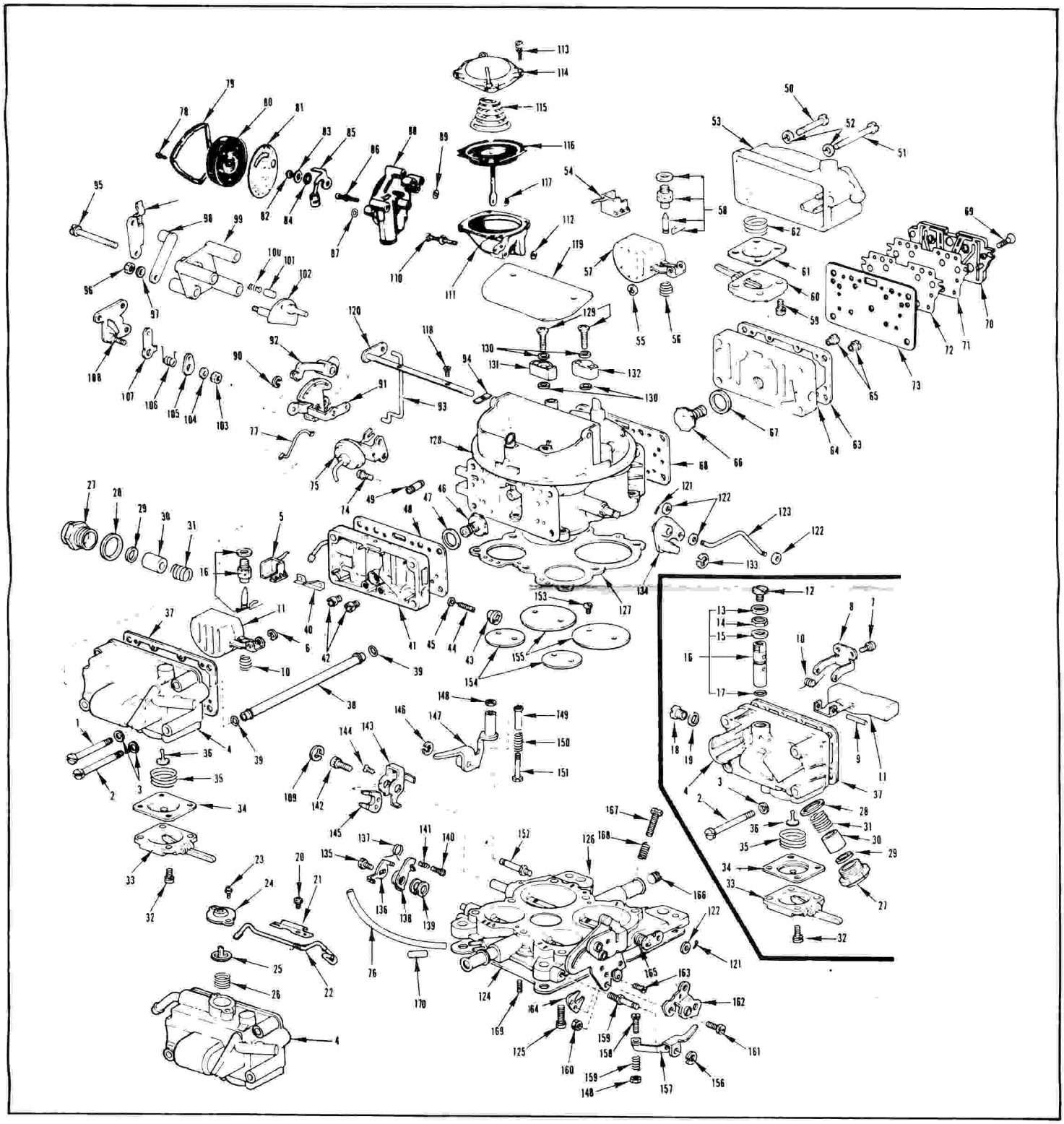
HOLLEY CARBURETOR INSTRUCTION SHEET
MODEL 4164/4175

Typical View - 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.



Dissasembly - Rest 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 cap: 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.

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 cleaning 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 to disassemly. 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.

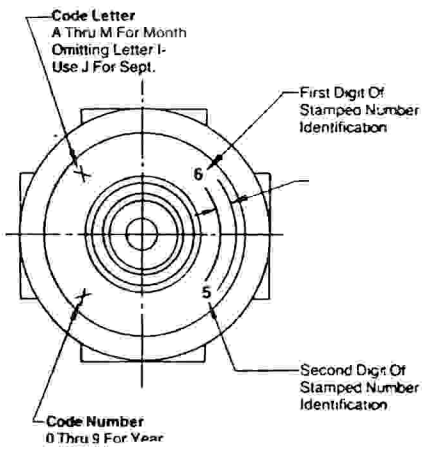
REF. NO.	REF. NO.	REF. NO.	REF. NO.
1. Fuel bowl screw (short) primary	48. Metering body gasket primary	88. Choke housing assembly	133. Cam follower lever assembly retainer
2. Fuel bowl screw (long) primary	49. Tube & "O" ring assembly	89. Choke housing gasket	134. Cam follower lever assembly
3. Fuel bowl screw gasket primary	50. Fuel bowl screw (short) secondary	90. Choke control lever retainer	135. Fast idle cam lever screw & lockwasher
4. Fuel bowl assembly primary	51. Fuel bowl screw (long) secondary	91. Choke control lever and/or shaft assembly	136. Fast idle pick-up lever
5. Baffle plate primary	52. Fuel bowl screw gasket secondary	92. Fast idle cam	137. Fast idle cam lever spring
6. Float retainer primary	53. Fuel bowl assembly secondary	93. Choke rod	138. Fast idle cam lever
7. Float shaft bracket screw & lockwasher	54. Baffle plate secondary	94. Choke rod seal	139. Throttle seal washer
8. Float shaft retainer bracket	55. Float retainer secondary	95. Fast idle cam plate screw & lockwasher	140. Fast idle cam lever adjusting screw
9. Float shaft	56. Float spring	96. Choke control lever nut	141. Fast idle cam lever screw spring
10. Float spring	57. Float assembly secondary	97. Choke control lever lockwasher	142. Pump cam lever screw & lockwasher
11. Float assembly primary	58. Fuel inlet valve & seat assembly secondary	98. Choke lever & swivel assembly	143. Pump cam lever secondary
12. Fuel valve seat lock screw	59. Accelerator pump cover screw & lockwasher secondary	99. Fast idle cam plate	144. Pump cam screw
13. Fuel valve seat lock screw gasket	60. Accelerator pump cover secondary	100. Fast idle cam plunger spring	145. Pump cam secondary
14. Fuel valve seat adjusting nut	61. Accelerator pump diaphragm assembly secondary	101. Fast idle cam plunger	146. Pump operating lever retainer secondary
15. Fuel valve seat adjusting nut gasket	62. Accelerator pump diaphragm spring secondary	102. Fast idle cam & shaft assembly	147. Pump operating lever & guide assembly secondary
16. Fuel inlet valve & seat assembly primary	63. Fuel bowl gasket secondary	103. Back-up plate stud nut	148. Pump operating lever adjusting nut
17. Fuel valve seat "O" ring seal	64. Metering body assembly secondary	104. Back-up plate stud nut lockwasher	149. Pump operating lever screw sleeve
18. Fuel level check plug	65. Main metering jet secondary	105. Choke spring washer	150. Pump lever adjusting screw spring secondary
19. Fuel level check plug gasket	66. Power valve assembly secondary	106. Choke spring	151. Pump operating lever adjusting screw
20. Vent rod clamp screw & lockwasher	67. Power valve gasket secondary	107. Choke rod lever & bushing assembly	152. Pump lever stud secondary
21. Vent rod clamp	68. Metering body gasket secondary	108. Back-up plate & stud assembly	153. Throttle plate screw
22. Vent rod	69. Secondary metering body screw	109. Secondary diaphragm link retainer	154. Throttle plate primary
23. Vent valve screw	70. Secondary metering body	110. Diaphragm housing screw & lockwasher	155. Throttle plate secondary
24. Vent valve clamp assembly	71. Secondary metering body plate gasket	111. Secondary diaphragm housing	156. Pump operating lever retainer primary
25. Vent valve	72. Secondary metering body plate	112. Secondary diaphragm housing gasket	157. Pump operating lever primary
26. Vent valve spring	73. Secondary metering body gasket	113. Secondary housing cover screw & lockwasher	158. Pump lever adjusting screw primary
27. Fuel inlet fitting	74. Choke diaphragm bracket screw & lockwasher	114. Secondary housing cover	159. Pump lever stud primary
28. Fuel inlet fitting gasket	75. Choke diaphragm assembly	115. Secondary diaphragm spring	160. Throttle lever extension screw nut
29. Fuel inlet filter gasket	76. Choke diaphragm hose	116. Secondary diaphragm & rod assembly	161. Throttle lever extension screw
30. Fuel inlet filter	77. Choke diaphragm link	117. Diaphragm housing check ball	162. Throttle lever extension
31. Fuel inlet filter spring	78. Thermostat housing clamp screw	118. Choke plate screw	163. Pump cam screw primary
32. Accelerator pump cover screw & lockwasher primary	79. Thermostat housing clamp	120. Choke shaft assembly	164. Pump cam
33. Accelerator pump cover primary	80. Thermostat housing assembly	121. Secondary connect rod retainer	165. Throttle return spring secondary
34. Accelerator pump diaphragm assembly primary	81. Thermostat housing gasket	122. Secondary connect rod washer	166. Throttle body channel plug
35. Accelerator pump diaphragm spring primary	82. Thermostat shaft nut	123. Secondary connect rod	167. Throttle stop screw
36. Accelerator pump check valve primary	83. Thermostat shaft nut lockwasher	124. Flange gasket	168. Throttle stop screw spring
37. Fuel bowl gasket primary	84. Thermostat lever spacer	125. Throttle body screw & lockwasher	169. Pump lever adjusting screw secondary
38. Fuel line tube	85. Thermostat lever, link & piston assembly	126. Throttle body & shaft assembly	170. Vacuum tube plug
39. Fuel line tube "O" ring seal	86. Choke housing screw	127. Throttle body gasket	
40. Metering body vent baffle	87. Choke housing screw lockwasher	128. Main body assembly	
41. Metering body assembly primary		129. Pump discharge nozzle screw	
42. Main metering jet primary		130. Pump discharge nozzle gasket	
43. Idle limiter cap		131. Pump discharge nozzle primary	
44. Idle adjusting needle		132. Pump discharge nozzle secondary	
45. Idle adjusting needle seal			
46. Power valve assembly primary			
47. Power valve gasket primary			

POWER VALVE IDENTIFICATION

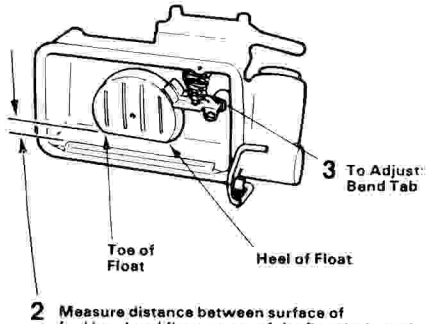
Example: Power Valve Assembly

25R591-65

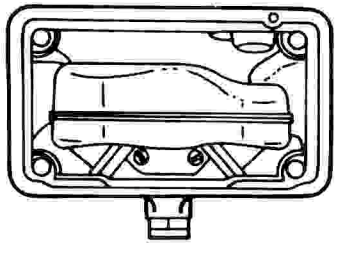
65 Which designates the stamped number, also identifies the opening point of the power valve (i.e., 6.5" vacuum).



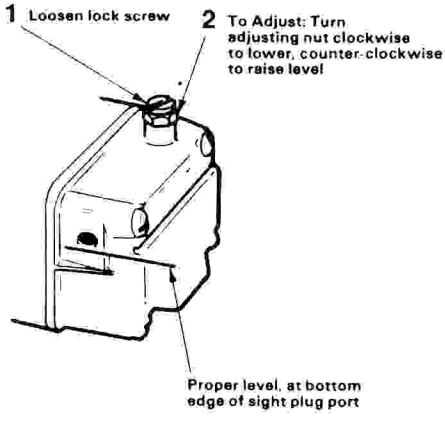
CARBURETOR NUMBER	FLOAT SETTING PRIMARY	FLOAT SETTING SECONDARY	PUMP CAM PRIMARY/SECONDARY	CHOKE QUALIFYING	CHOKE SETTING
R6210, R6211, R6212, R6213, R6262, R6263, R6468	Parallel	Parallel	#2 #1	.090	
R6210-1, -2, -3, R6211-1, R6468-1, -2, R6854, R8679, R8700	3/16T	13/64H	#2	.090	
R6499	Parallel	Parallel	#2 #1	.090	1 RICH
R6497, R7054	Parallel	Parallel	#2 #1	.070	2 RICH
R6498, R6772, R6773	Parallel	Parallel	#2 #1	.070	
R6528	Parallel	Parallel	#1 #1	.105	
R6774, R6853, R7002-1, R7004-1, -2, R7005-1, -2, R7006-1, -2, R8302, R8546	3/16T	13/64H	#2 #1	.070	
R6926, R6926-1, R7002, R7004, R7005, R7006	Parallel	Parallel	#2	.070	
R7001	Parallel	Parallel	#2 #1	.110	
R7351	3/16T	13/64H	#2	.096	INDEX
R7397	3/16T	13/64H	#2	.070	2 RICH
R7855	3/16T	13/64H	#2	.086	
R8059, R8059-1	3/16T	13/64H	#2	.106	1 RICH
R8276	3/16T	13/64H	#2	.100	
R8879	3/16T	13/64H	#2	.080	
R9895AAA, R80073AAA, R80125AAA, R80139AAA, R80140AAA, R80155AAA			#2	.096	INDEX
R9923AAA			#2	.116	
R9948AAA, R9976AAA, R80128AAA			#2	.120	1 NR
R80130-2AAA			#2	.218-.238	INDEX
R80328-2AAA, R80390AAA			#2	.200-.240	INDEX
R80391AAA			#2	.300±.02	5 LEAN



Non-Adjustable Type
Dry Float Setting
FIGURE 1

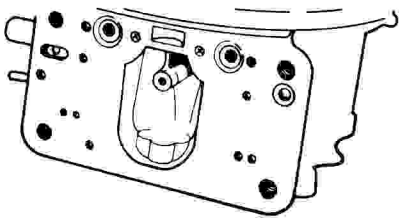


Center Inlet Type
Dry Float Setting
FIGURE 2



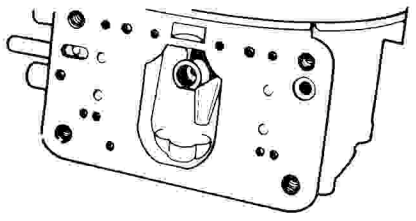
Wet Level Adjustment
FIGURE 3

NOTE:
Spread bore carburetor's have been built with two types of main metering body and main body castings.



Type A
Main body has accelerating pump passage boss flush, or even, with gasket surface for metering body.

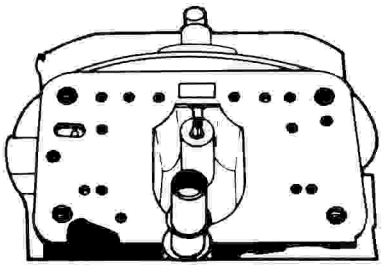
FIGURE 4



Type B
Main body has accelerating pump passage boss recessed .20 (almost 1/4") below gasket face and use connector tube and "O" rings.

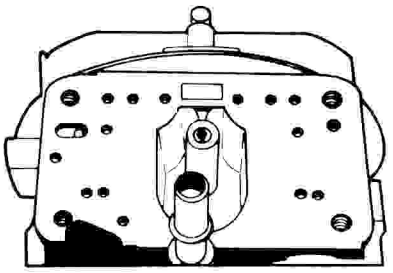
FIGURE 5

If your carburetor is Type A install roll pin and "O" ring enclosed.



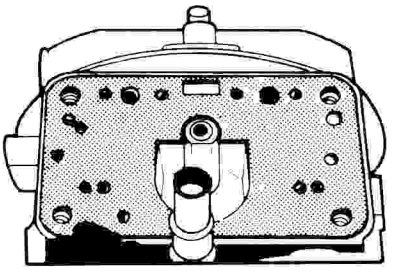
(1) Insert split roll pin in accelerating pump passage on metering body face of main body. Place washer provided over roll pin, Fig. 6. Tap roll pin into main body until the amount protruding is flush with washer, Fig. 7.

FIGURE 6



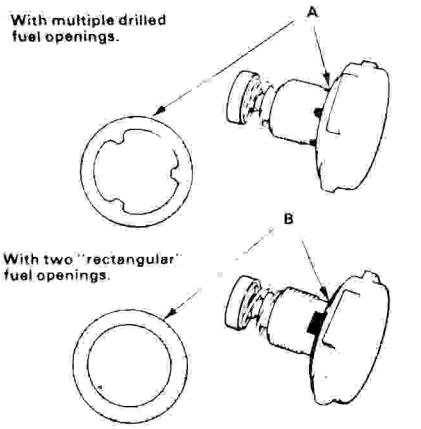
(2) Discard washer and place small "O" ring provided over roll pin, Fig. 8.

FIGURE 7



(3) Assemble carburetor with new gaskets provided.

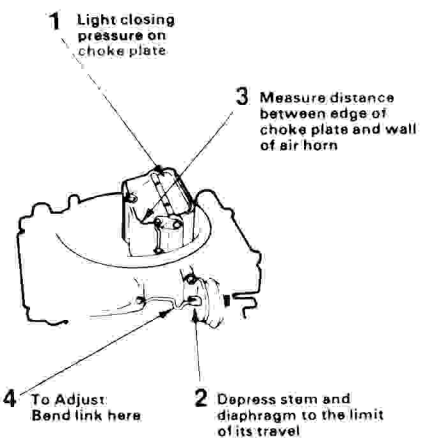
FIGURE 8



NOTE: Proper power valve gasket must be used as shown. Use of improper gasket will result in fuel leakage around power valve.
A. Torque to 40-50 inch pounds
B. Torque to 40-50 inch pounds

Power Valve Installation

FIGURE 9



Choke Qualifying (Vacuum Pull Down) Adjustment

FIGURE 10

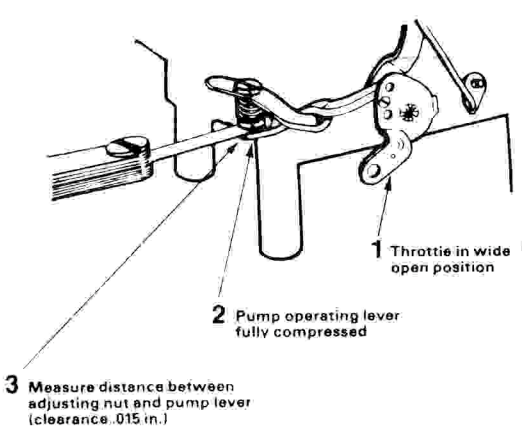
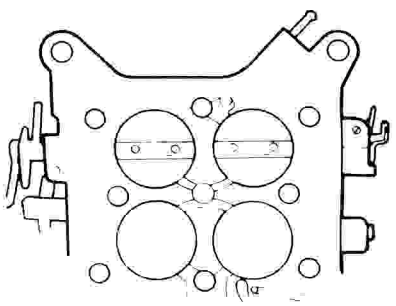


FIGURE 11 – Pump Override Adjustment



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.

FIGURE 12 – Secondary Throttle Stop Adjustment

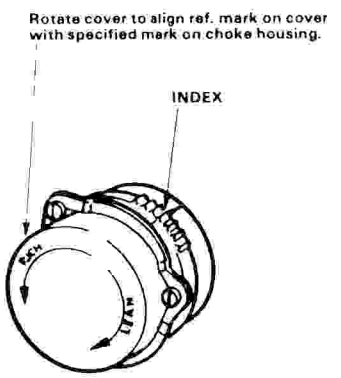


FIGURE 13 – Choke Adjustment

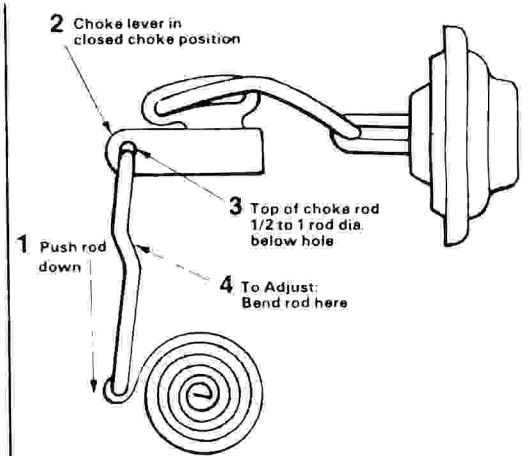


FIGURE 14 – Choke Rod Adjustment