



Tools for Powerhead Repair

Part No.	Tool Description
91-52344	Flywheel Holder
91-24161	Protector Cap
91-73687A1	Flywheel Puller
91-90455	Lifting Eye
91-24697	Piston Ring Expander
91-74607A1	Piston Pin Tool
91-77109A1	Locking Installation Tool
91-812549	Powerhead Stand

SEALANTS/LOCTITES® NEEDED

Loctite 271 (Obtain Locally)

Master Gasket Sealant Kit

Quicksilver® No. 92-12564 1 (Loctite Kit)

Quicksilver® Perfect Seal No. 4 (92-34227-1)

General Information

DISASSEMBLY AND REASSEMBLY

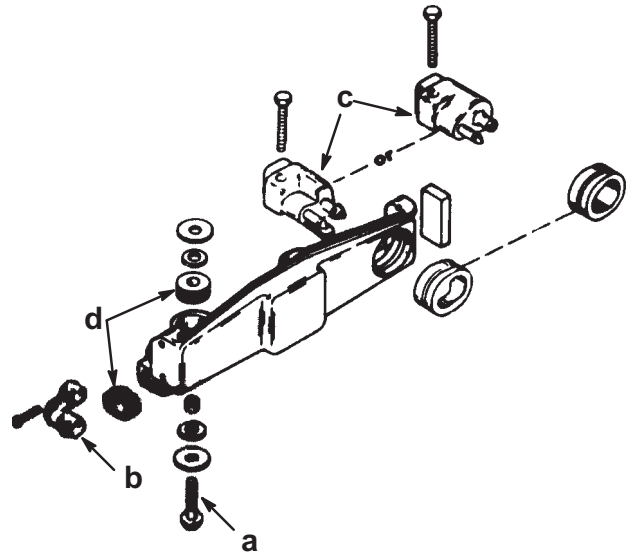
If complete disassembly is not necessary, start at appropriate spot; start reassembly at point disassembly stopped.

If major powerhead repairs are being done, remove powerhead from lower unit. It is not necessary to remove powerhead for:

- Visual check for scoring or broken rings (cylinder walls and pistons), by viewing through exhaust ports.
- Minor external repair (i.e. - ignition system, carburetors, reed blocks, thermostat checks, etc.).

Powerhead Component Removal

- Remove Front Cowl Bracket** before removing air box cover, by removing 2 bolts, cable retainer, and fuel connector. Bushings normally remain in brackets. Cowl and bracket seals/bushings stay attached to respective locations. If seal replacement is necessary, remove old seals at time of replacement.



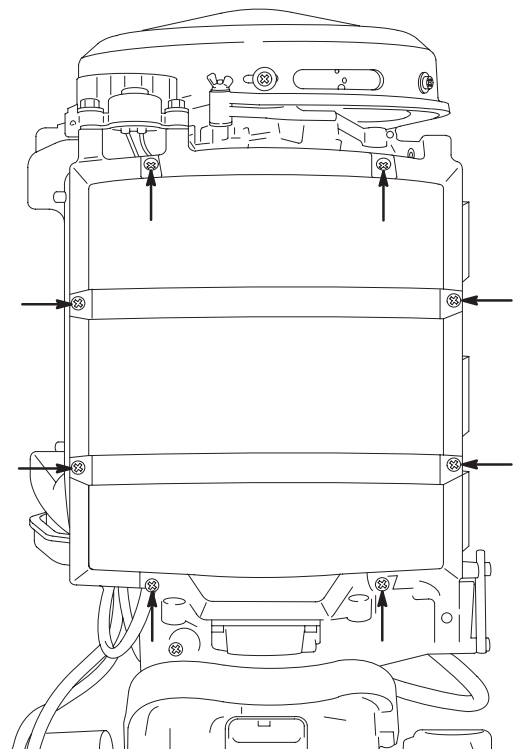
a - Bolts

b - Cable Retainer

c - Fuel Connector

d - Bushings

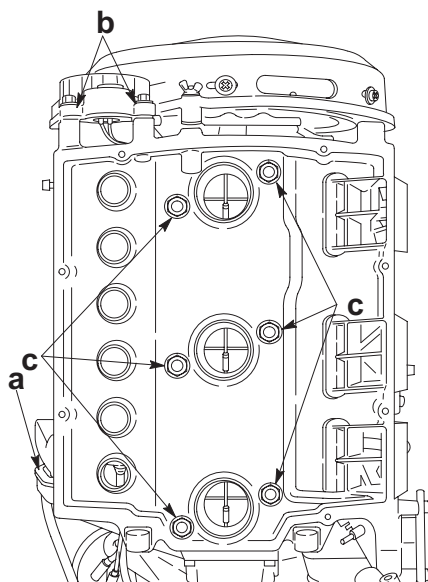
- Remove Air Box Cover by removing 8 screws.



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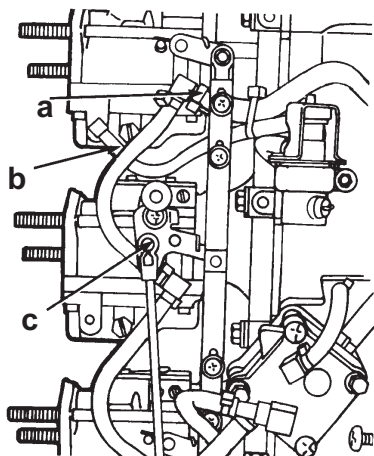
3. Remove 10mm bolt from lower oil tank support (starboard side of engine, base).
4. Remove 2 (8mm) Bolts from upper oil tank neck brace.
5. Remove Air Box by removing 6 nuts and pulling off of carburetor studs.
6. Disconnect Oil Lines - Remove Oil Reservoir.



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- a - Oil Tank Support
- b - Bolts (8mm)
- c - Nuts (6)

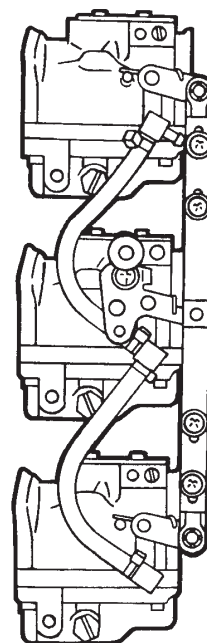
7. Disconnect Throttle Linkage (c).
8. Remove main fuel hose (a), and fuel hose (b). Lift carburetors off as 1-unit assembly (see next column).



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- a - Main Fuel Hose
- b - Fuel Enrichment Hose
- c - Throttle Linkage

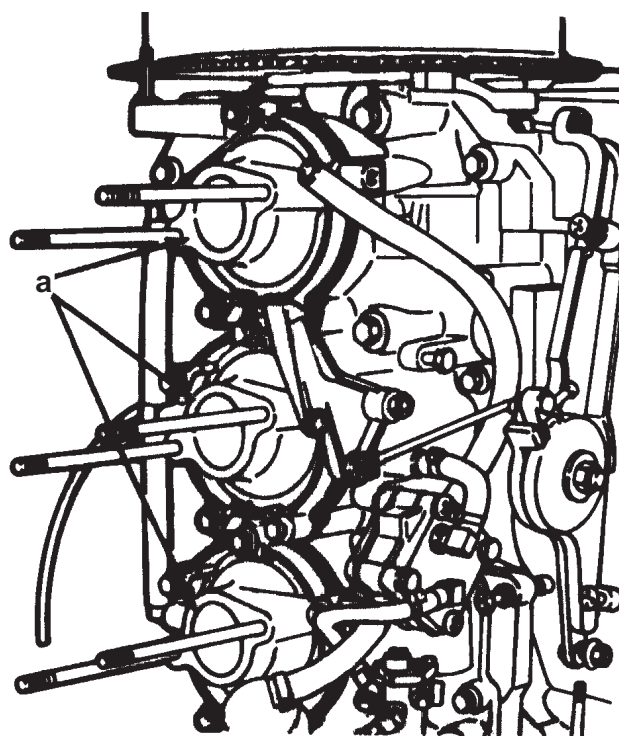
9. Remove Flywheel Cover by removing 3 wing nuts.



1-unit Removal Of Carburetor Assembly.

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10. Remove Intake Manifolds - see below.

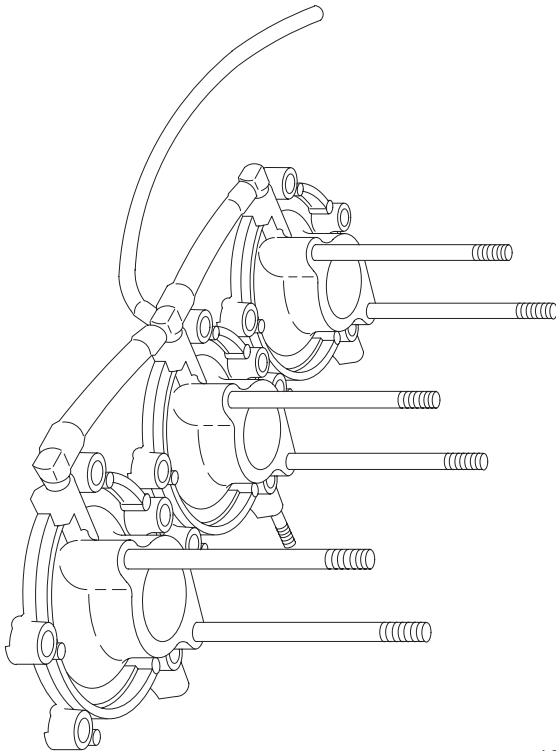


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- a - Intake Manifolds

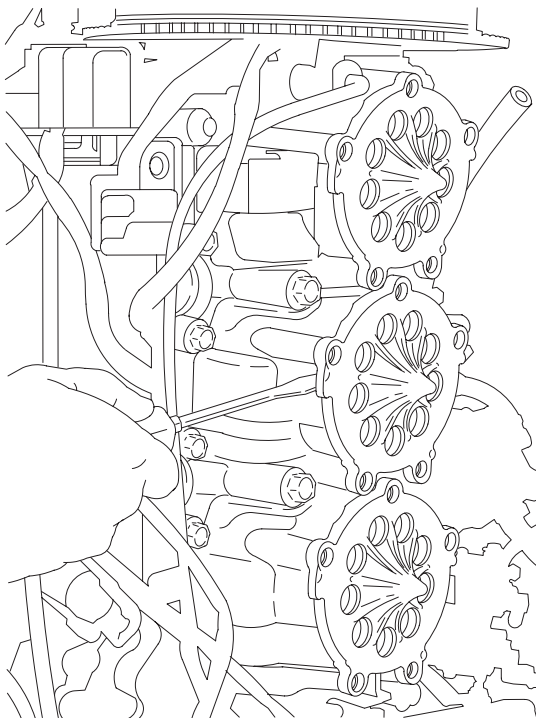


11. The intake manifolds may be removed as 1-unit.



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12. Pry off each Reed-Block, as shown, using screwdriver.



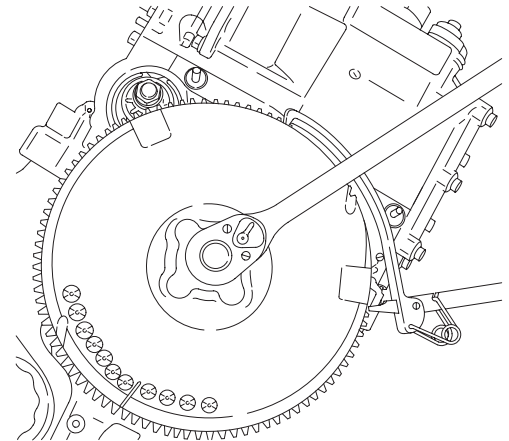
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Flywheel Removal

⚠ CAUTION

DO NOT strike end of puller center bolt to remove flywheel, or damage may result to crankshaft or bearings.

1. Remove flywheel cover from powerhead.
2. While holding flywheel with Flywheel Holder (91-52344), remove flywheel nut and washer.



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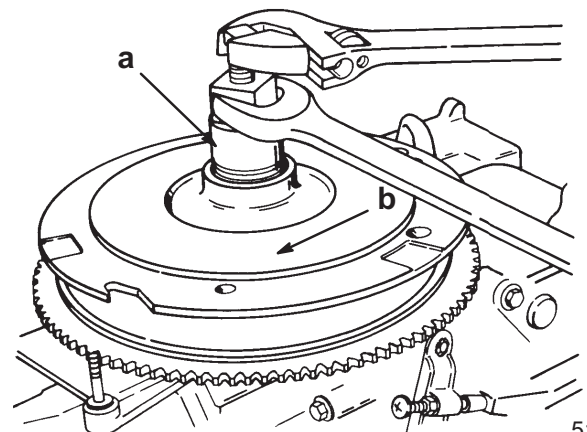
⚠ CAUTION

Crankshaft damage may result if a protector cap is not used between crankshaft and puller.

3. Install a crankshaft Protector Cap (91-24161) on end of crankshaft, then install Flywheel Puller (91-73687A1) into flywheel.
4. Install crankshaft Protector Cap (91-24161) on the end of crankshaft, then install Flywheel Puller (a) (91-73687A1) into flywheel (b).

NOTE: Neither heat nor hammer should be used on flywheel to aid in removal as damage to flywheel or electrical components under flywheel may result.

5. Remove flywheel.



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