**WORK INSTRUCTION OVERVIEW**

**WARNING**
- **DO NOT ATTEMPT THIS PROCEDURE IF YOU DO NOT HAVE PROPER TOOLS, TRAINING, AND FACILITIES.**
- Never consider using a two-post lift that is not certified according to ANSI/ALI ALCTV-2011 or ANSI/UL 201. (autolift.org)
- Read and follow all instructions provided when installing this product. Failure to do so may result in placing occupants at risk of serious injury or death.
- To protect bystanders and the service technician(s), shut vehicle off, remove the Ignition Key and secure vehicle to prevent unintended movement.
- Never operate the vehicle in excess of manufacturer’s specifications.
- Do not remove any of the A/C Component Caps until you are ready to connect the Pressure Lines.

**CAUTION**
- If installing the Vintage HVAC Assembly on a vehicle equipped with an Manual Transmission, it is **required** that you also install a Fan Shroud over the cooling fan with:
  - Fan Shroud - Part Number **S-0304FAB00771N**
- Refer to Fan Shroud.

**NOTICE**
- Installation of Vintage HVAC will require specific components and holes to be drilled into the vehicle using the provided Templates.
- For Vintage HVAC kits **Shipped On or BEFORE 9/1/2019**, Paper Templates should have been supplied in your kit. Contact the ROXOR Customer Care Line if templates were not provided in your kit. Paper templates will be provided on request.
- For Vintage HVAC Kits **Shipped AFTER 9/1/2019**, Templates are located at the end of the Work Instructions for print on 8.5 x 11 paper. Must click “Actual Size” in Print Settings. Verify the square on each template is 1” x 1” for accuracy of print.

**TOOLS REQUIRED**
- 13 mm Socket
- 19 mm Socket
- 6 mm Allen Wrench
- 9/16 mm Wrench
- 19 mm Wrench
- 22 mm Wrench
- 25 mm Wrench
- 27 mm Wrench
- 32 mm Wrench
- Socket Wrench
- Hose Cutters
- Step Bit Drill Bits
- Temperature Gauge
- 19 mm Crows Foot
- 27 mm Crows Foot
- 32 mm Crows Foot
- Hose Clamps
- Socket Extension
- Swivel Socket Extension
- Protective Eye-wear
- Pry Bars (Large)
- Pry Bar (Thin)
- Torque Wrench (Nm)
- R134A Recovery, Recycling, and Recharging Machine

**TORQUE SPECIFICATION**
Tighten each fastener to the torque specification below:
- **M6 Fasteners** - 10 N•m (±1 N•m)
- **M8 Fasteners** - 23.5 N•m (±3.5 N•m)
- **M10 Fasteners** - 43 N•m (±7 N•m)
- **M12 Fasteners** - 90 N•m (±10 N•m)
- **Liquid Line** - 17 N•m (±3 N•m)
- **Discharge Line** - 24 N•m (±3 N•m)
- **Suction Line** - 34 N•m (±7 N•m)
- **Pressure Switch - Receiver Drier** - 16 N•m (±2 N•m)

**COMPONENT TABLE**

<table>
<thead>
<tr>
<th>Components</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC Assembly</td>
<td>Left Bracket pre-installed for Manual Transmission Vehicles-See Drill Holes Section</td>
<td>1</td>
</tr>
<tr>
<td>1/2’ Drain Hose (18”)</td>
<td>For EVAP Drain Hole</td>
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<tr>
<td>AC Compressor Kit - Includes Compressor, Brackets and Fasteners</td>
<td>P/N: S-1203AUA00071N</td>
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<tr>
<td>AC Compressor Adjuster Bracket w/ Spacers - Included within AC Compressor Kit</td>
<td>P/N: S-1203AUA00071N</td>
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</tr>
</tbody>
</table>
# Install: Vintage HVAC Assembly

**Part Number:** S-1203AUA00041N

## Components

<table>
<thead>
<tr>
<th>Components</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Compressor Bracket - Lower Rear</td>
<td>Included within AC Compressor Kit</td>
<td>1</td>
</tr>
<tr>
<td>AC Compressor Bracket - Lower Forward</td>
<td>Included within AC Compressor Kit</td>
<td>1</td>
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<tr>
<td>AC Compressor Ground Cable</td>
<td></td>
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<tr>
<td>AC Receiver Drier Kit</td>
<td>Includes Bracket and Pressure Switch</td>
<td>1</td>
</tr>
<tr>
<td>AC Condenser Assembly</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Isolators for Condenser</td>
<td>Included in AC Condenser Assembly</td>
<td>2</td>
</tr>
<tr>
<td>Keepers for Isolators</td>
<td>Included in Condenser Kit</td>
<td>2</td>
</tr>
<tr>
<td>Brackets for Condenser</td>
<td>Included in Condenser Kit</td>
<td>2</td>
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<tr>
<td>AC Suction Line Cork Tape</td>
<td></td>
<td>1</td>
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<tr>
<td>AC Liquid Line</td>
<td>Drier to Condenser (Lower Condenser Port)</td>
<td>1</td>
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<tr>
<td>AC Discharge Line - AC</td>
<td>Compressor to Condenser (Upper Condenser Port)</td>
<td>1</td>
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<tr>
<td>AC Suction Line</td>
<td>Firewall to Compressor</td>
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<tr>
<td>AC Suction Line</td>
<td>Evaporator to Firewall (Left)</td>
<td>1</td>
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<tr>
<td>AC Liquid Line</td>
<td>Evaporator to Firewall (Right)</td>
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<tr>
<td>AC Liquid Line</td>
<td>Firewall to Receiver/ Drier</td>
<td>1</td>
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</tbody>
</table>

## Components

<table>
<thead>
<tr>
<th>Components</th>
<th>Description</th>
<th>Qty</th>
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</thead>
<tbody>
<tr>
<td>V Belt</td>
<td>P/N: S-0306GAB00371N</td>
<td>1</td>
</tr>
<tr>
<td>Grommet - Dash Panel</td>
<td>(Reused From Firewall)</td>
<td>2</td>
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<tr>
<td>Heater Core Shutoff Valve</td>
<td></td>
<td>1</td>
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<tr>
<td>5/8&quot; Heater Hose</td>
<td>Heater Core to Heater Core Shutoff Valve</td>
<td>1</td>
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<tr>
<td>Connector Heater</td>
<td>EGR Return</td>
<td>1</td>
</tr>
<tr>
<td>Cable Tie Straps - 305 Long</td>
<td>To Secure Wire Loom</td>
<td>1</td>
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<tr>
<td>Cable Tie Strap 165 W Xmas Tree</td>
<td>Heater Hose to LH Dash Bracket</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To secure Coolant Heater Core Hoses to HVAC Assembly</td>
<td>1</td>
</tr>
<tr>
<td>CAP - NON DEFROST</td>
<td></td>
<td>2</td>
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<tr>
<td>M8X45 Combination Bolts LP w/ Washers - M8X1.25X45X8.8.2</td>
<td>Battery Brace Bolts</td>
<td>2</td>
</tr>
<tr>
<td>M6X16 Hex Flange Bolts</td>
<td>Upper Condenser Bracket to Radiator Guard Assembly</td>
<td>2</td>
</tr>
<tr>
<td>M8X25 Hex Flange Bolts</td>
<td>Compressor Adjuster Pivot Bracket/ Lower Front Compressor Bracket to Compressor</td>
<td>2</td>
</tr>
<tr>
<td>M12X35 Hex Bolt HD (M12X1.5X35)</td>
<td>Motor Mount for Lower Rear Compressor Bracket to Engine Mount</td>
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<tr>
<td>M8X50 Hex Flange Bolt (M8X1.25X50X10.9)</td>
<td>Lower Rear Compressor Bracket to Compressor</td>
<td>1</td>
</tr>
</tbody>
</table>
## Install: Vintage HVAC Assembly
**Part Number: S-1203AUA00041N**

### Components

<table>
<thead>
<tr>
<th>Description</th>
<th>Qty</th>
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<tbody>
<tr>
<td>M8X81Hex Hex Flange Bolt (M Point) Adjuster Bracket to Front Cover Upper Bolt P/N: S-0000AUA02081N</td>
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<tr>
<td>M10X40 Hex Flange Bolt Adjuster Bracket to Front Cover Lower Bolt P/N: S-0000AUA01321N</td>
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<tr>
<td>M10X25 Hex Flange Bolts Lower Front Compressor Bracket to Engine Block P/N: S-0000AUA01591N</td>
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<tr>
<td>BOLT M8X1.25X25 BUTTON HD 6 LOBED P/N: S-0000AUA02021N</td>
<td>2</td>
</tr>
<tr>
<td>M6X1X9 Torx Screws-Large Crown WA - HVAC Assembly to IP P/N: S-0000AUA00061N</td>
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<tr>
<td>M12 Lock Washer (Reused from Motor Mount Bolt) P/N: S-6508212</td>
<td>1</td>
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<tr>
<td>M8 Spring Lock Washers P/N: S-6508212</td>
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<tr>
<td>M12 Flat Washer For Motor Mount Bolt P/N: S-0000AU01181N</td>
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<tr>
<td>M8X16 Plain Washers - M8X16.1.5ZN5 RH HVAC to Brace Lower Rear Compressor Bracket to Compressor P/N: S-SF401012</td>
<td>3</td>
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<tr>
<td>M6 Flat Washer Lower Condenser Bracket to Radiator Guard Assembly P/N: S-0000AUA01531N</td>
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<tr>
<td>M6 U Nuts (2) HVAC Assembly to IP (2) Condenser to Radiator Box P/N: S-0000AUA01181N</td>
<td>7</td>
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<tr>
<td>M6X9 Flange Nylon Hex Nut - M6X1X9X8 (2) HVAC Assembly to Dash Left Bracket (2) Lower Condenser Bracket to Radiator Guard Assembly P/N: S-SF0315004</td>
<td>5</td>
</tr>
<tr>
<td>M8 Hex Nuts - 1.25 HVAC to Dash/RR Compressor Bracket P/N: S-SF0301009</td>
<td>5</td>
</tr>
</tbody>
</table>

### Preparation Procedure

1. Loosen (2) M6 nuts for battery positive and negative cables. Set both cables aside.

2. Remove (2) M6 nuts on battery retainer. Remove battery retainer and save all for reuse. Cover battery terminals.

3. Place a catch below radiator and drain coolant from lower right drain port.
DISASSEMBLY PROCEDURE

1. Remove (2) 8 mm Hex Head Bolts from Fuse Block and Discard bolts and bracket.

2. Remove Wire Harness Clip and (2) 13 mm Hex Head Bolts from the Battery Brace. Replace with (2) M8X45 Combination Bolt and (2) M8X6.5 Hex Nut. Torque to Specification. Push Wire Harness Clip back through.

3. Remove Steering Column Cover, (3) 13 mm Bolts, (9) M6 T30 Torx screws, Upper (2) M6 T30 Torx Screws of Grab Handle and (3) Switch Connectors, Speedometer Connector, Ignition Switch Connector and Aux Power Outlet Connector and remove the Instrument Panel.

4. Remove (3) M6 nuts, Connector and remove Left Headlight. Repeat for opposite side.

5. Lift the Vehicle and remove (1) T30 Torx Screw from Grill. Starting from Front Left, slightly pull back Grill and carefully pry out each Clip and remove Grill.

6. Remove vacuum and breather hoses. Loosen lower (1) bolt for snorkel tube and remove air filter housing with snorkel tube.
7. Remove (2) M8 Bolts, upper bracket, air filter housing and lower bracket.

8. Using 10 mm wrench, loosen bolt and remove accessory belt from alternator.

**REQUIRED ACCESSORY INSTALLATION**

1. It is now time to install any required installations. See overview for additional information and part numbers.

   **CAUTION**
   - Pause this installation and proceed to required Work Instructions for Fan Shroud. **Once finished, return here to continue with Vintage HVAC installation.**


**DRILL HOLES PROCEDURE**

1. Templates have been designed for accurate hole placements. All Templates can be found at the end of the Work Instructions in PDF form.
   - For Vintage HVAC kits Shipped ON or BEFORE 9/1/2019, Paper Templates should have been supplied in your kit.
   - For Vintage HVAC Kits Shipped AFTER 9/1/2019, Templates are located at the end of the Work Instructions for print on 8.5 x 11 paper.
   - Must click “Actual Size” in print settings.
   - Verify squares on templates are 1” x 1” for print accuracy, before trimming.
   - Cut out to the alignment arrow edges.
   - Cut out cross-hatched areas.

2. Before drilling any holes for Vintage HVAC Installation, identify which pre-drilled holes on bulk head you have. You will either have 4 or 6 Large holes pre-drilled.

   **NOTICE**
   - Bulk head’s with 6 holes, the holes for Left HVAC unit bracket are pre-drilled. If 4 hole, you need to drill these holes in the next step.
   - This only affects the step below. If you only have 4 Large holes pre-drilled, proceed to the next step. If you have 6 large holes, skip the next step.
3. If 6 hole, skip this step. Using magnets or tape, fasten the Template on Firewall and drill (2) 19/64” holes for the HVAC Assembly mounting bolts. Accessory Pass-through Holes.

**NOTICE**
- To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.
- Paint the raw steel edges to prevent corrosion, allow to dry before installing grommets.

4. Using magnets or tape, fasten the Templates at outer sides of Battery Braces. Using a Step Drill Bit, Drill a 15/16” hole for Suction Line on left and 11/16” hole for Liquid Line on right of Firewall.

**NOTICE** To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.

5. Using magnets or tape, fasten the Templates on right side of the Battery Brace. Using a Step Drill Bit, Drill a 45/64” for the Condenser Drain Line on the Firewall.

**NOTICE** To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.

6. Using magnets or tape, fasten the Template to the Right Front Clip Brace and drill (2) 1/8” holes for the Receiver/ Drier Bracket.

**NOTICE** To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.
7. Using magnets or tape, fasten Template to the Right Front Fender and drill (1) 5/16" holes for AC Liquid Line.

**NOTICE**
To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.

8. Using magnets or tape, fasten the Template onto the Radiator Housing and drill (2) 19/64" holes for Condenser.

9. Using magnets or tape, fasten the Templates to the Radiator Housing. Using a Step Drill Bit, drill a 1 1/2" hole for (Upper) Discharge Line to the Compressor and 1 1/2" hole for (Lower) Liquid Line to the Receiver Drier through the Radiator Box.

**NOTICE**
To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.

---

**INSTALLATION PROCEDURE**

1. When installing A/C refrigerant lines, be sure A/C lines are:
   ○ Level to port.
   ○ O-rings are lightly lubricated and flush against the ridge on A/C line.
   ○ A/C Lines are fully inserted before attempting to tighten.
   ○ Hand-thread to begin tightening.

2. Before installing HVAC assembly into vehicle, install A/C lines to evaporator ports in orientation shown below:
   ○ Using a 9/16" wrench to counter-hold the brass outlet and 3/4" wrench to tighten A/C liquid line (lower).
   ○ Using a 7/8" wrench to counter-hold the brass outlet and 1 1/16" wrench to tighten A/C suction line (upper).
   ○ Torque lines to specifications.

**NOTICE**
   ○ All A/C Refrigerant Lines and Component Outlets are sealed for integrity. Sealing caps should not be removed for extended periods of time before installation. Be sure when opening the sealing caps, there is an audible release of air.
   ○ Be sure the O-rings do not remain within the sealing caps.
   ○ Be sure the A/C Lines are level and fully inserted before attempting to tighten.
   ○ Before installing any A/C Refrigerant Lines, be sure to lightly lubricate the O-rings on each line.
Install: Vintage HVAC Assembly  
Part Number: S-1203AUA00041N

3. Install cork tape to suction line as shown below. This is to prevent condensation leaking down.

4. Install the left side of the HVAC assembly guiding the (2) weld studs into drilled holes on bulkhead. Using 10 mm socket and (2) M6X9 flange nylon hex nuts, finger tighten.

5. Mount Right Side of HVAC Assembly onto Battery Brace against previously installed Nuts. Using 13 mm Deep Well Socket, install (2) M8x6.5 Hex Nut, (2) M8XZN5 Plain Washer and (2) M8 Spring Lock Washers (The double nut assembly will serve for tightening HVAC Nuts without having to counter hold Battery Brace Bolts). Torque all HVAC Assembly Fasteners to specification.

6. Install both Liquid Line and Suction Line through Fire Wall and torque (a second Technician will be necessary).
   - For Liquid Line, Counter-hold using 1” Wrench Inside and 1” Socket Outside to Torque Nut.
   - For Suction Line, Counter-hold using 1 1/8” Wrench Inside and 1 1/4” Socket Outside the Bulkhead to tighten Nut.
   - Torque both Nuts to Specification.

**NOTICE** A second technician may be necessary to assist in installation of HVAC unit.
7. Remove sealing caps from HVAC heater core pipes. Cut (1) 5/8” heater hose in half and install to pipes. Fasten hoses using (1) zip tie and feed both out through right bulkhead holes using (2) new grommets.

8. Using Hose Clamp Pliers, remove EGR Coolant Return Hose and cut just below the bend (Yellow Line). On the trimmed end, install (1) Spiral Hose Clamp with (1) Connector Heater, then install Coupled end back to main hose.

9. Remove the Hose from the Hose Mount. Using Hose Cutters, cut both sides of the Coolant Hose just below bend as shown.

10. Install EGR Coolant Return Hoses with (2) Spiral Hose Clamps to Coolant Shutoff Valve. Trim 5/8” Heater Hoses from Heater Core to length using Hose Cutters. Using (2) Spiral Hose Clamps, install both 5/8” Heater Hoses to Coolant Shut Off Valve. Reinstall EGR Coolant Return line with Hose Clamp and check that all Spiral Hose Clamps tightened.

11. Fully close the push pull cable knob at HVAC control panel, and fully close shutoff valve. Install push pull cable using supplied screw with clamp and tighten. Place spiraled end of cable on shutoff valve arm using supplied keeper as shown.

12. Using 19 mm socket, remove (1) motor mount bolt. discard bolt and save (1) lock washer for reuse.
13. Install lower rear compressor bracket with (1) M12X35 hex bolt and (1) M12 flat washer and (1) M12 lock washer (reused from previous step) using 19 mm socket.

14. Install the lower front compressor bracket with (2) M10X25 hex flange bolt using 15 mm socket.

15. Using 12 mm socket, remove the timing cover bolt and discard.

16. Install the Upper Compressor Bracket using 13 mm Socket and (1) M8X80 Hex Flange Bolt with (1) Spacer Upper. Using 15 mm Socket, Install (1) M10X40 Hex Flange Bolt with (1) Spacer Lower.

17. Remove the compressor sealing plate nuts using 13 mm socket. Discard plate and nuts. Install suction and discharge fittings using T30 torx and new (2) M8 torx bolts. Install suitable sealing caps to protect compressor from moisture and debris.

**NOTICE** All A/C Refrigerant Lines and Component Outlets are sealed for system integrity. Sealing caps should not be removed for extended periods of time before installation. Be sure when opening the sealing caps, there is an audible release of air.

18. Install the Compressor Using 13 mm Socket to tighten (1) M8X50 Hex Flange Bolt, Compressor Ground Cable, (1) M8X6.5 Hex Nut, (1) M8XZN5 Plain Washer, (1) M8 Spring Lock Washer (arrow left) and (1) M8X25 Hex Flange Bolt (arrow right) at Lower Compressor. Torque to specifications.

**NOTICE** Compressor Ground Cable will be routed at a later step.
21. Raise vehicle to adjust Belt Tension for Compressor. Place a Pry Bar in between Adjuster Bracket and Compressor. Using swivel extension and 13 mm socket, Pry outward on Compressor and Torque (1) M8X25 Hex Flange Bolt at Adjuster Bracket to specification.

22. Using 10 mm Socket and (2) M6X9 Flange Nylon Hex Nuts for Bottom Condenser Bracket. Torque to specification.

23. With flow indicating left to right, remove 9/16” Bolt with O-ring from Front of Receiver Drier. Install Pressure Switch Using 27 mm Wrench. Torque to specification.

**NOTICE**

- Find flow of Receiver Drier (left to right) while installing Pressure Switch by locating “in”, stamped on top of drier.
- The Receiver Drier should stay sealed until Installation.
- Lightly lubricate the O-ring of Pressure Switch.
- An O-ring is on both the 9/16” bolt and Pressure Switch itself. Be sure only one O-ring is on the Pressure Switch.

25. Assembly of condenser brackets and isolators have a specific installation orientation.

**NOTICE**
- To obtain front of condenser orientation, the discharge port is larger and should be on top, facing towards passenger side of vehicle.
- Isolators can be installed backwards causing misalignment during condenser installation.

26. Install (2) Isolators onto Condenser (Short for Top and Long for Bottom).
- Bracket Groove on Top Isolator should face towards vehicle rear.

27. Install (1) lower bracket into isolator groove, studs facing to rear of vehicle. (2) Brackets and (Top Bracket) with (2) M6 U-Nuts onto Condenser.
- Install (1) lower bracket into isolator groove, studs facing to rear of vehicle.
- Install (2) rubber isolators Keepers.
- Install (1) upper bracket into isolator groove with (2) M6 U-nuts.

28. Install Condenser Top End First, while bracing the Bottom Bracket and Isolator. Slide Condenser to the Passenger Side so that the A/C Ports are through the drilled radiator box holes.

**NOTICE**
- All A/C Refrigerant Lines and Component Outlets are sealed for system integrity. Sealing caps should not be removed for extended periods of time before installation. Be sure when opening the sealing caps, there is an audible release of air.
- Before installing any A/C Refrigerant Lines, be sure to lightly lubricate the O-rings on each line.
- Be sure the rubber washers do not remain within the sealing caps.
- Be sure the A/C Lines are level and fully inserted before attempting to tighten.

30. Remove the Sealing Caps from the Compressor Ports. Using 22 mm Wrench, connect the Discharge Line at Upper Condenser Line Port to Rear Compressor Line Port. Torque line to specification.

**NOTICE**
- All A/C Refrigerant Lines and Component Outlets are sealed for system integrity. Sealing caps should not be removed for extended periods of time before installation. Be sure when opening the sealing caps, there is an audible release of air.
- Before installing any A/C Refrigerant Lines, be sure to lightly lubricate the O-rings on each line.
- Be sure the rubber washers do not remain within the sealing caps.
- Be sure the A/C Lines are level and fully inserted before attempting to tighten.

31. Using 10 mm Socket, Torque Condenser to Radiator box using (2) M6X16 Hex Flange Bolts.

32. Remove the Sealing Caps from the Front Compressor and Bulkhead Ports for Suction Line. Using 27 mm Wrench, connect the Suction Line while Counter-holding with 32 mm Wrench at Bulkhead. Then using 27 mm Wrench connect Suction Line to Front Port at Compressor. Torque line to specification.

**NOTICE**
- All A/C Refrigerant Lines and Component Outlets are sealed for system integrity. Sealing caps should not be removed for extended periods of time before installation. Be sure when opening the sealing caps, there is an audible release of air.
- Before installing any A/C Refrigerant Lines, be sure to lightly lubricate the O-rings on each line.
- Be sure the rubber washers do not remain within the sealing caps.
- Be sure the A/C Lines are level and fully inserted before attempting to tighten.
33. Remove the Sealing Caps from the Bulkhead Ports for Liquid Line. Using 19 mm Wrench, connect the Liquid Line while Counter-holding with 25 mm Wrench at Bulkhead. Then using 19 mm Wrench connect Liquid Line to Receiver Drier Exit Port. Torque lines to specifications.

**NOTICE**
- All A/C Refrigerant Lines and Component Outlets are sealed for system integrity. Sealing caps should not be removed for extended periods of time before installation. Be sure when opening the sealing caps, there is an audible release of air.
- Before installing any A/C Refrigerant Lines, be sure to lightly lubricate the O-rings on each line.
- Be sure the rubber washers do not remain within the sealing caps.
- Be sure the A/C Lines are level and fully inserted before attempting to tighten.

34. Finish routing Liquid Line, while zip tying the Receiver Drier Signal Wire with (2) zip ties and (1) Christmas Tree. Using 19 mm Wrench connect Liquid Line to Receiver Drier Exit Port. Torque lines to specifications.

35. Install the 1/2" Drain Hose to the Vintage HVAC Assembly unit Drain Port and place the Drain Hose through the previously drilled Drain Hole.

36. Install A/C Refrigerant Caution Label on top of the Radiator Box, if necessary.

**NOTICE** Be sure area is clean of dirt and debris.
Install: Vintage HVAC Assembly
Part Number: S-1203AUA00041N

ELECTRICAL CONNECTIONS

<table>
<thead>
<tr>
<th>VINTAGE HVAC Assembly Wiring</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Arrow Orange</td>
<td>HVAC Assembly Push Pull Cable for Heater Shutoff Valve</td>
</tr>
<tr>
<td>Arrow Blue</td>
<td>HVAC Assembly Signal Feed to Receiver/ Drier</td>
</tr>
<tr>
<td>Arrow Purple</td>
<td>HVAC Assembly Switched Ignition Feed</td>
</tr>
<tr>
<td>Arrow Black</td>
<td>HVAC Assembly Ground Wire</td>
</tr>
<tr>
<td>Arrow Red</td>
<td>HVAC Assembly 12 Volt Power Feed with Circuit Protector</td>
</tr>
<tr>
<td>Arrow Green</td>
<td>Compressor Signal Feed</td>
</tr>
<tr>
<td>Arrow Yellow</td>
<td>Compressor to Receiver Drier Jumper Feed</td>
</tr>
</tbody>
</table>

1. Remove Cover from the Circuit Protector of HVAC Assembly 12 Volt Power Wire. Remove the Circuit Protector and Short Side Wire so the long side may be routed through the Fire Wall.
2. Using a pair of Needle Nose Pliers, remove and discard the Insulation Keeper from Pin 5 of the Ignition Switch. Insert the HVAC Assembly Key-On at Ignition Wire in to Pin 5 until you feel it completely seat.

3. Route the HVAC Assembly Ground Wire to the stud and fasten with a (1) Washer and (1) 10 mm Nut.

4. Remove the Right Fire Wall Grommet and place a small slice though the center. Route the Receiver Drier Signal Wire, HVAC Assembly 12 Volt Power Wire and Push Pull Cable for Heater Shutoff Valve through the Grommet and seat the Grommet in the Right Fire Wall Opening.

5. Using 60" of 1/4" Wire Loom, route the Signal Wire for Receiver/ Drier and HVAC Assembly 12 Volt Power Feed along the Battery and stop just before the Fuse and Relay Box. Using 3/8" Socket, re-connect the Ring Connector with (1) M6 Nut and Washer to the Circuit Protector and connect to the open 12 Volt B+ Post using (1) 10 mm Nut. Continue to route the Wire Loom with the Receiver/ Drier Signal Wire down towards the Firewall to Receiver/ Drier Liquid Line.

6. Reconnect HVAC Assembly 12 Volt Power Feed Relay using 10 mm Socket. Connect the HVAC Assembly 12 Volt Power Feed Ring Connector to the open B+ Post on Vehicle Battery Power Cable.
7. Finish routing the Receiver Drier Signal Wire along the Suction Line and connect to the Receiver Drier. Route the Compressor Signal Wire using 36” of Wire Loom and Zip Tie to the Compressor Discharge Line Condenser and connect the Receiver Drier Pressure Switch as well.

NOTICE
○ Be sure to use dielectric grease when connecting the Thermostat and Compressor connectors to the Receiver/Drier.
○ All wire loom should be zip tied every 5 to 8 inches.

8. Route the Compressor Ground Cable up the Oil Vacuum Pump High Pressure Line towards the Engine Lift Hook. Using 12 mm Socket and Wobble Extension, remove the Lower Engine Lift Hook Bracket Bolt and install the Compressor Ground Cable Ring End. Torque to specification.

NOTICE
Be sure to route the Compressor Ground Cable to and on the Left side of the Front Right Engine Harness to keep away from Exhaust Manifold.

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FINAL ASSEMBLY PROCEDURE

1. Connect Battery Positive Cable and tighten (1) 10 mm nut.


NOTICE
○ Be sure Connections are sealed so that no Contaminants are able to enter the A/C System.
○ Adding PAG Oil is not necessary as the Compressor has been prefilled.
○ Be sure A/C System is capable of holding a Vacuum for at least 15 mins.

3. Remove the A/C Charging Port Low Side Sealing Cap and Connect the Low Side Line to the Low Side Port.

NOTICE
○ Be sure Connections are sealed so that no Contaminants are able to enter the A/C System.
○ Adding PAG Oil is not necessary as the Compressor has been prefilled.
○ Be sure A/C System is capable of holding a Vacuum for at least 15 mins.
Install: Vintage HVAC Assembly  
Part Number: S-1203AUA00041N

4. With both Valves Open, Evacuate (Vacuum) the Vehicle's A/C System for at least 15 minutes. Record Needle Positions on both Gauges. Let Set for 5 minutes and compare Needle Positions. If System has maintained Vacuum, proceed to the next step. If System has lost Vacuum, determine where the leak is and repair as necessary and repeat Step 4.

NOTICE
- Be sure Connections are sealed so that no Contaminants are able to enter the A/C System.
- Adding PAG Oil is not necessary as the Compressor has been pre-filled.
- Be sure A/C System is capable of holding a Vacuum for at least 15 mins.

5. Using R134A Refrigerant, Charge A/C System to 1.7 lbs (771 g) of R134A. Remove Charge Port Connections and Re-Install A/C Charging Port Sealing Caps.

NOTICE
- Be sure Connections are sealed so that no Contaminants are able to enter the A/C System.
- Adding PAG Oil is not necessary as the Compressor has been pre-filled.
- Be sure A/C System is capable of holding a Vacuum for at least 15 mins.

6. Refill the Coolant System to Specifications.

7. Start Vehicle and bring up to Operating Temperature. Recheck coolant level.

8. Turn on Fan to Medium, Push/ Pull Cable Closed and Temperature to just past Medium (you should hear the Compressor engage).
9. Using a Temperature Gauge, be sure Temperature is between 45°F - 55°F for correct operation.

**REASSEMBLY PROCEDURE**

1. If you have ordered Vintage Defrost, here would be a good part to st.

2. Install snorkel tube, upper bracket, air filter housing, lower bracket and tighten (2) bolts. Reconnect vacuum and breather hoses.

3. Install grill by pressing in each clip. Lift the Vehicle and Install (1) T30 Torx Screw for Grill.

4. Install Headlights, connector and tighten (3) M6 nuts. Repeat for opposite side.
5. Using the Bottom IP Screw Hole, Measure to the Center of HVAC Assembly Right U Nut Hole (image left). At IP, use that measurement to make a Mark using Punch or Marker (image right).

**NOTICE**
- All (4) Holes for HVAC Assembly should be marked 11/16" from Bottom of IP to align all (4) holes properly.
- To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.

6. Measure 17 13/16" from First IP Mark and make Second Mark on IP.

**NOTICE**
- All (4) Holes for HVAC Assembly should be marked 11/16" from Bottom of IP to align all (4) holes properly.
- To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.

7. Measure 8 13/16" from Second IP Mark and make Third Mark on IP.

**NOTICE**
- All (4) Holes for HVAC Assembly should be marked 11/16" from Bottom of IP to align all (4) holes properly.
- To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.

8. Measure 4 7/16" from Third IP Mark and make a Final Mark on IP. Drill (4) Holes at Marks made.

**NOTICE**
- All (4) Holes for HVAC Assembly should be marked 11/16" from Bottom of IP to align all (4) holes properly.
- To prevent premature rusting of the body, use a Deburring Tool and apply paint or other suitable rust inhibitor to all holes drilled for this installation.
9. **If missing** install (1) No Power Wash Label between the First Two Vents as shown.

10. Position Instrument Panel into place and install (3) Switch Connectors, Speedometer Connector, Ignition Switch Connector and Aux Power Outlet Connector. Tighten (13) T30 Torx screws (Includes Upper (2) M6 T30 Torx Screws of Grab Handle), Steering Column Cover, (3) 10 mm Bolts, Tighten to Specifications.
LH DASH BRACKET
MANUAL TRANS/6-HOLE DASH ONLY

ALIGN HERE
CUT OUT AND REMOVE FROM TEMPLATE

19/64

ALIGN HERE
SUCTION LINE HOLE FOR DASH LEFT OF INBOARD BATTERY BRACE

CUT ALONG LINES AND REMOVE FROM TEMPLATE

ALIGN TO BRACE

ALIGN TO BRACE

\( \frac{15}{16} \)
CUT AND REMOVE FROM TEMPLATE

CONDENSATE DRAIN HOLE FOR HOSE FROM HVAC CASE

ALIGN TO BRACE

ALIGN TO BRACE

INBOARD LH BATTERY BRACE

45/64 HOLE TO BE DRILLED THRU DASH

CUT AND REMOVE FROM TEMPLATE
LIQUID LINE HOLE FOR DASH RIGHT OF OUTBOARD BATTERY BRACE
CUT ALONG LINES AND REMOVE TEMPLATE
ALIGN TO BRACE
ALIGN TO BRACE
UPPER CONDENSER BRACKET ATTACHMENTS TO RADIATOR BOX

CUT OUT AND REMOVE FROM TEMPLATE

ALIGN HERE

19/64
1: CUT ALONG LINE
2: ALIGN ARROWS A-A AND B-B
3: TAPE TOGETHER AFTER ALIGNING ARROWS
4: CUT AND REMOVE CROSS HATCHED AREA

CUT AND ALIGN TO INSIDE EDGE

CONDENSER DISCHARGE LINE HOLE

Ø 1 1/2"

CUT ALONG LINE

LOWER TEMPLATE

TEMPLATE 2 OF 2
MUST BE USED WITH UPPER TEMPLATE
1: CUT ALONG LINE
2: ALIGN ARROWS A-A AND B-B
3: TAPE TOGETHER AFTER ALIGNING ARROWS
4: CUT AND REMOVE CROSS HATCHED AREA
Locate hole 'X' first by measuring the actual location from this hole ('X' without J-clip) relative to the body where the IP fastens (hole 'Y') once the HVAC is mounted and torqued to specs. Measure actual distance from this hole on body not on IP.

For illustration purposes only. This is not a usable template and will not print to scale. Please see Work Instructions steps for detailed instructions on how to drill the holes for the IP.