



7521 & 7522 RECTANGULAR PORT 7523, 7524, & 7528 OVAL PORT “TEAM G”

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 kickdown linkage, air conditioning, power brakes, etc.), proceed to the next step.

Thank you for choosing WEIAND by Holley 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 AND THOROUGHLY BEFORE ATTEMPTING THIS INSTALLATION.**

IMPORTANT: Although all WEIAND by Holley 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 a mild soap and water solution. Check the fit on all bolt holes for proper alignment and thread any fittings by hand before you begin. Failure to perform these simple checks could result in engine damage and may void your warranty.

APPLICATION:

Available for both oval (7523, 7524, & 7528) and rectangular port (7521 & 7522) cylinder head-equipped big block Chevrolet engines, are the WEIAND by Holley hi-rise “Team G” manifolds. These are the most advanced single plane, 360° manifolds on the market, combining excellent bottom-end performance (2500 RPM if the 7523 is used) with an exceptionally broad power curve that extends to 8500 RPM when the 7522 is used. These manifolds are ideally suited to circle track, drag racing, or high performance marine use. The 7521, 7523, & 7528 will accept any square-bore carburetor. The 7522 & 7524 will accept a Holley “Dominator” ONLY. These “Team G” manifolds were designed for competition use, and they may not accept any stock accessory brackets. Also, hood clearance must be checked.

NOTE: There are no vacuum holes drilled in this manifold. If you need vacuum for any power accessories, a hole must be drilled and tapped at the back of the manifold plenum (area beneath the carburetor).

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 or Holley does not accept that responsibility.

PARTS REQUIRED:

- A. Intake manifold gasket set, such as Felpro P/N 1212 for oval, or P/N 1275 for rectangular.
- B. Thermostat housing gasket (Felpro P/N 2201, 2202).
- C. Oil resistant, silicone based sealant, such as Permatex Silicone “Form-A-Gasket”, Dow Corning Silastic, or equivalent.
- D. Spray gasket adhesive, such as Felpro’s “Spray Tack” P/N 220.
- E. Pipe plugs, if needed.
- F. Carburetor base gasket (usually supplied with carburetor).
- G. Teflon tape.

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

TOOLS REQUIRED:

- A. Socket wrench set, 3/8" drive ratchet and extensions
- B. Open end wrenches, 3/8" to 1"
- C. Box end flare wrenches (optional)
- D. 10" adjustable wrench (crescent)
- E. Ignition wrench set.
- F. Screwdrivers, standard & Phillips, various lengths
- G. Gasket scraper
- H. Needle nose pliers
- I. Drain bucket
- J. Timing light
- K. Torque wrench
- L. File
- M. 3/8" x 16NC tap (for cleaning bolt holes)

MANIFOLD REMOVAL PROCEDURE:

1. Disconnect the ground cable from the battery.
2. Identify the vacuum and crankcase ventilation hoses (if any) leading to the air cleaner and note the routing and connection points. Then, 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 kickdown 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 fuel line to prevent fuel leakage, and remove the carburetor.
7. Tag and disconnect the ignition coil and sensor wires. Remove the ignition coil bracket and 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 or remove the valve covers (if required) to assist in the manifold removal.

IGNITION REMOVAL PROCEDURES: In some applications, removal of your distributor is not necessary. If so, move on to step 12.

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

- A. Remove the distributor cap.
- B. Note the position of the rotor and make a mark on the distributor case in line with the rotor tip.
- C. Note the position of the distributor vacuum canister and place some type of reference mark on some convenient surface.
- D. Note the position of points, if open, how much; if closed, note the distance from the point block to the cam lobe.
- E. Remove the distributor. DO NOT rotate the engine after removing the distributor.

INSTALLING YOUR WEIAND MANIFOLD:

1. To prevent gasket pieces from falling into ports and valley when cleaning the old gaskets from the head surfaces, lay rags into the ports and valley. 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 oil or grease. This is a must for proper manifold/gasket sealing.

2. Apply a thin coat of spray adhesive to the cylinder head side of the intake gasket surface. Lay the manifold gasket in place at this time. Due to their superior sealing qualities, WEIAND recommends using a high performance style intake manifold gasket set, such as Felpro's P/N 1212 for oval ports, or 1275 for rectangular ports.
3. Apply a 1/4" wide bead of oil-resistant RTV silicone sealant to the front and the 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 to 15 ft/lbs, and finally to 25 ft/lbs, all using the factory GM torque sequence.
5. Install the thermostat, gasket, and housing (using silicone sealant on both sides of the gasket). Be sure the thermostat housing has been cleaned of any old gasket material.
6. Install the heater and radiator hoses. **NOTE:** Because of the elevated design of the water crossover, it will be necessary to extend the water pump bypass hose or install a 1/2" P x 5/8" hose nipple (with a 45° bend) into the manifold. You may also plug both outlets and drill two 1/8" holes in your thermostat. This then becomes your bypass.
7. If you had to remove your distributor, reinstall it at this time. Make sure 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 the ignition removal system (steps B, C, & D). Tighten the distributor body just enough that it can still be rotated by hand.
9. Install the water sensors and vacuum fittings into the manifold. **NOTE:** Use Teflon 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 the linkage and throttle springs.
13. Connect all vacuum and fuel lines. Refer to your tags or drawing for correct placement.
14. Automatic transmissions only: Adjust the kickdown or throttle pressure linkage for proper shift points. Check all linkages, making sure that there are no obstructions in function.
15. If required, reinstall the valve covers with the new gaskets.
16. Close the drain and fill the radiator to the proper level with coolant.
17. Retighten the gas cap.
18. Connect the battery cable.
19. Hook up the timing light and start the engine. Set the timing to factory specifications. Tighten the distributor.
20. Check for possible fuel, oil, or coolant leaks. Check for proper throttle 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.
22. Operate the engine for 30 minutes. Allow the engine to cool and retorque the manifold bolts to 25 ft./lbs., again using the factory GM torque sequence.

YOUR MANIFOLD INSTALLATION IS COMPLETE.
NOW IS A GOOD TIME TO CHANGE YOUR OIL AND FILTER!



7521



7522



7522



7524



7528

**Holley Performance Products
P.O. Box 10360
Bowling Green, KY 42102-7360**

Technical Service: 1-270-781-9741

Fax: 1-270-781-9772

**For online help, please check the Tech Service section of
our website: www.holley.com**