

PT. Satrindo Mitra Utama



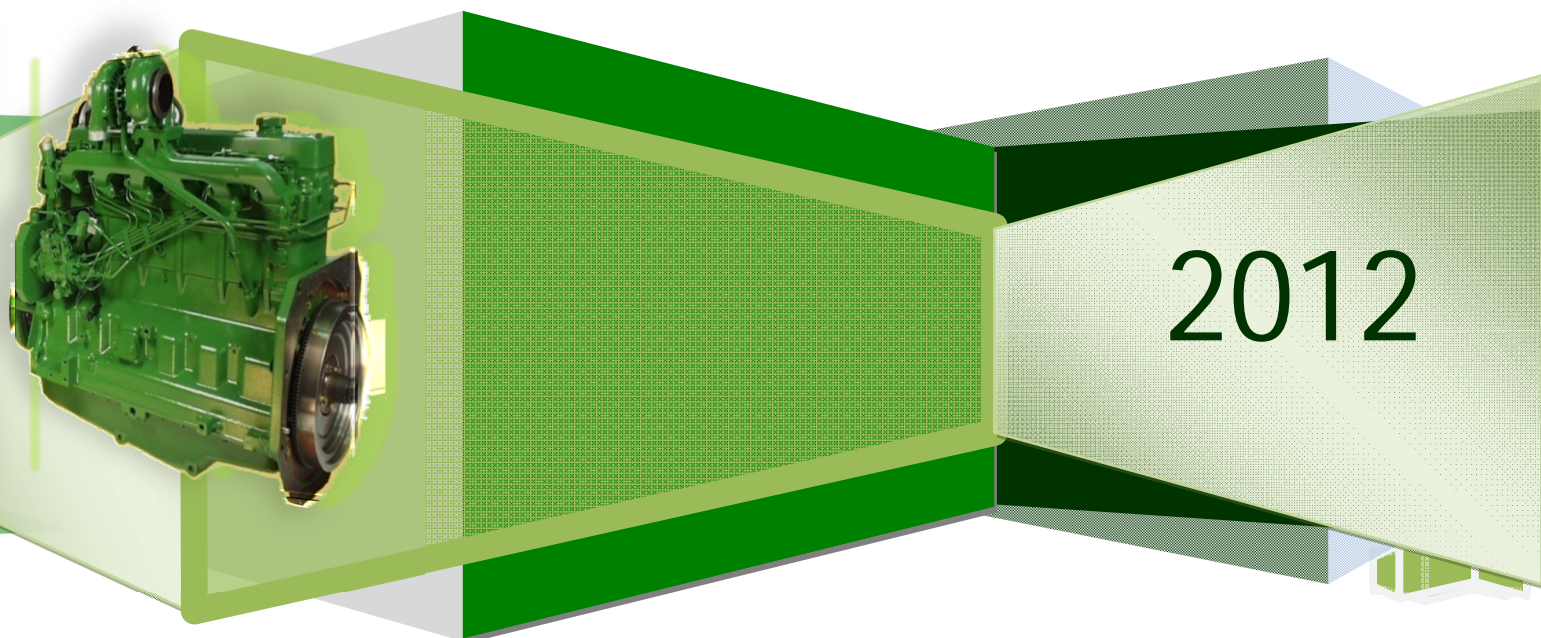
Remove and Install

Engine Power Tech 4.5L & 6.8L

JD5715



JOHN DEERE

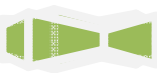


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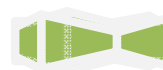
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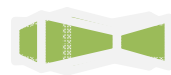
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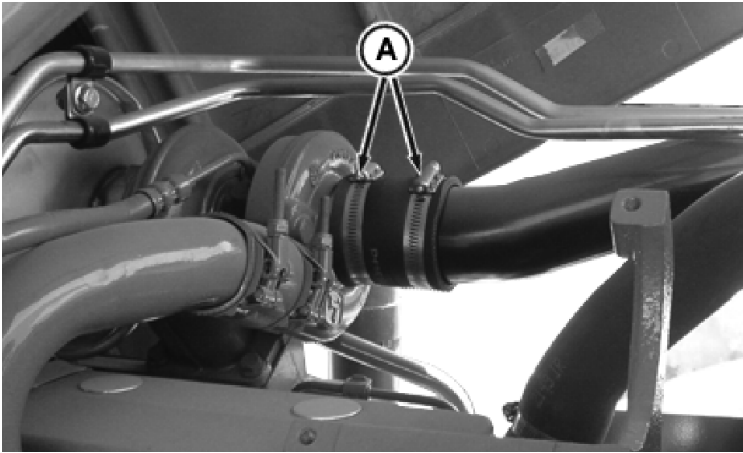
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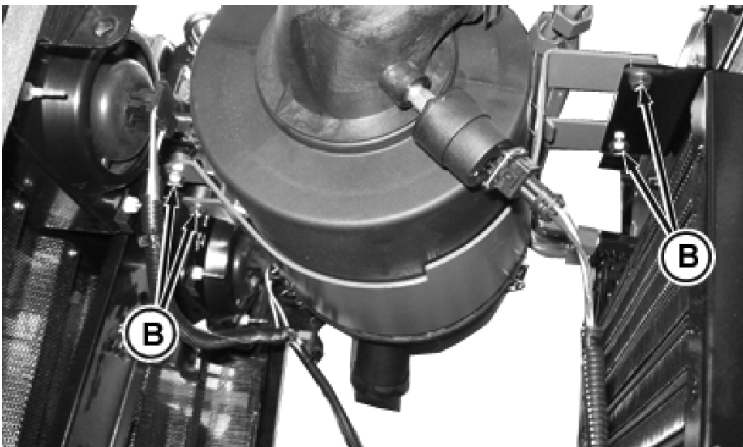
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Remove Engine



1. *PUM3502-UN: Engine Air Cleaner Assembly*



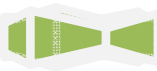
PUM3503-UN: Engine Air Cleaner Assembly

A - Clamp

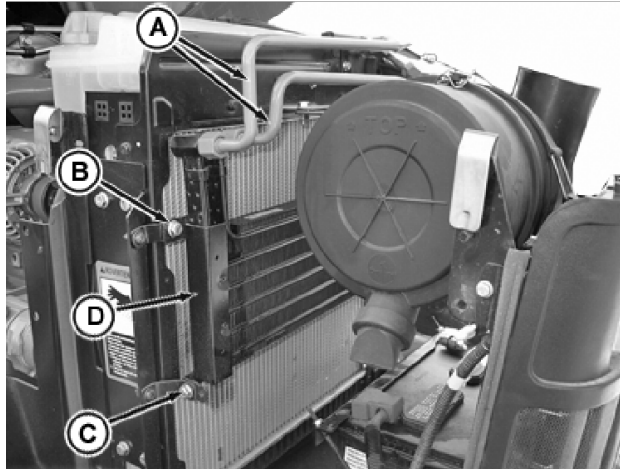
B - Cap Screw (4 used)

Remove hood and side screens.

2. Loosen clamp (A). Remove cap screws (B) and engine air cleaner assembly.
3. Remove battery.
4. Remove hydraulic oil cooler. (See “[Remove, Inspect, and Install Hydraulic Oil Cooler—Reference Listing](#)”.)



Remove, Inspect, and Install Hydraulic Oil Cooler



4.1. *PUM3516-UN: Hydraulic Oil Cooler*

- A - Hydraulic Line
- B - Nut (2 used)
- C - Cap Screw and Nut (2 used)
- D - Hydraulic Oil Cooler

Open the hood and remove side screens.

4.2. Disconnect negative (—) battery cable first and then positive (+) battery cable.

4.3. *NOTE:*

Hydraulic oil cooler can be inspected without removing oil cooler.

Remove nut (B) on both sides of oil cooler and tilt cooler (D) forward.

4.4. Inspect oil cooler for bent fins, cracks, and damaged seams. Repair as necessary.

4.5. Disconnect two hydraulic lines (A).

4.6. Remove two cap screws and nuts (C). Remove oil cooler.

4.7.



CAUTION:

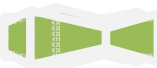
Reduce compressed air to less than 210 kPa (2 bar) (30 psi) when using for cleaning purposes. Clear area of bystanders, guard against flying chips or debris and wear personal protection equipment including protection.

Check oil cooler for debris lodged in fins. Clean cooler using compressed air or pressure washer.

4.8. Install oil cooler using two cap screws and nuts (C).

4.9. Install two nuts (B) and connect hydraulic lines (A).

4.10. Connect positive (+) battery cable.



- 4.11. Connect negative (—) battery cable.
 - 4.12. Start engine and operate tractor hydraulics system. Check for leaks. Check and adjust transmission/hydraulic oil level.
 - 4.13. Close the hood and install side screens.
-

5.

 CAUTION:



TS281-UN: Explosive Pressure

Explosive release of fluids from pressurized cooling system can cause serious burns. Shut off engine. Remove filler cap only when cool enough to touch with bare hands. Slowly loosen cap to first stop to relieve pressure before removing completely.

Remove radiator. (See “ [Remove and Inspect Radiator](#) ”)

Remove and Inspect Radiator

5.1.

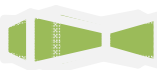
 CAUTION:



TS281-UN: Pressurized Fluid Safety

Explosive release of fluids from pressurized cooling system can cause serious burns.

Shut off engine. Remove filler cap only when cool enough to touch with bare hands. Slowly loosen cap to relieve pressure before removing completely.

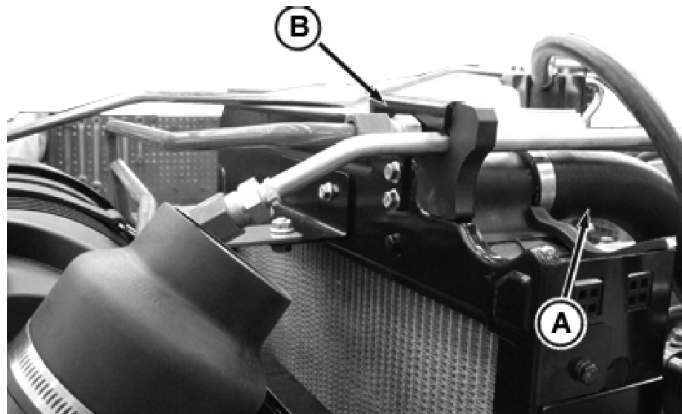


NOTE:

Engine cooling system capacity is approximately 11.4 L (3 gal).

Drain coolant.

- 5.2. Remove air cleaner, air intake tube, and air cleaner support bracket.
 - 5.3. Remove hydraulic oil cooler, if equipped. (See “ [Remove, Inspect, and Install Hydraulic Oil Cooler—Reference Listing](#) ”)
-



5.4.

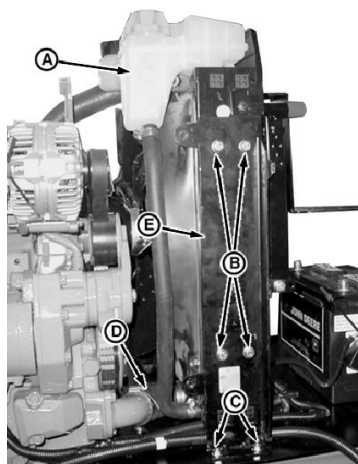
PUM3508-UN: Remove Radiator

A - Upper Radiator Hose

B - Hydraulic Oil Line Hold-Down

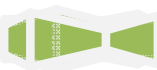
Remove fan guard from both sides of radiator.

- 5.5. Remove hydraulic oil line hold-down (B), if equipped.
 - 5.6. Disconnect upper radiator hose (A).
-



5.7.

P13772-UN: Remove Radiator



- A - Recovery Tank
- B - Cap Screws (8 used)
- C - Cap Screws (4 used)

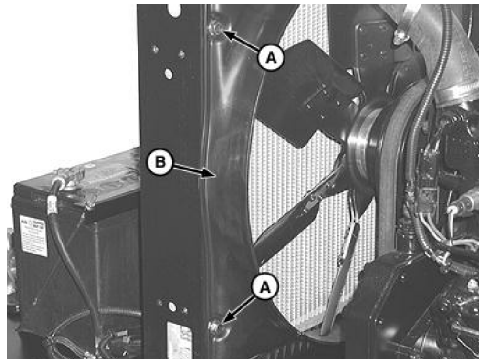
- D - Lower Radiator Hose
- E - Radiator Support

Remove recovery tank (A).

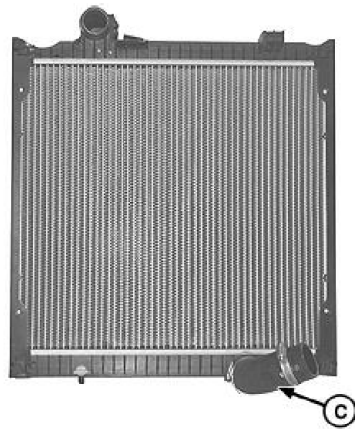
- 5.8. Loosen lower radiator hose (D) at coolant pump.
- 5.9. Remove four cap screws (B), two cap screws (C), and radiator support (E) from both sides.

5.10. *NOTE:*

Move fan shroud (B) rearward over fan to aid during removal of radiator.



LV10133-UN: Remove Fan Shroud



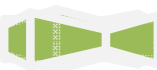
LV10134-UN: Radiator

- A - Cap Screw (4 used)
- B - Fan Shroud

- C - Lower Radiator Hose

Remove four cap screws (A) and separate fan shroud (B) from radiator.

- 5.11. Remove radiator.
- 5.12. Remove lower radiator hose (C).



5.13.



CAUTION:

Reduce compressed air to less than 210 kPa (2 bar) (30 psi) when using for cleaning purposes. Clear area of bystanders, guard against flying chips, and wear personal protection equipment, including eye protection.

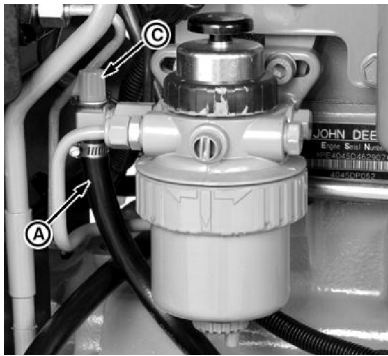
Check radiator for debris lodged in fins. Clean radiator using compressed air or pressure washer.

5.14. Inspect radiator for bent fins, cracks, and damaged seams. Repair as necessary.

6. Remove MFWD drive shaft, if equipped.

7. NOTE:

Close all openings using caps and plugs to prevent contamination.



P13739-UN: Fuel Filter

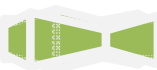


P13760-UN: Return Hose

A - Fuel Supply Hose

B - Fuel Return Hose

C - Shut-off valve

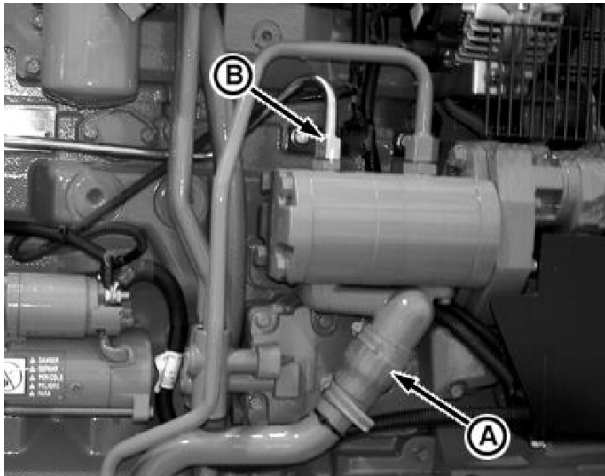


Turn shut-off valve (C) to off position.

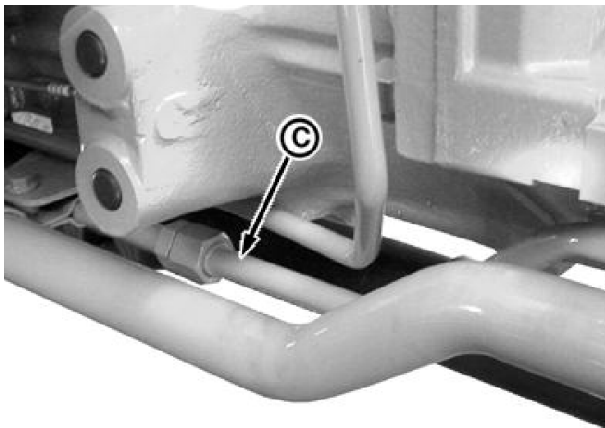
8. Disconnect fuel supply and return hoses (A and B). Close all openings using caps and plugs.

9. *NOTE:*

Support hydraulic pump suction line (A). Transmission/hydraulic oil will spill out of transmission filter assembly if line drops below transmission/reservoir oil level.

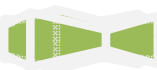


P13740-UN: Hydraulic Pump Suction Line



P13741-UN: Supply Line

- A - Hydraulic Pump Suction Line
- B - Hydraulic Steering Supply Line
- C - Main Hydraulic Supply Line



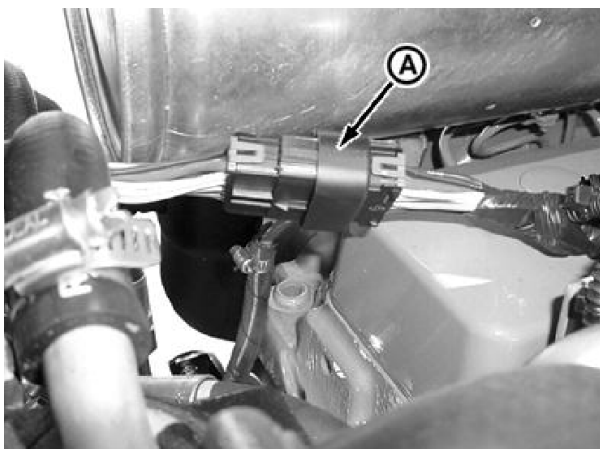
Disconnect hydraulic pump suction line (A) from pump. Close all openings using caps and plugs.

10. Disconnect hydraulic steering supply line (B). Close all openings using caps and plugs.

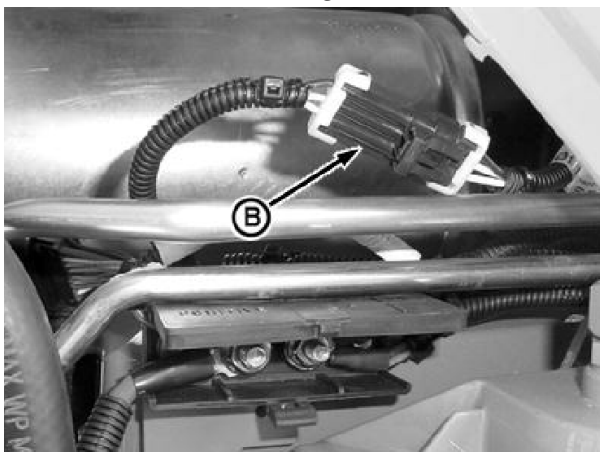
11. Disconnect main hydraulic supply line (C).

12. NOTE:

Cut all tie straps as needed.



P13761-UN: Main Wiring Harness Connectors



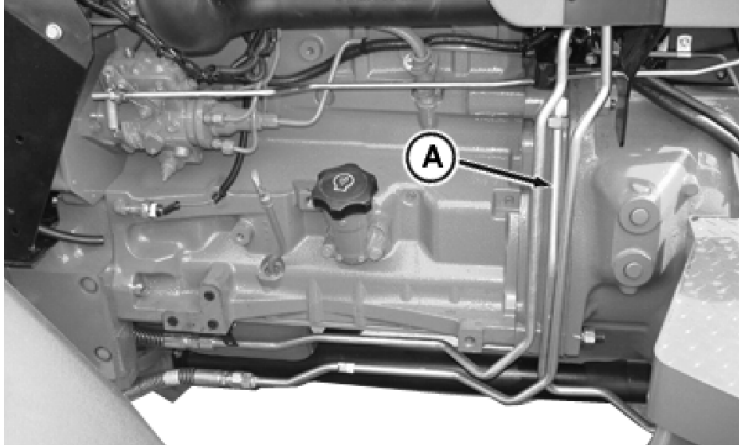
P13762-UN: Main Wiring Harness Connectors

A - Main Wiring Harness Connector

B - Wiring Harness Connectors

Disconnect wiring harness connectors (A and B).

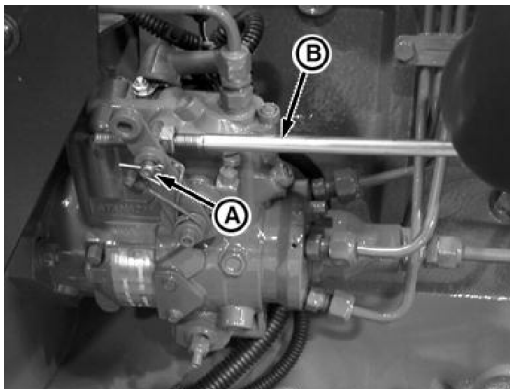




13. *PUM3507-UN: Steering Return Line*

A - Steering Return Line

Disconnect steering return line (A).



14. *P13803-UN: Throttle linkage*

A - Cotter Pin

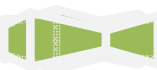
B - Throttle linkage

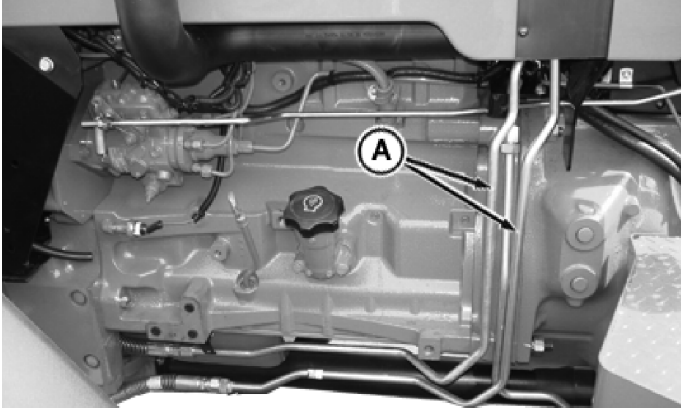
Remove cotter pin (A) and route throttle linkage (B) away from engine.

15. *NOTE:*

Close all openings using caps and plugs.

Tag or label steering lines before disconnecting to aid during installation.





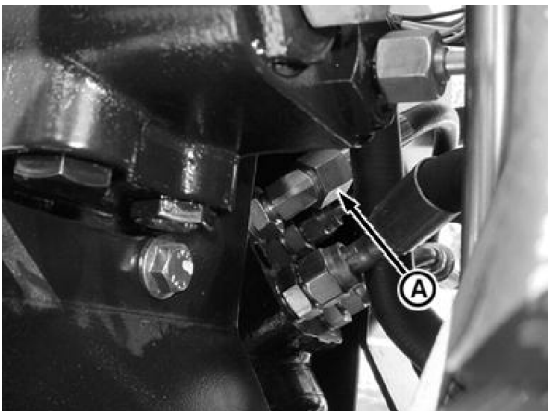
PUM3506-UN: Steering Lines

A - Steering Lines (2 used)

Remove two steering lines (A).

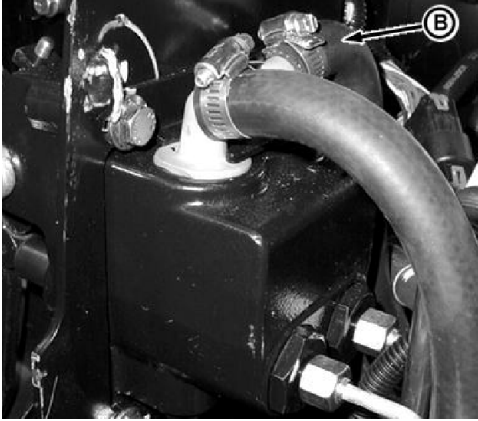
16. NOTE:

Tag or label steering lines before disconnecting to aid during installation.

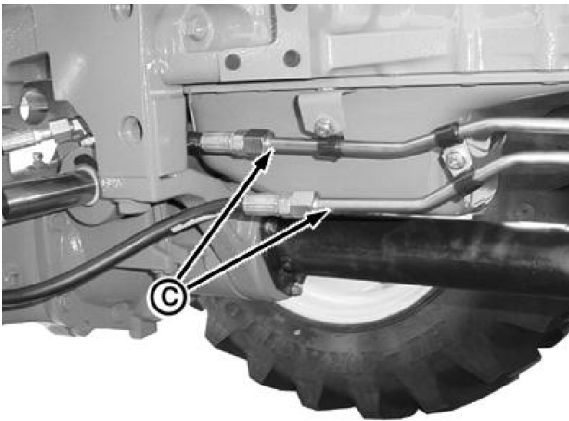


P13765-UN: Steering Hose





P13766-UN: Hydraulic Hose

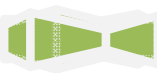


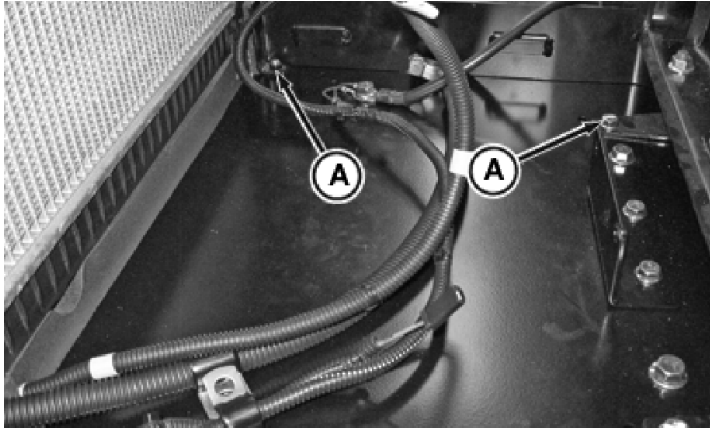
P13767-UN: Steering Lines

A - Steering Hose
B - Hydraulic Hose

C - Steering Lines (2 used)

- Remove steering hose (A) from steering valve. Close all openings using caps and plugs.
17. Remove hydraulic hose (B) from brake valve. Close all openings using caps and plugs.
 18. Disconnect two steering lines (C). Close all openings using caps and plugs.
-

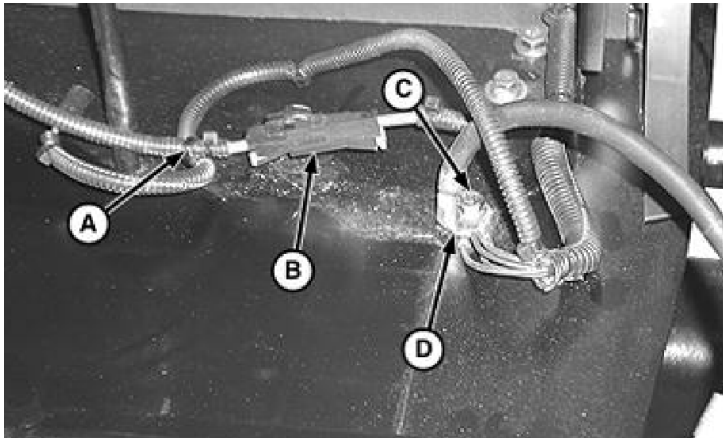




19. *PUM3505-UN: Cap Screw*

A - Cap Screw (4 used)

Remove cap screws (A). Remove front screen and battery plate spacer assembly.



20. *LV11269-UN: Wiring Harness*

A - Tie Straps

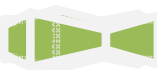
B - Connector

C - Cap Screw

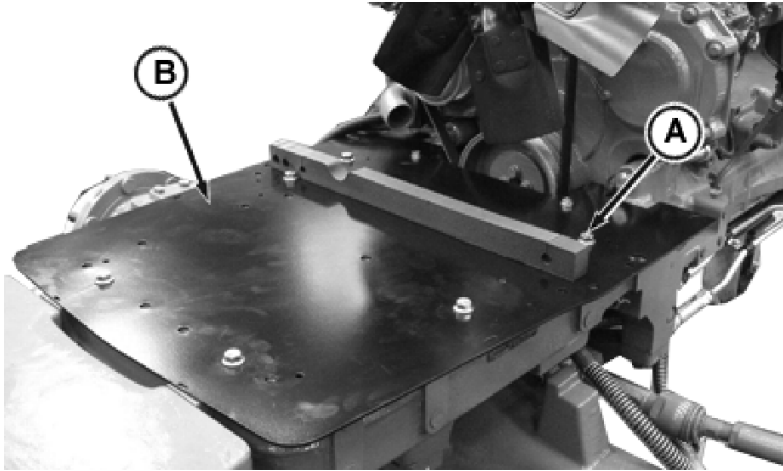
D - Wiring Harness (2 used)

At front of tractor, cut tie straps (A) as needed. Disconnect connector (B), remove cap screw (C) and pull wiring harnesses (D) back to engine.

21.  CAUTION:



Make sure front weights and front weight support are removed from tractor, if equipped, before removing any frame-to-engine mounting hardware.



PUM3504-UN: Front Plate

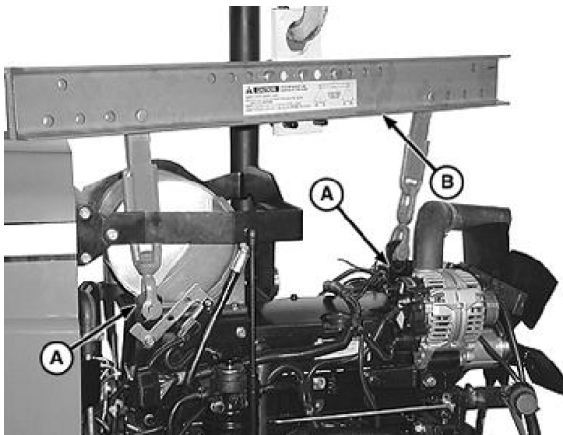
A - Cap Screw (6 used)

B - Plate

Remove front weights and support, if equipped.

22. Remove cap screws (A) and plate (B).

23. Remove front axle assembly.

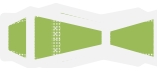


24.

LV11384-UN: Engine Lift Bracket

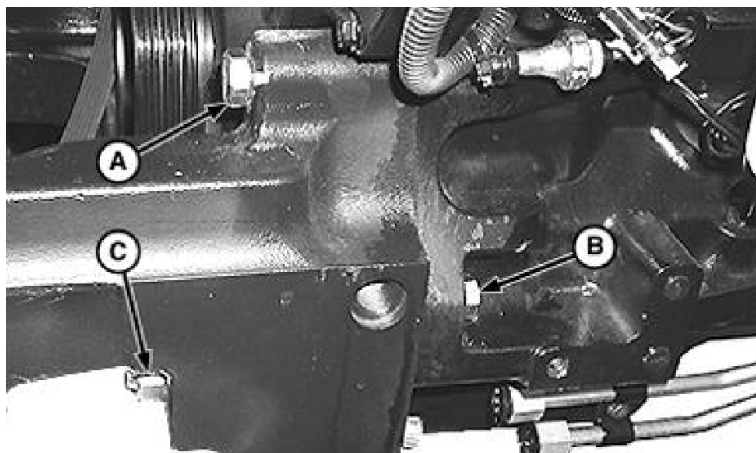
A - Engine Lift Bracket (2 used)

B - Engine Lift Sling



Install lift brackets (A).

25. Attach engine lift sling (B) and hoist to engine.



26. LV11268-UN: 4-Cylinder Engine

A - Cap Screw

C - Nut

B - Cap Screw

Attach hoist to front frame.

27.



CAUTION:

Front support assembly is heavy. Support assembly before removing cap screws to prevent personal injury.

Remove cap screw (A), cap screw (B) and nut (C) from each side of front support.

28. Remove front support.

29. **IMPORTANT:**

Make sure tractor is level before removing engine to prevent damage to PTO shaft.

