



A M E R I C A N   E X P E D I T I O N  
V E H I C L E S

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# **JK V8 HEMI® BUILDER KIT**

## **Plumbing**

### **Installation Guide**

5.7L, 6.1L WK or XK Powertrains w/AC Pump (55111414AA)  
and Power Steering Pump (5290778AA)  
07+ JK – SWB or LWB, LHD only



## A. AEV HEMI FUEL LINE

1. Remove the locking clip out of the plastic fuel line at the tank as shown.
2. Install the stud provided into the 5-45 transmission and reuse the steel fuel line bracket from the 3.8L engine.
3. Install the AEV Fuel Line; be sure to lubricate all tubes or hoses prior to installation in order to avoid damaging seals.





AMERICAN EXPEDITION  
VEHICLES

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## **B. POWER STEERING LINES**

1. This step is to be performed after the powertrain has been installed.
2. Be sure you are using the correct power steering pump (Mopar #5290778AA)
3. Install the lines as shown.
4. Be sure to lubricate all O-rings prior to assembly.



## **C. AEV AC LINES (BODY SIDE)**

1. Install the liquid line (Condenser to Firewall). Use the stock hardware to connect the lines.
2. Fasten the line to the ground stud located on the left fender structure immediately behind the ABS module using the supplied clip.
3. Be sure to lubricate all O-rings prior to assembly.

## **D. AEV AC LINES (POWERTRAIN SIDE)**

1. Be sure the correct AC compressor is being used (Mopar #55111414AA)
2. Install the suction line (Compressor to Firewall) onto the compressor using stock hardware. The firewall side will be installed when the body is mated to the chassis.
3. Install the AC Discharge line (Compressor to Condenser) to the compressor using the stock hardware. Install the stock pressure transducer. The condenser side will be installed when the body is mated to the chassis.
4. Be sure to lubricate all O-rings prior to assembly.



## **E. AEV TRANSMISSION COOLER**

1. Install the transmission cooler to the AC condenser as shown. Locate the cooler 3.5" from the top of the condenser and 3.5" from the right side of the condenser. Pre-install transmission cooler hose on each barb of the transmission cooler.
2. Using the Mopar 55038175AA Transmission Cooler lines remove the OE hose portion as shown. Connect the Transmission Cooler lines to the transmission Cooler once the body is mated to the chassis.

## **F. HEATER HOSES**

1. Cut the stock 3.8L hoses as shown and fit to the completed powertrain before mating the body to the chassis.

## **G. EVAPORATIVE PURGE VALVE HOSES**

1. Reuse the stock 3.8L hose from the fuel tank to the purge valve. Attach this line to the fuel line using the stock bracket and a couple zip ties.
2. Use Mopar part #4578627AA hose to go from the intake, around the engine to the purge valve. This hose doesn't quite go all the way to the purge valve; you will need to use a portion of the stock 3.8L purge valve line from the purge valve to the engine.

## **H. RADIATOR HOSES**

1. Install the upper and lower radiator hoses as shown.
2. Trim the corner off of the fan shroud in order to clear the lower radiator hose.



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## COMMENTS OR QUESTIONS?

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