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1968-83 Toyota FJ40

Evaporator Upgrade Add-On Kit (751202)

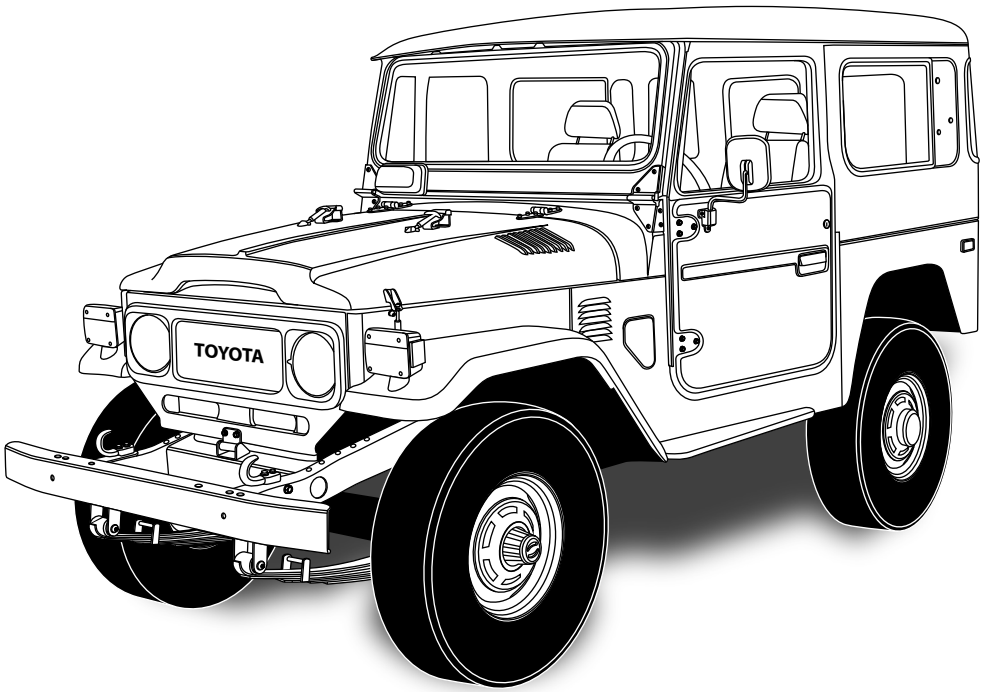

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Table of Contents

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Packing List: Evaporator Upgrade Add-On Kit (751202)

No.	Qty.	Part No.	Description
1.	1	744018	Upgrade Blower Motor Assembly
2.	1	902207	Instruction, 1968-83 Toyota FJ40 Evaporator Upgrade Kit
3.	1	791202	Accessory Kit

**** Before beginning installation, open all packages and check contents of shipment. Please report any shortages directly to Vintage Air within 15 days. After 15 days, Vintage Air will not be responsible for missing or damaged items.**

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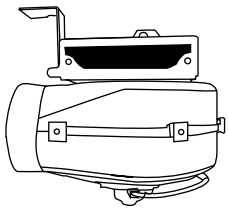

Upgrade Blower Motor Assembly 744018

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1968-83 Toyota FJ40 Evaporator Upgrade Kit Instruction 902207

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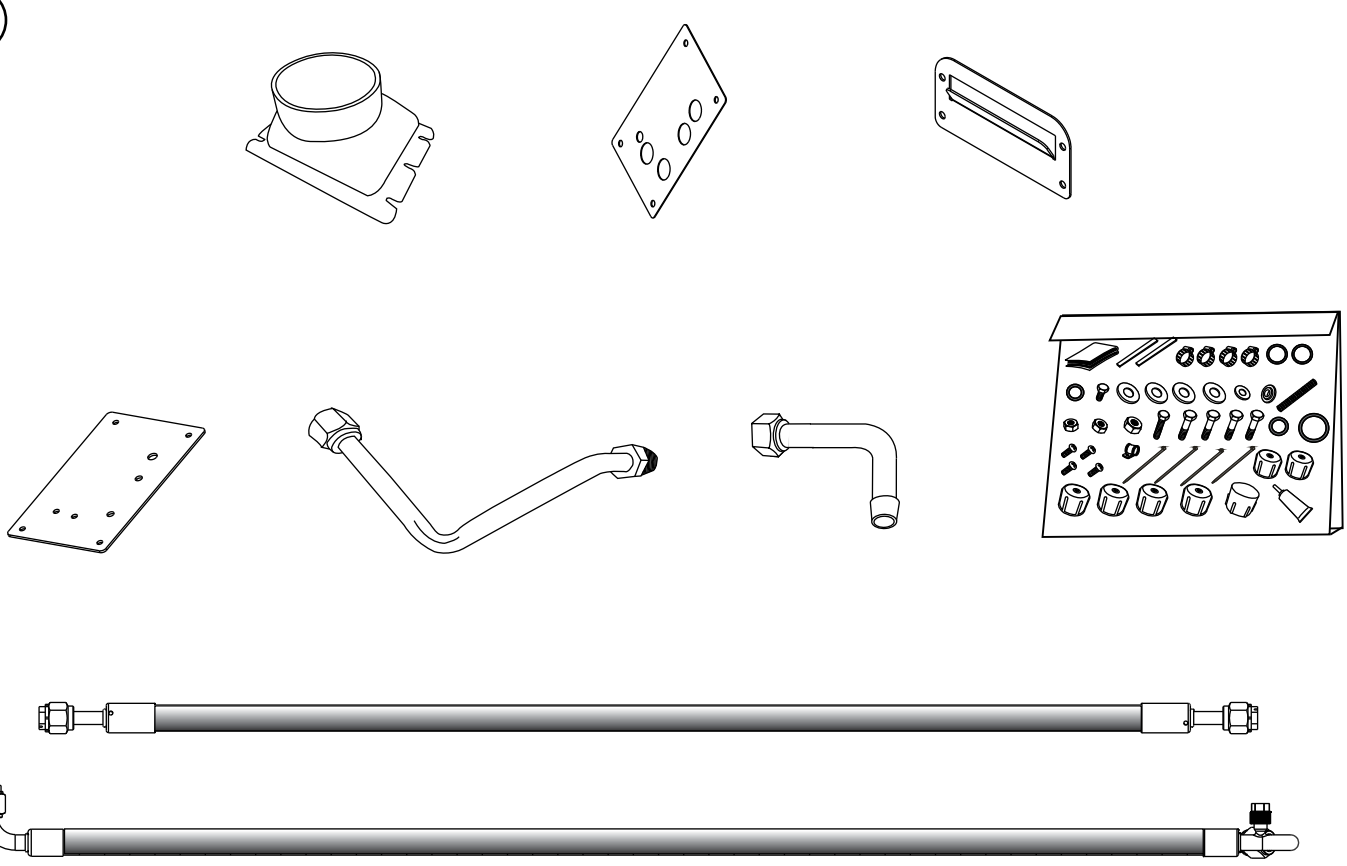

Accessory Kit 791202

NOTE: Images may not depict actual parts and quantities. Refer to packing list for actual parts and quantities.

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Important Notice—Please Read

For Maximum System Performance, Vintage Air Recommends the Following:

NOTE: Vintage Air systems are designed to operate with R134a refrigerant only. Use of any other refrigerant could damage your A/C system and/or vehicle, and possibly cause a fire, in addition to potentially voiding the warranties of the A/C system and its components.

Refrigerant Capacities:

Vintage Air System: 1.8 lbs. (28.8 oz.) or 816 grams of **R134a**, charged by weight with a quality charging station or scale. **NOTE: Use of the proper type and amount of refrigerant is critical to system operation and performance.**

Other Systems: Consult manufacturer's guidelines.

Lubricant Capacities:

New Vintage Air-supplied Sanden Compressor: No additional oil needed (Compressor is shipped with proper oil charge).

All Other Compressors: Consult manufacturer (Some compressors are shipped dry and will need oil added).

Safety Switches

Your Vintage Air system is equipped with a binary pressure safety switch. A binary switch disengages the compressor clutch in cases of extreme low pressure conditions (Refrigerant Loss) or excessively high head pressure (406 PSI) to prevent compressor damage or hose rupture. A trinary switch combines Hi/Lo pressure protection with an electric fan operation signal at 254 PSI, and should be substituted for use with electric fans. Compressor safety switches are extremely important since an A/C system relies on refrigerant to circulate lubricant.

Service Info:

Protect Your Investment: Prior to assembly, it is critical that the compressor, evaporator, A/C hoses and fittings, hardlines, condenser and receiver/drier remained capped. Removing caps prior to assembly will allow moisture, insects and debris into the components, possibly leading to reduced performance and/or premature failure of your A/C system. This is especially important with the receiver/drier.

Additionally, when caps are removed for assembly, **BE CAREFUL!** Some components are shipped under pressure with dry nitrogen.

Evacuate the System for 35-45 Minutes: Ensure that system components (Drier, compressor, evaporator and condenser) are at a temperature of at least 85° F. On a cool day, the components can be heated with a heat gun ***or*** by running the engine with the heater on before evacuating. Leak check and charge to specifications.

Bolts Passing Through Cowl and/or Firewall:

To ensure a watertight seal between the passenger compartment and the vehicle exterior, for all bolts passing through the cowl and/or firewall, Vintage Air recommends coating the threads with silicone prior to installation.

Heater Hose (Not Included With This Kit):

Heater hose may be purchased from Vintage Air (Part# 31800-VUD) or your local parts retailer. Routing and required length will vary based on installer preference.

Important Wiring Notice—Please Read

Some Vehicles May Have Had Some or All of Their Radio Interference Capacitors Removed. There Should Be a Capacitor Found At Each of the Following Locations:

1. On the positive terminal of the ignition coil.
2. If there is a generator, on the armature terminal of the generator.
3. If there is a generator, on the battery terminal of the voltage regulator.

Most alternators have a capacitor installed internally to eliminate what is called “whining” as the engine is revved. If whining is heard in the radio, or just to be extra cautious, a radio interference capacitor can be added to the battery terminal of the alternator.

It is also important that the battery lead is in good shape and that the ground leads are not compromised. There should be a heavy ground from the battery to the engine block, and additional grounds to the body and chassis.

If these precautions are not observed, it is possible for voltage spikes to be present on the battery leads. These spikes come from ignition systems, charging systems, and from switching some of the vehicle’s other systems on and off. Modern computer-operated equipment can be sensitive to voltage spikes on the power leads, which can cause unexpected resets, strange behavior, and/or permanent damage.

Vintage Air strives to harden our products against these types of electrical noise, but there is a point where a vehicle’s electrical system can be degraded so much that nothing can help.

Radio interference capacitors should be available at most auto and truck parts suppliers. They typically are cylindrical in shape, a little over an inch long, a little over a half inch in diameter, and they have a single lead coming from one end of the cylinder with a terminal on the end of the wire, as well as a mounting clip which is screwed into a good ground on the vehicle. The specific value of the capacitance is not too significant in comparison to ignition capacitors that are matched with the coil to reduce pitting of the points.

- Care must be taken, when installing the compressor lead, not to short it to ground. The compressor lead must not be connected to a condenser fan or to any other auxiliary device. Shorting to ground or connecting to a condenser fan or any other auxiliary device may damage wiring, the compressor relay, and/or cause a malfunction.
- When installing ground leads on Gen IV systems, the blower control ground and ECU ground must be connected directly to the negative battery post.
- For proper system operation, the heater control valve must be connected to the ECU.

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Additional Installation Information—Please Read

This instruction explains the procedures necessary to remove the evaporator unit and replace the standard evaporator blower motor with the ultra-high-performance blower motor supplied with this kit. Vintage Air recommends using the 1968-83 Toyota FJ40 Evaporator Kit (751200) instruction as a reference during the evaporator removal process. This instruction can be found on our website at www.vintageair.com. For the installation of the upgraded evaporator unit, use the 1968-83 Toyota FJ40 Evaporator Upgrade Kit (751201) instruction provided in this kit.

Engine Compartment Disassembly

1. Disconnect the battery.
2. Drain the radiator. **NOTE: Coolant will not drain completely from the inside of the evaporator.**
3. Discharge the A/C system using proper refrigerant recovery/recycling procedures and equipment. **NOTE: Vintage Air recommends having this step performed by a licensed automotive A/C technician.**
4. Once the A/C system is properly discharged, disconnect the #10 compressor/evaporator A/C hose from the compressor and the evaporator (See Photo 1, below). Use the supplied caps to seal the fitting on the compressor and evaporator. **NOTE: Discard the #10 A/C hose. When installing the upgraded evaporator unit, utilize the new #10 A/C hose provided with this kit.**
5. Disconnect the #6 drier/evaporator A/C hose from the drier and evaporator (See Photo 2, below). Use the supplied caps to seal the fitting on the drier and evaporator. **NOTE: Discard the #6 hose. When installing the upgraded evaporator unit, utilize the new #6 hose provided with this kit.**
6. In the passenger compartment, support the evaporator using a 2" x 4" block of wood as shown in Photo 3, below. **NOTE: Do not place the board directly under the drain outlet, as it may break.**
7. Disconnect the (2) heater hoses at the firewall (See Photo 4, below). **NOTE: Use the supplied caps (31706-VUR) on the heater fittings to prevent undrained coolant from spilling inside the cab when removing evaporator.**
8. Remove the firewall cover. **NOTE: For easier firewall cover removal, remove the grommets from the firewall, leaving them attached to the hoses.**
9. Remove the 1/4-20 x 1/2" hex bolt and sleeve washer from the firewall (See Photo 5, below).

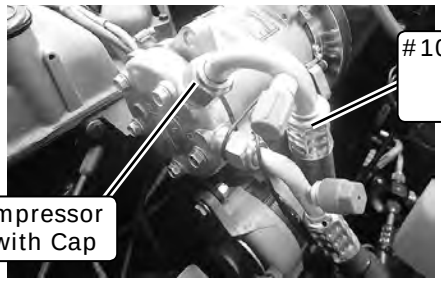


Photo 1

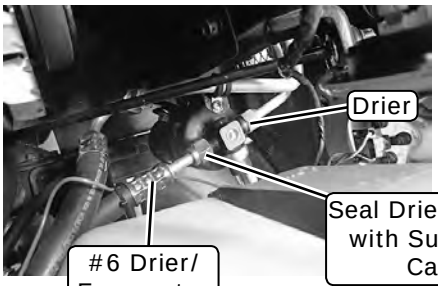
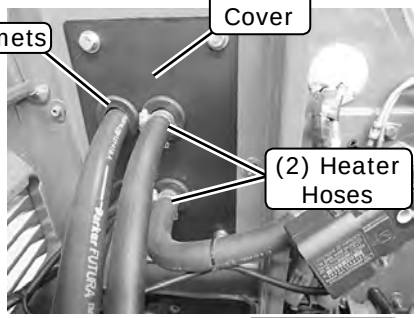


Photo 2

Photo 3



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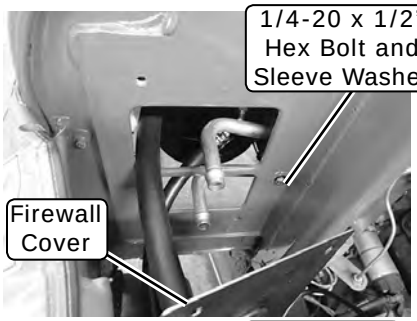


Photo 5

Evaporator Removal

1. On the driver side of the passenger compartment, remove the #6 x 1/4” screw from the louver bezel support bracket (See Photo 6, below).
2. In the glove box, remove the ECU mounting bracket, and unplug the ECU (See Photo 7, below). Remove the (2) 1/4-20 x 1/2” hex bolts supporting the evaporator rear bracket (See Photo 8, below).
3. Disconnect the drain hose from the bottom of the evaporator unit (See Photo 9, below).
4. Remove the last remaining bolt from the evaporator front driver side bracket in the center of the firewall (See Photo 10, below).
5. Place the evaporator unit onto the floor of the passenger compartment.
6. Remove the defrost duct hoses from the evaporator (See Photo 11, below).

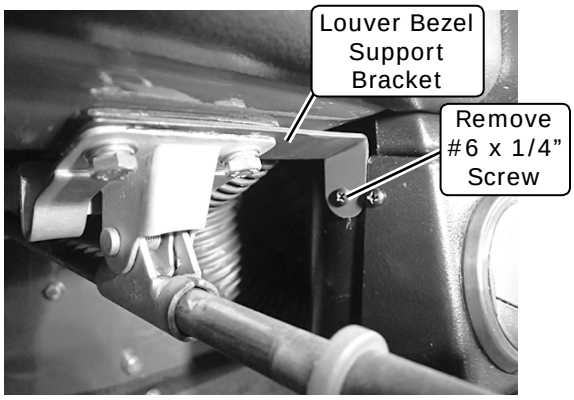
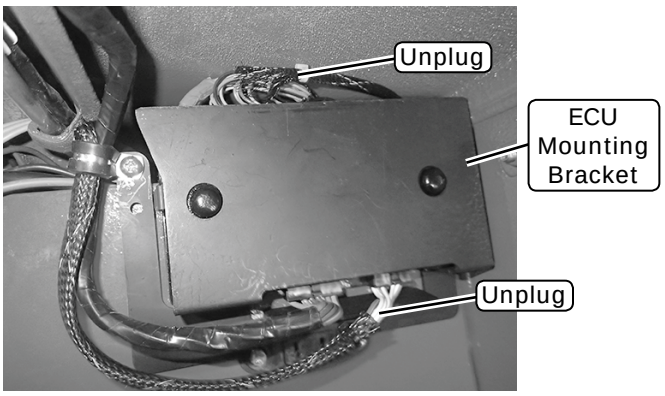


Photo 6



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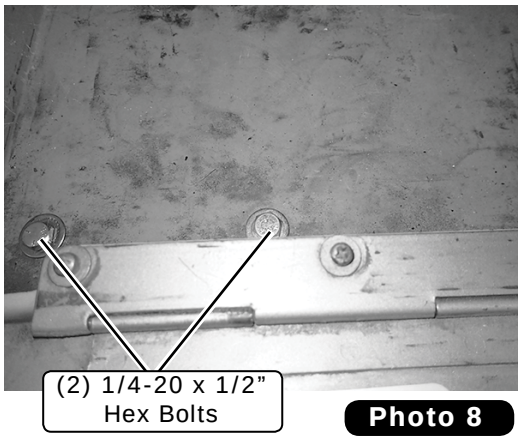

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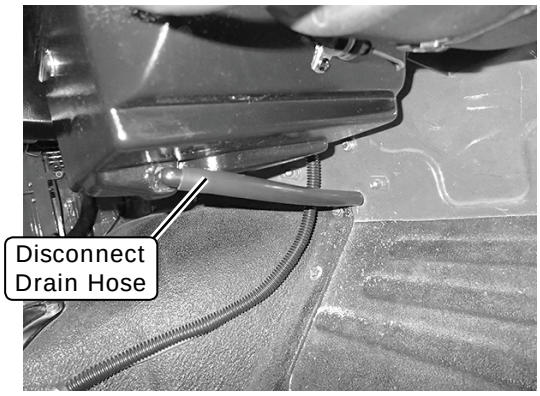

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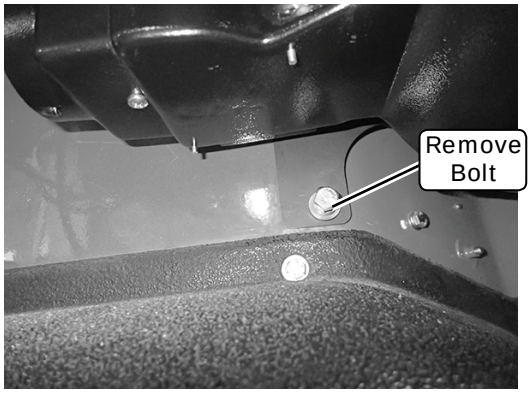

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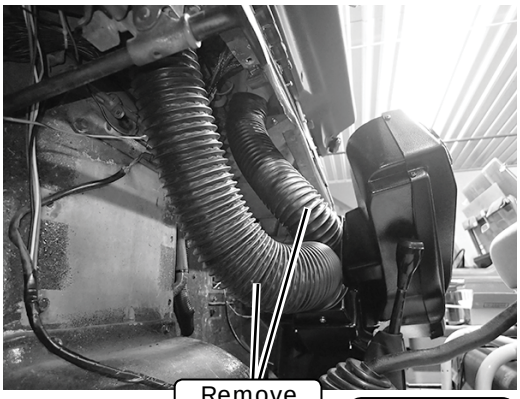


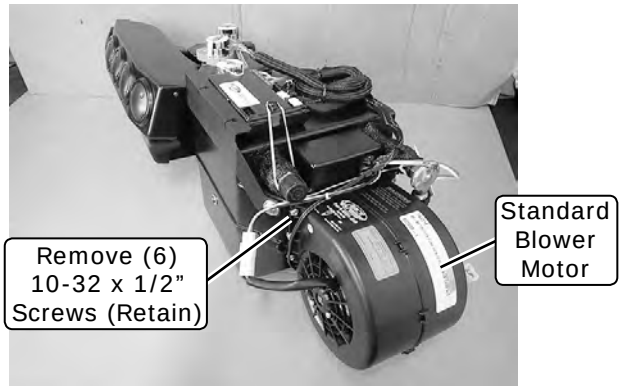
Photo 11

Evaporator Removal (Cont.)

7. Unplug any remaining connectors from the evaporator.
8. Place the evaporator unit on a workbench. Remove the (2) heater hardlines from the evaporator unit.

Blower Motor Upgrade

1. Remove the standard blower motor from the evaporator unit by removing the (6) 10-32 x 1/2” screws (retain) (See Photo 12, below). Unplug the blower connector (See Photo 13, below).
2. Place the upgrade blower template onto the bottom opening of the blower intake (See Photo 14, below). **NOTE: Be sure the (4) holes on the template are horizontally aligned with the holes on the evaporator unit.**
3. Cut and remove the lower portion of the evaporator case.
4. Remove the template from the evaporator.
5. Cut (2) 3” lengths of sealing foam, and attach them to the sides of the blower intake (See Photo 15, below). Cut the remaining sealing foam for the top and bottom sections of the intake (See Photo 15, below). **NOTE: Do not cover the blower mounting locations with sealing foam.**



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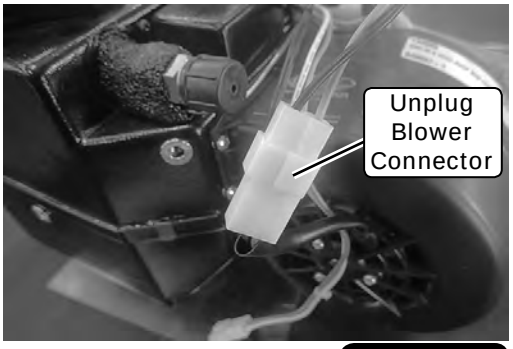

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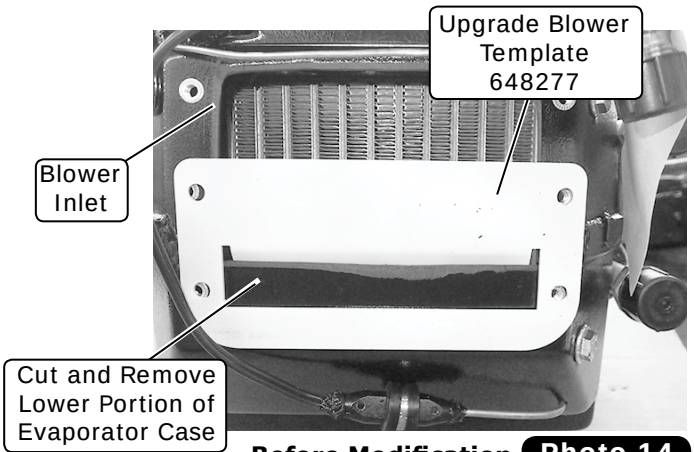


Before Modification Photo 14

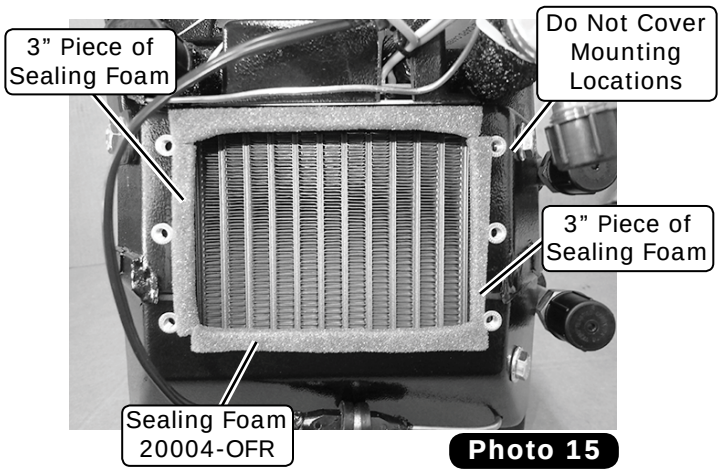


Photo 15

Blower Motor Upgrade (Cont.)

6. Install the upgrade blower adapter onto the evaporator unit, and secure it using the (6) 10-32 x 1/2” screws previously removed (See Photo 16, below).
7. Remove the blower filter bracket from the upgrade blower assembly by removing the (2) 10-24 x 1/2″ black screws. **NOTE: Set aside the filter and screws to be used for later use (See Photo 17, below).**
8. Install the upgrade blower assembly onto the upgrade blower adapter (See Photo 18, below).
9. Remove the (2) 1/4-20 x 1/2” bolts securing the evaporator front passenger side bracket to the evaporator unit. Secure the evaporator front passenger side bracket and the blower bracket to the evaporator unit using the (2) 1/4-20 x 1/2” bolts. **NOTE: The blower bracket should rest on top of the evaporator front passenger side bracket as shown in Photos 19 and 20, below.**
10. Connect the blower motor to the evaporator unit as shown in Photo 21, below.
11. To install the upgraded evaporator unit, use the 1968-83 Toyota FJ40 Evaporator Upgrade Kit (751201) instruction supplied with this kit. **NOTE: Begin with the Evaporator Pre-Installation section, and continue through to the end of the instruction booklet.**

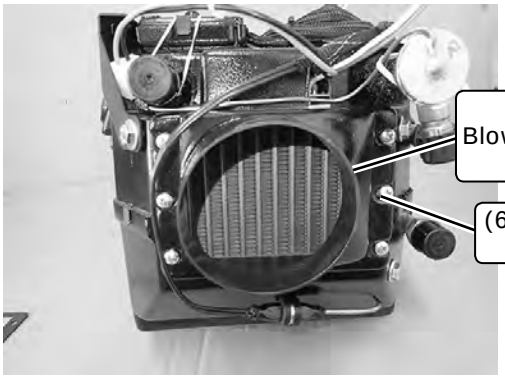
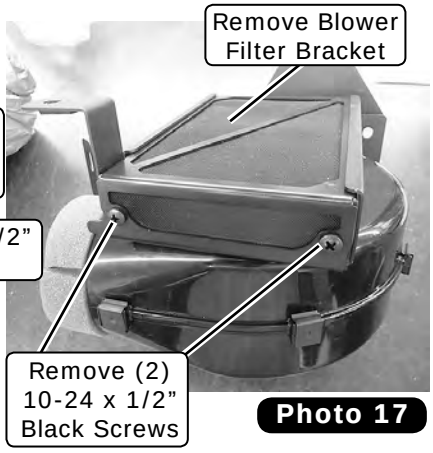


Photo 16



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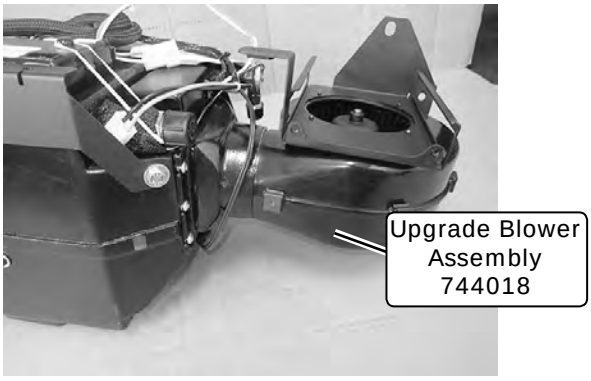

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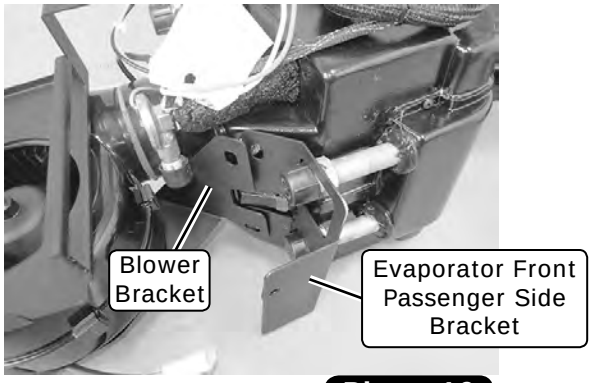

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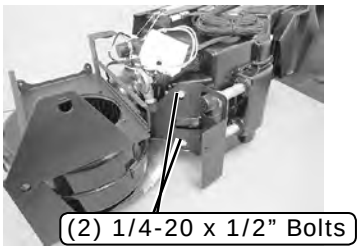

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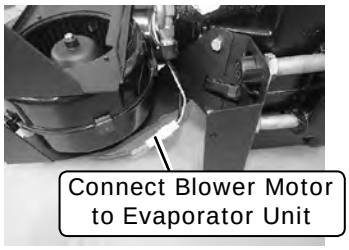
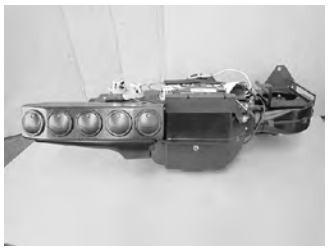


Photo 21



Final Assembly

Photo 22

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No.	Qty.	Part No.	Description	
1.	1	744018	Upgrade Blower Motor Assembly	_____
2.	1	902207	Instruction, 1968-83 Toyota FJ40 Evaporator Upgrade Kit	_____
3.	1	791202	Accessory Kit	_____

Checked By: _____
Packed By: _____
Date: _____

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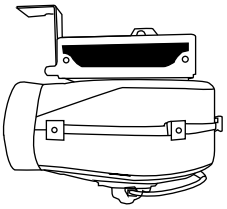
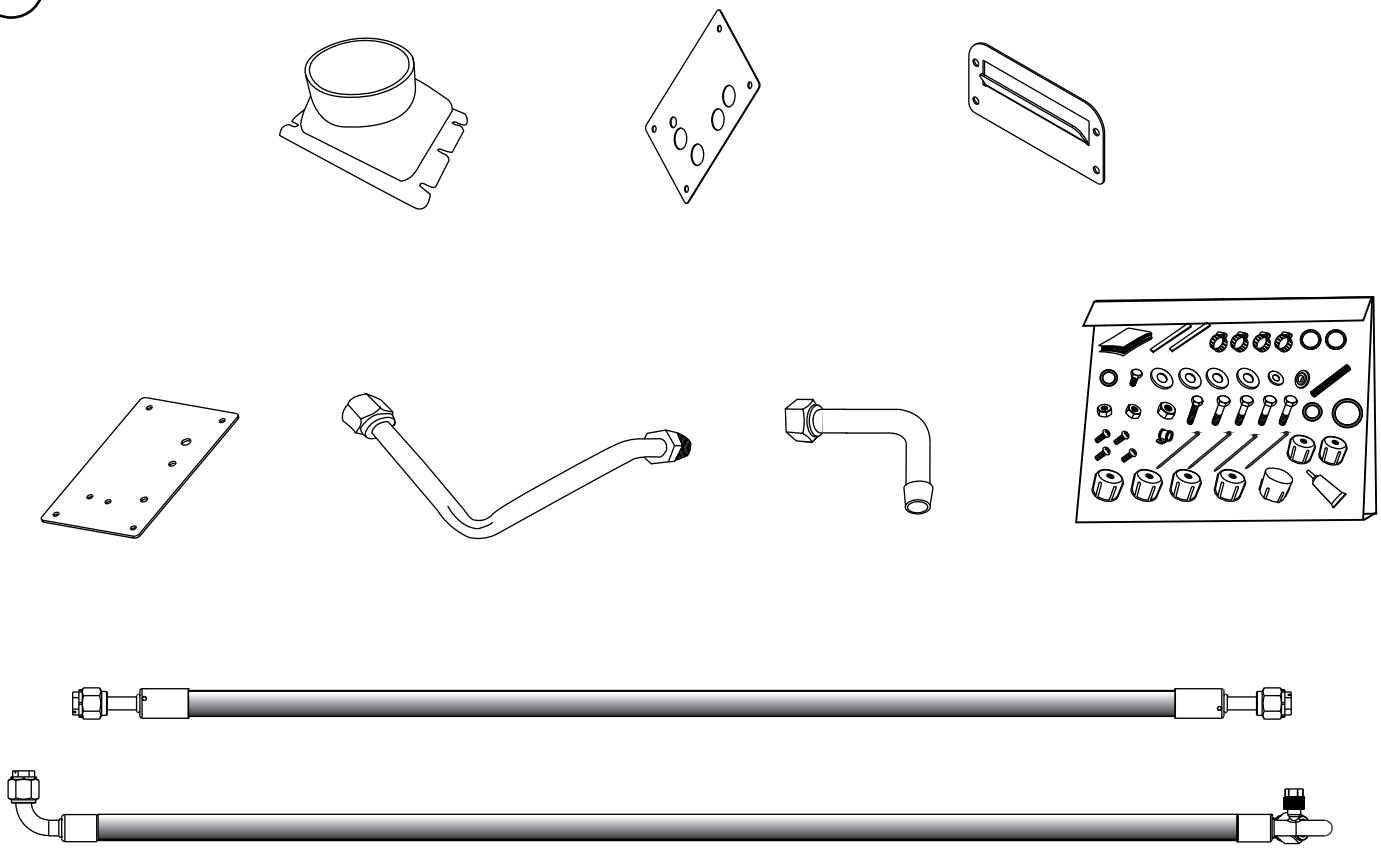


Upgrade Blower Motor Assembly 744018

2

1968-83 Toyota FJ40 Evaporator Upgrade Kit Instruction 902207

3



Accessory Kit 791202

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