

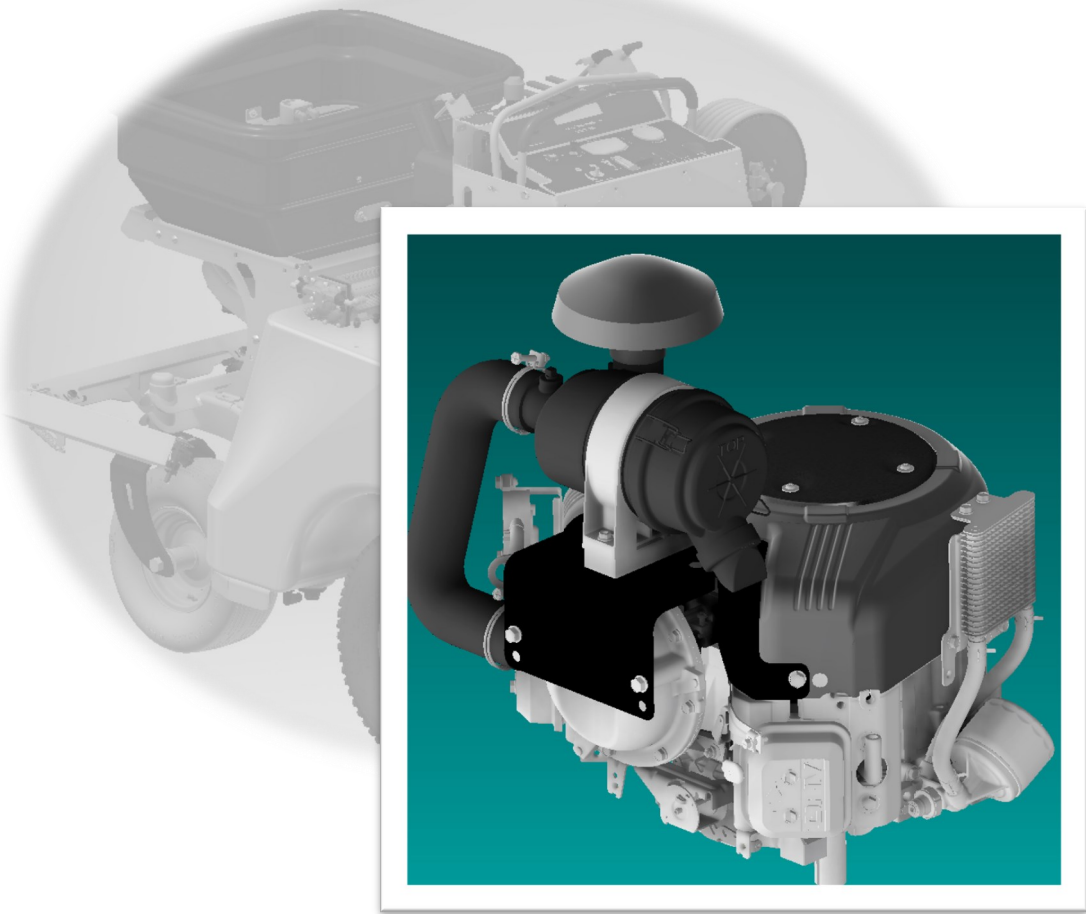
STEELGREEN[™]

M A N U F A C T U R I N G

INSTRUCTION MANUAL

ENGINE REPLACEMENT

Models: SG36, SG42, SG46, & SG52



ENGINE REPLACEMENT INSTRUCTIONS

NOTE:

- *The engine swap process will be easier if you have access to an atv lift.*
- *Before proceeding with the following steps be sure the tank is drained or hopper is empty.*

STEP 1:

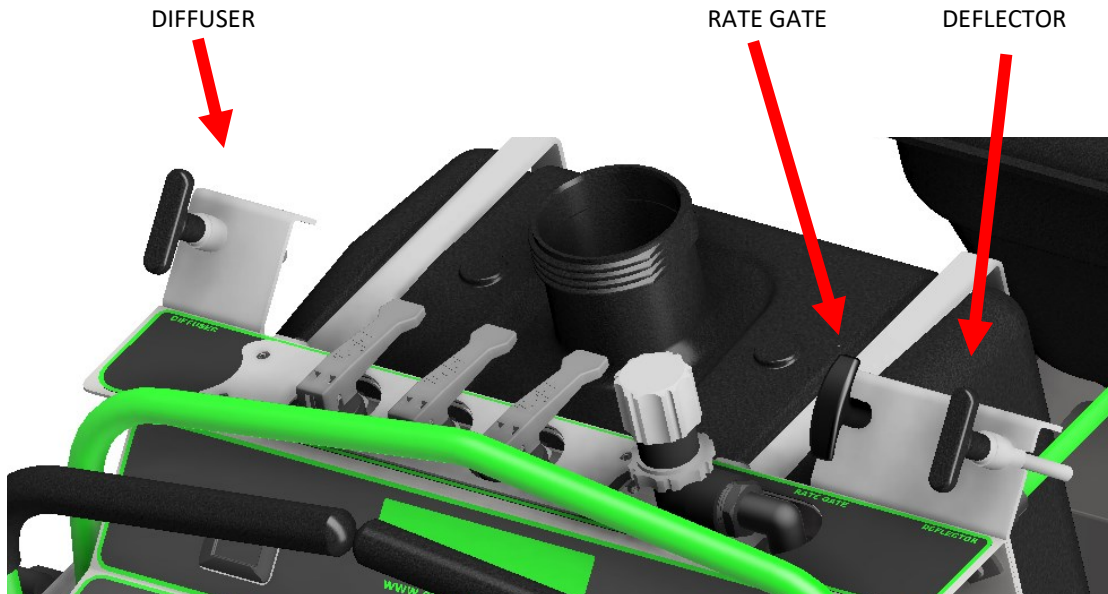
- Disconnect the battery, *ground* first and then *power* wire.
- Remove the battery from the battery box.



GROUND

POWER

STEP 2: Disconnect the three cables from the dash.

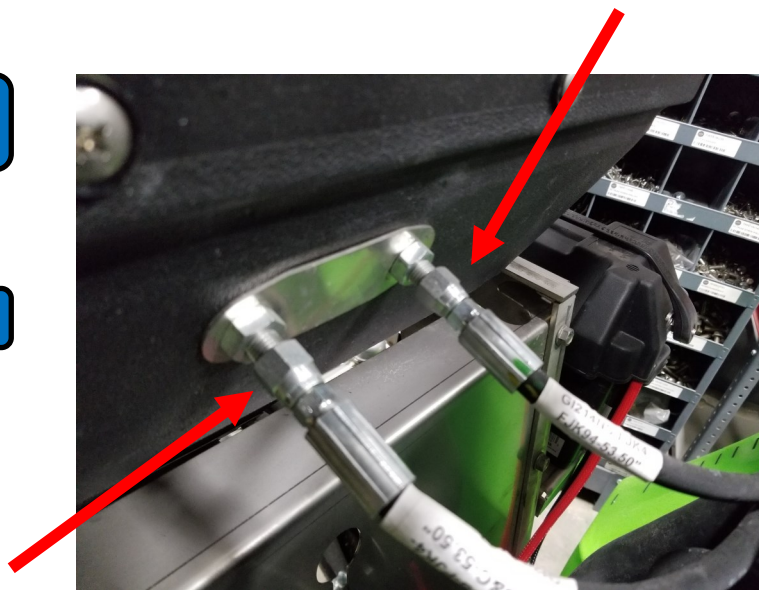


ENGINE REPLACEMENT INSTRUCTIONS

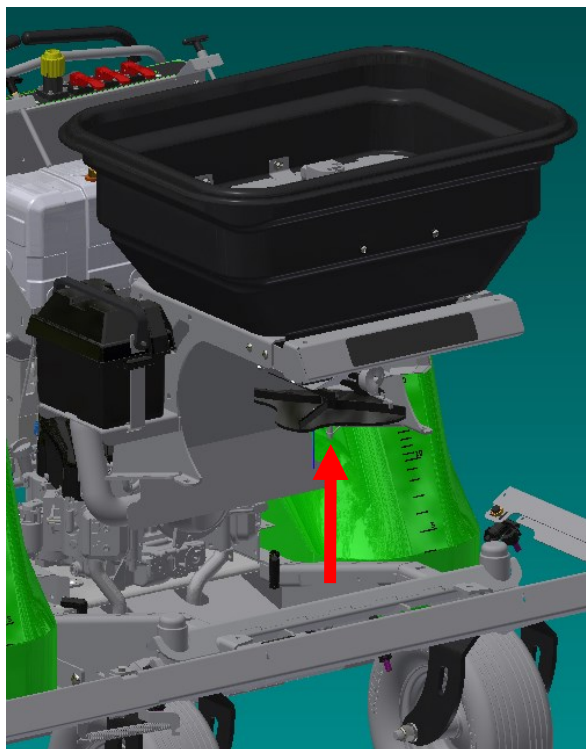
NOTE: Proceed to steps 5 & 6 if the unit is equipped with fluid tank.

STEP 3: Disconnect the hoses from the hopper and connect the plug fittings to the end of the hoses.

NOTE: Hold the hoses up to prevent oil spillage.

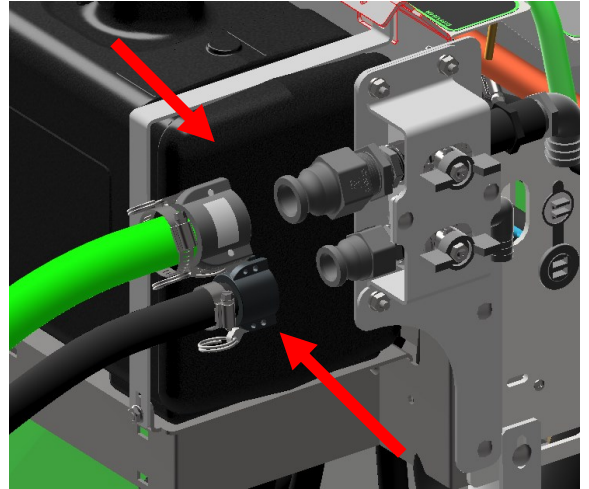


STEP 4: Remove the six bolts from the frame and lift the hopper assembly off of the frame.



ENGINE REPLACEMENT INSTRUCTIONS

STEP 5: Be sure both valves are closed and disconnect the (2) hoses.



STEP 6: Remove the six bolts from the frame and lift the tank assembly off of the frame.



ENGINE REPLACEMENT INSTRUCTIONS

STEP 7:

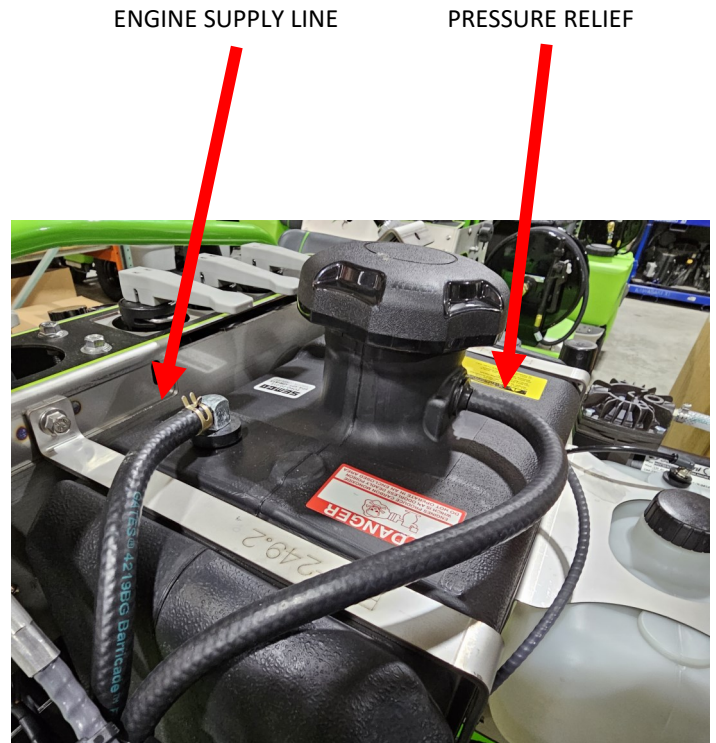
- Squeeze the hose clamp and slide it back.
- Disconnect both fuel lines.

CAUTION!

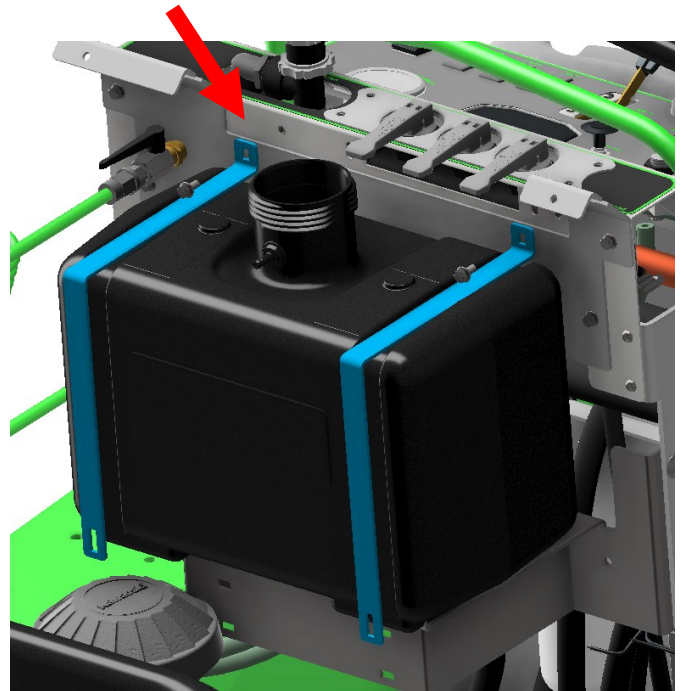
- Beware of excess fuel in the lines.
- Fuel spillage.

WARNING!

- Flammable gas.

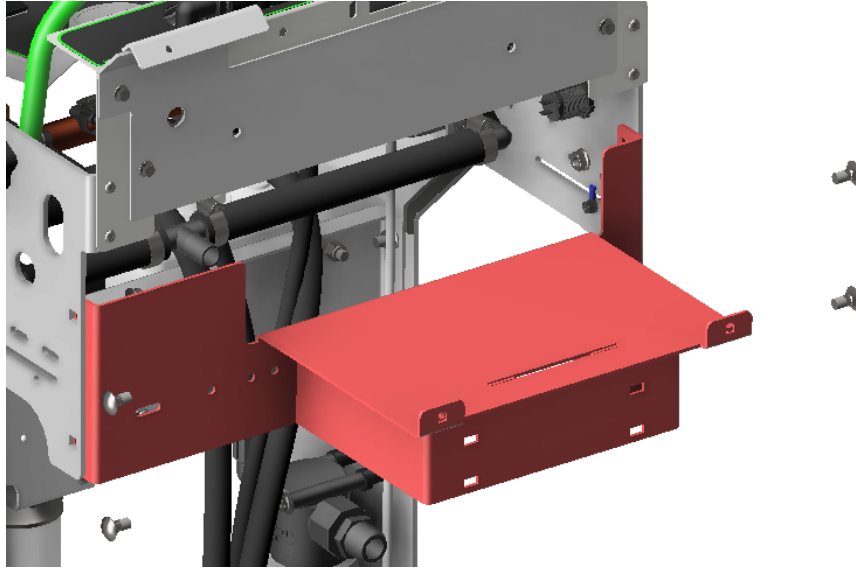


STEP 8: Disconnect the gas tank straps and remove the tank.



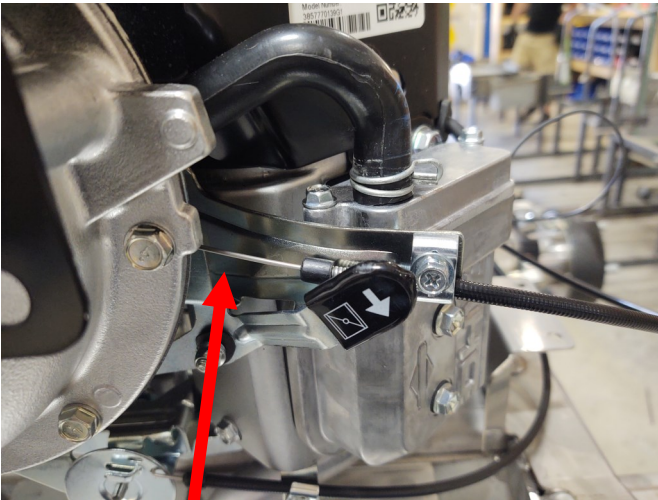
ENGINE REPLACEMENT INSTRUCTIONS

STEP 9: Remove the fuel tank support.

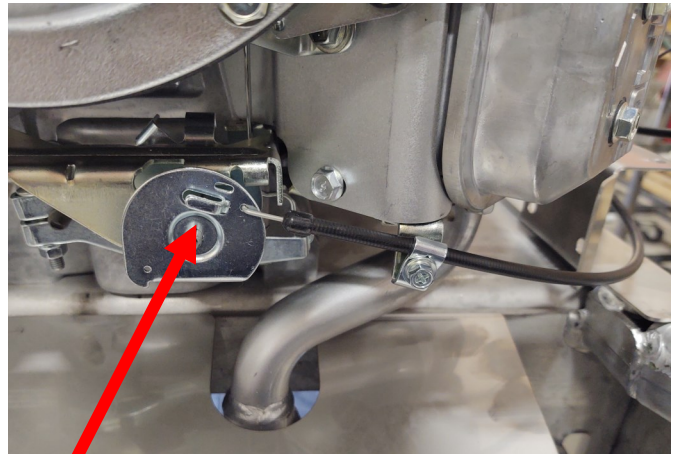


STEP 10: Disconnect the throttle and choke cables.

BRIGGS



CHOKE



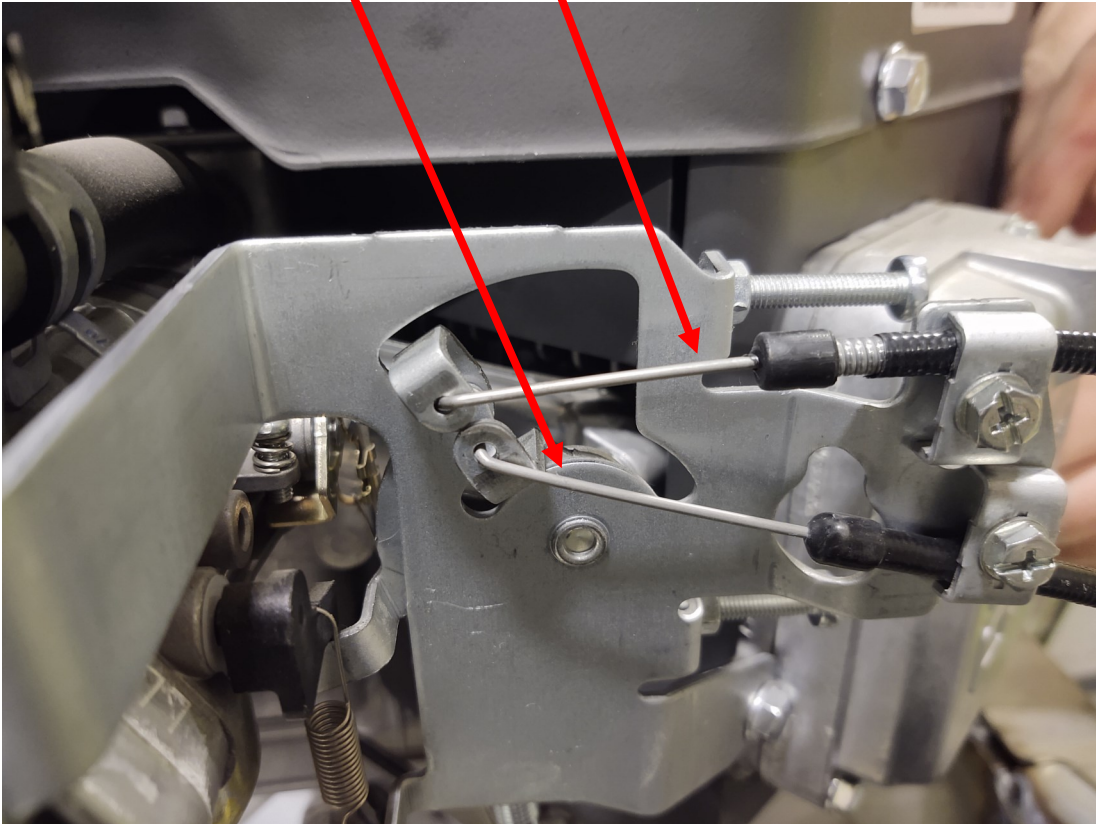
THROTTLE

ENGINE REPLACEMENT INSTRUCTIONS

KAWASAKI

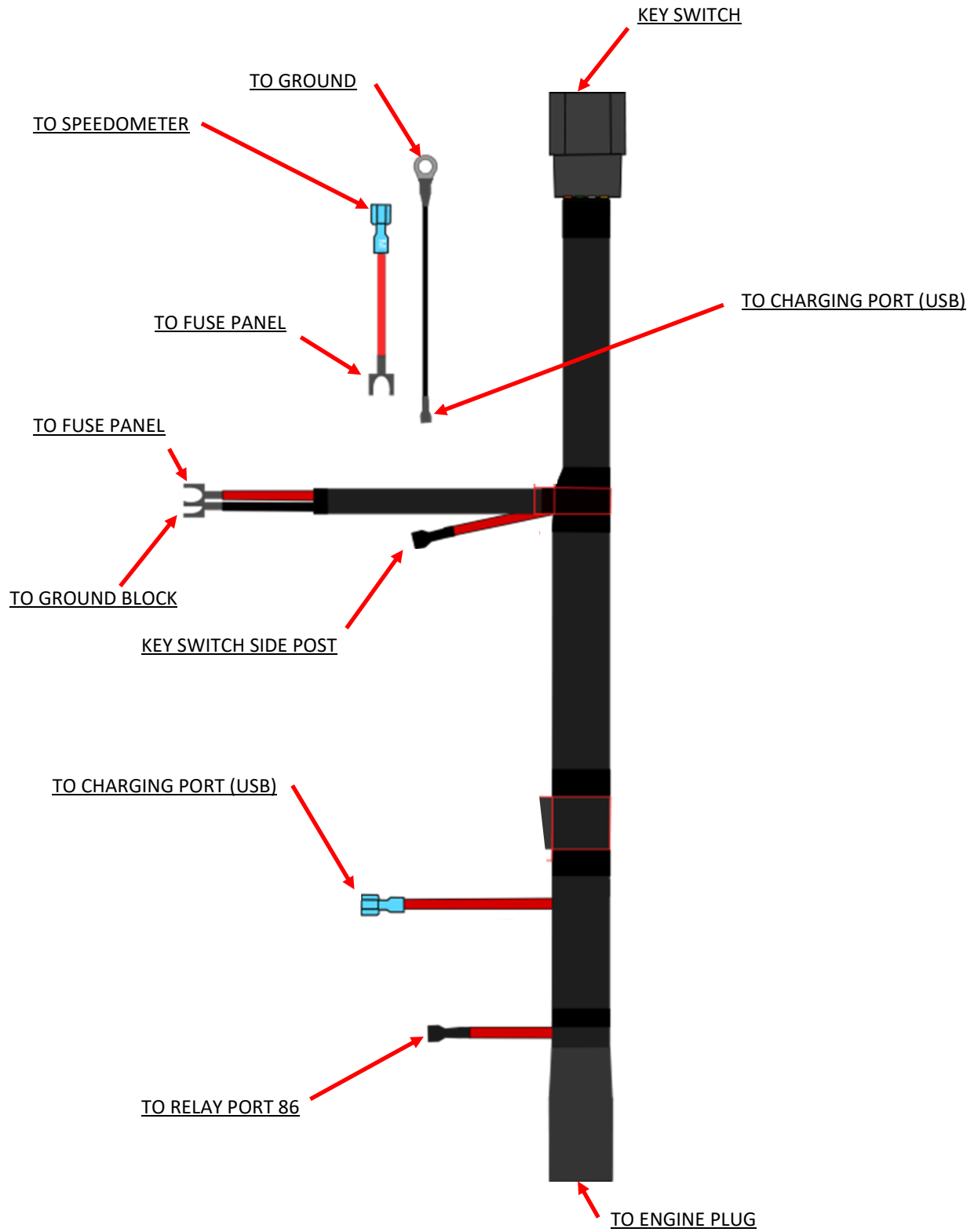
CHOKE

THROTTLE



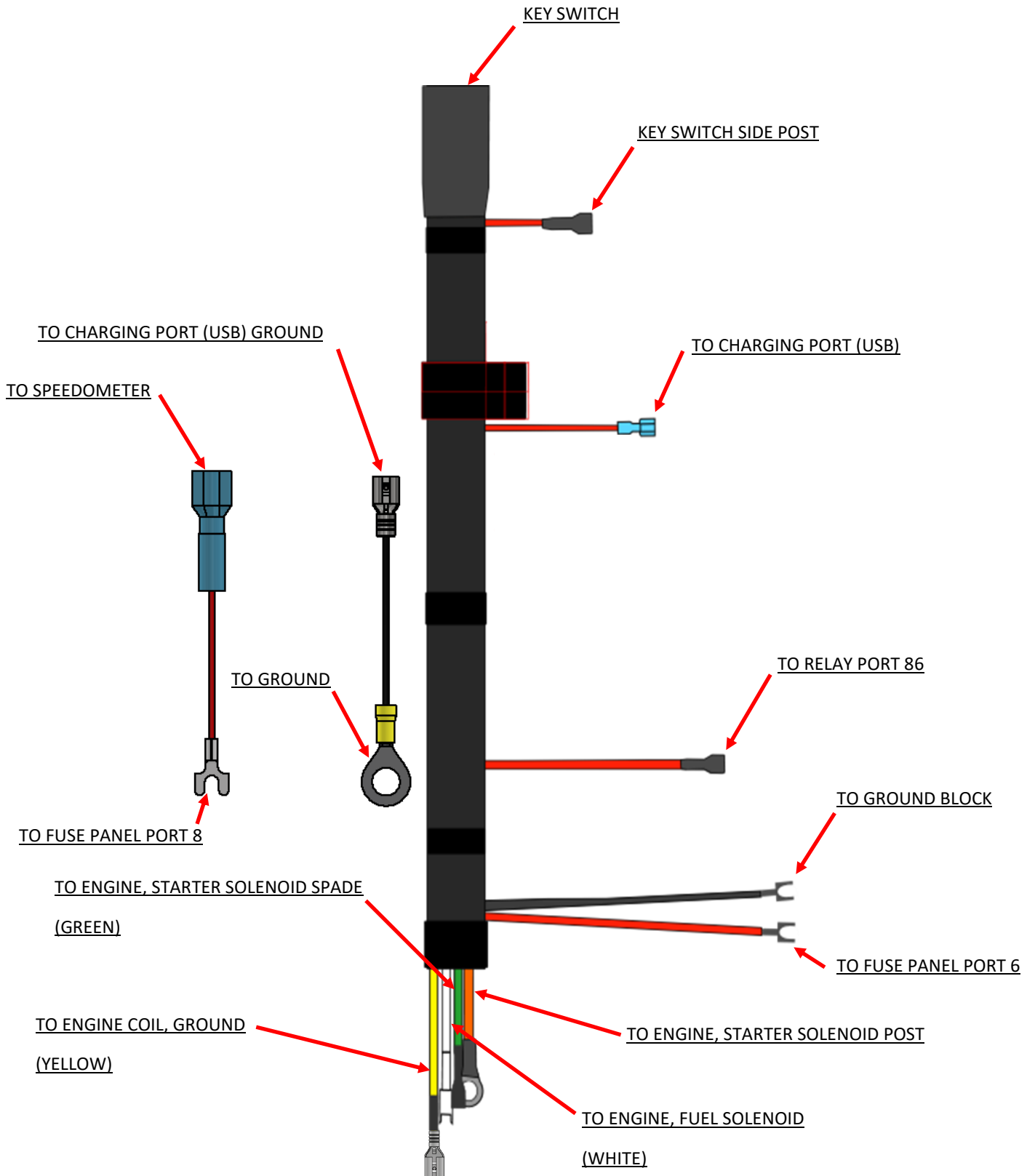
ENGINE REPLACEMENT INSTRUCTIONS

KAWASAKI WIRING HARNESS



ENGINE REPLACEMENT INSTRUCTIONS

BRIGGS WIRING HARNESS



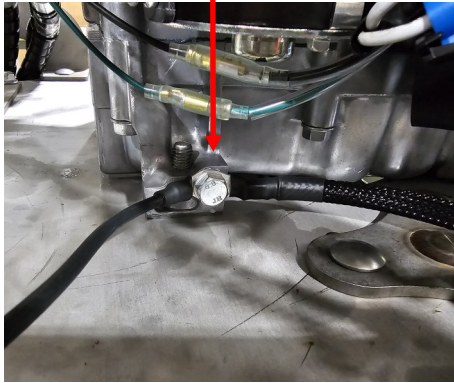
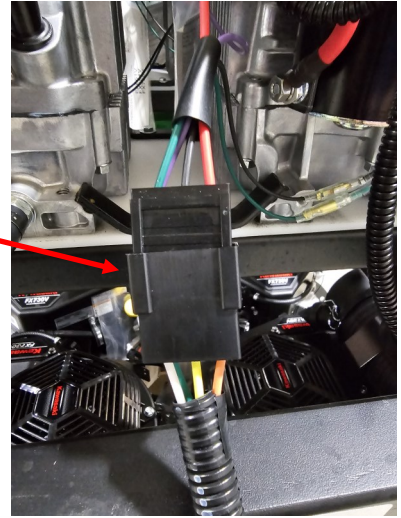
ENGINE REPLACEMENT INSTRUCTIONS

KAWASAKI

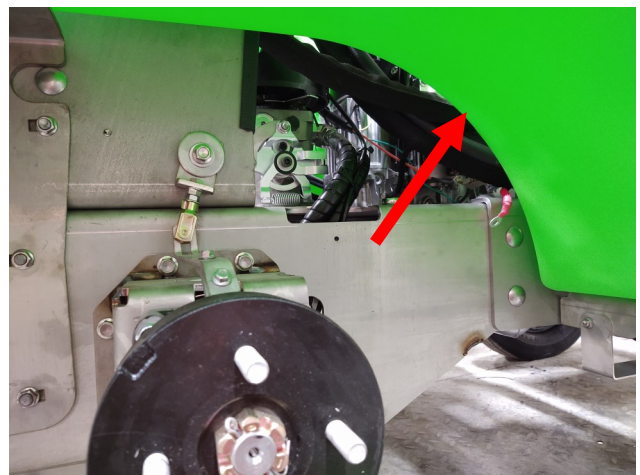
STEP 11:

- Disconnect the plug from the engine.
- Disconnect the ground & power cables.

NOTE: For Briggs engine skip to page 11.



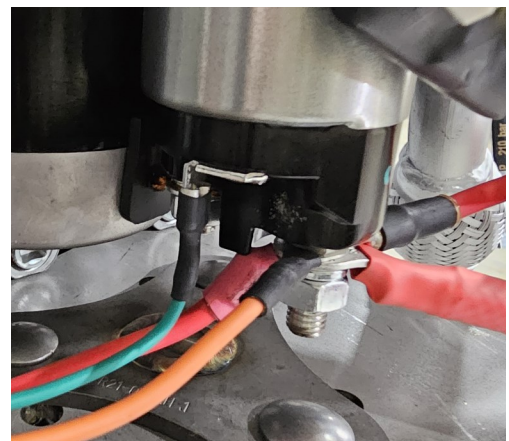
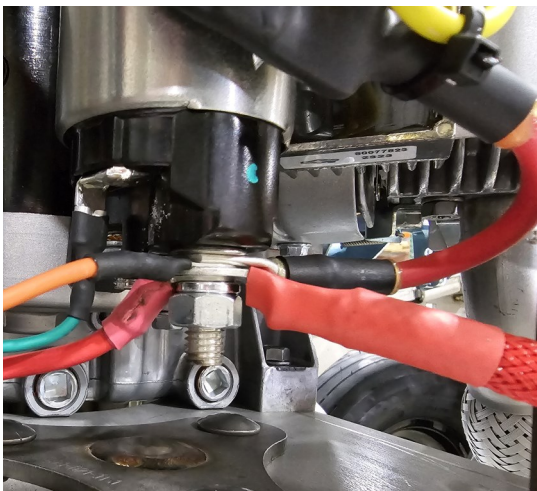
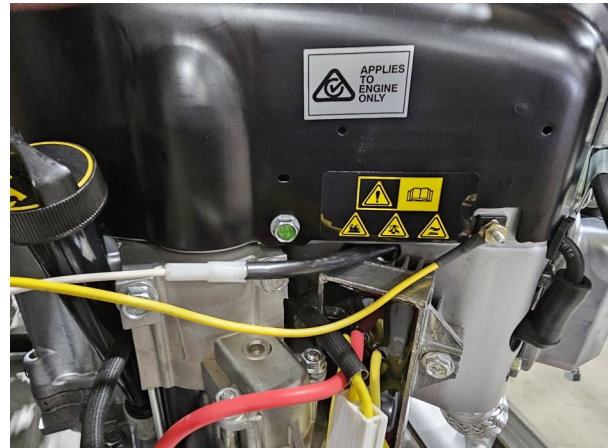
NOTE: For easier access, remove the right rear tire.



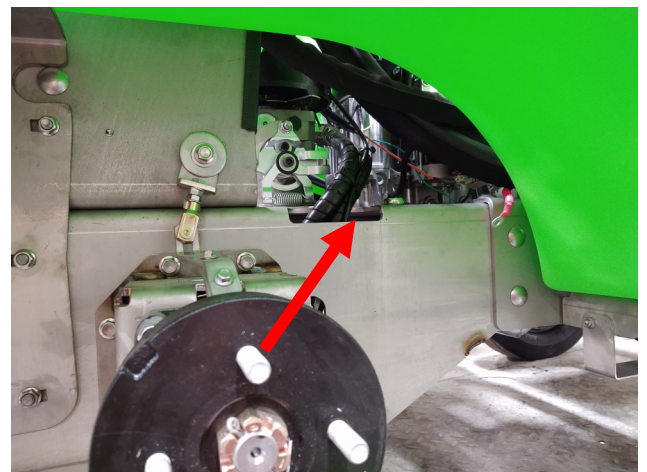
ENGINE REPLACEMENT INSTRUCTIONS

BRIGGS

STEP 11: Disconnect all the electrical connections from the wiring harness and battery.

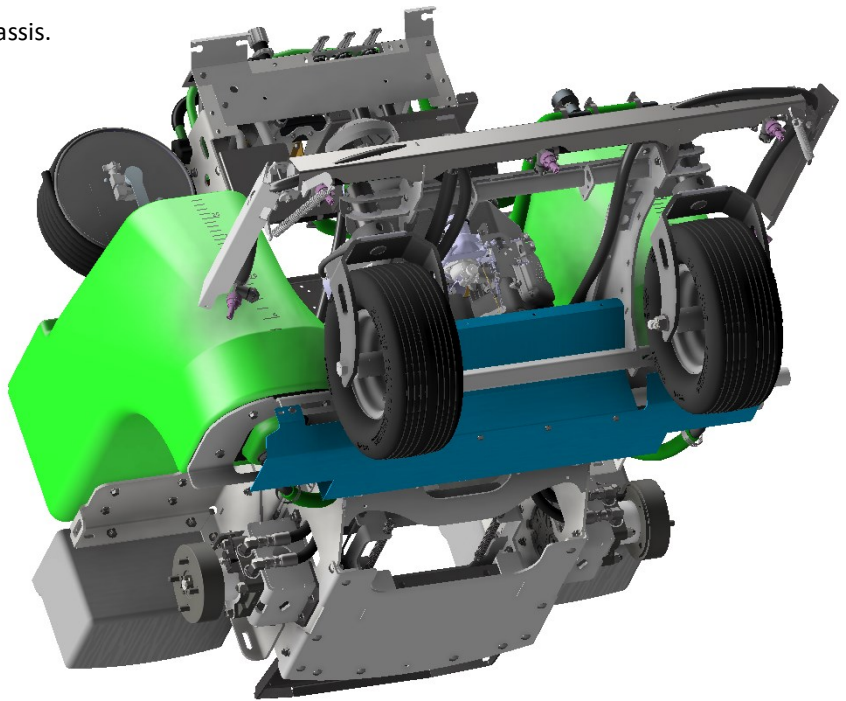


NOTE: For easier access, remove the right rear tire.

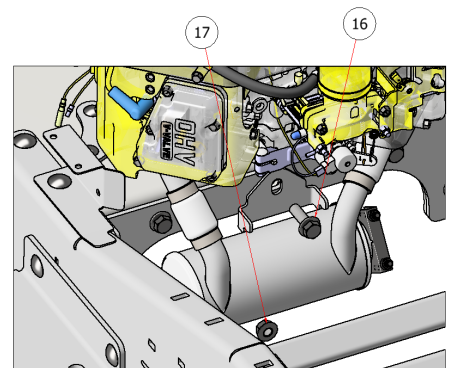
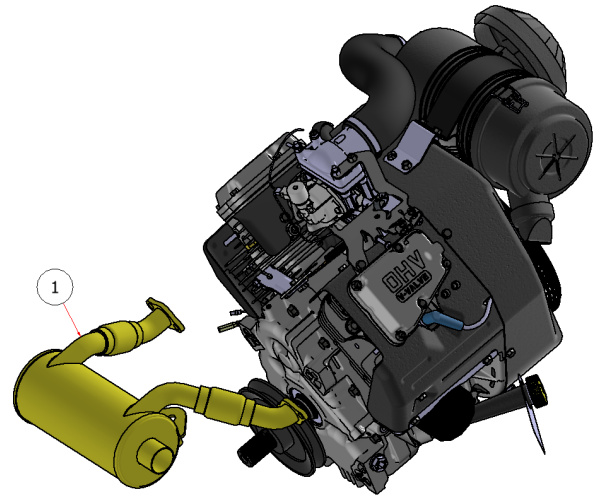


ENGINE REPLACEMENT INSTRUCTIONS

STEP 12: Remove the heat shield from the chassis.



STEP 13: Remove the muffler by unbolting it from the engine manifold and chassis brace.



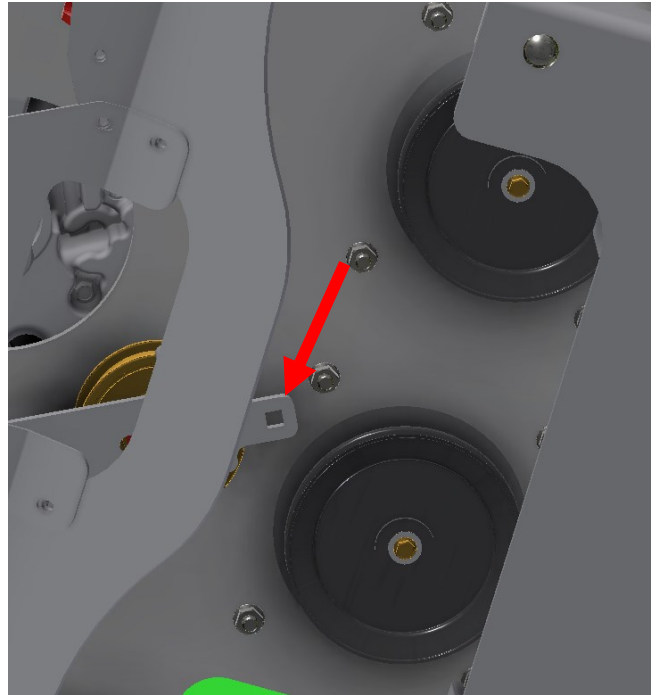
ENGINE REPLACEMENT INSTRUCTIONS

STEP 14: Remove the spring from the idler arm and remove the drive belt.

NOTE:

The square hole in the idler arm can be used with a 3/8" ratchet to move the idler arm.

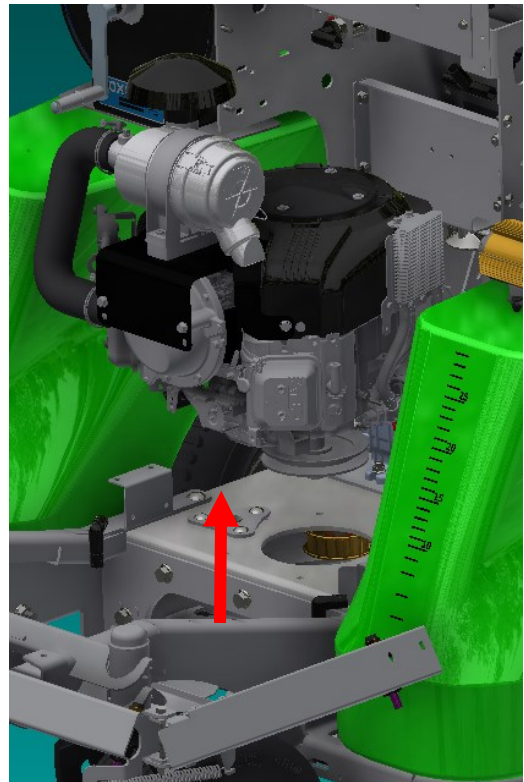
Instructions are the same for Briggs & Kawasaki



STEP 15: Remove the four bolts securing the engine to the chassis (if not done in step thirteen) and lift the engine from the machine using a hoist or 2 people if lifting by hand.

NOTE: *Instructions are the same for Briggs & Kawasaki.*

LIFTING POINTS



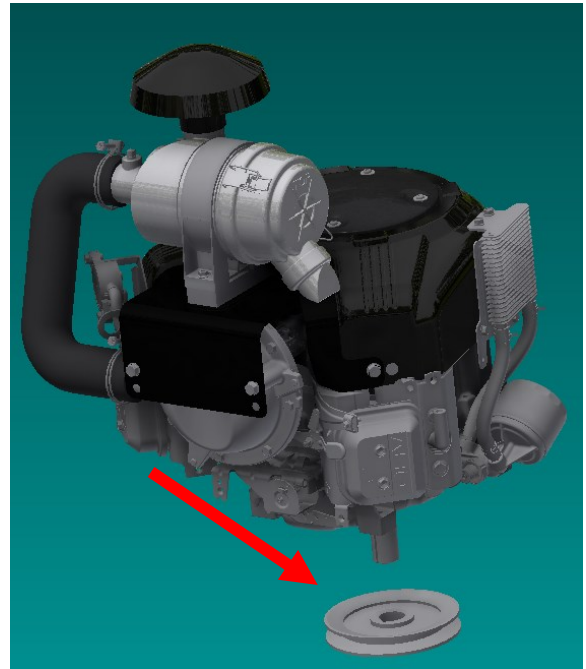
ENGINE REPLACEMENT INSTRUCTIONS

STEP 16: Remove the engine pulley and install it on the new engine.

NOTE:

Install the pulley on the new engine ensuring it is at the same position on crank to keep the belt in alignment with hydro pulleys.

Instructions are the same for Briggs & Kawasaki.



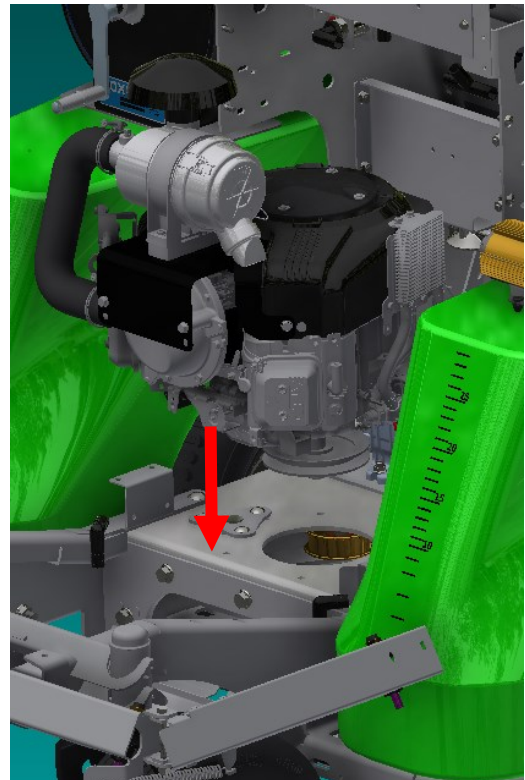
STEP 17:

- Lower the engine onto the chassis using a hoist or 2 people if lifting by hand.

NOTE: *Instructions are the same for Briggs & Kawasaki.*

- Attach the engine to the frame with the four engine bolts.

LIFTING POINTS

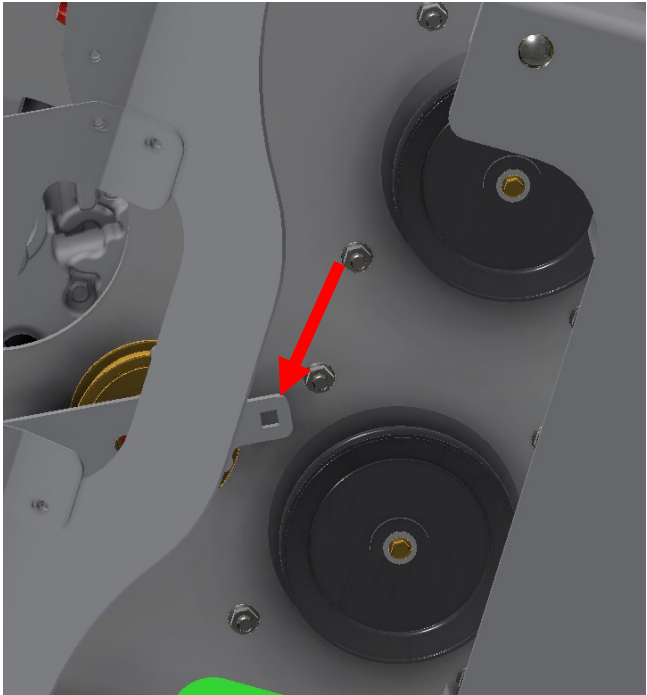


ENGINE REPLACEMENT INSTRUCTIONS

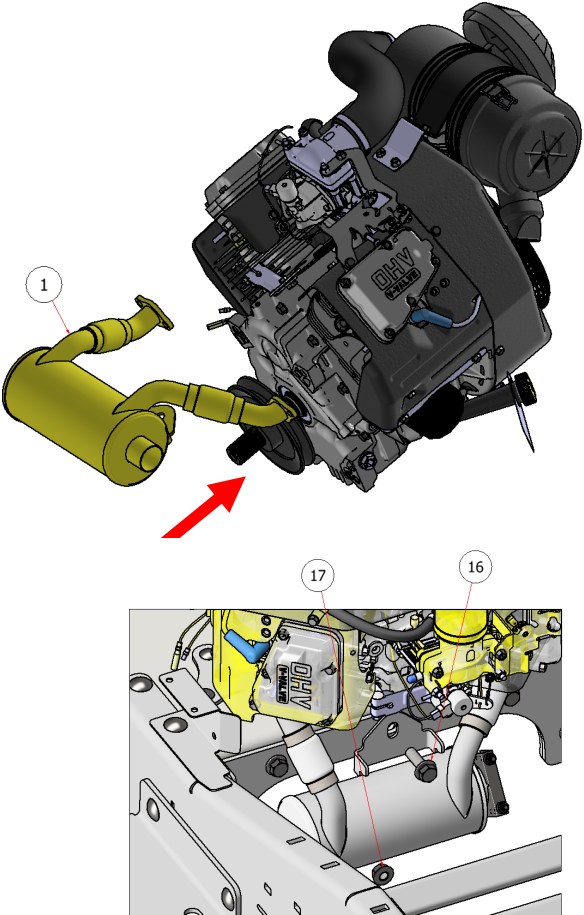
NOTE:
Steps 18—31 the instructions are the same for Briggs & Kawasaki

The square hole in the idler arm can be used with a 3/8" ratchet to move the idler arm.

STEP 18: Reinstall the drive belt and idler arm spring.

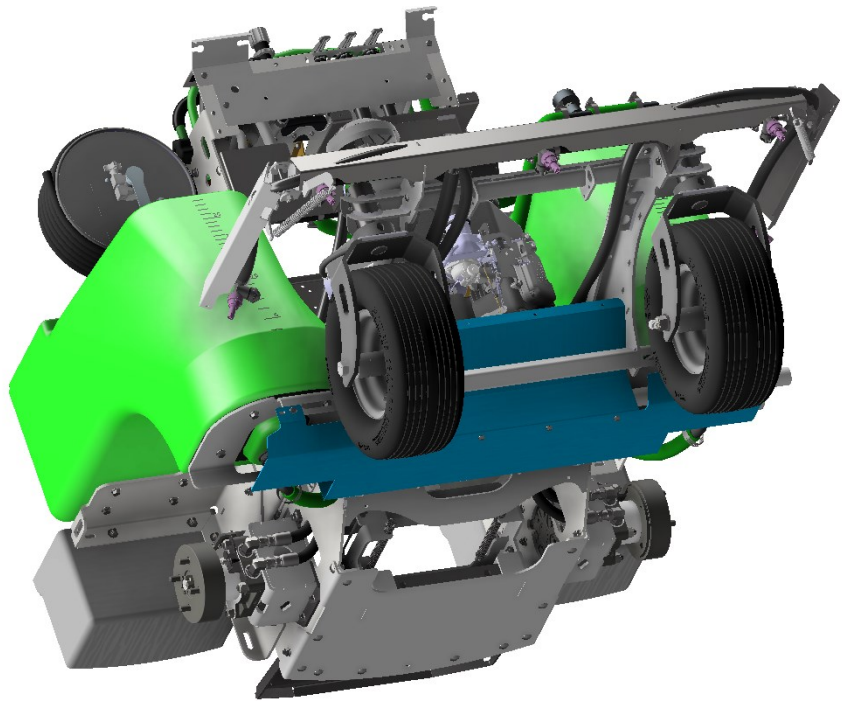


STEP 19: Reinstall the muffler.



ENGINE REPLACEMENT INSTRUCTIONS

STEP 20: Reinstall the heat shield.



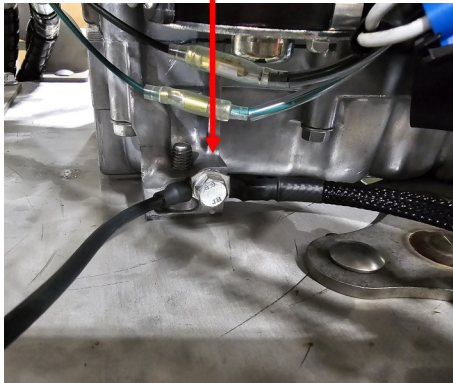
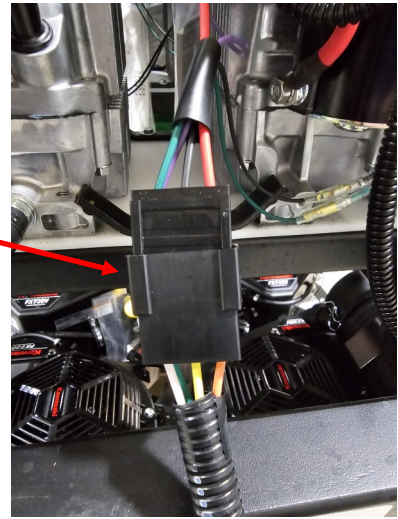
ENGINE REPLACEMENT INSTRUCTIONS

KAWASAKI

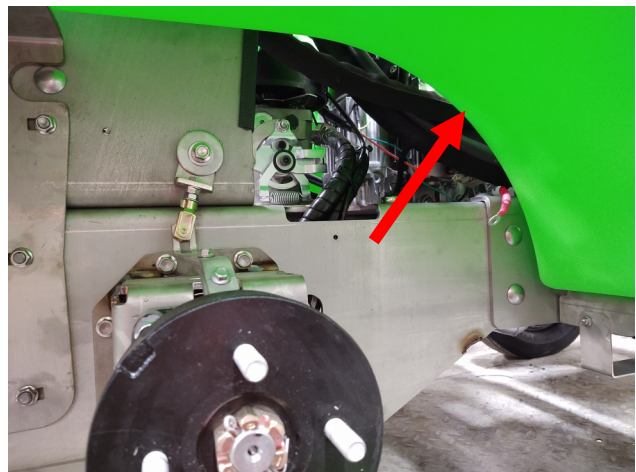
STEP 21:

- Reconnect the plug from the engine.
- Reconnect the ground & power cables.

NOTE: For Briggs engine skip to page 18.



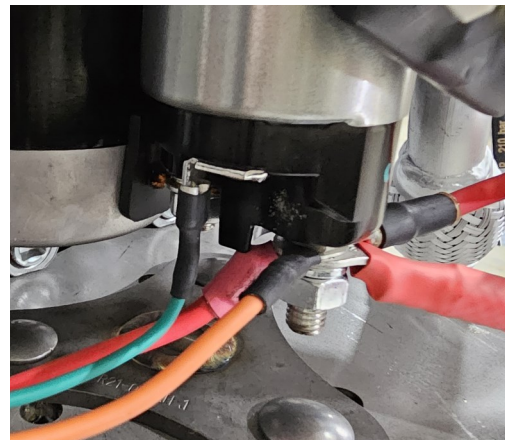
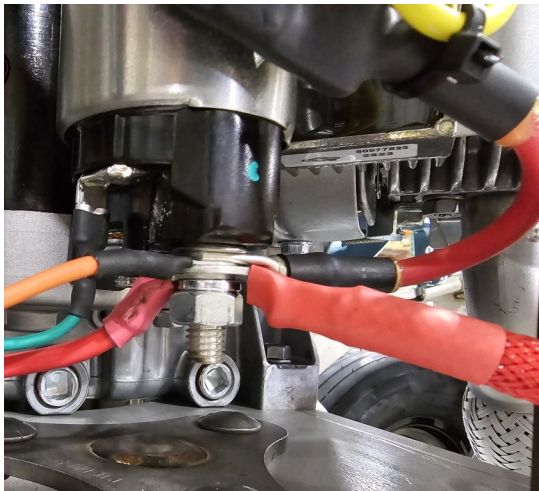
NOTE: For easier access, remove the right rear tire.



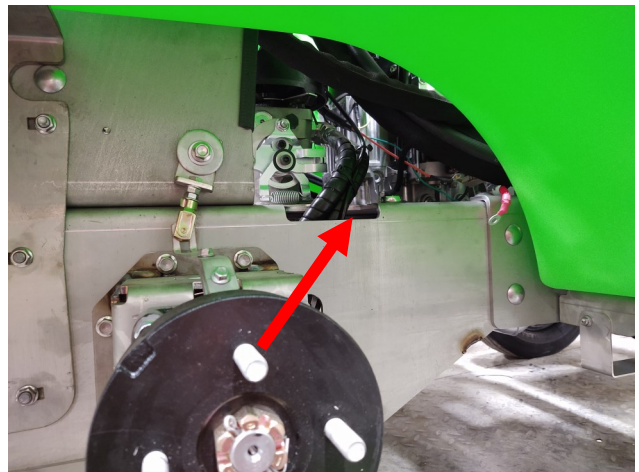
ENGINE REPLACEMENT INSTRUCTIONS

BRIGGS

STEP 21: Reconnect all the electrical connections from the wiring harness and battery.

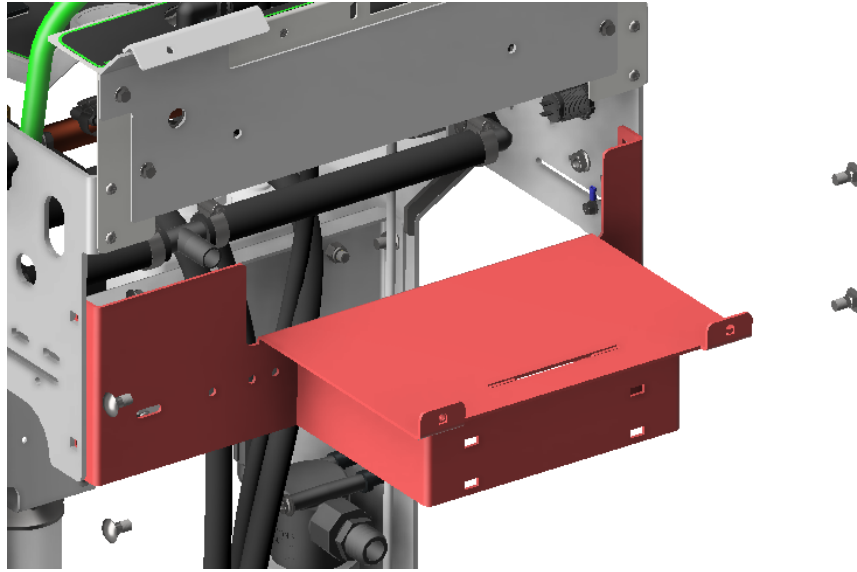


NOTE: For easier access, remove the right rear tire.



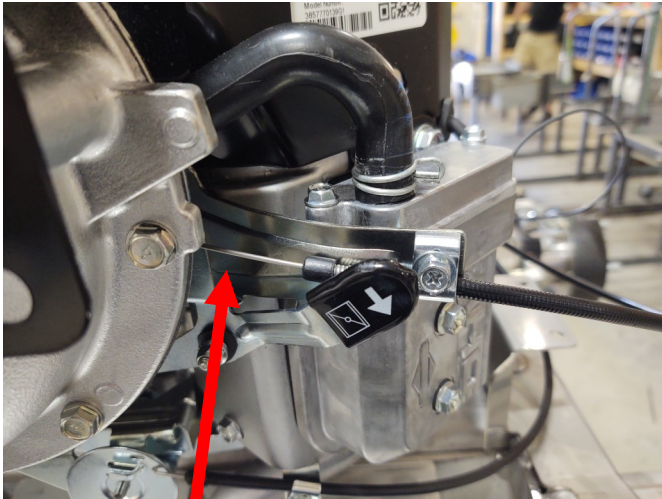
ENGINE REPLACEMENT INSTRUCTIONS

STEP 22: Reattach the fuel tank support.

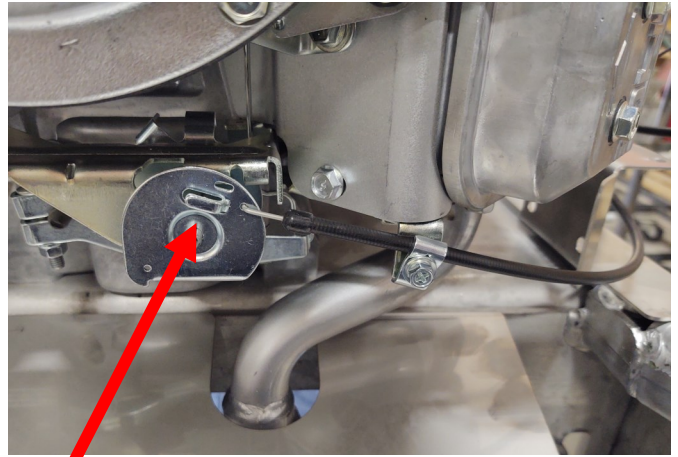


STEP 23: Disconnect the throttle and choke cables.

BRIGGS



CHOKE



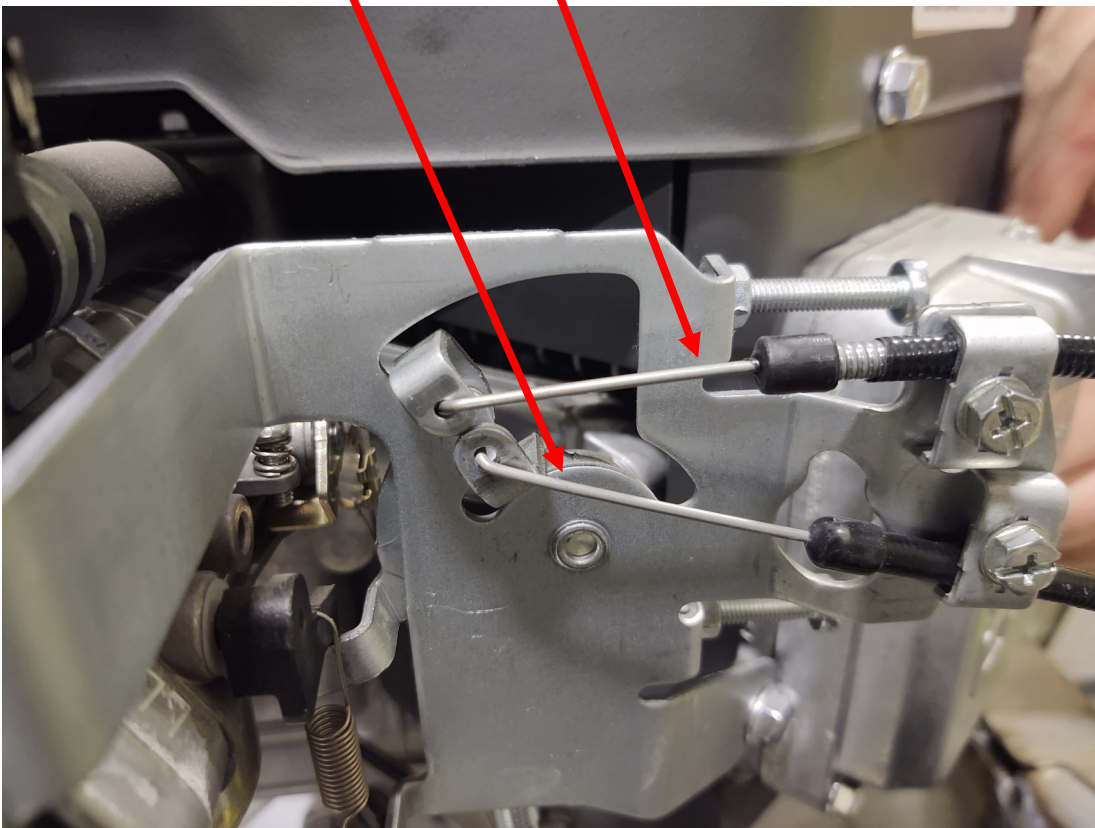
THROTTLE

ENGINE REPLACEMENT INSTRUCTIONS

KAWASAKI

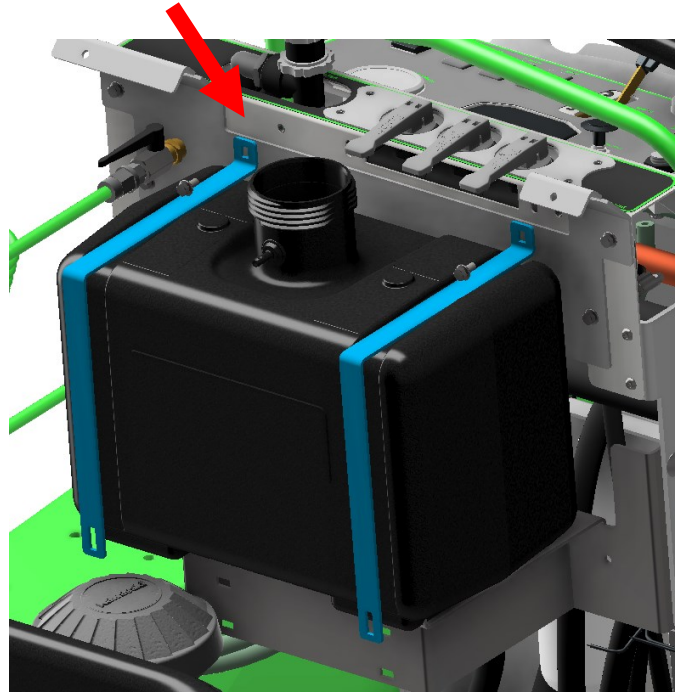
CHOKE

THROTTLE



ENGINE REPLACEMENT INSTRUCTIONS

STEP 24: Reinstall the gas tank & straps.



STEP 25: Reconnect the fuel & relief lines.

CAUTION!

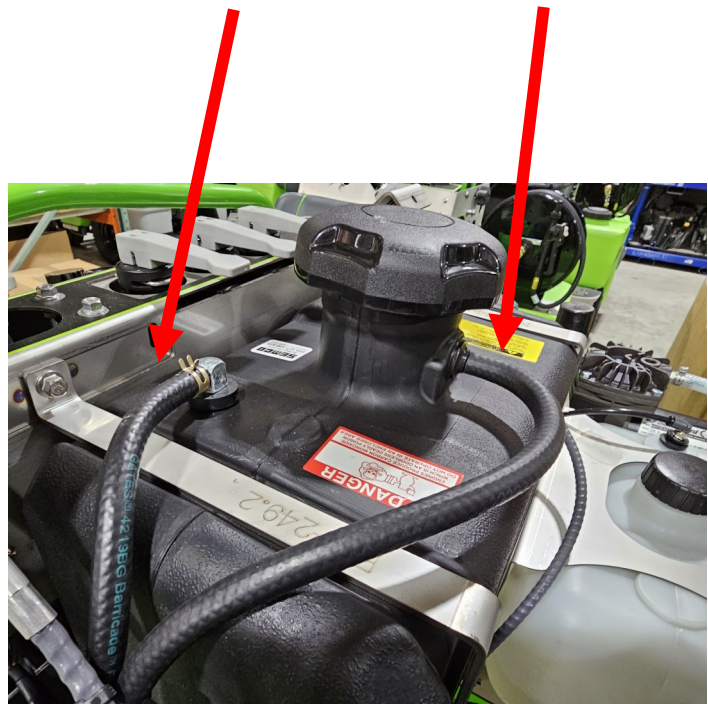
- Beware of excess fuel in the lines.
- Fuel spillage.

WARNING!

- Flammable gas.

ENGINE SUPPLY LINE

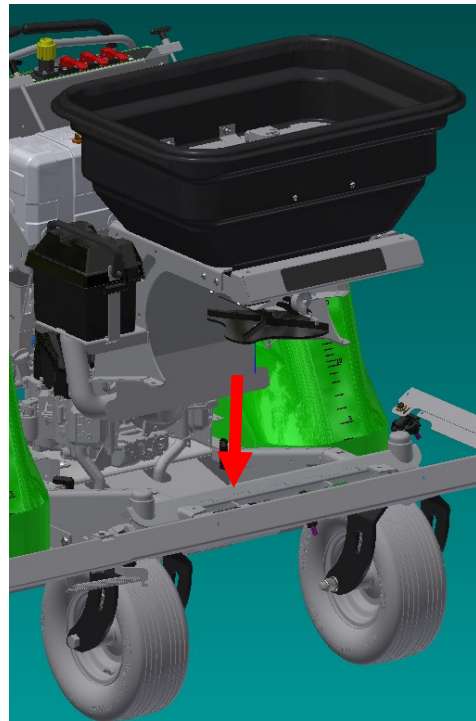
PRESSURE RELIEF



ENGINE REPLACEMENT INSTRUCTIONS

NOTE: Proceed to steps 29 if the unit is equipped with fluid tank.

STEP 26: Reinstall the hopper assembly to the frame with the six bolts.

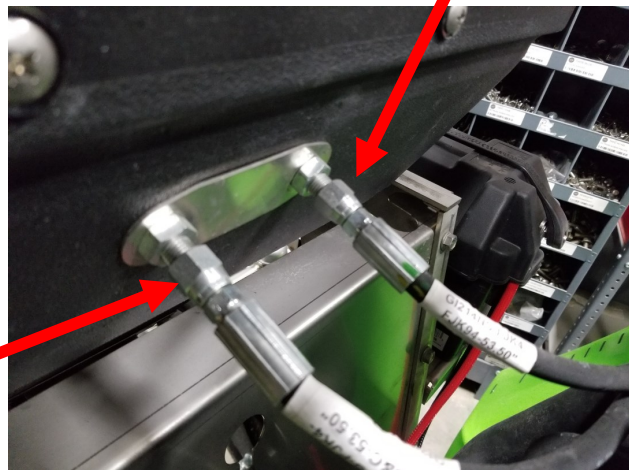


STEP 27: Reconnect the hydraulic hoses to the hopper.

NOTE: Hold the hoses up to prevent oil spillage.

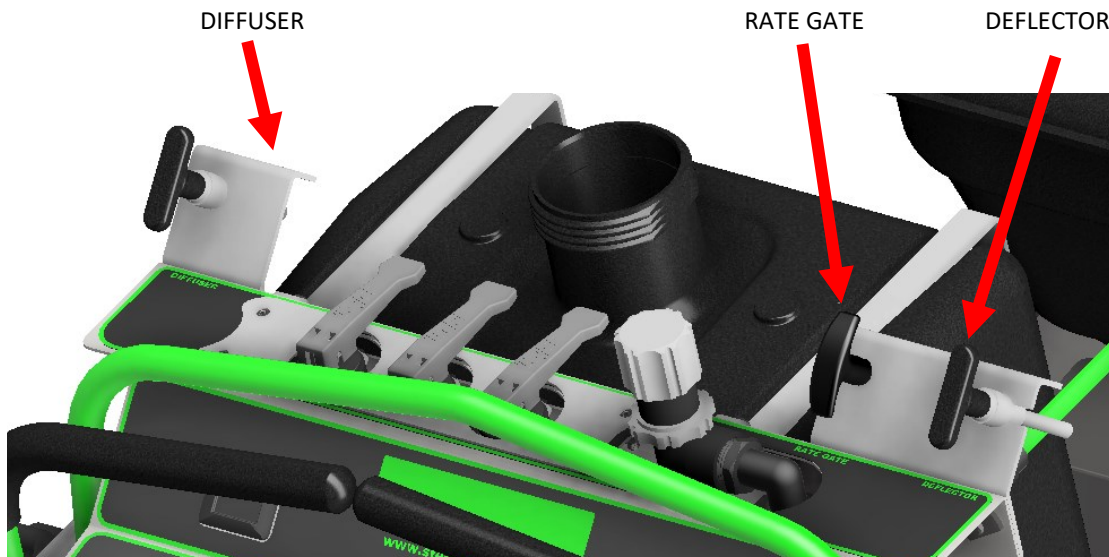
Motor Input

Motor Output



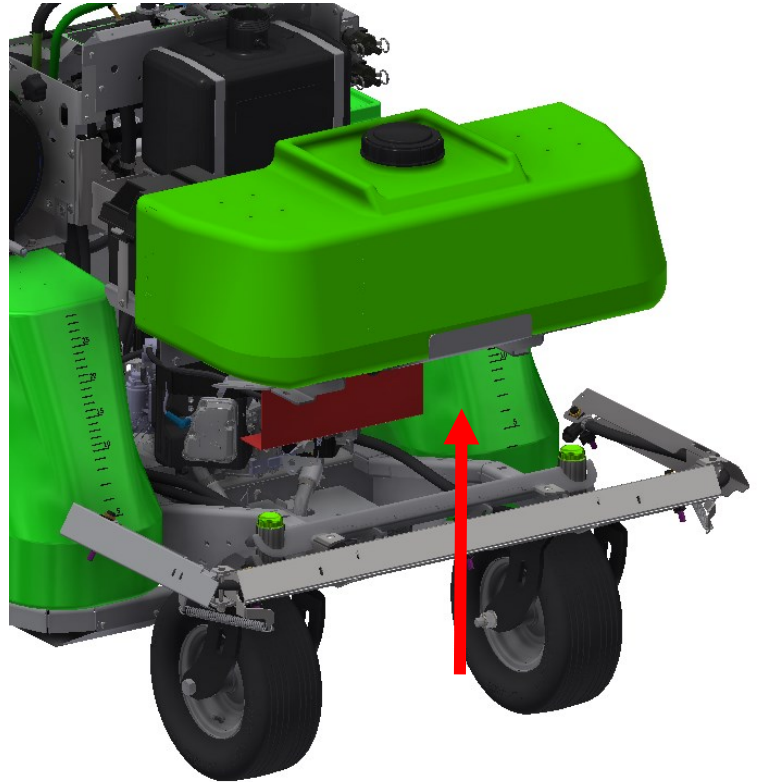
ENGINE REPLACEMENT INSTRUCTIONS

STEP 28: Reconnect the cables from the dash.



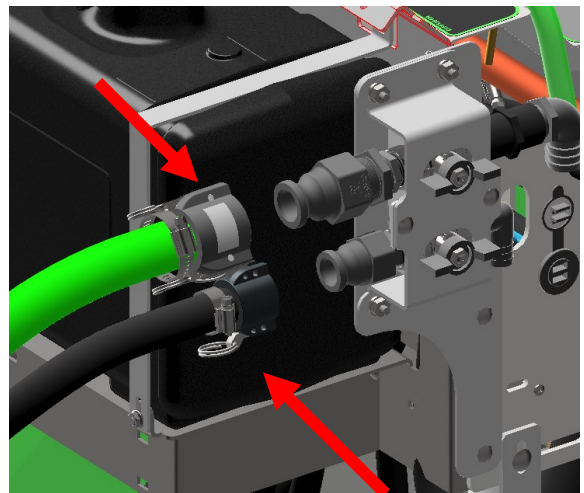
ENGINE REPLACEMENT INSTRUCTIONS

STEP 29: Set the 35 gallon tank on the frame and attach it with the six bolts.



STEP 30: Connect the hoses to the valves.

- Top valve is **Suction**.
- Bottom valve is **Return**.



ENGINE REPLACEMENT INSTRUCTIONS

STEP 31:

- Set the battery in the battery box.
- Reconnect the battery cables, power cable and wires first followed by the ground wire.
- Attach the battery box cover and bungie strap.



GROUND

POWER

ENGINE REPLACEMENT INSTRUCTIONS

NOTES

ENGINE REPLACEMENT INSTRUCTIONS

NOTES



Steel Green Mfg.
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Lebanon, IN 46052
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www.steelgreenmfg.com

MANUAL PART NO.	MANUAL REV.	DESCRIPTION
SGM-018	3	ENGINE REPLACEMENT