GENERAL INFORMATION
This kit is used to test gas valves and pressure switches on Residential & Commercial applications.

CONTENTS
These kits consists of:

<table>
<thead>
<tr>
<th>Qty.</th>
<th>1PK0601</th>
<th>Qty.</th>
<th>1PK0602</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 each</td>
<td>Case Analyzer</td>
<td>1 each</td>
<td>Case Analyzer</td>
</tr>
<tr>
<td>1 each</td>
<td>Installation Manual</td>
<td>1 each</td>
<td>Installation Manual</td>
</tr>
<tr>
<td>1 each</td>
<td>Pressure Tap Fitting</td>
<td>1 each</td>
<td>Pressure Tap Fitting</td>
</tr>
<tr>
<td>1 each</td>
<td>Silicon Tube</td>
<td>1 each</td>
<td>Silicon Tube</td>
</tr>
<tr>
<td>1 each</td>
<td>Reducer Connector</td>
<td>1 each</td>
<td>Reducer Connector</td>
</tr>
<tr>
<td>2 each</td>
<td>1/8” Tee, Barbed</td>
<td>2 each</td>
<td>1/8” Tee, Barbed</td>
</tr>
<tr>
<td>2 ft.</td>
<td>Tubing</td>
<td>2 ft.</td>
<td>Tubing</td>
</tr>
<tr>
<td>1 each</td>
<td>Manometer, Dwyer</td>
<td>1 each</td>
<td>Service Wrench w/ Adapter</td>
</tr>
<tr>
<td>1 each</td>
<td>Allen Wrench, 3/16”</td>
<td>1 each</td>
<td>Allen Wrench, 3/32”</td>
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</tbody>
</table>

CHECKING GAS VALVE PRESSURES
WHITE RODGERS 36E SERIES VALVES

Inlet / Supply
1. Turn off gas at external manual shutoff valve. See Figure 1.
2. Remove 1/8” test plug on inlet side of gas valve and install tubing adapter. See Figure 2.
3. Connect the positive side of manometer to adapter.
4. Turn on shutoff valve and check for proper pressure range. See Table 1.
5. Turn off gas supply, remove adapter, reinstall plug, turn on gas and check for gas leakage.

Outlet / Manifold
1. Turn off gas at external shutoff valve.
2. Remove 1/8” plug on outlet side of gas valve and install tubing adapter.
3. Connect the positive side of manometer to adapter.
4. Turn on gas and electrical power to furnace, set thermostat to a setpoint above indoor temperature and ensure unit lights properly.

INLET GAS PRESSURE RANGE

<table>
<thead>
<tr>
<th></th>
<th>Natural Gas</th>
<th>Propane (LP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>4.5 In. W.C.</td>
<td>11 In. W.C.</td>
</tr>
<tr>
<td>Maximum</td>
<td>10.5 In. W.C.</td>
<td>13.0 In. W.C.</td>
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</tbody>
</table>

NOTICE
For 90% sealed combustion unit. Read the gas pressure with the burner box cover in place. Disconnect the pressure reference hose from the side of the burner box. Using the tee fitting and a short piece of hose, connect the negative side of the manometer to the burner box pressure reference port. See Figure 3.
5. Check for proper pressure range with other nearby gas appliance operating.
6. If adjustment is necessary, set to the specifications below, after adjustment, shut down unit, replace plug, restart unit and check for gas leakage. See Figure 4.

**WARNING**
An overpressure protection device, such as a pressure regulator which conforms to the National Fuel Gas Code, ANSI Z233.1 (U.S.) or Can-B149.1 or .2 (Canada) and acts to limit the downstream pressure to a value that does not exceed 0.5 PSI (14” w.c), must be installed in the gas piping system upstream of the furnace. Failure to do so may result in a fire or explosion or cause damage to the furnace or some of its components.

**WHITE RODGERS 36G & 36J SERIES VALVES**

**Inlet / Supply**
1. Turn off gas at external shutoff valve.
2. Loosen the setscrew inside the inlet test port housing with a 3/32nd hex head wrench. Do Not Remove. See Figure 5.
3. Place 5/16” tubing over the test port housing. See Figure 6.
4. Connect to the positive side of the manometer.
5. Turn on shutoff valve and check for proper pressure range. See Table 3.
6. Turn off gas safety at external shutoff valve.
7. Tighten test port setscrew.

**OUTLET / MANIFOLD PRESSURES**

<table>
<thead>
<tr>
<th>Single Stage-W</th>
<th>High Fire-W2</th>
<th>Low Fire-W1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>3.5 W.C.</td>
<td>1.6 W.C.</td>
</tr>
<tr>
<td>LP Gas</td>
<td>10 W.C.</td>
<td>4 W.C.</td>
</tr>
</tbody>
</table>

Reset thermostat back to homeowner’s preference.
Outlet / Manifold

1. Loosen the setscrew inside the outlet test port housing. Do Not Remove.
2. Place tubing over the test port housing. See Figure 7.
3. Connect to the positive side of the manometer.
4. Turn on gas and electrical power to furnace, set thermostat to a setpoint above indoor temperature and ensure unit lights properly.
5. Check for proper pressure range with other nearby gas appliance operating. See Table 4.
6. If adjustment is necessary, set to the specifications below, after adjustment, shut down unit. Tighten test port setscrew. Restart unit and check for gas leakage.

**FIGURE 8: 90% Burner Box Re Tube**

Reset thermostat back to homeowner’s preference.

**FIGURE 7: Tube Over Manifold Test Port Housing**

<table>
<thead>
<tr>
<th>INLET GAS PRESSURE RANGE</th>
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</table>

**NOTICE**

For 90% sealed combustion unit. Read the gas pressure with the burner box cover in place. Disconnect the pressure reference hose from the side of the burner box. Using the tee fitting and a short piece of hose, connect the negative side of the manometer to the burner box pressure reference port. See Figure 8.

**CAUTION**

Never apply a pipe wrench to the body of the combustion automatic gas valve. A wrench must be placed on the projection or wrench boss of the valve when installing piping to it.

**NOTICE**

Always check operation before leaving job.
CHECKING PRESSURE SWITCH
OPERATION

Disconnect the pressure hose from the side of the pressure switch. Using the tee fitting and a short piece of hose, connect the negative side of the manometer to the pressure switch. Turn on gas and electrical power to furnace, set thermostat to a set-point above indoor temperature and ensure unit lights properly.

With draft inducer motor running, check pressure. See Figure 9.

**NOTICE**

**If pressure is below** setting on switch, (small sticker on switch) check motor, wheel and vent pipe(s) for restriction. If a 90% furnace, check condensate trap for proper drainage.

**If pressure is above** setting on switch and switch is not closing, replace switch.

**FIGURE 9:** Single Port Pressure Switch

For two port or multiple switches connect negative side same as above with other tee of manometer to other hose pressure reference tubing. See Figure 10.

**FIGURE 10:** Dual Port Pressure Switch