

1. Procedure summary

This process describes how to safely Change and tune up a small motor.

1.1. Related Procedures

1.2. Procedure impacts and concerns

Safety Required PPE: gloves, safety glasses, long sleeve shirt, rubber gloves, and steel toe shoes.

Quality Clean up and dispose of used material in the proper container. Clean area where work was performed. All used material is being stored in the proper containers. All PPE is being cleaned and put away.

Cost

1.3. Responsibilities and owners

Document Owner	Manage content and distribution
Process Owner	Responsible for content and process validation
Site Manager	Responsible for implementation and conformance

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2. Process

2.1. Process description

Process on how to change oil and tune up motor.

2.2. Process diagram: Work Instruction



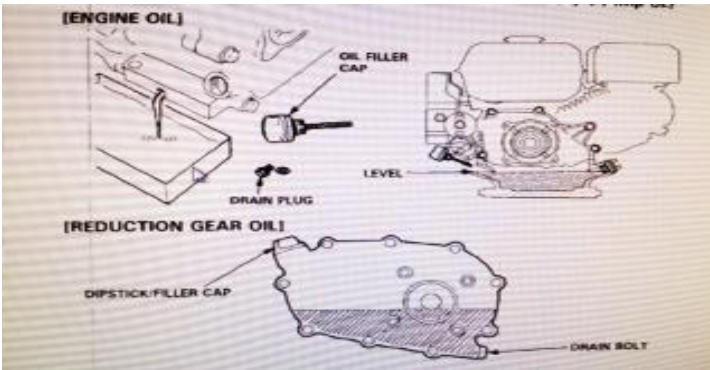
2.3. Process steps

Steps needed to change oil and tune up small motor.

Oil Change

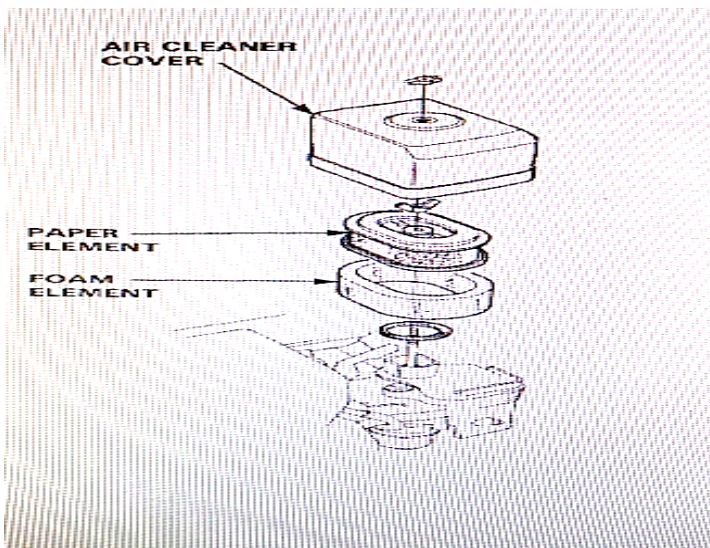
1. Set up oil pan to catch used oil under drain plug.
2. Remove the oil filler cap and drain plug to drain the oil.
3. Replace drain plug.
4. Refill with recommended oil and check the oil level.

5. Install the oil filler cap.



Air Cleaner Service

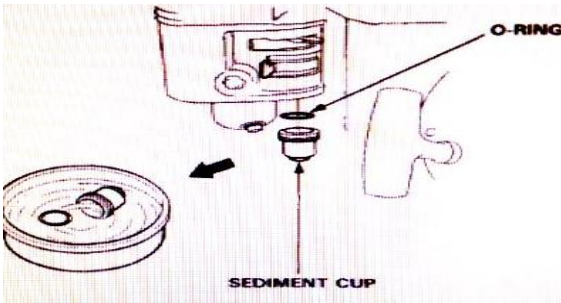
6. Remove the wing nut and the air cleaner cover. Remove the elements and separate them. Carefully check both elements for holes or tears and replace if damaged.
7. Foam element: wash element in a solution of household detergent and warm water, then rinse thoroughly, or wash in nonflammable or high flash point solvent. Allow the element to dry thoroughly. Soak the element in clean engine oil and squeeze out the excess oil. The engine will smoke during initial start-up if too much oil is left in the foam.
8. Paper element: tap the element lightly several times on a hard surface to remove the excess dirt, or low compressed air through the air filter from the inside out. Never try to brush the dirt off; brushing will force dirt into the fibers. Replace the paper element if it is excessively dirty.



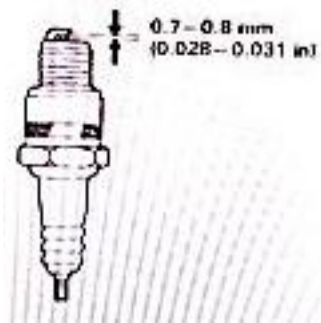
Sediment Cup Cleaning

9. Turn the fuel valve to off. Remove the sediment cup and O- ring and wash them in nonflammable or high flash point solvent. Dry them thoroughly and reinstall securely. Turn

the fuel valve on and check for leaks.



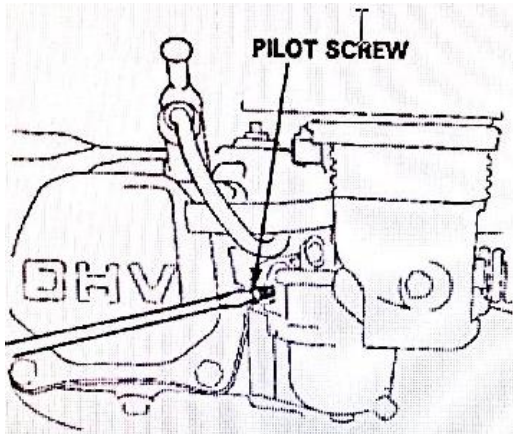
10. Remove the spark plug cap and use a spark plug wrench to remove the plug.
11. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused if not discard.
12. Measure the plug with a feeler gauge. The gap should be 0.7-0.8mm correct as necessary by bending the side electrode.



13. Check that the spark plug washer is in good condition and thread the spark plug by hand to prevent cross-threading.
14. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.

Carburetor adjustment

15. Start the engine and allow it to warm up to normal operating temperature.
16. With the engine idling, turn the pilot screw in or out to the setting that produces the highest idle rpm.
17. After the pilot screw is correctly adjusted, turn the throttle stop screw to obtain the standard idle speed.
18. Standard idle speed should be 1400 +/- 100



3. Required documents

3.1. Input documents

<Input document and storage instructions>

 <Input document
number>

3.2. Output documents

<Output document and storage instructions>

 <Output
document
number>

4. Document control

4.1. Revision history

R0 – Initial Release – <Editor name>	<Date>
R1 – <Editor name>	<Date>

4.2. Document approval

<Name>

<Approval date>

4.3. Document reviewers

<Name>

<Name>

 <Last reviewed
date>
<Last reviewed
date>

5. Risk analysis

<Risk name>

<Mitigation plan>

 <Ow
ner> <RPN>