



General Instructions

- Take lots of pictures as you take your carburetor apart. This will give you a reference of where things go.
- Using a cookie sheet with folded up sides will help keep parts from falling on the floor.
- We suggest not removing the throttle shaft, valves, or choke shaft unless they are corroded, or very dirty. These parts can be easily damaged and are difficult to re-assemble.
- Instruction sheets that come with our carburetor kits are somewhat generic. It may not match your parts exactly.
- Do NOT use WD-40 around your carburetor. It reacts with ethanol.
- Using Silicon Spray Lubricant on the gaskets will help with sticking in case you need to take the carburetor apart again.
- Be careful after taking the top of the carburetor off. Turning the carburetor upside down may cause parts to fall out and you won't know where they were.
- Screws and jets that are frozen can often be removed after heating outside the screw or jet.
- Stuck check balls can be removed by heating the outside of where the check ball resides and tapping the carburetor on the work bench.
- Do not discard any parts until complete done. You may have to refer for size, or matching.

Cleaning:

- Clean with carburetor dis-assembled.
- Soak all parts except rubber & electrical in Simple Green for 2 hours. Aluminum parts will get discolored if left longer.
- Wash parts with hot water if available to remove all chemicals.
- Blow out each passage way taking special notice of the smaller ones. Test each passage that air goes through the entire passage.
- Blow out the idle mixture hole.

- Check any hole above the idle mixture hole (inside the bore). This is the idle discharge and often becomes plugged.
- A tooth brush can facilitate cleaning parts.
- Soda blasting, then washing again will make the carburetor look good any will clean any minor deposits.
- Any corrosion, or deposits that are hard to remove may indicate the passages are also corroded and the carburetor should be replaced.
- If your engine has been sitting for 6 months or more, the gas has probably turned, and the gas tank will need to be cleaned as well as the fuel lines. Flushing new gas through the tank will not be enough.

Assembly:

- Do NOT apply any gasket sealant on any of the gaskets. Gas will break sealant part and the particles will clog the small passages.
- Test your float.
 - Brass floats should be immersed into hot water. As the air inside expands any leak will be noticeable with air bubbles.
 - Plastic, or Nitrophyl floats should be weighed. The weight is in grams. Check our technical pages for any weight specification that we may have.
- Most gaskets will fit as expected, but you may have to trim some, especially under the venturis.
- Your kit may include multiple gaskets in order to get better coverage out of the kit. Use the one that fits the best. Look for any opening the gasket may leave allowing air into the carburetor. Some holes may be casting holes that don't lead to anything and do not have to be covered.
- Mounting gaskets for multiple bore carburetors do not have to have matching holes. Example a four-barrel gasket can be open in the middle instead of 4 holes as long as the carburetor has some kind of passage between bores. The passage is between primary, or secondary, not both.
- When adjusting the float be careful not to put any pressure on the needle. The viton tip is easily damaged.
- Most idle mixture screws can be cleaned using a soft wire wheel. Inspect for any scoring, which would indicate over tightening. Screw with scoring should be replaced.

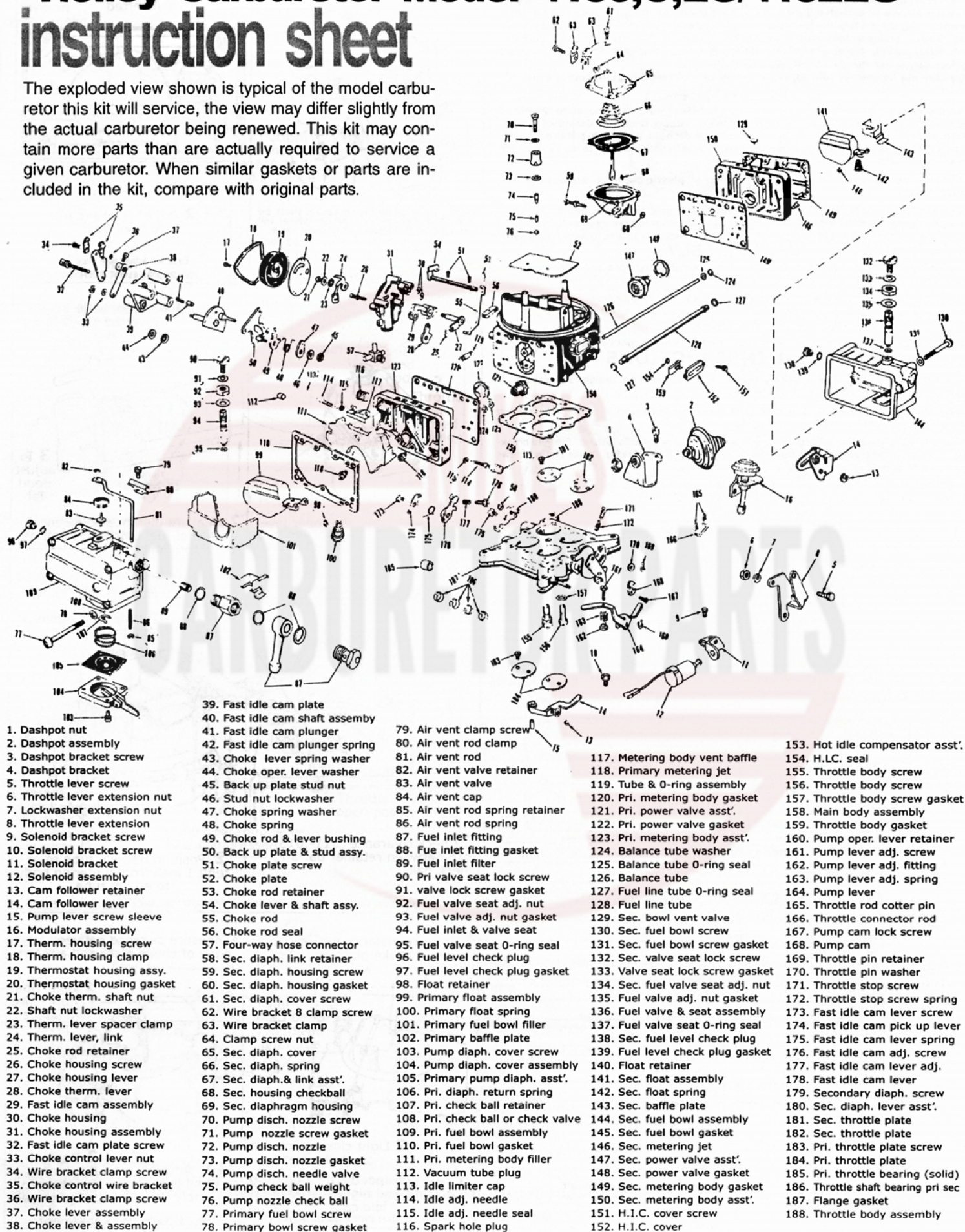
Accelerator Pumps:

- On leather cups run your finger around the inside of the cup to break any manufacturer sealant.
- Apply 2 drops of oil to cups (leather, or rubber) before inserting into carburetor. Do not soak the cup in oil. The swelling of the cup needs to happen inside the carburetor. Allow the 2 drops of oil and the gas to do its job naturally.
- Twist the pump as you are inserting to help keep the cup from curling or folding over.
- Test your accelerator pump circuit before putting the top of the carburetor back on. Our technical pages have instructions on how to do this for most carburetor types.
- Pump wells are usually slight tapered, and the pump will not seal until it gets towards the bottom.

Holley Carburetor Model 4150,C,EG/4152EG

50-794

The exploded view shown is typical of the model carburetor this kit will service, the view may differ slightly from the actual carburetor being renewed. This kit may contain more parts than are actually required to service a given carburetor. When similar gaskets or parts are included in the kit, compare with original parts.



DISASSEMBLY

Rest the carburetor on a repair stand to avoid damage to the throttle plates during renew procedures. Use exploded view as a guide, and follow the numerical sequence in general to disassemble unit far enough to permit cleaning and inspection. Do not remove throttle plates or shaft. Idle limiter: turn the idle limiter cap to its leanest (clockwise) position and remove cap. Observe and record the initial position of the needle slot. Turn the idle needles clockwise until lightly seated, recording the number of turns required to seat the needles. This procedure is necessary to reinstall the idle needles after renewing.

Use care not to damage idle adjusting needles when removing idle limiter caps.

CLEANING

Cleaning must be done with carburetor disassembled. Soak parts long enough to soften and remove all foreign material. Use a carburetor solvent, lacquer thinner or denatured alcohol. Make certain the throttle body is free of all hard carbon deposits. Wash off in suitable solvent. Blow out all passages in castings with compressed air and check carefully to insure thorough cleaning of obscure areas.

CAUTION: Do not soak parts containing rubber or plastic material. Serious damage could result.

Fuel bowls, should only be exposed to carburetor cleaner long enough to permit removal of gum and varnish deposits with a brush. (NOTE: Some fuel bowls have internal "O" ring seals which are not removable, but can be damaged by prolonged exposure to some carburetor cleaning solvents.)

REASSEMBLY

Reassemble in reverse order of disassembly. Note special instructions and follow outline in making adjustments.

Manually operate the throttle lever and choke mechanism, checking for binding or malfunction. Any binding or interference could cause throttle to stick during operation and result in loss of carburetor throttle control (or uncontrolled engine speed).

Check carburetor to be sure there are no leaks, flooding, which might cause a fire.

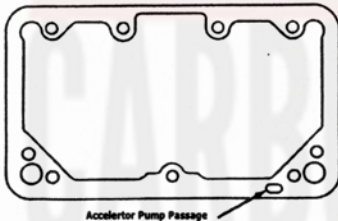
SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLES - Tapered portion of needle must be straight and smooth. If grooved or ridged, a new needle should be installed.

PUMP INLET CHECK VALVE - Lubricate tip of new valve and in-set in center hole in pump cavity. Pull thru from fuel bowl side until seated.

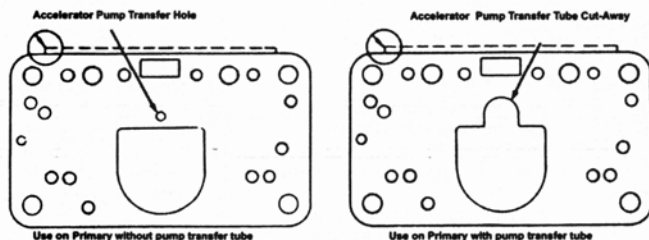
CHOKE PLATE SCREW - Choke plate screws are staked to prevent loosening. To avoid breaking or stripping the threads in the choke shaft, lightly file off the staking. Choke plates screws should be re-staked after tightening to prevent loosening.

THROTTLE BODY - Do not remove throttle shaft or plates. If throttle plates are nicked or damaged, it will be necessary to replace the throttle body.



Accelerator Pump Passage

The primary fuel bowl gasket must be installed with the accelerator pump passage on the right side of the main jets. Fuel bowl screws must be torqued to 40 inch pounds.



Use on Primary without pump transfer tube

Use on Primary with pump transfer tube

Metering Body Gaskets

POWER VALVE IDENTIFICATION

Example: Power Valve Assembly

25R59-65

65 Which designates the stamped number, also identifies the opening point of the power valve (i.e..6.5" vacuum).

Code Letter

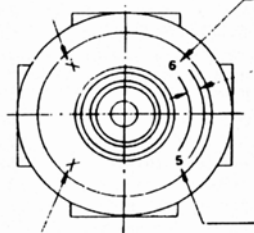
A Thru M For Month Omitting Letter I - Use J For Sept.

First Digit

Of Stamped Number Identification

Code Number
0 thru 9 for Year

Second Digit
of Stamped Number
Identification



With multiple drilled fuel openings. With two "rectangular" fuel openings. NOTE Proper power valve gasket must be used as shown, use of improper gasket will result in fuel leakage around power valve. Power valve (A): Torque to 40-50 inch pounds FIG. 1 - POWER VALVE INSTALLATION	1 with fuel bowl inverted 2 Adjust float parallel to bowl floor External Adjustable Type FIG. 2 - DRY FLOAT SETTING
1 Loosen lock screw 2 To Adjust: Turn adjusting nut clockwise to lower counter-clockwise to raise level 3 Proper level, at bottom edge of sight plug port With car on level surface and engine running FIG. 3 - WET LEVEL ADJUSTMENT	1 with fuel bowl inverted 2 Measure distance between surface of fuel bowl and float, at toe of the float 3 To adjust Bend Tab Non Adjustable Type FIG. 4 - DRY FLOAT SETTING
1 with fuel bowl inverted 2 Check clearance .011-.015 inch between retainer bar and check ball FIG. 5 - PUMP INTAKE CHECK BALL ADJUSTMENT	1 Insure "O" rings and washers are seated in recesses 2 Position balance tube to extend 1 inch from metering body to end of tube FIG. 6 - BALANCE TUBE ADJUSTMENT
3 Measure distance between lower edge of choke plate and airhorn wall 4 To Adjust: Bend Cam positioner adj. tang 2 Light closing pressure on choke plate 1 Fast idle speed adjusting tang contacting 2nd highest step of fast idle cam FIG. 7 - CAM INDEX ADJUSTMENT	3 Measure distance between lower edge of choke plate and airhorn wall 1 Light closing pressure on choke plate 2 Depress diaphragm and stem to limit of travel 4 To Adjust: Bend link here FIG. 8 - VACUUM KICK ADJUSTMENT

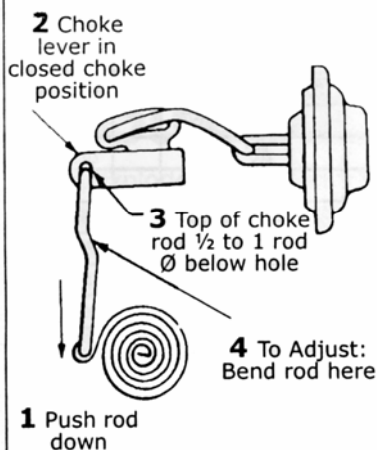


FIG. 9 - CHOKE ROD ADJUSTMENT

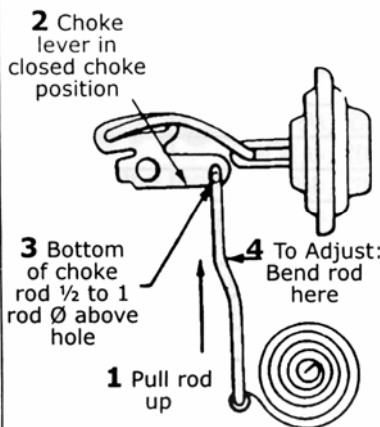


FIG. 10 - CHOKE ROD ADJUSTMENT

1 Insert paper clip into piston bore until end of bore slot is hooked as shown

Note: Bend paper clip (.030-.036 Ø) as shown to provide end no longer than 1/8 inch long

4 To Adjust Bend piston lever tang

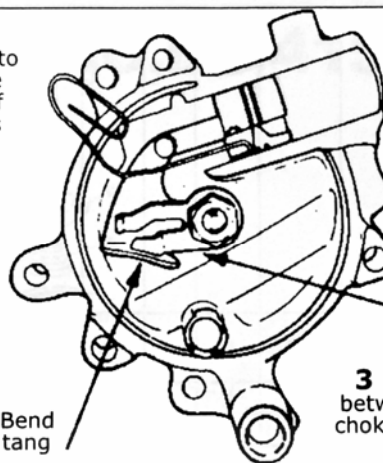


FIG. 15 - CHOKE QUALIFYING (INTEGRAL CHOKE) ADJUSTMENT

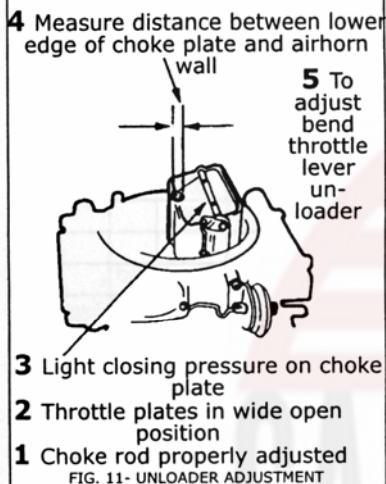


FIG. 11 - UNLOADER ADJUSTMENT

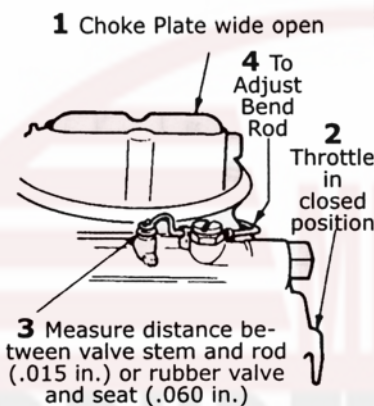


FIG. 12 - VENT VALVE ADJUSTMENT

Rotate cover to align ref. mark on cover with specified mark on choke housing

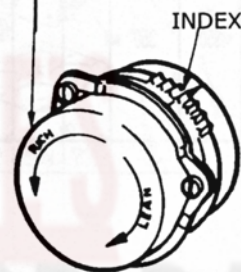


FIG. 16 - CHOKE ADJUSTMENT

1 With choke in wide open position

4 Adjust for .060 to .090 clearance

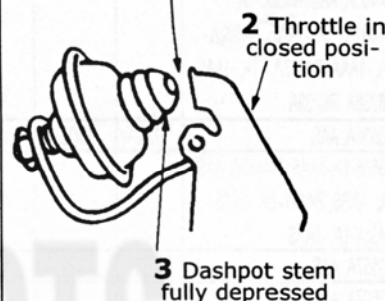


FIG. 17 - DASHPOT ADJUSTMENT

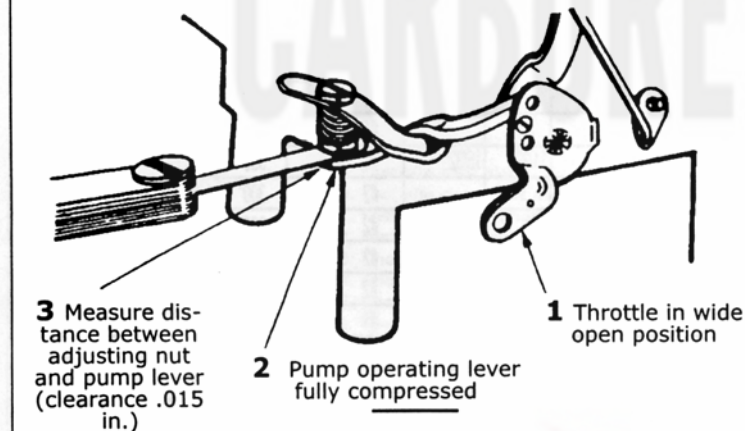
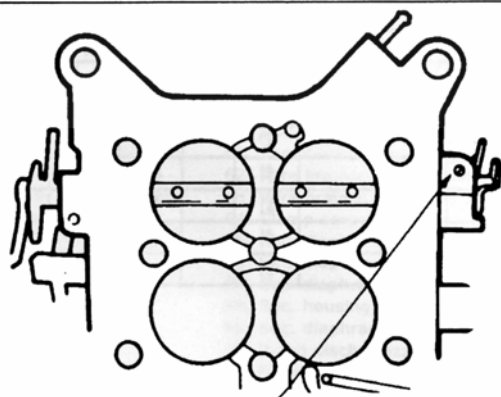


FIG. 13 - PUMP OVERRIDE ADJUSTMENT



Back the secondary throttle stop screw out until the secondary throttle plates are closed in the throttle bore. Turn the screw in (clockwise) until it just touches the stop on the lever, then give it an additional 1/4 turn

FIG. 14 - SECONDARY THROTTLE STOP ADJUSTMENT

SETTINGS/SPECIFICATIONS

Carburetor Number	Primary Dry Float Adj.	Secondary Dry Float Adj.	Pump Cam Position	Cam Index	Vacuum Kick	Vacuum Unloader	Bowl Vent	Auto Choke	Dash Pot
R1272A, -1A, R1448A	13/16"	3/4"	#1				.060"	Index	
R1273A, -1A, -2A, -2AAS, R1483A	13/16"	3/4"	#1			.180"	.060"	Index	.075"
R1312A, -1A, R1748A, -1A, R1957A, -1A, R1958A, -1A	13/16"	3/4"	#1			.180"	.060"	1NL	
R1312-2A, -3A, -4A			#1			.180"	.060"	1NL	.105"
R1405A, R1551A, R1619A, -1A	13/16"	3/4"	#1				.060"	2NR	.075"
R1426A, R1736A	13/16"	3/4"	#1				.060"	2NR	
R1427A, R1616A, R1737A, -1A, R1738A, -1A	13/16"	3/4"	#1				.060"	2NR	.075"
R1550A	13/16"	3/4"	#1				.060"	1NR	
R1740A	13/16"	1/2"	#1				.060"	1NR	.075"
R1740-1A			#1				.060"	1NR	.075"
R1748-2A			#1			.180"	.060"	1NL	
R2464A			#1			.180"	.060"	1NL	.105"
R2668A, AAS, R2687A, R2818-1A, R2855A, R2919A, R2926A, R4118AAS			#1					Index	
R2818A, AAS			#1					Index	
R2927A, R4223AAS, R4237A, -1A, -2A, R4318A, -1A, R4455AAS, R4543A, R4572A, -1A, -1AAS, -2A, R4578AAS, R4776-1AAA, R4777-1AAA, R4778-1AAA, -2AAA, R4779-									

2AAA, R4780-2AAA, -3A, R4781-1A, 2A, 3A, R6299AAA, R6895AAA, R7138A, R7410AAA, R7411AAA, R7785AAA, R7927A, R8156A, R8162A, R9714A, R9715A, R9716A, R9717A, R60031A, R60034A, R60037A, -1A, R60041A, -1A, R60043A, -1A, R60162A, R84780AA, R84781AA			#1						
R2953A, -1A, R3124A, R3130A, AAS, -1A, R3310A, AAS, -1AAA	3/8"	1/2"	#1					Index	
R3043A			#1				.050"	Index	
R3044A			#1				.060"	1NL	
R3045A, R3074A			#1				.060"	1NL	.105"
R3245A, AAS			#1		.190"	.265"	.085"		
R3246A, AAS, R3247A, AAS, R3613A	11/32"	15/32"	#1		.350"	.350"	.085"		
R3259A, -1A, R3668A, R3680A	3/8"	1/2"	#1						
R3417A, R3418A, AAS, -1A, -1AAS, R3910A, AAS, R4054A, R4490A, AAS, R4800-1A, R4801A, -1A, -1AAS, R4802A, -1A, -1AAA, R4803A, -1A, -1AAS, R6238A, R6239A			#1		.350"	.350"			
R3530A, AAS	11/32"	15/32"	#1				.085"	Index	.075"
R3556-1A, -1AAS, R4489A, AAS, -1A, -1AAS, R4491-1A, -1AAS, R4554-1A, -1AAS			#1		.350"	.350"	.017"		
R3557A, AAS	11/32"	15/32"	#1				.085"	1NR	
R3607A, AAS			#1		.190"	.265"	.085"		
R3787-1, R4210A, AAS, R4295A, AAS, R4323-8A, R4324-8A, R4486A, R4493A, AAS, -1AAS, R4558A, AAS, -1A, R4559AAS, R4584AAS, R4776AAA, R4777AAA, -1A, -2A, -3A, R4778AAA, -1A, -2A, -3A, R4779AAA, -1A, -2A, -3A, -4A, R4781AAA, -2AAA, R4788AAA, -1AAA, R4830A, R4880AAA, -1AAA, R6109AAA, R6803-4A, R6877A, R6974-1A, R7029-2A, R7191A, R8105-1A, R8139-1A, R8243-2A, R8737A, -1A, R80110AAA, R84776AA, R84777AA, R84778AA, R84779AA			#2						
R3793A, AAS			#1				.085"	Index	
R3794A, AAS			#2				.085"	Index	.110"
R3795A, AAS, -1A, -1AAS			#1				.085"	Index	.110"
R3796A			#2				.085"	Index	.075"
R3796-1A			#2				.085"	Index	
R3806A, AAS, R3807A	5/16"	9/32"	#1		.190"	.265"	.085"		
R3926A			#1				.085"		
R3977AAS	11/32"	15/32"	#1						
R4053A, AAS, R4555A, AAS, R6647A			#1		.300"	.350"			
R4069A			#1	.080"	.180"	.080"			
R4088A			#1				.080"		
R4129A			#1	.080"	.320"	.075"	1NR		
R4168A, AAS			#2	.080"	.300"	.075"	1NR		
R4174A, AAS			#2	.060"	.300"	.075"	1NR		

R4234A, AAS			#1	.080"	.180"		Index	.110"
R4264A, -1A, R4320A, -1A			#1					.075"
R4279A			#2	.080"	.300"		2NR	.060"
R4280A			#2	.080"	.300"		1NR	.100"
R4296A, AAS			#2		.350"		2NL	
R4312A, -1A, 2A, 3A,			#1	.205"	.230"		2NL	
R4313A, -1A, 2A, 3A,			#1	.205"	.230"		2NL	.075"
R4319A, -1A			#1	.080"	.205"	.230"	3NL	
R4321A			#1	.205"	.230"		3NL	.075"
R4321-1A			#1	.080"	.205"	.230"	3NL	.075"
R4346A			#1	.300"	.350"	.060"		
R4399A, AAS			#1	.080"	.205"	.180"	2NR	
R4491A, AAS, R4554A, AAS, R4556A, AAS, R4557A, AAS			#1	.300"	.350"	.017"		
R4492A			#1	.350"	.350"	.060"		
R4511A, AAS			#2		.310"	.075"		
R4513A, AAS			#2	.080"	.300"		4NR	.100"
R4513-1AAA			#2		.330"			.140"
R4514A, AAS			#2	.080"	.300"		3NR	.100"
R4514-1AAA			#2		.330"			.200"
R4515A			#2		.300"		4NR	
R4515-1AAA			#2		.330"			
R4516A			#2		.300"		3NR	
R4516-1AAA			#2		.330"			
R4545A, R4546A			#2					
R4556A, AAS			#2		.300"	.075"		.100"
R4599A, AAS, -1A			#1	.040"	.280"	.230"	Index	
R4601A, -1A			#1					.105"
R4601-2A			#1					.100"
R4602A, AAS, -1A, -2A			#1	.040"	.280"	.230"	Index	.105"
R4609A, AAA			#2	.080"	.300"		1NR	.100"
R4627A, AAS, R4628A, AAS			#2	.100"	.300"	.300"	2NR	
R4647A			#2		.300"			
R4653A, AAS			#2		.310"			
R4698A, AAS			#1		.300"	.080"	1NL	
R4742AAA			#2	.166"	.340"		Index	.128"
R4800A			#1	.350"	.320"			
R4815AAA	11/32"	15/32"	#1	.350"	.350"			
R6127A, AAS			#2	.300"	.300"		2NR	.100"
R6128A, AAS			#2	.100"	.300"	.300"		.115"
R6128-1AAA			#2	.300"	.300"			
R6129A, AAA			#2	.310"				.115"
R6189A			#1	.080"	.170"	.180"	2NR	
R6238-1A, R6239-1A			#1	.350"	.350"			
R6284A, -1A			#1		.127"			
R6390A, -1A, -2AAS, -3A			#1	.040"	.200"	.230"	4NL	.105"
R6708A, AAA, -1AAA, R6709A, AAA			#1			.015"		
R7035A			#1	.080"	.160"	.230"	Index	
R7035-1A			#1	.080"	.160"	.200"		
R7923A, R7924A, R9922A			#1			.060"		
R80145AA			#2	.159"	.290"	.090"		
R80159AA, R80309			#2	.140"	.300"		4NL	
R80311AA			#1	.480"	.350"		5NL	
R80311-2			#1	.480"	.320"		5NL	
R80330AA			#1	.420"	.350"		5NL	
R80378			#1	.310"	.350"		5NL	