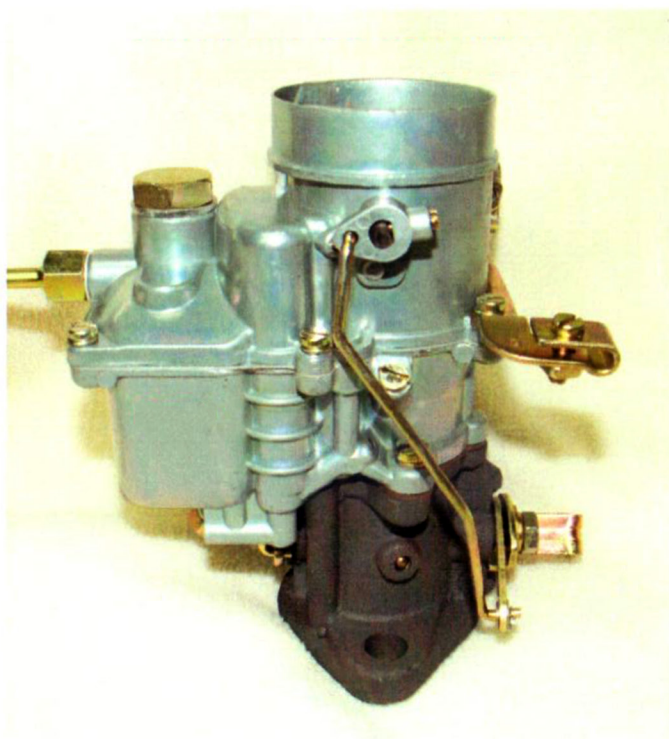


# UNIVERSAL CARBURETOR UN2



# ATTENTION!!

## FLOODING AT INTIAL STARTUP

One of the most common problems with carburetors can occur during the initial startup of your new or restored carburetor.

Flooding or fuel flowing out of the carburetor is caused by dirt or foreign material from the fuel tank or line becoming stuck in the needle & seat, a stuck float assembly, or the use of "Teflon Plumbers Tape, pipe sealer, etc" Never use such products to seal your fuel fitting!!

Normally flooding can be remedied by a light tap on the fuel inlet fitting of the carburetor.

Excessive fuel pump pressure can also cause the above problems. This is a result of a defective or worn out pump as well as an electric pump that is not pressure regulated. Consult your manufacturers specifications for correct fuel pressure.

Please read carefully the accompanying instructions packed with your carburetor, and always use common sense when working around gasoline or other highly flammable products!

Do not tamper, or open your new carburetor!

# Please read before Installation

This carburetor is engineered to provide a wide variety of replacement applications for original factor carburetors.

These replacement carburetors are manufactured to the highest quality standards, and contain alcohol resistant parts throughout, for long service life, under normal operating conditions.

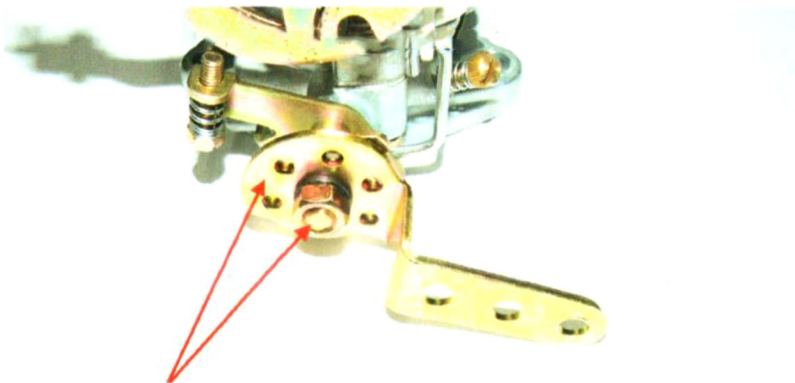
The information contained in this booklet will help you with your installation, and act as a guide to a successful install.

These replacement carburetors are available to fit a wide variety of original 1bbl carburetors for most American engines from 1965 back to around 1932.

These fully Universal models are especially made to allow a wider variety of external adjustments. They have fully adjustable throttle arms, and externally adjustable high speed main jets. This allows the throttle arm to be indexed to any point you may need to arm the move. The externally adjustable main jet allows you to fine tune the high speed rich/lean mixture to the exact demands of your current engine. Variations in fuel lines, vacuum lines, choke cables and air cleaners may require re-routing or adapting of those items.

# Repositioning the Universal Throttle Arm

## Fully Universal Models Only

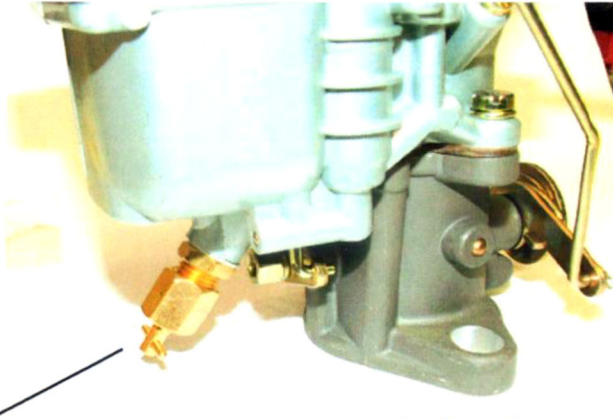


These Universal Carburetors have a fully adjustable throttle arm. To re-position the arm. Loosen the locknut on the end of the throttle shaft, then rotate the outer arm to the new position required making sure the hole in the outer arm lines up with the dimple on the arm backing plate, and then retighten the locknut. If the arm requires a 180 degree position change, simply remove and reposition the backing dimple plate 180 degrees, then re-install the arm. Always make sure the backing plate dimple engages a corresponding hole in the outer arm, before tightening the locknut.

## After Installation of Carburetor

1. Make the following adjustments **WITHOUT** hooking up your main throttle rod or cable to the carburetor!
2. Start and warm up engine, making sure the manual choke is fully open, before proceeding.
3. **For Universal models only, proceed to High Speed adjustment procedure on next page!! This must be done correctly, BEFORE setting the idle circuit and idle speed adjustments!!**
4. With engine running at 400-500 RPM, adjust the idle mixture screw, until the engine idles smoothly. **DO NOT OVERTIGHTEN THE IDLE MIXTURE SCREW!**
5. Reset the idle speed screw to lower the engine speed back to 400-500 RPM, or to your manufactures idle speed recommendation, using a suitable dwell-tachometer tool. **DO NOT GUESS** at Engine idle speed! Engine idle speed is critical to the low speed operation of your carburetor.
6. After the engine is running smoothly at idle; then adjust your main firewall throttle control rod or cable to match the opening on your new carburetor throttle arm, without moving the arm position.

## ADJUSTMENT PROCEDURE FOR **EXTERNAL HIGH SPEED MAIN JET MODELS ONLY.**



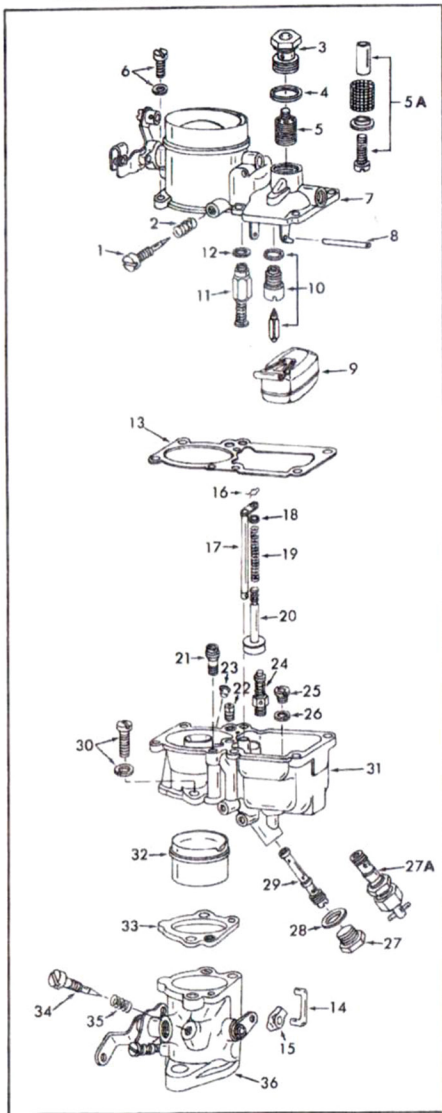
These Universal carburetors have a fully adjustable external high speed main jet. **This adjustment is preset to accommodate most engines with a correct fuel/air mixture.** For altitude adjustment above 3500 feet, or special fine tuning, use the following procedure: With engine fully warm, bring engine up to aprox 2000 RPM and block the throttle at that speed. Then slowly turn the handle inwards until the engine begins to loose speed. Then turn slowly outwards until the highest engine RPM increase is achieved. STOP! You have set the correct fuel/air mixture for your particular engine and altitude. **NOTE!! DO NOT** tighten or loosen the brass nut containing the screw; only adjust the handle.

This optional high quality air filter is fully recleanable. The filter fits the Universal carburetors and is designed to fit any standard 2 1/4" straight neck air horn one barrel US made carburetor. Recommended cleaning once a year and re-oiling with air filter oil, available at any local auto parts store.



# PARTS EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO INDIVIDUAL UNITS COVERED IN THIS INSTRUCTION SHEET



## NOMENCLATURE

REF. NO.	REF. NO.
1.	18.
NEEDLE - IDLE ADJUSTING (28 SERIES)	WASHER - PUMP SPRING
2.	19.
SPRING - IDLE ADJUSTING NEEDLE (28 SERIES)	SPRING - PUMP
3.	20.
PLUG - FUEL FILTER	PUMP PLUNGER
4.	21.
GASKET - FILTER PLUG	JET - IDLE
5.	22.
FILTER - DISK TYPE	VENT. WELL
5A.	23.
FILTER - SCREEN TYPE	PLUG - PUMP PASSAGE
6.	24.
SCREW & LOCKWASHER (6) - BOWL COVER	VALVE - POWER JET
7.	25.
COVER - BOWL	JET - MAIN
8.	26.
PIN - FLOAT LEVER	GASKET - MAIN JET
9.	27.
FLOAT & LEVER ASSY.	PLUG - MAIN NOZZLE
10.	27A.
NEEDLE, SEAT & GASKET ASSY.	JET - ADJUSTABLE MAIN
11.	28.
VACUUM PISTON ASSY.	GASKET - PLUG OR ADJ. JET
12.	29.
GASKET - VACUUM PISTON ASSY.	NOZZLE - MAIN
13.	30.
GASKET - BOWL COVER	SCREW & LOCKWASHER - BOWL TO THROTTLE BODY
14.	31.
LINK - PUMP LEVER	BOWL ASSY. - FLOAT
15.	32.
RETAINER - PUMP LINK	VENTURI
16.	33.
RETAINER - PUMP	GASKET - THROTTLE BODY
17.	34.
ROD - PUMP	NEEDLE - IDLE ADJUSTING (228 SERIES)
	35.
	SPRING - IDLE ADJ. NEEDLE (228 SERIES)
	36.
	THROTTLE BODY ASSY.

## CARBURETOR TROUBLE-SHOOTING INFORMATION

- Always install or replace a good in-line gas filter to protect your carburetor from foreign material and dirt before installing and starting the engine. Check for fuel leaks.
- Vacuum leaks are about the most common problem. Make sure all vacuum lines and hoses are connected properly to the carburetor and manifold. If an adaptor is used, make sure gaskets are used above and below the adaptor and seal properly.

Possible Solution	Situation											
	Carburetor floods idle	Carburetor won't idle	Will not adjust properly	Loads up, stumbles on acceleration	Surges, cuts out	Vacuum leak	Backfires	Fuel leaks at shafts	Rough idle	Boogs	No power	Hard starting
Check for foreign material inside carburetor needles and seats — Replace needles and seats.	X							X				X
Check for air leak at base of carb., manifold, adaptors, etc. Make sure base gasket seats properly and all outlets are plugged or connected.		X	X		X	X	X		X	X	X	
Check float level and drop. Reset to specifications if needed.	X			X				X				X
Check float for leak. Replace if gas found inside of float.	X							X				
Excessively rich, requires leaner rods and/or jets. Check primary side. If performance cam is used, change metering rod springs.				X						X		
Too lean, requires richer rods and/or jets. Check secondary side for hanging throttle valves.					X		X			X	X	
Check ignition, timing, points, cap or vacuum leak at base of carburetor.		X	X		X	X	X		X			X
Off road vehicles need spring-loaded needles and seats. See 25P9655.	X							X				
Check air horn or top gasket for breaks and/or clamps.	X											
Increase accelerator pump stroke. Larger or smaller pump squibbers may be needed.				X							X	
Check choke setting. May require richer or leaner setting.		X		X	X		X		X			X
Check idle mixture screws adjustment. See service instructions.		X	X						X			
Engine temperature too hot causing fuel to boil and run over. Use heat shield between carb. and intake manifold.								X				X
Replace carburetor filter.	X			X							X	X
Dirt may be blocking the low speed circuit. Apply air pressure after cleaning unit and install inline gas filter.		X	X		X				X			
Check engine compression for good balance.					X		X		X		X	

## Important Warranty Information

Your Universal carburetor is manufactured to the highest quality standards, and are warranted, to be free from defects in both workmanship and material for a period of (1) year from the date of purchase, provided that the product is properly installed, subjected to normal use and service and that the product is not modified or changed in any way, nor damaged because of negligence by customer or installer or used for racing or competition purposes. Warranty covers only the product itself and not the cost of installation or removal.

### Warranty is void under the following condition.

Enclosed fuel filter is not installed; dirt or rust enters the carburetor for any reason; if carburetor disassembly is attempted by either purchaser or third party; incorrect usage of aftermarket gasoline additives or long periods of inactivity resulting in varnish buildup inside the carburetor. Any usage of gasoline alcohol content over 10%; stripped screws, inlet threads, bent or broken levers or castings are not normal warranty issues, but an indication of misuse by the purchaser or third parties.

### Warranty Disclaimer

Due to the nature of replacement or performance applications, the parts or carburetors are sold without any express warranty or any implied warranty of merchantability or fitness for a particular purpose. We are not under any circumstances, liable for any special, incidental, or consequential damages, including, but not limited to, damage or loss of property or equipment, loss of profits or revenue, cost of purchased or replaced goods, or claims of customers of the purchaser, which may arise and / or result from the sale, installation or use of these parts.

Check with your State vehicle emission regulating authorities before installation of any parts or carburetors. Not liable for your vehicle emission law compliance, or for the failure of an emission test or inspection.