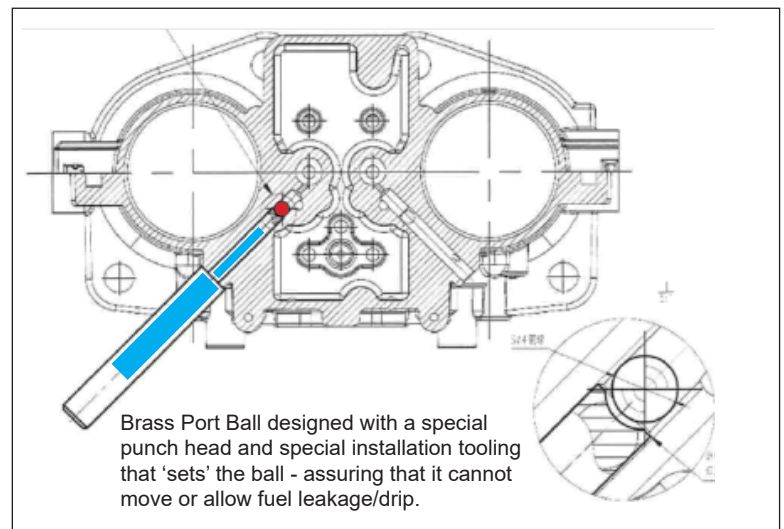
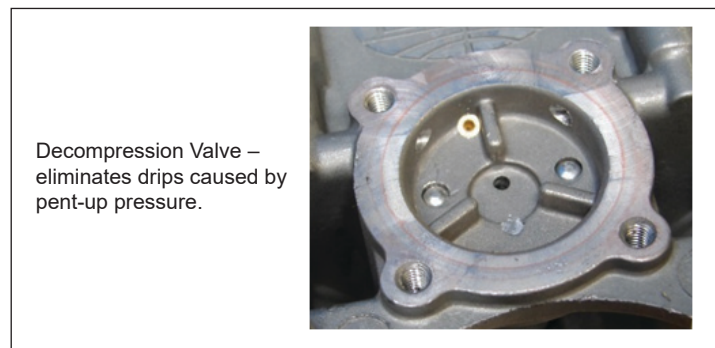
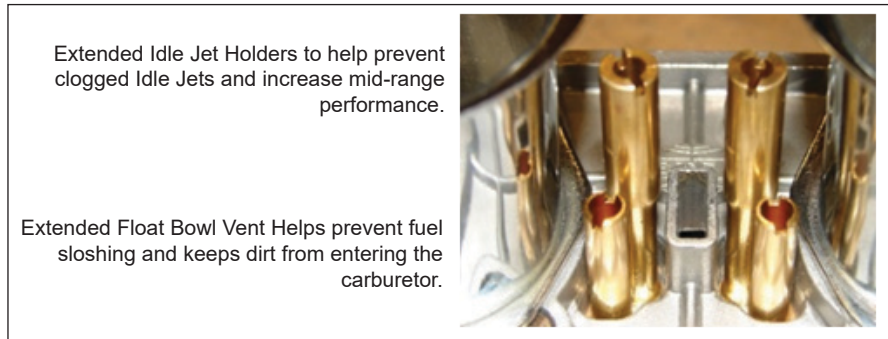
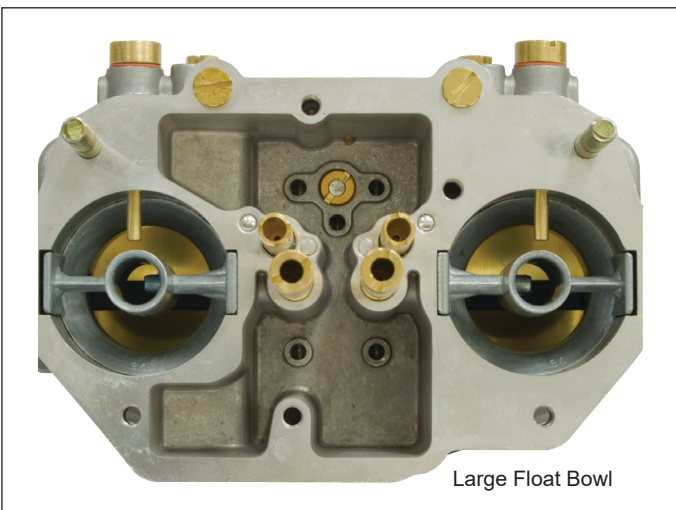
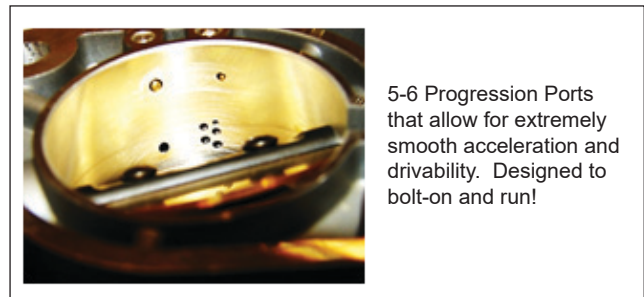
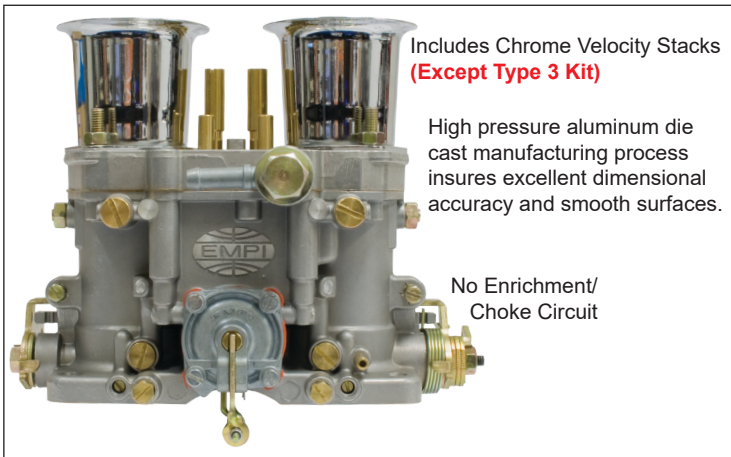


EMPI D Performance 2-Barrel Carburetor

The New EMPI D 2-Barrel Performance Carburetor....Built specifically for the VW Aftermarket. With all the features that you have asked for...

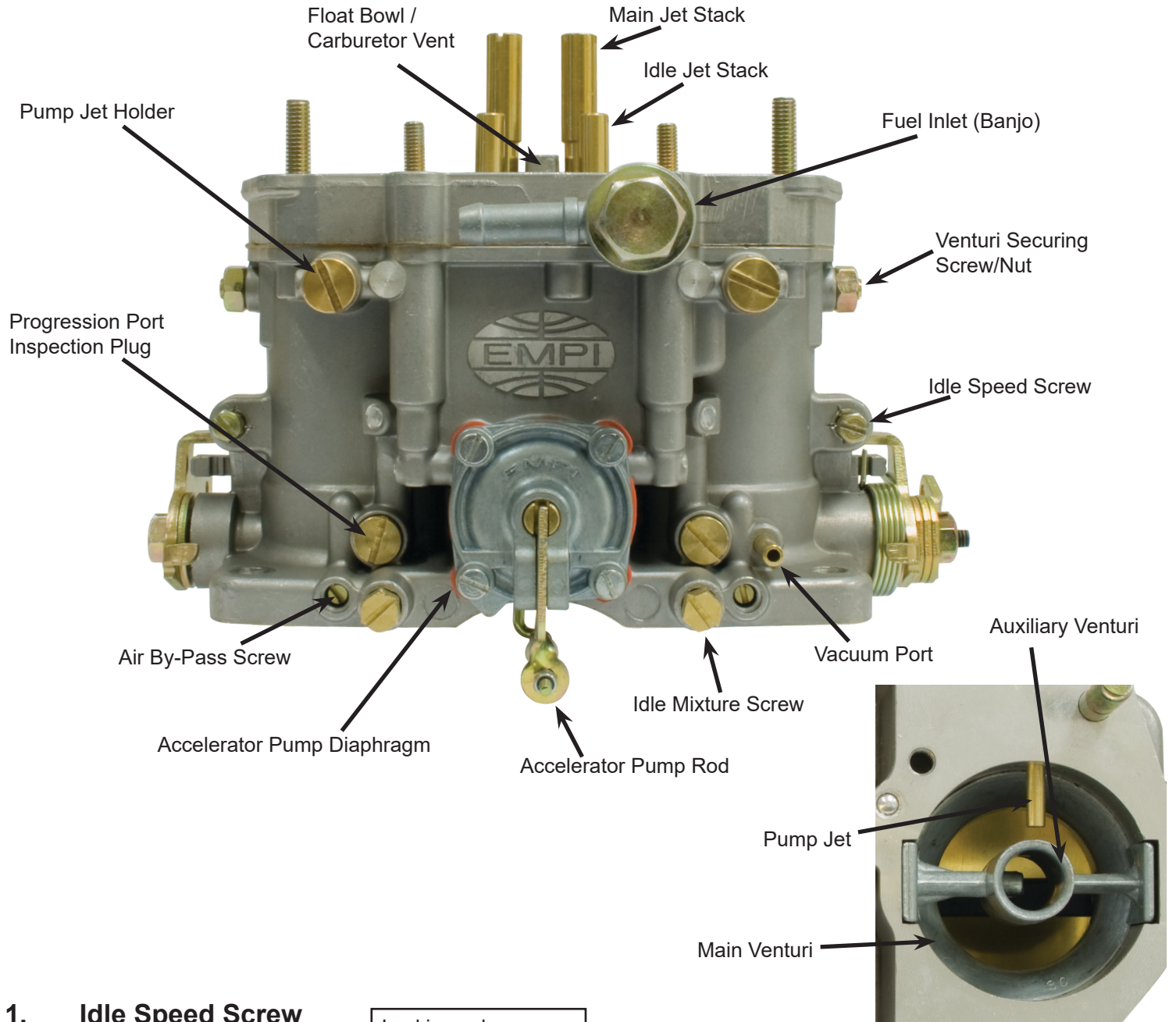
- *More Progression Ports for smoother acceleration...*
- *Idle Jets Located on the Top for easy access*
- *And much more...*



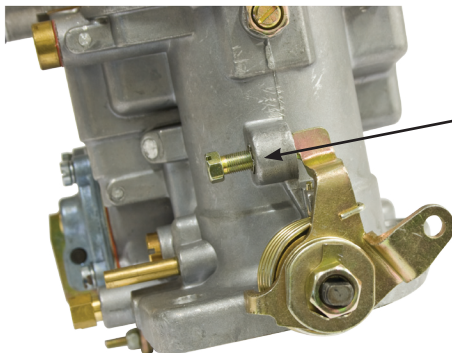
EMPI D Carburetor Features and Components

While the EMPI D Carburetor looks like it should adjust and function like the HPMX (or IDF) Series carburetors, it does not. Do not attempt to adjust or jet the EMPI D carburetor like an HPMX or IDF.

EMPI D Performance 2-Barrel Carburetor

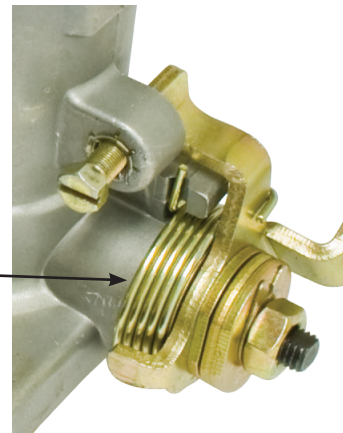


1. Idle Speed Screw

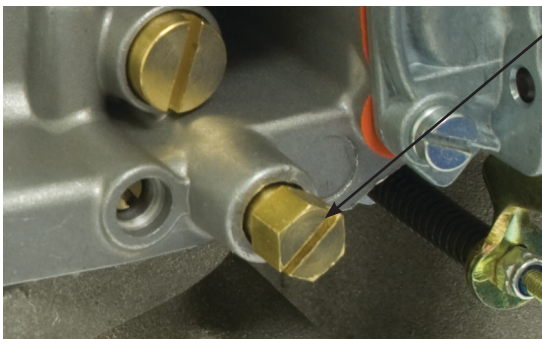


Locking nylon threads to help ensure that the idle screw does not back out from vibration over time.

Heavy duty spring for reliable return action



2. Idle Mixture Screw



Made with precision, the idle mixture screws are made specifically for the EMPI D carburetor.

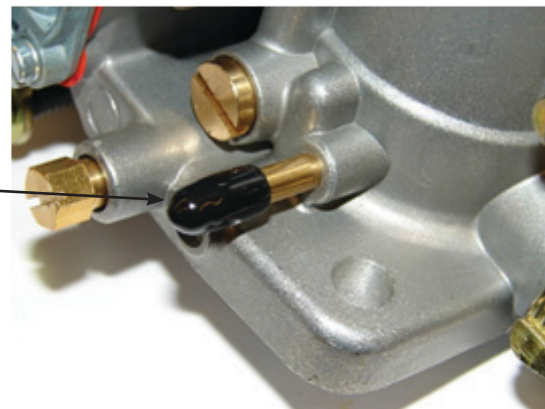
Adjustments for the EMPI D carburetor are nothing like the HPMX OR IDF carburetors.

For further information on how to adjust the EMPI D carburetors please refer to the supplemental page of How to Adjust Dual EMPI D Carburetors.

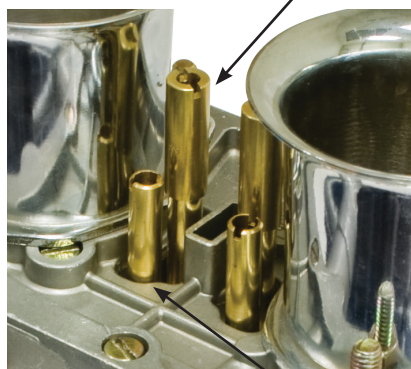
3. Vacuum Port



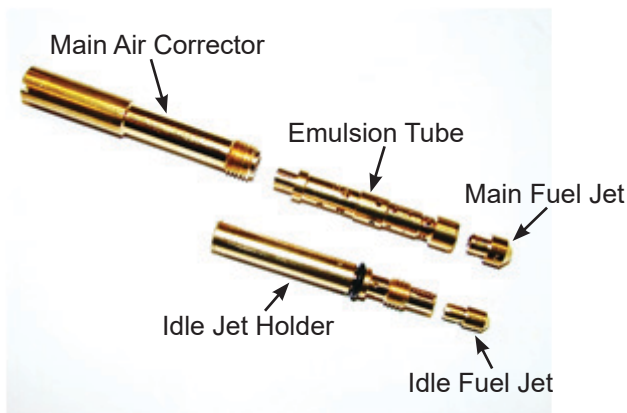
A Vacuum Port is available for Distributor vacuum if required. If you do not intend to use this port(s), be certain to install the vinyl Vacuum Plug(s) provided with your Kit.



4. Jet Stacks



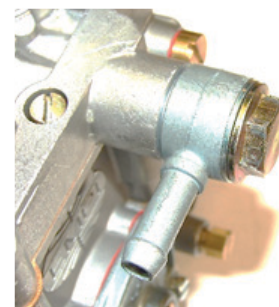
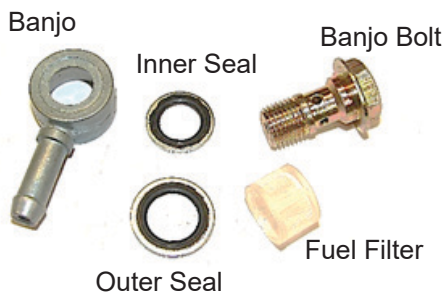
EMPI D Carburetor Kits come Factory Jetted to bolt on and run most Stock and Mildly Modified engines. Re-jetting is made easy with both Main and Idle Jet Stacks located at the top of the carburetor. A complete selection is available at your EMPI Dealer.



NOTE: Dirty and/or plugged Idle and Main Jets will lead to poor performance. If one or more cylinders are not firing properly – this is the first place to inspect and clean.

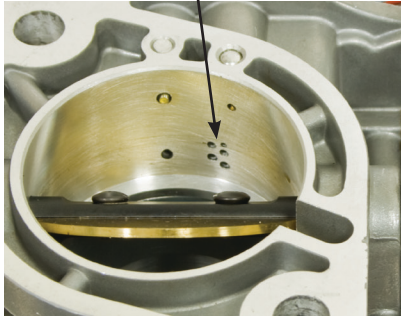
5. Fuel Inlet Fitting & Filter (Banjo-Style)

EMPI D Carburetors feature a Banjo-Style Fuel Inlet with Bolt, Fuel Filter and special Sealing Washers. To adjust the direction of the Fuel Inlet, loosen the Bolt, turn the Fuel Inlet to the desired direction then tighten the Bolt. Remove the bolt, washers and Filter for easy inspection, cleaning or Filter replacement. Filters and Sealing Washers are available at your EMPI Dealer. Always inspect for leaks or drips before running the engine. Note: Inner and Outer Sealing Washers have different Inside Diameters.

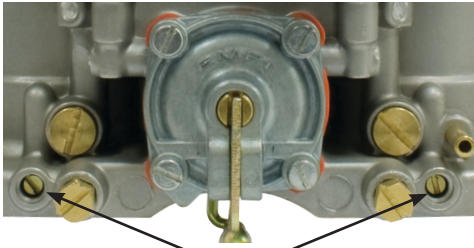


6. Progression Ports

EMPI D Carburetors feature a series of Progression Ports that allow for extremely smooth acceleration and drivability. 40mm & 45mm Carburetors feature 5 Progression Ports - 36mm Carburetor features 6 Progression Ports. Inspection Covers may be removed for cleaning.

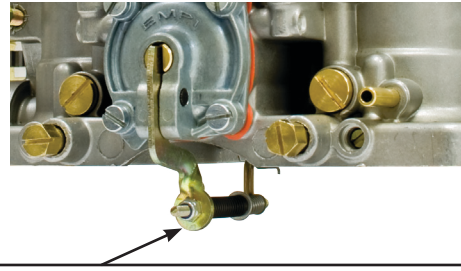


7. Air By-Pass Screws



Air By-Pass Screws should remain closed.

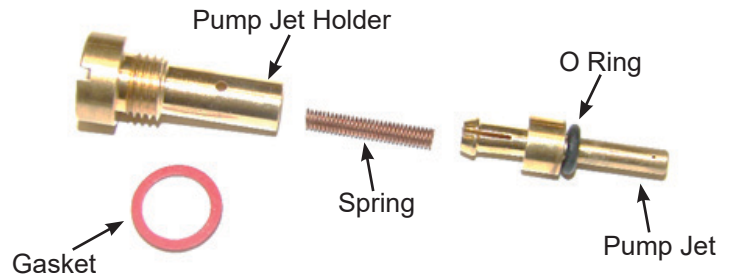
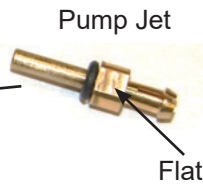
8. Accelerator Pump Rod



The Accelerator Pump Rod is set at the factory. It is not recommended to adjust the action of the rod to increase fuel delivery.

9. Pump Jet

Off Idle performance can be refined or improved, if necessary, by changing the Pump Jets. There are two (2) per carburetor - one for each barrel and are easily located and removed from the side of the carburetor. Note: They install with the 'Flat' pointing UP - thereby the Jet pointing DOWN into the barrel. When changing the Jet, be certain to re-install the spring in the Jet Holder and O Ring on the Jet.



10. Emulsion Tubes

The #2 Emulsion Tubes supplied with all EMPI D Carburetors provide the best balance of low, mid-range and top end performance. Different size Emulsion Tubes are available for your specific calibration requirements.

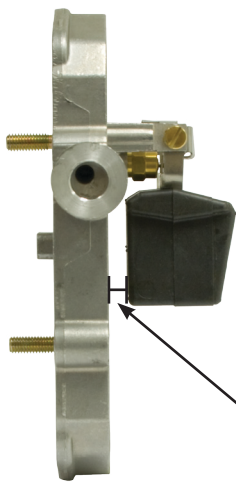


#1
Rich Low Speed
Lean at Full Throttle



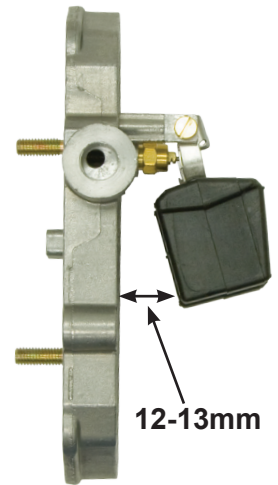
#2
Lean Low Speed
Rich at Full Throttle

11. Float Setting



5-6mm (or parallel with the carburetor top surface)
Resting on the Needle Ball – but NOT depressing it.

Float Setting is critical for proper fuel delivery. While the Floats have been set at the Factory, bouncing around in the back of a series of delivery trucks can often alter the adjustment. It is always best to check. While there, check and clean the float bowl for any debris. Remove the Carburetor Top carefully – the gasket is reusable if not torn during dis-assembly.



12-13mm

12. Factory Jetting

The carburetors are calibrated/jetted from the factory per the following:

Part # Carburetor Only	Carburetor Only	Idle Jet	Main Jet	Air Corrector	Inlet Valve	Pump Jet	Emulsion Tube	Venturis
44-1036-0	EMPI D 36mm - Dual	60	122	180	1.50	50	2	30mm
44-1040-0	EMPI D 40mm - Dual	60	140	180	1.50	35	2	34mm
44-1040-2	EMPI D 40mm – Single*	65	162	170	1.50	55	2	30mm
44-1045-0	EMPI D 45mm - Dual	70	162	200	1.50	55	2	38mm
44-1045-2	EMPI D 45mm – Single*	70	162	160	1.50	60	2	32mm

*Single Carburetors feature a 2mm port in each butterfly to improve idle performance.

13. Trouble Shooting

Performance Carburetors can only perform as well as the engine allows. Be certain to inspect, clean, adjust or replace critical engine components....Spark plugs, spark plug wires, distributor points & condenser or electronic trigger, fuel pump and fuel filter(s). Adjust Valves, check Ignition Timing & Compression and correct any exhaust leaks.

When you have completed installation, first check for fuel leaks or drips. The two most common installation errors are vacuum leaks and too much fuel pressure.

Won't idle/poor idle or backfire upon deceleration are the most common symptoms a vacuum leak. Double check all the sealing surfaces, re-tighten all your hardware and make certain that your Fuel Pressure Regulator is set at no more than 3lbs and that vacuum caps are in place or check the vacuum line(s) to distributor and/or brakes.

- *Black smoke and the smell of raw fuel are the most common symptoms of excessive fuel pressure or improper Float setting.*
- *Rich condition is also caused if instructions for setting Mixture Screws first – then Idle Speed were not followed.*
- *Often a poor Idle, popping or 'dead' cylinder situation can be traced to a clogged Idle Jet.*
- *Will Not Idle condition is usually caused by a vacuum leak. Check seal at cylinder head, carburetor and vacuum port.*

14. Jetting/Calibration

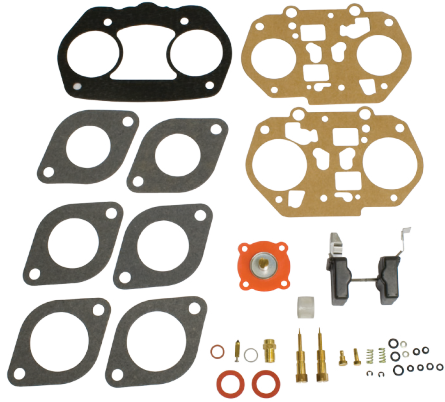
Engine size & component choices, exhaust systems, temperature, humidity, elevation – all make it impossible to determine the correct jet sizes for every application. The EMPI D Carburetors are designed to run and function well right out of the box...but to perform at their best some refinement for your specific engine may be required.

Once your carburetors are adjusted and synchronized correctly, look and listen for....

- *A Rich Condition – Black smoke from the exhaust, fouled spark plugs, pinging, knocking when the engine is shut off, hunting or loss of power thru higher RPMs. Reduce the size of the Idle and/or Main Jets. A Rich Condition causes poor performance and excess fuel consumption.*
- *A Lean Condition – Engine temperature increases, popping back thru the carburetor or out the exhaust, detonation, surging, poor acceleration and white colored spark plug electrodes. Increase the size of the Idle and/or Main Jets. A very Lean Condition causes HEAT and can cause significant damage and/or possible engine failure. Do not continue to run an engine in an extreme Lean Condition.*
- *Remember - up to about 2,500RPM the engine is running on the Low Speed (Idle) Circuit – not the Main Jets.*

EMPI D Carburetor Jets, Components & Service Parts

44-1125 EMPI D Carburetor Rebuild Kit, 36, 40 & 45MM, Fits All, Each



44-1113 EMPI D Carburetor Base Gaskets, 36mm, Pr.
44-1114 EMPI D Carburetor Base Gaskets, 40mm, Pr.
44-1115 EMPI D Carburetor Base Gaskets, 45mm, Pr.



44-1117 EMPI D Carburetor Accelerator Pump Diaphragm, Fits All, Each

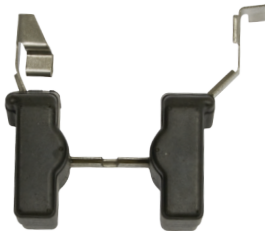


44-1128 EMPI D Carburetor Fuel Inlet Sealing Washer – Small Fits All, Each

44-1129 EMPI D Carburetor Fuel inlet Sealing Washer – Large Fits All, Each



44-1112 EMPI D Carburetor Float, Fits All, Each



44-1111 EMPI D Carburetor Fuel Filter, Fits All, Each



Main Jet	
Part #	Size
44-1050	1.10
44-1051	1.15
44-1052	1.20
44-1053	1.22
44-1054	1.30
44-1055	1.35
44-1056	1.40
44-1057	1.45
44-1058	1.50
44-1059	1.62
44-1060	1.70
44-1061	1.75
44-1062	1.80
44-1119	1.85
44-1120	1.90

Air Correction Jet	
Part #	Size
44-1063	1.60
44-1064	1.65
44-1065	1.70
44-1066	1.75
44-1067	1.80
44-1068	1.85
44-1069	1.90
44-1070	1.95
44-1071	2.00
44-1072	2.10
44-1073	2.15
44-1074	2.20
44-1075	2.25

Idle Jet	
Part #	Size
44-1076	0.40
44-1077	0.45
44-1078	0.50
44-1079	0.52
44-1080	0.55
44-1081	0.60
44-1082	0.62
44-1083	0.65
44-1084	0.70
44-1085	0.75
44-1118	0.80

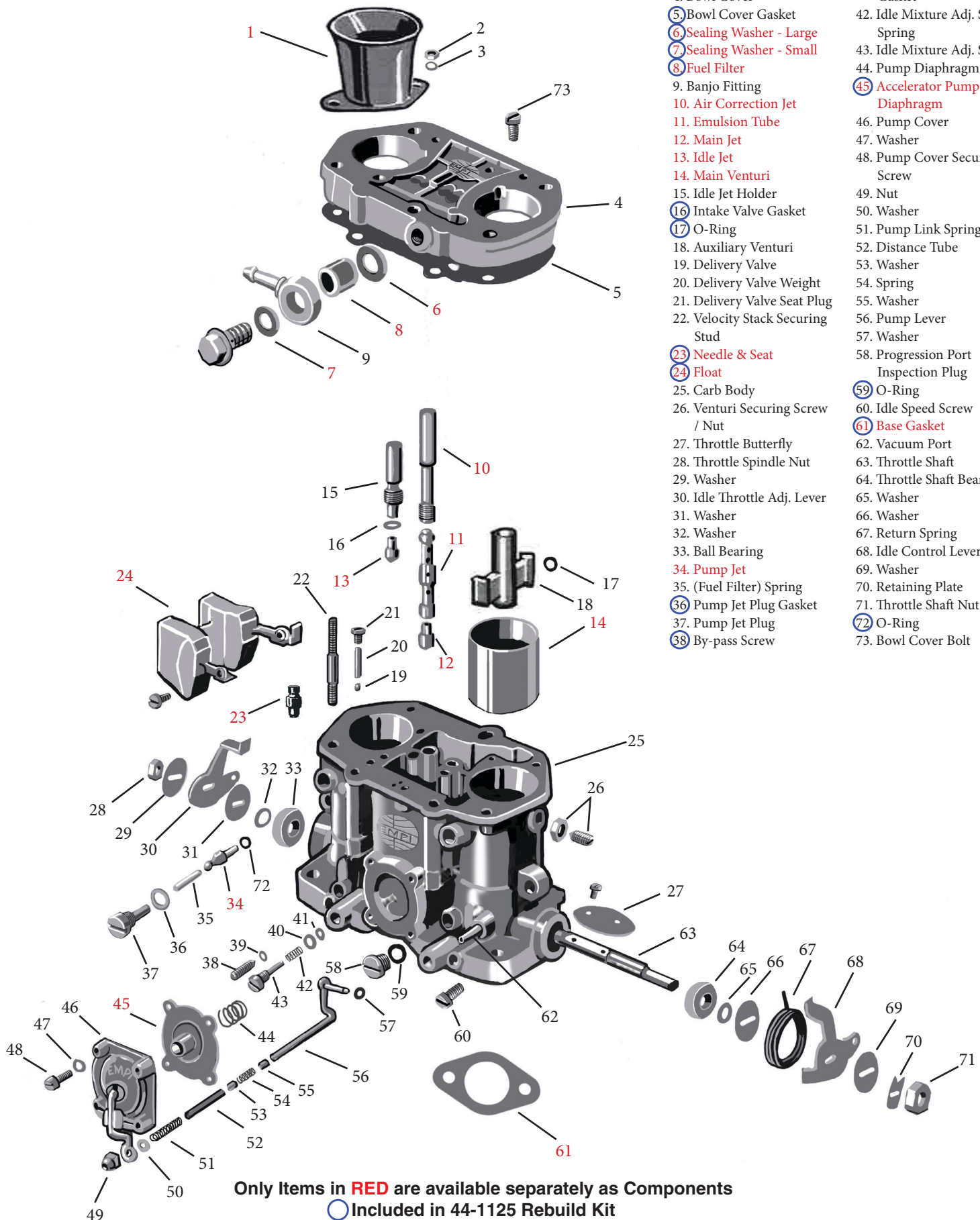
Pump Jet	
Part #	Size
44-1092	0.33
44-1093	0.35
44-1094	0.45
44-1095	0.50
44-1096	0.55
44-1097	0.60
44-1098	0.65
44-1099	0.70
44-1100	0.75
44-1101	0.80

Main Venturi	
Part #	Size
44-1104	27
44-1105	28
44-1106	30
44-1107	32
44-1108	34
44-1109	36
44-1110	38

Emulsion Tube	
Part #	Size
44-1102	1
44-1103	2

Inlet Valve	
Part #	Size
44-1086	1.50
44-1087	1.70
44-1088	2.00
44-1089	2.25
44-1090	2.50
44-1091	3.00

EMPI "D" CARBURETOR



- 1. Velocity Stack
- 2. Velocity Stack Securing Nut
- 3. Washer
- 4. Bowl Cover
- 5. Bowl Cover Gasket
- 6. Sealing Washer - Large
- 7. Sealing Washer - Small
- 8. Fuel Filter
- 9. Banjo Fitting
- 10. Air Correction Jet
- 11. Emulsion Tube
- 12. Main Jet
- 13. Idle Jet
- 14. Main Venturi
- 15. Idle Jet Holder
- 16. Intake Valve Gasket
- 17. O-Ring
- 18. Auxiliary Venturi
- 19. Delivery Valve
- 20. Delivery Valve Weight
- 21. Delivery Valve Seat Plug
- 22. Velocity Stack Securing Stud
- 23. Needle & Seat
- 24. Float
- 25. Carb Body
- 26. Venturi Securing Screw / Nut
- 27. Throttle Butterfly
- 28. Throttle Spindle Nut
- 29. Washer
- 30. Idle Throttle Adj. Lever
- 31. Washer
- 32. Washer
- 33. Ball Bearing
- 34. Pump Jet
- 35. (Fuel Filter) Spring
- 36. Pump Jet Plug Gasket
- 37. Pump Jet Plug
- 38. By-pass Screw
- 39. Idle Mixture Adj. Screw Gasket
- 40. Flat Washer
- 41. Idle Mixture Adj. Screw Gasket
- 42. Idle Mixture Adj. Screw Spring
- 43. Idle Mixture Adj. Screw
- 44. Pump Diaphragm Spring
- 45. Accelerator Pump Diaphragm
- 46. Pump Cover
- 47. Washer
- 48. Pump Cover Securing Screw
- 49. Nut
- 50. Washer
- 51. Pump Link Spring
- 52. Distance Tube
- 53. Washer
- 54. Spring
- 55. Washer
- 56. Pump Lever
- 57. Washer
- 58. Progression Port Inspection Plug
- 59. O-Ring
- 60. Idle Speed Screw
- 61. Base Gasket
- 62. Vacuum Port
- 63. Throttle Shaft
- 64. Throttle Shaft Bearing
- 65. Washer
- 66. Washer
- 67. Return Spring
- 68. Idle Control Lever
- 69. Washer
- 70. Retaining Plate
- 71. Throttle Shaft Nut
- 72. O-Ring
- 73. Bowl Cover Bolt

Only Items in **RED** are available separately as Components

○ Included in 44-1125 Rebuild Kit

If not in **Red** it is not available separately.

If it is in **Red** and **Circled** it is available separately or in the Rebuild Kit.

If it is **Black** and **Circled** it is only available in a Rebuild Kit.

All other items are for Reference ONLY and are not available separately or in any Rebuild Kit.