FUEL SYSTEM (CARBURETOR)

GENERAL

- Work in a well ventilated area. Smoking or allowing flames or sparks in the work area or where gasoline is stored can cause a fire or explosion.
- If the vehicle is to be stored for more than one month, drain the float chamber. Fuel left in the float chamber may cause clogged jets, resulting in hard starting or poor driveability.
- Before disassembling the carburetor, place an approved fuel container under the carburetor, loosen the drain screw and drain the carburetor.
- When disassembling the fuel system parts, note the locations of the O-rings. Replace them with new ones on reassembly.
- After removing the carburetor, wrap the intake port of the engine with a shop towel or cover it with a piece of tape to prevent any foreign material from dropping into the engine. Be sure to remove the cover when reinstalling the carburetor.

TROUBLESHOOTING

Engine won't start
- Too much fuel getting to the engine
  – Air cleaner clogged
  – Flooded carburetor
- Intake air leak
- Fuel contaminated/deteriorated
- No fuel to carburetor
  – Fuel filter clogged
  – Fuel strainer clogged
  – Fuel tank cap breather hole clogged
  – Fuel line clogged/bent
  – No fuel in tank

Engine stall, hard to start, rough idling
- Fuel line restricted
- Ignition system malfunction
- Fuel mixture too lean/rich
- Fuel contaminated/deteriorated
- Intake air leak
- Idle speed misadjusted
- Air screw misadjusted
- Slow circuit clogged
- Improper choke operation
- Low cylinder compression
- Air cleaner clogged

Lean mixture
- Fuel jets clogged
- Float valve faulty
- Float level too low
- Fuel line restricted
- Carburetor air vent hose clogged
- Intake air leak
- Throttle valve faulty

Rich mixture
- Carburetor choke stuck
- Float valve faulty
- Float level too high
- Air jets clogged
- Air cleaner element contaminated
- Flooded carburetor

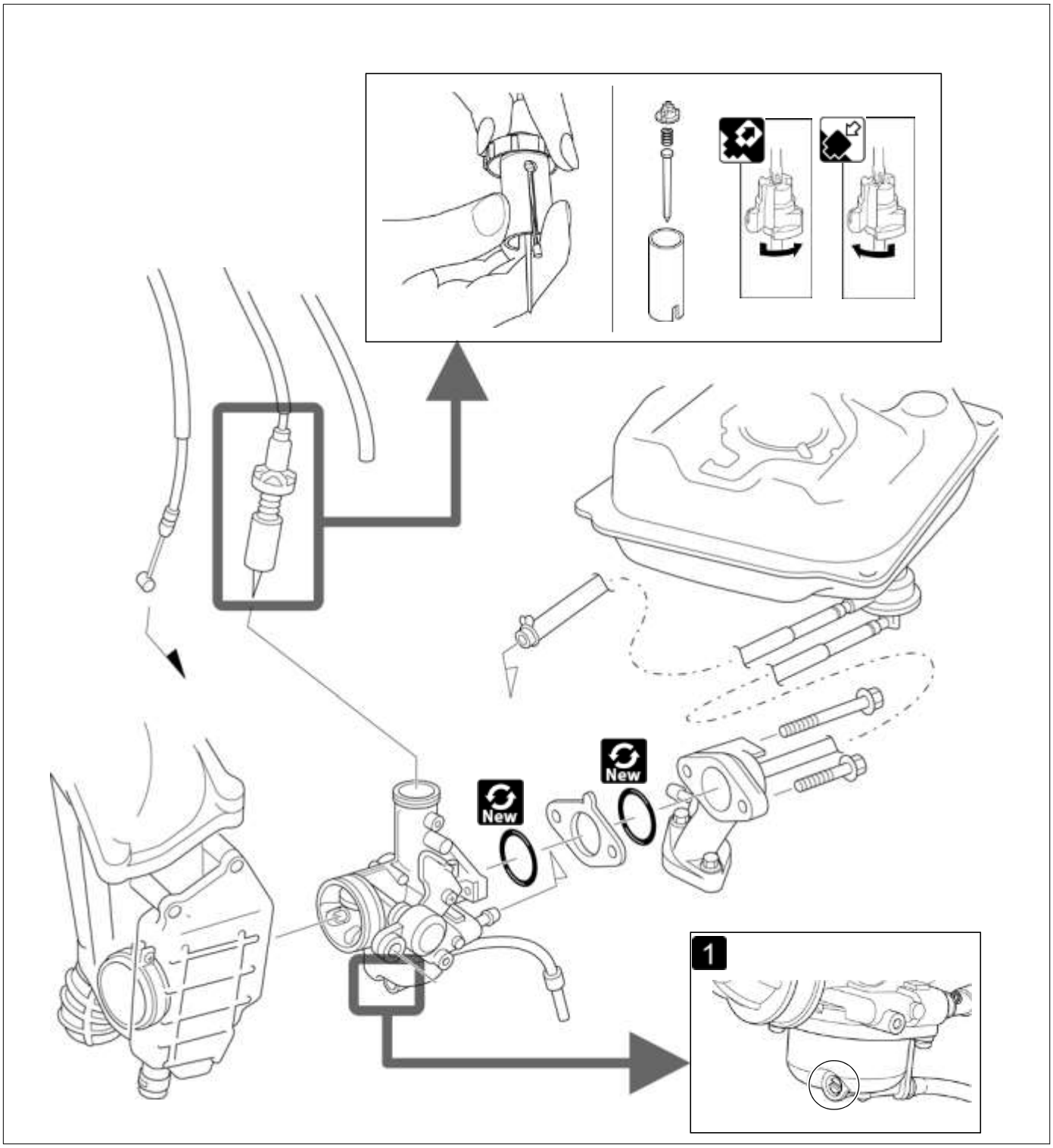
Afterburn when engine braking is used
- Lean mixture in slow circuit
- Faulty pulse secondary air injection (PAIR) system
  – Faulty PAIR control valve
  – Clogged hose of the PAIR system
- Ignition system malfunction
- Faulty air cut-off valve

Backfiring or misfiring during acceleration
- Ignition system malfunction
- Fuel mixture too lean

Poor performance (driveability) and poor fuel economy
- Fuel system clogged
- Ignition system malfunction
- Air cleaner clogged

CARBURETOR (PISTON VALVE TYPE)

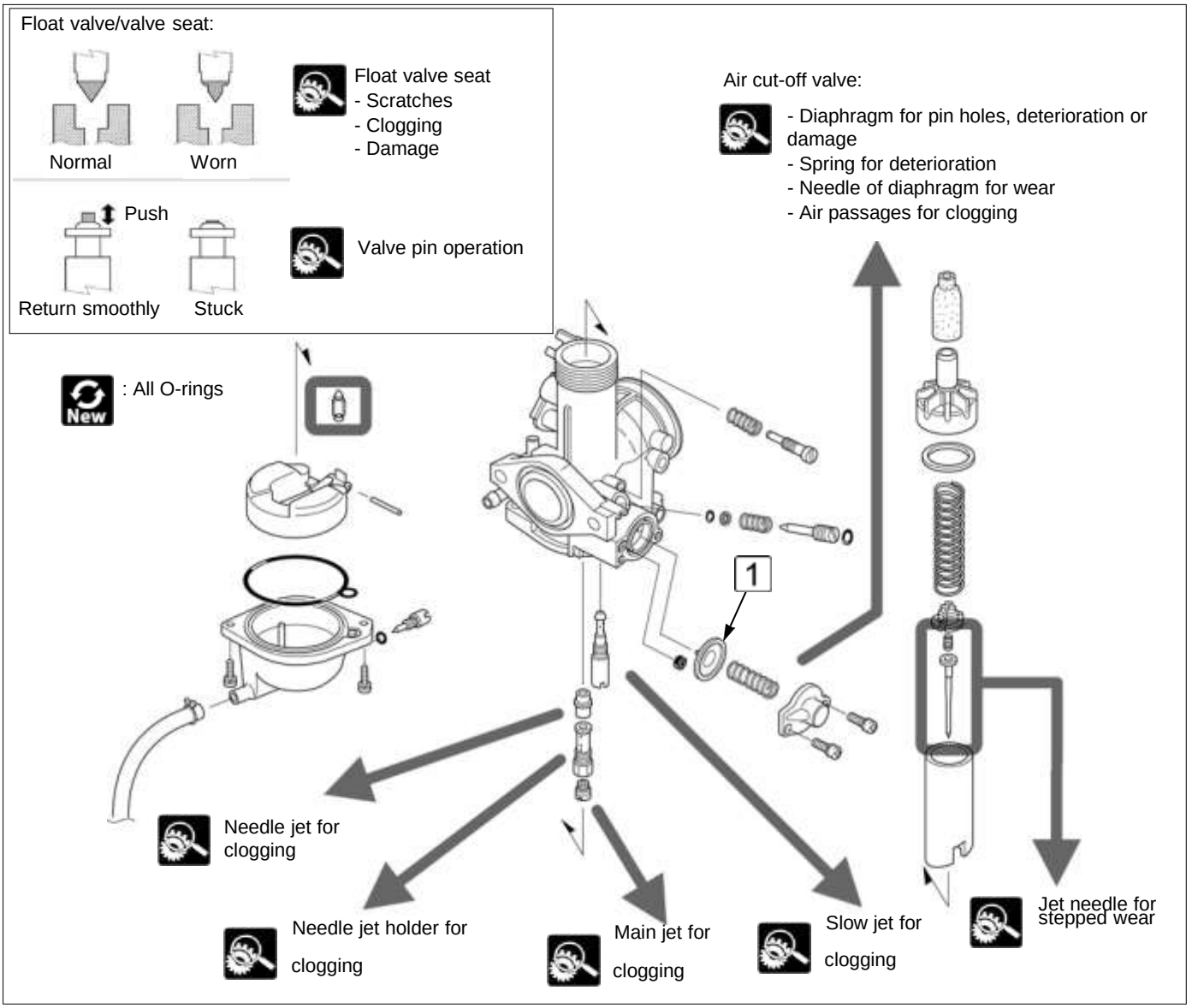
REMOVAL/INSTALLATION



• 1 Place a suitable container under the float chamber and drain fuel from the carburetor by loosening the drain screw.

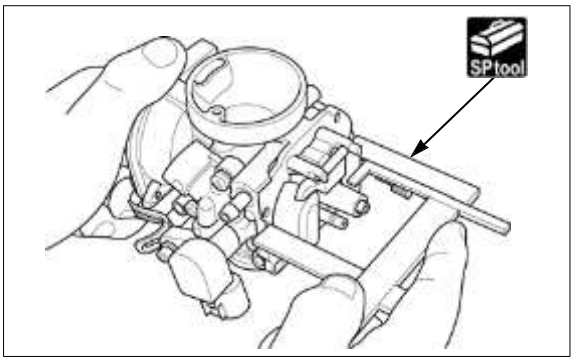
DISASSEMBLY/ASSEMBLY/INSPECTION

- Handle all jets with care. They can easily be scored or scratched.
- Turn the air screw in and record the number of turns until it seats lightly. Make a note of the number to use as a reference when reinstalling the air screw.
- Damage to the air screw seat will occur if the air screw is tightened against the seat.



- 1 Install the air cut-off valve O-ring with its flat side facing the carburetor body.

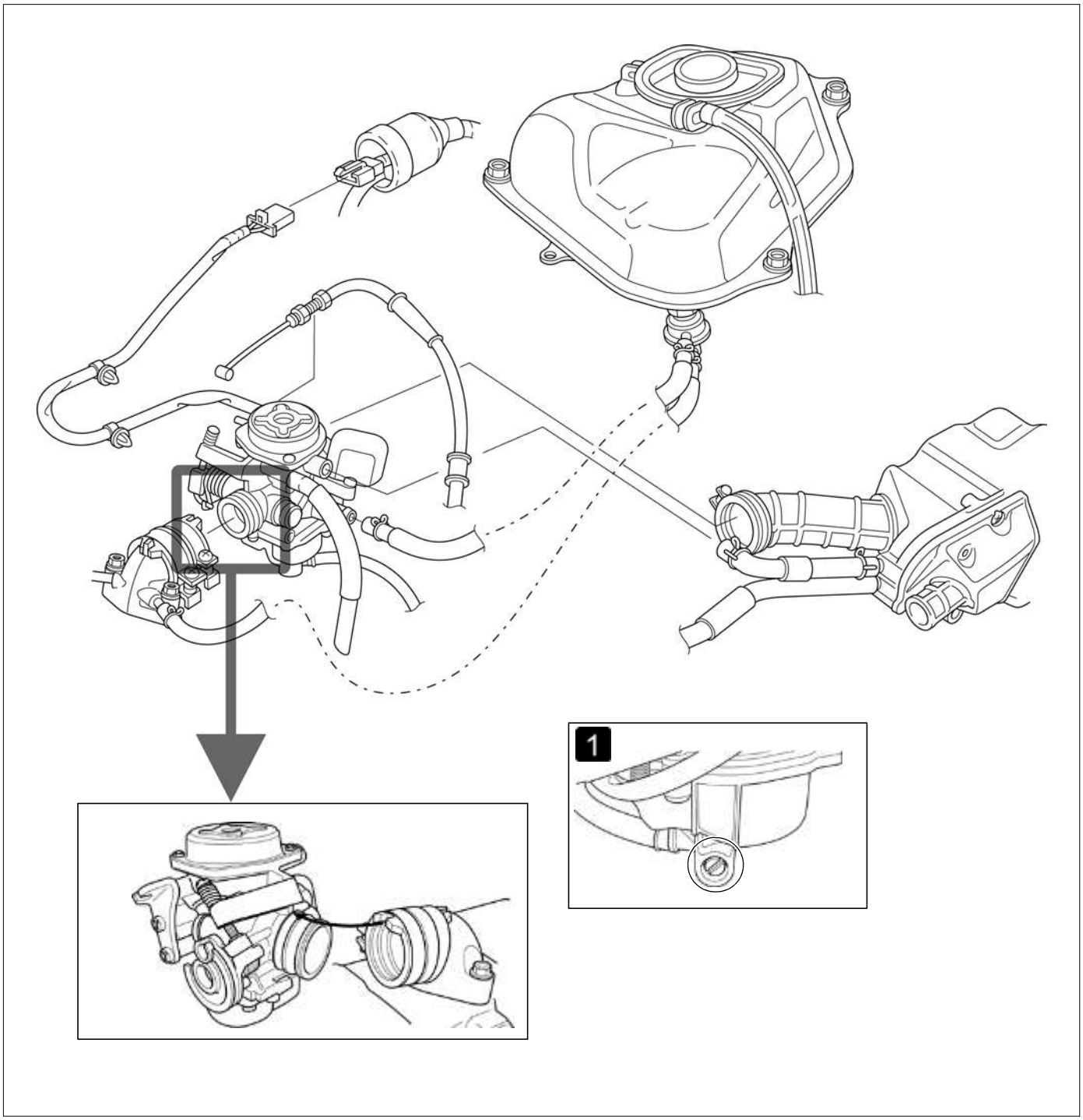
Float Level Inspection:



- With the float valve seated and the float arm just touching the valve.
- Measure the float level with the float level gauge

CARBURETOR (DIAPHRAGM TYPE)

REMOVAL/INSTALLATION

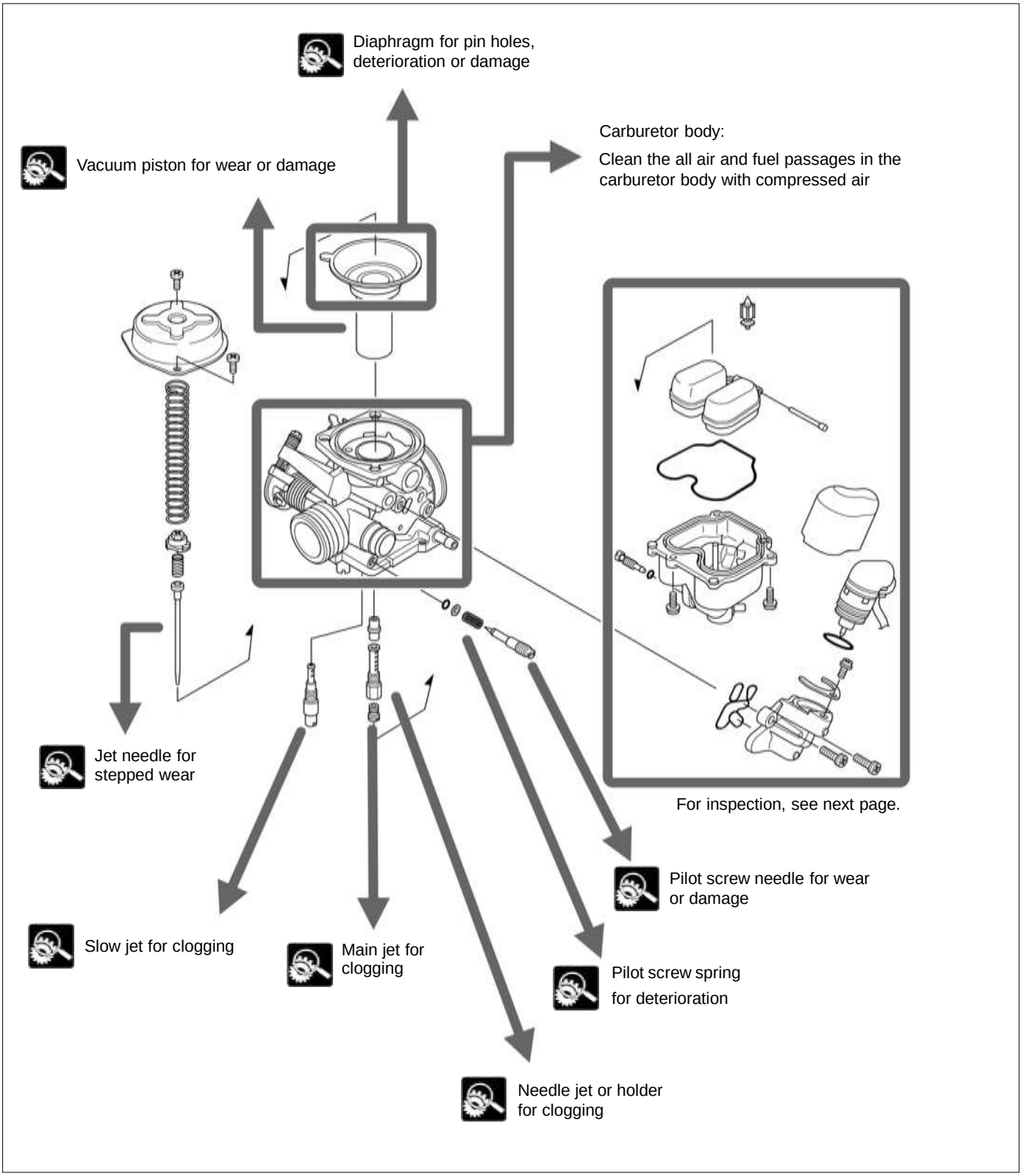


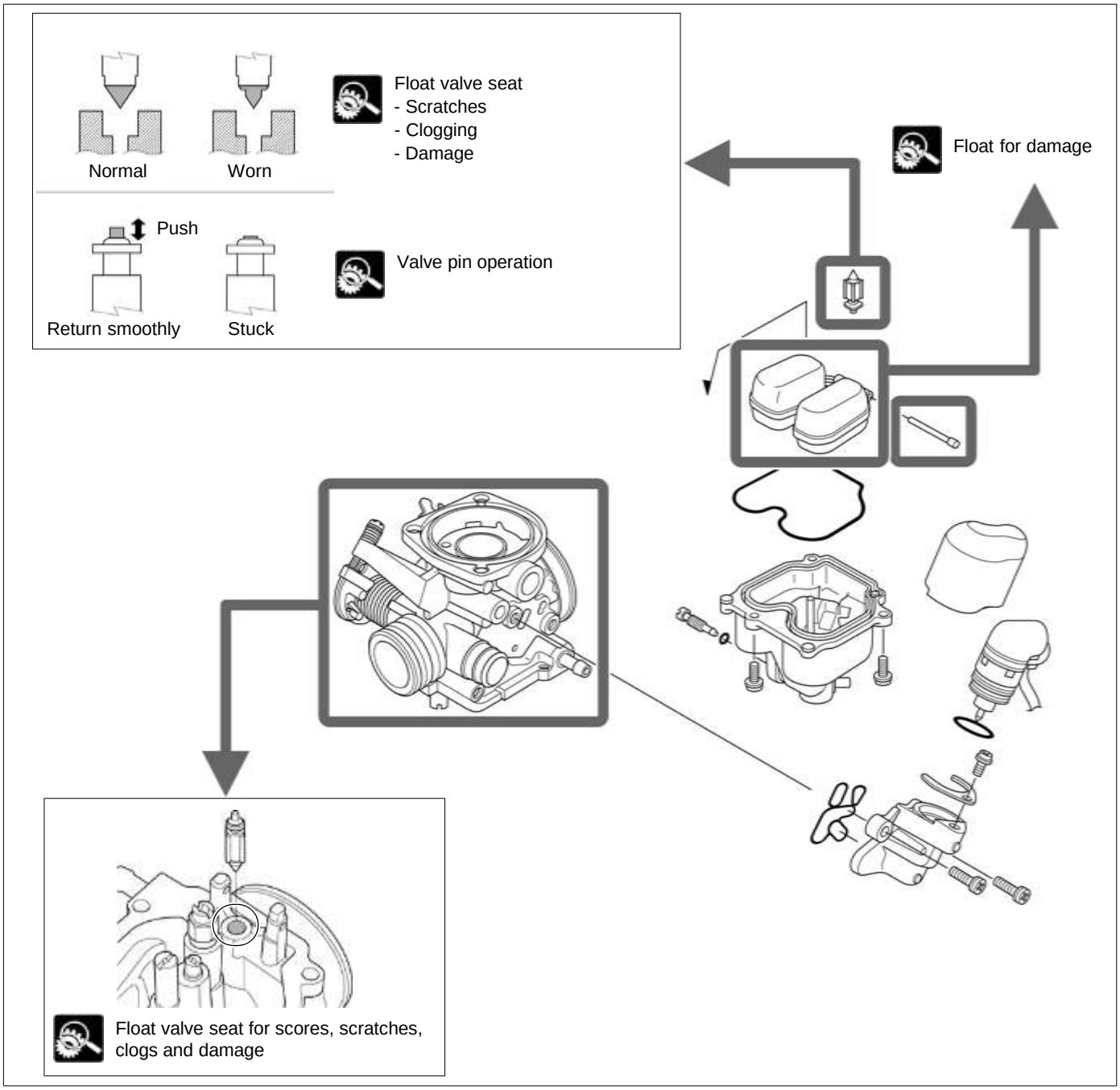
- Fuel hose (Pinch the fuel hose with a hose clamp.)
- 1 Place a suitable container under the float chamber and drain fuel from the carburetor by loosening the drain screw. After draining, tighten the drain screw.

- After assembly, check the following:
  – Throttle grip freeplay
  – Engine idle speed

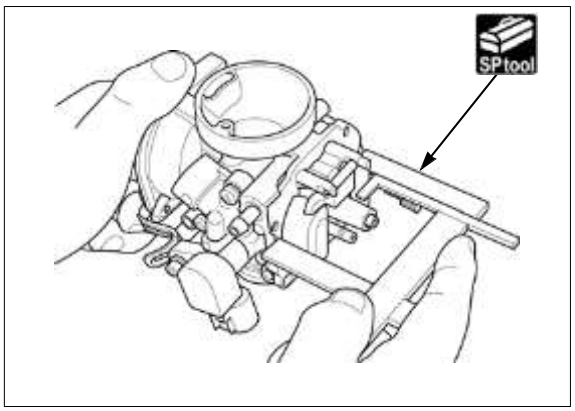
DISASSEMBLY/ASSEMBLY/INSPECTION

- Before removing the pilot screw, record the number of turns until it seats lightly, then remove the pilot screw, spring, washer and O-ring.
- Damage to the pilot screw seat will occur if the screw is tightened against the seat.





Float level inspection:



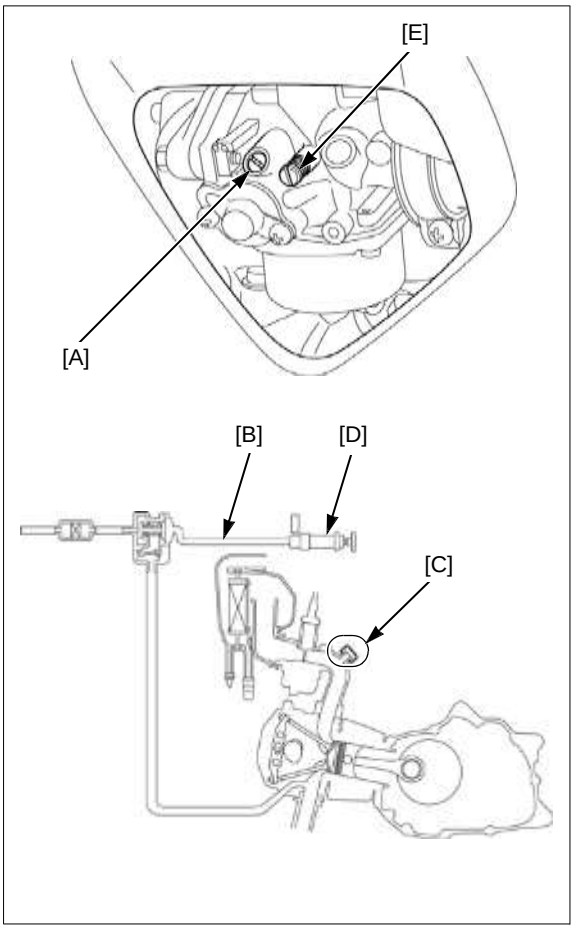
- With the float valve seated and the float arm just touching the valve.
- Measure the float level with the float level gauge

AIR/PILOT SCREW ADJUSTMENT (CARBURETOR TYPE)

IDLE DROP PROCEDURE

- The air/pilot screw is factory pre-set and no adjustment is necessary unless the carburetor is overhauled or the air/pilot screw is replaced.
- Use a tachometer with graduations of 50 min^{-1} (rpm) or smaller that will accurately indicate a 50 min^{-1} (rpm) change.

- Refer to Spec (Specific) Service Manual for the instruction and specification in detail.



NOTE:

- Damage to the air/pilot screw seat will occur if the air screw is tightened against the seat.
- Turn the air/pilot screw [A] clockwise until it seats lightly, then back it out to specification given.
- This is an initial setting prior to the final air/pilot screw adjustment.

- Warm up the engine
- Stop and go riding for 10 minutes is sufficient.

- Stop the engine.
- Tachometer

- Vacuum hose [B] of PAIR control valve (from the intake pipe)

- Plug the vacuum port [C].
- Vacuum pump [D] (to vacuum hose)
- Apply the specified vacuum to the PAIR control valve vacuum hose.

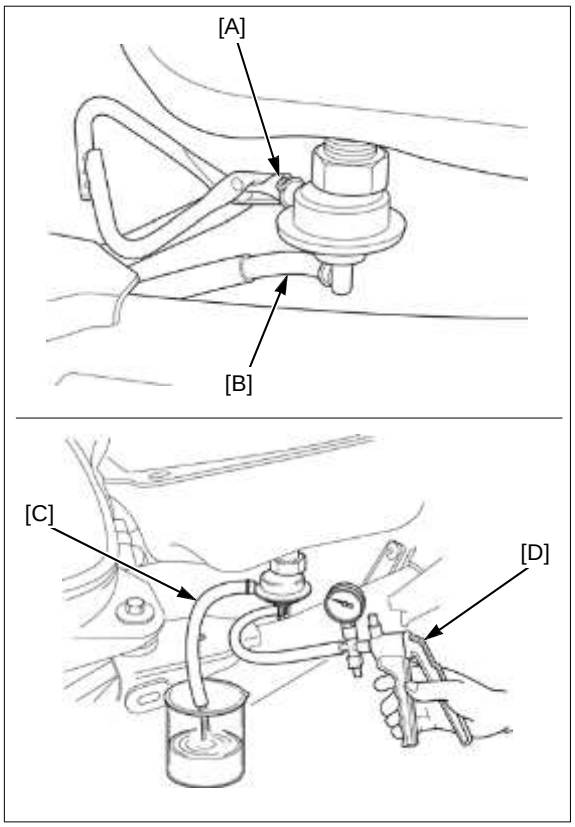
1. Adjust idle speed with the throttle stop screw [E]
2. Turn the pilot/air screw in or out slowly to obtain the highest engine speed.
3. Lightly open the throttle 2 or 3 times, then adjust the idle speed with the throttle stop screw.
4. Turn the air/pilot screw out or in until the engine speed drops as specified.
5. Turn the air/pilot screw clockwise or counterclockwise to the final opening from the position obtained in previous step.

- Plug from the vacuum port, then remove the vacuum pump and connect the vacuum hose of PAIR control valve.

- Idle speed with the throttle stop screw

FUEL AUTO VALVE (CARBURETOR TYPE)

INSPECTION



- Hose clamp

- Fuel hose [A] (from the fuel auto valve)
  – Wipe off spilled out fuel.

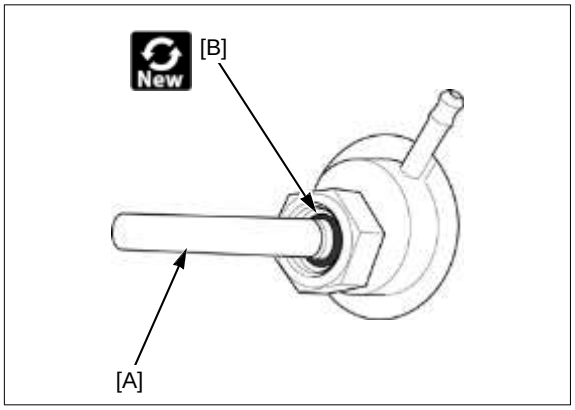
- Fuel does not come out from the joint of the fuel auto valve

- Vacuum hose [B] from the fuel auto valve

- Connect a suitable fuel drain hose [C] to the fuel auto valve.
  – Place a suitable container under the fuel drain hose.
- Connect a commercially available vacuum pump [D] to the vacuum hose joint.

- Fuel should flow out from the fuel hose when vacuum is applied.
  – If fuel flow is restricted or does not flow, remove the fuel auto valve and check the condition of the fuel strainer screen and clean it if necessary.
  – If fuel flow is still restricted or does not flow after cleaning, replace the fuel auto valve.

Fuel Strainer Screen:



- Fuel strainer screen [A]
- O-ring [B]

- Clean the fuel strainer screen (with compressed air)