IXTHIS.COM

Nitro® 6300
Nitro® 6345
Nitro® 6500
Tier 4B (final)

Sprayer

PIN 2116021 and above

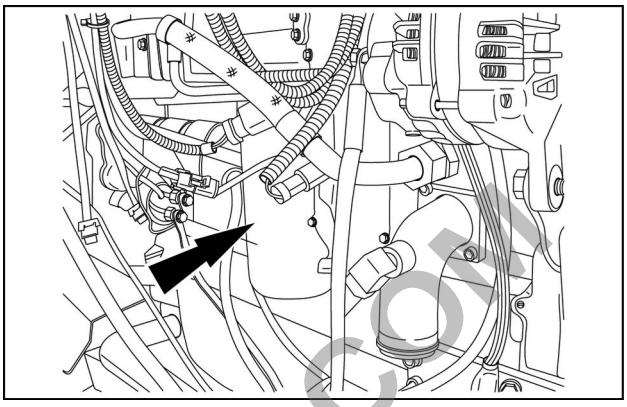
SERVICE MANUAL

Part number 48048561
1st edition English
October 2016

Miller
Since 1899

Engine - Replace - Engine oil and filter

Refer to the Cummins Operation and Maintenance Manual for all engine maintenance procedures and maintenance schedules not covered in this manual.
Change the engine oil and filter as described in the Cummins Operation and Maintenance Manual.



RAIL14SP00872AA 1

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

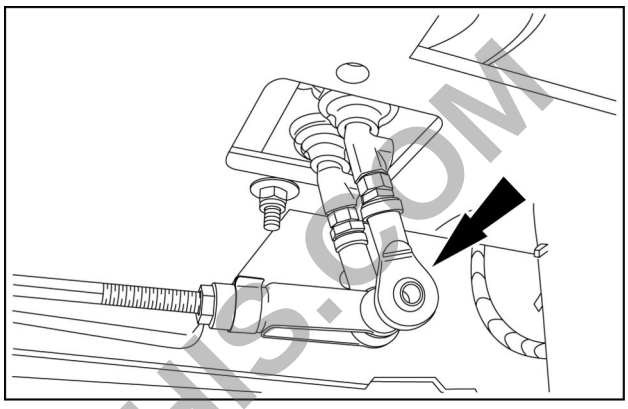
Swing arm - Remove - A-frame

Swing arm pin removal kit 380003180

Steering pin removal kit 380003181

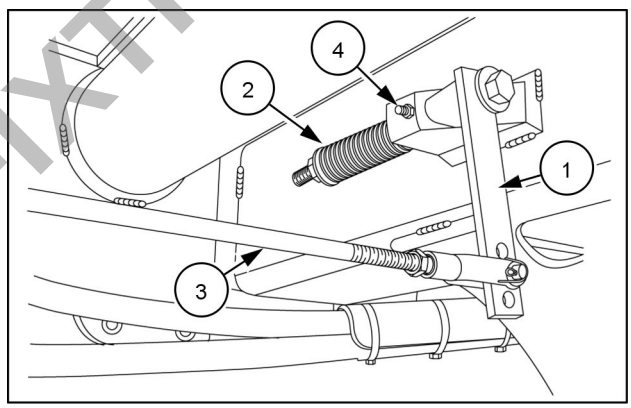
NOTE: *Special tool are available through the parts system.*

1. Adjust the track width of the vehicle to the widest setting.
2. Drive the vehicle onto level ground.
3. Disconnect the suspension linkage and completely lower the suspension.
4. Set the parking brake and shut off the engine.



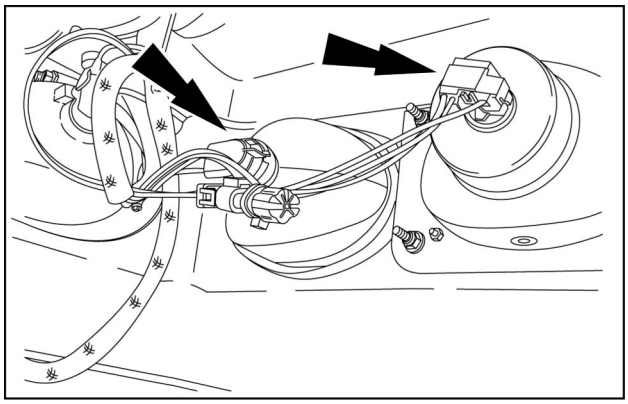
RAIL13SP01000AA 1

5. Remove the suspension cam lever **(1)**, spring **(2)**, linkage **(3)**, grease fitting **(4)** and hardware. from the swing arm being removed. Set aside for reassembly.



RAIL13SP01056AA 2

6. Unplug the lights in the styling fender.



RAIL13SP01002AA 3

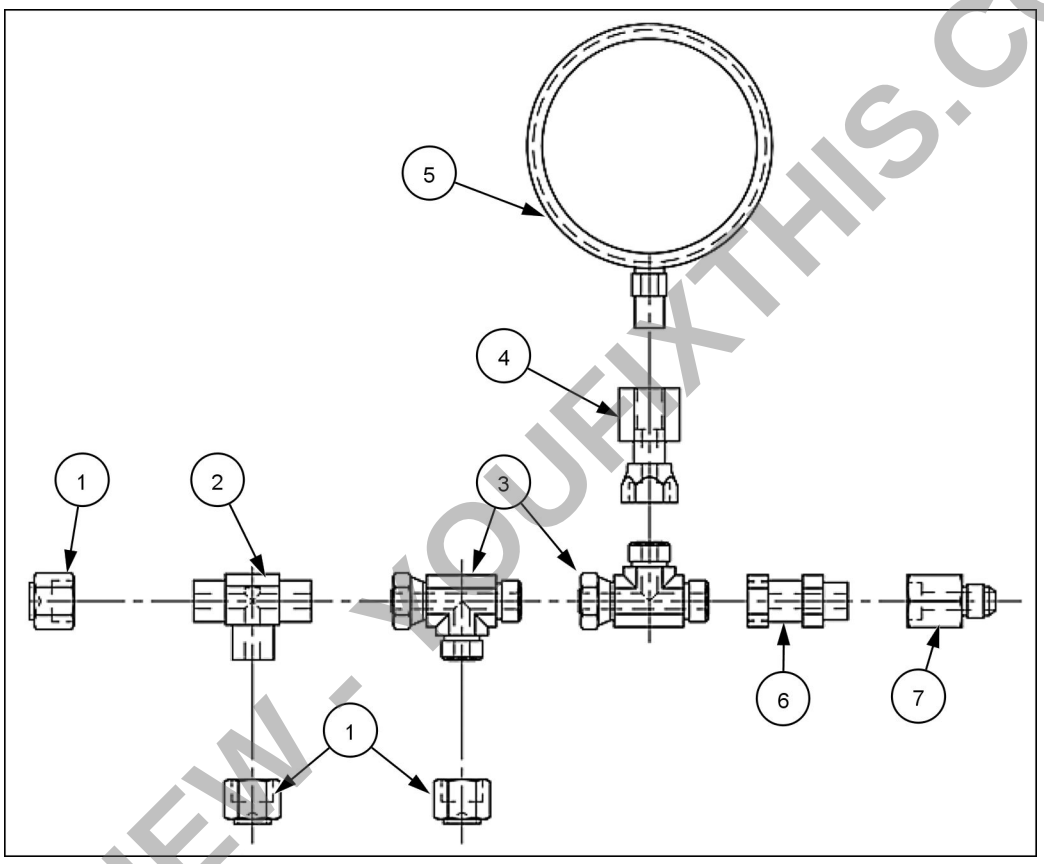
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Pump and motor components - Service instruction - Moving a downed 6300T4F PD

Nitro 6300	

1. Obtain two O-ring face seal run tees and Port-A-Power adapter. Fill the Port-A-Power with clean, **NEW HOLLAND AMBRA HYDROSYSTEM 68** to prevent contamination of the hydraulic system. Add additional oil as needed to maintain pressure.
2. Locate the Brake Over Under (BOU) block, located in front of the ladder.



RAIL13SP00981FA 1

Item	Description
1	Cap, 06 ORFS
2	Tee, 06RFS run
3	Tee, 06 SN run
4	Adapter, 6 ORFS x **.25 in**
5	Gauge, **200 psi** liquid
6	Connector, 06 ORFS x 06 MPT
7	Connector, 06 MJIC x **.375 in**

3. Prepare for hose disconnects and valve plugging; set out the Port-A-Power, along with the following required fittings and gauge above.
4. Locate ports labeled X, X1, and X2 on the BOU block.
5. Remove the hose connected at the X port and connect it to one of the tee fittings. Insert a plug into the valve connection point from which the hose was removed.

PREVIEW - YOUFIXTHIS.COM

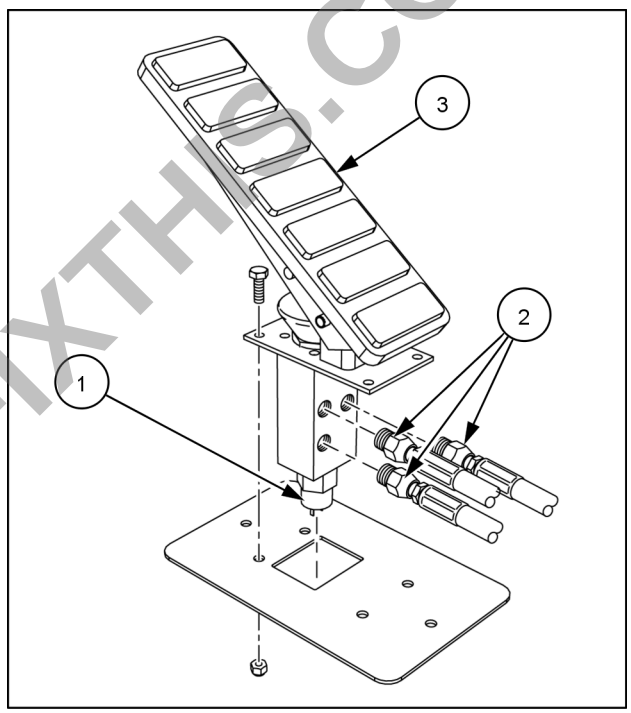
Download full manual at youfixthis.com

Brake pedal control valve - Remove

Prior operation:
Apply a vacuum to the hydraulic tank to hold the hydraulic fluid **Oil reservoir - Service instruction - Tank vacuum procedure (35.300)**
Prior operation:
Remove the floor mat from the vehicle.

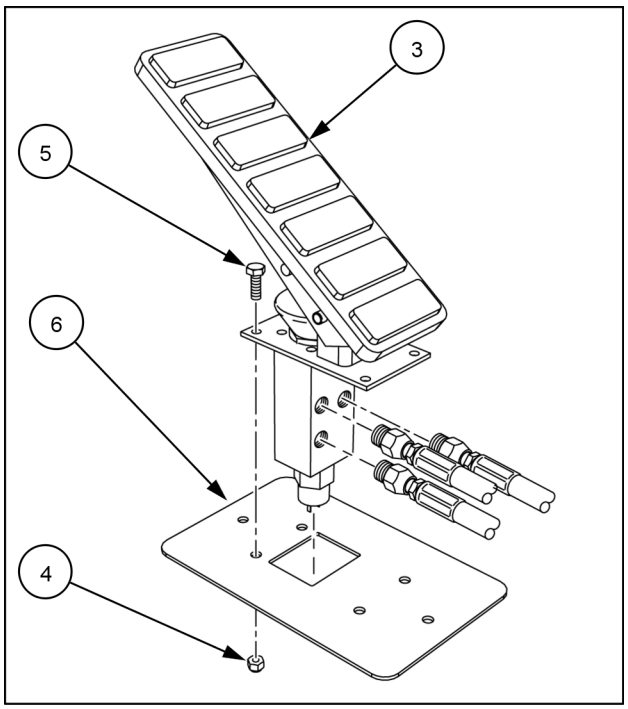
1. Relieve all hydraulic pressure from the system before disconnecting any lines or fittings.
2. At brake pedal/valve, tag and mark hydraulic and electrical lines. Cut securing cable ties as required.
3. Disconnect electrical connector **(1)**.
4. Tag and mark hoses. Disconnect three hydraulic hoses **(2)** from brake pedal/valve assembly **(3)**.
5. Cap and plug lines and fittings.

NOTE: *The locknuts securing the hex bolts are accessed underneath the vehicle; the bolts they're secured to will need to be removed from inside the cab.*



RAIL13SP01119AA 1

6. Remove four locknuts **(4)** from hex bolts **(5)** protruding through floor mounting plate **(6)** to exterior of vehicle.
7. Remove four hex bolts **(5)** from brake pedal/valve assembly **(3)**, and pull assembly up through opening in floor mounting plate **(6)**.



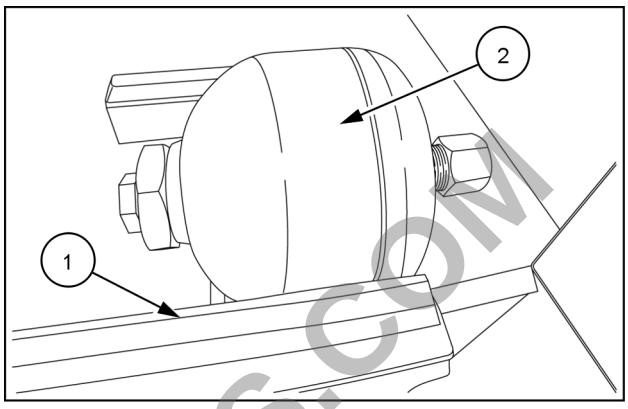
RAIL13SP01119AA 2

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

Hydraulic systems - Service instruction - Accumulator charging

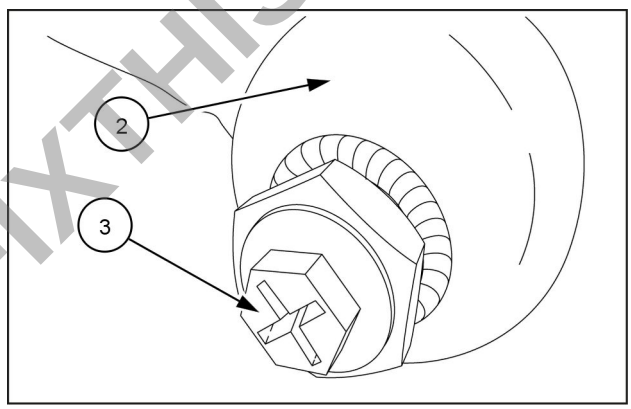
Boom lift accumulator

1. Using padded vice **(1)**, securely clamp down accumulator **(2)**.



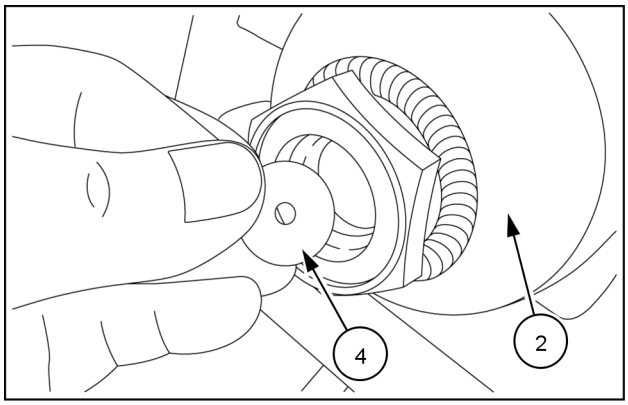
RAIL13SP03458AA 1

2. Remove red cap **(3)** on base of accumulator **(2)** and discard.



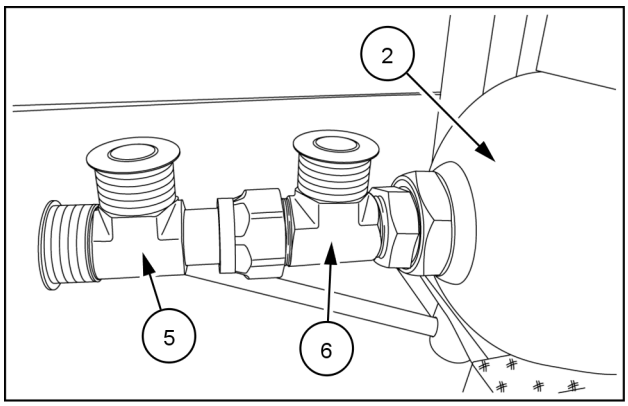
RAIL13SP03451AA 2

3. Insert **5.156 mm** (**0.203 in**) orifice disk **(4)** into opening on base of accumulator **(2)**.



RAIL13SP03454AA 3

4. Make sure orifice stays in place inside accumulator **(2)** and install two Tee fittings **(5)** **(6)**.



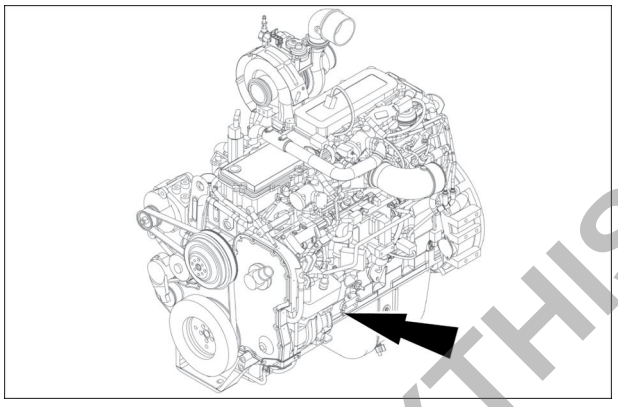
RAIL13SP03452AA 4

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

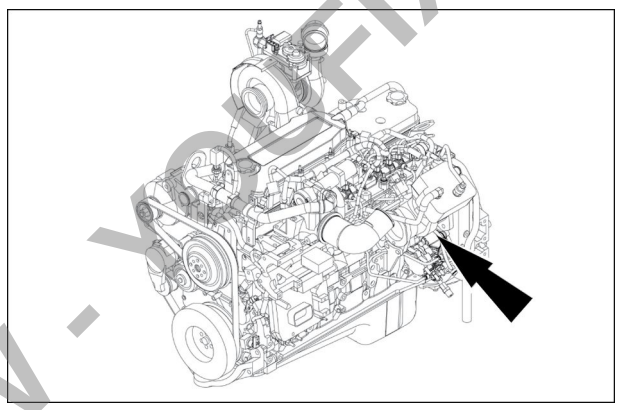
Pneumatic compressor - Overview

The air compressor of the vehicle is used for the foam marker system, boom blow out option, and the cab air suspension.
The air compressor of the vehicle is attached to , and driven by, the engine. The air compressor is cooled by engine coolant. The operating pressure range for the air compressor is **8 - 9 Kg/cm²** (**115 - 125 psi**). The location and style of the air compressor for the vehicle is different depending upon the engine of the vehicle. For QSB engines the air compressor is located nearer the fan belt end of the engine. For QSL engines the air compressor is located further from the fan belt of the engine



RAIL15SP00249FA 1

Air compressor location QSB engine



RAIL15SP00248FA 2

Air compressor location QSL engine

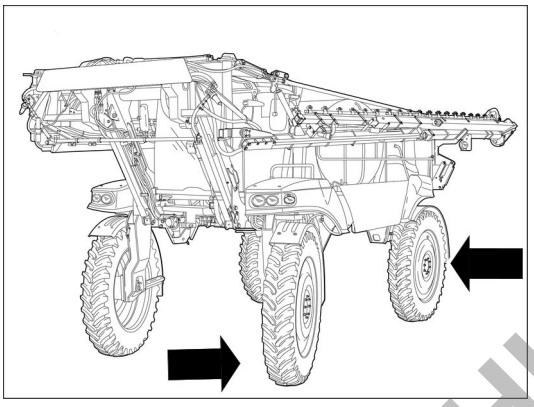
The air compressor has a small amount of lubricating oil carry over, which lubricates the piston rings and moving parts of the compressor. When the lubricating oil is exposed to normal air compressor operating temperatures over a period of time, the lubricating oil will form carbon deposits. The carbon deposits will cause the air compressor piston rings to be affected by high operating temperatures and pressures, resulting in improper ring seal. Inspect the inside diameter of the air discharge line for carbon deposits exceeding **1.52 mm** (**0.06 in**). If the total carbon deposit exceeds **1.52 mm** (**0.06 in**), clean and inspect the air compressor cylinder head, the valve assembly, and the discharge line. Replace any items if necessary.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Steering control - Dynamic description - Four wheel steer

The Four Wheel Steer (4WS) function is available on the front boom sprayers. The system allows for steering of the two rear wheels in conjunction with the steering of the two front wheels. Steering of all four wheels gives the vehicle the ability to have the rear wheels track with the front wheels, resulting in less crop damage when turning and also the ability to “crab” steer in order to help hold on side hills or to climb out of trouble spots



RAIL12SP01122FA 1

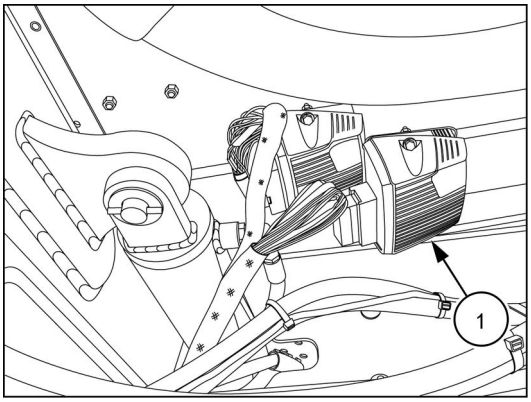
The system includes two hydraulic steering cylinders, two hydraulic lock cylinders, a counterbalance valve, a directional control valve, and a cylinder lock valve. Electrically, the system includes three wheel position sensors, two lock proximity switches, an IQAN X IO 2 controller, and a steering mode selection switch. Additionally, system functioning is controlled by the MC2 master controller.

Other components related to the 4WS system are common wheel leg assemblies (front left / right rear, and front right / left rear), remote grease lines, and a raised operator walkway

System operation may be monitored and controlled through the use of the in cab display panel mounted on the right hand console.

In order to activate the 4WS steering mode, the operator selects the 4WS mode from the selector switch. The switch also allows for the selection of the two wheel steer (normal), and CAL (manual steering) functions. In order to utilize 4WS, the vehicle must be moving and have ground speed. If the cab display panel does not show a vehicle ground speed the 4WS function will not operate.

When 4WS is activated, a signal travels to the MC2 controller **(1)** to activate the system. From the MC2 controller, signals are sent to the directional control valve of the 4WS system and to the IQAN X IO 2 controller. The signal to the directional control valve activates the valve to allow hydraulic fluid to flow to the system components. The signal to the IQAN X IO 2 controller is distributed from the controller and sent to the cylinder lock valves, the lock proximity switches, the wheel position sensors, and any third party steering controller input. Feedback signals are sent back from the lock proximity switches and the wheel position sensors to the cab display panel to show cylinder lock status and the wheel positions



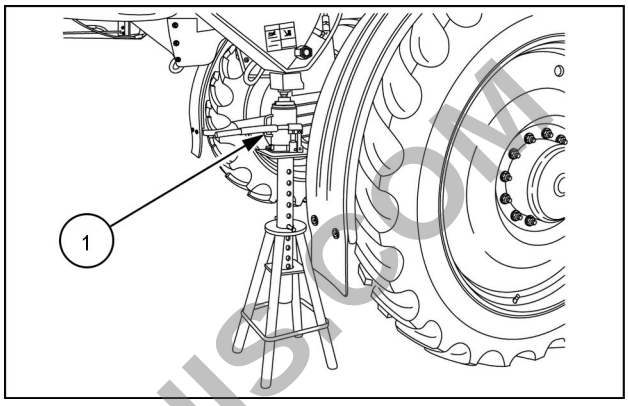
RAIL13SP05045AA 2

Hydraulically, when the 4WS system is activated, the fluid flows from the directional control valve to the lock cylinders and unlocks the rear wheels for steering. Fluid also flows to the steering cylinders, passing through a counterbalance valve which balances the fluid flow supplying both rear steering cylinders.

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

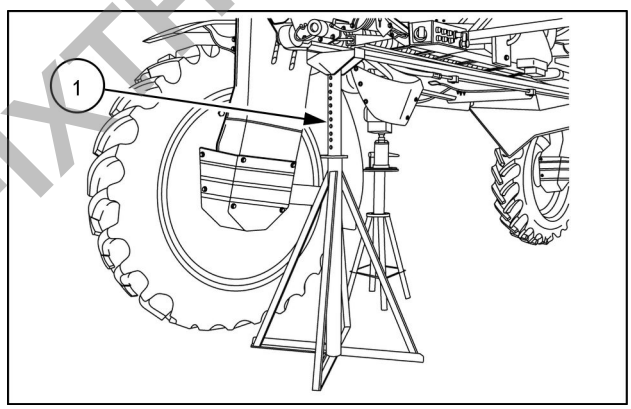
Front wheels - Remove

1. Drive the vehicle on to a hard, level surface.
2. Turn off the vehicle engine and remove the key from the ignition.
3. Install a bottle jack **(1)** under the wheel leg pivot bracket.
4. Operate the jack to lift the wheel off of the ground. Ensure that the wheel has enough ground clearance for proper wheel removal.



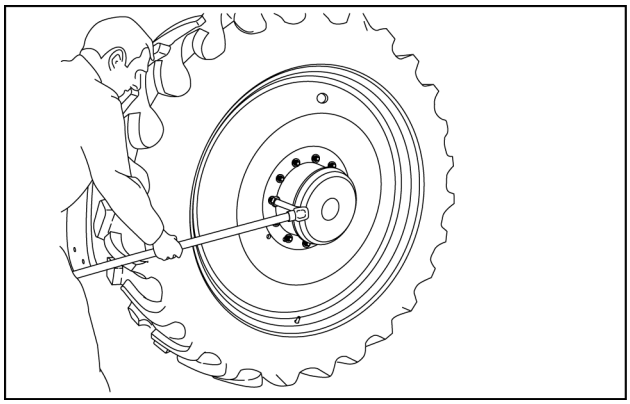
RAIL15SP00816AA_1 1

5. Install additional jackstands **(1)** to support the vehicle during wheel removal.



RAIL15SP00819AA_1 2

6. Loosen the wheel lug nuts. Do not completely remove the lug nuts.



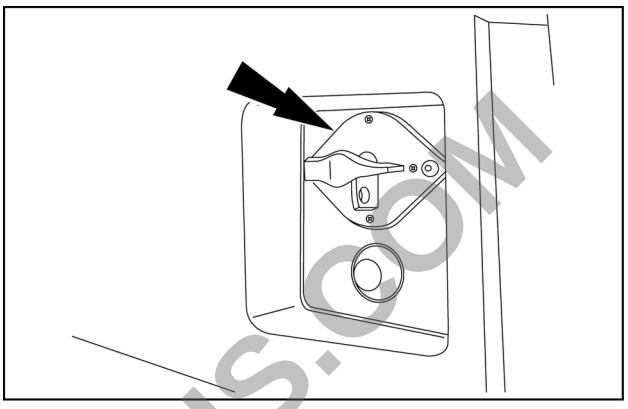
RAIL15SP00817AA_1 3

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

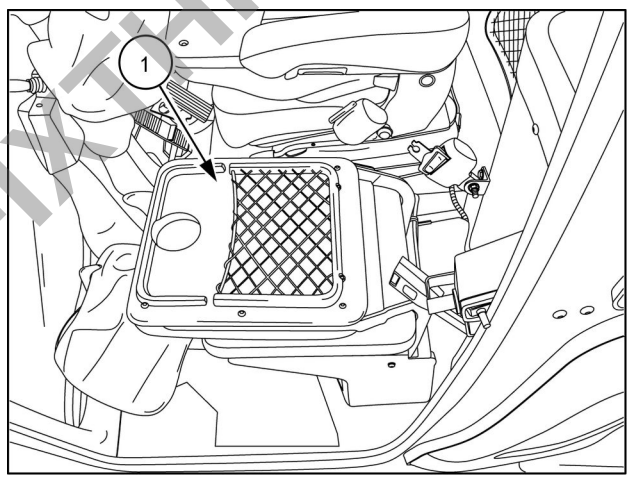
Heater control valve - Remove

1. Move the machine to a hard and level surface.
2. Turn the ignition key to the “OFF” position.
3. Turn off the power to the batteries by turning the switch attached to the engine panel to the “OFF” position.



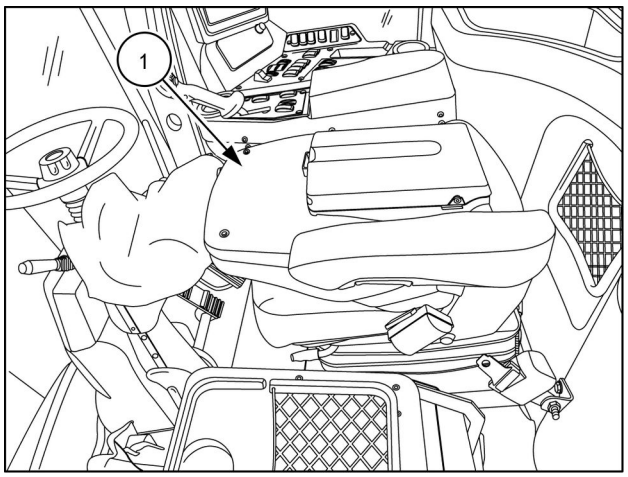
RAIL14SP00818AA 1

4. Remove the instructors seat **(1)** from the interior of the cab in order to access the back panel mounting bolts.



RAIL13SP04730AA 2

5. Remove the operators seat **(1)** from the interior of the cab in order to access the back panel mounting bolts.



RAIL13SP04724AA 3

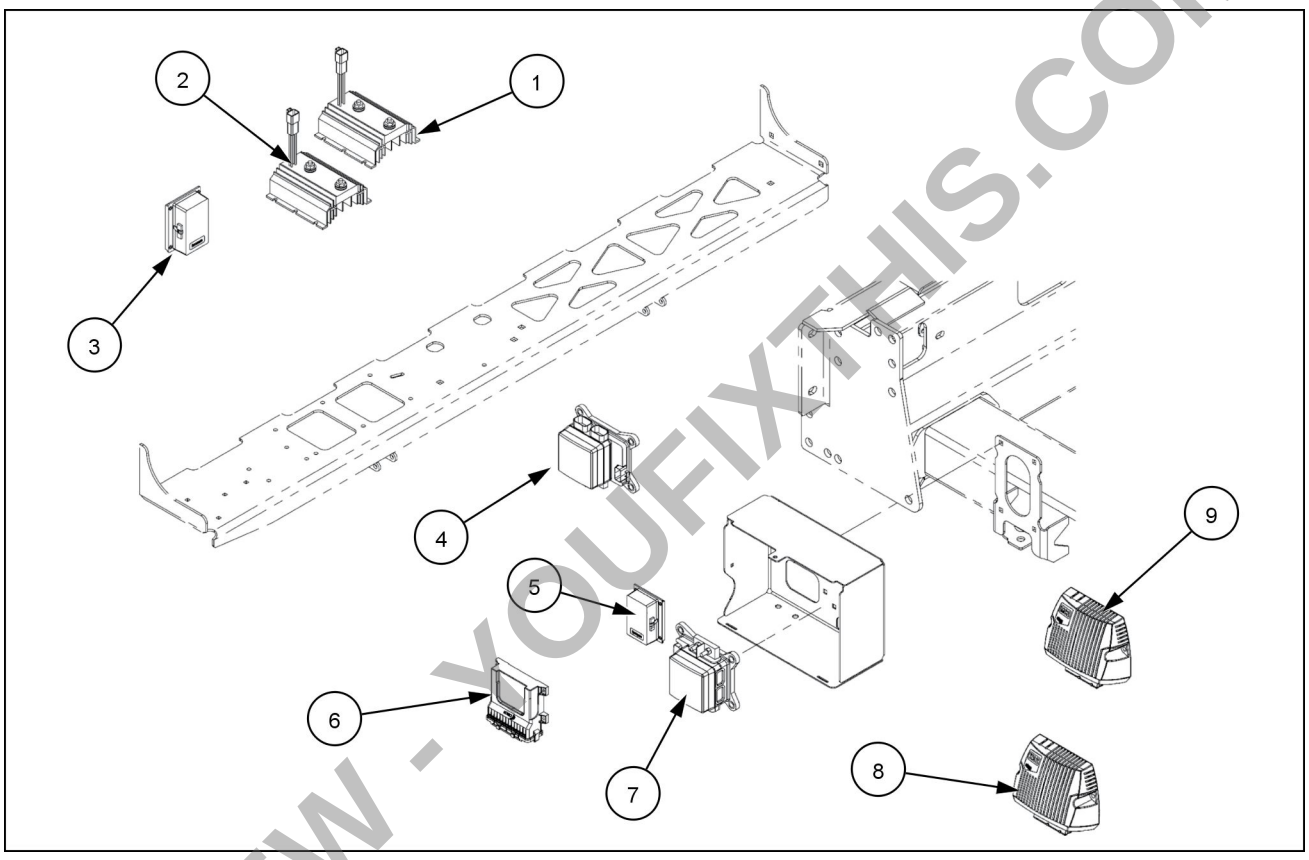
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Electrical system - Overview - Electrical power distribution, fuses and relays, sensing systems

The electrical power distribution system includes the system batteries, fuses, relays, resistors, and dongles, grounding, starting system, and system sensing.

Electrical power distribution begins at the batteries and is routed to the positive (+) jumper post, and to the starter motor. From the jumper post, power is routed to the battery disconnect switch. From the disconnect switch the battery power is branched off to each of the 200 Amp relays, the auxiliary fuse panel, and to the positive (+) remote battery terminal. From the starter the battery power is routed to the alternator excitation cable connected to the alternator.



RAIL15SP00357FA 1

Item	Description
1	Relay — 200 Amp
2	Relay — 200 Amp
3	DEF Fuse panel
4	Module — MVEC, front
5	Auxiliary fuse panel
6	Module — XIO2
7	Module — MVEC, rear
8	Module — MC2
9	Module — XS2

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

CONNECTS TO SN105 ON SUPER NODE HARNESS #21.52040

CONNECTS TO AR049 ON ARMREST HARNESS #21.52302

CONNECTS TO BM000 ON CENTER BOOM HARNESSES #21.52009, #21.52010, AND #46.11147

CONNECTS TO BH038 ON BOOM HYDRAULIC HARNESS #21.52011

CONNECTS TO AR050 ON ARMREST HARNESS #21.52302

CONNECTS TO STEERING COLUMN HARNESS #21.52756

CONNECTS TO FW229 ON 4WHL STEER HARNESS #21.52049

CONNECTS TO CC1 ON MAIN CAB HARNESS #21.53511

CONNECTS TO HY166 ON HYDRAULIC HARNESS #21.61152

CONNECTS TO CC2 ON MAIN CAB HARNESS #21.53511

CONNECTS TO EN347 ON ENGINE HARNESS #21.61022

CONNECTS TO CC3 ON MAIN CAB HARNESS #21.53511

CONNECTS TO EN153 ON ENGINE HARNESS #21.61022

CONNECTS TO INDICATOR LIGHTS HARNESS #21.53508

CONNECTS TO UF228 ON ULTRA FLOW HARNESS #21.52013 OR TO CM228 ON ULTRA FLOW HARNESS #21.53939

CONNECTS TO AR050 ON ARMREST HARNESS #21.52302

CONNECTS TO EI366 ON EGRESS LIGHTING HARNESS #21.52415

#21.520301

PREVIEW - YOUFIXTHIS.COM

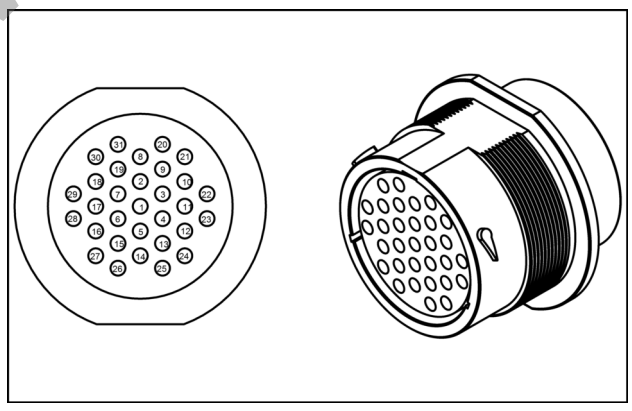
SAIS16SP00007JA 1

Download full manual at youfixthis.com

Wire connectors - Component diagram 00 - Connectors 1 through 9

CONNECTOR BM000 Center boom harness

PIN Number	Wire gauge/color	Circuit reference	Electrical schematic frame
1	18/PINK	BOOM 1	**SHEET 01**
2	18/PINK	BOOM 2	
3	18/PINK	BOOM 3	
4	18/PINK	BOOM 4	
5	18/PINK	BOOM 5	
6	—	—	
7	—	—	
8	—	—	
9	—	—	
10	—	—	
11	—	—	
12	—	—	
13	—	—	
14	—	—	
15	—	—	
16	—	—	
17	—	—	
18	—	—	
19	—	—	
20	—	—	
21	18/RED	PRES TRANS(+)	
22	18/SS	PRES TRANS(-)	
23	18/BLACK	PRS TRNS SIG	
24	18/RED	—	
25	—	—	
26	—	—	
27	14/RED	BOOM VLV 12V	
28	14/GREEN	GND 1	
29	18/BLACK	L FENCE	
30	18/BLACK	R FENCE	
31	18/PINK	BM BLOWOUT	



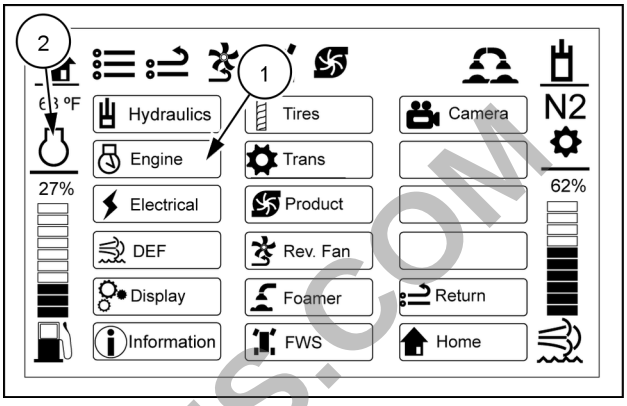
84400777 1

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

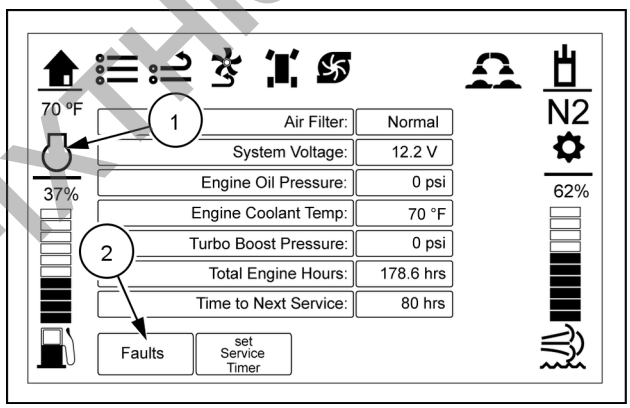
Engine Control Unit (ECU) - HB - Display stored fault codes

1. From the home screen touch the navigation icon. The List screen displays.
2. From the List screen touch the “Engine” button **(1)** from the list, or touch the engine icon **(2)** to the left of the “Engine” button.
   The Engine screen displays.



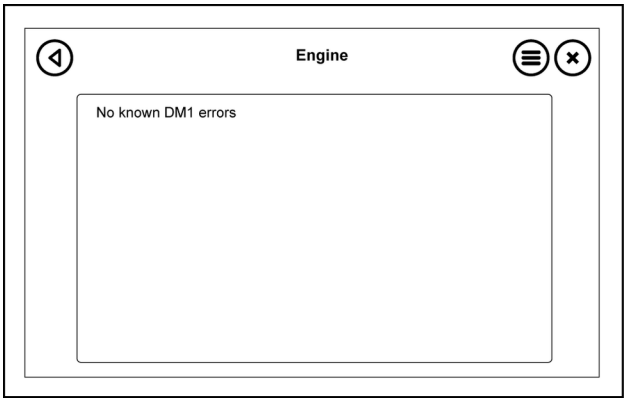
RAIL15SP00830AA 1

3. Touch the flashing engine icon **(1)**, or touch the “Faults” button **(2)** in order to display the Service Fault Number screen.
   The Service Fault Number screen displays.



RAIL15SP00832AA 2

4. The Service Fault Number screen will display the SPN, and the FMI numbers of the engine faults present on the machine.
   Use the following fault code table to diagnose the fault by finding the SPN or FMI number in the table.



RAIL15SP00834AA 3

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

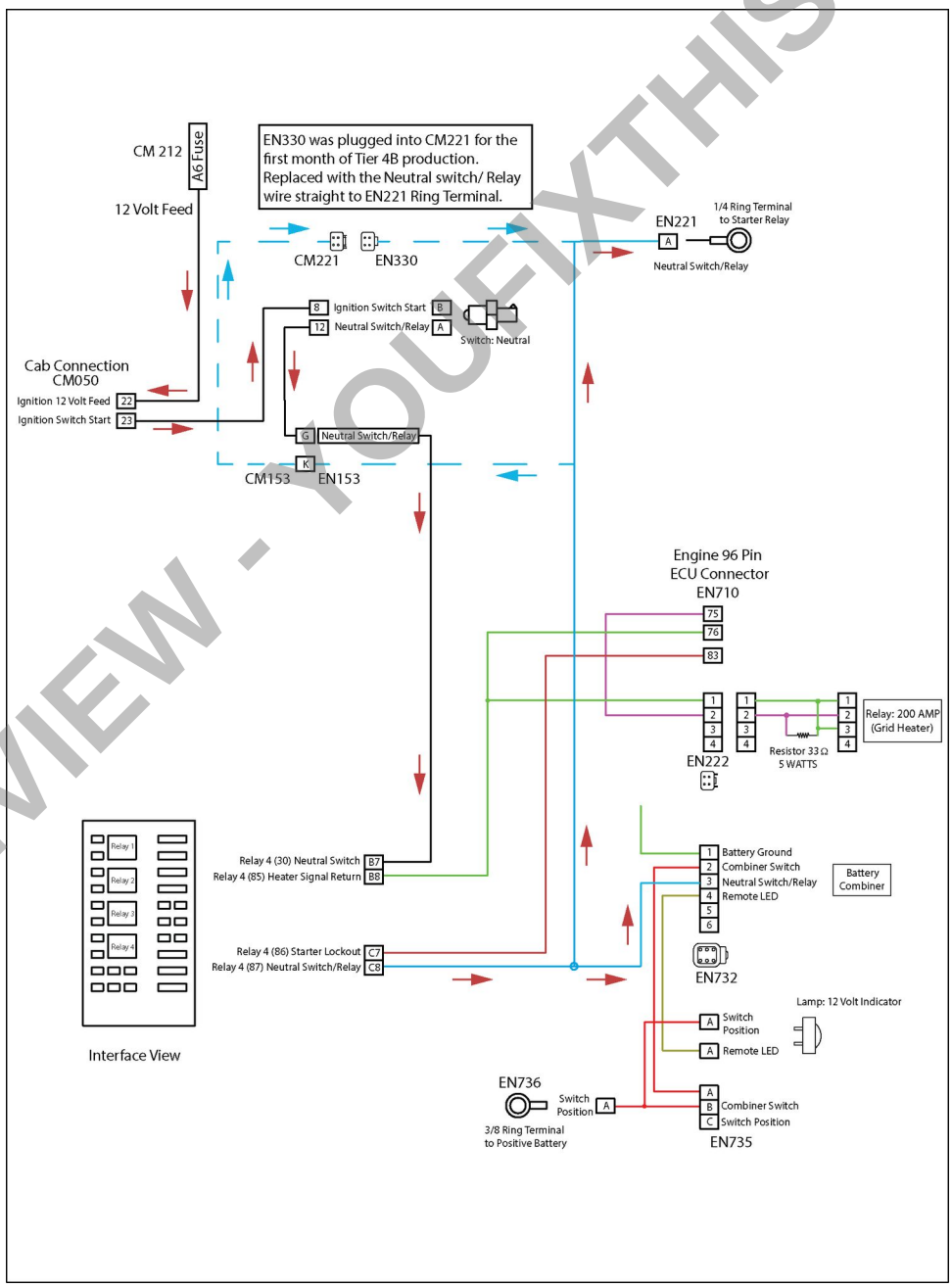
Engine starting system - Overview - Starter troubleshooting and circuit

Refer to the Cummins Engine Operation and Maintenance Manual for problems not covered in this manual.

Engine will not crank	Check that the drive control lever is in Neutral.
	Check that Neutral start switch is working properly.
	Check that starter relays are working properly.
Coolant temperature too high	Clean air inlet screens.
	Clean debris out of radiator, oil cooler, CAC, and AC condenser fins.
	Check coolant level.

STARTING CIRCUIT

Refer to the following illustration for circuit path of the starting system.

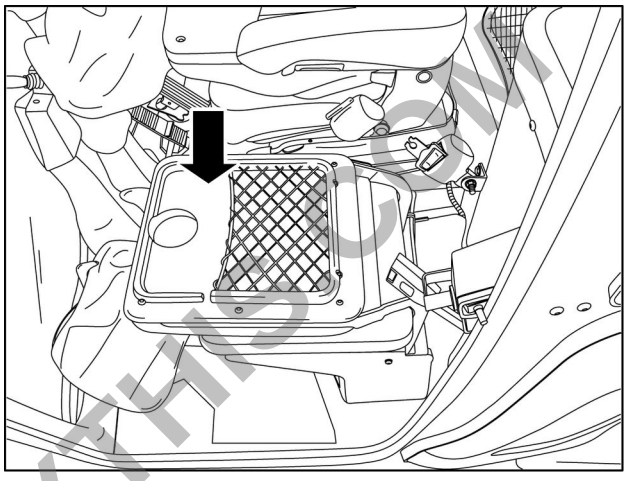


RAIL15SP00319HA 1

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

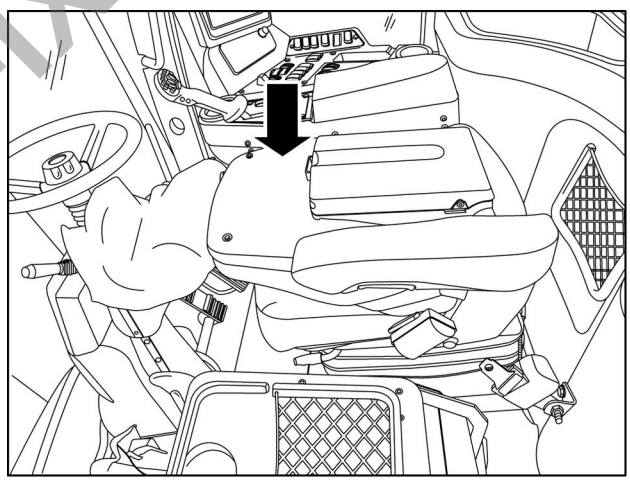
Blower - Remove - Pressurize blower motor

1. Move the machine to a hard and level surface.
2. Turn the ignition key to the “OFF” position.
3. Turn off the power to the batteries by turning the switch attached to the engine panel to the “OFF” position.
4. Fold the instructors seat down.



RAIL13SP04730AA 1

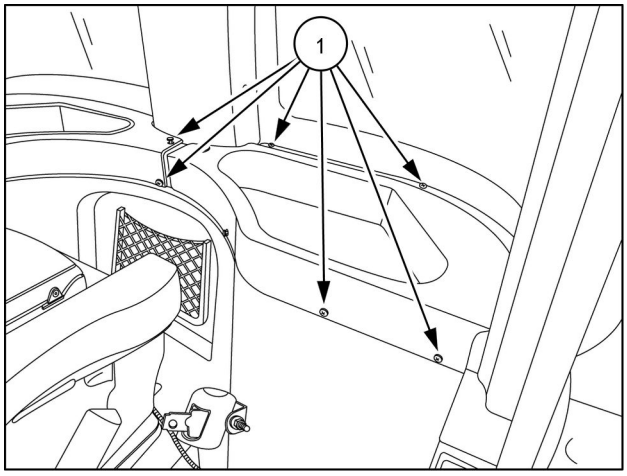
5. Fold the operator seat down.



RAIL13SP04724AA 2

6. Remove the upper rear panel mounting bolts **(1)** securing the upper rear panel to the back panel.
7. Place the upper rear panel to the side.

NOTE: *Be sure not to disconnect the electrical connections on the bottom side of the rear panel.*



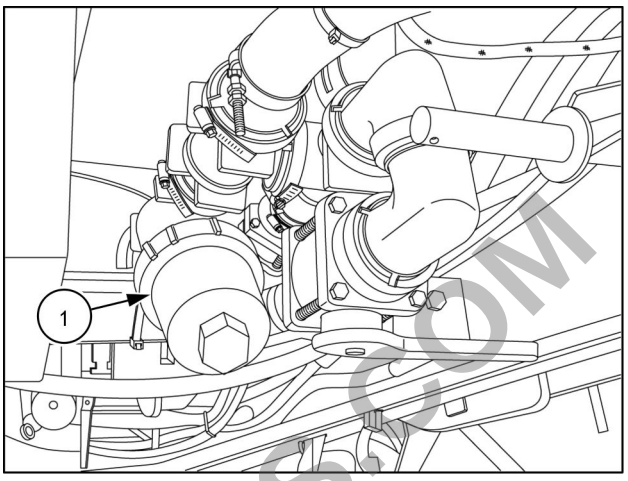
RAIL13SP04736AA 3

PREVIEW - YOUFIXTHIS.COM

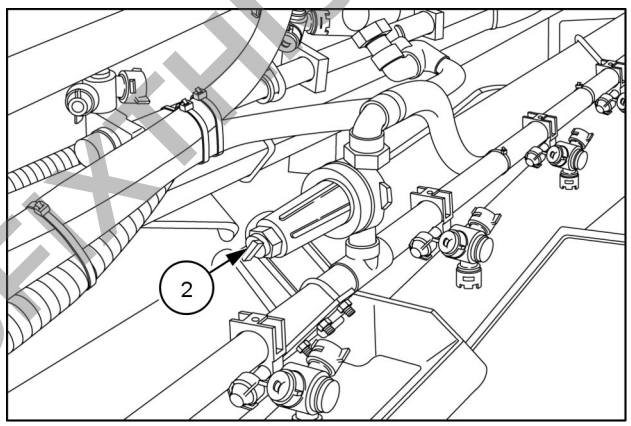
Download full manual at youfixthis.com

Chemical spraying - Overview - Sprayer overview

1. Confirm main product strainer **(1)** and boom strainers **(2)** are clean and free of undissolved powder, etc.



RAIL13SP03387AA 1



RAIL13SP03390AA 2

2. Check the following components and lines as indicated:

- Flow control valve (Switch to manual control and increase/decrease pressure to confirm operation)
- Intake of pump
- Impeller
- Monitor, for flow control operation
- Ball valves

  NOTE: *If the ball valves have been thermally tripped, the power to the ball valves must be disconnected for 20 seconds and then reconnected.*

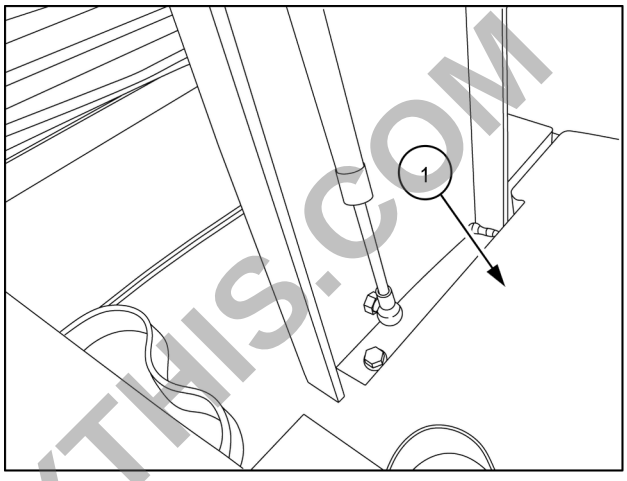
- Gauge, for correct operation

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

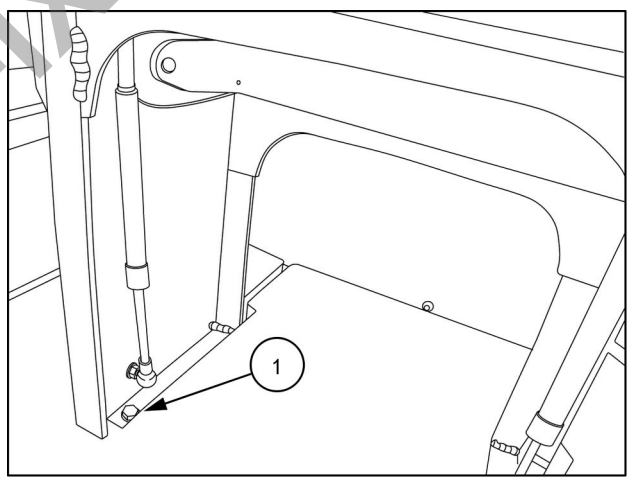
Instructional seat - Remove

1. Move the machine to a hard and level surface.
2. Turn the ignition key to the “OFF” position.
3. Fold the base of the instructional seat up in order to access the seat mounting bolts.
4. Fold the floor mat **(1)** back in order to remove the instructional seat from the interior of the cab.



RAIL13SP05154AA 1

5. Remove the two instructional seat mounting bolts **(1)** and remove the instructional seat from the interior of the cab.



RAIL13SP05152AA 2

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SPECIAL TOOL INDEX

Genuine	Reference	PAGE
380003396 [Assembly Pressing Tool]	Planetary drive and hub - Special tools	25.2 / 3
380003397 [Service Brake Test Plate]	Planetary drive and hub - Special tools	25.2 / 3
380003398 [Snap Ring Assembly Tool]	Planetary drive and hub - Special tools	25.2 / 4
380003399 [Sealing Ring And Piston Pressing Tool]	Planetary drive and hub - Special tools	25.2 / 4
380003401 [Roll Check & Leak Test Plate]	Planetary drive and hub - Special tools	25.2 / 4
380003396 [Assembly Pressing Tool]	Planetary drive and hub - Assemble	25.2 / 20
380003399 [Sealing Ring And Piston Pressing Tool]	Planetary drive and hub - Assemble	25.2 / 20
380003399 [Sealing Ring And Piston Pressing Tool]	Planetary drive and hub - Assemble	25.2 / 20
380003398 [Snap Ring Assembly Tool]	Planetary drive and hub - Assemble	25.2 / 21
380003399 [Sealing Ring And Piston Pressing Tool]	Planetary drive and hub - Assemble	25.2 / 21
380003397 [Service Brake Test Plate]	Planetary drive and hub - Assemble	25.2 / 21
380003401 [Roll Check & Leak Test Plate]	Planetary drive and hub - Test - Park brake	25.2 / 25
380003401 [Roll Check & Leak Test Plate]	Planetary drive and hub - Test - Service brake	25.2 / 27
380003401 [Roll Check & Leak Test Plate]	Planetary drive and hub - Test - Roll test	25.2 / 29
380003401 [Roll Check & Leak Test Plate]	Planetary drive and hub - Test - Leak test	25.2 / 31

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SEE ARMREST 21-523021 PAGE 2

SEE CRENLO CAB HARNESSES PAGE 3

SEE BOOM HARNESSES PAGE 4

SEE SUPER NODE HARNESS ON PAGE 4

See 4 Wheel Steer on page 4

SEE ENGINE HARNESS ON PAGE 2

CONNECTOR LOCATION
SEE CRENLO CAB HARNESS 21-523017

HARNESS: CHASSIS MAIN #21-523101

HARNESS: 21-523015 CAB TO LIFT CYLINDER #21-523030

HARNESS: 21-523016 CAB TO LIFT CYLINDER #21-523031

HARNESS: TRL CNT #21-523100

HARNESS: HYDRAULICS #21-523102

HARNESS: NTL CNT #21-523103

TO INJECTOR ON MACHINES W/O INJECTOR USE WHITE TERMINATOR #21-523039

PREVIEW - YOUFIXTHIS.COM

MILLER FRONT BOOM SPRAYER MODELS:
6300, 6345, 6500 Tier 4B with Planetary Drive
ELECTRICAL SCHEMATIC
SERIAL NUMBER 2116021 AND ABOVE
RAC 48048562

480485625S1S1

Download full manual at youfixthis.com

DRAWING AND DESCRIPTIONS OF SYMBOLS USED ON THIS DRAWING TO DIRECT VARIOUS FITTING USES ON THIS DRAWING

- HIGH PRESSURE SAE O-RING FACE SEAL TO MALE ORFS
- MALE - ORB to FEMALE SWIVEL ORFS STRAIGHT
- MALE - ORB ADJ to ORFS STRAIGHT
- MALE ORB PLUG
- MALE RUN TEE SWIVEL FEMALE ORFS to MALE ORFS
- FEMALE SWIVEL 90 DEG ORFS ELBOW TO ADJ MALE ORB
- 90 DEG LONG DROP ELBOW HOSE END
- 45 DEG ELBOW HOSE FITTING ADAPTER
- TEST POINT ADAPTOR TEE-MALE ORFS to FEMALE ORFS
- PRESSURE SWITCH
- HOSE CLAMP
- MALE RUN ELKHD TEE ADJ-ORFS to ORFS
- CLAMP
- MALE STR. ELKHD CONN-ORFS to ORFS
- 90 DEG SHORT DROP ELBOW HOSE END
- MALE 90 DEG ELBOW - MALE ORFS to FEMALE SWIVEL ORFS
- REDUCER
- MALE ADJ ORB 90 DEG ELBOW to MALE ORFS
- MALE RUN TEE-MALE ORFS (2) to FEMALE SWIVEL ORFS
- MALE 45 DEG ELBOW - MALE ORFS to FEMALE SWIVEL ORFS
- MALE ADJ ORB RUN TEE-MALE ORFS (2)
- UNION ORFS
- MALE ADJ ORB MALE ORFS RUN TEE
- MALE NPT TO MALE -ORB
- FEMALE NPT TO FEMALE -ORFS
- QUICK COUPLER FEMALE END
- QUICK COUPLER MALE END
- MALE RUN TEE ORFS to ORFS

IN CAB ATTACH OPTION

CYLINDER-STEERING
21.00342ZJ
21.00342ZJ
21.00342ZJ
21.46972ZJ
21.51203ZJ
21.46973ZJ
21.46979ZJ (2WS)
21.51676ZJ (4WS)
21.00361
21.00362
21.00327ZJ
21.00342ZJ
21.46977ZJ
21.43740ZJ
21.43741ZJ
LIFT CYL. 21.43263 (2)
21.00342ZJ
21.00342ZJ
CYLINDER-STEERING
STEERING CYL. 21.22388 (2)
21.24021ZJ
21.24022ZJ

REV FAN OPTION

REV FAN MOTOR 21.62104
21.00310ZJ
21.62024ZJ
3480 PSI
21.003202J
3480 PSI
21.62022ZJ
21.62020ZJ
21.00312ZJ

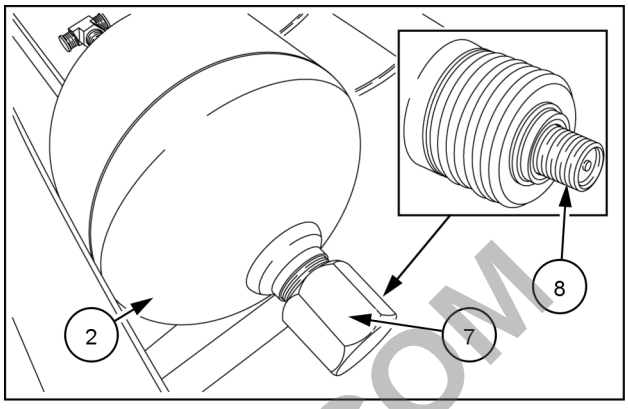
21.46975ZJ
21.46978ZJ
21.00325ZJ
INCL W/ MANIFOLD
21.46974ZJ
21.00314ZJ
STEERING VALVE 21.23186
BRAKE PEDAL 21.61899
Return to Hyd Res See Propel Diagram 21.61908
21.00320ZJ
To Wheel Drives See Propel Diagram 21.61908
21.22070ZJ
NO CHECK VALVE
21.51496
21.00315ZJ
21.418442J
SUSPENSION CYL. 21.44080 (4)
21.00327ZJ (7)
21.22065ZJ
21.00320ZJ
21.00318ZJ
ACCUMULATOR 85CC 21.31537
1400 PSI ±25 PRECHARGE
21.00300ZJ (2)
21.51609
21.00327ZJ (4)
21.22075ZJ
21.00327ZJ (4)
21.42188ZJ
21.30069ZJ
21.42187ZJ
44.03097ZJ
21.418422J
21.42179ZJ
21.42188ZJ
21.42187ZJ
44.03097ZJ
21.418422J
250 PSI ±25 PRECHARGE
ORIFICE 21.21263
21.00342ZJ
21.00342ZJ
21.42115ZJ
21.47323ZJ
21.00300ZJ
21.00349ZJ
21.00300ZJ
21.00327ZJ (3)
21.51146
ORIFICE DISK 907771
PRECHARGE: 80'-90'-100' BOOM 650 PSI ±25 120' BOOM 1200 ±25
ACCUMULATOR 85CC 21.31537
21.00300ZJ
PLUGS INCL W/ VALVE
21.00325ZJ
21.00320ZJ
21.00320ZJ
21.00319ZJ
21.00324ZJ
LEG WIDENING VALVE 32.05267 (2)
21.00319ZJ
21.00324ZJ
21.00347ZJ
LF CYLINDER
21.00319ZJ
LEG WIDE CYL. 21.40742 (4)
LR CYLINDER
21.00347ZJ
RF CYLINDER
21.00319ZJ
21.00324ZJ
21.00319ZJ
21.00314ZJ
21.00342ZJ
21.00324ZJ
21.00319ZJ
21.00346ZJ
21.00327ZJ
PUMP ISTDI 21.43784
SEE LOWER LEFT FOR LARGE PUMP
TO CASE DRAIN SEE PROPEL CIRCUIT
21.434922J
44.03098ZJ
21.43312ZJ
FLOW CONTROL VALVE 21.51125
21.00302ZJ
21.24835ZJ
21.00332ZJ
21.00320ZJ
INC W/ VALVE
3400 PSI ±100
PILOT RATIO 3.1
2300 PSI ±100
21.00302ZJ
21.00327ZJ
21.00346ZJ
21.00320ZJ
21.00310ZJ
21.00346ZJ
21.00318ZJ
21.00342ZJ
21.22075ZJ
21.620197J
Supply to Park Brake Valve See Propel Diagram 21.61908
21.24022ZJ
21.240212J
21.22280ZJ
VALVE- INTEGRATED 21.40618
907659
21.42188ZJ
21.30069ZJ
21.42187ZJ
44.03097ZJ
21.42188ZJ
21.418442J
21.00315ZJ
SUSPENSION VALVE 21.53814 (2)
21.00325ZJ
SUSPENSION ACCUMULATOR 21.41610 (4)
250 PSI ±25 PRECHARGE
21.00342ZJ
21.42115ZJ
21.47323ZJ
21.00342ZJ
21.00300ZJ
PLUGS INCL W/ VALVE
ORIFICE 21.21263
250 PSI ±25 PRECHARGE
21.418422J
21.00325ZJ
21.00300ZJ
21.00325ZJ
21.00300ZJ
21.00325ZJ
21.00300ZJ

Steering 41
[41.101] Steering control 41.1
[41.216] Cylinders 41.2
Wheels 44
[44.511] Front wheels 44.1
[44.520] Rear wheels 44.2
Cab climate control 50
[50.100] Heating 50.1
[50.104] Ventilation 50.2
[50.200] Air conditioning 50.3
Electrical systems 55
[55.000] Electrical system 55.1
[55.100] Harnesses and connectors 55.2
[55.015] Engine control system 55.3
[55.201] Engine starting system 55.4
[55.301] Alternator 55.5
[55.302] Battery 55.6
[55.640] Electronic modules 55.7
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system 55.8
[55.047] Steering control system 55.9
Spraying 78
[78.110] Chemical spraying 78.1
[78.111] Spraying pump 78.2
[78.120] Foam marking system 78.3
Platform, cab, bodywork, and decals 90
[90.151] Cab interior 90.1
[90.120] Mechanically-adjusted operator seat 90.2

PREVIEW - YOUFIXTHIS.COM

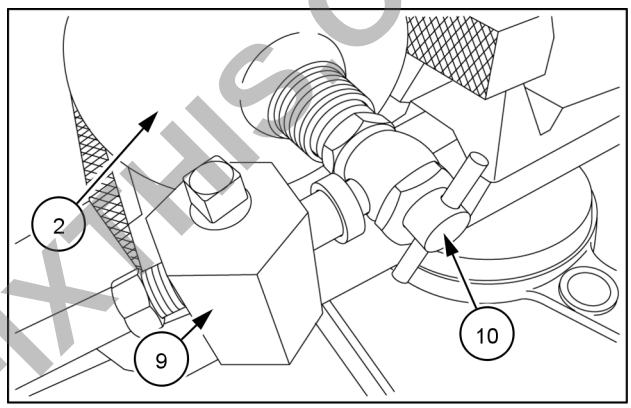
Download full manual at youfixthis.com

5. Remove metal protector cap **(7)** on opposite end of accumulator **(2)**, exposing inflator nipple **(8)**.



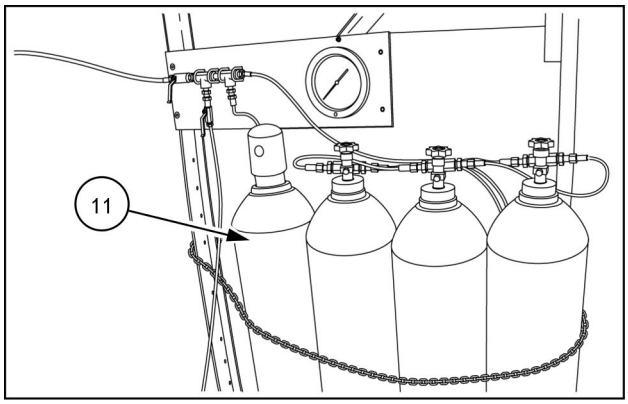
RAIL13SP03453AA 17

6. Attach air line coupler **(9)** onto inflator nipple of accumulator **(2)** and turn core pusher **(10)** clockwise to open accumulator to nitrogen gas supply through gas supply hose.



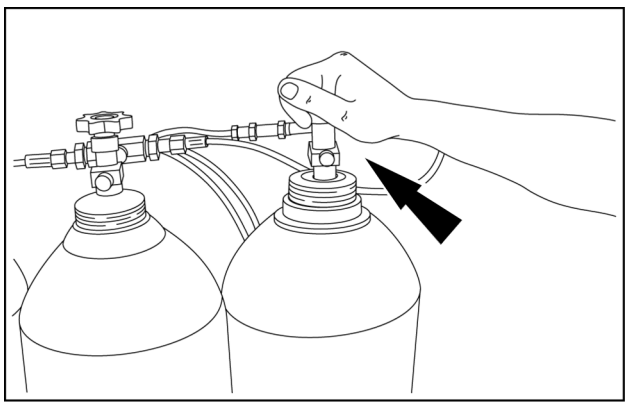
RAIL13SP03455AA 18

7. Use the dry nitrogen gas manifold system **(11)** to fill the accumulator.



RAIL13SP03456AA 19

8. Slowly open appropriate bottle to fill accumulator. Deplete nitrogen in lower pressure bottles first, until flow of nitrogen slows or stops. Close that bottle and finish filling accumulator to appropriate pressure setting with another nitrogen bottle with higher psi content.



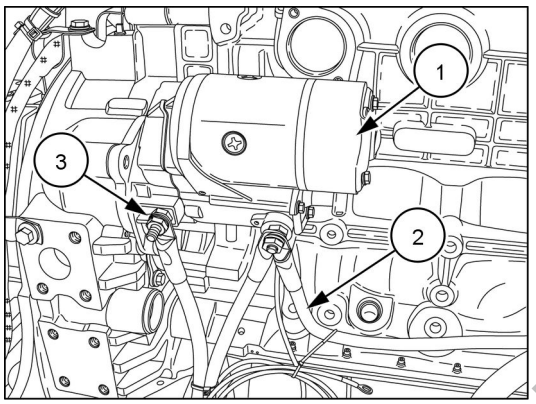
RAIL13SP03474AA 20

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

STARTING CIRCUIT

The start system begins with a 12 volt feed into the ignition switch. When the key is turned, the 12 volt signal runs from the cab harness to the neutral start switch and the neutral start relay. From the relay the 12 volt signal runs to the auxiliary fuse panel. From the fuse panel the 12 volts runs to the battery combiner switch and to the starter relay to initiate engine cranking.



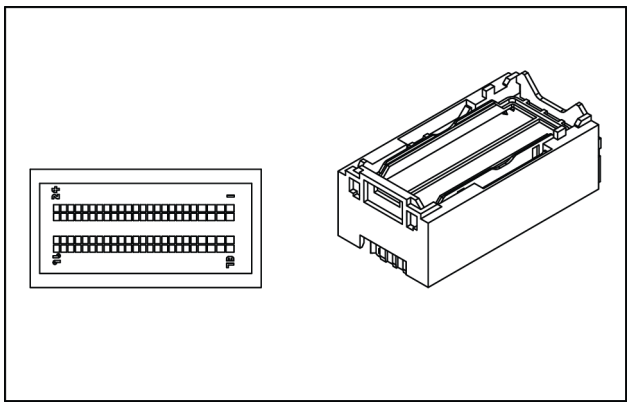
RAIL14SP00107AA 35

Item	Description
1	Starter Motor
2	Power cable from 100 Amp Relay
3	Ground Cable

Refer to the following illustration for circuit path of the starting system.

PREVIEW - YOUFIXTHIS.COM

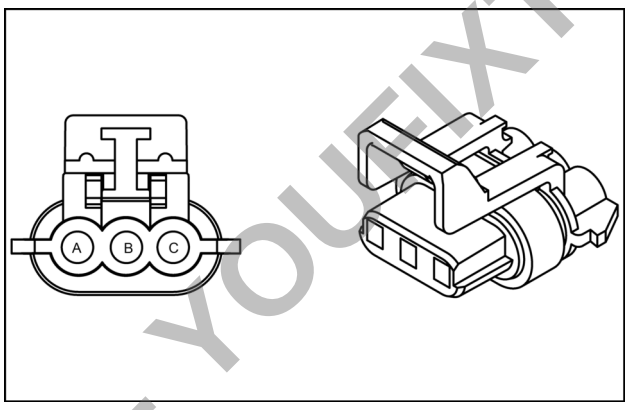
Download full manual at youfixthis.com



21-61858 1

CONNECTOR EN712 Engine harness to deareation tank

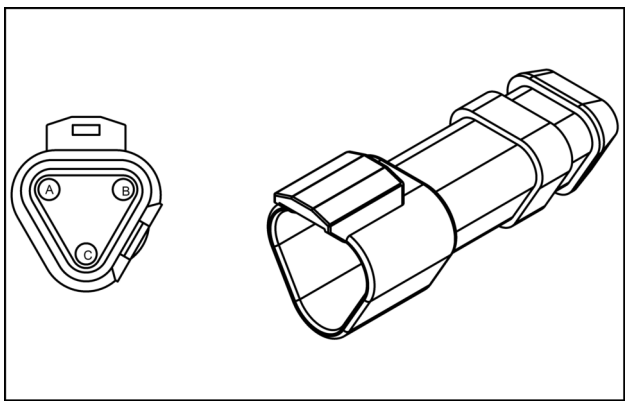
PIN Number	Wire gauge/color	Circuit reference	Electrical schematic frame
A	18/RED	5V SENSOR PWR	
B	18/GREEN	COOLANT LVL SIG	
C	18/BLACK	OEM SENSOR GD	



87693712 2

CONNECTOR EN713 Engine harness to DEF CAN HI/LO

PIN Number	Wire gauge/color	Circuit reference	Electrical schematic frame
A	18 J1939/YELLOW	DEF CAN HI	
B	18 J1939/GREEN	DEF CAN LO	
C	—	—	



87700816 3

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 25 of 1001 pages

The full manual includes:

- All 1001 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Miller Nitro 6300, 6345, 6500 Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual