

PT240
Tier 3
Pneumatic Line Roller

SERVICE MANUAL

Part number 47703681
2nd edition English
September 2015
Replaces part number 84287260A



Contents

INTRODUCTION

Engine.....	10
[10.414] Fan and drive	10.1
[10.400] Engine cooling system	10.2
[10.001] Engine and crankcase	10.3
Transmission.....	21
[21.118] Transmission/Rear drive	21.1
Front axle system	25
[25.400] Non-powered front axle	25.1
Rear axle system.....	27
[27.100] Powered rear axle.....	27.1
[27.124] Final drive hub, steering knuckles, and shafts	27.2
Brakes and controls	33
[33.300] Pneumatic service brakes.....	33.1
[33.110] Parking brake or parking lock	33.2
Hydraulic systems.....	35
[35.000] Hydraulic systems.....	35.1
[35.300] Reservoir, cooler, and filters.....	35.2
Pneumatic system	36
[36.100] Pneumatic system.....	36.1
Frames and ballasting	39
[39.500] Vibratory roller.....	39.1
Steering.....	41
[41.101] Steering control	41.1
[41.106] Tie rods.....	41.2

[41.200] Hydraulic control components.....	41.3
[41.206] Pump.....	41.4
[41.216] Cylinders.....	41.5
Wheels.....	44
[44.511] Front wheels.....	44.1
[44.520] Rear wheels.....	44.2
Cab climate control.....	50
[50.104] Ventilation.....	50.1
[50.200] Air conditioning.....	50.2
Electrical systems.....	55
[55.000] Electrical system.....	55.1
[55.100] Harnesses and connectors.....	55.2
[55.525] Cab engine controls.....	55.3
[55.201] Engine starting system.....	55.4
[55.301] Alternator.....	55.5
[55.302] Battery.....	55.6
[55.011] Fuel tank system.....	55.7
[55.640] Electronic modules.....	55.8
[55.512] Cab controls.....	55.9
[55.408] Warning indicators, alarms, and instruments.....	55.10
[55.DTC] FAULT CODES.....	55.11
Tools.....	89
[89.165] Water kit.....	89.1
Platform, cab, bodywork, and decals.....	90
[90.150] Cab.....	90.1
[90.114] Operator protections.....	90.2
[90.100] Engine hood and panels.....	90.3

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>



INTRODUCTION

Foreword - Important notice regarding equipment servicing

All repair and maintenance work listed in this manual must be carried out only by qualified dealership personnel, strictly complying with the instructions given, and using, whenever possible, the special tools.

Anyone who performs repair and maintenance operations without complying with the procedures provided herein shall be responsible for any subsequent damages.

The manufacturer and all the organizations of its distribution chain, including - without limitation - national, regional, or local dealers, reject any responsibility for damages caused by parts and/or components not approved by the manufacturer, including those used for the servicing or repair of the product manufactured or marketed by the manufacturer. In any case, no warranty is given or attributed on the product manufactured or marketed by the manufacturer in case of damages caused by parts and/or components not approved by the manufacturer.

The manufacturer reserves the right to make improvements in design and changes in specifications at any time without notice and without incurring any obligation to install them on units previously sold. Specifications, descriptions, and illustrative material herein are as accurate as known at time of publication but are subject to change without notice.

In case of questions, refer to your CASE CONSTRUCTION Sales and Service Networks.

Safety rules


Personal safety





This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

Throughout this manual you will find the signal words DANGER, WARNING, and CAUTION followed by special instructions. These precautions are intended for the personal safety of you and those working with you.

Read and understand all the safety messages in this manual before you operate or service the machine.

 DANGER indicates a hazardous situation that, if not avoided, will result in death or serious injury.

 WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.

 CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

FAILURE TO FOLLOW DANGER, WARNING, AND CAUTION MESSAGES COULD RESULT IN DEATH OR SERIOUS INJURY.

Machine safety

NOTICE: Notice indicates a situation that, if not avoided, could result in machine or property damage.

Throughout this manual you will find the signal word Notice followed by special instructions to prevent machine or property damage. The word Notice is used to address practices not related to personal safety.

Information

NOTE: Note indicates additional information that clarifies steps, procedures, or other information in this manual.

Throughout this manual you will find the word Note followed by additional information about a step, procedure, or other information in the manual. The word Note is not intended to address personal safety or property damage.

Safety rules - Personal safety

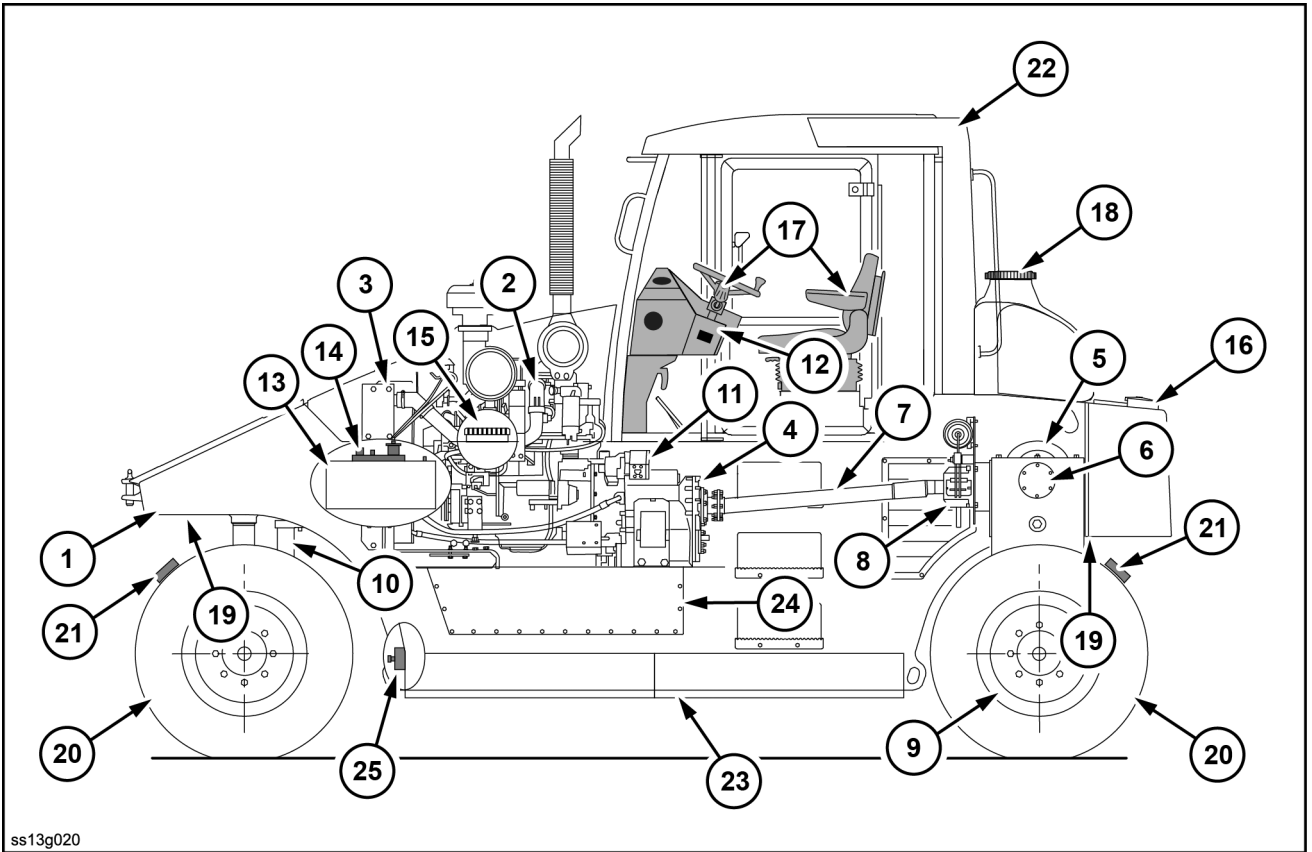
Carefully study these precautions, and those included in the external attachment operators manual, and insist that they be followed by those working with and for you.

1. Thoroughly read and understand this manual and the attachment Operator's Manual before operating this or any other equipment.
2. Be sure all people and pets are clear of the machine before starting. Sound the horn, if equipped, three times before starting engine.
3. Only the operator should be on the machine when in operation. Never allow anyone to climb on to the machine while it is in motion. If the machine is equipped with an Instructors Seat, this must only be used for training purposes. Passengers must not be allowed to use the Instructors Seat.
4. Keep all shields in place. Never work around the machine or any of the attachments while wearing loose clothing that might catch on moving parts.
5. Observe the following precautions whenever lubricating the machine or making adjustments.
 - Disengage all clutching levers or switches.
 - Lower the attachment, if equipped, to the ground or raise the attachment completely and engage the cylinder safety locks. Completing these actions will prevent the attachment from lowering unexpectedly.
 - Engage the parking brake.
 - Shut off the engine and remove the key.
 - Wait for all machine movement to stop before leaving the operators platform.
6. Always keep the machine in gear while travelling downhill.
7. The machine should always be equipped with sufficient front or rear axle weight for safe operation.
8. Under some field conditions, more weight may be required at the front or rear axle for adequate stability. This is especially important when operating in hilly conditions or/when using heavy attachments.
9. Always lower the attachment, shut off the engine, set the parking brake, engage the transmission gears, remove the key and wait for all machine movement to stop before leaving the operators platform.
10. If the attachment or machine should become obstructed or plugged; set the parking brake, shut off the engine and remove the key, engage the transmission gears, wait for all machine or attachment motion to come to a stop, before leaving the operators platform to removing the obstruction or plug.
11. Never disconnect or make any adjustments to the hydraulic system unless the machine and/or the attachment is lowered to the ground or the safety lock(s) is in the engaged position.
12. Use of the flashing lights is highly recommended when operating on a public road.
13. When transporting on a road or highway, use accessory lights and devices for adequate warning to the operators of other vehicles. In this regard, check local government regulations. Various safety lights and devices are available from your CASE CONSTRUCTION dealer.
14. Practice safety 365 days a year.
15. Keep all your equipment in safe operating condition.
16. Keep all guards and safety devices in place.
17. Always set the parking brake, shut off the engine and remove the key, engage the transmission gears, wait for all machine or attachment motion to come to a stop, before leaving the operators platform to service the machine and attachment.
18. Remember: A careful operator is the best insurance against an accident.
19. Extreme care should be taken in keeping hands and clothing away from moving parts.

Part identification

PT240

LA --- NA ---



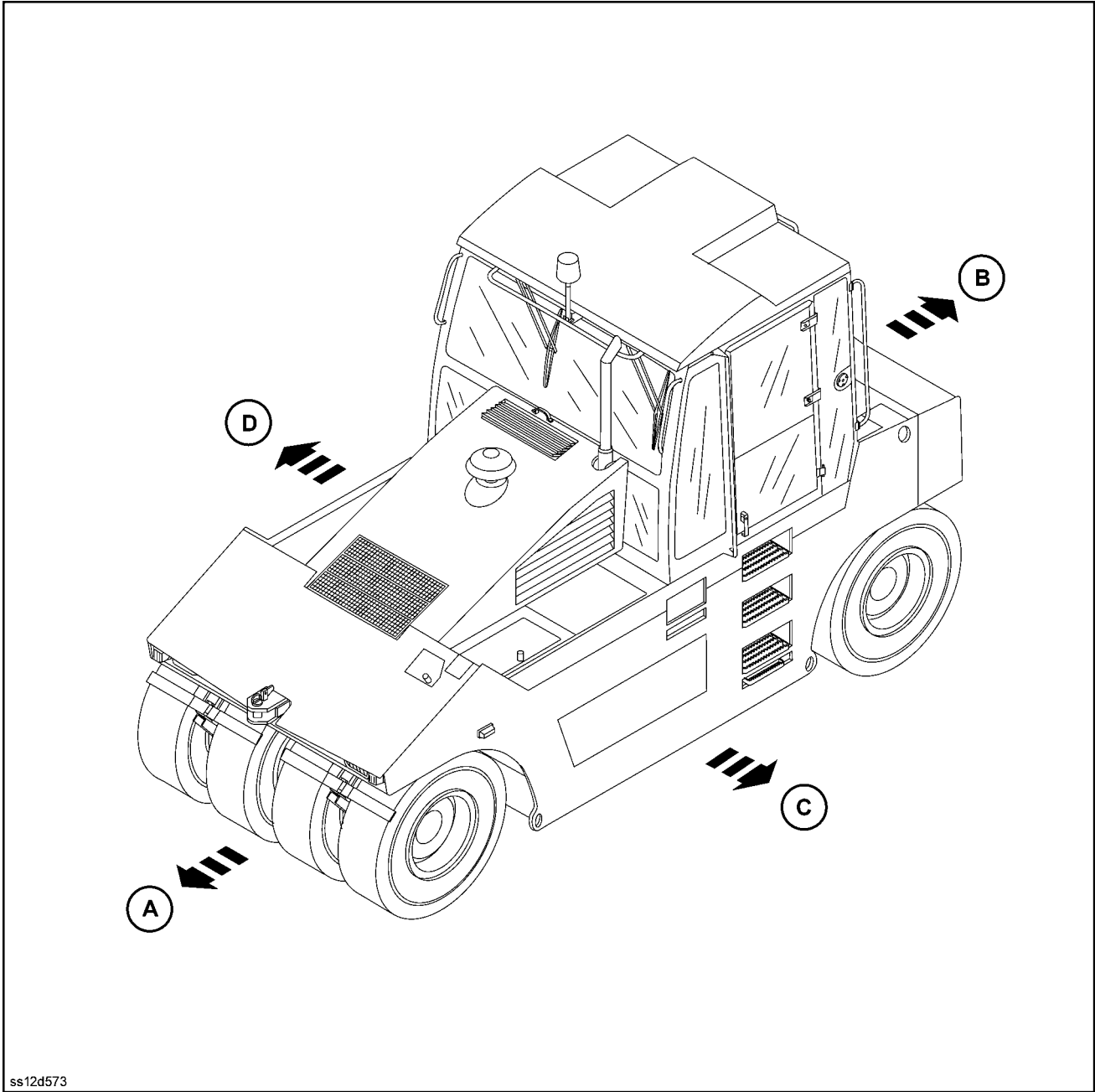
SS13G020 1

Pos.	Designation	Pos.	Designation
1	Roller frame	14	Hydraulic tank (right side of cylinder)
2	Engine	15	*Additional water weight closure
3	Engine radiator, hydraulic circuit cooler, and transmission cooler	16	Fuel tank
4	Transmission including torque converter	17	Operator's control stand
5	Final drive housing including differential	18	Sprinkling tank
6	Final transmissions	19	Tire sprinkling
7	Propeller shaft	20	Wheels
8	Parking and emergency brake	21	Scrapers
9	Service brake (rear wheels only)	22	Roll Over Protective Structure (ROPS) frame
10	Front axle including telescopic cylinders	23	Additional weight
11	Compressor drive pump	24	Ballast space lids
12	Power steering	25	Additional water weight drain
13	Battery (left side of cylinder)		

Product identification

PT240 | LA --- NA ---

As used in this manual, the terms right, left, front, and rear indicate the sides of the machine as seen from the operator's seat.



ss12d573

SS12D573 1

Pos.	Designation	Pos.	Designation
A	Front	C	Left
B	Rear	D	Right



SERVICE MANUAL

Engine

PT240

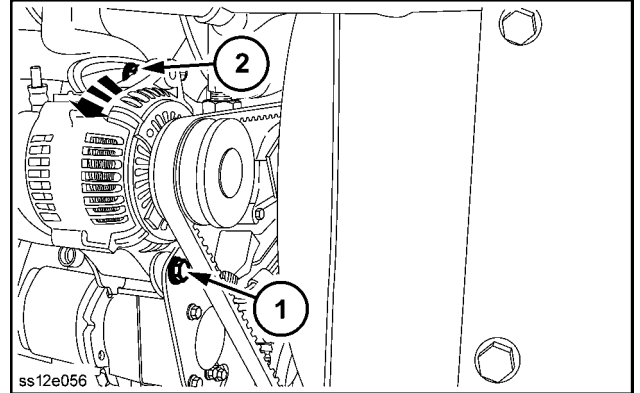
Belt - Replace

⚠ WARNING

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

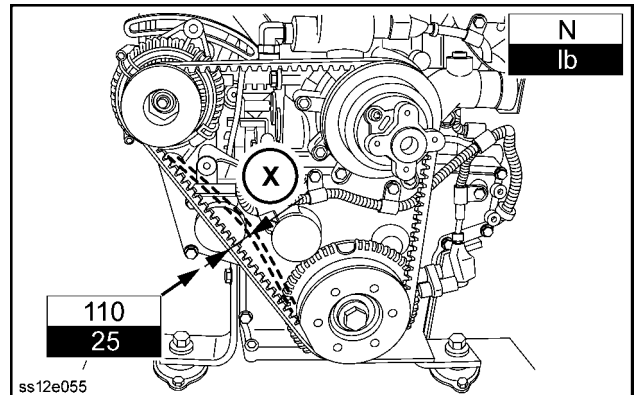
W0251A

1. Stop the engine.
2. Loosening the bolt for the alternator holder (1) and tensioning arm (2).
3. Push the alternator towards the engine.
4. Remove the old belt, and install the new belt.



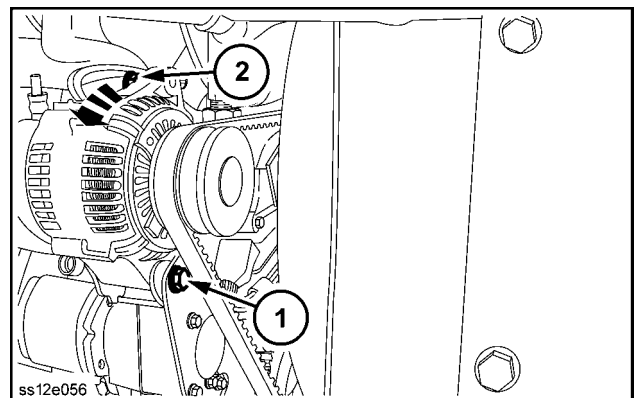
SS12E056 1

5. Using your hand, press the belt in the longest spot between pulleys (30.00 cm (11.81 in)) with approximately 110 N (25 lb) of force.
6. If slack (X) is excessive, tighten the belt by pulling the alternator away from the engine.



SS12E055 2

7. Once the belt tightness is within specification (see image 2), torque bolt (1) to 66 N·m (49 lb ft) and torque bolt (2) to 31 N·m (23 lb ft).



SS12E056 3

Engine - Drain fluid

⚠ WARNING

Burn hazard!

Do not handle any service fluid (engine coolant, engine oil, hydraulic oil, etc.) at temperatures that exceed 49 °C (120 °F). Allow fluids to cool before proceeding.

Failure to comply could result in death or serious injury.

W0330B

⚠ WARNING

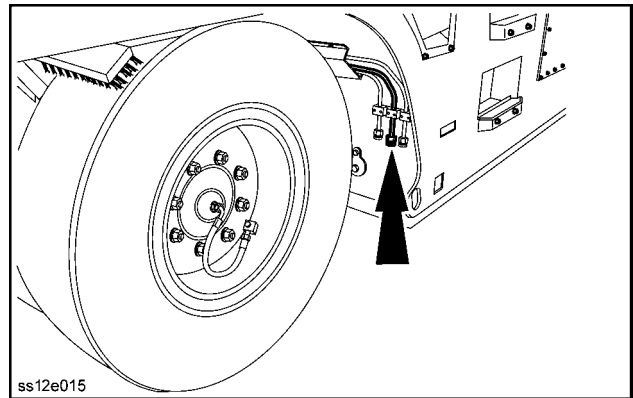
Chemical hazard!

When handling fuel, lubricants, and other service chemicals, follow the manufacturer's instructions. Wear Personal Protective Equipment (PPE) as instructed. Do not smoke or use open flame. Collect fluids in proper containers. Obey all local and environmental regulations when disposing of chemicals.

Failure to comply could result in death or serious injury.

W0371A

1. Remove the drain plug and let the oil flow out into a container with a capacity of approximately **9 L (2.38 US gal)**.
2. Reinstall the drain plug. Tighten to **80 N·m (59 lb ft)**.



SS12E015 1

Engine - Remove

Prior operation:

Remove the water tank.

Prior operation:

Remove the front cover and hood.

Prior operation:

Remove the cab.

Prior operation:

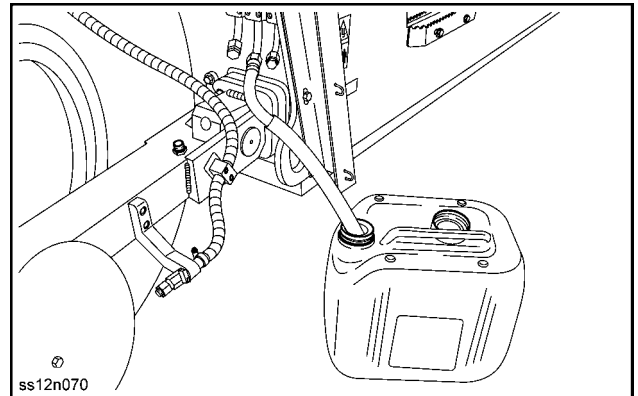
Remove the front panel.

Prior operation:

Remove the ROPS (refer to **Operator protections - Remove (90.114)**).

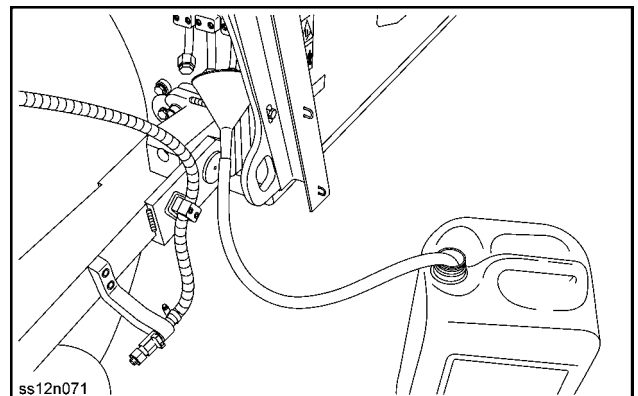
NOTE: For more details, refer to **Engine - Component identification (10.001)**.

1. Drain the engine oil.



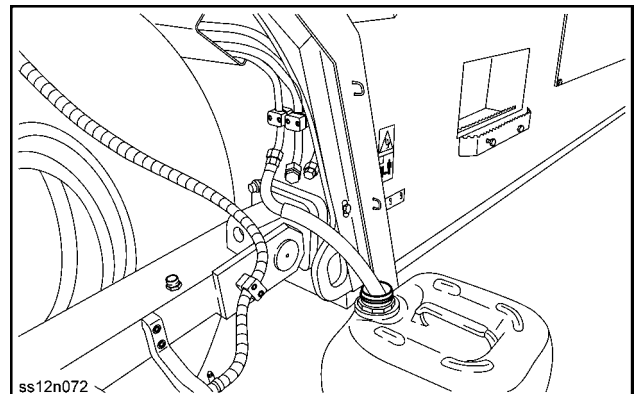
SS12N070 1

2. Drain the coolant.



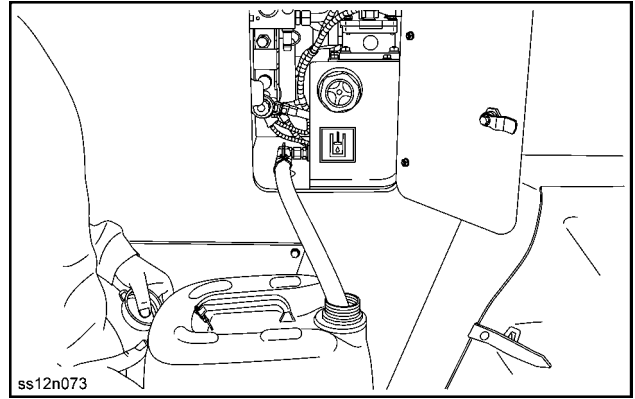
SS12N071 2

3. Drain the transmission fluid.



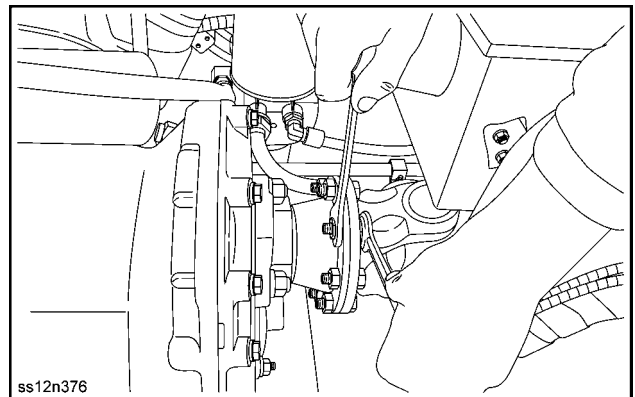
SS12N072 3

4. Drain the hydraulic oil.



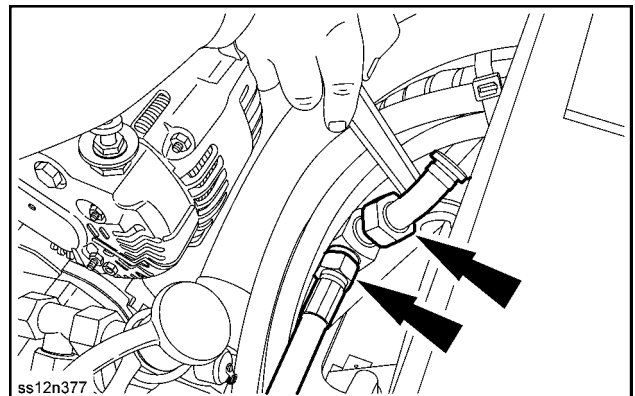
SS12N073 4

5. Remove the bolts connecting the shaft to the transmission.



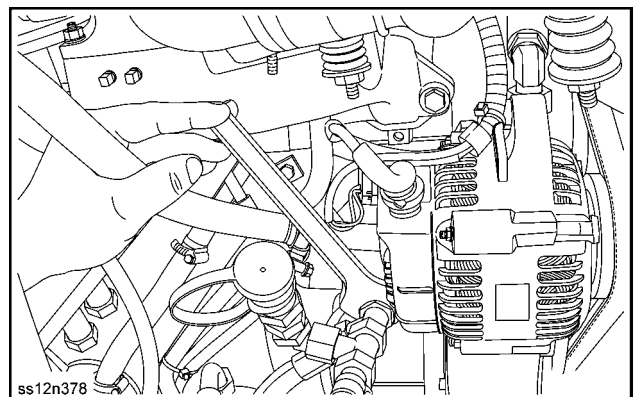
SS12N376 5

6. Detach the hydraulic oil hoses.



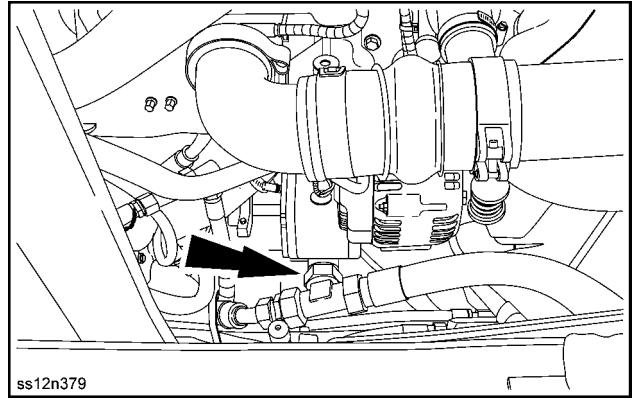
SS12N377 6

7. Remove the pump discharge hose.



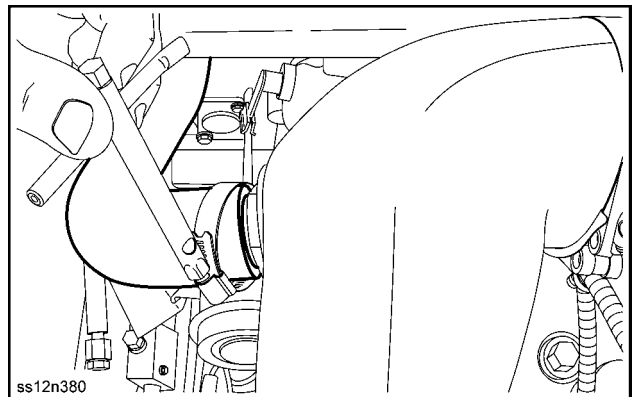
SS12N378 7

8. Remove and plug the suction hose.



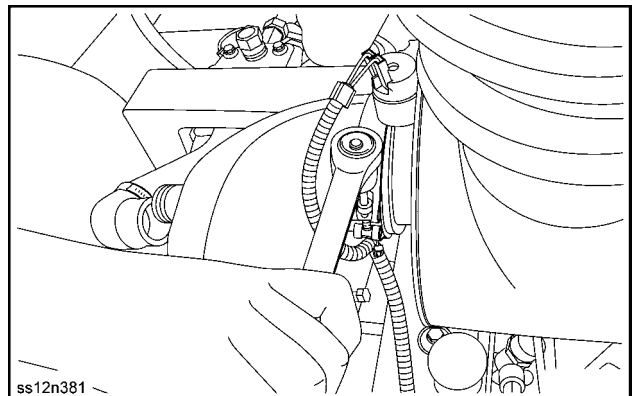
SS12N379 8

9. Remove the compressor suction hose.



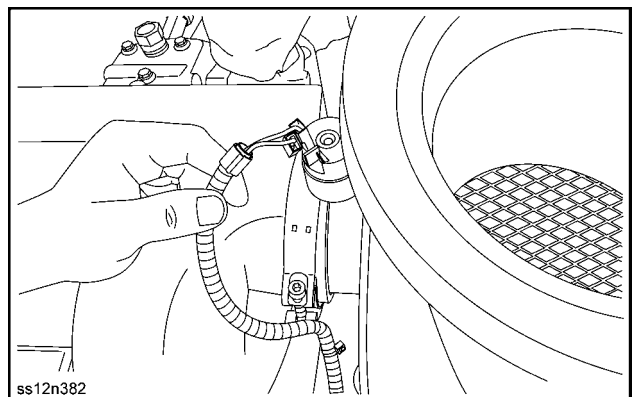
SS12N380 9

10. Remove the engine air intake pipe.



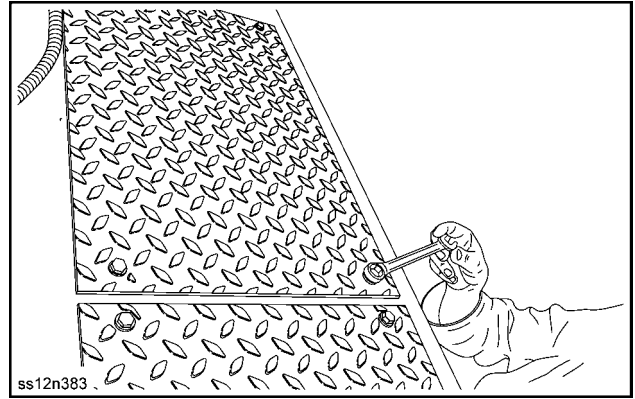
SS12N381 10

11. Disconnect the vacuum switch connectors.



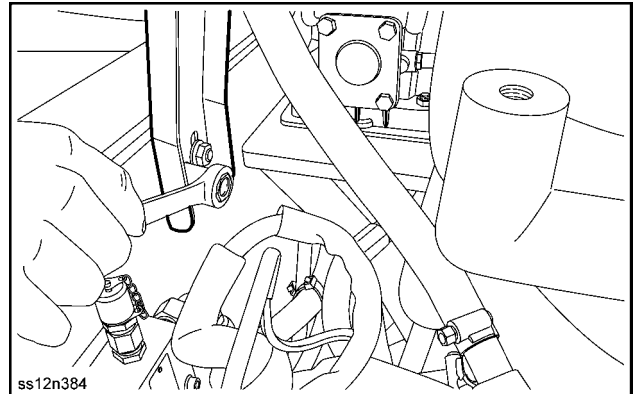
SS12N382 11

12. Remove the covers along both sides.

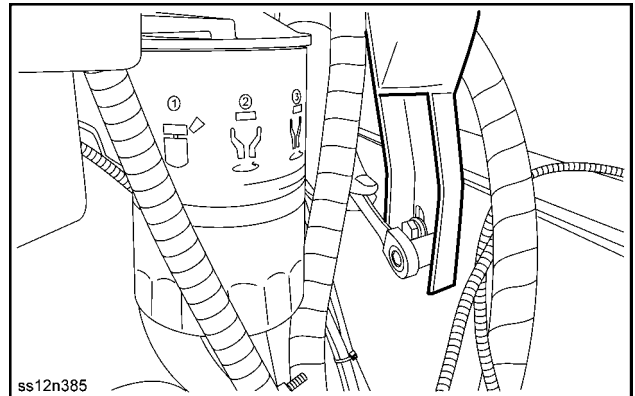


SS12N383 12

13. Remove the air filter holder brackets.

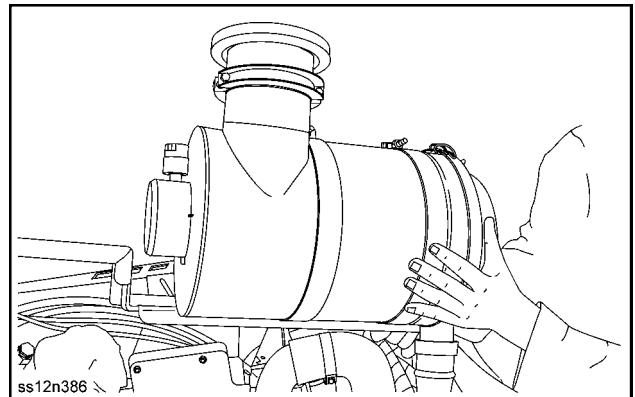


SS12N384 13



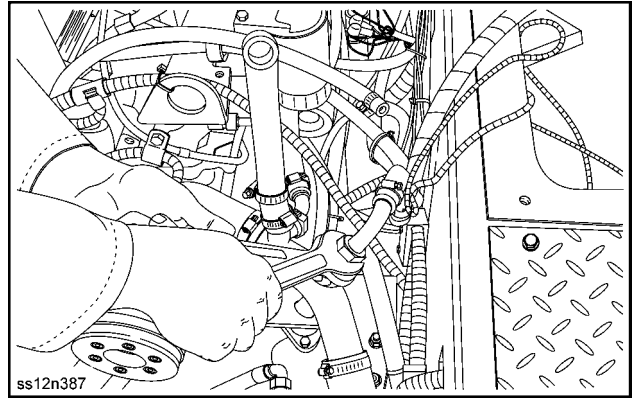
SS12N385 14

14. Remove the filter.



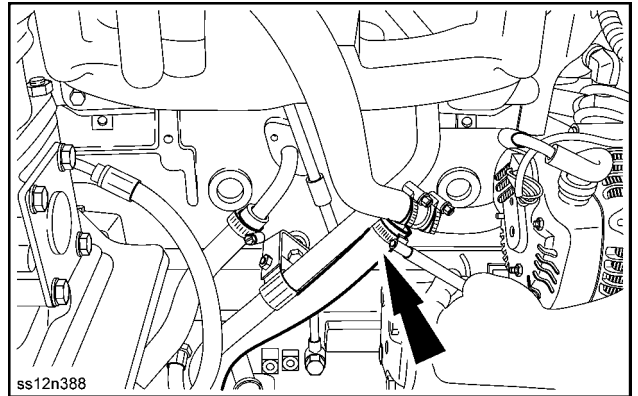
SS12N386 15

15. Remove the heater hose – left-hand side.



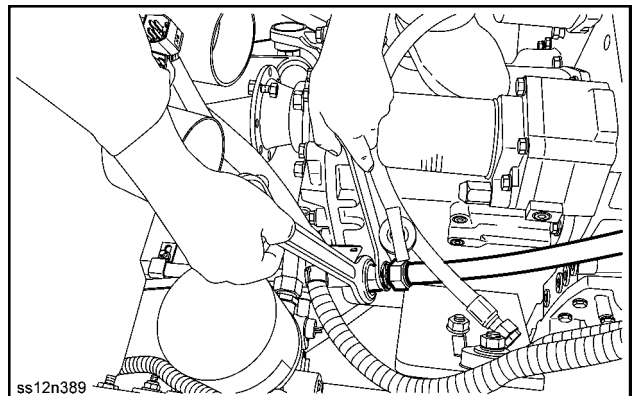
SS12N387 16

16. Remove the heater hose – right-hand side.



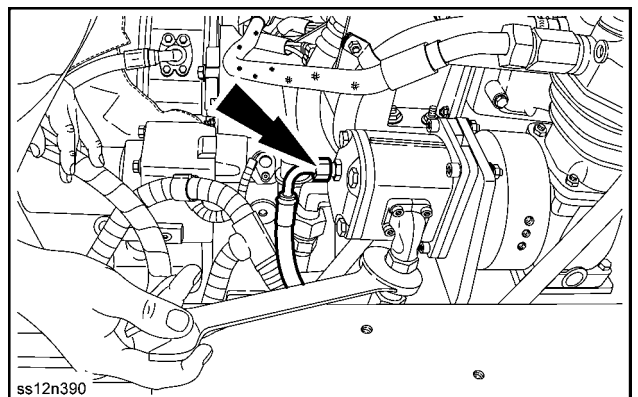
SS12N388 17

17. Remove the pipe running from the compressor to the radiator.



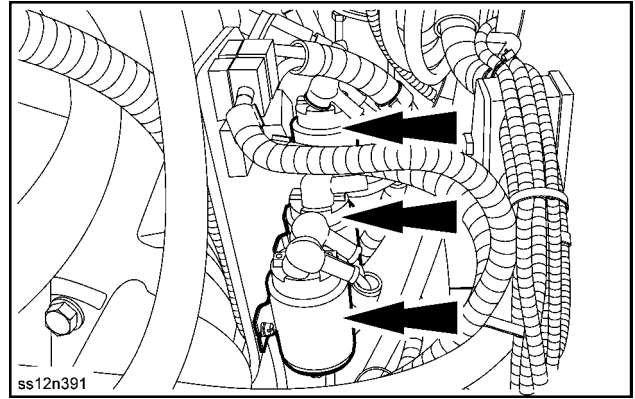
SS12N389 18

18. Remove the hydraulic pump pipe for the compressor drive.



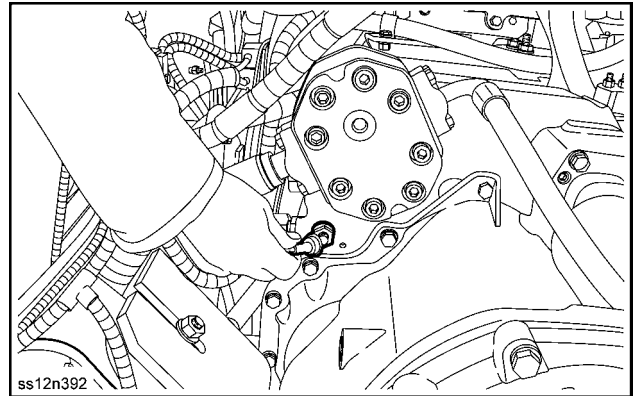
SS12N390 19

19. Disconnect the contactor wiring; mark it according to the wiring diagram.



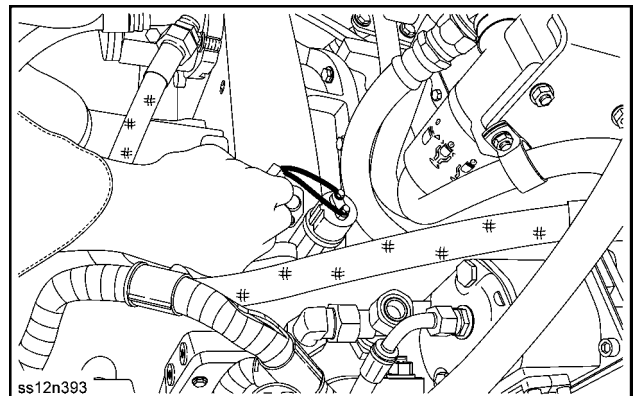
SS12N391 20

20. Disconnect the transmission air temperature sensor.



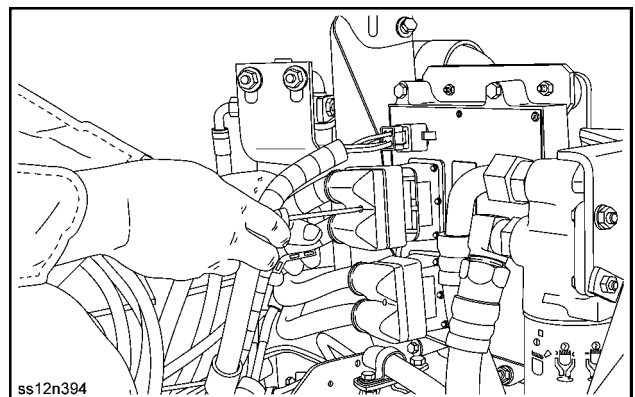
SS12N392 21

21. Disconnect the transmission pressure sensor.



SS12N393 22

22. Disconnect the control unit wiring.



SS12N394 23



Suggest:

If the above button click is invalid.

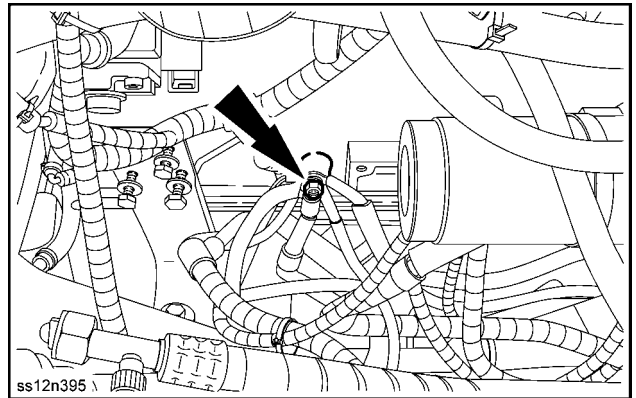
Please download this document

first, and then click the above link

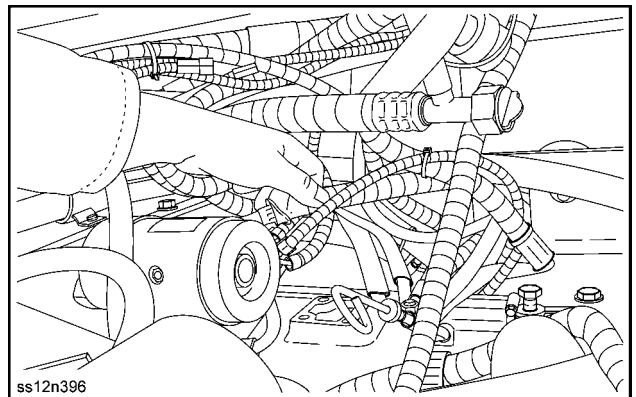
to download the complete manual.

Thank you so much for reading

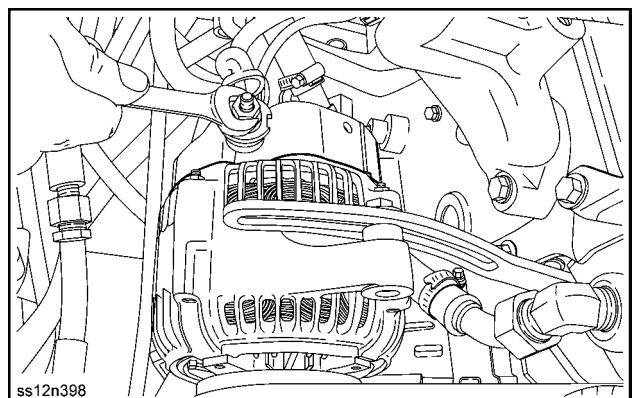
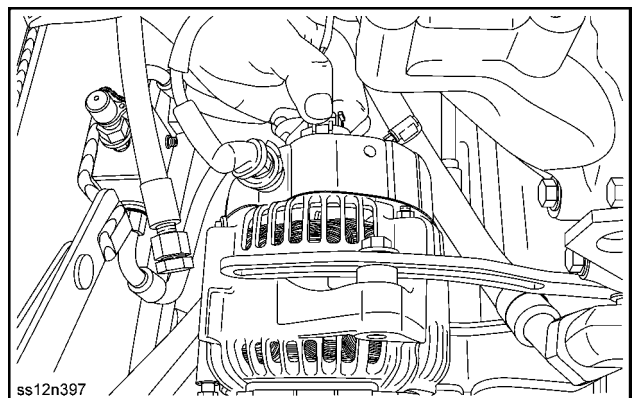
23. Disconnect the ground connection.



24. Disconnect the starter wiring.



25. Disconnect the alternator wiring; put the strips away.



<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>