INSTALLATION INSTRUCTIONS FOR HOLLEY CHRYSLER STREET-DOMINATOR MANIFOLD

READ AND FOLLOW INSTRUCTIONS BEFORE AND DURING INSTALLATION TO PRESERVE WARRANTY.

The Holley STREET DOMINATOR manifolds, 300-10 and 300-14 have been designed for use on all Chrysler 383-440 engines, except hemi head engines. Its low end torque and usable power range of idle to 5500 RPM make it ideal for street and street-strip applications. Because of its unique design, no carburetor adaptors are required to complete any square-bore or spread-bore four-barrel carburetor installation (See exception Step 25).

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

PARTS REQUIRED:

A. Intake Manifold Gasket Set:

383-400	440
Chrysler Part #3671874	Chrysler Part #3671933
Except 1974 performance 4 barrel engines	
Chrysler Part #3769932	Chrysler Part #3769933

Additional parts required for a simple and complete installation are provided in Holley Manifold Installation Kit No. 301-7.

NOTE: This is a general instruction sheet which covers a wide range of vehicle applications. If your vehicle is not equipped with items refered to in these instructions (EGR, transmission kickdown linkage, air conditioning, power brakes) just go on to the next step.

TOOLS NEEDED FOR INSTALLATION:

Socket Set-3/8" Drive	
Open End Wrenches	Gasket Scraper
10" Adjustable Wrench	Needle Nose Pliers
Ingition Wrench Set	Torque Wrench
Screwdriver Set	3/8" Allen Wrench

NOTE: To reduce chances of engine contamination by dirt or other foreign material, it is advisable to clean the engine exterior before starting manifold change.

INSTALLATION INSTRUCTIONS:

1. Remove air cleaner.

2. Prior to removing any vacuum lines, identify the routing of the lines and, also, whether or not the source of vacuum is a "timed (ported) vacuum" source or "direct vacuum" source. (It is helpful to make a schematic sketch of the vacuum line routing). "Timed vacuum" sources and "direct vacuum" sources can be determined as follows:

   A. Start engine and allow it to warm-up to operating temperature.

   B. With engine idling, disconnect each vacuum line (one at a time) and note if there is manifold vacuum. If there is vacuum, the source is a "direct vacuum" source. If there is no vacuum, the source is probably "timed." Check by slowly opening the throttle to approximately 2000 RPM. You should now feel vacuum from the "timed" source. Mark and remove vacuum lines.

3. Disconnect ground cable from battery.

4. Disconnect throttle linkage, transmission kickdown linkage and choke lines from carburetor.

5. Remove gas cap to relieve pressure from fuel system. Disconnect and plug the fuel line at the carburetor.

6. Remove carburetor.

7. Remove coil bracket with coil.

8. Remove the two rear air conditioning compressor brackets.

   NOTE: The two bolts holding the A/C bracket to the front of the engine may have to be loosened to gain sufficient clearance to remove the manifold.

9. Remove EGR valve.

10. Remove EGR amplifier.

11. Remove electric choke control unit.

12. Remove manifold "hold-down" bolts.

13. Loosen or remove one valve cover (it may be necessary to use a new gasket to prevent oil leakage.)

14. Carefully remove manifold.

15. Remove the remaining bolts holding the manifold gasket to the engine block and remove gasket.

16. Clean old gaskets from cylinder head and block surfaces. (Before cleaning, stuff intake ports in head with paper towels or rags and lay clean, *lint-free,* rags in valley to prevent scrapings from entering cylinder head ports and engine). See Figure 1.

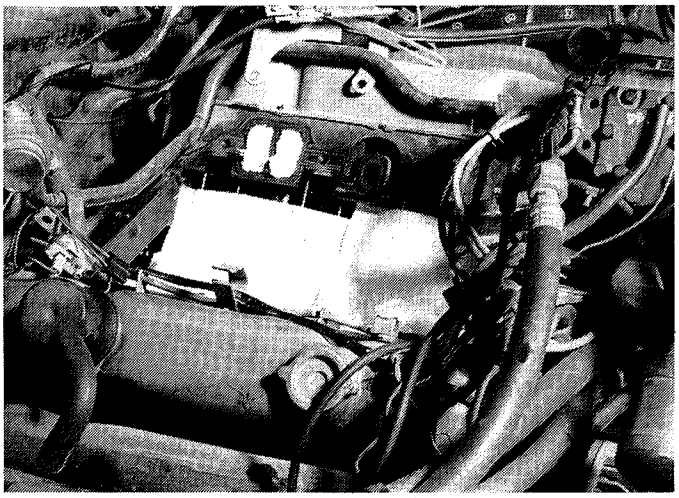

Fig. 1

17. It is advisable to run a 3/8"-16 tap in each manifold bolt hole in each cylinder head to clean the holes to assure even manifold sealing. If a tap is not available, run a manifold bolt through each hole before installing the manifold. Carefully remove port stuffing and rags, assuring that no dirt or foreign material has entered the engine.

18. Before installing new manifold, transfer all fittings from the old manifold. Pipe plugs are provided to close off all unused openings.

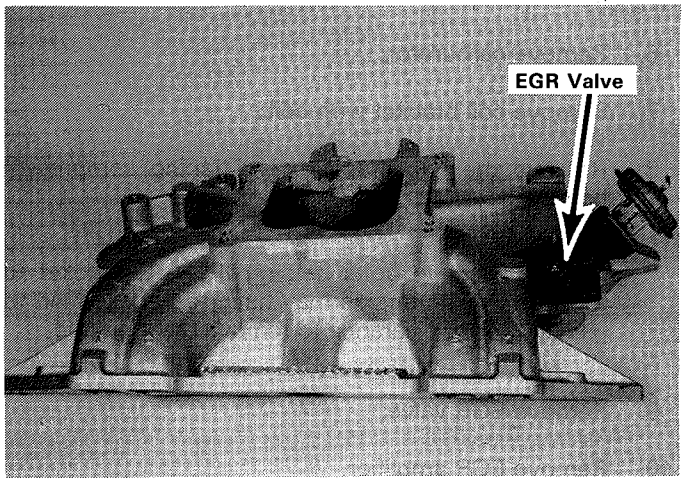

Fig. 2

If the vehicle is equipped with EGR (Exhaust Gas Recirculation) equipment, the EGR valve should be mounted on the pad at the rear of the manifold with the stock EGR gasket. Use EGR valve bolts provided. See Figure 2.

If no ERG valve is used, two cap plugs are provided

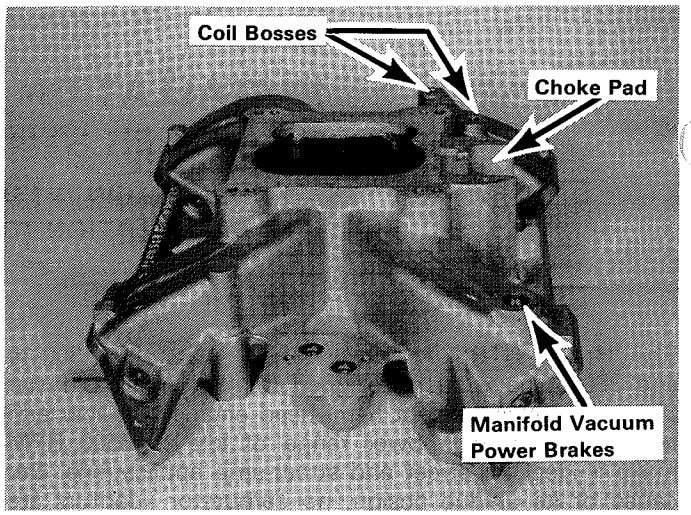

Fig.3

to seal the EGR passages. These should be carefully pressed into each of the two EGR holes so that the top edge of the plug is flush with the EGR pad. See Figure 3.

19. Apply a small amount of sealer to the four corners between the cylinder head and the block.

20. Install intake manifold gasket.

NOTE: Holley Carburetor Division strongly recommends the use of new, original equipment intake manifold gaskets (or their equivalent) due to their proper thickness and superior sealing characteristics in the severe operating environment of late model street-driven engines.

21. Carefully lay intake manifold in place.

22. Start all hold-down bolts by hand; be sure all brackets are under proper bolts.

23. Tighten bolts to 15 ft. lbs. and progress to 30 ft. lbs. in 5 ft. lbs. increments noting the torquing sequence. See Figure 4. Retighten valve covers.

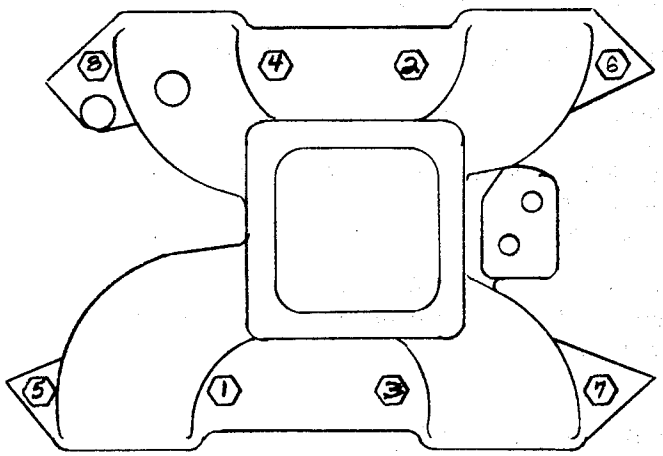

Fig. 4

24. Install ignition coil, reposition coil in bracket, if necessary, and attach all wires.

25. Install studs in manifold flange, and lay carburetor gasket in place. If carburetor to be used has a "timed spark" hole visible from the bottom of the carburetor, use flange spacer, Holley Part No. 61BP-529. See Figure 5.

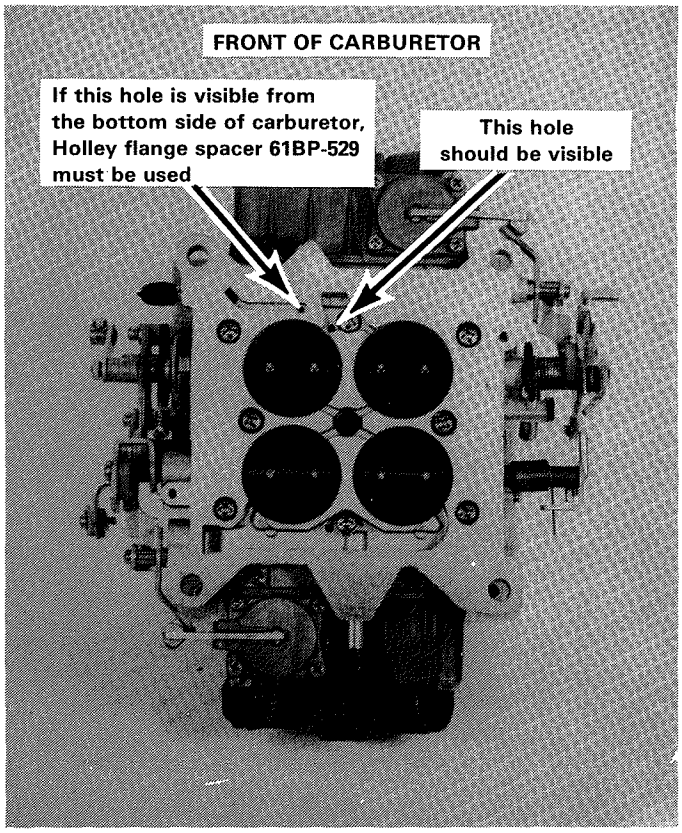

Fig. 5

26. If vehicle is equipped with power brakes, install power brake line in back of carburetor or in tapped hole on Runner No. 8. See Figure 3).

27. Install new carburetor, connect throttle linkage, automatic kickdown linkage, hoses and fuel line according to instructions supplied with carburetor, or install original carburetor in reverse order of removal.

    NOTE: Transmission shift points are determined by the position of the kickdown sliding bar relative to the carburetor throttle lever. Consult vehicle chassis service manual if readjustment is necessary.

    If wide open throttle can not be obtained with the adjustment provided, it may be necessary to redrill the sliding bar. To find the new location of the hole, hold the throttle at the wide open position with the sliding bar disconnected at the rear. Push the kickdown rod all the way back and mark the location of the new hole. Drill to the same size.

28. For divorced choke operation, install choke and choke rod as in the original application.

    NOTE: Correct choke operation is dependent upon the configuration of the choke bi-metal, choke rod and the carburetor to manifold flange gasket used. If the gasket and choke rod supplied in the Holley installation kit are used, proper choke operation will result.

    Connect choke rod to carburetor; note whether bi-metal (choke spring) pushes or pulls to open. (Be sure choke plate opens when the choke bi-metal is heated).

29. Install two rear A/C brackets. Retighten the two bolts from the front if necessary.

30. Connect remaining vacuum lines in the original position as per sketch or tags. Plug all unused vacuum outlets.

    NOTE: Holley Carburetors designed for Chrysler EGR applications do not require the use of the EGR "Vacuum Amplifier." Use a single hose connecting the EGR valve directly to the EGR port on the carburetor per carburetor instruction sheet.

31. Reinstall gas cap.

32. Connect battery and start engine.

33. Check for fuel leaks and proper choke operation.

34. Install air cleaner. **IMPORTANT:** Check for adequate hood clearance before closing hood.

35. Operate engine for thirty minutes. Allow engine to cool, and check manifold bolts for tightness.

GENERAL INFORMATION:

1. It is advisable to periodically recheck (every six months or 6000 miles) the torque on the manifold bolts to minimize the possibility of a manifold 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 milled to compensate. This is necessary to maintain correct port alignment, minimize the possibility of manifold vacuum leaks, and assure proper engine performance.

    NOTE: The cylinder head faces of the manifold are each 35° from the horizontal.

3. For maximum fuel economy, it is advisable to use a "snorkel" type air cleaner with pre-heated inlet air (heated by a stove on the exhaust manifold) to help promote good fuel atomization and vaporization. This also helps prevent carburetor icing and is beneficial for good low speed throttle response.

4. Since idle speed increases as the ignition is advanced, the only way to bring the idle speed down to an acceptable level is to close the throttle plates with the idle speed adjusting screw. 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.

5. When changing from a two-barrel intake manifold to a four-barrel intake manifold (**NOTE:** check the legality in your state), it is sometimes necessary to adjust the transmission kickdown linkage to obtain wide open throttle. Provision for this adjustment may be under the dash or at the throttle cable bracket. Consult the appropriate chassis service manual for more detailed adjustment instructions.

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