



***Ural (Урал) - Днепр (Днепр)
Russian Motorcycle
Carburetors
Part 8: K-65 Carburetor***

(see also Part 8A- Pekar K-65 Carbs and Part 8B- Setting K-65 Carbs)

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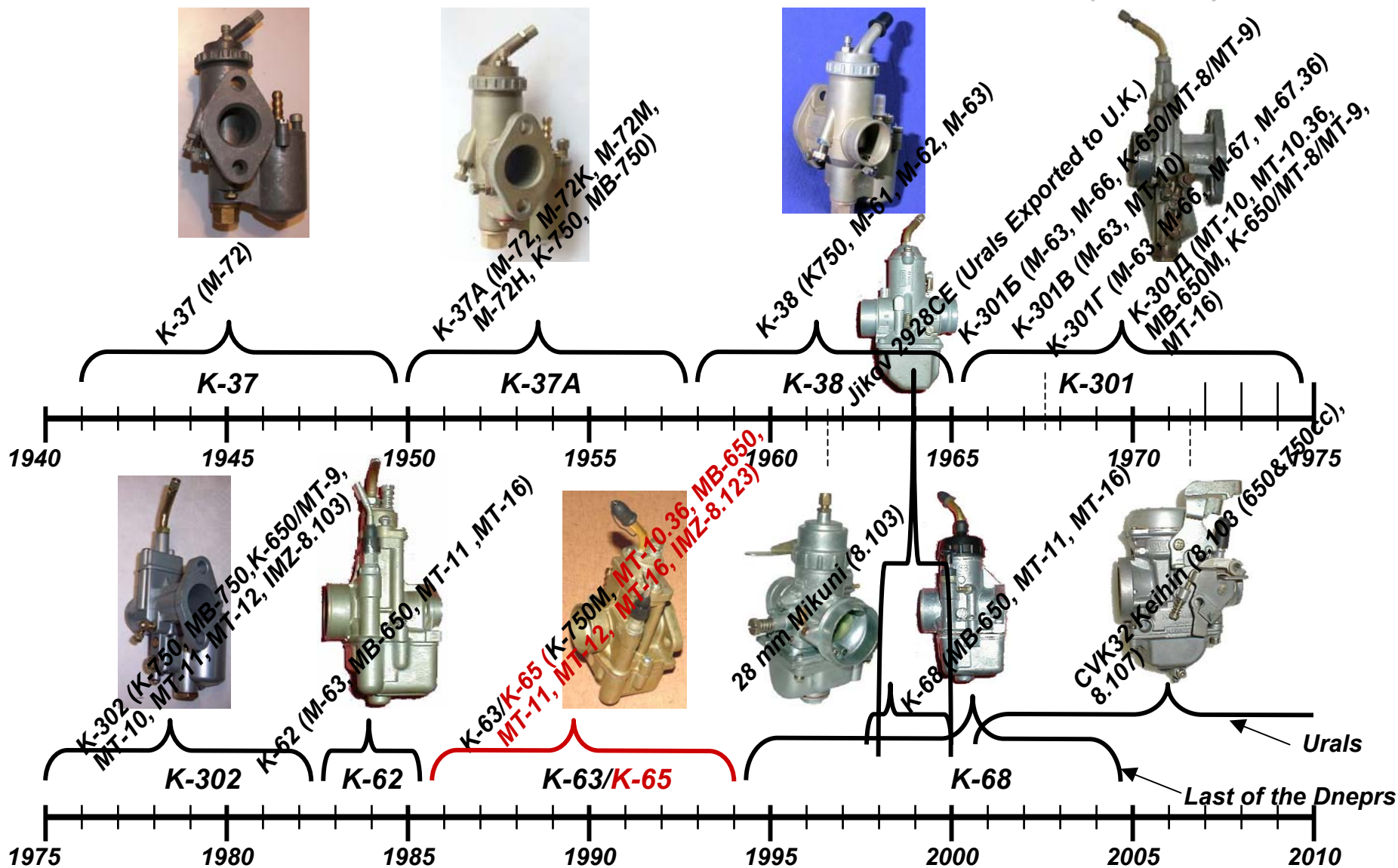
K-65 Carburetor

- **Common Carburetor Found on Urals and Dneprs**
 - **K-63T (most popular) Introduced on Dnepr MT-10.36, MB-650, MT-11 and MT-16**
 - **K-63Y (K-63U in English) Introduced to Dnepr MT-10.36 and to Ural "Соло Классик" (Solo Classic, IMZ-8.123 (650 cc)) in Late 1980's**
- **Modernized Version of K-62 Carburetor**
- **Fit 650cc Urals from M-67 Onwards**
- **Manufactured by Pekar (St Petersburg, Russia)**
- **Most Ural and Dnepr 650 cc Motorcycles from 1985, Right thru to Late 1990's Were Fitted with These**
- **Left and Right-Hand Versions Identical**
- **Flat-Slide Throttle Valve**
- **Standard Jets: 50 and 165**
- **Flange Bolts Directly onto Cylinder Head**
 - **Horizontal Mounting Bolt Holes**
- **Later Replaced with K-68 and 28 mm Mikuni**
- **Re-Build and Repair Kits Readily Available**



The *K-65* carburetor appeared on Dnepr MT-10.36MB-650, MT-11, MT-16 and on the modern Ural IMZ-8.123 (650 cc) Solo Classic.

Russian Carburetor Time-Line (09/2012)



We have seen the gradual migration of the K-37 to the K-37A and then the K-38. The K-301 went through several iterations before the K-302 came along, followed by the K-Series carburetors.

Table I: KMZ (KM3) - Dnepr (Днепр) Sidecar Model/Year vs. Engine and Carb (09/2012)

<i>Model</i>	<i>Use</i>	<i>Year</i>	<i>Engine Size (cm³ / inch³)</i>	<i>Compression Ratio</i>	<i>Horse Power BHP (hp / kW)</i>	<i>Max Power (rpm)</i>	<i>Voltage</i>	<i>Carburetor</i>
<i>M-72</i>	<i>Military</i>	<i>1952-56</i>	<i>746 / 45.3 SV</i>	<i>5.5:1</i>	<i>22 / 16.2</i>	<i>4,500-4,800</i>	<i>6-Volt</i>	<i>K-37A (1950)</i>
<i>M-72H</i>	<i>Military</i>	<i>1956-59</i>	<i>746 / 45.3 SV</i>	<i>5.5:1</i>	<i>22 / 16.2</i>	<i>4,500-4,800</i>	<i>6-Volt</i>	<i>K-37A (1950)</i>
<i>K-750</i>	<i>Military</i>	<i>1959-63</i>	<i>746 / 45.3 SV</i>	<i>6.0:1</i>	<i>26 / 19.1</i>	<i>4,600-4,800</i>	<i>6-Volt</i>	<i>K-37A (1950), K-38</i>
<i>K-750M</i>	<i>Military</i>	<i>1963-77</i>	<i>746 / 45.3 SV</i>	<i>6.0:1</i>	<i>26 / 19.1</i>	<i>4,500-4,800</i>	<i>6-Volt</i>	<i>K-37A, K-302, K-63Φ</i>
<i>MB-750</i>	<i>Military 2WD</i>	<i>1964-73</i>	<i>746 / 45.3 SV</i>	<i>6.0:1</i>	<i>26 / 19.1</i>	<i>4,600-4,900</i>	<i>6-Volt</i>	<i>K-37A, K-302</i>
<i>K-650/MT-8</i>	<i>Civilian</i>	<i>1967-70</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1</i>	<i>32 / 23.5</i>	<i>5,000-5,200</i>	<i>6-Volt</i>	<i>K-301Б, K-301Д</i>
<i>K-650/MT-9</i>	<i>Civilian</i>	<i>1971-74</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1</i>	<i>32 / 23.5</i>	<i>4,800-5,200</i>	<i>6-Volt</i>	<i>K-301, K-301Б, K-301Д, K-302</i>
<i>MB-750M</i>	<i>Military 2WD</i>	<i>1973-77</i>	<i>746 / 45.9 SV</i>	<i>6.0:1</i>	<i>26 / 19.1</i>	<i>4,500-4,900</i>	<i>6-Volt</i>	<i>K-302</i>
<i>MT-10</i>	<i>Civilian</i>	<i>1973-76</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1 (7.5:1)</i>	<i>32 / 23.5 (36 / 26.5)</i>	<i>5,600-5,800</i>	<i>12-Volt</i>	<i>K-301Б, K-301Д</i>
<i>MB-650M</i>	<i>Military 2WD</i>	<i>1969-1974</i>	<i>649 / 39.4 OHV</i>	<i>7.5:1</i>	<i>36 / 26.5</i>	<i>5,000-5,200</i>	<i>12-Volt</i>	<i>K-301Д</i>
<i>MT-10.36</i>	<i>Civilian</i>	<i>1976-87</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1 (7.5:1)</i>	<i>32 / 23.5 (36 / 26.5)</i>	<i>5,600-5,800</i>	<i>12-Volt</i>	<i>K-301Д, K-65У</i>
<i>MT-12</i>	<i>Civilian 2WD</i>	<i>1977-85</i>	<i>746 / 45.3 SV</i>	<i>6.0:1</i>	<i>26 / 19.1</i>	<i>5,000-5,800</i>	<i>6-Volt</i>	<i>K-302, K-63Φ</i>
<i>MB-650</i>	<i>Civilian 2WD</i>	<i>1968-91</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1</i>	<i>32 / 23.5</i>	<i>5,000-5,200</i>	<i>12-Volt</i>	<i>K-301, K-62, K-63T (1985), K-65T, K-68</i>
<i>MB-650-M1</i>	<i>Military (MT-16)</i>	<i>1985-2007</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1</i>	<i>32 / 23.5</i>	<i>5,000-5,200</i>	<i>12-Volt</i>	<i>K-301Б</i>
<i>MT-16 (Dnepr-16)</i>	<i>Civilian & Military 2WD</i>	<i>1985-2005</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1 (7.5:1)</i>	<i>32 / 23.5 (36 / 26.5)</i>	<i>5,600-5,900</i>	<i>12-Volt</i>	<i>K-301Д, K-62, K-63T (1985), K-65T, K-68</i>
<i>MT-11 (Dnepr-11)</i>	<i>Civilian</i>	<i>1987-2005</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1 (7.5:1)</i>	<i>32 / 23.5 (36 / 26.5)</i>	<i>4,800-5,200</i>	<i>12-Volt</i>	<i>K-301Д, K-302, K-62, K-63T (1985), K-65T, K-68</i>

Dnepr principally used the *K-65T* carburetor in the *MT-11* and *MT-16*.

Table II: IMZ (ИМЗ) - Ural (Урал) Sidecar Model/Year vs. Engine and Carburetor (09/2012)

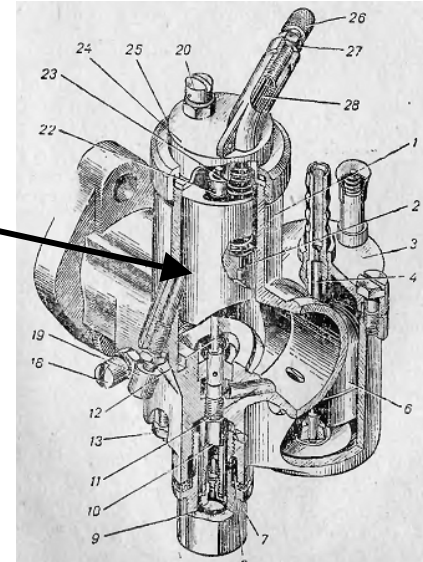
<i>Model</i>	<i>Use</i>	<i>Year</i>	<i>Engine Size (cm³ / inch³)</i>	<i>Compression Ratio</i>	<i>Horse Power BHP (hp / kW)</i>	<i>Max Power (rpm)</i>	<i>Voltage</i>	<i>Carburetor</i>
<i>M-72</i>	<i>Military</i>	<i>1941-56</i>	<i>746 / 45.3 SV</i>	<i>5.5:1</i>	<i>22 / 16.2</i>	<i>4,500-4,800</i>	<i>6-Volt</i>	<i>K-37, K-37A after 1950</i>
<i>M-72K</i>	<i>Military</i>	<i>1954-60</i>	<i>746 / 45.3 SV</i>	<i>5.5:1</i>	<i>22 / 16.2</i>	<i>4,500-4,800</i>	<i>6-Volt</i>	<i>K-37A (1950)</i>
<i>M-72M</i>	<i>Military</i>	<i>1956-60</i>	<i>746 / 45.3 SV</i>	<i>5.5:1</i>	<i>22 / 16.2</i>	<i>4,500-4,800</i>	<i>6-Volt</i>	<i>K-37A (1950)</i>
<i>M-61</i>	<i>Civilian</i>	<i>1958-60</i>	<i>649 / 39.4 OHV</i>	<i>6.2:1</i>	<i>28 / 20.6</i>	<i>4,800-5200</i>	<i>6-Volt</i>	<i>K-38</i>
<i>M-62</i>	<i>Civilian</i>	<i>1961-65</i>	<i>649 / 39.4 OHV</i>	<i>6.2:1</i>	<i>28 / 20.6</i>	<i>4,800-5,200</i>	<i>6-Volt</i>	<i>K-38</i>
<i>M-63 (Ural-2)</i>	<i>Civilian</i>	<i>1965-68</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1</i>	<i>32 / 23.5</i>	<i>5,200-5,800</i>	<i>6-Volt</i>	<i>K-38, K-301, K-301Б, K-301В, K-301Г, K-301Д, K-62</i>
<i>M-66 (Ural-3)</i>	<i>Civilian</i>	<i>1968-72</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1</i>	<i>32 / 23.5</i>	<i>5,600-5,900</i>	<i>6-Volt</i>	<i>K-301, K-301Б, K-301Г</i>
<i>M-67</i>	<i>Civilian</i>	<i>1973-75</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1</i>	<i>32 / 23.5</i>	<i>5,000-5,200</i>	<i>12-Volt</i>	<i>K-301Г</i>
<i>M-67.36</i>	<i>Civilian</i>	<i>1976-95</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1</i>	<i>36 / 26.5</i>	<i>4,600-4,900</i>	<i>12-Volt</i>	<i>K-301Г</i>
<i>8.103, 8.107 Series "650"</i>	<i>Civilian</i>	<i>1994- 2002</i>	<i>649 / 39.4 OHV</i>	<i>7.0:1</i>	<i>36 / 26.5</i>	<i>5,000-5,200</i>	<i>12-Volt</i>	<i>K-302, K-63Y, 28mm Mikuni (1994), Keihin CVK32 (2000)</i>
<i>8.103 "750"Series</i>	<i>Civilian</i>	<i>2003- present</i>	<i>745 / 45.2 OHV</i>	<i>8.6:1</i>	<i>45 / 29</i>	<i>5,600</i>	<i>12-Volt</i>	<i>Keihin CVK32 (2000)</i>

Ural used the *K-65* on the IMZ-8.123 Соло Классик (650 cc) "Solo Classic" (non-sidecar), until the Mikuni and Keihin came along.

Characteristics: Round-Slide vs. **Flat-Slide** vs. Butterfly Throttle Valves

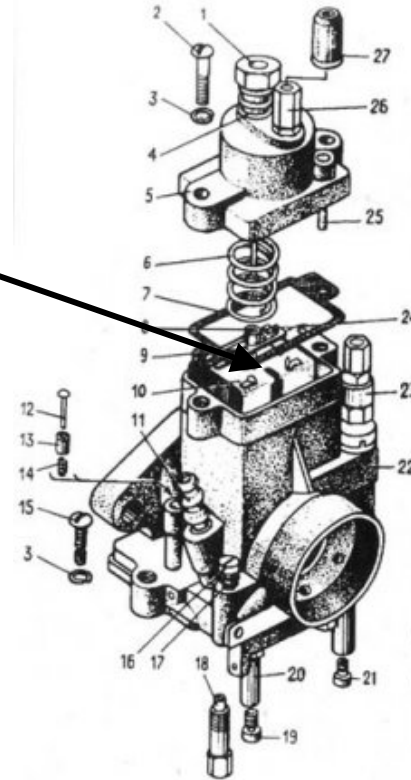
- **Round-Slide Throttle Valve**

- K-37 / K-38 / PZ-28D
- K-68
- Kaptex VDC-RAM (Ukrainian copy of Pekar K-68)
- Mikuni VM-28
- Jikov 2928



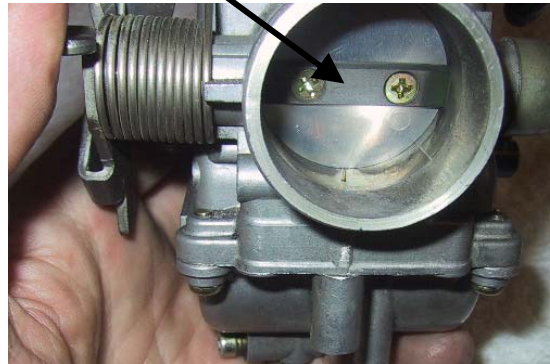
- **Flat-Slide Throttle Valve**

- 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.

Characteristics: **Flange** vs. Spigot Intake Manifold Mount

• **Flange-Mount**

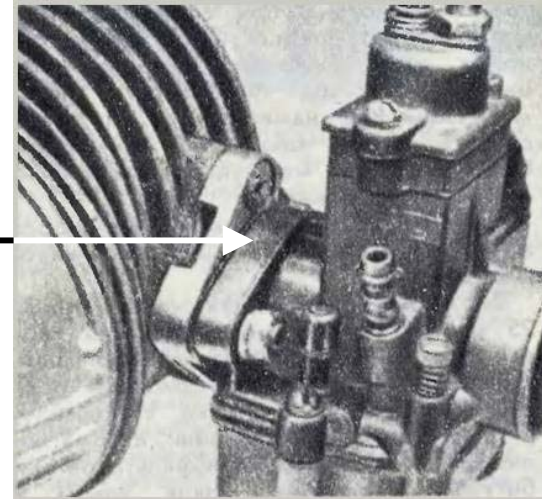
–Bolts Directly on Cylinder Head or Adapter

• K-37 / K-38 / PZ-28D

• K-301 / K-302

• K-62 / K-63 / **K-65** / K-68

• **Kaptex VDC-RAM** (Ukrainian copy of Pekar K-68)



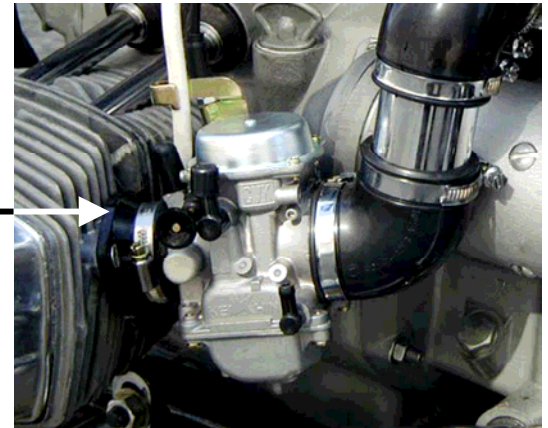
• **Spigot-Mount**

–Rubber Compliant Mount to Cylinder Head

–Mikuni VM-28

–Jikov 2928CE

–Keihin CVK32



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

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

- **Vertical Mounting Holes**

- K-37 / K-38 / PZ-28D, K-301 / K-302



- **Horizontal Mounting Holes**

- K-62 / K-63 / **K-65** / K-68

- Kaptex VDC-RAM (Ukrainian copy of Pekar 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-63 / **K-65** / K-68 Carbs

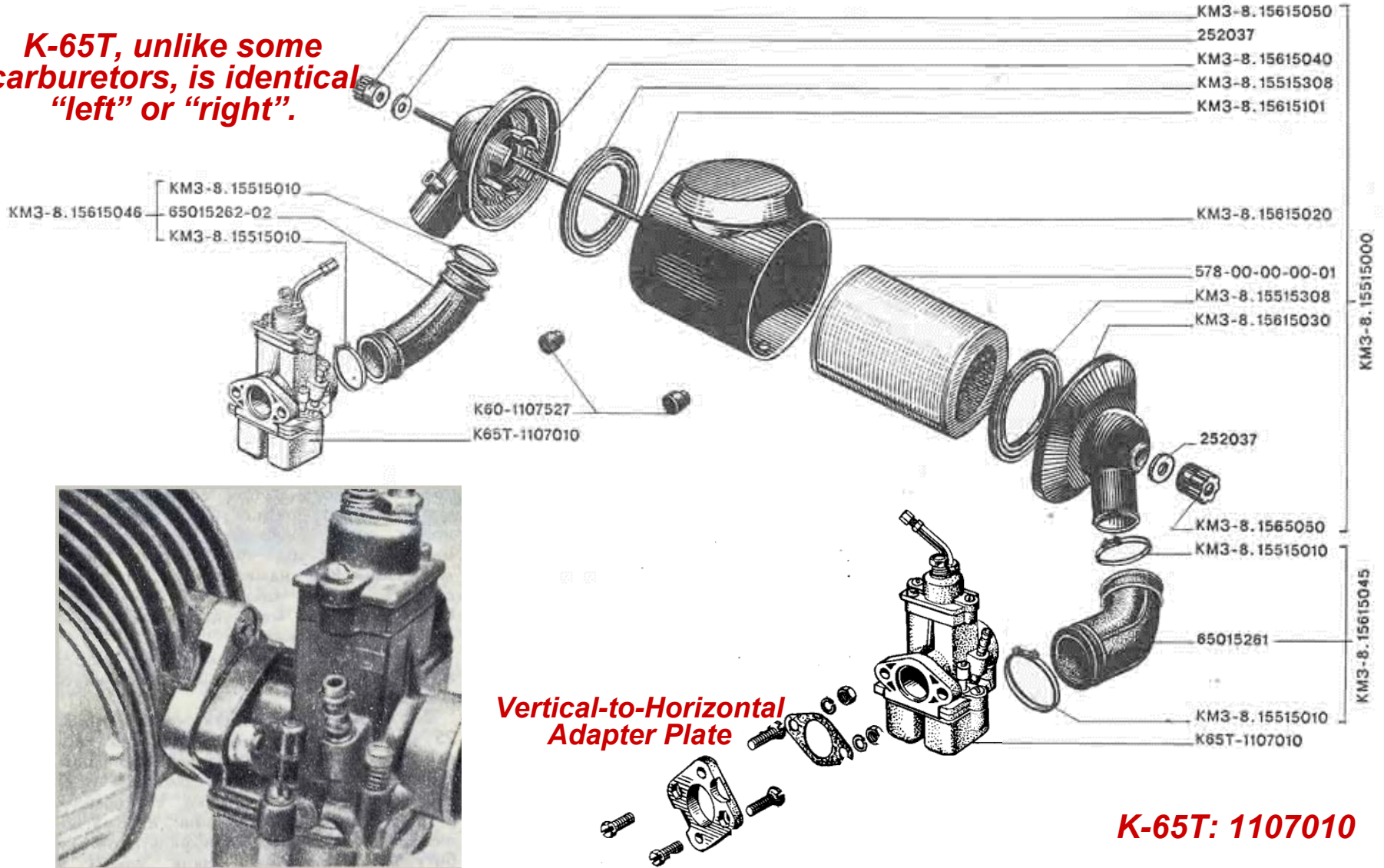
- Adapter Plates Readily Available



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

K-65T Carburetor on Dnepr MB-650, MT-11 and MT-16

K-65T, unlike some carburetors, is identical "left" or "right".



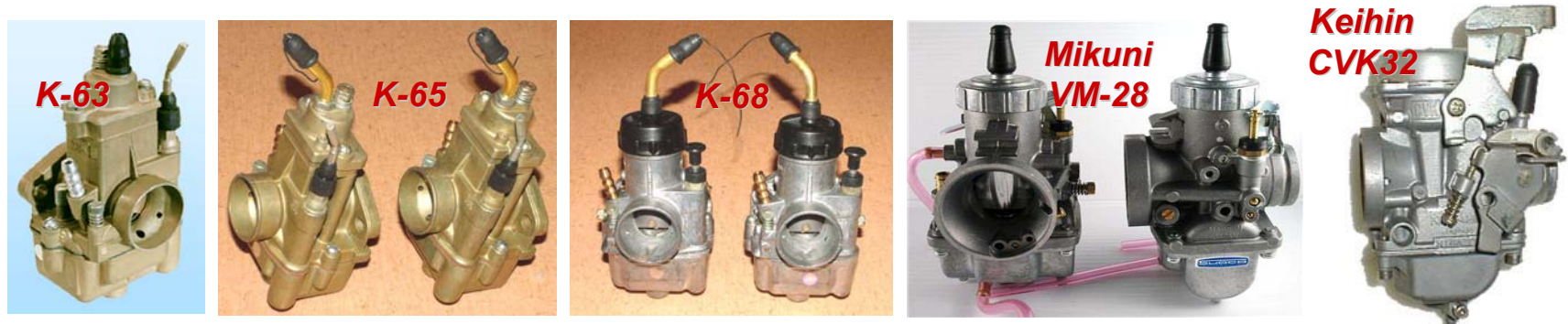
MT-11 and MT-16 maintenance manuals show the adapter plates needed to transform the vertical mounting pattern used by the K-37/K-301 carbs to the **K-65 horizontal mounting pattern.**

Characteristics: In-Line vs. Off-Axis Float Chamber Mount

- **Older Float Chamber (Bowl) Offset from Carburetor Body**
 - **Vertical vs. Slanted Float Chamber (Bowl) Mount**
 - **Vertical: K-37 / K-37A / K-38 / PZ-28D, K-301 / K-302**



- **Modern Float Chamber (Bowl) In-Line with Center of Carburetor Body**
 - **K-62 / K-63 / K-65 / K-68, Mikuni VM-28, Jikov 2928CE, Keihin CVK32**



Older Russian carburetors had external float bowls, with some built on a slant, with greater foaming of the fuel under vibration.

Characteristics: Left-or Right-Hand vs. Similar Construction

- **Left-Hand or Right-Hand Construction (mixture-adjust on opposite sides)**
– K-37 / PZ-28D, K-301 / K-302, K-68, Kaptex VDC-RAM (Ukrainian Copy of Pekar K-68)



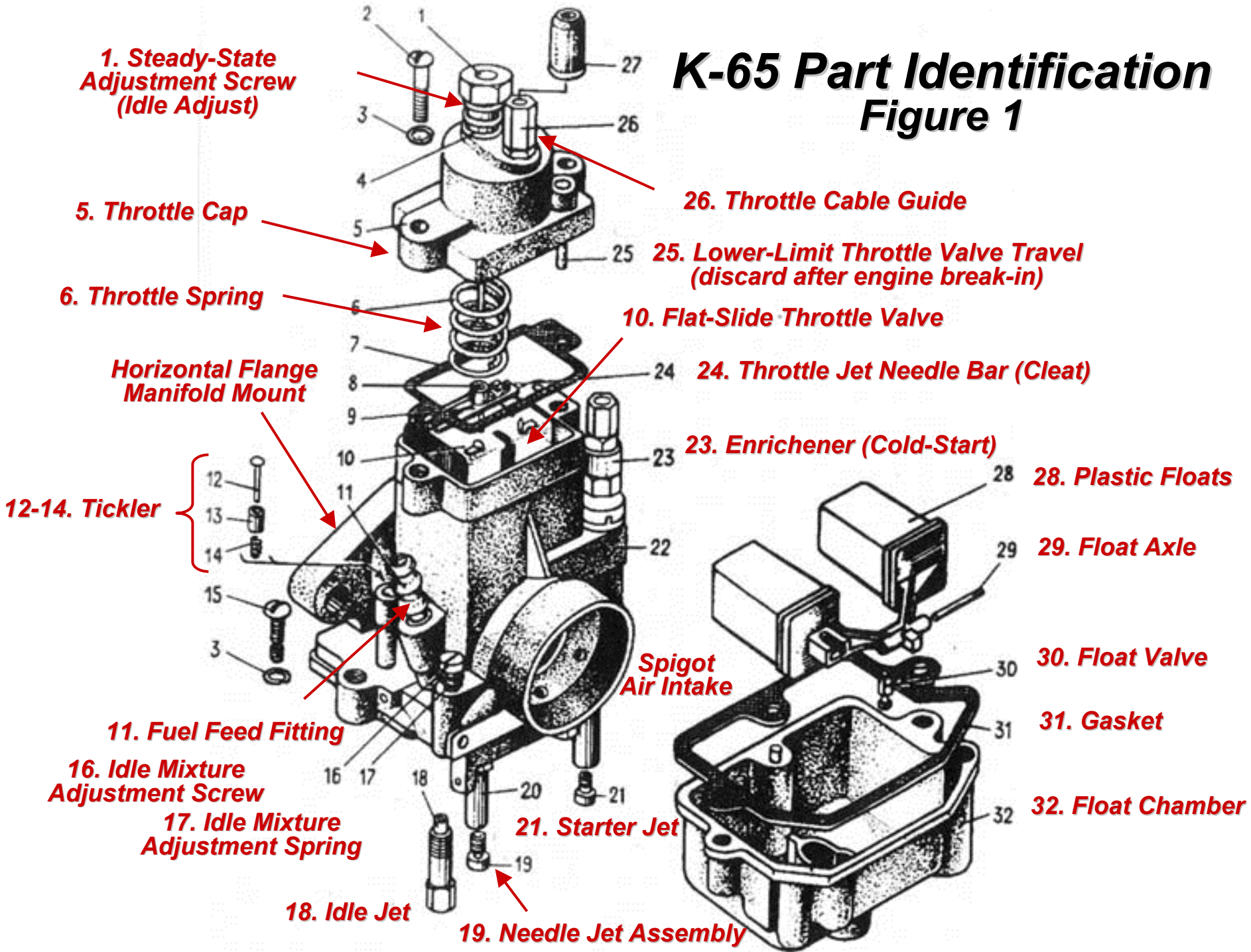
- **Identical Construction (mixture-adjust on same side, top or bottom)**
– K-62 / K-63 / K-65, Mikuni VM-28, Keihin CVK32 (L22A)



A few Russian carburetors (L/R) were built so that the mixture-adjust screw was always on the outside.

K-65 Part Identification

Figure 1



Setting K-63/K-65 Carbs (FoilHeadz Maintenance)

- **Instructions based on revising the generic K-301 / K-302 / K-37**
- **1. Warm up the engine (make sure both sides get hot because many times bikes are only running off of one cylinder). If installed, disconnect the supercharger hose and plug up the carb holes or pinching off the tube with vise-grips so that absolutely ZERO air passes from one side to the other. Then, kill or ground out one cylinder; we'll set the carb on the other cylinder.**
- **2. Loosen the carb neck screws so that there is slack between the end of the cable casing and the carb neck.**
- **3. Note that both adjustments are vertical screws. It's now LOWER (mixture) and UPPER (slide stop) adjustments.**
- **4. Screw the LOWER screw 1.5 turns out from a softly seated, fully-in position. If already operating fine, it is not necessary to "pre-set" this screw, simply adjust it in Step 6.**
- **5. Set the UPPER screw for minimum steady operation.**
- **6. Adjust the LOWER screw for maximum engine speed.**
- **7. Set the UPPER screw for minimum steady operation again.**
- **8. Repeat for the other side.**
- **9. Note differences in engine speeds when operating on single cylinders. Plug up both cylinders spark plug cables. Adjust the UPPER screws equally in 1/8 turns for final low-speed idle operation.**
- **10. Put it on the center stand (or jack up the drive wheels on an MT-16).**
- **11. Fire it up.**
- **12. Put it in 4th gear (might wanna chock it).**
- **13. Rev it up to 30-40 khp (20-30 mph).**
- **14. Clamp/hold the throttle in place, AND DO NOT CHANGE UNTIL THE PROCEDURE IS OVER**
- **15. Disconnect (or ground) one cylinder wire**
- **16. Note exactly what the speedometer settles down to after 10 seconds.**
- **17. Now quickly re-connect that side, disconnect the other (don't move the throttle even though it'll rev up some).**
- **18. Adjust the carb cable ferrule on the running side to match the exact speed you noted while the first side was running.**
- **19. Now let off the throttle and reconnect your supercharger (if present).**

Note: Upper Screw is (1) Min. Idle Speed, and Lower Screw is (16) Idle Mixture Adjust, both from Figure 1.

Major K-65T Carburetor Characteristics

Throttle Control Cable

Tickler



Steady-State Adjustment Screw (Idle Adjust)



Float Chamber

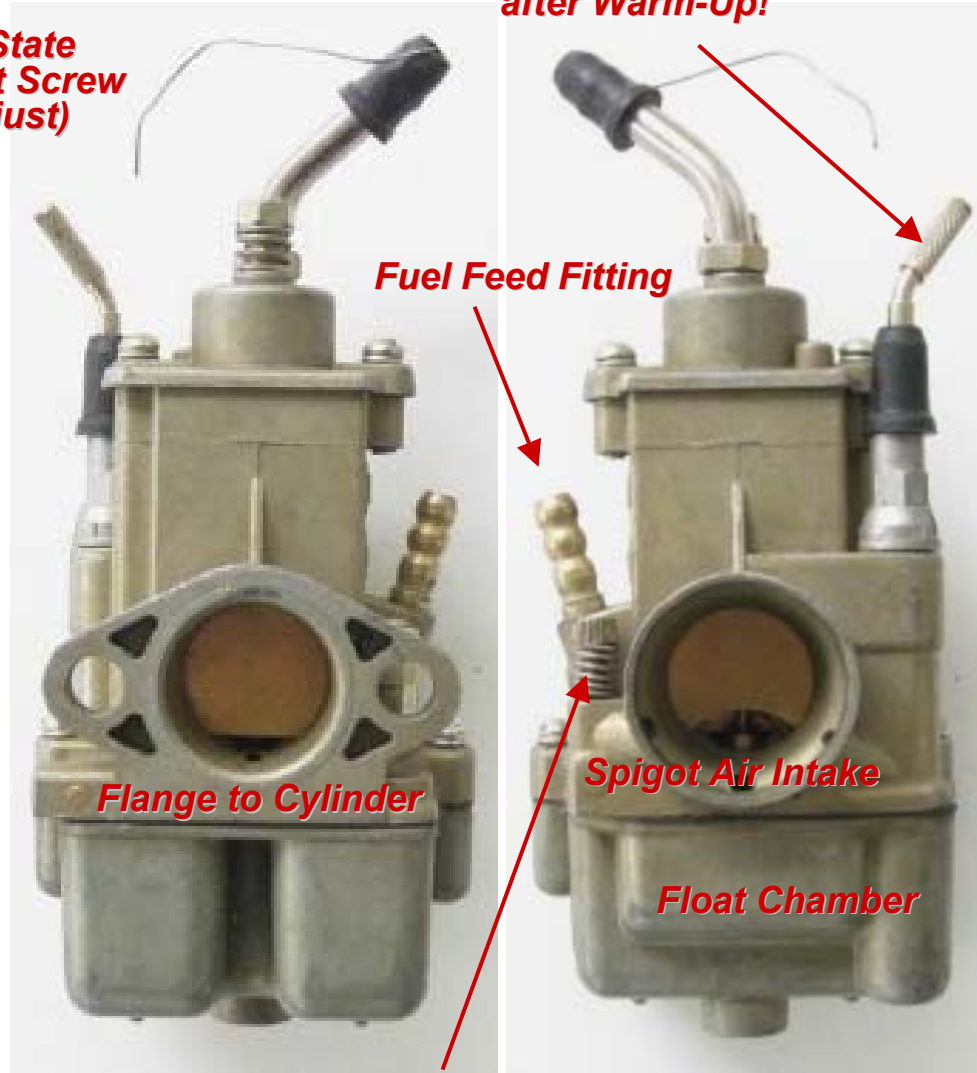
Enrichener (a.k.a. Choke) Lever
Pull Up and Rotate 90° to Enable.
Disable (Un-twist and Release) Soon
after Warm-Up!

Fuel Feed Fitting

Flange to Cylinder

Spigot Air Intake

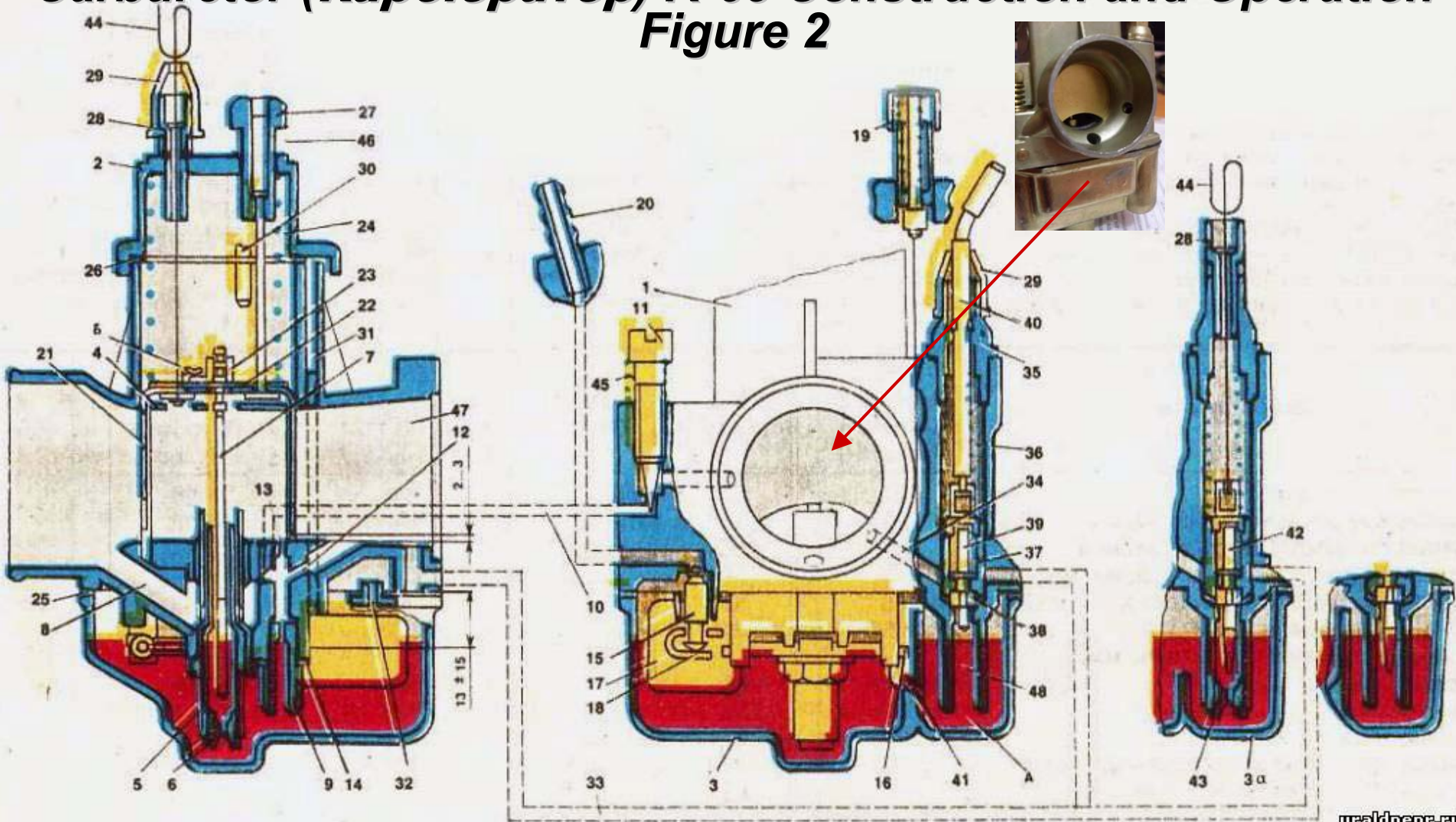
Float Chamber



Idle Mixture Adjustment Screw
(Tightening Enrichs)

Carburetor (Карбюратор) K-65 Construction and Operation

Figure 2



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- | | | | | |
|-------------------------|------------------------------|------------------------------|-------------------------------|----------------------------|
| 1. Carburetor Body | 11. Idle Mixture Adjust | 21. Flat-Slide Throttle | 31. Float Vent to Air | 41. Hole |
| 2. Throttle Cover | 12. Fuel/Air (Emulsion) Hole | 22. Needle Bar (Cleat) | 32. Excess Fuel Drain Hole | 42. Enricher Rod |
| 3. Float Chamber (Bowl) | 13. Idle Transition Hole | 23. Needle Lock | 33. Fuel Channel | 43. Enricher Jet |
| 4. Flat-Side Throttle | 14. Jet Lock Washer | 24. Throttle Spring | 34. Fuel/Air Channel | 44. Control Cable |
| 5. Main Nozzle | 15. Fuel Valve | 25. Float Chamber | 35. Guide | 45. Mixture Adjust Spring |
| 6. Main Jet | 16. Float Axle | 26. Throttle Gasket | 36. Return Spring | 46. Min. Idle Spring |
| 7. Jet Throttle Needle | 17. Plastic Float | 27. Min. Idle Throttle Screw | 37. Starter Piston or Plunger | 47. Flange Output |
| 8. Air Channel Inlet | 18. Elastic Stop Washer | 28. Control Guide (Slide) | 38. Sealing Rubber | 48. Fuel Channel |
| 9. Idle (Pilot) Jet | 19. Tickler | 29. Protective Cap | 39. Starting Needle | Note: 19 and 32 Absent |
| 10. Air Channel | 20. Fuel Inlet Fitting | 30. Throttle Limiter Rod | 40. Control Rod | on K-65A (A) and K-65Л (L) |

K-65 Carburetor Construction (Figure 2)

- **K-65 Construction Similar to K-62 / K-63**
- **Carburetor Consists of Three Main (cast zinc alloy) Parts;**
 - **Body (1), Throttle Cover (2), and Float Chamber (bowl) (3)**
- **Float Chamber (3)**
 - **Breathing Hole Connected to External Environment via Opening (31)**
 - **Float Mechanism Consists of Two, Rectangular, Lever-Type, Plastic Floats (17), Connected by a Common Shaft (axle) (16)**
 - **Level of Fuel in Float Chamber Approximately the Same as in the K-62 / K-63**
 - **When Carburetor Upside Down, Molding Line on Side of the Float Should be Parallel and 13 ± 1 mm to the Plane**
 - **Excess Fuel Drain Hole (32) In Lid of the Float Chamber**
- **Fuel Valve (15)**
 - **Designed as Brass Needle which Rests on the Float Plate**
 - **Top Closes the Fuel Supply Channel**
 - **Disc of Elastic Material In Upper Cone of Fuel Valve (18)**
 - **Level of Floats in the Chamber (bowl) Controlled by Bending the Supporting Plate Tab**
- **Mixture Enrichener System (Corrector or Starter)**
 - **Before Starting a Cold Engine, Bent Stick Raises Starter Piston (37)**
 - **Fuel Mixture from Enrichener (starter) to Mixing Chamber Enters thru Channel (33)**
 - **Under the Influence of Vacuum, Formed when Turning Kick-Starter, Fuel Flows thru Starter Jet (43)**
 - **Spring (36) Prevents Conical Starter Needle (39) from Sticking**
- **Flat-Slide Throttle Valve (4)**
 - **Vertical, Flat, U-shaped Cross-Section of Sheet Brass**
 - **In Wall, Facing the Air Cleaner, the Bottom Is Cut on a Semi-Circular Radius to Provide Air/Fuel Mixture when Idling**
- **Throttle Jet (metering) Needle (6)**
 - **Made of Stainless Steel**
 - **Upper Part Has Five Grooves to Move to Change the Amount of Spray**
 - **Metering Needle Can Be Raised or Lowered by Loosening the Needle Lock (23)**
 - **Need for Such Adjustments May Occur Under Seasonal Operation, Break-In Period, or In Conditions of High Temperature or Altitude (mountains)**

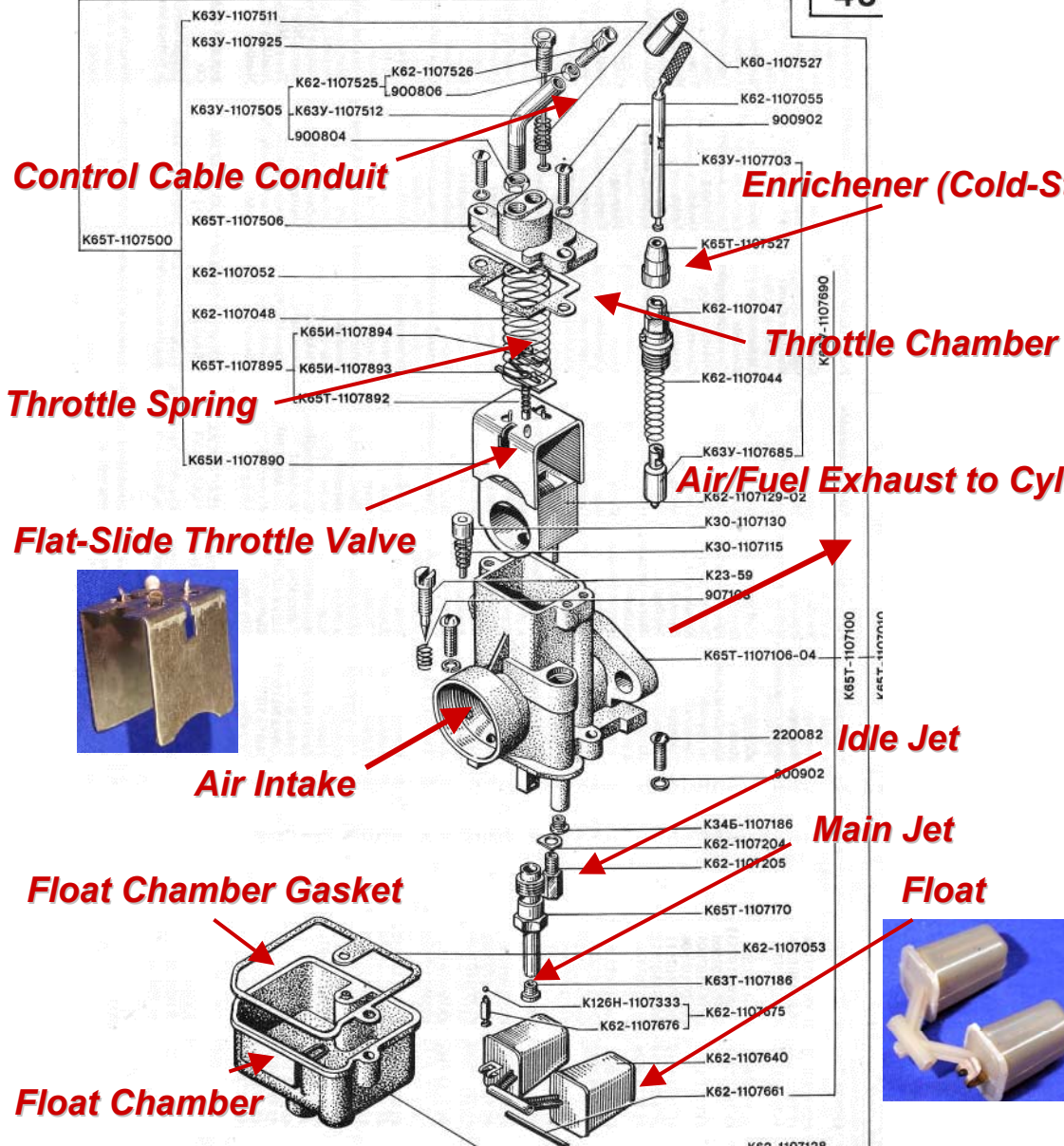
K-65 Carburetor Construction (Figure 2)

- ***At Low-Speed***
 - ***Cylinders Need a Rich Mixture, When Idle Throttle Screw (27) Is Slightly Screwed In***
 - ***Mixing Occurs in the Mixing Chamber thru Fuel/Air Emulsion Hole (12), from Fuel Leaving the Idle (pilot) Jet (9) and Air Coming thru Air Channel (10)***
- ***In the First Quarter of the Throttle (when the throttle is first lifted)***
 - ***When Lifting the Throttle Up to a Quarter, the Mixture Composition Is Determined by Idling System***
 - ***Idle Jet (9) Fuel Fed Directly from the Float Chamber thru Emulsion (12) and Transition (13) Holes***
 - ***Vacuum in the Main Nozzle (5) Increases***
 - ***Fuel Is Discharged from the Float Chamber thru the Main Jet (6) to the Annular Cavity between the Jet Needle (7) and the Walls of the Main Nozzle into the Air-Flow of the Main Air Duct***
 - ***Here, Fuel is Sprayed, Partially Evaporating and Entering the Cylinder***
 - ***Composition of the Mixture Is Controlled by Idle Mixture Screw (11) and Idle Speed Adjust Screw (27)***
 - ***With Mixture Screw Turned Out (CCW) (11) Mixture Is Depleted (leaner)***
 - ***Turned In (CW) Mixture Is Enriched (richer)***
 - ***Best Composition of Fuel/Air Mixture Depends on Position of Conical Jet Needle (7), the Capacity of the Main Jet (6) and the System Idling System***
 - ***Jet Needle (7) Provides Necessary Fuel Supply Over Most of Throttle Range, Corresponding to about 1/4 to 3/4 of Range***
 - ***Since Moving Jet Needle Up Increases the Area of Annular Cross-Section between the Jet Needle and the Air Tube, and Consequently the Fuel***
- ***In the Last Quarter of the Throttle***
 - ***Flow Area of Air Channel in Spray Zone Varies Relatively Little, so Air Flow Remains Almost Unchanged***
 - ***Amount of Fuel Supplied Determined Mainly by Diameter of Main Jet (6)***
 - ***Air Entering thru Channel (8) of Main Nozzle (5) in the Annular Gap between the Nozzle and Body, Substantially Improves Mixing***

K-63 Carburetor Construction (Figure 2)

- **Tickler (cold-start) (19)**
 - **Ensures Desired Mixture when Starting a Cold Engine ($\leq -15^{\circ}$ C)**
 - **Momentarily Bypasses Float Valve (15) to Give Extra Shot of Fuel during Cold-Start**
 - **To Avoid Excess Fuel Ending Up in the Cylinder, Which Can Lead to Compression with Devastating Consequences, a Drain Hole (32) Is Provided in the Float Chamber**
- **Max Throttle Limiter (30)**
 - **Rod (30) Molded Inside Carburetor Lid**
 - **Limits Travel Height of Throttle Valve, Thus Limiting the Max Speed During New Engine Break-In**
 - **Made To Be Removed following Engine Break-In Period**
- **Idle Speed Adjust Screw (27)**
 - **Upper End of Idle-Adjust Throttle Rod (27) Is Fixed with a Screw, Screwed into the Lid**
 - **Rotate to Limit the Lowest Value of the Throttle**
 - **Engine Idle Speed Regulated by Screw (27)**
 - **If Unscrewed: Speed Is Increased; if If Screwed In: Speed Is Reduced**
- **Idle Mixture Adjust Screw (11)**
 - **Screw (11) Regulates Composition of Combustible Mixture When Engine Is at Idle**
 - **If Unscrewed (counter-clockwise): Mixture Is Leaned; If Screwed In (clockwise): Enriched**

K-65T from MB-650, MT-11 and MT-16 (Maintenance Manuals)



Item #	Part Number	Part Description
-	K63T-1107010	Carburetor
1	K63Y-1107925	Steady-State Idle Adjust Screw
2	K62-1107055	Screw
3	900902-0	Washer
4	K63Y-1107511	Spring
5	K63Y-1107506	Throttle Cover
6	K62-1107048	Throttle Spring
7	K62-1107052	Throttle Gasket
8	K63Y-1107892	Needle
9	K63Y-1107894	Strap (Bar)
10	K63Y-1107890	Throttle Valve
11	N/A	Fuel Input Fitting
12	K30-1107130	Depressor (Tickler) Knob
13	K30-1107130	Depressor (Tickler) Stem
13	K30-1107115	Depressor (Tickler) Spring
15	220082	Screw, M5-6gx20
16	K23-59	Idle Stroke Screw
17	907103-0	Idle Screw Spring
18	K62-1107205	Idle Jet
19	K63T-1107186	Main Jet
19	K34B-1107186	Main Jet
20	K63Y-1107170	Main System Atomizer
21	K63-1107185	Enricher Jet
22	K62-1107044	Enricher Spring
N/A	K62-1107047	Guide Spring
23	K63-1107690	Corrector-Enricher
24	K62-1107893	Throttle Needle Lock
25	K28D-1107032	Lower-Limit Throttle Valve Travel (remove after engine break-in)
26	K62-1107525	Guide Wire Assembly
27	K60-1107527	Cover
28	K62-1107640	Float assembly
29	K62-1107661	Axle
30	K62-1107675	Needle valve Assembly
31	K62-1107053	Float Chamber Gasket
32	K62-1107128	Float Chamber

The breakdown of the K-65 carb shows the flat-side throttle valve, and flange-mount. The part numbers clearly show a heritage to the K-62 and K-63.

Carburetor K-65 Adjustment (see Figure 2)

- **Initial Checks and Adjustments**

- **Before Checking the Carburetor**

- **Check / Adjust Spark Plug Electrode Gaps**
- **Check / Adjust Ignition Breaker Points**
- **Check / Adjust Clearances between Valve Stems and Rocker Ends**

- **Idling Speed Adjustment**

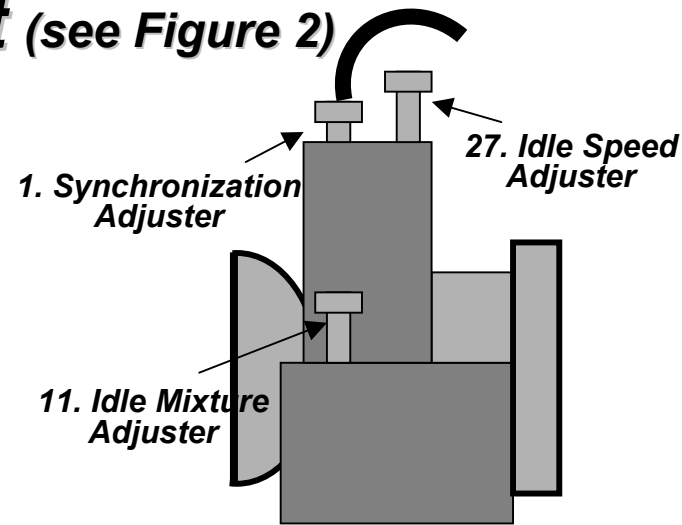
- **First, Ensure There Is Clearance (Gap) between Cable Sheath End-Piece and Union of 2-3 mm**
- **If Not, Loosen the Lock-Nut Socket of Union and Rotate It Clockwise or Counterclockwise, Adjusting the Proper Gap and Then Secure the Lock-Nut**

- **Carburetor Adjust for Idle (Low-Speed)**

- **If Warm Engine Stops at Minimum Idling Speed without a Load, Must Adjust Carb Idle**
- **Adjust Each Carburetor Individually, Disabling the Other Cylinder**
- **Idle Adjustment Procedure**
 - **Adjust Idle Screw (27) to Set a Minimum Sustained Speed, then Slowly Unscrew (CCW) Idle Mixture Screw (11) until It Misses (misfires), then Slowly Turn the Screw In (CW) until Engine Starts to Operate Steadily**
 - **Then Screw (28) Again to Reduce Throttle to Obtain the Minimum Sustainable Speed, at the Same Time Adjusting Mixture Screw (11)**
 - **These Operations are Repeated Three or Four Times until Minimum Sustained Speed Is Achieved**
 - **Similarly, Adjust the Carburetor of Other Cylinder**

- **Synchronizing Engine Idling Speed**

- **After Adjusting, Idle Speed when Using Either Left or Right Cylinders Should Be the Same**
- **Checked by Ear, Alternately Disabling Left and Right Cylinders**
 - **By Lifting the Cap from the Spark Plug or By Shorting Out the Spark Plug to Ground**
- **If Engine Speed Varies When Shifting between Left and Right Cylinders, Adjust Screw (28), until They're the Same**
- **Engine Stability Checked by Sharp Opening and Closing the Throttle (Turning Throttle Control Handle)**
- **If Engine Runs Stably at Low-Speed, but Stops during Heavy Throttle (Sharply Opened), Enrich the Mixture by Screwing In (CW) Mixture Adjust (11) by 1/4 to 1/2 Turn**
- **If Engine Stops when Abruptly Closing the Throttle, Lean the Mixture by Unscrewing (CCW) Mixture Adjust Screw (11) by 1/4 to 1/2 Turn**



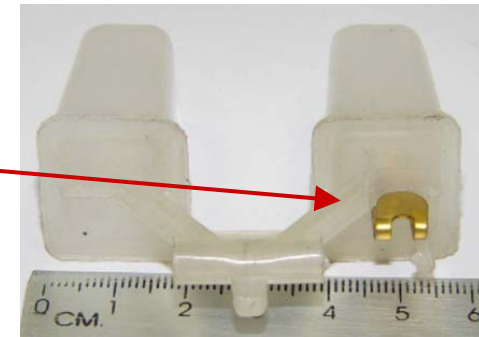
Carburetor K-65 Adjustment (see Figure 2)

- **Air-Fuel Mixture Adjustment Under Engine Operating Conditions**
 - Running Engine at Average Load Conditions Depends on Position of Jet Needle (7) in Main Jet (6)
 - Therefore Adjustment is Choice of Correct Needle Position
 - Need for Adjustment Appears When Changing Seasons (summer-to-winter) or for Increasing Engine Power for Economical Operation
 - Needle Position Adjustment
 - Adjust Jet Needle (7) Using Different Grooves on the Jet Needle by Undoing Plastic Lock (23)
 - When Needle Is Raised with Respect to Atomizer Hole; Mixture Is Enriched
 - With Needle Lowered; Mixture Becomes Leaner (impoverished)
 - Re-fasten Plastic Lock (23)
 - To test regulation, Sharply Increase Engine Speed
 - If Knocking Is Heard in the carburetor, the mixture should be enriched by Raising the needle



K-65 Throttle Needle:
1- Throttle Needle Lock
2- Plastic Plate
3- Jet Needle

- **Setting the Fuel Level in the Float Chamber**
 - If the Fuel Level in Float Chamber Is Too High, Fuel Consumption Is Increased or Engine Pick-Up Is Insufficient
 - After Replacement of Fuel Valve or Float, Need to Check Normal Fuel Level
 - Remove the Carburetor, Remove Float Chamber Cover and Gasket
 - Hold Carburetor Vertically with Float Chamber Up
 - The Float's Mold Parting Line Must Be Parallel to the Carburetor Body
 - Distance between Float Parting Line and Plane Must Be 13 ± 1 mm
 - Adjustment by Bending Fuel Valve Stop Metal Tab
 - Leakage of Fuel thru Drain Hole (32) Indicates a Leaky Fuel Valve
 - Wash or Replace the Elastic Washer, Eliminating Any Nick on Valve Seat
- **Carburetor Care**
 - After Every 5,000 kilometers (3,000 miles) Wash and Blow-Out the Carbs
 - Acetone, or Similar Solvents, Used to Clean Jets
 - Do Not Use Steel Wire to Clean Jets, which Can Change the Cross-Section of Holes and Disrupt Carburetor Operation



Carburetor K-63 Adjustment (see Figure 2)

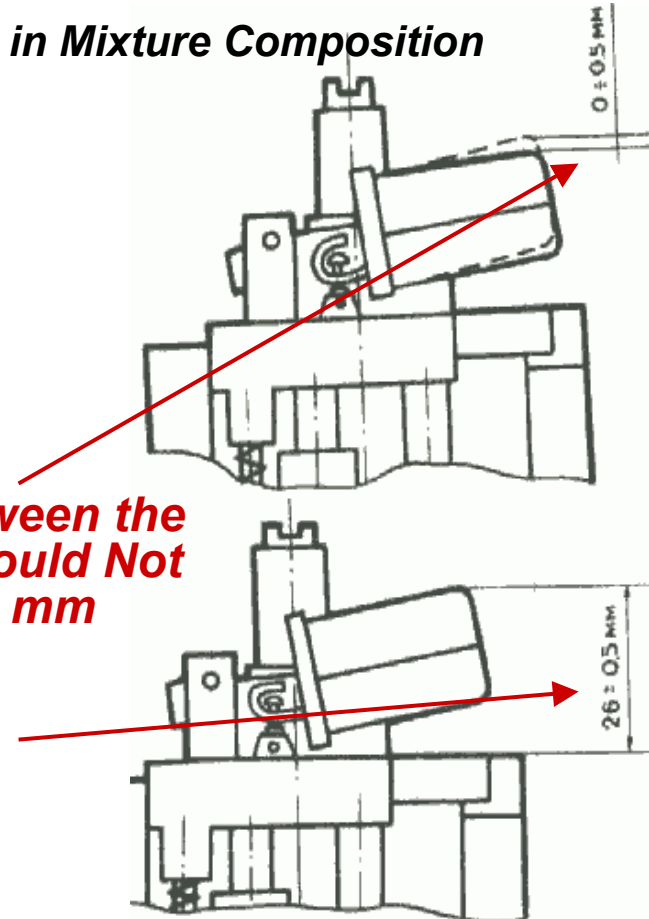
- **With Long-Term Use**
 - **in Hot Climate ($\geq 35-40^{\circ}\text{C}$) and at an Altitude of 2,000 meters (6,500 ft): Lower Jet Needle (7)**
 - **At Temperatures $\leq -15^{\circ}\text{C}$: Raise Jet Needle (25)**
- **Medium-Speed Adjust: 1/3 to 3/4 Throttle Range**
 - **The Greatest Influence In This Range Is the Position of the Throttle Jet Needle (7)**
 - **To Determine the Proper Position of the Jet Needle, Need to Run at least 20-30 kilometers (15-20 miles), Stop and Look at Color of the Spark Plugs**
 - **Color of the insulator of the Center Electrode (your only hint)**
 - **If Black with Signs of Soot: Indicates a Rich Mixture - Lowered (lean the mixture)**
 - **If Too Light, Pale Gray: Indicates a Lean Mixture - Jet Needle Must Be Raised (enrich the mixture)**
 - **Normal Should Be Regarded as a Light Brown or Dark Gray**
- **High-Speed Adjust: Selection of Main Fuel Jet (6)**
 - **Easiest Method Is Substitution**
 - **Form a Queue of Different Performance Jets and Determine Which Shows the Best Results.**

Adjustment of Carburetor K-65 (moto4you.ru)

- **K-65 Carburetor Has Three Throttle Speed Regions**
 - **Idle Speed: Fully Closed Throttle or Very Small Opening (20-30%)**
 - **Medium Speed: Throttle Position from 1/3 to 3/4 of Range**
 - **High Speed: Last Quarter of Throttle, Only Main Fuel Jet Has Effect**
- **If New Carburetor**
 - **Check Out Whether It Has Been Thoroughly Cleaned**
 - **Sometimes Clot Preservative Grease Conceals Remnants of Shavings and Moldings, Clogging Thin Channels**
 - **Must Be Rinsed and Blow-Dried with Air**
- **Make Sure Carburetor Is Firmly Fastened to Cylinder**
 - **If Not, Sucking Air thru Cracks Nullifies All Adjustments in Mixture Composition**
 - **Use Gasket of Elastic, Petrol-Resistant Material**
 - **Typically, Gaskets Used Cardboard or Paronite**
- **Carburetor Must Be Removed for Adjustment**
 - **Remove Bottom Float Chamber**
 - **Turn Carburetor Over**
 - **Check That Floats Are in Same Plane**
 - **If Not, Bend the Tab**

**Difference between the
Two Floats Should Not
Exceed 0.5 mm**

**Distance from Plane of Connector
Housing to Top Parts of Upper Float
Should Be 26 (±0.5) mm**



K-65 Carburetor Parameters (Table I)

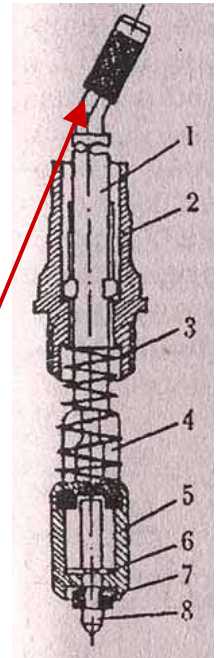
Parameter	K-65И (I)	K-65В (V)	K-65Д (D)	K-65С (S)	K-65Г (G)	K-65Т (T)	K-65У (U)	K-65Ж (ZH)
Used In:	Motorcycle IzhMoto, IZH Planeta-3, -4, -5	Motorcycle ZID Sunrise-3M	IzhMoto, IZH Jupiter-5	Minsk Motorcycle MMVZ-3.1122-03, MMVZ-1121, MMVZ-3.3.112111	Motorcycle TMZ 5.952 Scooters: Tula 5.301-02.01 Tulitsa-02M 5.403-02 Ant-2M-01 5.403-03 Ant-2M-02	Motorcycle Dnepr MT-11 (CMH-8.155) and MT-16	Ural	Snowmobile Blizzard RMZ-640
Engine Size	IL-P5		IL-YU5		TMZ	IMZ-8.128	IMZ-8.123	
Carb Part #	K65И-1107010		K68Д-1107010		K65Г-1107010	K65Т-1107010	K68У-1107010	K65Ж-1107010
Diffuser (Cone) Diameter	32 mm	26 mm	30 mm	26 mm	26 mm	26 mm	28 mm	32 mm
Mixing Chamber Diameter	32 mm	28 mm	32 mm	28 mm	28 mm	28 mm	30 mm	32 mm
Capacity of Main Fuel Jet	270 ml/min	200 ml/min	260 ml/min	165 ml/min	130 ml/min	165 ml/min	170 ml/min	330 ml/min
Enrichener (Corrector) Control	Remotely	Off-line	Remotely	Off-line	Remotely	Off-line	Off-line	Remotely
Capacity of Enrichener Jet	255 ml/min	-	255 ml/min	-	-			-
Capacity of Idle Jet	50 ml/min	50 ml/min	50 ml/min	50 ml/min	50 ml/min	50 ml/min	50 ml/min	50 ml/min
Diameter of Jet	2.67 mm	2.63 mm	2.65 mm	2.63 mm	2.63 mm	2.65 mm	2.65 mm	2.72 mm
Throttle Needle, Diameter of Cylindrical Part	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm
Throttle Needle, Diameter of Conical Section (smallest)	1.82 mm	1.6 mm	1.82 mm	1.75 mm	1.75 mm			1.75 mm
Cone Length	27 mm	24 mm	27 mm	24 mm	24 mm			24 mm
Diameter of Idle Hole	0.7 mm	0.65 mm	0.6 mm	0.65 mm	0.7 mm	0.7 mm	0.7 mm	0.7 mm
Diameter of Transition Hole	1.0 mm	1.2 mm	1.5 mm	1.2 mm	1.2 mm	1.2 mm	1.2 mm	1.0 mm
Capacity of Enrichener Jet						55 ml/min	55 ml/min	55 ml/min

Ural / Dnepr sidecars use the popular K-65T carburetor. Many of the versions have a control cable for remoting the enrichener (choke), which Ural / Dnepr owners can't use.

Enrichener (Starting Device, Corrector or Choke (Figure 2))

- **When Everything Is Cold, Fuel Doesn't Vaporize Well**
 - The Enrichener (Corrector or Choke) System Is Used
- **Basic Start-Up and Warm-Up System (Different Modifications Applied to Different Versions)**
 - **K-65C (S), K-65B (V), K-65T (T) and K-65Y (U): Stand-Alone Lever (local control)**
 - Knurled Rod which Twists Up and Rotates 90 degrees to Lock
 - Opens Another Jet which Allows an Enriched Mixture into the Mixing Chamber
 - System Is Dependent Upon Springs and Seals to Operate Properly
 - Launcher Consists of Plunger (37), Plunger Guide (35), Spring Return (36), Corrector Needle (39), Sealing Rubber (38), Protective Cap (29), Control Rod (40) and Fuel Channels (33 and 34), as Well as Hole (41)
 - Normal Position Closed: When Needle (39) with Sealing Rubber (38) Blocks Fuel Channel (48) and the Side Surface of Plunger (37) Closes Channels (33 and 34).
 - When Fully Raised the Plunger Yields Maximum Enrichment Required for Starting the Engine
 - To Enable Starting Device; Raise-Up and Rotate Rod (40) 90°
 - The Stem Comes Out of the Guide Slot (35) and the Upper part Locked
 - The Piston (34) Rises, Opening Fuel Channels (33 and 34) and Fuel Channel (48)
 - To Disable Starting Device; Turn Rod Back by 90°, Then Under the Influence of the Return Spring(36) the Plunger Will Take Its Original Position.
 - Starting Device Protected from Dust and Dirt by Rubber Cap, Helmeted Over the Spring Guide (35).
 - **K-65И (I), K-65Д (D), K-65Г (G) and K-65Ж (ZH): Cable-Operated Choke (remote control) (Not for Ural / Dnepr Owners)**
 - Cable-Operated Starting Device Similar to Stand-Alone Lever
 - Does Not Have Stem (40)
 - Position of Plunger (37) Regulated by a Cable Connected to External Control
- **Additional Starting Device (Tickler or utolitel) Used at Temperatures Below + 5°C**
 - Tickler (35) Momentarily Pushed to Bypass Float Valve

- Starting Device
(Enrichener or Choke):**
1. Stem
 2. Guide
 3. Spring
 4. Plunger Tube
 5. Piston
 6. Lock Washer
 7. Sealing Washer
 8. Needle

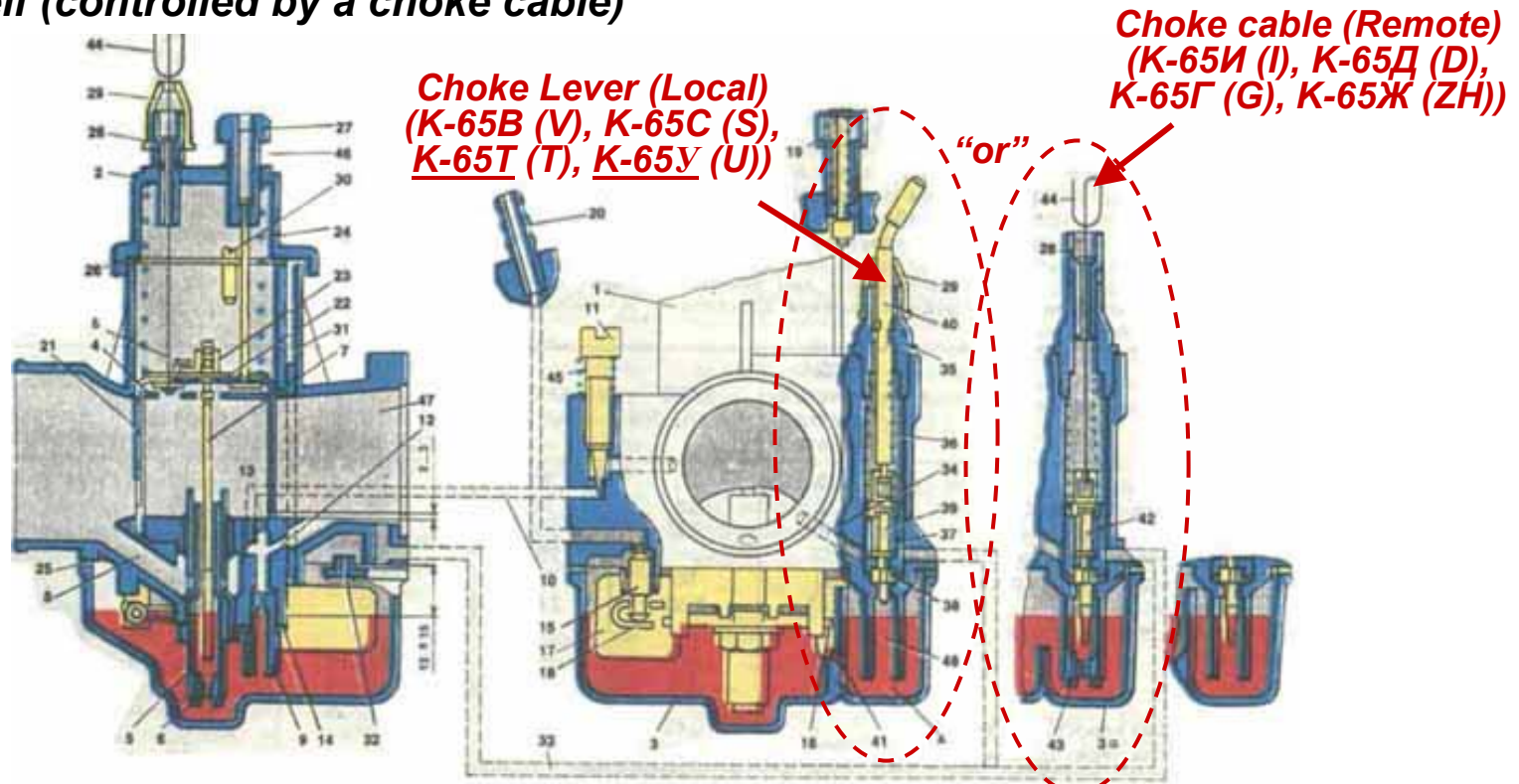


Enrichener (a.k.a. Choke)
Pull Up and Rotate 90° to Enable.
Disable (Un-twist and Release)
Soon after Warm-Up!

K-65 Showing Two Types of Enricheners

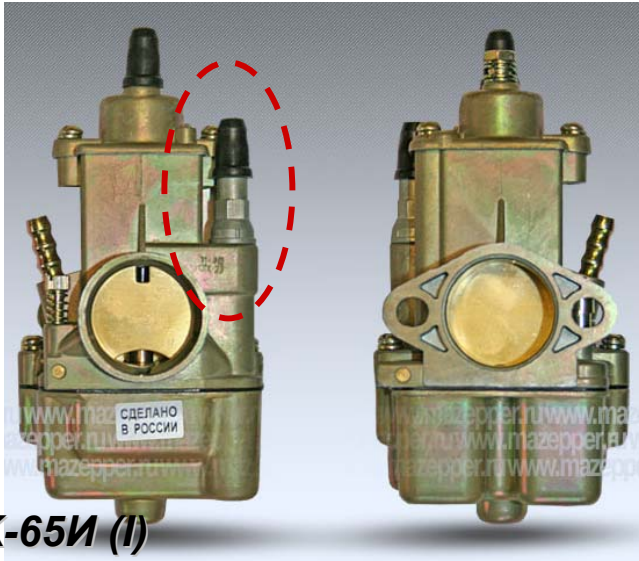
(a.k.a. Correctors or Chokes)

- All K-65 Models Are Shown in Table I
- Identification Is Important
 - Photos Are Included to Avoid Disappointment When Ordering
 - What You Don't Want to Do Is Get a Carburetor with a Wire Cable Coming Out of the Enrichener Used for Remote Setting of Choke
- The K-65T Is the One Used on Ural / Dnepr (Local Enrichener with Lever)
 - Off-Line Means the Enrichener Is Controlled Locally (right at the Carb itself)
 - Remotely Means that the Enrichener Is Controlled by a Choke Control Mounted on the Vehicle Itself (controlled by a choke cable)

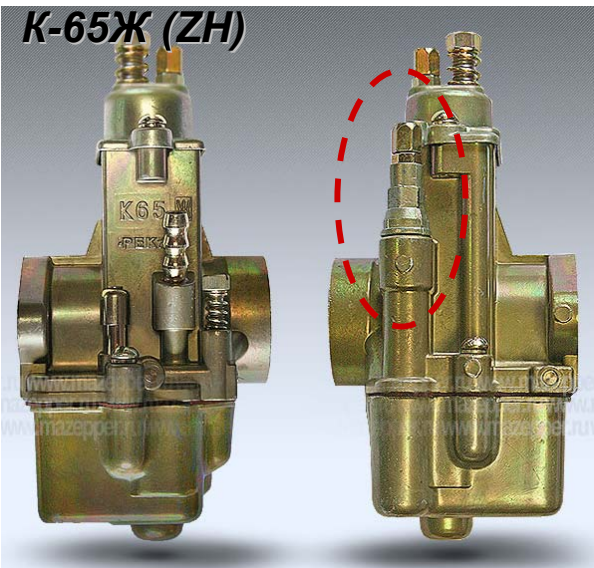
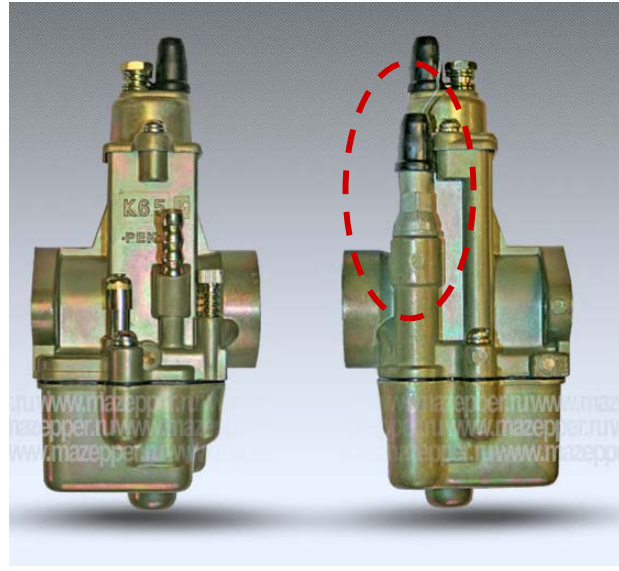


Control for the enrichener (corrector or choke) is via the choke lever (local) or via a cable (remote) that goes to a choke control.

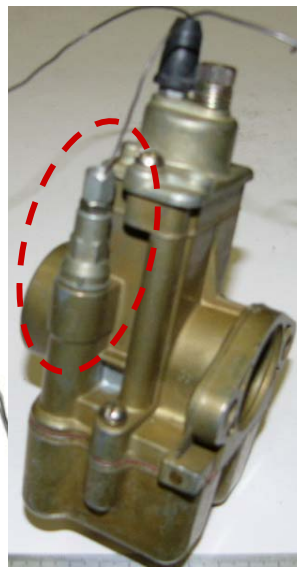
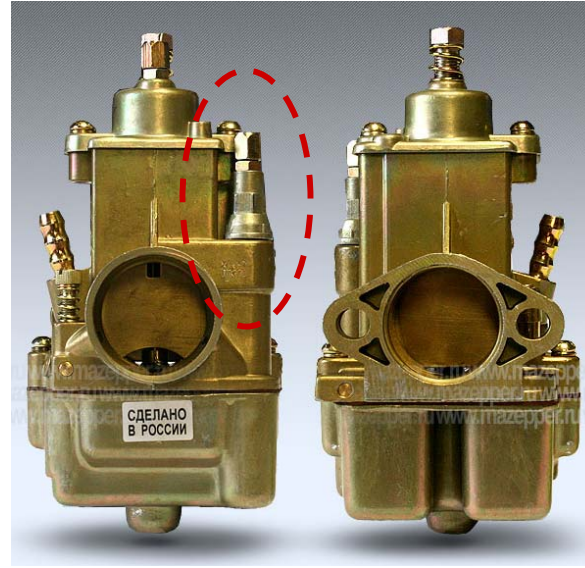
Карбюратор K-65И (I) and K-65Ж (ZH) Carburetors



K-65И (I)

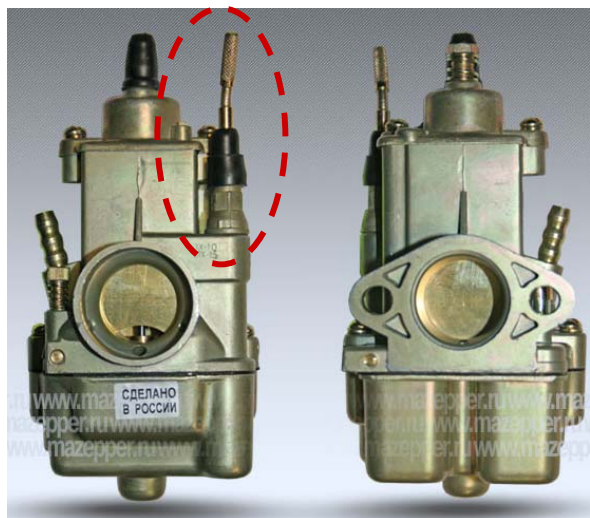


K-65Ж (ZH)

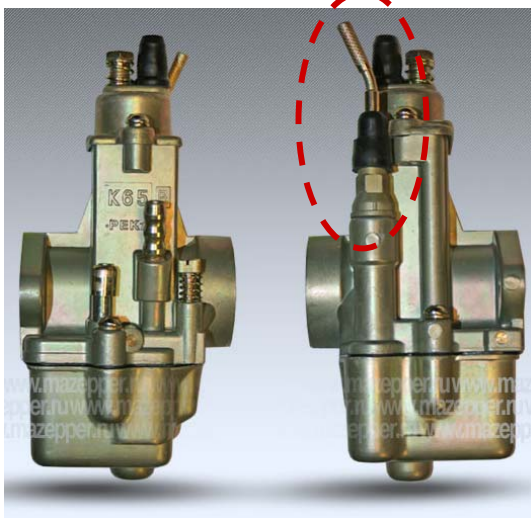


Control for the enricher (corrector) of the "I" (И) and ZH (Ж) uses a cable that goes to a remote control.

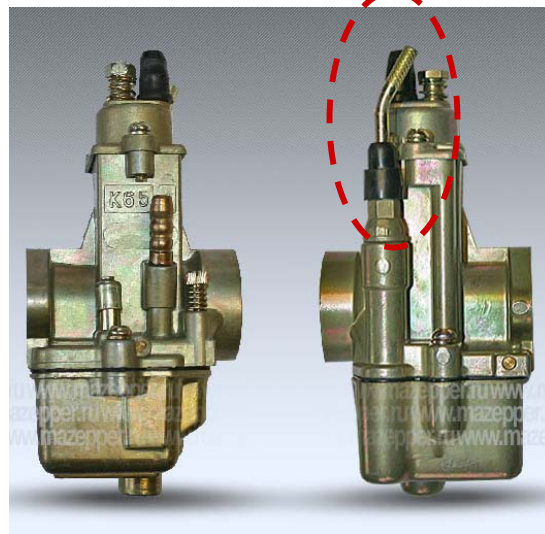
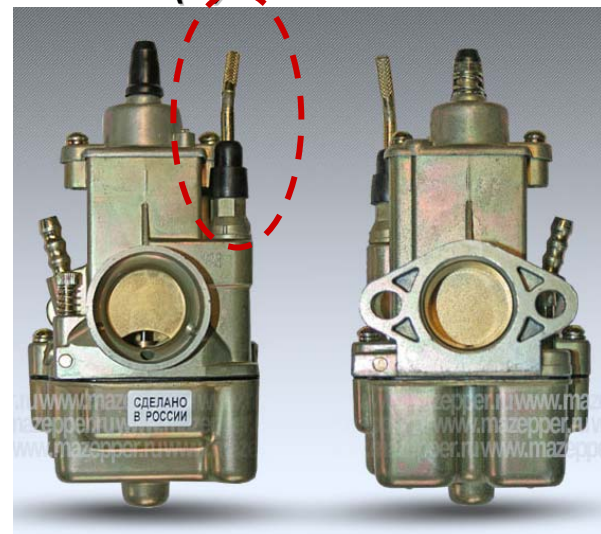
Карбюратор K-65V (B) and K-65C (S) Carburetors



K-65V (B)

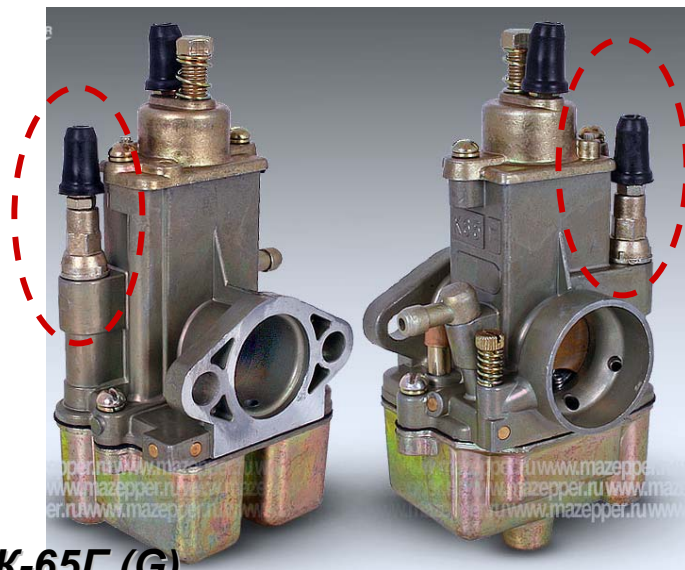


K-65C (S)

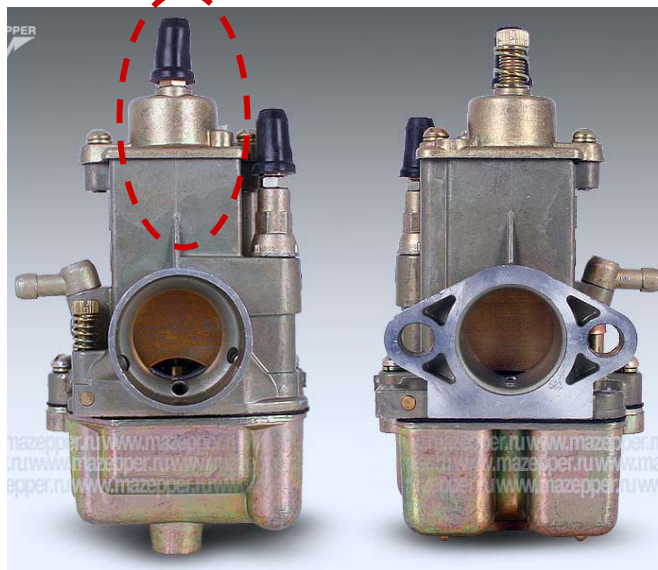


Both the K-65B and the K-65C use a twist handle to locally control the enrichener (corrector).

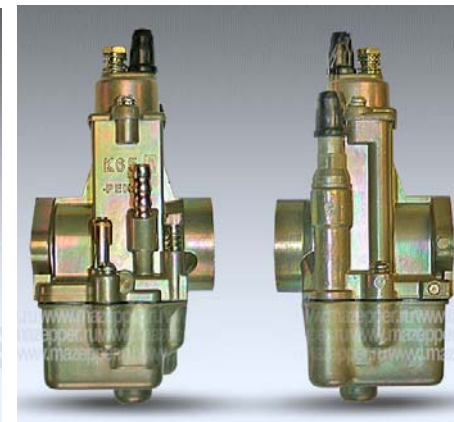
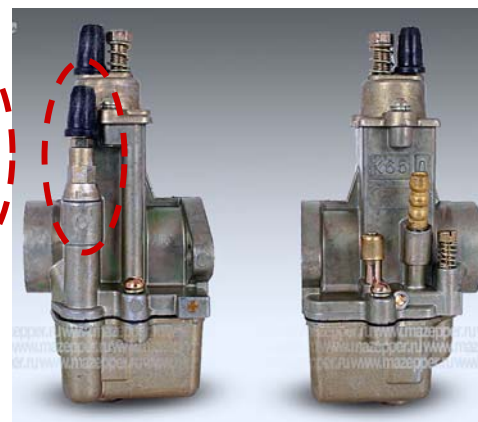
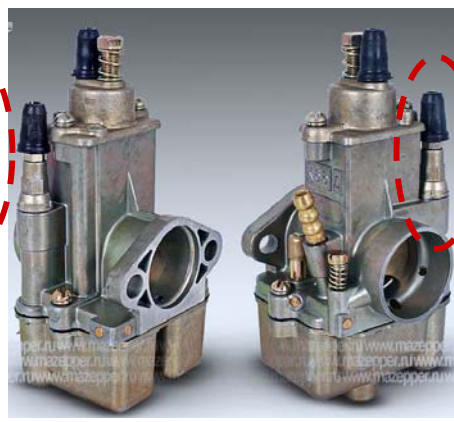
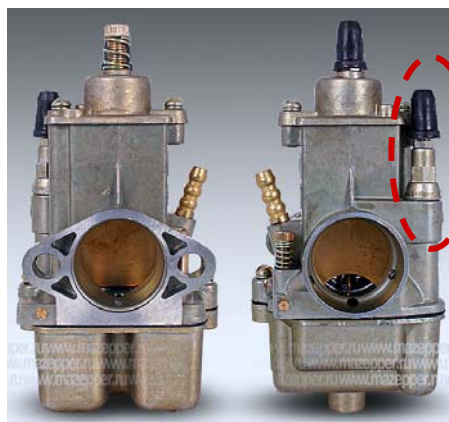
Карбюратор К-65Г (G) and К-65Д (D) Carburetors



K-65Г (G)

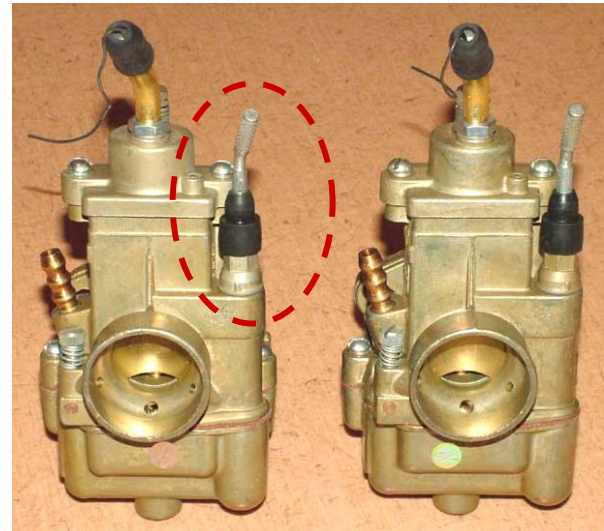
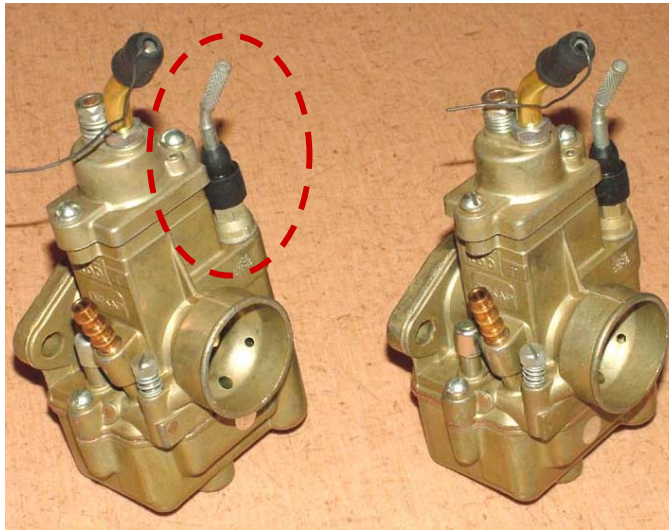
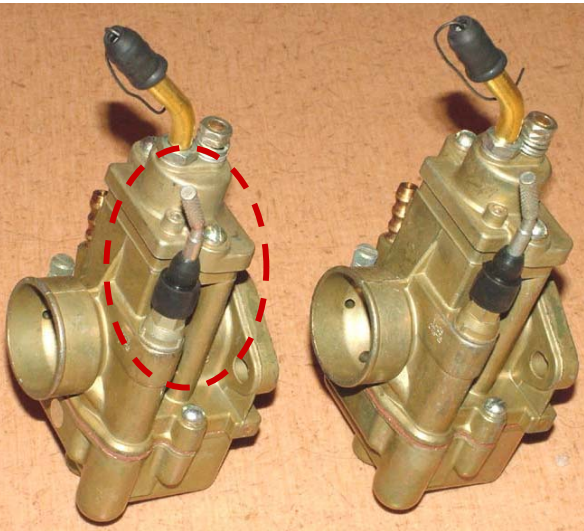
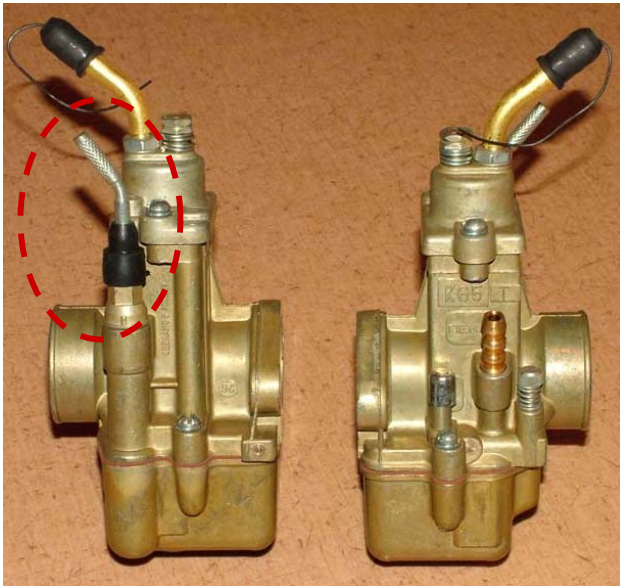
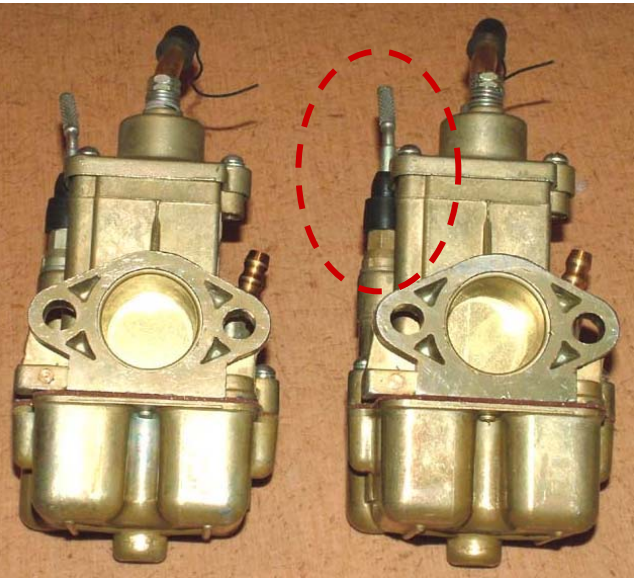


K-65Д (D)



The control for the enrichener (corrector) of the gamma (Г) and delta (Д) versions of the K-65 carburetor is a cable that goes to a remote control.

Карбюратор К-65Т (Т) with Local Choke Control (90° Twist Knob on Enrichener)



The control for the enrichener (corrector) of the “T” version of the K-65 carburetor is a twist handle.

K-62 / **K-63** / K-65 Flat-Slide Carburetor Parts (\$2012 and €2012)



Float Chamber Gasket
Part #: K62-1107053
Vendor Part #: 825
List Price: 1.36€
(www.moto-boxer.com)

Vendor Part #: S119
List Price: 1.49€
(www.ural-zentrale.de)

List Price: 2.05€
(www.ural-hamburg.de)



Idle Jet 0.7 mm
Part #: K62-1107205
Vendor Part #: S119-D
Carburetor jet made from brass
For all Pekar K-63/**K-65**/K-68
Exact Adjusting with Reamer is
Recommended.
List Price: 1.79€
(www.ural-zentrale.de)



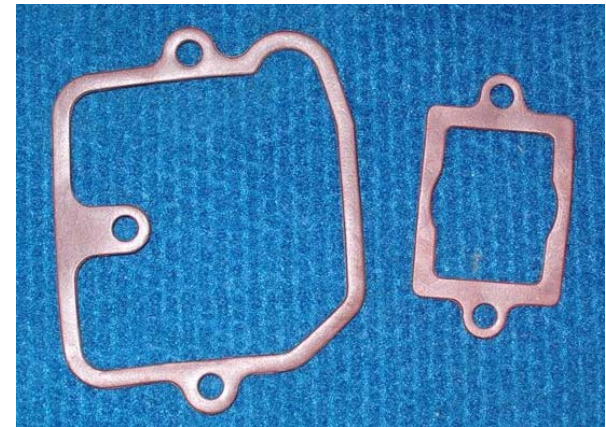
K-63/K-65 Mixing Chamber Top Gasket
Part #: K62-1107052
Vendor Part #: 826
List Price: 1.00€
(www.moto-boxer.com)

Vendor Part #: S2120
List Price: 0.99€
(www.ural-zentrale.de)

List Price: 1.02€
(www.ural-hamburg.de)



**Set of 12 Jet Reamers with Holder
for Jets with Bores from 0.6 to 2 mm**
Vendor Part #: S7005
Perfect for fine-tuning carburetors.
List Price: 19.99€
(www.ural-zentrale.de)



Gasket Set
Vendor Part #: 000.140/141
Vendor Part #: 813
List Price: 3.53€
(www.oldtimergarage.eu)



**Carburetor K-63/K-65 Throttle Jet Needle
with Clip**
Part #: K63U-1107895
Vendor Part #: 148
List Price: 2.95€
(www.moto-boxer.com)

The K-62 / **K-63 / K-65 carburetor has two gaskets;
the float chamber gasket and the mixing chamber gasket.**

K-62 / K-63 / **K-65** Flat-Slide Carburetor Parts (\$2012 and €2012)



Throttle Valve for **K-65T**



Extra Thick K-65 Gasket
Vendor Part #: F23838/x1
List Price: £6.00
Vendor Part #: F23838/pair
List Price: £10.00
(www.f2motorcycles.ltd.uk)

Gasket between head and carburetor for K-65 only. Standard gaskets coming from Russia are now less than 2 mm thick. These are made as exact copies of the original gasket designed by the factory in the first place. They are 4.10 mm thick and compress to 4.00 mm in use. This helps stop heat transfer from the head to the carburetor.



Carb Heat Protection Shield
For K-62 / K-63 / **K-65** / K-68
Vendor Part #: S119-SB
List Price: 7.49€
(www.ural-zentrale.de)

Protects the carburetor efficiently against the heat of the cylinder. Suitable for both sides, has to be bend around the carburetor. The gap to the carburetor should not be less than 5 mm. Use a gasket in front and behind the shield, if necessary use longer stud bolts.

Carburetor K-63 / **K-65** / K-68 Parts (\$2012 and €2012)



**Float Needle,
with Silicone Seal
Fits K-62/K-63/K-65**
Part #: K62-1107675
Vendor Part #: 149
List Price: 1.89€
(www.moto-boxer.com)



**Float Needle,
with Silicone Seal**
Vendor Part #: S374
List Price: 1.99€
(www.ural-zentrale.de)



Float Needle Seal
Part #: K126N-110733
Vendor Part #: 1994
List Price: 1.00€
(www.moto-boxer.com)



Set of 10 Float Needle Seals
Fits on needle valve of K-63/K-65/K-68
Vendor Part #: S388
List Price: 7.99€
(www.ural-zentrale.de)



**Rubber Boot to Seal Throttle
Cable for All Carbs**
Length: 20 mm, Diameter: 5 mm
(elastic)
Vendor Part #: S4537
List Price: 0.99€
(www.ural-zentrale.de)



**Rubber Boot to Seal Throttle and
Choke cable at Carb Cover**
Size: 8 x 13 mm, Length: 11 mm
Vendor Part #: S4538
List Price: 0.99€
(www.ural-zentrale.de)

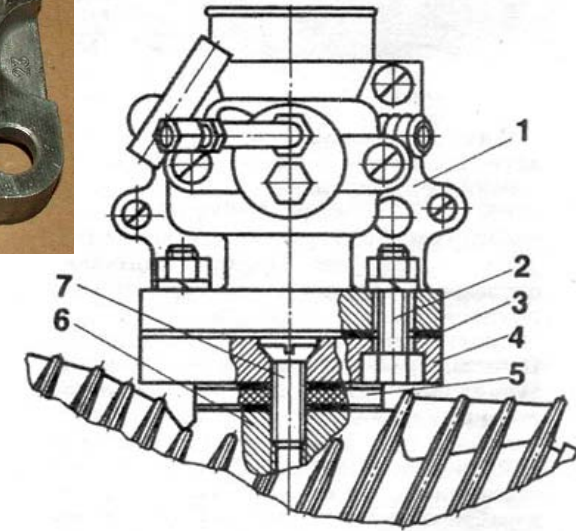


**Carburetor K-63/K-65/K-68
Rubber Protector Cap**
Part #: K60-1107527
List Price: 3.07€
Vendor Part #: 671
(www.moto-boxer.com)

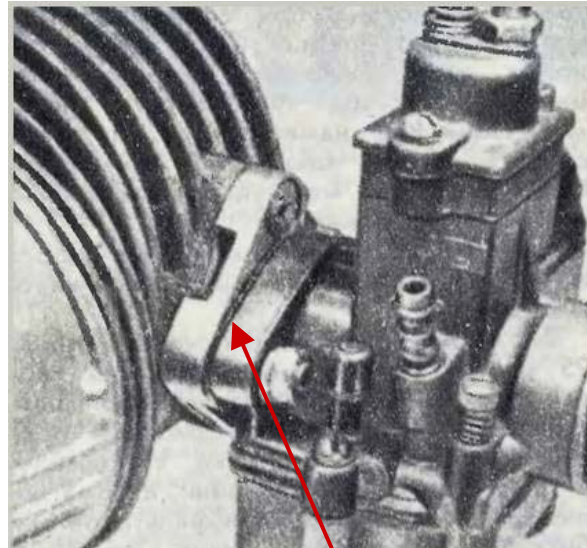


**Air-Intake Rubber Tubes, 38 mm
for K-301, K-63/K-65/K-68 Carbs**
Vendor Part #: 001.655
List Price: 7.00€ for pair
(www.oldtimergarage.eu)

Carburetor Adapter from Older Vertical (K-37/K-301/K-302) to Horizontal Type of Installation (K-62 / K-63 / **K-65** / K-68)



1. K-65 Carburetor
2. Spacer Bolt to Carburetor
3. Gasket
4. Spacer
5. Gasket
6. Cylinder Head
7. Screw Spacers to Cylinder Head



Vertical-to-Horizontal Transition Adapter
(A Paronite, Heat-Insulating Gasket Is Installed on Both Sides of the Adapter)



A simple conversion kit is needed to adapt from vertical (K-37/K-38/K-301/K-302) to a horizontal type of installation (K-62 / K-63 / **K-65 / K-68).**

Carburetor Repair (Ремкомплект карбюратора) Kits for K-65

Caburetor	Nickname	Background Color
K-65И (I)	"IZH-Planeta	Red
K-65В (V)	"Sunrise"	Dark Yellow
K-65Д (D)	"IZH-Jupiter "	Turquoise
K-65С (S)	"Minsk"	Light Blue
K-65Г (G)	"Ant"	Lime Green
K-65Т (T)	"Ural, Dnepr"	Yellow (Small), White (Pale Blue)
K-65У (U)	"Ural, Dnepr"	Use K-6Т Kits
K-65 Ж (ZH)	"Buran"	-
K-65С/В/Д/Т/И/Г/Ж	All Versions	Orange



Throttle Cover and Enricher included in Large Repair Kit

- Repair Kit for K-65T (small)**
Contains:
- Float Assembly (with axle) - 1
 - Jets (55 and 165) - 2
 - Needle Valve Assembly - 1
 - Idle Dosing Tube - 1
 - Idle Adjusting Screw - 1
 - Gaskets - 2
 - Spring - 1
 - Needle Throttle Assembly - 1
 - Throttle Assembly - 1

- Repair Kit for K-65T (large)**
Contains:
- Gasket - 1 pc.
 - Needle Valve Assembly - 1
 - Float Assembly (with axle) - 1
 - Choke Assembly - 1
 - Main Spray System - 1
 - Idle Dosing Tube - 1
 - Jet - 1
 - Idling Screw (with spring) - 1
 - Top Cover Assembly - 1
 - Screws M5x20 - 2
 - Washers - 2



Repair Kit for K-65Г (G) and for K-65С (S) (small)



Repair Kit for K-65С/В/Д/Т/И/Г/Ж (small)



Repair Kit for K-65В (V) (small)



Repair Kit for K-65Д (D) (small)



Repair Kit for K-65И (I) (small)

non-Ural / non-Dnepr Repair Kits

Carburetor repair / rebuild kits come in small and large sizes, depending on the amount of replacement parts supplied. The least expensive kits do not include the choke and top cover assembly.

[http://www.snowsport.ru/index.p](http://www.snowsport.ru/index.php?chp=showpage&num=101)

[hp?chp=showpage&num=101](http://www.snowsport.ru/index.php?chp=showpage&num=101)

Circuit device CARB:

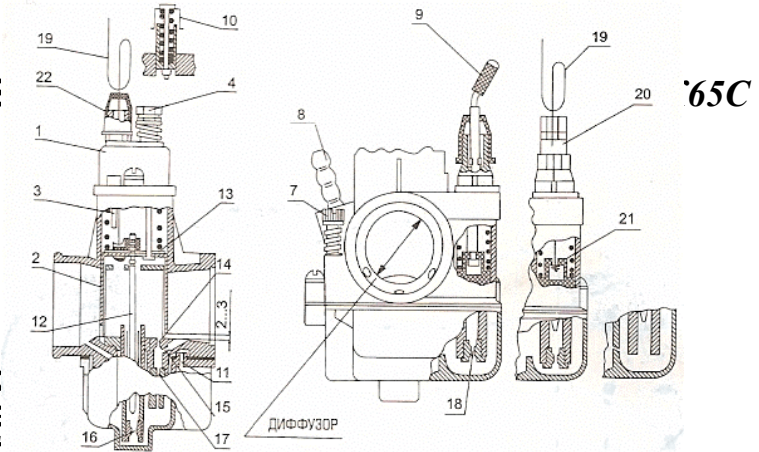
1. Kryshka;
2. Drossel;
3. Ogranichitel rise of the throttle (for K65B, K65K, K65ZH, K65P K65E, K65K, K65Ж, K65П absent);
4. Vint lifting the throttle;
7. Vint quality of the mixture;
8. Shtutser toplivoprovodyaschy;
9. Rukoyatka rod starter (for K65B, K65V, K65K, K65P, K65S, K65F, K65E, K65B, K65K, K65П, K65C, K65Φ and for other modifications poses. 19);
10. Utopitel float (for K65A, K65L K65A, K65Л absent);
11. Otverstie drain (for K65A, K65L K65A, K65Л absent);
12. Iгла dosing;
13. Zamok needle dispensing;
14. Otverstie transitional idle;
15. Otverstie idling;
16. Zhikler fuel main system;
17. Trubka dosing idling;
18. Zhikler (for K65I, K65G, K65ZH, K65K, K65P, K65R, K65S absent);
19. Harvesting of a rope;
20. Napravlyayuschaya cable equalizer in concentration;
21. Porshen corrector in concentration;

Guide wire drive.

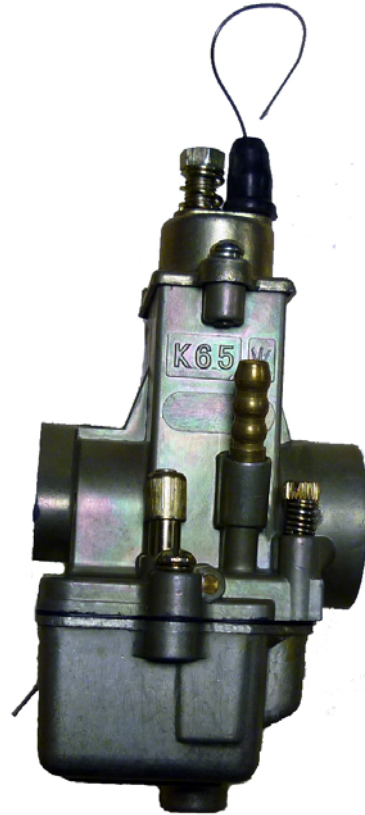
Carburettor installation on the engine:

Must be performed in the following sequence:

- Remove the cover 1 with the throttle assembly, disconnect
- Assemble, attach the throttle cable (instead of blank cable
- Throttle to raise and lower the throttle and make sure that
- Screw 4 to raise the throttle so that the distance between the lower edge of the air filter and the generator was 2 - 3 mm (See diagram)
- If the carburetor has a corrector with cable operated, unscrew part 20, remove the corrector assembly and attach the cable to the piston 21;
- Set up a site to place:



Карбюратор К65Ж



K65ZH carburetor (Fig. 5) Single horizontal with a central location and a flat float choke vertical-traverse, consists of three main parts: the body 12, the float chamber 26 and housing cover 34. The carburetor is attached to the adapter through the heat insulating spacer two nuts. Joints sealed connectors steam NITs gaskets.

In the body of the carburetor includes: fuel, air channels metering systems, nozzle chamber 29, a throttle 31 with dispensing needle 21, the throttle spring 35, a main jet idling 23 spray 25 main jet 24, toplivopriemny choke utopitel float 18, the adjusting screw quality idle mixture and 11 parts fuel corrector. Housing is provided with a flange through which is attached to the engine carburetor.

In the cover of the carburettor set stop 1 cover of a cable throttle and adjusting screw 3 with traction. The lid and bowl are connected to the housing carburetor screws.

Float mechanism consists of two rectangular plastic floats 19, connected by a common lever. In the lever shaft 27 is inserted into the mechanism of fixing the float carburetor body to the speakers.

Fuel shut-off valve 20 is in the form of needles, which is based on the bottom of the float arm, and upper (with plate of elastic material) closes the channel for supplying fuel.

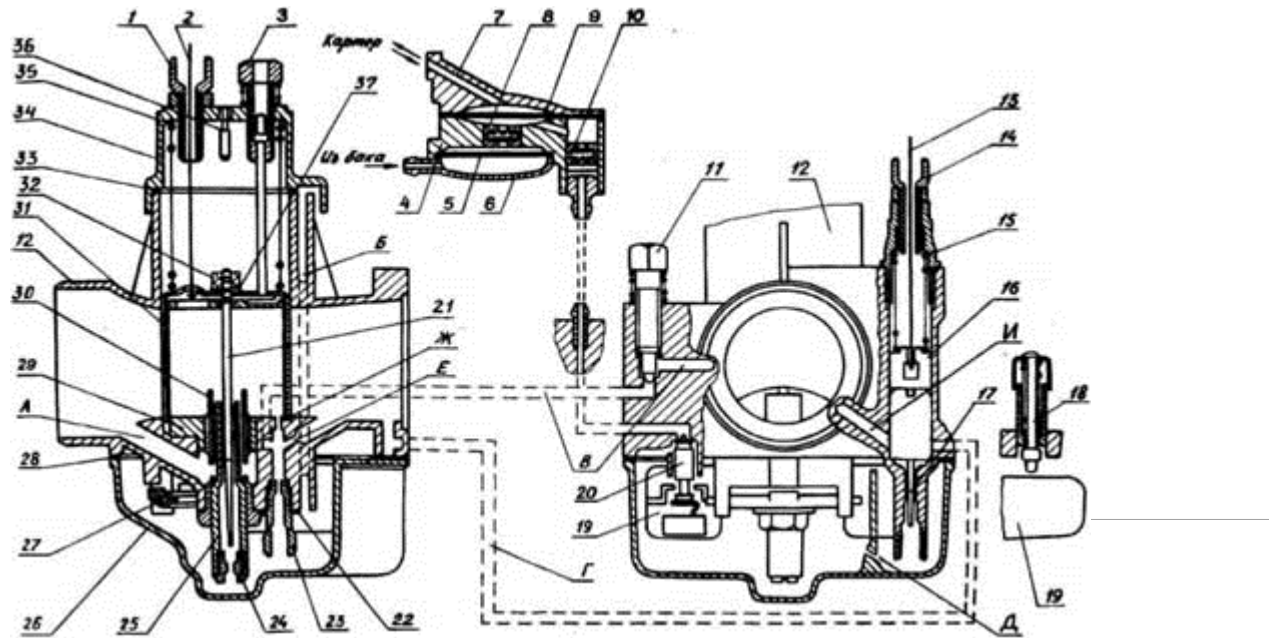
Starting device (corrector) consists of plunger 16 with the metering needle 17 and spring 15.

Toplivozabornaya corrector is part of the well float 26 which orifice communicates with the main volume of the chamber, the upper part of the corrector consists of a spring guide plunger stop 14 cover of a cable 13, attached to the plunger 16. Sprayer main dosing system consists of two parts: the body 30 and is pressed into a sprayer 25. Dispenser has four radial holes. Nozzle chamber is attached to the body of the carburetor body spray.

Choke 31 P-ring is made of brass sheet. In its wall facing the air cleaner, lower radial cut is made, the predetermined dilution of the spray. Metering pin 21 is made of stainless steel, has five grooves to lock. Permutation lock needle in the grooves provided by the ability to change the composition of the mixture. When the engine oil from the tank enters the float chamber under the pressure created by the fuel pump diaphragm 9, which is driven by a pulsating pressure from the crankcase. The fuel supply is automatically adjusted the fuel needle valve 20 associated with the hollow float 19. The float and needle valve secures the fuel level in the float chamber. With the engine at low idle (throttle 31 in the lower position) depression in the diffuser is small and fuel through the main metering system is not sucked.

The composition of the fuel mixture at idle the engine is regulated by a screw 11, the number of revolutions - screw 3. Necessary (most favorable) the mixture with the engine load mode ensures that the tapered metering needle 21 relative to the spray jet and 23 in conjunction with the system idling.

For a quick and complete filling of the most fuel in the float chamber is used when starting utopitel float 18.



1 - emphasis shell throttle cable, 2 - wire throttle control, 3 - idle adjustment screw, 4 - pump housing 5 - strainer, 6 - filter cover, 7 - pump cover, 8 - inlet valve, 9 - diaphragm; 10 - release valve, 11 - quality of the mixture adjusting screw idle, 12 - carburetor body, 13 - control cable equalizer, 14 - emphasis cover of a cable plug, 15 - Spring plunger, 16 - plunger, 17 - fuel metering pin corrector, 18 - utopitel float, 19 - float, 20 - fuel valve, 21 - metering pin the throttle, 22 - retaining 23 - a main jet idling, 24 - the main jet, 25 - Spray, 26 - bowl 27 - axis of the float; 28 - a lining, 29 - nozzle chamber, 30 - gun body, 31 - choke, 32 - plastic locking sleeve, and 33 - a lining, 34 - cover, 35 - a spring throttle; 36 - Positive stop, 37 - Castle needle throttle; A - air passage, B - channel venting float B - air channel idle, D - fuel emulsion channel equalizer, E - emulsion channel idle, F - vias and - fuel air channel equalizer, D - dispensing opening in the wall of the well corrector