# CARBURETOR CLINIC

MIKUNI Z-BARREL

This Mikuni carb appears on the 2.6L Mitsubishi engine. The 2.6 is used in some Chrysler-built vehicles, some Mazda B2600 pickups, and in Mitsubishi's own vehicles. This Mikuni comes in both feedback and non-feedback versions. Because there are so many details to cover on this carb, we'll offer another **Carb Clinic** on it next month.

FEEDBACK

This carb demands patience, care, and clean--



Never touch this carb's hardware with an impact driver unless it's absolutely necessary. And remember that the thermo-wax choke assembly is not available separately.



# SUCKING SOUND, NO IDLE

The engine won't idle. When you try to keep it running, you hear a loud sucking or whooshing sound from inside the secondary barrel. See the secondary passage we've highlighted in white? Momentarily plug that passage with your finger.



# DECEL BY-PASS CIRCUIT

Does the engine idle okay when you plug that passage? If it does, then the problem's in the coasting air valve (CAV)—a decel air by-pass device. Remove this cover. Then remove the 10 mm brass fitting from the cover.



### **CLEAN THE SCREEN**

Using spray carb cleaner, clean both the openings in this brass piece and the little screen that fits onto it. Fit the screen back onto it, put a drop of oil on the o-ring, and thread the piece back into the CAV cover. Reinstall the cover.



### EGR HESITATION

This sub-EGR piston loves to carbon up and stick open. Then, the engine hesitates the *instant* the EGR valve opens. Clean this piston first. Then spray carb cleaner down its bore. Slide the piston in and out of the bore as you're flushing it out.



#### SUB-EGR VALVE BOOT

A torn or shredded boot just aggravates sub-EGR valve sticking problems because it lets extra dirt and moisture into the bore. If you clean one of these thoroughly and install its boot, the valve will work fine without lubricant.



#### **DOES THE VENT VENT?**

Whenever you have a hard hot start condition and fuel dripping out of the venturis, check bowl vent operation. With the key off, air should pass through the vent circuit. Vent solenoid should measure 80-90 ohms at room temperature.



#### **BOWL VENT PASSAGE**

Replacing the bowl vent diaphragm and/or its seal? Ready to dip the air horn in the carb cleaner? Then remove the screw that's hidden under the bowl vent hose nipple and slide this assembly out of the air horn altogether.



#### **IDLE/DECEL SOLENOID**

Whenever you have a 2.6L engine that won't idle, be sure you have power to the idle solenoid. Of course, the solenoid should click when you apply 12 volts to it. At room temperature, idle solenoid should measure about 50 ohms.



## SO-FINE THREADS

The threads on the Mikuni idle mixture screw are extremely fine, so handle it with kid gloves. When you reinstall it, lubricate its threads and o-ring. Start this screw with care so you don't cross-thread it.



**CHOKE ADJUSTMENT INDEX** Watch this! The Mikuni's choke is supposed to be factory-set so the second of these three marks lines up with the punch mark on the choke housing. If the choke was working okay, just set it back to its preteardown setting.



## CHOKE BREAKER DIAPHRAGMS

Contrary to what you may have heard, these choke breaker (choke pull-off) diaphragms are available separately for Mikunis. The single-stage diaphragm carries Mitsubishi/Mopar P/N MD617019. The dualstage unit carries P/N MD617021.



## SINGLE VERSUS DUAL

In case you forget, the dual-stage choke breaker diaphragm has this spring-loaded arm on the end of its stem, the single-stage one doesn't. Some carb specialists tell us that in a pinch, they've successfully substituted the single for the dual.



## CHOKE DIAPHRAGM R AND R

To replace the choke diaphragm on the car, remove the coolant elbow. Remove the upper brass pinion gear plate bolt—but just loosen the lower one. Pivot the pinion plate upward until you have enough room to wiggle the diaphragm stem out of there.



ALIGNING CHOKE TEETH

If you remove this plate with the white choke pinion gear mounted on it, note the little index mark on the back of the gear. When you reinstall it, carefully align the index mark with this dot or punch mark on the toothed choke lever.



### GO ON, HOOK IT HERE

Yes, this is where you hook the loop on the pinion gear spring. Note how much the choke blade moves when you pivot the pinion gear plate up and down. Believe it, a small change there can make a big difference in the Mikuni's cold performance!

15



# THE OL' HIDDEN-SCREW GAG

The Mikuni has six air horn screws. Note the air cleaner stud hole. To the right and left of the air cleaner stud are two deep holes. Inside these deep holes are two long air horn screws that're very easy to overlook.



## SUDDEN IMPACT

Some guys say they've found these air horn screws to be gorilla-tight. They say the way to loosen them without cracking the bowl is to use a small hammer and a hand impact driver. But, they do this before they remove the carb from the engine!



## **CATCH THOSE CAPTIVES!**

The air horn screws thread into these almost-captive nuts in the plastic bowl casting. If you remove the air horn on the vehicle, be ready to catch these nuts with a magnet or your fingers. They can and do fall out without warning.



## SUDDEN IMPACT II

The throttle opener/dash pot screws can be really stubborn. Remove the choke diaphragm cover first so you get a straight shot at the inboard screw. Hold the carb steady. Then give each screw a good shot with your hand impact driver.



## MATCHING DOTS WITH STRIPES

You suspect someone has monkeyed with the vacuum hoses? Don't reach for that vacuum-circuit book yet. Spray off the heavier dirt. Then see if the hose's stripe matches the color of the paint dot on the carb nipple or underhood solenoid nipple.