



INSTALLATION INSTRUCTIONS FOR TYPE 4 EMPI HPMX & IDF DUAL CARBURETOR KITS



READ THOROUGHLY ALL STEPS OF THESE INSTRUCTIONS BEFORE BEGINNING THIS INSTALLATION.

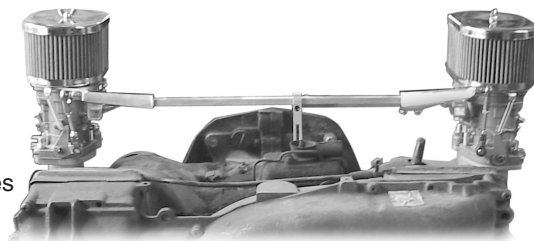
TOOLS AND EQUIPMENT NEEDED:

Combination, box or open end wrenches (metric + U.S.)
 Socket set metric
 Screwdriver (Regular and Phillips)
 Pliers
 Gasket Scraper
 Rags
 Cleaning Solvent
 Knife
 Gasket Sealer

3/8" Drive Ratchet
 3/8" Drive Swivel
 3/8" Drive Extension (10-12")
 3/8" open-end Wrench
 Allen Wrenches
 Wire Cutters

PARTS SUPPLIED WITH INSTALLATION KIT:

1 - Gasket set
 1 - Hardware Kit
 2 - Linkage Mounts
 2 - Carburetors
 2 - Intake Manifolds
 2 - Air Filter Assemblies
 1 - Alum. Hex Bar
 1 - Fuel Line
 1 - Accel. Cable Bracket (914 only)



Your EMPI carburetor(s) come equipped with the Main, Air, and Idle jets most often used in the kit's particular application. Although it is a bolt-on kit, with the necessary hardware, gaskets and linkage to install the carburetor(s) onto the desired motor – The carburetor(s) are not jetted size specific. Multiple engine displacements, compression, camshafts, ignition, cylinder heads, and many other items such as operating elevation will affect the overall requirements of the air/fuel ratio and may require additional jetting and tuning. A wide variety of jets and components are available from your EMPI dealer.

The following instructions are based on an engine in stock condition. If you have made modifications to your engine, some of the following steps may not apply to your application.

NOTE: ON CARS WITH ORIGINAL FUEL INJECTION, A LOW PRESSURE FUEL PUMP (41-2000-8) AND CENTRIFUGAL ADVANCE DISTRIBUTOR (00-9431-B) MUST BE USED. ALL APPLICATIONS WILL BENEFIT FROM USING A CENTRIFUGAL ADVANCE DISTRIBUTOR.

DISASSEMBLY FOR FUEL INJECTED ENGINES

Stock fuel injection fuel pump **MUST** be replaced. Before attempting removal of the fuel pump: either drain the fuel tank, or clamp off the fuel line **BEFORE** the fuel filter. Clamping is only recommended if hose is in good condition.

1. Disconnect the electrical lead to the stock fuel pump. Remove the fuel pump bracket and pump assembly. Replace the stock fuel filter, if necessary.
2. Install the replacement fuel pump, per the manufacturer's recommendations. Remove the clamp pinching the line once the pump is installed. Check for fuel leaks.
3. Disconnect the metal fuel line to the injectors.
4. Disconnect the fuel pressure regulator and plug it off.
5. Disconnect all electrical components for the stock fuel injection system. Either tape the wires, or use tie-wraps to position them in a safe area. Tape all connectors to prevent any shorts.
6. Remove the mounting nuts and any other hardware retaining the intake and fuel injection system. Remove the manifolds and injection housing as one assembly. Insert a clean rag in the intake ports and clean the mounting surface with a gasket scraper.
7. **STOCK FUEL INJECTION DISTRIBUTOR ASSEMBLY MUST BE REPLACED.** Disconnect and remove the stock distributor. Install the replacement distributor per the recommendation above.

DISASSEMBLY FOR CARBURETORS

1. Remove the vehicle's gas cap.
2. Disconnect the battery.
3. Remove the stock air filter and attached components.
4. Remove the distributor cap and ignition wires. Identify the wires for correct reassembly.
5. Remove fuel line from the pump to the carburetors. Plug the outlet to prevent leakage.
6. Disconnect the throttle cable and electric choke wire/idle cut-off solenoid wire from the carburetors. (Insulate the wire connectors to prevent any shorts. These wires will not be reused).
7. Unbolt and remove carburetors and manifolds from the heads. Insert a clean rag in the intake ports to prevent dirt and debris from entering the engine.
8. Thoroughly clean the intake mounting surfaces using a gasket scraper.

BENCH ASSEMBLY

1. Install studs into manifolds.
2. Install carburetor gaskets & carburetor onto manifolds using nuts & lock washers in kit. **DO NOT OVERTIGHTEN CARBURETOR HOLD DOWN NUTS (12-14 FT./LBS MAXIMUM).**
3. Install the throttle levers, if necessary, (**See Figure 1 & 2**) on left carburetor install the throttle stop tab prior to installing the throttle lever. Relocate left carburetor idle screw to opposite end of carburetor.
4. Replace fuel enrichment lever assembly from right carburetor with block off plate in kit. Use short screws & washers in kit (**See Figure 3**).
5. Install plastic bushings into linkage mounts.
6. Remove studs from carburetor top. Note locations of long & short studs.
7. Install linkage mounts onto carburetors, followed by air filter bases using gaskets, long & short 6mm bolts and lock washers in kit (**See Figure 4**).
8. Install the jam nuts and swivel ball-ends onto small hex rods, gold nuts and swivel ball-ends with a groove are for left hand thread.
9. Install the carburetor linkage rods to each of the carburetor throttle levers. Connect the carburetor return springs to each of the carburetor throttle levers and hook other end of spring to tab hanging down from air filter base.
10. Slide center pull lever and the left and right extension arms onto the hex bar so there is approximately 90° between centerlines of extension arms compared to the center pull lever. Install retention hardware onto the parts, but do not fully tighten at this time. Install jam nuts onto ball-ends and thread ball-ends into each end of the hex bar.

FINAL INSTALLATION

1. Remove rag from left intake ports and install new intake gasket. Install left carburetor assembly using nuts and lockwashers in kit.
2. Insert centering spring into linkage bracket bushing of left carburetor. Insert left hand ball-end of hex bar assembly into left bracket bushing against centering spring. Temporarily support to perform next step.
3. Remove rag from right intake ports and install new intake gasket. Install right carburetor assembly leave mounting nuts loose at this time.
4. Install centering spring into right carburetor linkage bracket bushing, tilt carburetor assembly and insert right bar ball-end of hex bar into linkage bracket bushing.
5. Carefully tighten right manifold nuts keeping an eye on the hex bar end play. If hex bar starts to bind as nuts are tightened - **STOP**. Check if hex rod ball-ends are threaded in fully into hex rod. Some installations will require shorting of hex bar. **Hex bar is designed with sufficient internal thread length to allow removal of up to 1" off of either side.**
6. After right manifold nuts are tight, adjust hex bar ball-ends to achieve approx. 1/32" clearance between bushing flange & ball flange. After ball ends are properly adjusted, lock the jam nuts in place (See Figure 1).
7. Install carburetor linkage rods into outer most holes in extension arms.
8. Locate hex bar extension arms so linkage rods are "centered" vertically when in the 1/2 throttle position, tighten extension arm fasteners. Locate center pull lever to align with throttle cable and tighten fastening bolt.
9. Adjust carburetor linkage rods so both carburetor throttle levers are resting on idle adjust screws. Leave jam nuts loose.
10. Check throttle operation for free movement. If there is any indications of sticking or binding, correct as necessary before proceeding.
11. Replace distributor cap & wires, being sure wires are in proper firing order.
12. Remove the plug from the fuel pump outlet and install the new fuel lines supplied in the kit. Inspect hose barb on carburetor and determine if location is correct for your application. Fitting can be moved to face forward or backward. Before starting engine to synchronize the carburetors, be sure carburetor linkage moves freely and ignition plug wires have been replaced in proper firing order.
13. Replace the gas cap and reconnect the battery.
14. Start the engine and check for fuel and vacuum leaks. Correct, if necessary, before proceeding.
15. Synchronize and set idle mixture as per the special instruction included with this kit.
16. After carburetor synchronizing is completed, turn engine off and proceed with throttle cable installation.
17. Install the throttle cable trunion and shortner. Align the center pull lever on the hex bar with the throttle cable and tube. Secure it in place by tightening the set screw.
18. Position the stock throttle cable next to the shortner and measure the excess cable to be cut.
19. Once you have correctly measured the amount of cable to be removed, cut the cable. Install the new cable end into the shortner. Lock the cable in place by tightening down the set screw. **NOTE: WHEN SETTING THE CABLE ADJUSTMENT AT CENTER PULL LEVER, THE ACCELERATOR PEDAL SHOULD BE AT "FULL STOP" AND THEN CABLE IS SET AT CARBURETOR "FULL THROTTLE STOP". THIS WILL KEEP YOU FROM OVER-EXTENDING YOUR CARBURETOR LINKAGE AND THROTTLE SHAFTS.**
20. Complete the installation of the air filter assemblies.

Figure 1

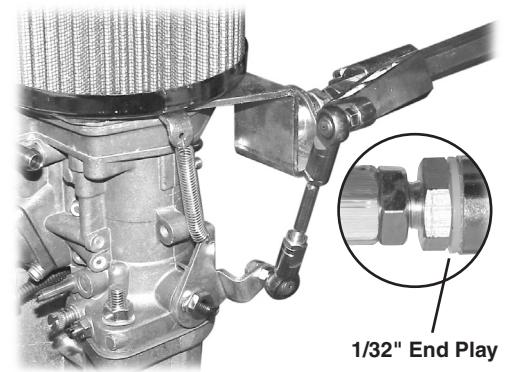


Figure 2

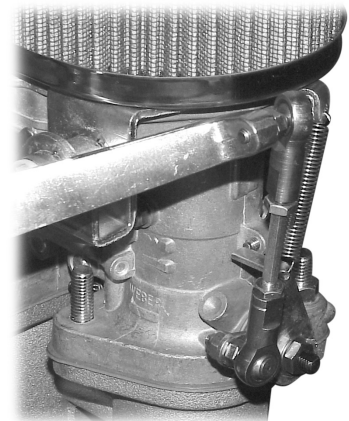


Figure 3



Figure 4

