

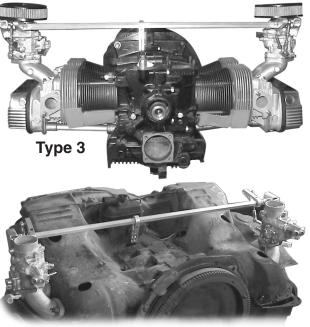
INSTALLATION INSTRUCTIONS FOR TYPE 3 & 4 EMPI DUAL 34 ICT & EPC 34 KITS READ THOROUGHLY ALL STEPS OF THESE INSTRUCTIONS BEFORE BEGINNING THIS INSTALLATION.

TOOLS AND EQUIPMENT NEEDED:

Combination, box or open end wrenches (metric + U.S.)Socket set metricScrewdriver (Regular and Phillips)Pliers3/8" Drive RatchetGasket Scraper3/8" Drive SwivelRags3/8" Drive Extension (10-12")Cleaning Solvent3/8" open-end WrenchKnifeAllen WrenchesGasket SealerWire Cutters

PARTS SUPPLIED WITH INSTALLATION KIT:

- 1 Gasket set
- 1 Hardware Kit
- 2 Linkage Mounts
- 2 EMPI Carburetors
- 2 Intake Manifolds
- 2 Air Filter Assemblies
- 1 Alum. Hex Bar
- 1 Fuel Line



Type 4

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 fuel 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 manufacturer's recommendations. PROCEED TO WEBER CARBURETOR INSTALLATION SECTION.

DISASSEMBLY FOR CARBURETED ENGINES

- 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. Remove linkage assembly.
- 8. Unbolt and remove carburetor and manifolds from the heads. Insert a clean rag in the intake ports to prevent dirt and debris from entering the engine.
- 9. Thoroughly clean the intake mounting surfaces using a gasket scraper.

BENCH ASSEMBLY

(A) Install the studs into the intake manifolds.

- (B) Install the throttle levers and spacers onto carburetors (See Figures 2, 3 & 4). Prior to installing throttle lever, inspect throttle shaft spacers on carburetor. The thicker spacer must be between the throttle return spring arm and the newly installed throttle lever. If thicker spacer is not towards the outside position, swap it with the narrower spacer. This will provide ample clearance for the nylock nut that holds the throttle lever spacer on (See Figure 4). Install long linkage spacer on left carburetor and short linkage spacer on right carburetor. Re-install throttle shaft nuts on each carburetor. (DO NOT OVER TIGHTEN NUTS, 4-5 FT/LBS MAXIMUM). Bend lock tab against nut to hold nut tight.
- (C) Install the flange gaskets and carburetors onto the manifolds. Secure them in place using the lockwashers and nuts from the kit. DO NOT OVER TIGHTEN THE CARBURETOR HOLD DOWN NUTS. (12-14 FT/LBS MAXIMUM).
- (D) Remove return spring from bracket screwed to carburetors. Remove spring bracket from carburetors. Insert bushings into linkage brackets and install linkage brackets to carburetors with bolts and lock washers from the kit.
- (E) Slide the center pull-lever and the left and right extension arms onto the hex bar so there is approximately 60° between the centerline of the arms compared to the center pull lever (See Figure 1). Install retention hardware onto the parts, but DO NOT fully tighten at this time. Install the jam nuts onto the ball-ends and thread the ball-ends into each end of the hex bar.

FINAL INSTALLATION

- 1. Remove the rags from the intake ports and install the manifold gaskets supplied in the kit. Install the left-side (Driver's side) manifold and carburetor assembly first. Secure the manifold in place using the nuts and lock washers from the kit.
- 2. Install the self-centering spring inside the left bracket bushing.
- 3. Insert the left hand ball-end of the hex bar assembly into the left bracket bushing against centering spring. Temporarily support to perform next step.
- 4. Install the right centering spring. Unbrace the hex bar and insert the ball-end into the right bracket bushing and secure right manifold/carburetor assembly NOTE: THE HEX BAR AND BALL-ENDS HAVE BEEN DESIGNED WITH SUFFICIENT THREAD LENGTH TO ACCOMMODATE CUTTING THE BAR IF NECESSARY OR EXTENDING THE BAR ENDS OUT TO GAIN PROPER INSTALLATION. BAR CAN BE CUT APPROXIMATELY 1" ON EITHER END AND STILL HAVE SUFFICIENT THREAD FOR BALL-END INSTALLATION.
- 5. Adjust the hex bar ball-ends to achieve a 1/32" clearance between the bushing flange and ball flange. Once the ball-ends are adjusted correctly, lock the jam nuts in place (See Figure 2).
- 6. Install the carburetor linkage rods to the center hole of each extension arm on the hex bar and to the spacers on carburetor throttle levers (See Figures 2 & 3). NOTE: LINKAGE RODS, ROD ENDS & JAM NUTS ARE LEFT HAND & RIGHT HAND THREAD TO FACILITATE EASE OF CARBURETOR LINKAGE ADJUSTMENT. GOLD NUTS & ROD ENDS WITH GROOVE ARE LEFT HAND THREAD. At this time tighten rod ends fully at carburetor spacers, set linkage rod length to center of adjustment with jam nuts loose, and fully tighten rod ends at hex bar extension arms. Extension arms (on hex bar) should be fully tightened at this time. CAUTION: BE SURE CENTER PULL LEVER IS POSITIONED FOR CORRECT THROTTLE CABLE HOOK-UP, AT IDLE AND FULL THROTTLE POSITIONS. Install carburetor return springs in holes on carburetor arms and linkage mounts. On 72-79 Bus (Type 4) application, screw a 90° fitting into each manifold and connect balance hose between fittings. If vehicle is equipped with power brakes tee into this hose for vacuum source. CHECK THROTTLE OPERATION FOR FREE MOVEMENT. IF THERE IS ANY INDICATIONS OF STICKING OR BINDING, CORRECT AS NECESSARY BEFORE PROCEEDING.
- 7. Reinstall the distributor cap and ignition wires.
- 8. Remove the plug from the fuel pump outlet and install the new fuel lines supplied in the kit. BEFORE STARTING ENGINE TO SYNCHRONIZE THE CARBURETORS, BE SURE CARBURETOR LINKAGE MOVES FREELY AND IGNITION PLUG WIRES HAVE BEEN REPLACED IN PROPER FIRING ORDER.
- 9. Replace the gas cap and reconnect the battery.
- 10. Start the engine and check for fuel and vacuum leaks. Correct, if necessary, before proceeding.
- 11. Synchronize and set idle mixture as per the special instructions included with this kit.
- 12. After carburetor synchronizing is completed, turn engine off and proceed with throttle cable installation.
- 13. Install the throttle cable trunion and shortener. Align the center pull lever on the hex bar with the throttle cable and tube. Secure it in place by tightening the set screw.
- 14. Position the stock throttle cable next to the shortener and measure the excess cable to be cut.
- Once you have correctly measured the amount of cable to be removed, cut the cable. Install the cable end into the shortener. Lock the cable in place by tightening down the set screw. NOTE: WHEN SETTING THE CABLE ADJUSTMENT AT CENTER PULL LEVER, BE SURE TO SET AT "FULL THROTTLE POSITION". THIS MEANS 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.
- 17. Complete the installation of the air filter assemblies.
- 18. A 90° plastic elbow is included in this kit for crank case breather hookup. If desired, you can drill a 9/16" hole into the air cleaner (Do this off the engine!) and install the elbow for breather hose hookup.
- 19. CHECK FOR ADEQUATE CLEARANCE BEFORE CLOSING THE ENGINE COVER.

