WARNING: Never install tapered (pipe) fittings in an aluminum manifold. Tack Part No. 220, or equivalent.
4. Pipe plugs, if needed, either 3/8 or 1/2-NPT.
5. Carburetor base gasket (usually supplied with carburetor).
6. Teflon tape or pipe dope. NOTE: Never install tapered (pipe) fittings in an aluminum manifold without Teflon tape or thread damage and or leakage will likely occur.

TOOLS NORMALLY REQUIRED:
1. Socket wrench set
2. Open end wrenches
3. Box end/flare wrenches (optional)
4. Distributor wrench
5. Ignition wrench
6. Screwdrivers (Standard and Phillips)
7. Oil pan scraper or putty knife
8. Channel lock and hose clamp pliers
9. Torque wrench
10. Timing light and vacuum gauge
11. Drain bucket
12. Rag
13. 3/8"-16 or 5/16-18 tap (for cleaning bolt holes)

MANIFOLD REMOVAL PROCEDURE:
WARNING: Do not attempt to remove manifold from a hot engine. Allow the engine time to cool down sufficiently before removal.
1. Disconnect battery ground cable.
2. Tag vacuum and/or ventilation hoses leading to air cleaner, if so equipped, making note of routing and connection points. Now remove vacuum and crankcase hoses allowing removal of the air cleaner assembly.
3. Note the routing of remaining vacuum lines from carburetor and intake manifold. After being tagged, remove vacuum lines.
4. Drain radiator by opening drain plug at lower corner of radiator to relieve pressure. Be prepared for necessary to remove the lower radiator hose. CAUTION: Coolant may still be hot. Allow engine to cool down before proceeding.
5. Disconnect throttle linkage and springs, transmission kick-down/cruise control (if applicable), and carburetor choke rod.
6. Remove gas cap to relieve pressure from fuel system. Disconnect fuel line at carburetor using flare wrench.
7. Drain fuel line to remove the isolated coil and sensor wires.
8. Remove the remaining bracket(s) from the manifold.
9. Remove remaining water hoses and fittings from manifold.
10. Remove all manifold vacuum fittings.
11. Remove any remaining bulkhead from the manifold.
12. Loosen or remove valve covers, if needed, to aid in removing the intake manifold.

NOTE: PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION. See instructions for specific manifolds starting on page 3 of these instructions.

This Instruction sheet is designed to cover a wide variety of vehicle applications. If your vehicle is not equipped with any items referred to in these instructions (EGR, transmission kick-down linkage, air conditioning, power brakes, etc.), proceed to the next step.

Follow these instructions carefully, so that you can avoid the results of installation for this intake manifold. Slight errors in installation can make a big difference in performance, mileage and emissions.

Warranty is void if proper installation procedures are not followed.

CHECK LIST:
- Fully read and understand all of the instructions.
- Inspect manifold for any shipping damage. If damaged, contact Summit immediately.
- Check all threaded holes have been checked by the factory but do a quick check to make sure they are all clean and not damaged.
- Check all internal passages with a flashlight and a wire, making sure the passages are clean and not obstructed.
- Use proper OEM or aftermarket intake gaskets. See bottom of page 2 of this instruction sheet for specific gasket recommendations.
- Use Teflon tape on all pipe plugs.
- Use correct carburetor and adapter if recommended. Always use a new carburetor gasket.
- Re-install vacuum lines correctly and replace any bad lines with the correct size.
- Verify manifold tightness and torque sequence correctly per instruction sheet.
- Set ignition timing to correct specifications.
- Test drive your vehicle before installation, noting at what point automatic shift points occur. After installation of this manifold, adjust linkage to achieve same shift points (if applicable).
- Check emission parts for proper function before removing stock manifold.
- Adjust automatic choke correctly.

NOTE: This manifold was thoroughly checked at the factory. It has been pressure tested to assure that no air or water leaks occur. All the tapped holes have been clean after polishing with the proper taps. The manifold has been vapor blasted to clean it and then meticulously hand detailed before packing for shipment.

PARTS REQUIRED:
1. Intake manifold gasket set. See bottom of page 2 of these instructions for specific recommendations.
2. Oil resistant, silicone based sealant such as Mr.Gasket Part No. 7809, or equivalent.
3. Spray gasket adhesive, such as Fel Pro’s “Spray-Gard” Part No. 305060, or equivalent.
4. Pipe plugs, if needed, either 3/8 or 1/2-NPT.
5. Carburetor base gasket (usually supplied with carburetor).
6. Teflon tape or pipe dope.
Connect all linkages and throttle springs. 
Connect all vacuum and fuel lines. Refer to your tags or drawing for correct placement from Manifold Removal Procedures section (step 3).
Adjust kick-down or throttle pressure linkage for proper shift points. Check all linkages, making sure that they all function properly.

3. Re-tighten gas cap after engine is cold. 
4. Install coil brackets, coil, wires, and all remaining brackets (early style manifold).

INSTALLING THERMOSTAT:
1. Install thermostat and apply silicone sealant on both sides of gasket and place on manifold. Clean thermostat mating surfaces of the manifold must be milled to compensate.

INSTALLING MANIFOLD:
1. Install distributor at this time making sure distributor engages the oil pump drive shaft.
2. Check location of rotor and distributor body, making sure your reference marks line up. Refer to Hold-down Removal section (steps 2, 3, and 4). Install hold-down clamp and tighten distributor just enough that it still can be rotated by hand. Re-install distributor cap and wires.
3. Connect battery cables.
4. Hook up timing light and start engine; set timing to factory specs, tighten distributor.
5. Check for possible fuel, oil, or coolant leaks and proper choke operation.
6. Install air cleaner.

CAUTION: Check that there is adequate clearance for throttle and choke linkages through their range of travel.

CAUTION: Do not over-tighten or cross-thread fittings, bolts, and nuts. Use caution when threading to threads or cracked mounting bosses may result unless caution is used when torquing.

2. Install all water sensors and vacuum fittings into manifold.

CAUTION: Do not plug all unused water and vacuum ports in the manifold with plugs.

GENERAL INFORMATION:
1. Periodically (every 6 months or 6000 miles) re-check the torque on the manifold bolts to minimize the possibility of a vacuum leak.
2. If the cylinder heads have been milled or the cylinder block “decked,” the cylinder head faces and the end surfaces of the manifold must be refaced to compensate. This is necessary to maintain correct port alignment, minimize the possibility of manifold vacuum leaks, and assure proper engine performance.
3. Ignition timing should be set to factory specifications. Any attempt to further advance the initial ignition setting will result in an adverse effect on exhaust emission levels and improper engine operation. Since idle speed increases as the manifold vacuum increases, the only way to bring the idle speed down to an acceptable level, is to close the throttle plate progressively by hand to provide proper engine perfromance. Closing the throttle plates in this manner will change the geometry between the throttle plates and the idle fuel ports. This can cause idle quality deterioration and make it difficult to get the idle mixture rich enough. If more advance is desired, it should be done in the distributor advance curve.
4. If changing from a 2BBL intake manifold (NOTE: Intake Gasket Recommendations:

226022 & 226020 - Fel-Pro #1210 or #1212
226031 - Fel-Pro #1250

226036 - Fel-Pro #1250
226042 - Fel-Pro #1213 (non-Magnum) or Mopar #4878049 (Magnum)

Check legally in your state, it is necessary to sometimes adjust the transmission kick-down linkage to the carburetor in order that it may obtain wide-open throttle. This adjustment is made by loosening the locking grommet and pulling enough out of the grommet cable through the grommet to achieve full throttle. Lock the grommet against the kick-down cable and connect kick-down linkage to the carburetor.

INSTRUCTIONS FOR SPECIFIC MANIFOLDS:

1. Install thermostat - This manifold is a stock replacement part when used with a stock or legal replacement carburetor or 472-73 427, 428, 427 and 460 cars. The carburetor must be removed before manifold installation. Do not use cork or rubber seals. The manifold is forward of the stock position by .25". If your manifold is forward of the stock position by .25", do not install. Use Fel-Pro #1250 or Fel-Pro #1212.

2. Manifold Port Design - This manifold was designed to generate a maximum power band from idle to 6,000 rpm with the latest style oval port heads. We recommend using the manifold as-cast with the early style (large oval port) cylinder heads when operating within the recommended rpm range.

3. Intake Gaskets - Use Fel-Pro #1210 or #1212.

4. Carburetor recommendations:
   a. Original Quadrajet 4BBL spread bore
   b. Holley #470770 750 cfm spread bore
   c. Holley #48505S 750 cfm
   d. Edelbrock #1405, #4146 600 cfm
   e. Edelbrock #1407 750 cfm
   f. Edelbrock Q-Jet #8101, #1100 750 cfm
   g. This manifold is supplied with a special carb adapter plate and gasket. You will need to install this adapter if you elect to use a square bore carburetor instead of the stock size round baffle

5. Use a Fel-Pro #1212 intake gasket.

FOR INSTALLATION:
1. When installing, be sure to use new gaskets on each manifold to adapt both early and later type manifold gaskets at all four corners. If manifold is forward of the stock position by .25", do not install. Use Fel-Pro #1250 or Fel-Pro #1212.

Special Features
These manifolds have a dusting port recommendation only and have a port setup that is not found on the stock manifold or most aftermarket manifolds. One feature is the addition of two tapped water ports in the back portion of the manifold. These holes are 3/8 NPT and must be plugged with pipe plugs if not used. Or you may find it more advantageous to position your temperature gauge sending unit in one of these back ports to avoid running wires to the front of the engine.