

How to...

When servicing a carburetor, it may be necessary to adjust or return the carburetor to the original factory settings. The new carburetor models are listed below with the corresponding factory adjustments.

The before mentioned STIHL Technical Bulletins can be referenced for additional information regarding the carburetor adjustments.

Carburetor Adjustment (open from light seat with limiter caps removed)				
Model	High: (H)	Low: (L)	Carburetor Model Number	Carburetor Part Number
FS90/FS100RX/FS110	3 3/4	1 1/4	C1Q-S131 A	4180 120 0608
FS130	4 1/2	2 1/2	C1Q-S130 A	4180 120 0607
KM90/KM110	3 3/4	1 1/4	C1Q-S131 A	4180 120 0608
KM130	4 1/2	2 1/2	C1Q-S130 A	4180 120 0607
FC90/FC95/FC100/FC110	3 3/4	1 1/4	C1Q-S131 A	4180 120 0608
HT100/HT101	3 3/4	1 1/4	C1Q-S131 A	4180 120 0608
HT130/HT131	4 1/2	2 1/2	C1Q-S130 A	4180 120 0607
HL90K/HL100/HL100K	3 3/4	1 1/4	C1Q-S131 A	4180 120 0608



The limiter cap removal tool (5910 890 4501) can be used to remove the limiter caps from the carburetor if adjustments are necessary.



Tech Service Tips

Issue

10

Summer 2009

What's New...

Enhancements to Series
4180, 4182, 4280

How to... Adjustment of New Carburetors
This & That... New Special Tools



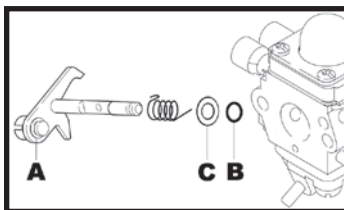
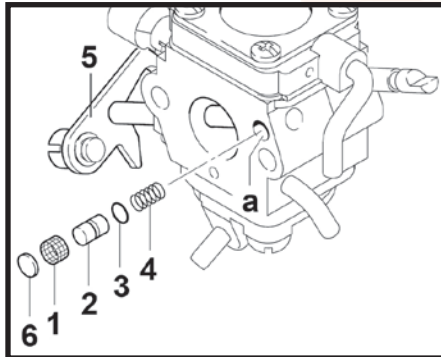
What's New?

Recently STIHL has released several new enhancements to the Series 4180, 4182, and 4280. The models for these enhancements are listed below with the corresponding Technical Bulletin.

Model	Series	Technical Bulletin
FS90/FS100RX/FS110	4180	43.2008
FS130	4180	44.2008
KM90/KM110	4180	43.2008
KM130	4180	44.2008
FC90/FC95/FC100/FC110	4180	43.2008
HT100/HT101	4182	43.2008
HT130/HT131	4182	44.2008
HL90K/HL100/HL100K	4280	43.2008

1 Carburetor Enhancements

Advantages of the enhanced carburetors are a modified accelerator pump (2), choke shaft, throttle lever shaft and improved welch plug sealant. For improved sealing against dirt, the previous strainer in the accelerator pump cylinder bore will be replaced by a new sealing cap (6).

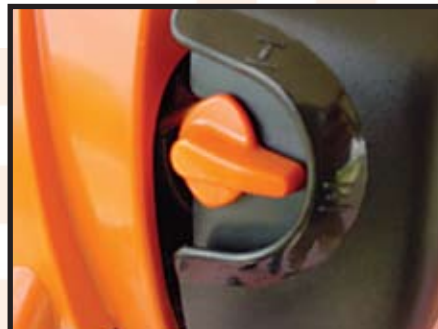
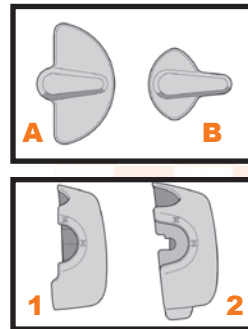


To improve sealing of the choke shaft and the throttle lever shaft (A), the shaft seals of the carburetor housings are changed. A modified seal with a sealing ring (B) and washer (C) can identify the new throttle shaft lever. Reference the corresponding STIHL Technical Bulletin for additional information.

2 Further Improvements

The choke knob, air filter cover, air filter housing, and carburetor spacer flange have also been optimized to increase durability and performance.

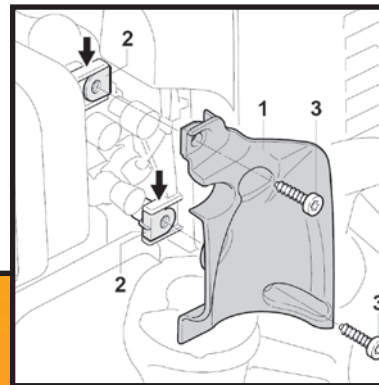
The new choke knob (B) has a larger grip area but can only be installed on the new carburetor version and can only be combined with the new filter cover (2). The previous version (A) remains available for older filter cover (1).



3 Cosmetic Upgrade

A new cover is installed between the filter housing and spacer flange. The filter cover has been changed to allow for the new design. More information regarding these changes can be referenced in STIHL Technical Bulletins 43.2008 and 44.2008.

The new cover (1) 4180 123 0600 will use push nuts (2) 9286 929 0030 to pan head self-tapping screws (3) 9074 478 3025 for fastening the cover to the mounts (arrows) on the filter housing and spacer flange.

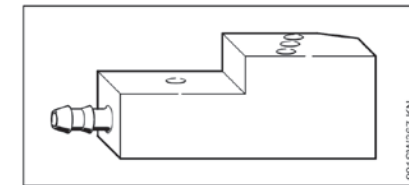


...this and that.....

Further information regarding application and detailed step-by-step use, can be referenced in the STIHL Workshop Manual that corresponds with the listed models below.

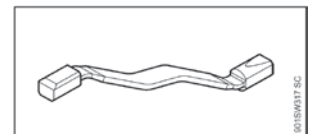
Model	Series	Part Number	Description of Use
MS192, MS171, MS181, MS211, FS40, FS56	1137, 1139, 4144, 4241	0000 893 5904	Stop the Crankshaft from Rotating to Complete Repairs
MS210, MS230, MS250 MS170, MS180 MS171, MS181, MS211	1123, 1130, 1139	1123 890 2202	Remove and Install Oil Pump
MS171, MS181, MS211	1139	1139 893 2500	Test Flange for Pressure and Vacuum Testing Crankcase

Featured STIHL Special Tools in this edition include:

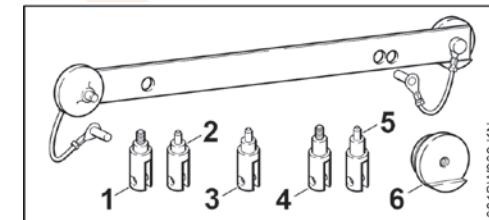


1139 893 2500 Flange

- 10mm Locking Strip (piston stop)
- Test Flange
- Oil Pump Removal / Installing Tool



0000 893 5904 Locking strip



1123 890 2202 Installing tool

- 1 Puller (1) 1123 893 1400
- 2 Installer (1) 1123 893 1500
- 3 Installer (1) 1123 893 1501
- 4 Puller (1) 1130 893 1400
- 5 Installer (1) 1130 893 1500
- 6 Support (1) 1123 893 7500

1123, 1130, 1139