used to directly power the solenoid coil used to engage the feeder or thresher circuits. This is done primarily for safety purposes, so that if the power supply to the feeder or thresher switches fails for any reasons, the output circuits will also lose power, and the mechanical drives will be automatically shut down, without software intervention required.

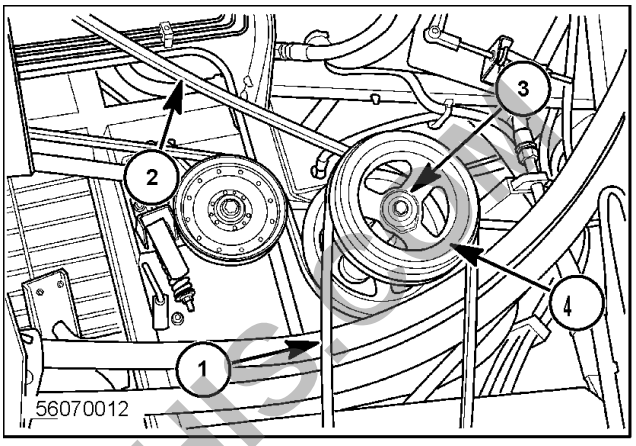
PREVIEW ONLY. YOUFIXTHIS.COM

Download full manual at youfixthis.com

Discharge beater - Remove

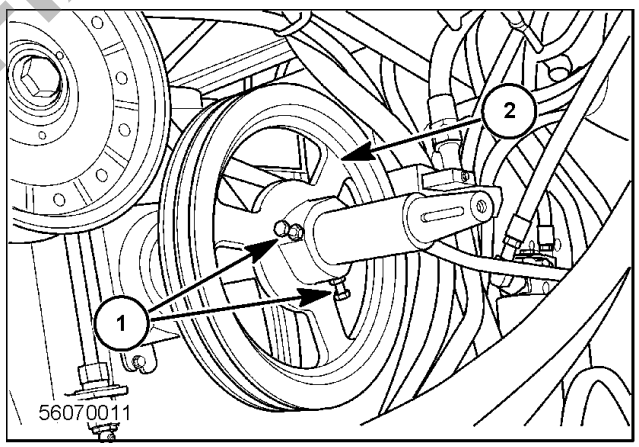
NOTICE: *The beater grate is heavy, approximately* ***55 kg*** *(****121 lb****). The grate's width and location may make handling and support difficult. Always use appropriate and adequate support materials or devices. Failure to comply could result in serious injury or death.*

1. Loosen idlers and remove the shoe drive belt **(1)** and the beater drive belt **(2)**.



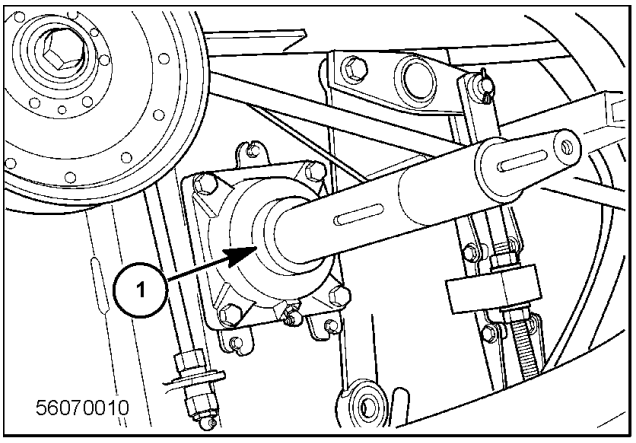
56070012_204 1

2. Remove the cap screw with the lock washer and the flat washer **(3)** and remove the sheave **(4)**.
3. Clean any dirt and corrosion from the exposed shaft area.
4. Loosen the two nuts and cap screws **(1)** and remove the sheave **(2)**.



56070011 2

5. Clean any dirt and corrosion from the exposed shaft area.
6. Remove the lock collar **(1)**.



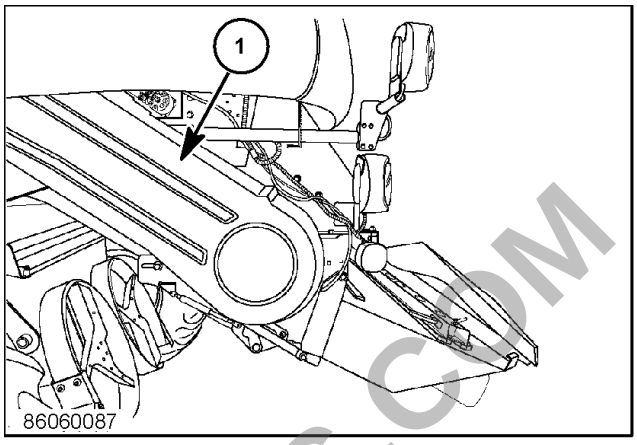
56070010 3

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

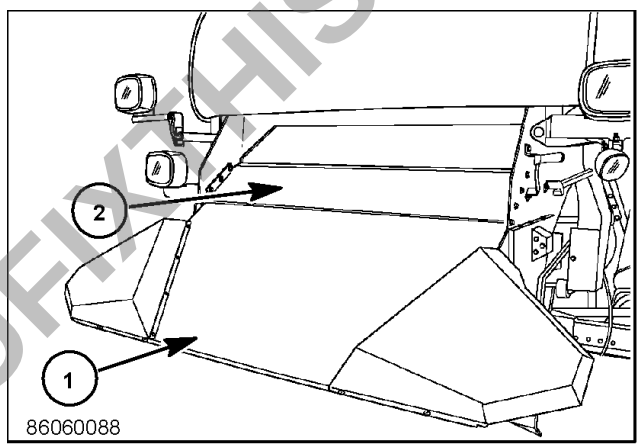
Positive Straw Discharge (PSD) - Remove

1. Remove the left rear access cover **(1)**.



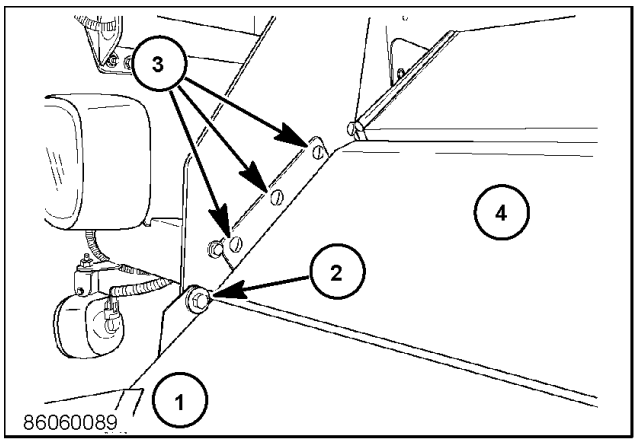
86060087 1

2. Remove the windrow forming shield **(1)** and the chopper top cover **(2)**.



86060088 2

3. Remove the cap screws and the bushings **(2)**, the nuts and the lock washers from both sides of the spreader hood **(1)**.
4. Lift the window forming shield from the unit.
5. Remove the carriage bolts **(3)**, the nuts and the lock washers from both sides of the chopper top cover **(4)**.
6. Lift the chopper cover from the unit.



86060089 3

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

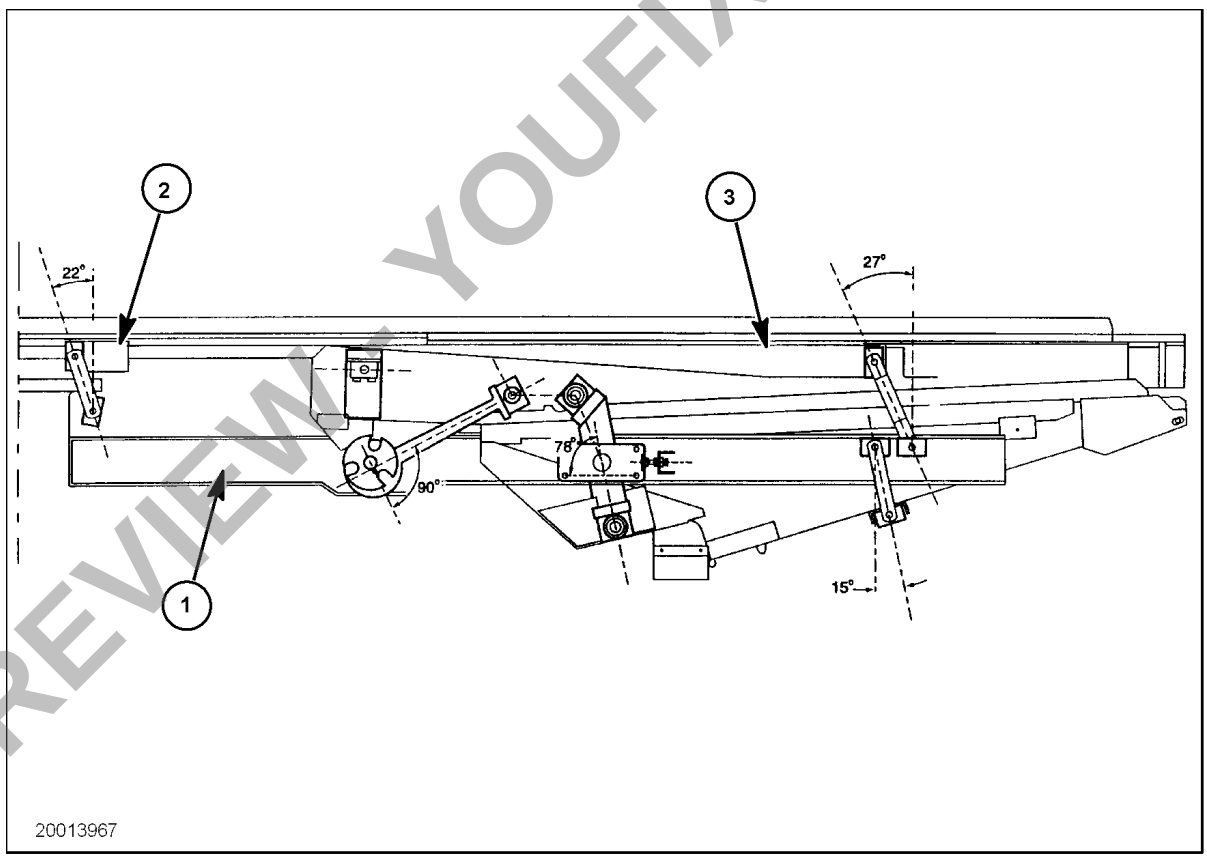
Cleaning - Dynamic description

The grain and chaff on the grain pan are transported to the rear by the reciprocating action of the cleaning shoe. An electrical actuator ensures that the cleaning shoe automatically remains horizontal in the transverse axis of the machine, even when operating on side slopes up to **17%**. This innovation increases the capacity of the cleaning shoe considerably when operating in hilly conditions.

The cleaning shoe is composed of an upper shoe and a lower shoe which move in opposite directions. A first separation takes place on the grain pan as the lighter chaff forms the top layer and the heavier grain the bottom layer. The material falls through the finger grate installed at the rear of the grain pan, onto the presieve. The air coming from the secondary blow opening of the cleaning fan blows the chaff over the presieve so that grain with a reasonably high degree of cleanliness falls through the presieve. This action will be repeated a second time between the presieve and upper sieve.

The air coming from the main blow opening of the cleaning fan blows the chaff over the upper sieve out of the machine, while the grain, unthreshed heads and small volumes of chaff fall onto the lower sieve. In addition, the grain separated by the presieve is guided by the small grain pan to the lower sieve. The installation of a presieve considerably increases the cleaning shoe capacity as the main separation of grain and chaff occurs at both finger grates. The lower sieve, or cleaning sieve, provides the final cleaning operation. Grain that passes through the cleaning sieve is carried over the grain plate to the clean grain cross auger. Unthreshed heads which do not fall through the lower sieve are split into two streams and are transported by the returns auger to the roto-threshers for rethreshing.

From the roto-threshers this material is channeled by returns augers to the grain pan for cleaning. Divider plates divide the returned material evenly over the grain pan where the exclusive self-leveling cleaning shoe takes over.



20013967 1

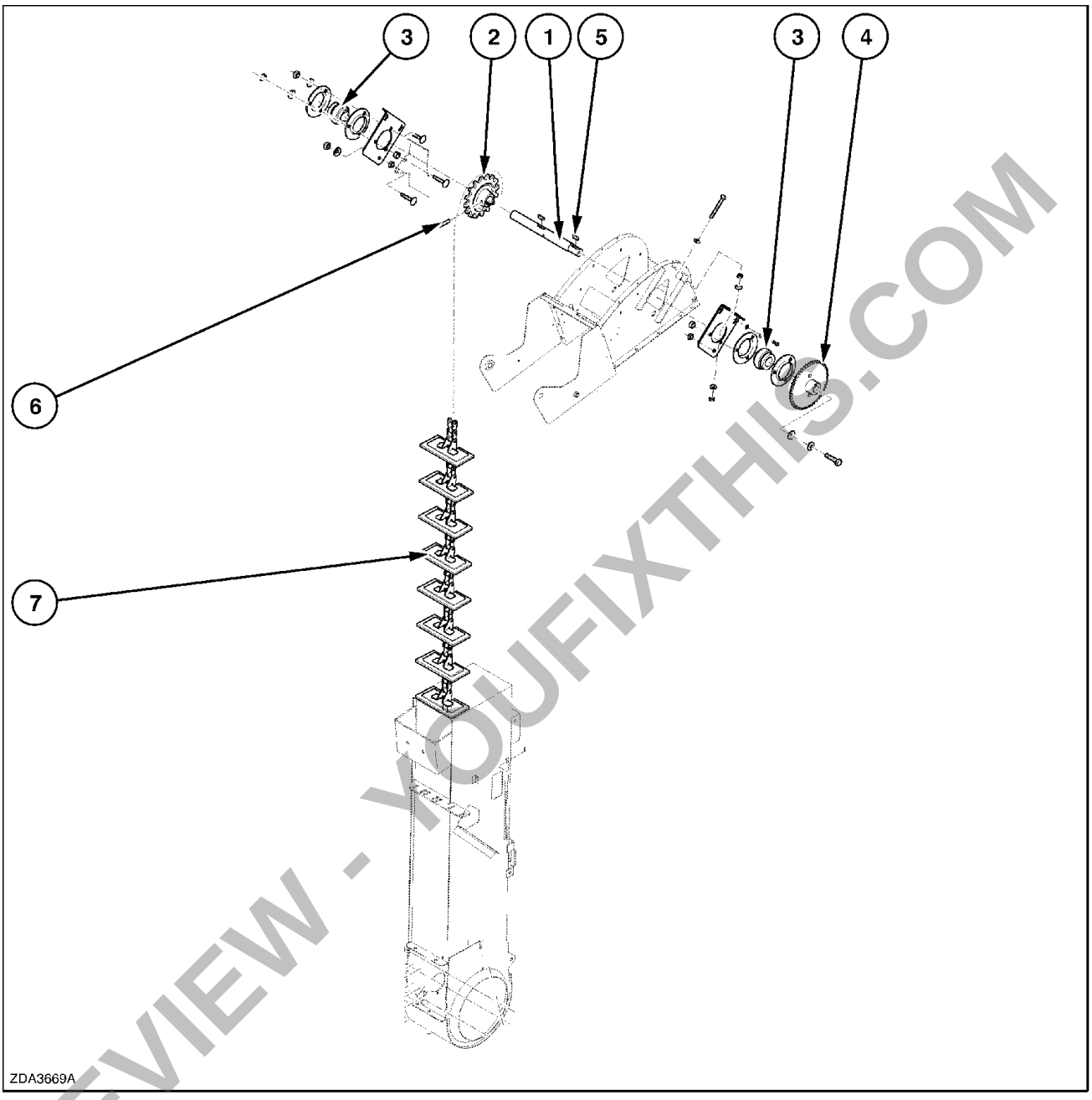
The cleaning shoe assembly is constructed of six major parts.

The Cleaning Shoe Frame, **(1)**.

All components that make up the cleaning shoe are connected to the frame. The frame attaches to the combine at the front through a pivot pin in the center. The rear of the frame rests on a sealed roller bearing mounted to the combine.

Download full manual at youfixthis.com
PREVIEW: YOUFIXTHIS.COM

Elevator upper shaft - Exploded view



ZDA3669A 1

1 Upper shaft
2 Sprocket
3 Bearing
4 Sprocket
5 Key
6 Dowel pin
7 Elevator chain

PREVIEW - YOUFIXTHIS.COM

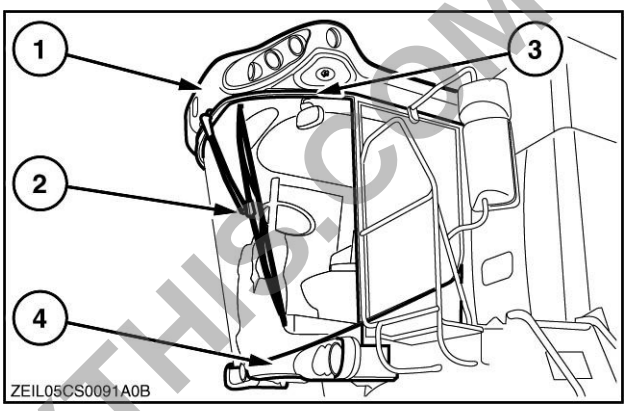
Download full manual at youfixthis.com

Cab doors and hatches - Replace

NOTE: *The biggest problem for manufacturer and dealer is the supply of the polyurethane based adhesive to be used, due to its short shelf life. Therefor, ask the local supplier for products to glue windows.*

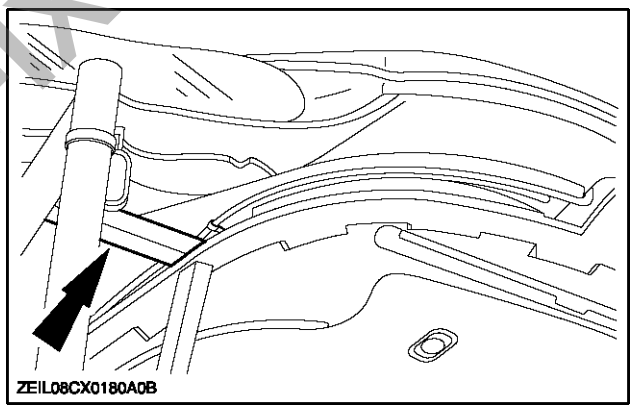
1. Park the combine so that it can stay on the spot for minimum 48 hours after the window is replaced.
2. Use a sturdy and sufficiently high working platform placed in front of the cab.
3. Remove the wiper **(2)**, the supports **(3)** and the lower yellow covers **(4)**.

NOTE: *It can be useful to remove the cab doors in order to have easier access during the wind shield replacement.*



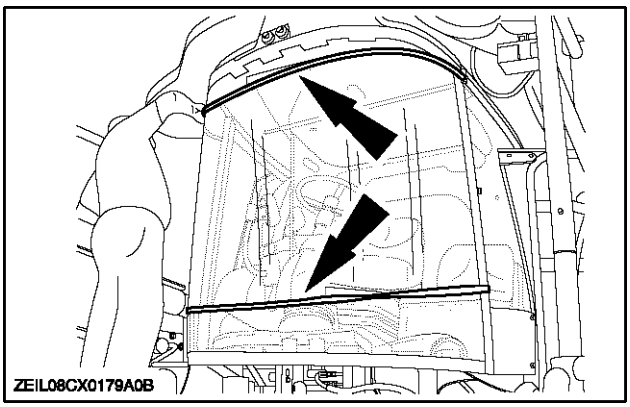
ZEIL05CS0091A0B 1

4. Loosen the front and side bolts retaining the cab roof to the cab frame. Lift the front side of the roof **(1)** and put a wooden beam between the cab roof and the cab frame on the front left and right hand side.



ZEIL08CX0180A0B 2

5. Secure the window with adequate ropes or straps so that the window cannot fall down unexpectedly when cutting the glue.



ZEIL08CX0179A0B 3

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Genuine	Reference	PAGE
80679968 [Pin Removal Tool, Suitable To Remove Pins From Electronic Box Connectors And Sort Likes]	Electrical system - Special tools 2	55.1 / 14
380000354 [Timer Pin Puller]	Electrical system - Special tools 2	55.1 / 14
380000353 [Faston Pin Puller]	Electrical system - Special tools 2	55.1 / 15
380000355 [Amp Pin Removal DIA 1,6]	Electrical system - Special tools 2	55.1 / 15
380000356 [DCS Pin Puller]	Electrical system - Special tools 2	55.1 / 15
84400045 [Deutsch Crimping Pin Pliers]	Electrical system - Special tools 3	55.1 / 16
84400044 [Plastic Pin Removal Tool]	Electrical system - Special tools 3	55.1 / 16
380001162 [Power Steering Test Fitting - 14 mm x 1.5 -6 g]	Electrical system - Special tools 3	55.1 / 16
84074681 [Tool Kit]	Electrical system - Special tools 3	55.1 / 17
84400046 [Pliers]	Electrical system - Special tools 3	55.1 / 17
84400047 [Pliers]	Electrical system - Special tools 4	55.1 / 19
380003394 [LIN Actuator Test Cable]	Electrical system - Special tools 5	55.1 / 20
380003394 [LIN Actuator Test Cable]	Electronic modules - Test - LIN actuators	55.6 / 21
380040185 [Harness Diagnostic /Repair Kit (NEF)]	Electronic modules - Electrical test Engine Control Unit	55.6 / 34
380100057 [Pressure Gauge and Hose Assembly]	DTC 19B5 - Fuel Filter: Main fuel filter clogged	55.29 / 158
380100057 [Pressure Gauge and Hose Assembly]	DTC 1AB5 - Fuel Filter: Main fuel filter clogged	55.29 / 173
380100057 [Pressure Gauge and Hose Assembly]	DTC 31E5 - Fuel pre-filter clog or circuit failure	55.29 / 278
FNH00088 [53 mm Locknut Wrench]	Clutch - Install	60.4 / 15
380000735 [Torque Sensing Hub Remover]	Threshing - Special tools	66.1 / 3
380000660 [Front Seal Ring Installer]	Threshing - Special tools	66.1 / 3
380000807 [Rotor Gearbox 4-pin Socket Wrench]	Threshing - Special tools	66.1 / 4
380000916 [Rotor Support Tool]	Rotor - Remove	66.3 / 11
380000806 [Rotor Assembly Handling Tool]	Rotor - Remove	66.3 / 11
380001139 [Rotor Support Adapter]	Rotor - Remove	66.3 / 12
380000806 [Rotor Assembly Handling Tool]	Rotor - Balancing	66.3 / 13
380000916 [Rotor Support Tool]	Rotor - Balancing	66.3 / 13
380000806 [Rotor Assembly Handling Tool]	Rotor - Install	66.3 / 16
380000806 [Rotor Assembly Handling Tool]	Rotor - Install	66.3 / 16
380000806 [Rotor Assembly Handling Tool]	Rotor - Install	66.3 / 18
380000660 [Front Seal Ring Installer]	Rotor gearbox housing Right-hand - Disassemble Dual Speed	66.3 / 32
380000660 [Front Seal Ring Installer]	Rotor gearbox housing Right-hand - Disassemble Dual Speed	66.3 / 34
380000807 [Rotor Gearbox 4-pin Socket Wrench]	Rotor gearbox housing Right-hand - Disassemble Dual Speed	66.3 / 35

PREVIEW - YOUFIXTHIS.COM

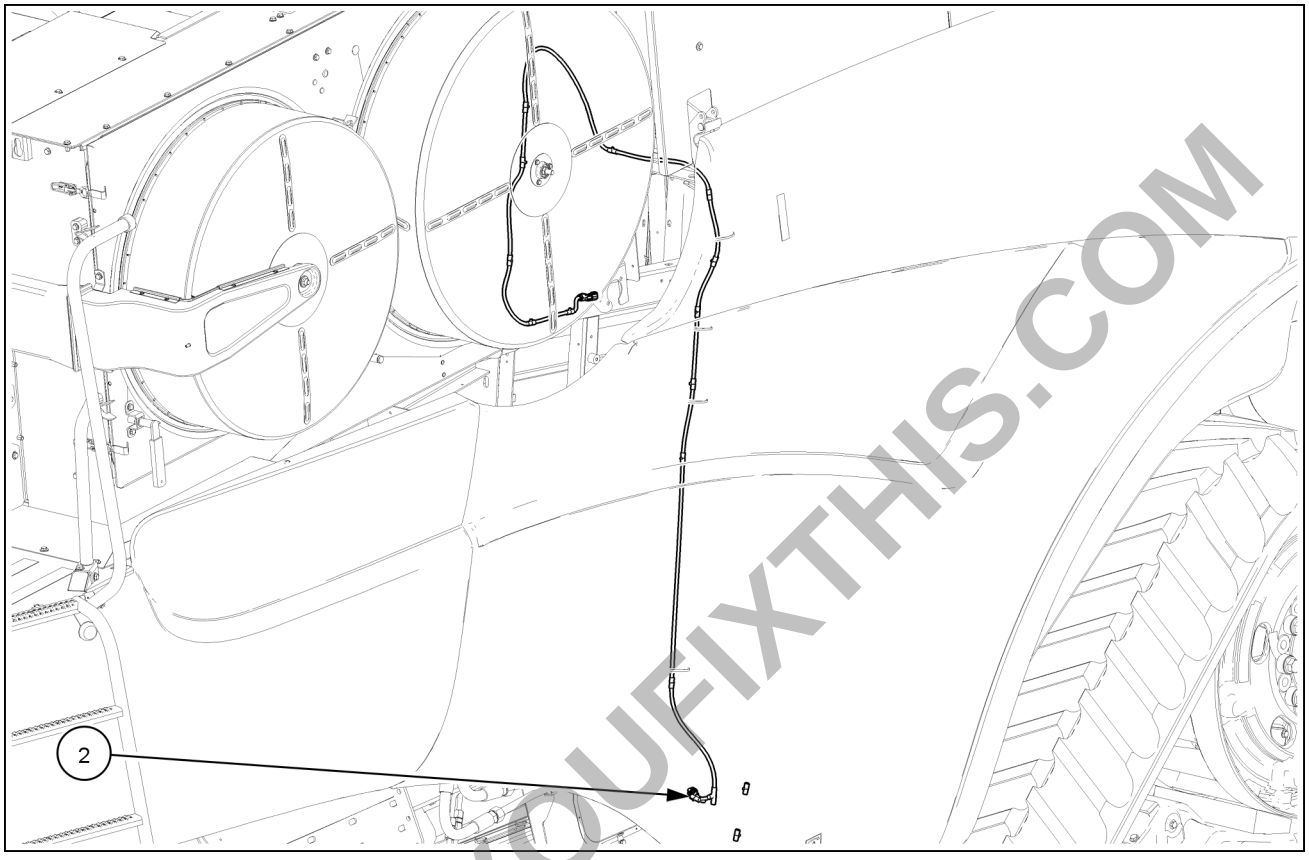
Download full manual at youfixthis.com

Product	Market Product	Engine
CR9.80 Revelation MY19 tracks [8D2007000 -]	Europe	F3HFE613A*B009
CR9.90 Revelation MY19 [7E2007000 -]	Europe	F3HFE613A*B009
CR9.90 Revelation MY19 tracks [8E2007000 -]	Europe	F3HFE613A*B009
CR9.90 Revelation MY19 [7E2007000 -]	North America	F3HFE613A*B003
CR9.90 Revelation Model Year 19 tracks [8E2007000 -]	North America	F3HFE613A*B003

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Item	Connector number	Description
2	**X-370**	Right-hand rear shield light



BAPH14CR00044FA 2

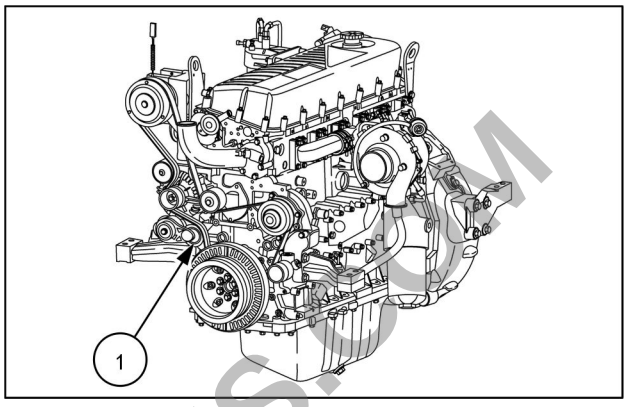
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Alternator drive system Belt tensioner - Check

CR7.80 Revelation Tier 2 Tires [2A2007000 -]	
CR7.90 Revelation Tier 2 Tires [2B2007000 -]	

1. Checking of the tensioner assembly operation should be carried out, with the tensioner assembly still attached to the front cover. To check the spring load, place a "break back" torque bar pre-set to, **70-85 Nm** (**52-63 lb ft**) on to the pulley attaching bolt. Raise the lever up through an angle of **20°** maximum. If the torque bar does not "break" within the range, a new tensioner assembly is required.
2. Ensure that the tensioner pulley **(1)**, rotates freely by hand. If not replace with new parts.



ZEIL18CR00321AA 1

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

E0023-04 - Right Returns RPM Sensor - Shorted to low source

Control Module: UCM1

Context:
The Universal Control Module 1 (UCM1) **A-001** monitors the operation of the right returns RPM sensor **B-110**.

Cause:
UCM1 **A-001** is sensing a signal level less than **0.52 V** in the right returns RPM sensor **B-110** signal circuit.

Possible failure modes:

1. Faulty right returns RPM sensor **B-110**.
2. Faulty electrical wiring shorted to ground.
3. Faulty UCM1 **A-001**.

Solution:

1. Verify that the fault is present and active.

   Use the display monitor diagnostic capability to view parameter status to check the voltage level.

   For additional information about the monitor diagnostic capability, see **Electrical system - Dynamic description Theory of operation - Display monitor diagnostic screens (55.000)**.

   A. If the voltage reading is less than **0.52 V**, continue to Step **2**.

   B. If the voltage reading is greater than **0.52 V**, the fault may intermittent and not currently active. Continue to Step **5**.

2. Verify that the right returns RPM sensor **B-110** functions properly.

   Disconnect the right returns RPM sensor **B-110** from the harness at connector **X-110**.

   Check the display monitor for other fault codes.

   A. If fault code **E0023-04 – Right Returns RPM Sensor - Shorted to low source** is still present, continue to Step **3**.

   B. If fault code **E0023-05 – Right Returns RPM Sensor - Line disconnected** is present, the circuit wiring functions properly. However, the right returns RPM sensor **B-110** has failed internally. Replace the right returns RPM sensor **B-110**.

3. Check for an open condition.

   Place the ignition switch in the OFF position.

   Use a multimeter to check for continuity:

From	To	Result
Harness side of connector **X-110** pin 2, wire RMF-441 (YE)	Chassis ground	Should not be continuity
Harness side of connector **X-110** pin 2, wire RMF-441 (YE)	Harness side of connector **X-110** pin 1, wire RMF-511CE (BL)	Should not be continuity

   A. If there is continuity, continue to Step **4**.

   B. If there is no continuity, the UCM1 **A-001** has failed internally. Load the appropriate module software. If the fault recurs, replace the UCM1 **A-001**.

4. Check for a short to low condition.

   Disconnect the Cab Main (CM) harness from the UCM1 **A-001** at connector **X-001C4A**.

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

E0751-07 - Reel Aft Switch - Mechanical out of range

Control Module: RHM

Context:
The Armrest Control Module (ACM) **A-004** monitors the operation of the switches on the Multi-Function Handle (MFH) **A-009**.

Cause:
ACM **A-004** is sensing that the reel aft switch has been depressed for **1.0 s** at power up at connector **X-004H1** pin 8.

Possible failure modes:

1. Reel aft switch pressed when the ignition switch is being switched ON.
2. Reel aft switch damaged or sticking.
3. Faulty MFH **A-009**.
4. Faulty electrical wiring.
5. Faulty ACM **A-004**.

Solution:

1. Verify that the fault is present and active.

   Use the display monitor diagnostic capability to view parameter status to check the fault is still present.

   For additional information about the monitor diagnostic capability, see **Electrical system - Dynamic description Theory of operation - Display monitor diagnostic screens (55.000)**.

   A. If the fault is still present, continue to Step **2**.

   B. If the fault is not present, the fault may intermittent and not currently active. Continue to Step **8**.
2. Verify that the reel aft switch on the MFH **A-009** functions properly.

   Operate the reel aft switch and check for signs of damage or sticking.

   A. If the reel aft switch shows signs of damage or sticking, the MFH **A-009** has failed. Replace the MFH **A-009**.

   B. If the reel aft switch does not show signs of damage or sticking, continue to Step **3**.
3. Verify the MFH **A-009** functions properly.

   Operate all other switches on the MFH and check they function properly.

   A. If all other MFH switches function properly, the MFH **A-009** has failed. Replace the MFH **A-009**.

   B. If other MFH switches do not function properly, continue to Step **4**.
4. Place the ignition switch in the OFF position.

   Check for faulty wiring.

   Disconnect the MFH **A-009** connector **X-009**.

   Place the ignition switch in the ON position.

   Use a multimeter to check for voltage:

From	To	Result
Harness side of connector **X-009** pin 10, wire (BL)	Chassis ground	Should be approximately **5.0 V**

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 25 of 6637 pages

The full manual includes:

- All 6637 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

New Holland CR7.80, CR7.90, CR8.80, CR8.90, CR9.80, CR9.90, CR10.90 Service Manual



Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual