

**TOMORROW'S CARBURETOR FOR TODAY'S ENGINES**

**LECTRON<sup>TM</sup>**  
**POWERJET**



## THE NEW LECTRON POWERJET HAS ALL THESE EXCLUSIVE FEATURES...

### LUSTROUS NICKEL GUILLOTINE SLIDE...

"Slices" the Air Flow for a Positive Shut Down. Extremely hard surface has virtually no wear.



### HIGHLY PRECISIONED METERING ROD...

Produces an accurate fuel "nozzle signal" according to the air-flow velocity.



### FUEL-VU™ TRANSPARENT FLOAT BOWL...

Allows easy view of fuel to check level or contaminants.

### DUAL-FLOAT SYSTEM...

Ensures a precise level under all conditions.



### INTERCHANGEABLE IDLE STOP...

Easily converts from left to right hand operation.

### STARTING SYSTEM...

New no leak "Y" shaped Viton Piston shuts off both fuel and air for higher precision performance.



### POSITIVE FUEL SHUT-OFF...

The Viton Seal, another Lectron first, eliminates wasteful fuel leaks.



### NEW FUEL FILTER...

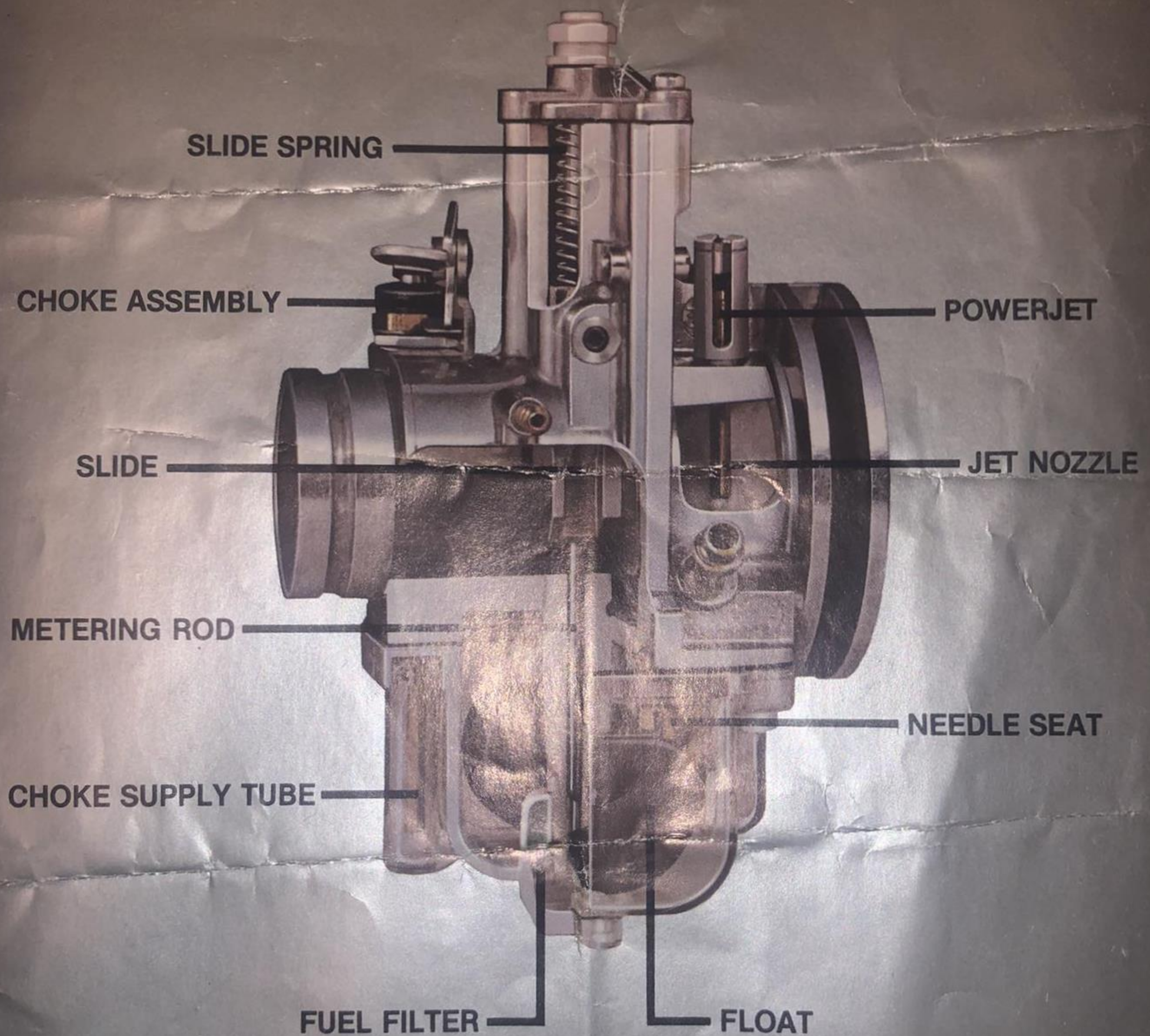
Specially developed foam prevents dirt and foaming at fuel pick-up tube.



- GREATER FUEL ECONOMY
- FAST STARTING IN ANY WEATHER
- SELF-CLEANING MAIN FUEL CIRCUIT
- NO LOADING UP...  
Runs on its side, never loads up even when dropped or stalled.
- SMOOTHER ACCELERATION...  
Better engine response under rapid acceleration demands.



## IMPORTANT FEATURES OF THE LECTRON POWERJET



DEVELOPED PARTICULARLY FOR FUEL REQUIREMENTS FOR TWO STROKE ENGINES



# LECTRON™

## CARBURETOR APPLICATION CHART

### TOMORROW'S CARBURETOR FOR TODAY'S ENGINE

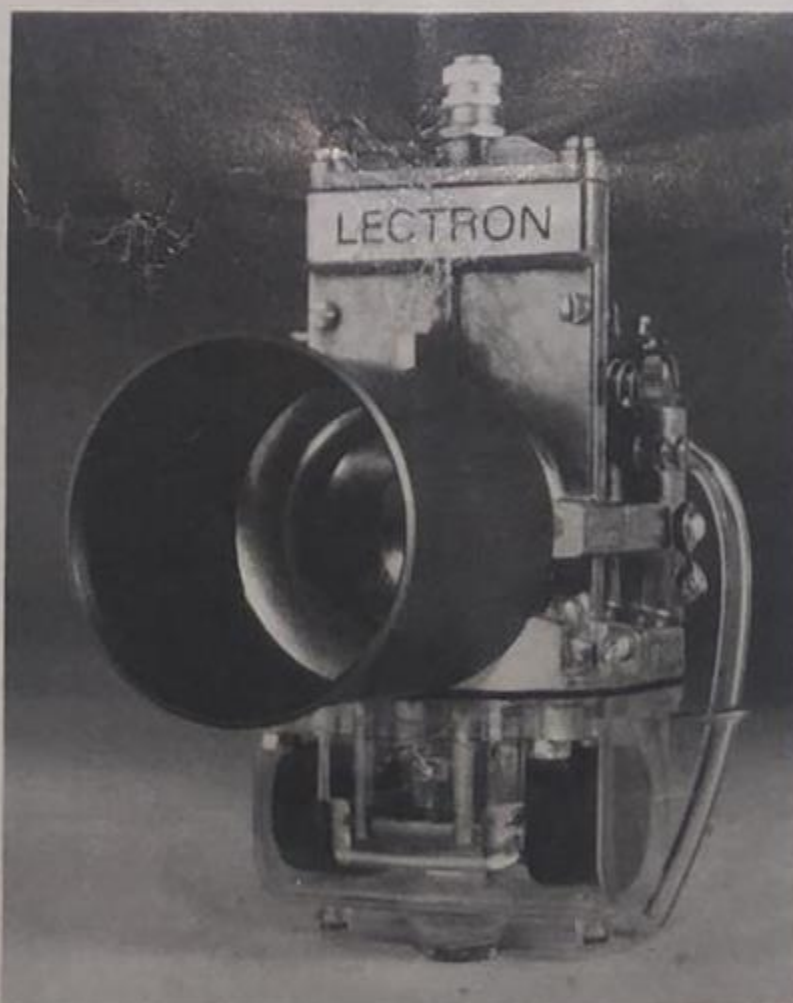
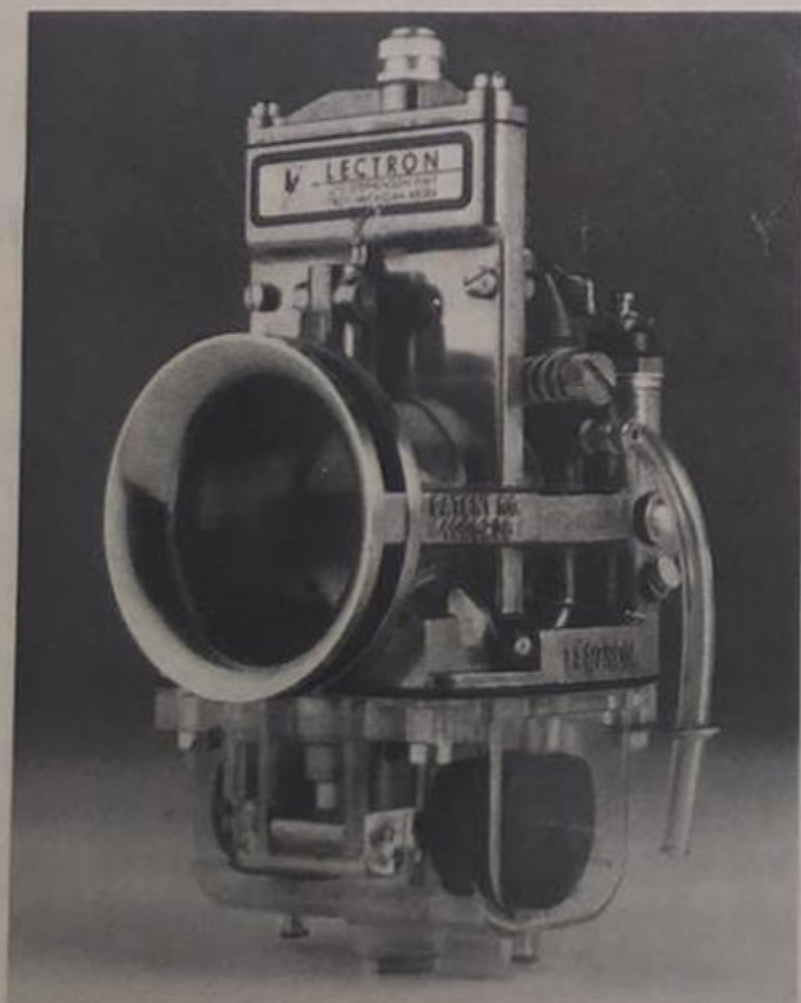
Superior engineering and testing and the exacting manufacturing, now possible with new highly precision machinery, makes the Lectron Carburetor the world's first single-fuel metering system.



STD. - Standard carb., usually 4-stroke.



PJ. - Powerjet carb., usually 2-stroke.



SPEC. - Special carb's modified PJ. or STD. for bolt on applications. Velocity stacks - straight bored.



# LECTRON CARBURETOR APPLICATION CHART

## GENERAL RECOMMENDATIONS FOR STOCK MOTORCYCLES

CYCLE MODEL	CARB. TYPE			CARB. PART NUMBER	METERING ROD SIZE	POWER JET SIZE	ADDITIONAL PARTS REQUIRED	DESCRIPTION
	STD.	PJ	SPEC.					
<b>BULTACO</b>								
250 Pursang		X		5470-38	5-1	45		STOCK 38MM PJ
250 Astro		X		5470-38	5-1	40		STOCK 38MM PJ
370 Reed		X		5470-38	5-1	40		STOCK 38MM PJ
<b>CAN-AM</b>								
MX250		X		5470-38	5-2	55		STOCK 38MM PJ
MX370		X		5470-38	5-2	50		STOCK 38MM PJ
<b>HARLEY-DAVIDSON</b>								
250MX		X		5470-38	5-2	45		STOCK 38MM PJ
250MX Short Track		X		5470-40	5-2	65		STOCK 40MM PJ
XR750			X	5494-36	3-1	0		SPECIAL 36MM STANDARD STB. WITH V-STACK
ALL	X			5341-36			COMPLETE KIT	36MM STD.
STREET	X			5341-38			COMPLETE KIT	38MM STD.
BIKES	X			5341-40			COMPLETE KIT	40MM STD.
<b>HONDA</b>								
CR125		X		5470-36	4-2	50		STOCK 36MM PJ
CR250MX		X		5470-40	3-4	55		STOCK 40MM PJ
XR500			X	5495-38	3-2	0		SPECIAL 38MM STD. WITH V-STACK
ODESSY CAR FL250			X	5496-32	2-2	35	1 NO. 24 HOSE CLAMP	SPECIAL 32MM PJ WITH 2 GROOVE HONDA MOUNT
<b>HUSQVARNA</b>								
CR125		X		5470-36		60		STOCK 36MM PJ
WR250		X		5470-38		50		STOCK 38MM PJ
CR & WR390		X		5470-38		60		STOCK 38MM PJ
AMX390		X		5470-38		60		STOCK 38MM PJ
<b>KAWASAKI</b>								
KX125MX		X		5470-36	5-2	60		STOCK 36MM PJ
KX250		X		5470-38	6-1	60		STOCK 38MM PJ
KR420		X		5470-40	7-1	60		STOCK 40MM PJ
KLX250			X	5497-36	3-1	0		SPECIAL 36MM STD. WITH V-STACK USE KX THROTTLE & CABLE
<b>KTM</b>								
250			X	5511-38	5-2	45		SPECIAL 38MM WITH SHORT PJ & 2 1/8" BELL
420			X	5510-40	5-1	45		SPECIAL 40MM WITH SHORT PJ & 2 1/8" BELL & 1.816" MOUNT
<b>MAICO</b>								
250			X	5511-38	5-2	45		SPECIAL 38MM WITH SHORT PJ & 2 1/8" BELL
450			X	5510-40	6-2	55	1 3/4" x 1 3/4" HOSE REQUIRED	SPECIAL 40MM WITH SHORT PJ & 2 1/8" BELL & 1.816" MOUNT
<b>SUZUKI</b>								
RM125			X	5498-36	5-2	60		SPECIAL 36MM PJ WITH SHORT MOUNT - SPECIAL BOWL & 2" V-STACK
RM250			X	5498-38	6-2	55		SPECIAL 38MM PJ WITH SHORT MOUNT - SPECIAL BOWL & 2" V-STACK



CYCLE MODEL	CARB. TYPE			CARB. PART NUMBER	METERING ROD SIZE	POWER JET SIZE	ADDITIONAL PARTS REQUIRED	DESCRIPTION
	STD.	PJ	SPEC.					
RM400			X	5498-40	6-3	60		SPECIAL 40MM PJ WITH SHORT MOUNT - SPECIAL BOWL & 2" V-STACK
DR370			X	5499-36	2-1	0		SPECIAL 36MM STD. WITH V-STACK DO NOT USE AIR BOX USE RM 250 THROTTLE CABLE
PE250		X		5470-38	5-2	45		STOCK 38MM PJ
SWM-MX 250A		X		5470-38	5-3	50		STOCK 38MM PJ
YAMAHA "F" MODELS YZ100F			X	5501-32	3-2	50	USE CABLE OFFSET ADAPTOR 40-5347	SPECIAL 32MM PJ
YZ125F		X		5470-36	5-2	60	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 36MM PJ
YZ250F		X		5470-38	5-4	60	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 38MM PJ
YZ400F		X		5470-38	6-3	60	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 38MM PJ
IT175		X		5470-36	5-2	55	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 36MM PJ
IT250		X		5470-38	6-2	60	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 38MM PJ
IT400		X		5470-38	6-3	60	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 38MM PJ
TT500			X	5502-38	3-1	0	USE CABLE OFFSET ADAPTOR 40-5347	SPECIAL 38MM STD. WITH V-STACK
TZ250			X	5503-36			COMPLETE KIT	SEE INFORMATION SHEET TZ 250 R.R. KIT
TZ350			X	5503-36			COMPLETE KIT	SEE INFORMATION SHEET TZ 250 R.R. KIT
TZ750/AMA			X	5504-34			COMPLETE KIT	SEE INFORMATION SHEET TZ 250 R.R. KIT
TZ750/EUROPE			X	5505-36			COMPLETE KIT	SEE INFORMATION SHEET TZ 250 R.R. KIT
YAMAHA "G" MODELS IT125G		X		5470-36	5-2	60	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 36MM PJ
IT175G		X		5470-36	5-3	60	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 36MM PJ
IT250G		X		5470-38	6-2	60	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 38MM PJ
IT425G			X	5506-40	6-3	60	USE CABLE OFFSET ADAPTOR 40-5347	SPECIAL 40MM PJ
YZ125G		X		5470-36	4-2	55	USE CABLE OFFSET ADAPTOR 40-5347	STOCK 36MM PJ
YZ250G			X	5507-40	7-1	65	USE CABLE OFFSET ADAPTOR 40-5347	SPECIAL 40MM PJ
YZ465G			X	5507-40	7-2	60	USE CABLE OFFSET ADAPTOR 40-5347	SPECIAL 40MM PJ
TT250			X	5508-36	2-1	0	USE CABLE OFFSET ADAPTOR 40-5347 AND USE YZ THROTTLE CABLE	SPECIAL 36MM STD. DO NOT USE AIR BOX

STD. - Standard Carb. - usually 4 Stroke  
 PJ - PowerJet Carb. - usually 2 Stroke  
 SPEC. - Modified PJ or STD. for bolt on applications  
 VS - Velocity Stack  
 STB - Straight Bored

FOR ASSISTANCE, CALL OUR FACTORY AT (313) 689-7575  
 OR OUR CALIFORNIA CARBURETOR SERVICE CENTER: (805) 255-6474.



# IDLE & LOW RPM RANGE TUNING:

By turning metering rod in or out:  
One turn in to richen idle.  
One turn out to leaner idle.

Low RPM range tuning is the same as idle, also a half turn adjustment possible by removing slide Insert Screw, Rotating Slide Insert 180 degrees, then bringing flat surface of metering rod back or forth 180 degrees and reinserting locking screw.

# MID RANGE TUNING:

Changing metering rod to different number. The second number of the two numbers determines richer or leaner mid range tuning. #4 metering rod leanest, #4-3 richest. (See chart below)

**EXAMPLE:** Using #5-2 metering rod engine is too rich at part throttle.

**SOLUTION:** Replace #5-2 with 5-1 to lean out part throttle.

# TOP END TUNING (HIGH RPM):

Adjustment by changing first number of metering rod #2 metering rod leanest, #10 Metering rod richest.

**EXAMPLE:** Using #6-2 metering rod engine is too rich at full throttle.

**SOLUTION:** Replace #6-2 with #5-2 to lean out full throttle.

# METERING ROD SELECTION CHART

TOTAL THROTTLE RESPONSE RICH.....TO.....LEAN	Mid-Range Selection Lean.....to.....Rich				
	1-0	1-1	1-2	1-3	1-4
	2-0	2-1	2-2	2-3	2-4
	3-0	3-1	3-2	3-3	3-4
	4-0	4-1	4-2	4-3	4-4
	5-0	5-1	5-2	5-3	5-4
	6-0	6-1	6-2	6-3	6-4
	7-0	7-1	7-2	7-3	7-4
	8-0	8-1	8-2	8-3	8-4
	9-0	9-1	9-2	9-3	9-4
	10-0	10-1	10-2	10-3	10-4

→ MID RANGE  
→ TOP END

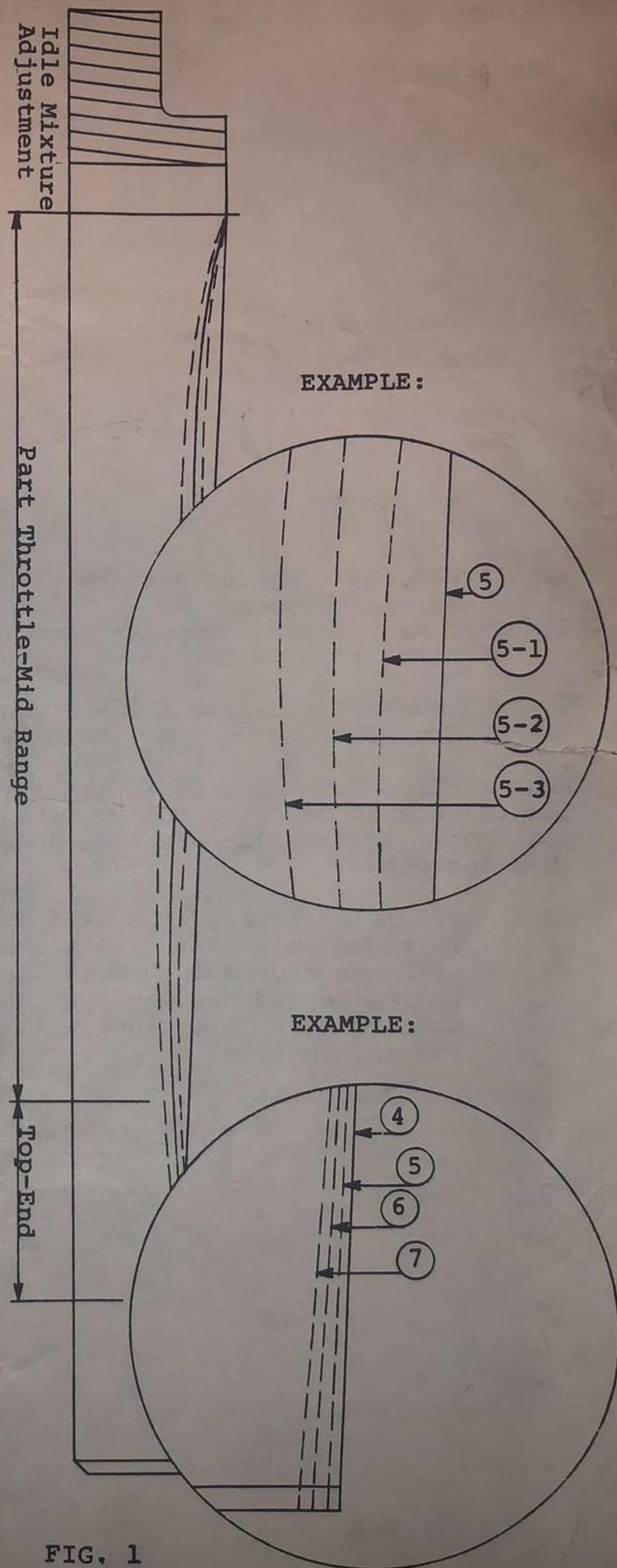


FIG. 1



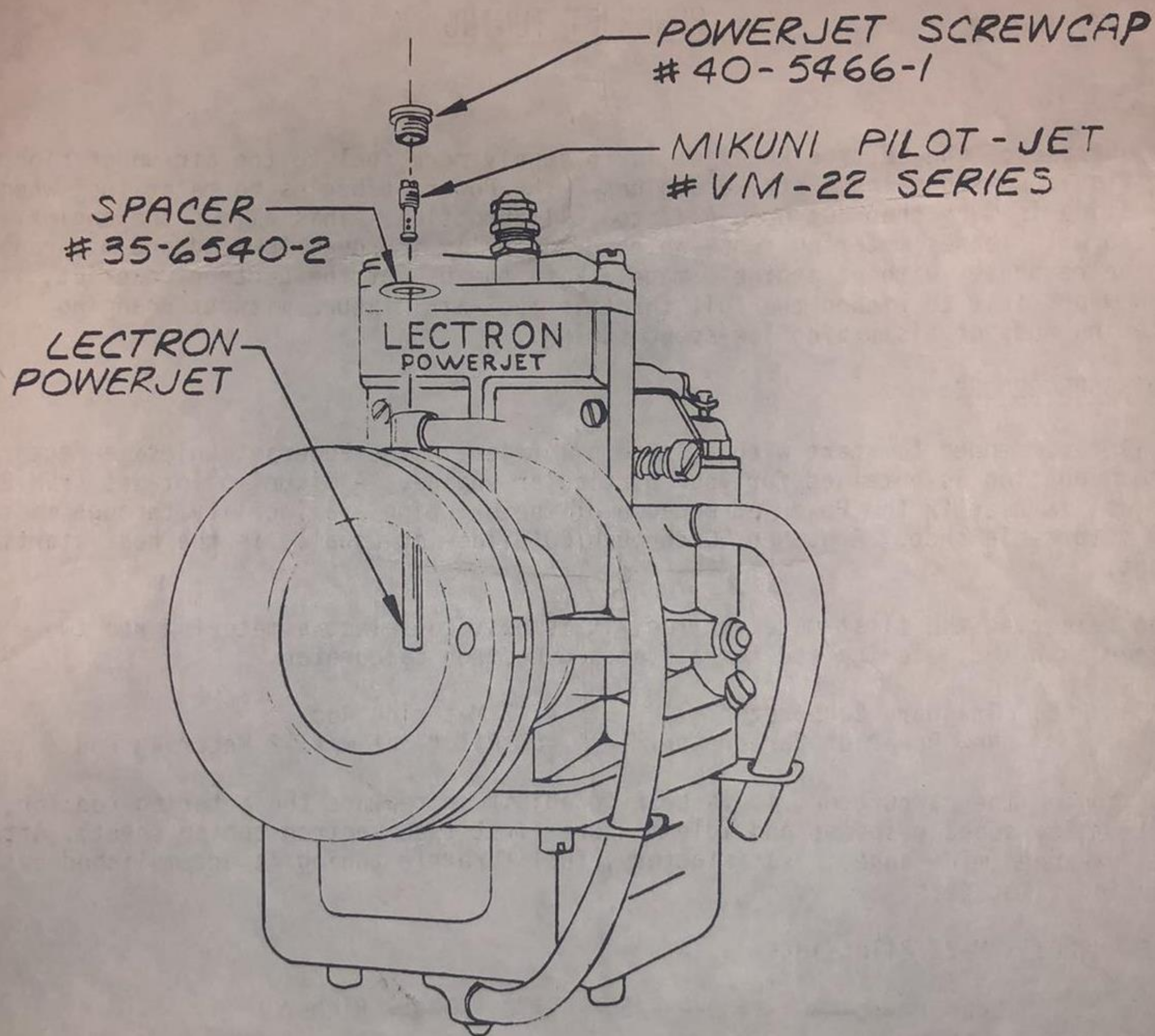
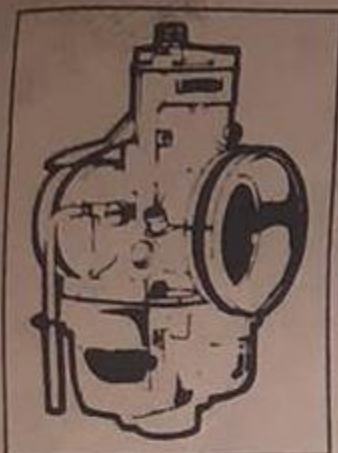


FIG. 1





# LECTRON FUEL SYSTEMS INC.

1800 Stephenson Highway • Troy, Michigan 48084 • Phone 313-689-7575

4-1-79

## POWERJET TUNING

### OPERATION:

The purpose of the Lectron Powerjet is to supply more fuel to the air under high air flow conditions for 2 stroke engines. The Powerjet begins to meter fuel when the slide is more than 50% open (1/2 to full throttle). This allows the engine to run with leaner metering rods, which drastically improves low-end and mid-range engine response, without engine damage. With the use of the Lectron Powerjet, it is now possible to richen the full throttle fuel-air mixture without changing metering rods or disturbing low-speed tuning.

### TUNING PROCEDURE:

It is recommended to start with a large pilot-jet in the Powerjet unless a factory recommendation is obtained for your particular engine. A Mikuni pilot-jet (#VM-22 Series) is used in the Powerjet because of the existing availability through most any motorcycle shop. A number 50 through 60 pilot-jet usually is the best starting point.

When selecting the first metering rod, it is best to select a metering rod two sizes leaner than the metering rod for a standard Lectron carburetor.

EXAMPLE: Standard Carburetor:	#7-2 Metering Rod
New Powerjet Carburetor:	#60 Pilot-jet w/#5-2 Metering Rod

When tuning the carburetor, it is best to adjust or replace the metering rod for maximum low-speed response and idle mixture first (see Lectron tuning sheet). After the low-speed mid-range is satisfactory, full throttle tuning is accomplished by changing pilot jets.

EXAMPLE: VM-22 Pilot-jets

Leaner ← - #30-----#50-----#70 → Richer

To change pilot-jets, unscrew cover screw from Powerjet body (Figure 1). Using a fine blade screwdriver, unscrew pilot-jet from inside Powerjet body and remove. When replacing pilot-jet, make sure it is seated firmly in Power-jet body but do not overtighten or force.

NOTE: When replacing cover screw, be sure gasket is in place and screw is tightened securely.

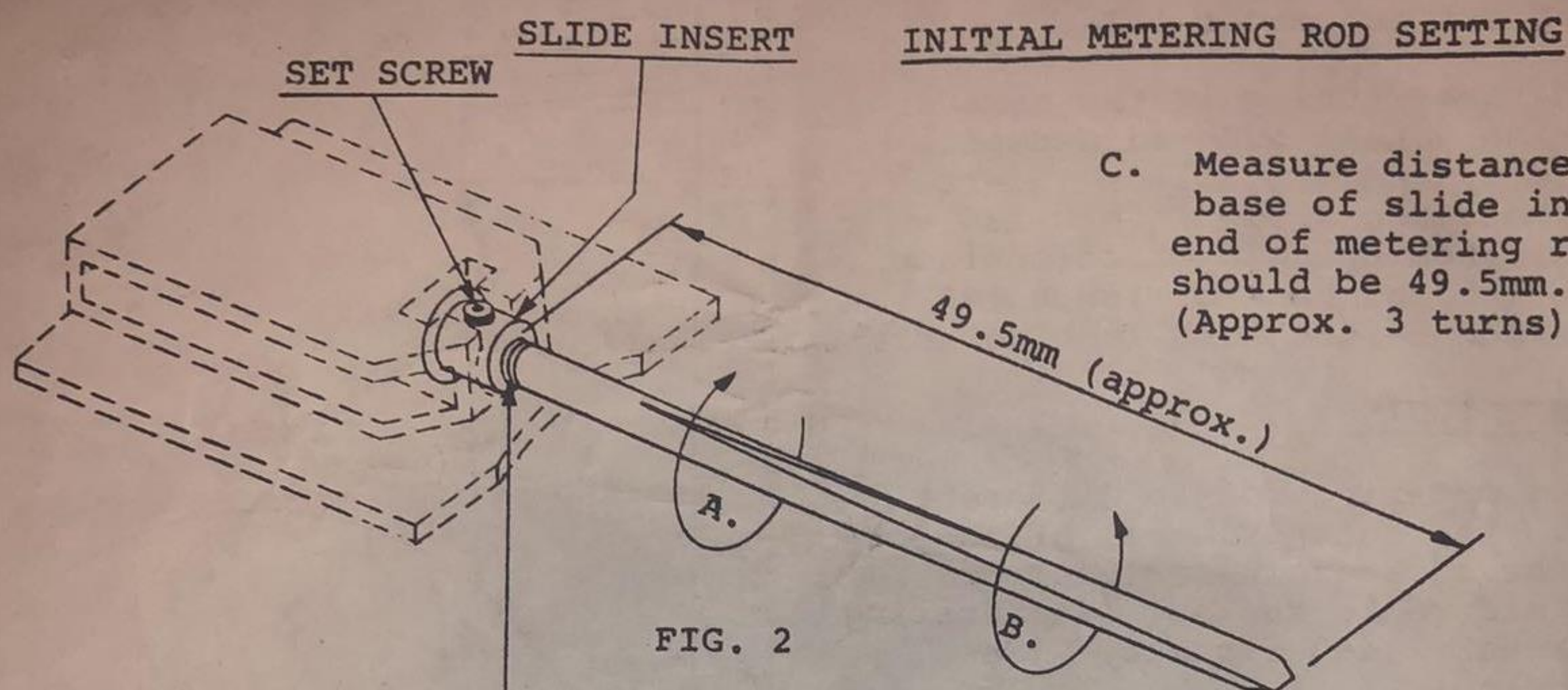
After changing pilot-jet, it may be necessary to make minor adjustments on metering rod.

### CAUTION:

If you are in doubt as to carburetor selection or setting, you may call either our Michigan plant, or our California Technical Service Center (805-255-6464) for additional information.



Loosen small set screw in slide insert to make initial setting of metering rod:



- A. Thread metering rod all the way into slide insert until it stops. (No thread showing)
- B. Turn metering rod counter clockwise until flat taper is in line with set screw, then turn clockwise 3 more times.

NOTE: THE INITIAL METERING ROD SETTING SHOULD BE 49.5mm FROM SLIDE INSERT TO END OF METERING ROD. THIS IS APPROXIMATELY 3 TURNS OUT.

When working with dual carburetors it is necessary to measure the length of each metering rod to make sure both rods are at the same position. If the rods are not equal, one cylinder will run leaner than the other.

NOTE: The metering rod that is supplied with your Lectron Carburetor is recommended for a standard, serial production version of your motorcycle in a normal state of tune. Any variations of tuning beyond the way your motorcycle was manufactured and subsequently maintained will affect the recommended metering rod and setting.



## HOW TO TUNE YOUR LECTRON POWERJET

### IDLE & LOW RANGE TUNING:

Turn Metering Rod in or out. One turn in for richer idle. One turn out for leaner idle.

Low RPM range tuning is the same as idle. Half turn adjustment is possible by removing Slide Insert Screw. Rotate Slide Insert 180° then bring flat surface of Metering Rod back or forth 180° and reinsert Locking Screw.

### MID-RANGE TUNING:

Change Metering Rod number. The second number of the two numbers determines richer or leaner mid-range tuning. #4 Metering Rod leanest, #4-3 richest. (See chart)

**EXAMPLE:** Using #5-2 Metering Rod, engine is too rich at part throttle.

**SOLUTION:** Replace #5-2 with #5-1 to lean out part throttle.

### TOP END TUNING (HIGH RPM):

Change first number of Metering Rod and Pilot Jet size. Low number leaner. High number richer.

**EXAMPLE:** Using #6-2 Metering Rod, the #45 Pilot Jet engine is too rich at full throttle.

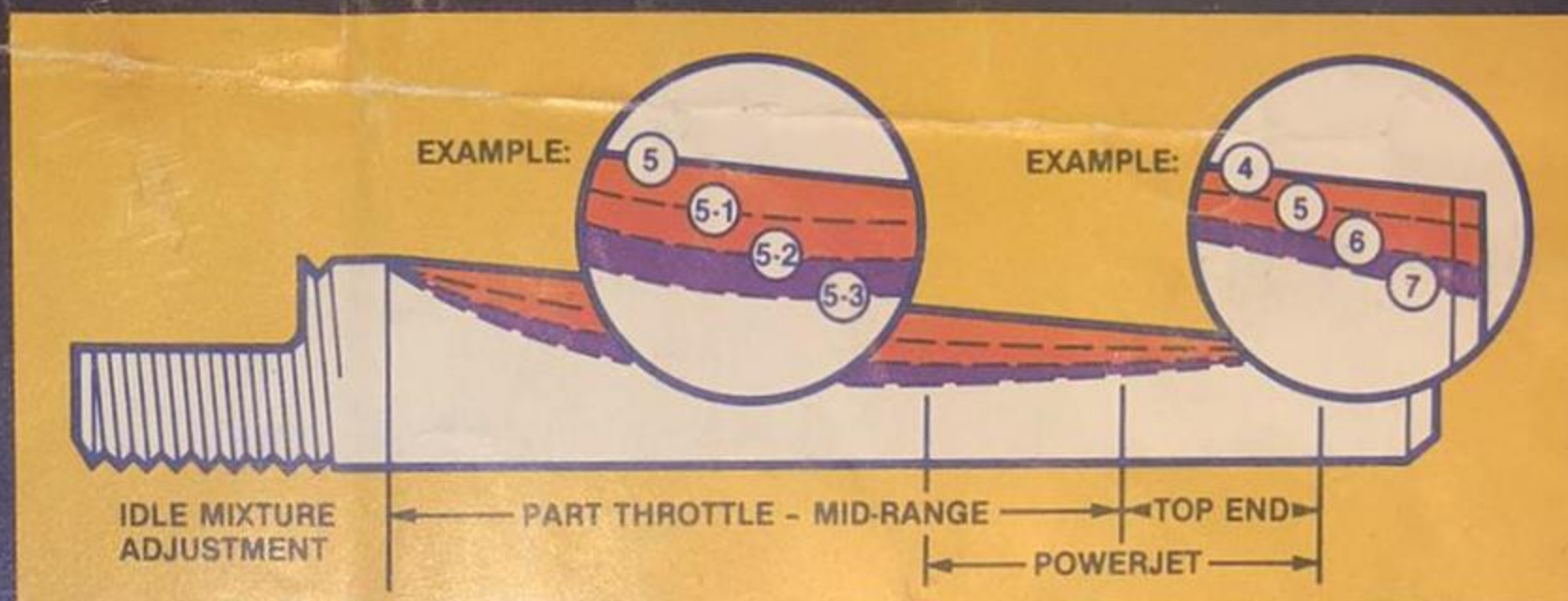
**SOLUTION:** Replace #6-2 with #5-2 Metering Rod and #35 Pilot Jet to lean out throttle.

Correct Metering Rods for engine application are available from your dealer.

### METERING ROD SELECTION CHART

TOTAL THROTTLE RESPONSE LEAN TO RICH	MID-RANGE SELECTION				
	LEAN	TO			RICH
1-0	1-1	1-2	1-3	1-4	
2-0	2-1	2-2	2-3	2-4	
3-0	3-1	3-2	3-3	3-4	
4-0	4-1	4-2	4-3	4-4	
5-0	5-1	5-2	5-3	5-4	
6-0	6-1	6-2	6-3	6-4	
7-0	7-1	7-2	7-3	7-4	
8-0	8-1	8-2	8-3	8-4	
9-0	9-1	9-2	9-3	9-4	
10-0	10-1	10-2	10-3	10-4	

TOP END MID-RANGE



## HOW TO ORDER YOUR LECTRON POWERJET CARBURETOR

Lectron Carburetors are available in six sizes: 30mm, 32mm, 34mm, 36mm, 38mm and 40mm, through your dealer. We recommend that you purchase Metering Rods one size below and one size above the recommendations for fine tuning on critical applications. We will exchange Metering Rods provided they are in new condition and the index numbers can be read.

The Lectron Powerjet will fit most Mikuni Adaptors and many others with little or no alterations.

CARB SIZE	PART NO.
30mm	5470-30
32mm	5470-32
34mm	5470-34
36mm	5470-36
38mm	5470-38
40mm	5470-40



COVERED BY U.S. AND WORLD PATENTS

CONTACT YOUR DEALER FOR LECTRON CARBURETORS

# LECTRON™

Free application charts and brochures are available on request.  
Call our California carburetor Service Center, Phone (805) 255-6474.

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