READ THIS FIRST:
This is a typical view type instruction sheet for different carburetor models, which will show more parts than are required for any one specific model. This kit may also contain universal part assortments resulting in throw away, or an excess in the number of parts that are actually required for servicing any one carburetor. In the case of duplicate gaskets or parts, compare with old pieces. When reassembling the carburetor use the adjustment specifications list to make the necessary adjustments for the list number of your carburetor. Since this instruction sheet cannot contain all the pertinent information required to rebuild your carburetor, Holley recommends the HOLLEY - REBUILDING AND MODIFYING book by Jeff William’s P/N 36-185. Through out this instruction sheet there will be WARNINGS and NOTES. Please read these, they contain valuable information that can save you time and money. It is our intent to provide the best possible products for our customers: products that perform properly and satisfy your expectations. Should you need information of parts assistance, please contact our technical service department at 1-270-781-9741, Monday through Friday, 7 a.m. to 5 p.m. CST. Please have the part number of the product you purchased when you call.

LOCATING THE LIST NUMBER:
The List number for a Model 2010, 2300, 4010, 4011, 4150, 4160, 4165 or 4175 carburetor can be found on the right side of choke air horn. The List number for the 4500 can be found on the top of the main body casting. Below the list number is a date code that will contain no more than four (4) digits. See Figure 1 below.

Figure 1

DISASSEMBLY:
Rest the carburetor on a repair stand to avoid damage to the throttle plates during the renew procedures. Use the exploded view, for the model of carburetor you have, 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 the carburetor.

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

CLEANING AND CARE:
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 all passages in castings with compress air and check carefully to insure thorough cleaning of obscure areas.

WARNING! DO NOT soak parts containing rubber or plastic material. Serious damage could result.

WARNING! Fuel bowls, should only be exposed to carburetor cleaner long enough to permit removal of gum and varnish deposits with a brush. 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 the special instructions and follow the calibration numbers in the SPECIFICATIONS manual in making final 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).

WARNING! Check carburetor to be sure there are no leaks, flooding, which might cause a fire.
SPECIAL INSTRUCTIONS FOR ALL CARBURETORS:

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

PUMP INLET CHECK VALVE - Lubricate tip of new valve and insert in center hole in pump cavity. Pull through 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 plate screws should be restaked after tightening to prevent loosening.

THROTTLE BODY - DO NOT remove throttle shafts or plates. If throttle plates are nicked or damaged, it will be necessary to replace the throttle body.

CHECK BALL - Your kit may contain more than one check ball. The check ball removed from your carburetor should be compared to the new check ball for correct sizing before installation.

POWER VALVE IDENTIFICATION AND GASKET SELECTION

<table>
<thead>
<tr>
<th>List Number</th>
<th>Prim. Dry Float Adj.</th>
<th>Sec. Dry Float Adj.</th>
<th>Pump Cam Primary</th>
<th>Pump Cam Secondary</th>
<th>Choke Quality</th>
<th>Choke Setting</th>
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<td>6210, 6211, 6212, 6263, 6262, 6263, 6468</td>
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<td>#2</td>
<td>.240 -&quot;</td>
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</table>

Figure 2
NOTE: Spread bore carburetors have been built with two types of main metering body and main body castings.

NOTE: If your carburetor is Type A, install the roll pin and the o-ring enclosed.
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 13

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

Figure 14

1. Push rod down.
2. Close lever in closed choke position.
3. Top of choke rod 1/2 to 1 rod dia. below hole.
4. To adjust: Bend rod here

Figure 15
### Nomenclature - Model 4165 / 4175

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Description</th>
<th>Ref. No.</th>
<th>Description</th>
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<td>Fuel Bowl Screw (short) Primary</td>
<td>2</td>
<td>Fuel Bowl Screw (long) Primary</td>
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<td>3</td>
<td>Fuel Bowl Screw Gasket Primary</td>
<td>4</td>
<td>Fuel Bowl Assembly Primary</td>
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<tr>
<td>5</td>
<td>Baffle Plate Primary</td>
<td>6</td>
<td>Float Retainer Primary</td>
</tr>
<tr>
<td>7</td>
<td>Float Shaft Bracket Screw &amp; Lockwasher</td>
<td>8</td>
<td>Float Shaft Retainer Bracket</td>
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<td>9</td>
<td>Float Shaft</td>
<td>10</td>
<td>Float Spring</td>
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<tr>
<td>11</td>
<td>Float Assembly Primary</td>
<td>12</td>
<td>Fuel Valve Seat Lock Screw</td>
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<td>13</td>
<td>Fuel Valve Seat Lock Screw Gasket</td>
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<td>Fuel Valve Seat Adjusting Nut</td>
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<td>Fuel Valve Seat Adjusting Nut Gasket</td>
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<td>Fuel Inlet Valve &amp; Seat Assembly - Primary</td>
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<td>17</td>
<td>Fuel Valve Seat O-Ring Seal</td>
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<td>Fuel Level Check Plug</td>
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<td>19</td>
<td>Fuel Level Check Plug Gasket</td>
<td>20</td>
<td>Vent Rod Clamp Screw &amp; Lockwasher</td>
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<td>Vent Valve Clamp Assembly</td>
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<td>26</td>
<td>Vent Valve Spring</td>
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<tr>
<td>27</td>
<td>Fuel Inlet fitting</td>
<td>28</td>
<td>Fuel Inlet Fitting Gasket</td>
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29  Fuel Inlet Filter Gasket
31  Fuel Inlet Filter Spring
33  Accelerator Pump Cover Primary
35  Accelerator Pump Diaphragm Spring Primary
37  Fuel Bowl Gasket Primary
39  Fuel Line Tube O-Ring Seal
41  Metering Body Assembly Primary
43  Idle Limiter Cap
45  Idle Adjusting Needle Seal
47  Power Valve Gasket Primary
49  Tube & O-Ring Assembly
51  Fuel bowl Screw (long) Secondary
53  Fuel bowl Assembly Secondary
55  Float Retainer Secondary
57  Float Assembly Secondary
59  Accelerator Pump Cover Screw & Lockwasher Sec.
61  Accelerator Pump Diaphragm Assembly Secondary
63  Fuel Bowl Gasket Secondary
65  Main Metering Jet Secondary
67  Power Valve gasket Secondary
69  Secondary Metering Body Screw
71  Secondary metering Body Plate Gasket
73  Secondary Metering Body Gasket
75  Choke Diaphragm Assembly
77  Choke Diaphragm Link
79  Thermostat Housing Clamp
81  Thermostat Housing Gasket
83  Thermostat Shaft Nut Lockwasher
85  Thermostat Lever. Link & Piston Assembly
87  Choke Housing Screw Lockwasher
89  Choke Housing Gasket
91  Choke Control lever and/or Shaft Assembly
93  Choke Rod
95  Fast idle Cam Plate Screw & Lockwasher
97  Choke Control Lever Lockwasher
99  Choke Lever & Swivel Assembly
101  Fast Idle Cam Plunger Spring
103  Fast Idle Cam & Shaft Assembly
105  Back-up Plate Stud Nut Lockwasher
107  Choke Spring
109  Back-up Plate & Stud Assembly
111  Diaphragm Housing Screw & Lockwasher
113  Secondary Diaphragm Housing Gasket
115  Secondary Housing Cover
117  Secondary Diaphragm & Rod Assembly
119  Choke Plate Screw
121  Choke Shaft Assembly
123  Secondary Connect Rod Washer
125  Flange Gasket
127  Throttle Body & Shaft Assembly
129  Main Body Assembly
131  Pump Discharge Nozzle Gasket
133  Pump Discharge Nozzle Secondary
135  Cam FOLLOWER Lever Assembly
137  Fast Idle Pick-up lever
139  Fast Idle Cam Lever
141  Fast Idle Cam Lever Adjusting Screw
143  Pump Cam Lever Screw & Lockwasher
145  Pump Cam Screw
147  Pump Operating Lever Retainer Secondary
149  Pump Operating Lever Adjusting Nut
151  Pump Lever Adjusting Screw Spring Secondary
153  Pump lever Stud Secondary
155  Throttle Plate Primary
157  Pump Operating Lever Retainer Primary
159  Pump Lever Adjusting Screw Primary
161  Throttle Lever Extension Screw Nut
163  Throttle Lever Extension
165  Throttle Return Spring
167  Throttle Body Channel Plug
169  Throttle Stop Screw Spring
171  Vacuum Tube Plug

30  Fuel Inlet Filter
32  Accelerator Pump Cover Screw & Lockwasher primary
34  Accelerator Pump Diaphragm Assembly Primary
36  Accelerator Pump Check Valve Primary
38  Fuel Line Tube
40  Metering Body Vent Baffle
42  Main Metering Jet Primary
44  Idle Adjusting Needle
46  Power Valve Assembly Primary
48  Metering Body Gasket Primary
50  Fuel Bowl Screw (short) Secondary
52  Fuel Bowl Screw Gasket Secondary
54  Baffle Plate Secondary
56  Float Spring
58  Fuel Inlet Valve & Seat Assembly Secondary
60  Accelerator Pump Cover Secondary
62  Accelerator Pump diaphragm Spring Secondary
64  Metering Body Assembly Secondary
66  Power Valve Assembly Secondary
68  Metering Body Gasket Secondary
70  Secondary Metering Body Plate
72  Secondary Metering Body Plate
74  Choke Diaphragm Bracket Screw & Lockwasher
76  Choke Diaphragm Hose
78  Thermostat Housing Clamp Screw
80  Thermostat Housing Assembly
82  Thermostat Shaft Nut
84  Thermostat Lever Spacer
86  Choke Housing Screw
88  Choke Housing Assembly
90  Choke Control Lever Retainer
92  Fast Idle Cam
94  Choke Rod Seal
96  Choke Control Lever Nut
98  Choke Wire Bracket
100  Fast Idle Cam Plunger
102  Fast Idle Cam Plunger
104  Back-up Plate Stud Nut
106  Choke Spring Washer
108  Choke Rod Lever & Bushing Assembly
110  Secondary Diaphragm Link Retainer
112  Secondary Diaphragm Housing
114  Secondary Housing Cover Screw & Lockwasher
116  Secondary Diaphragm Spring
118  Diaphragm Housing Check Ball
120  Choke Plate
122  Secondary Connect Rod Retainer
124  Secondary Connect Rod
126  Throttle Body Screw & Lockwasher
128  Throttle Body Gasket
130  Pump Discharge Nozzle Screw
132  Pump Discharge Nozzle Primary
134  Cam FOLLOWER Lever Assembly Retainer
136  Fast Idle Cam Lever Screw & Lockwasher
138  Fast Idle Cam lever Spring
140  Throttle Seal Washer
142  Fast Idle Cam lever Screw Spring
144  Pump Cam Lever Secondary
146  Pump Cam Secondary
148  Pump Operating Lever & Guide Assembly Secondary
150  Pump Operating lever Screw Sleeve
152  Pump Operating Lever Adjusting Screw
154  Throttle Plate Screw
156  Throttle Plate Secondary
158  Pump Operating Lever Primary
160  Pump Lever Stud Primary
162  Throttle Lever Extension Screw
164  Pump Cam Screw Primary
166  Throttle Return Spring Secondary
168  Throttle Stop Screw
170  Pump Lever Adjusting Screw

Date: 5-26-11
Holley Technical Support: 1-270-781-9741
199R-8340-1