

How to...

When servicing a carburetor, the steps below can be followed to ensure there are no leaks in the fuel system:

1. Install and remove the fuel hoses, by hand whenever possible, to avoid damage to the barbed connector – tools with sharp edges like pliers or screwdrivers must not be used. As a Service Tip, the limiter cap removal tool (5910 890 4501), featured in Tech Tips Issue 10, can be used as a suitable tool to remove fuel supply lines from barbed connectors.



2. Do not reuse fuel hoses after disassembly, always replace them with new hoses as fuel hoses may be over-extended when removed.
3. Install new fuel hoses dry or with the aid of STIHL Press Fluid OH723 (0781 957 9000). Other assembly fluids are not permitted and may lead to fuel hose damage.
4. When using Press Fluid OH723, apply press fluid to the ends of the hose and connectors prior to installation.



Notes Regarding STIHL Press Fluid OH723

Press Fluid OH723 produces a lubricant film to aid in assembly of components such as fuel lines, tank vents, AV buffers, spark plug wires, and O-Rings. The lubricant evaporates after a short period of time allowing for a tight fit.

Never use fuel, oil, or grease as an assembly lubricant. Fuel, oil, and grease do not evaporate and may allow the component to slip from the connector.



Tech Service Tips

Issue

11

Fall 2009



What's New...
How to...
This & That...

Enhancements to Series 4282
Servicing the Fuel System
EPA Phase 3
New STIHL Warranty

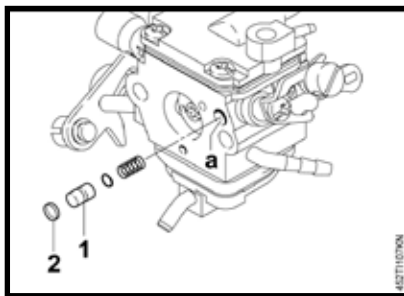
What's New?

Recently Andreas STIHL has released several new enhancements to the Series 4282 (BR 500, BR 550, BR 600 Magnum).

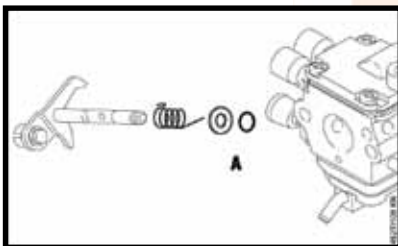
The models for these enhancements are listed below with the corresponding carburetor part numbers. More information regarding the changes to the carburetors can be referenced in the STIHL Technical Bulletin 51.2008.

Model	ID Previous	Part # Previous	New ID	New Part #
BR 500	C1Q-S99	4282 120 0600	C1Q-S99A	4282 120 0603
BR 600	C1Q-S100	4282 120 0601	C1Q-S100A	4282 120 0604
BR 550	C1Q-S101	4282 120 0602	C1Q-S101A	4282 120 0605

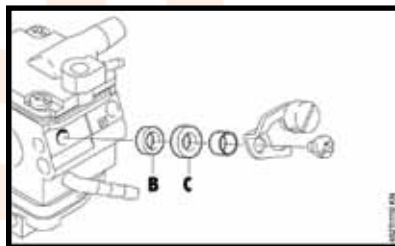
1 The advantages of these carburetors are a barbed connector, modified accelerator pump (1), throttle lever shaft, and improved welch plug sealant (red). For improved sealing against dirt, the previous strainer in the accelerator pump cylinder bore is replaced by a new sealing cap (2).



2 To improve sealing of the throttle lever shaft, the shaft seals of the carburetor housings are changed. A modified seal with a sealing ring (A), (B), and washer (C) can identify the new throttle shaft lever. The new carburetors can also be used on older machines.



Throttle shaft, left side



Throttle shaft, right side

3 Furthermore, the exhaust valve and exhaust valve seat have been changed. The exhaust valve 4282 025 1901 has been replaced by the new version 4282 025 1903 starting with Serial Number 279 578 499. There has been no change to the intake valve and valve seat.

Important note: The new exhaust valve cannot be installed in a cylinder or shortblock with the previous valve seat as they are not compatible and will result in engine damage.

For this reason the previous exhaust valve 4282 025 1901 remains available for engines with the previous valve seat. The new exhaust valve has been optimized to increase durability and performance. The exhaust valve stem is strengthened by 290% and material hardness has increased by 52% for the valve face and 64% for the valve seat.

Reference STIHL Technical Bulletin 12.2009 for additional information.



The new version of the cylinder is marked with the letter (S) on the lower muffler boss. The letter (S) can be found on the side or underside of the boss.



...this and that.....

On January 1, 2010, an important new EPA Regulation will take effect. The EPA Regulation is titled, "EPA Phase 3" and directly affects you, the servicing dealership. There are several items that will need to be addressed at your dealerships in the next few months. For more information, log onto www.cdctsihl.net click on the Tech Resources tab for the full report. Additional website resources are also available to you.

Here are some of the basics:

EPA 3 Effective Date: January 1, 2010

EPA Phase 3 Exhaust and Evaporative Emission Regulations www.epa.gov

PART 1054 Control of Emissions from New, Small Non-Road Spark-Ignition Engines and Equipment

PART 1068 – General Compliance Provisions for Non-Road Programs

EPA Phase 3 Penalties:

- False Reporting: Civil Penalty up to \$32,500 each day in violation and possible criminal penalties up to five years imprisonment
- Penalties for Tampering: Dealer: \$32,500 each violation
- End-User: \$2,750 for each day the engine is operated in violation
- Importation of Non-Compliant Engines: \$32,500 for each day in violation
- If you cause someone to commit a prohibited act: \$32,500 each violation

Additional Notes:

- Use correct replacement parts for repairs.
- Use correct part numbers, failure codes, and failure descriptions on warranty claims to avoid inaccurate reports.
- Define failure of emission related components accurately on warranty claims to avoid inaccurate reports.
- Use correct serial numbers on warranty claims to avoid inaccurate reports

STIHL Limited Warranty Policy effective October 1, 2009

Model	Personal, Family, or Household Use	Professional Use
Gasoline and Electric Chainsaws	1 year	3 months
Trimmers, Brushcutters, Clearing Saws, Edgers, Hedge Trimmers, Tree Pruners, Blowers, Sprayers, Shredder/Vacs, Boring Gears	2 years	2 years
Manual Sprayers	2 years	2 years
Cut-Off Machines	3 months	3 months