



## 8021 CJ/SCJ 429/460 *STEALTH*<sup>™</sup> INTAKE MANIFOLD INSTALLATION INSTRUCTIONS



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

Thank you for choosing WEIAND for your manifold needs. It is our concern that you follow these instructions carefully, so that you can achieve the desired results. Slight errors in installation can make a big difference in performance, mileage, and emissions. Warranty is void if proper installation procedures are not followed. **PLEASE READ THE INSTRUCTIONS COMPLETELY BEFORE INSTALLATION.**

**IMPORTANT:** Although all WEIAND parts pass several inspections, it is imperative that the installer personally inspects the part before installation. Run a stiff wire through all passages while shining a bright light into it. Also, wash the part using mild soap and water solution. Check the fit on all bolt holes for proper alignment and thread any fittings in first by hand. Failure to perform these simple checks could result in engine damage and may void your warranty.

**APPLICATION:** The WEIAND 8021 (CJ/SCJ) *Stealth*<sup>™</sup> manifold was designed for use on 429 Wedge and 460 Ford engines. This manifold concentrates power from 1000 to 6800 RPM range, making it ideal for street, RV, and performance applications. The 2P-180°-style manifold was designed to accept most stock hardware such as coolant lines, vacuum lines, coil, choke, and brackets. Slight alterations (if any) will be required. This manifold, because of its design, is taller than stock, so hood clearance will have to be checked.

**NOTE:** It may be necessary to purchase some of the parts listed below (or their equivalents) in order to properly complete the manifold installation. Determination of equivalency is the responsibility of the consumer. WEIAND does not assume that responsibility.

**NOTE:** When using an electric choke carburetor, it may be necessary to modify the intake or install a spacer for adequate clearance of the fast idle lever. If a spacer is used, please check hood clearance before closing the hood.

### PARTS REQUIRED:

- Performance intake manifold gasket set (Fel-Pro® 1231)
- Thermostat housing gasket
- Oil-resistant, silicone-based sealant (Permatex® silicone “form-a-gasket”, Dow Corning® Silastic®, or equivalent)
- Spray gasket adhesive (Permatex® 80064 High Tack™ Spray-A-Gasket™ or equivalent)
- Pipe plugs, if needed
- Carburetor-base gasket (usually supplied with carburetor)
- PTFE tape

**NOTE:** Never install tapered (pipe) fittings in an aluminum manifold without PTFE tape or thread damage will occur.

### TOOLS REQUIRED:

- Socket wrench set – 3/8” drive ratchet and extensions
- Open end wrenches – 3/8” to 1”
- Box end/flare wrenches (optional)
- 10” adjustable wrench (crescent)
- Ignition wrench set
- Screwdrivers – standard and Phillips, various lengths
- Gasket scraper
- Needle nose pliers
- Drain bucket
- Timing light
- Torque wrench
- File

## MANIFOLD REMOVAL PROCEDURE

1. Disconnect the ground cable from the battery.
2. Identify the vacuum and crankcase ventilation hoses (if any leading to air cleaner and note routing and connection points). Remove the air cleaner.
3. Prior to removing any other vacuum lines, identify the routing of the lines. Mark and remove the vacuum lines from the carburetor and/or intake manifold.
4. Drain the radiator. (It may be necessary to remove the bottom radiator hose if there is no drain plug in the radiator).

**WARNING:** Hot water and steam may be present if the engine is still warm.

5. Disconnect the throttle linkage, transmission kick-down linkage (auto trans. only), and choke rod from the carburetor, if applicable.
6. Loosen the gas cap to relieve pressure from the fuel system. Disconnect the fuel line at the carburetor using flare wrenches. Plug the end of the fuel line to prevent fuel leakage. Remove the carburetor.
7. Tag and disconnect the ignition coil and sensor wires. Remove the ignition coil bracket and the coil.
8. Remove the radiator hose, thermostat housing, and the thermostat.
9. Remove all water and vacuum fittings from the manifold.
10. Remove all remaining brackets (if any) from the manifold.
11. Loosen and remove valve covers to assist in the manifold removal and the new manifold instructions.

## IGNITION REMOVAL PROCEDURES

**NOTE:** In some applications, removal of your distributor is not necessary. If so, move on to step 6 below.

**CAUTION:** FOLLOW THESE INSTRUCTIONS CAREFULLY, AS SERIOUS DAMAGE CAN OCCUR WHEN THE IGNITION IS NOT REINSTALLED CORRECTLY.

1. Remove the distributor cap.
2. Note the position of the rotor and make a mark on the distributor case in line with the rotor tip.
3. Note the position of the distributor vacuum canister and place some type of reference mark on a convenient surface.
4. Note the position of the points, if open, how much; if closed, note the distance from the point block to the cam lobe.
5. Remove the distributor. **DO NOT** rotate the engine after removing the distributor.
6. Remove all of the intake bolts and/or studs.
7. Remove the intake manifold.

## BEFORE INSTALLATION OF MANIFOLD ON ENGINE

It is necessary to press in the new water pump by-pass nipple (supplied with manifold) before the manifold is installed on the engine. Use Fel-Pro's "Pli-A-Seal" (GS215), Permatex "Form-A-Gasket" (GS216), or equivalent NON-HARDENING sealer on the nipple and press the square into the manifold, leaving approximately 1-1/4" exposed.

**NOTE:** You may wish to tap the hole with a 3/8" American standard pipe tap and use a 3/8"P x 5/8" hose nipple fitting available in most auto parts or hardware stores.

## INSTALLING YOUR NEW WEIAND MANIFOLD

1. To prevent gasket pieces from falling into ports and valleys when cleaning old gaskets from head surfaces, lay rags into all ports and valleys. When clean, remove the stuffing carefully. Make sure that all particles that fell on the rags are completely removed. Wipe surfaces with rags soaked in lacquer thinner or alcohol to remove any oils or grease. This is a must for proper manifold/gasket sealing.

**WARNING:** On most 429 Wedge and 460 Ford engines, there are dowel pins in the front and rear block sealing surfaces. These dowel pins must be removed. WEIAND manifolds are not drilled for dowel pins and will not seal if they are not removed. Damage to the intake may occur.

2. Apply a thin coat of spray adhesive to the cylinder head side of the intake gasket surface. Lay the manifold gaskets in place. **DO NOT USE THE FACTORY STEEL VALLEY PAN.** Due to their superior sealing qualities, WEIAND recommends manifold gasket set (Fel-Pro P/N 1231).

3. Apply a 1/4" wide bead of oil-resistant RTV-silicone sealant to the front and rear block-sealing surfaces, making sure to overlap manifold gaskets at all four corners. Do not use cork or rubber seals.

**NOTE:** Thread sealant should be used on all bolt threads.

4. Carefully, lay your WEIAND intake manifold in place. If the manifold must be moved, recheck the gaskets. Install the intake bolts initially torquing to 10 ft./lbs., then 15 ft./lbs., following the factory GM sequence, and finally torque to 25 ft./lbs. as shown in **Figure 1**.
5. Install the thermostat, gasket, and housing (using silicone sealant on both sides of the gasket). Be sure that the thermostat housing has been cleaned of any old gasket material.
6. Install the heater and radiator hoses.
7. If you had to remove your distributor, install it at this time. Make sure that your distributor engages the oil pump drive shaft.
8. Check the location of the rotor and distributor body, making sure your reference marks line up. Refer to ignition removal section (steps 2, 3, & 4). Tighten the distributor body just enough that it can still be rotated by hand.
9. Install all water sensors and vacuum fittings into the manifold.

**NOTE:** Use PTFE tape or pipe dope on all pipe threads.

10. Plug all unused water and vacuum ports in the manifold.
11. Install your four carburetor studs in the manifold. Place the carburetor gasket on the clean carburetor pad. Do not use any type of sealant on the carburetor gasket.
12. Install the carburetor. Connect all linkage and throttle springs.
13. Connect all vacuum and fuel lines. Refer to your tags or drawings for correct placement.
14. Automatic transmissions only: Adjust kick-down or throttle pressure linkage for proper shift points. Check all linkages, making sure that there are no obstructions in function.
15. If required, reinstall valve covers with the new gaskets.
16. Install the A/C and coil brackets, coil, wires, and all brackets that were removed from the manifold.
17. Close the drain and fill the radiator to the proper level with coolant.
18. Retighten the gas cap and connect the battery cable.
19. Hook up the timing light and start the engine. Set the timing to factory specs. Tighten the distributor.
20. Check for possible fuel, oil, or coolant leaks and for proper choke operation.
21. Install the air cleaner.

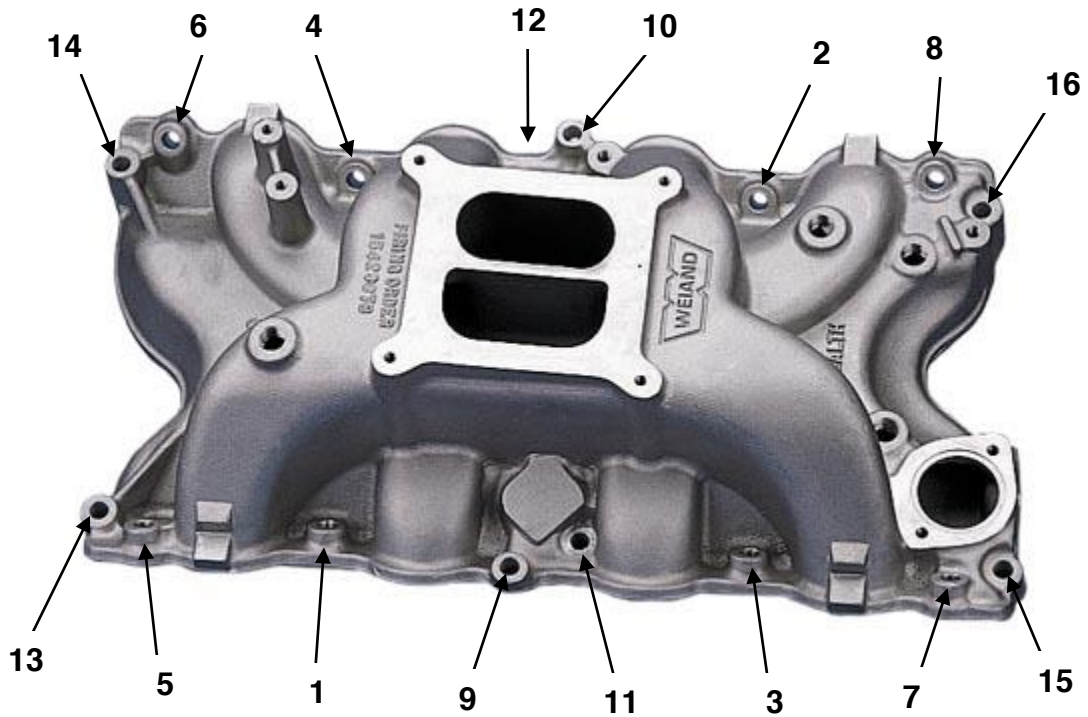
**CAUTION:** Check to be sure that there is adequate clearance for the throttle and choke linkages through their range of travel.

**IMPORTANT:** Check for adequate hood clearance before closing the hood.

**NOTE:** When using an electric choke carburetor, it may be necessary to modify the intake or install a spacer for adequate clearance of the fast idle lever. If a spacer is used, please check hood clearance before closing the hood.

22. Operate the engine for 30 minutes. Allow the engine to cool and retorque the manifold bolts following step 4 above.

**YOUR MANIFOLD INSTALLATION IS COMPLETED.  
NOW IS A GOOD TIME TO CHANGE YOUR OIL AND FILTER.**



**Figure 1**  
**Bolt tightening sequence**

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