

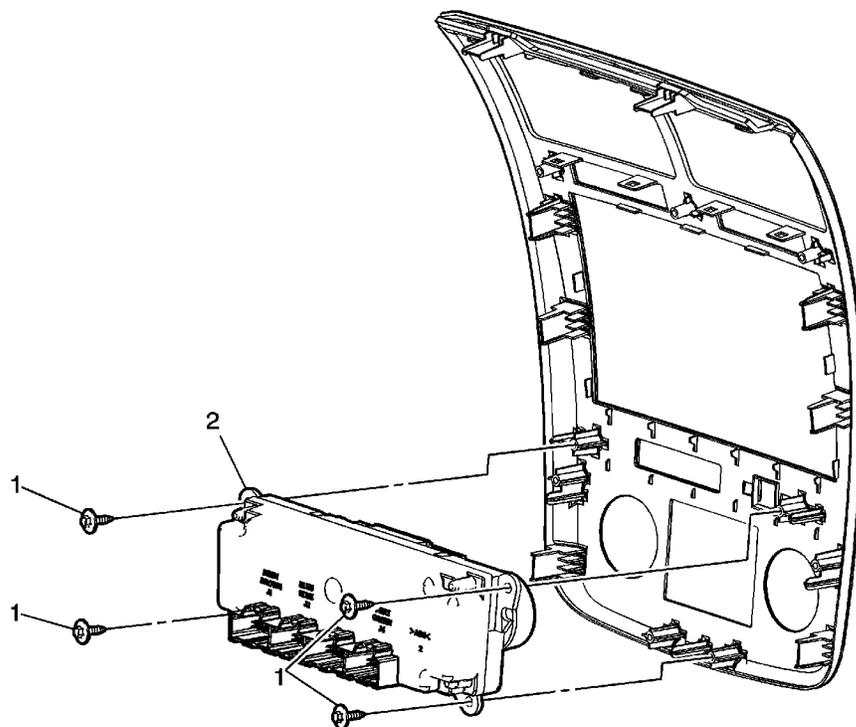
## Fastener Tightening Specifications

Application	Specification	
	Metric	English
Actuator Mounting Screws	1.5 N·m	13 lb in
HVAC Control Module Mounting Screws	2 N·m	17 lb in

## Sensor Resistance Table

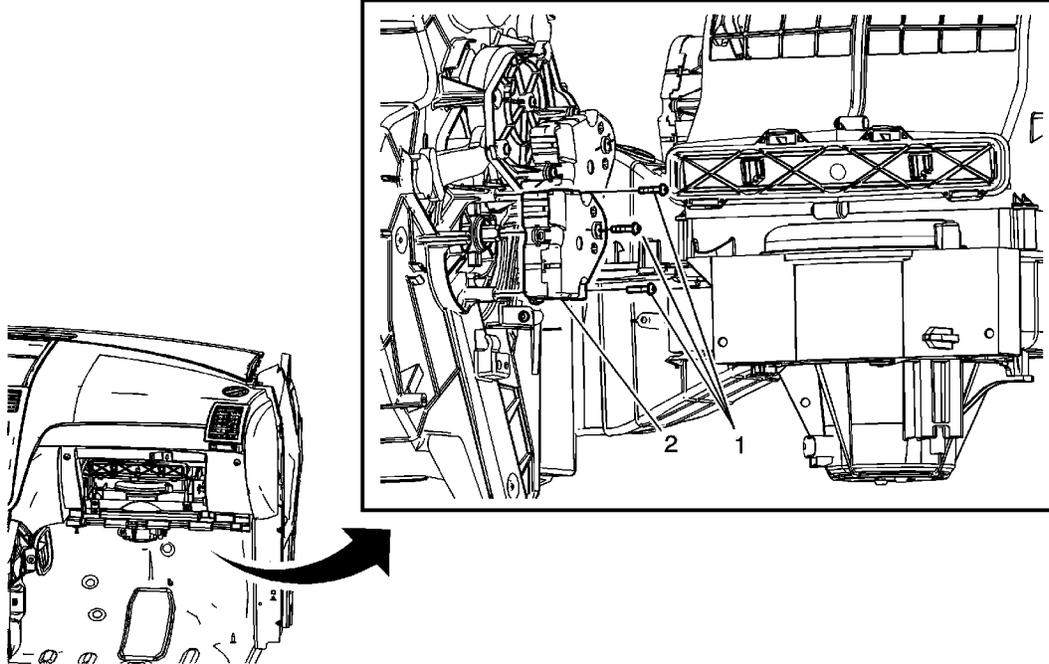
Temperature		Ambient Air Temp Sensor	Evaporator Temperature Sensor
°C	°F	(K ohms)	(K ohms)
-40	-40	333.56	92.76
-30	-22	176.08	48.79
-20	-4	96.8	26.76
-10	14	55.2	15.25
0	32	32.6	9
10	50	19.9	5.48
20	68	12.4	3.44
30	86	8.05	2.22
40	104	5.32	1.47
50	122	3.6	.993
60	140	2.48	.685
70	158	1.75	.482

# HVAC Control Module Replacement



Callout	Component Name
<p><b>Preliminary Procedure</b></p>	
<p>Remove the instrument panel (I/P) accessory trim plate. Refer to <a href="#">Instrument Panel Accessory Trim Plate Replacement</a>.</p>	
<p>1</p>	<p>HVAC Control Module Screw (Qty: 4)</p> <p><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.</p> <p><b>Tighten</b> 2 N·m (18 lb in)</p>
<p>2</p>	<p>HVAC Control Module</p> <p><b>Procedure</b></p> <p>Reprogram the HVAC Control Module. Refer to <a href="#">Control Module References</a>.</p>

## Temperature Valve Actuator Replacement - Right Side

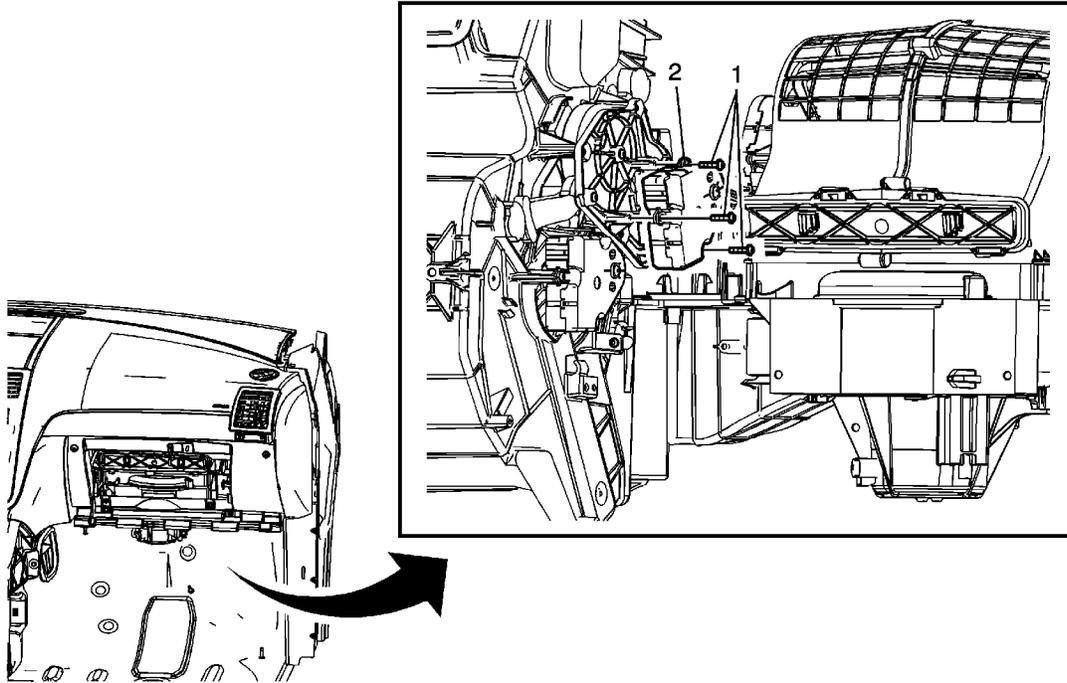


Callout	Component Name
<p><b>Caution:</b> In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p><b>Preliminary Procedures</b></p>	
<ol style="list-style-type: none"> <li>1. Remove the instrument panel insulator - right side. Refer to <a href="#">Instrument Panel Insulator Panel Replacement - Right Side</a>.</li> <li>2. Remove the instrument panel (I/P) compartment. Refer to <a href="#">Instrument Panel Compartment Replacement</a>.</li> </ol>	
<p>1</p>	<p>Right Temperature Actuator Screw (Qty: 3)</p> <p><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.</p> <p><b>Tighten</b> 2 N·m (18 lb in)</p>
<p>2</p>	<p>Right Temperature Actuator</p> <p><b>Procedure</b></p>

© 2010 General Motors Corporation. All rights reserved.

1. Disconnect the electrical connectors.
2. Re-calibrate the right temperature actuator. Refer to [Actuator Recalibration](#).

# Mode Valve Actuator Replacement

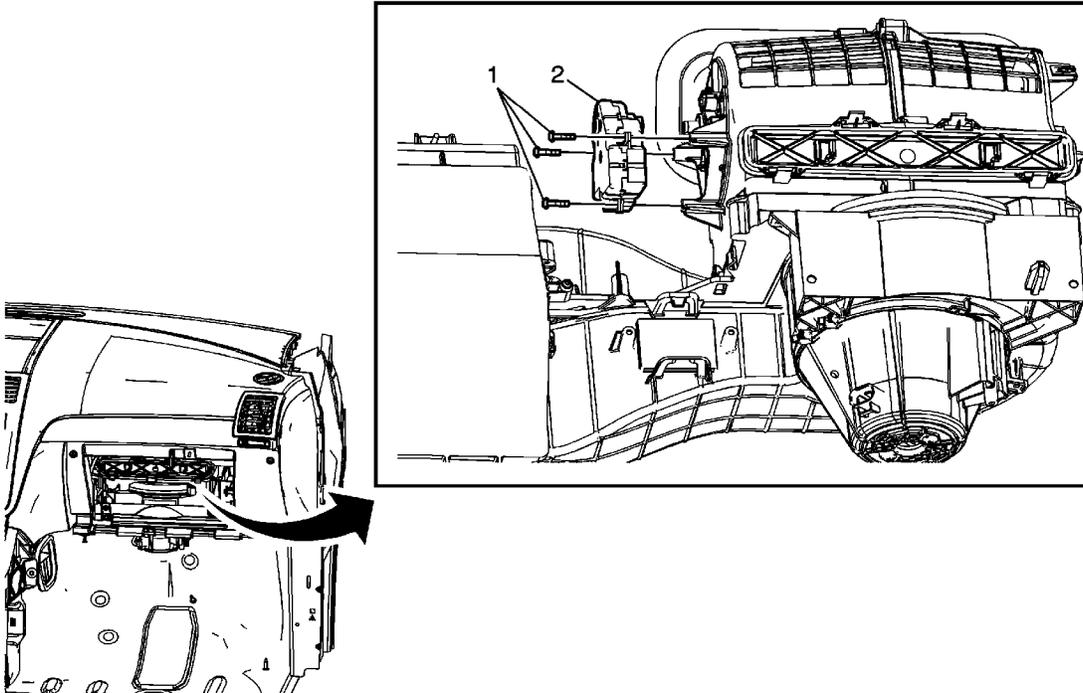


Callout	Component Name
<p><b>Caution:</b> In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p><b>Preliminary Procedures</b></p> <ol style="list-style-type: none"> <li>1. Remove the instrument panel insulator - right side. Refer to <a href="#">Instrument Panel Insulator Panel Replacement - Right Side</a>.</li> <li>2. Remove the instrument panel (I/P) compartment. Refer to <a href="#">Instrument Panel Compartment Replacement</a>.</li> </ol>	
1	<p>Mode Actuator Screw (Qty: 3)</p> <p><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.</p> <p><b>Tighten</b> 2 N·m (18 lb in)</p>
2	<p>Mode Actuator</p> <p><b>Procedure</b></p>

© 2010 General Motors Corporation. All rights reserved.

1. Disconnect the electrical connectors.
2. Re-calibrate the right temperature actuator. Refer to [Actuator Recalibration](#).

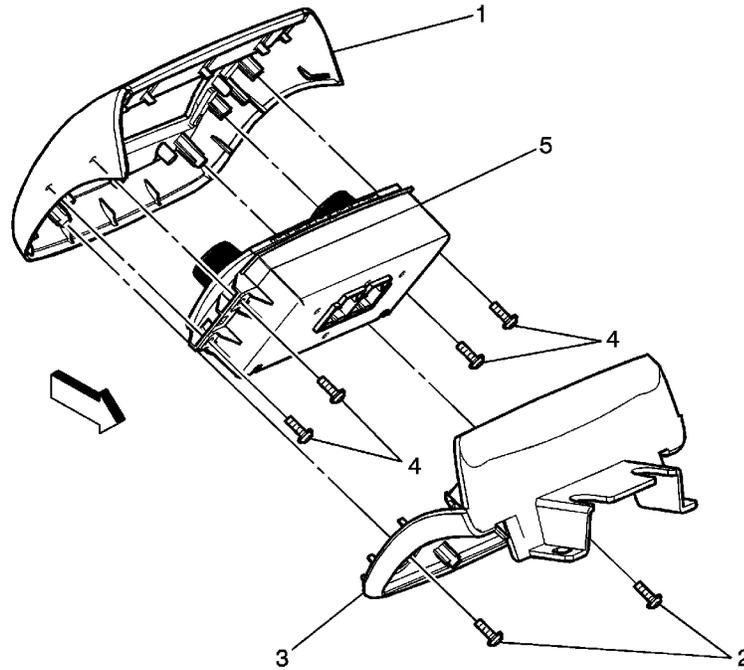
# Air Inlet Valve Actuator Replacement



Callout	Component Name
<p><b>Caution:</b> In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p><b>Preliminary Procedures</b></p> <ol style="list-style-type: none"> <li>1. Remove the instrument panel insulator - right side. Refer to <a href="#">Instrument Panel Insulator Panel Replacement - Right Side</a>.</li> <li>2. Remove the instrument panel (I/P) compartment. Refer to <a href="#">Instrument Panel Compartment Replacement</a>.</li> </ol>	
<p>1</p>	<p>Recirculation Actuator Screw (Qty: 3)</p> <p><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.</p> <p><b>Tighten</b> 2 N·m (18 lb in)</p>
<p>2</p>	<p>Recirculation Actuator</p> <p><b>Procedure</b></p>

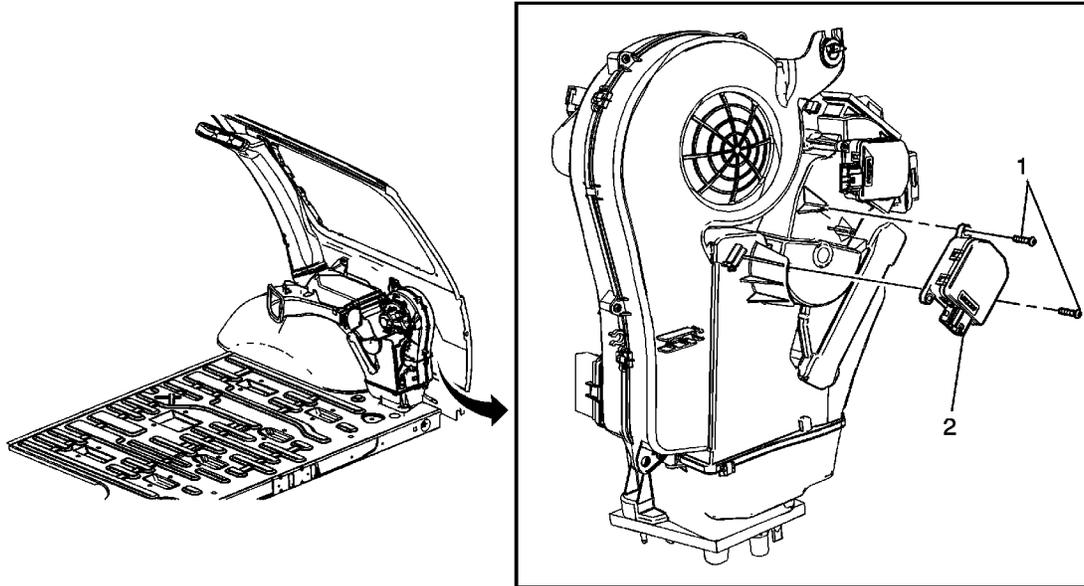
1. Disconnect the electrical connectors.
2. Re-calibrate the air recirculation actuator. Refer to [Actuator Recalibration](#).

# Auxiliary Heater and Air Conditioning Control Module Replacement



Callout	Component Name
1	Front Floor Console Extension Accessory Upper Bezel Refer to <a href="#">Front Floor Console Extension Accessory Upper Bezel Replacement</a> .
2	Front Floor Console Extension Accessory Upper Bezel Screw (Qty: 2) <b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section. <b>Tighten</b> 2 N·m (18 lb in)
3	Front Floor Console Extension Accessory Upper Bezel Closeout
4	Auxiliary HVAC Control Module Screw (Qty: 4) <b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section. <b>Tighten</b> 2 N·m (18 lb in)
5	Auxiliary HVAC Control Module Assembly

# Auxiliary Temperature Valve Actuator Replacement



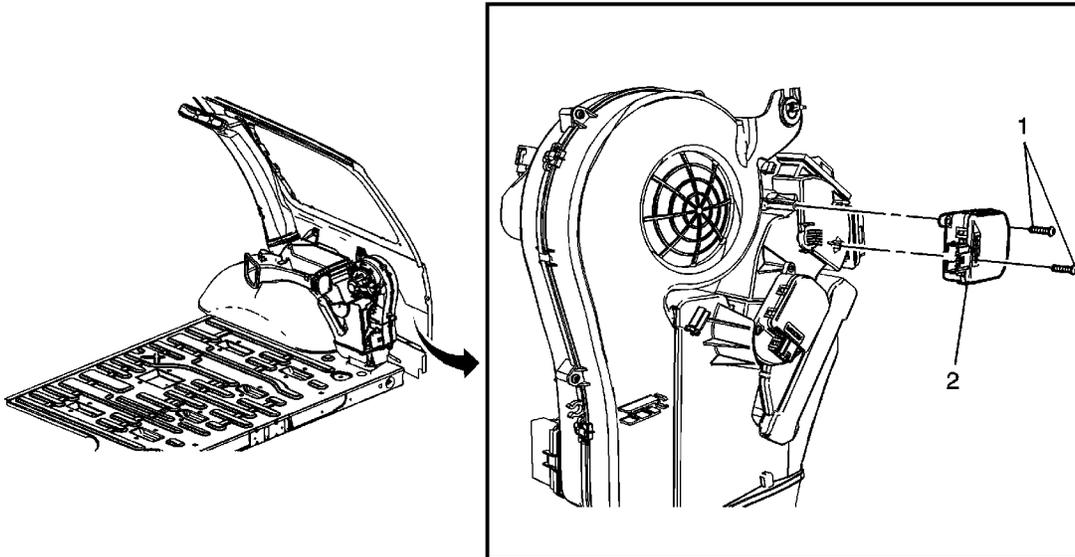
Callout	Component Name
<p><b>Caution:</b> In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p><b>Preliminary Procedures</b></p> <ol style="list-style-type: none"> <li>1. Remove the rear quarter lower trim panel. Refer to <a href="#">Quarter Lower Rear Trim Panel Replacement</a>.</li> <li>2. Remove the rear wheelhouse liner panel. Refer to <a href="#">Rear Wheelhouse Panel Liner Replacement</a>.</li> <li>3. Remove the HVAC module mounting nuts and reposition the auxiliary HVAC module inward to gain access to the temp door actuator.</li> <li>4. Disconnect the electrical connector from the temp actuator (2).</li> </ol>	
<p>1</p>	<p>Temp Door Actuator Screw (Qty: 2)</p> <p><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.</p> <p><b>Tighten</b> 2.5 N·m (16 lb in)</p>
	<p>Auxiliary Temp Door Actuator</p>

2

**Procedure**

Re-calibrate the air temp actuator. Refer to [Actuator Recalibration](#).

# Auxiliary Mode Valve Actuator Replacement



Callout	Component Name
<p><b>Caution:</b> In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p><b>Preliminary Procedures</b></p>	
<ol style="list-style-type: none"> <li>1. Remove the right rear quarter trim panel. Refer to <a href="#">Quarter Lower Rear Trim Panel Replacement</a>.</li> <li>2. Remove the rear wheelhouse liner panel. Refer to <a href="#">Rear Wheelhouse Panel Liner Replacement</a>.</li> <li>3. Remove the HVAC module mounting nuts and reposition the auxiliary HVAC module inward to gain access to the mode door actuator.</li> <li>4. Disconnect the electrical connector from the mix door actuator.</li> </ol>	
<p>1</p>	<p>Mode Door Actuator Screw (Qty: 2)</p> <p><b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.</p> <p><b>Tighten</b> 2.5 N·m (16 lb in)</p>
<p>Auxiliary Mode Door Actuator</p>	

2

**Procedure**

Re-calibrate the mode actuator. Refer to [Actuator Recalibration](#).