



**Ural (Урал) - Днепр (Днепр)
Russian Motorcycle**

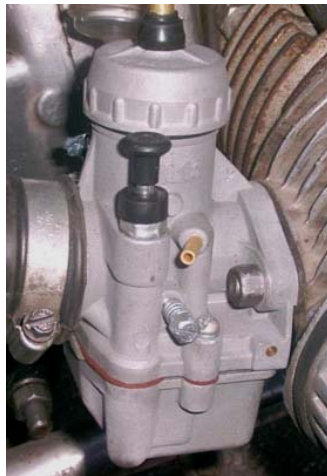
Carburetors

**Part 9: Kartex VDC-RAM Carburetor
(КАРБЮРАТОР КАРТЕХ VDC-03У)**

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04/2011**

Kaptex VDC-RAM Carburetor

- **Kaptex VDC-RAM Carburetor Is Ukrainian Copy of Pekar K-68**
 - **Kaptex VDC-RAM Carburetor Not Made Anymore**
 - **When Kaptex Carbs Die, Replacements and Refurb Kits Will Not Be Sourced by the Factory**
 - **Kaptex Is Just as Good as Original Russian Pekar K68 Carburetor**
 - **Kaptex Has Metal Top/Cover, while Pekar K-68 Has Plastic Top/Cover**
 - **Not To Be Confused with Chinese K-68 Copies**
 - **Chinese-Copies Look Like the Pekar K-68, but Poorly Fabricated**
- **Fully Interchangeable with K-301D, K-65T and K-68U Carburetors**
- **Parameters:**
 - **Diameter of Mixing Chamber: 31.5 mm**
 - **Diameter of Diffuser: 28 mm**
 - **Main Jet: 190 mL/min**
 - **Idling Jet: 50 mL/min**
 - **Jet Launcher: 55 mL/min**

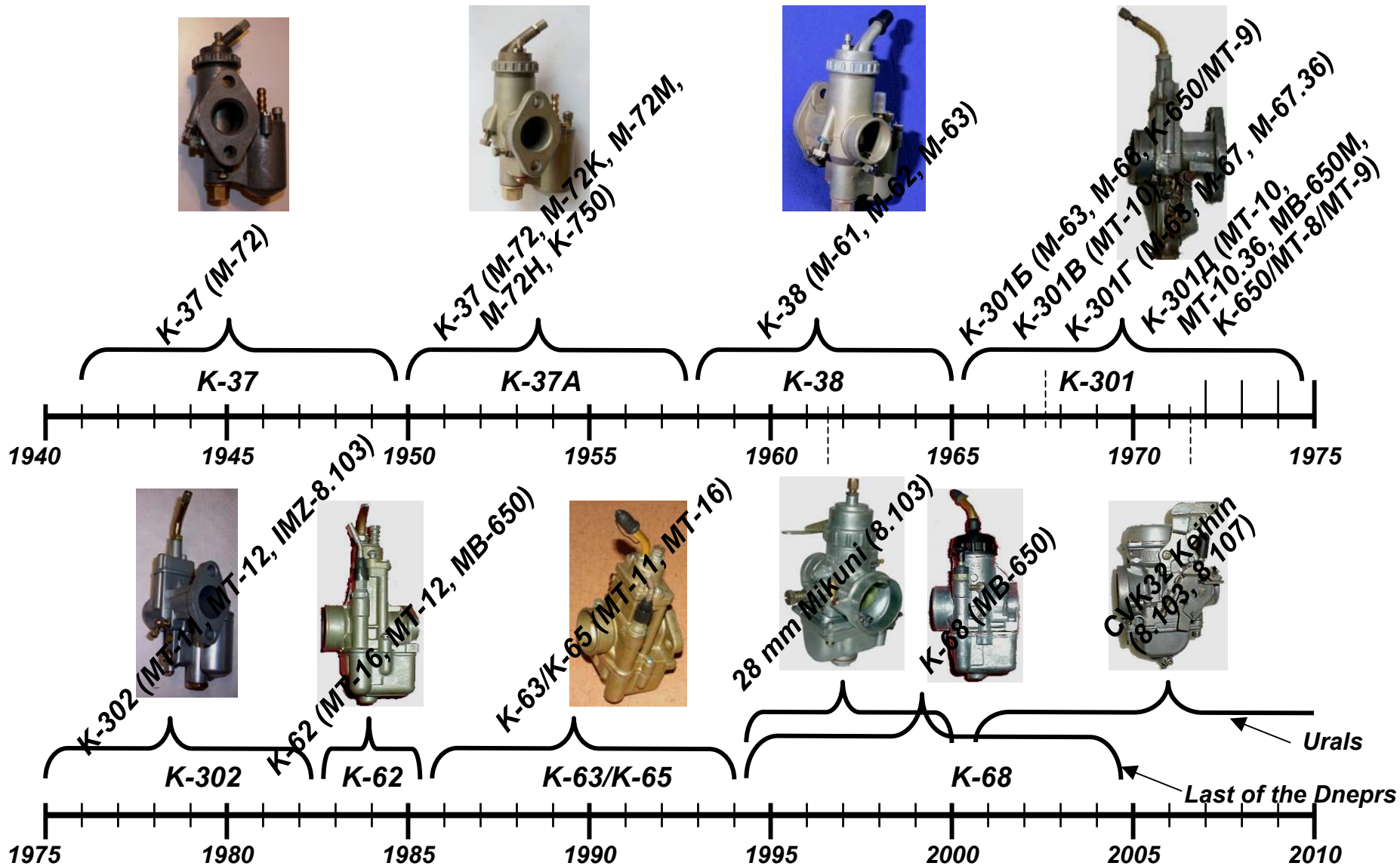


Kaptex VDC-RAM



Because the Kaptex is a copy of the Pekar K-68, many of the slides make a comparison and tune-up is the same (in other words see Part 10 of the series).

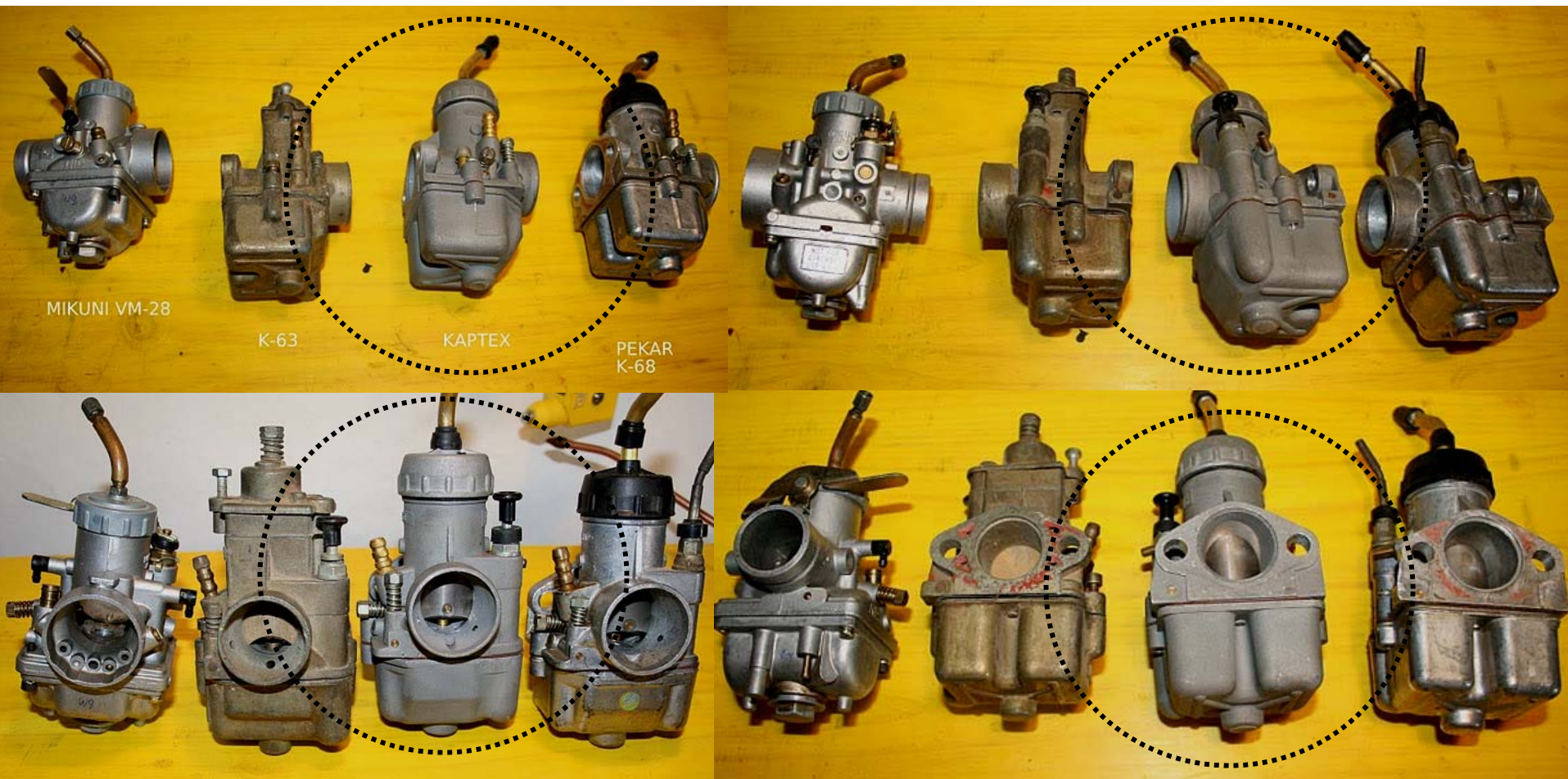
Russian Carburetor Time-Line (04/2011)



The Kaptex VDC-RAM's time-line parallels that of the Pekar K-68, both of which were overcome by the Keihin CVK32.

Identifying Kaptex Carbs in a Line-Up

(Russian Iron Board Forum, Antoni Font, picasaweb.google.es)

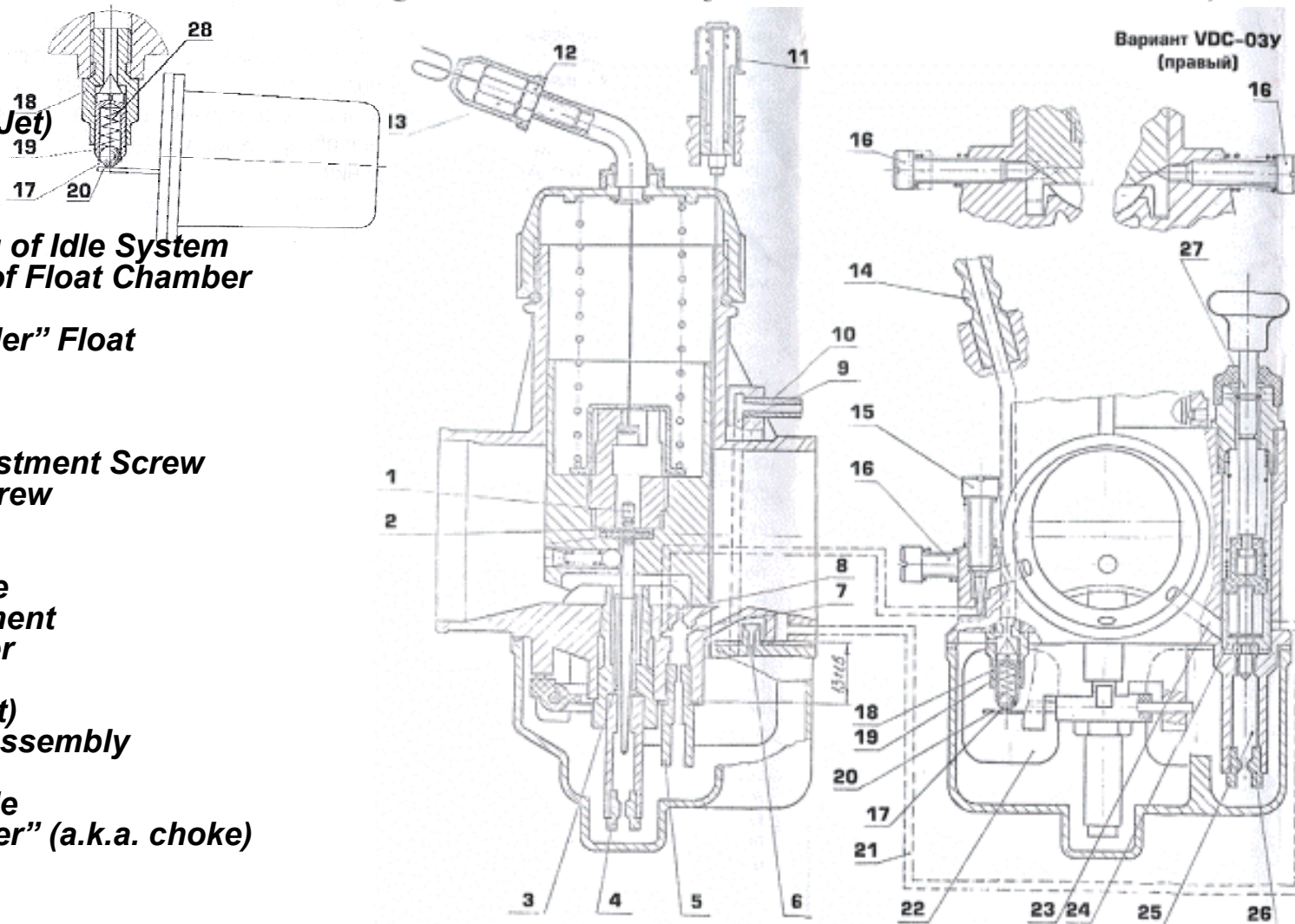


Kaptex has the metal top/cover, while the Pekar K-68 has a plastic top/cover.

Kaptex VDC-RAM Carburetor

(<http://moto-planeta.ru/motoural/dvigatelural/601-karbjurator-kartekh-vdc-ozu.html>)

- 1 - Needle Valve
- 2 - Needle C-Clip
- 3 - Sprayer
- 4 - Main Fuel Nozzle (Jet)
- 5 - Idle Jet
- 6 - Drain Hole
- 7 - Idling Hole
- 8 - Transient Opening of Idle System
- 9 - Balance Channel of Float Chamber
- 10 - Balancing Port
- 11 - Enrichener "Tickler" Float
- 12 - Lock-nut
- 13 - Protective Cap
- 14 - Fuel Inlet Fitting
- 15 - Idle Mixture Adjustment Screw
- 16 - Idle Adjusting Screw
- 17 - Ball
- 18 - Fuel Valve Seat
- 19 - Needle Fuel Valve
- 20 - Adjust Float Element
- 21 - Channel of Starter
- 22 - Float
- 23 - Air Channel (Duct)
- 24 - Starter Plunger Assembly
- 25 - Fuel Channel
- 26 - Enrichener Needle
- 27 - Enrichener "tickler" (a.k.a. choke)
- 28 - Spring

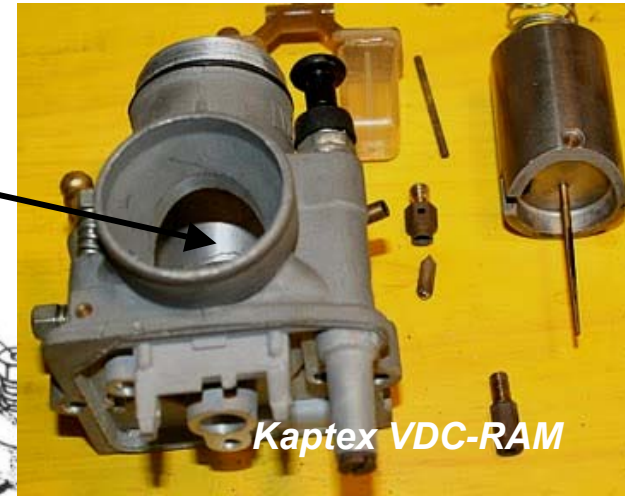


The Kaptex consists of four systems: (a) supplying and maintaining a constant level of fuel (14,17,18,19,20,22), (b) regulatory system of the combustible mixture; main (1,3,4) and idling (5,7,8,15,16), (c) unbalance and drain float chamber (6,9,10) and (d) starter enrichener float for cold starts (11,21,23,24,25,26,27).

Round-Slide vs. Flat-Slide vs. Butterfly Throttle Valves

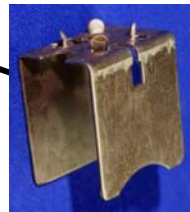
- **Round-Slide Throttle Valve**

- K-37, PZ-28, K-38
- Kaptex VDC-RAM
- K-68
- Mikuni VM-28
- Jikov 2928



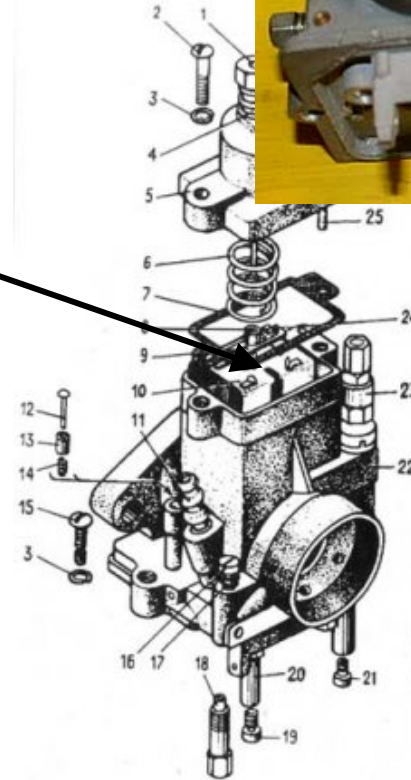
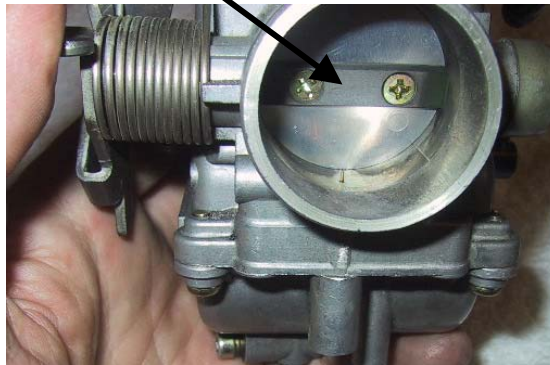
- **Flat-Slide Throttle Valve**

- K-301 / K-302
- K-62 / K-63 / K-65



- **Butterfly Throttle Valve**

- Keihin CVK32



One term describing carburetors is **round-slide**, flat-slide or butterfly throttle valves.

Flange-Mount vs. Spigot-Mount

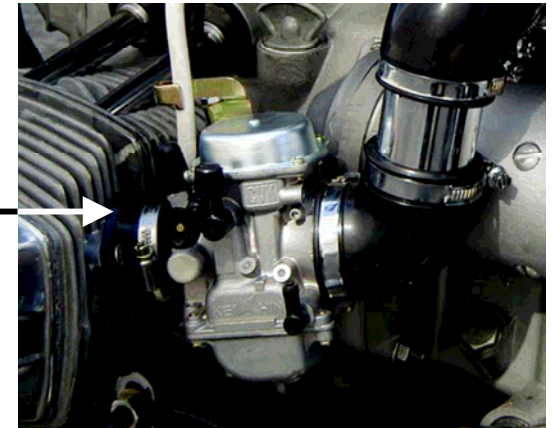
- **Flange-Mount**

- Bolts Directly on Cylinder Head or Adapter
- K-37, PZ-28, K-38,
- K-301 / K-302
- K-62 / K-63 / K-65 / K-68
- **Kaptex VDC-RAM**



- **Spigot-Mount**

- Rubber Compliant Mount to Cylinder Head
- Mikuni VM-28
- Jikov 2928CE
- Keihin CVK32



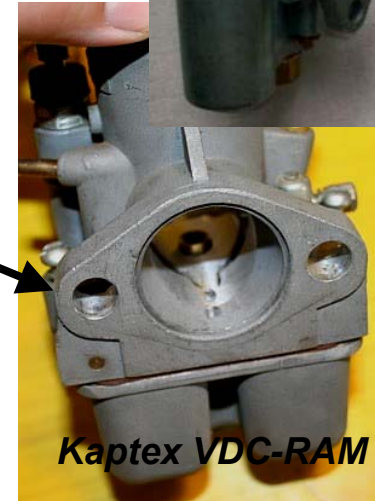
Another term describing carburetors is **flange-mount** or **spigot-mount**.

Flange-Mount: Vertical vs. **Horizontal**

- **Vertical Mounting Holes (MT-9's, MT-10's)**
–K-37, PZ-28, K-38, K-301, K-302



- **Horizontal Mounting Holes (MT-11's, MT-16's)**
–K-62, K-63, K-65, **Kaptex VDC-RAM**, K-68



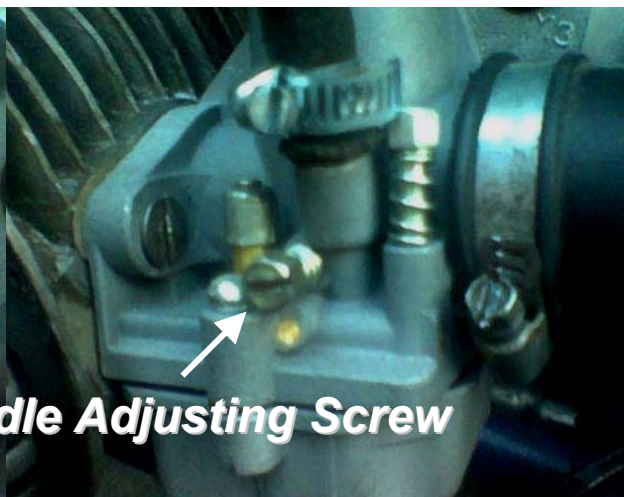
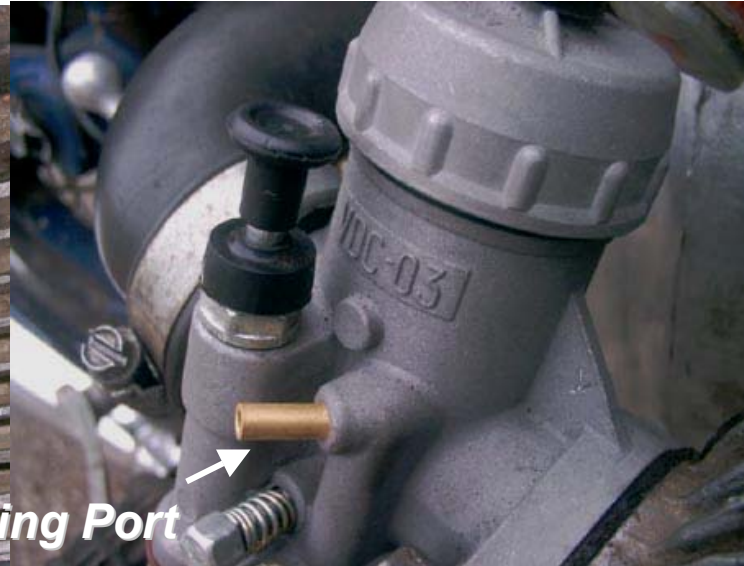
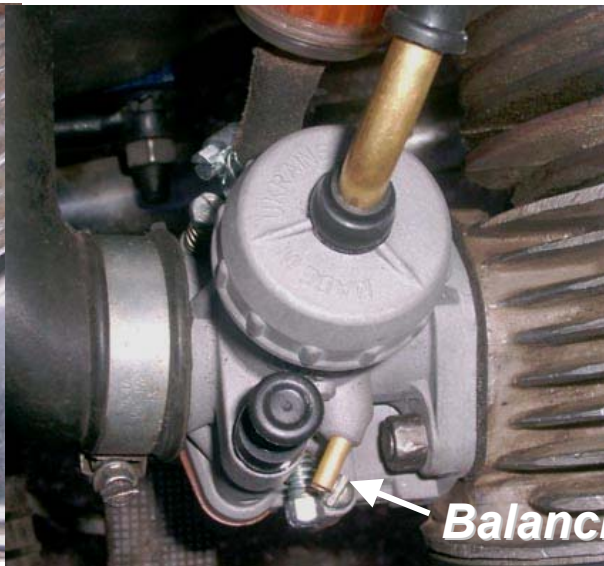
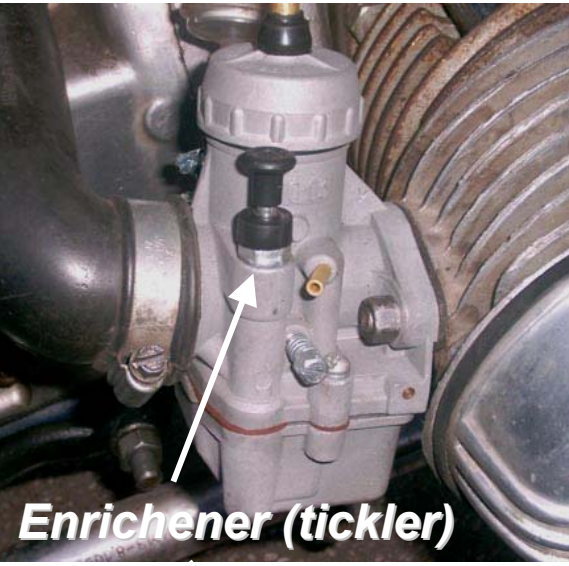
- **Transition from Vertical-to-Horizontal**
–Used to Transition from Older K-37/38 and K-301/302 Carbs to Modern K-62 / K-65 / K-68 Carbs
–Adapter Plates Readily Available



An adapter plate is needed to upgrade older motorcycles to the modern horizontal pattern for the K-63 / K-65 / K-68 type carbs.

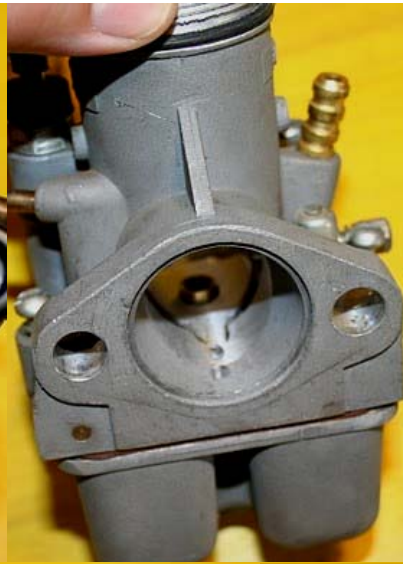
Kaptex VDC-RAM Carburetor Close-Up

(www.opposit.ru)



Close-Up of Kaptex VDC-RAM

(Russian Iron Board Forum, Antoni Font, picasaweb.google.es)



Break-Down of the Kaptex VDC-RAM Carburetor *(Russian Iron Board Forum, Antoni Font, picasaweb.google.es)*



KAPTEX

We will see that the components of the Kaptex VDC-RAM are very similar to those of the Pekar K-K-68.

Enricheners for the Kaptex and K-68 Carbs

(Russian Iron Board Forum, Antoni Font, picasaweb.google.es)



***Tickler used to
prime the carbs for
starting under
normal
conditions***

***Enricheners (a.k.a. ticklers) act in the same manner
as a choke for initial starting, to give a few shots of fuel.***

Throttle Spring and Seat for the Kaptex and K-68

(Russian Iron Board Forum, Antoni Font, picasaweb.google.es)



The throttle spring and seat for the spring of the Kaptex are very similar to those of the Pekar K-68.

Round-Slide Throttles for the Kaptex and K-68

(Russian Iron Board Forum, Antoni Font, picasaweb.google.es)



In a similar manner, the round-slide throttle of the Kaptex is very similar to the Pekar K-68's throttle.

Needles and Jets for the Kaptex and K-68

(Russian Iron Board Forum, Antoni Font, picasaweb.google.es)



Needle Valve has 5 positions of adjustment via a C-clip. Factory setting is the middle position. Lowering the C-clip leans the mixture...raising the clip enriches it.



Main Jets



Fuel Valves

Each component of the Kaptex is very similar to those of the K-68.

Floats for the Kaptex and K-68

(Russian Iron Board Forum, Antoni Font, picasaweb.google.es)



***Plastic floats
are notorious for
having holes or
cracking***



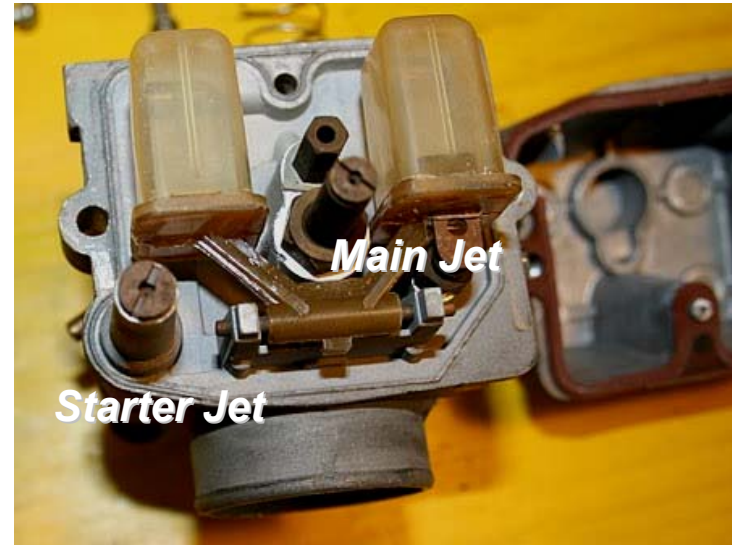
KAPTEX

K-68

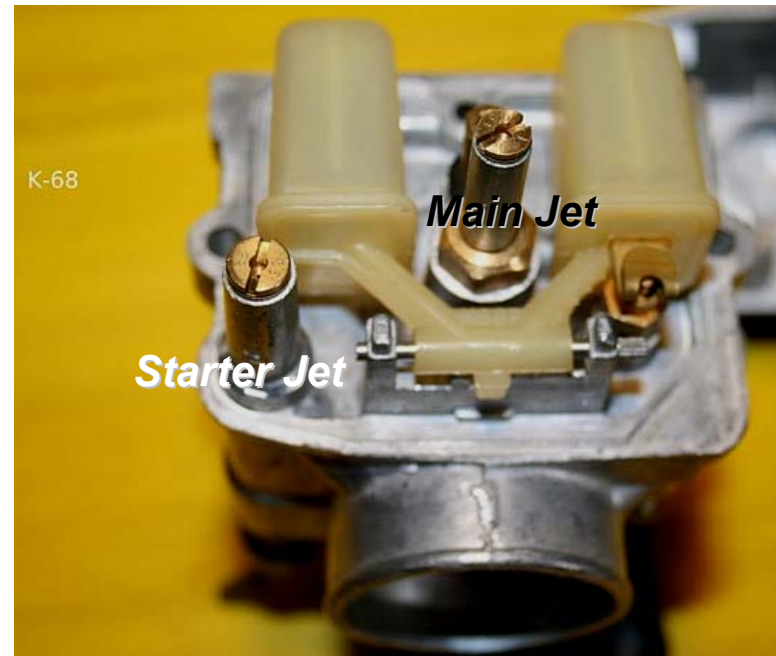
Floats on a Kaptex VDC-RAM and on a K-68

(Russian Iron Board Forum, Antoni Font, picasaweb.google.es)

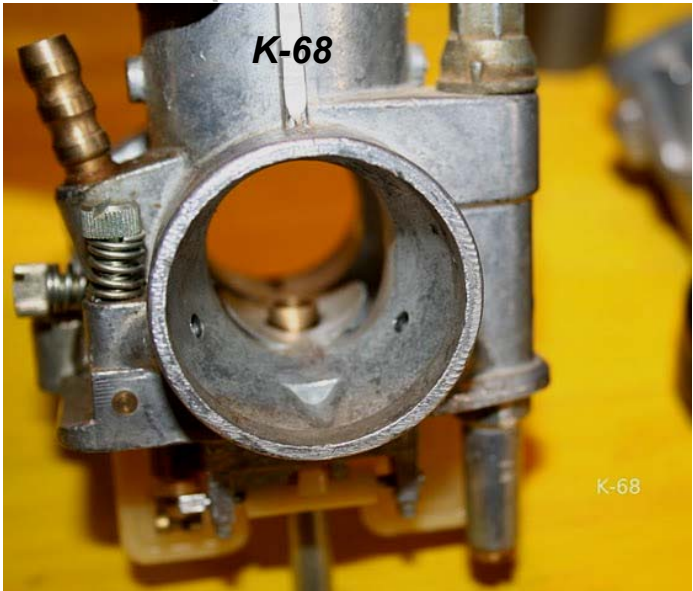
Kaptex Float Chamber



K-68 Float Chamber



Inlet/Outlet Comparison for the Kaptex and K-68 (Russian Iron Board Forum, Antoni Font, picasaweb.google.es)



Carburetor Adapter from Vertical (K-301/K-302) to a *Horizontal Type* of Installation (K-63/K-65/K-68/*Kaptex*)



A simple conversion kit is needed to adapt from vertical (K-301/K-302) to a *horizontal* type of installation (K-63/K-65/K-68 or *Kaptex*).