

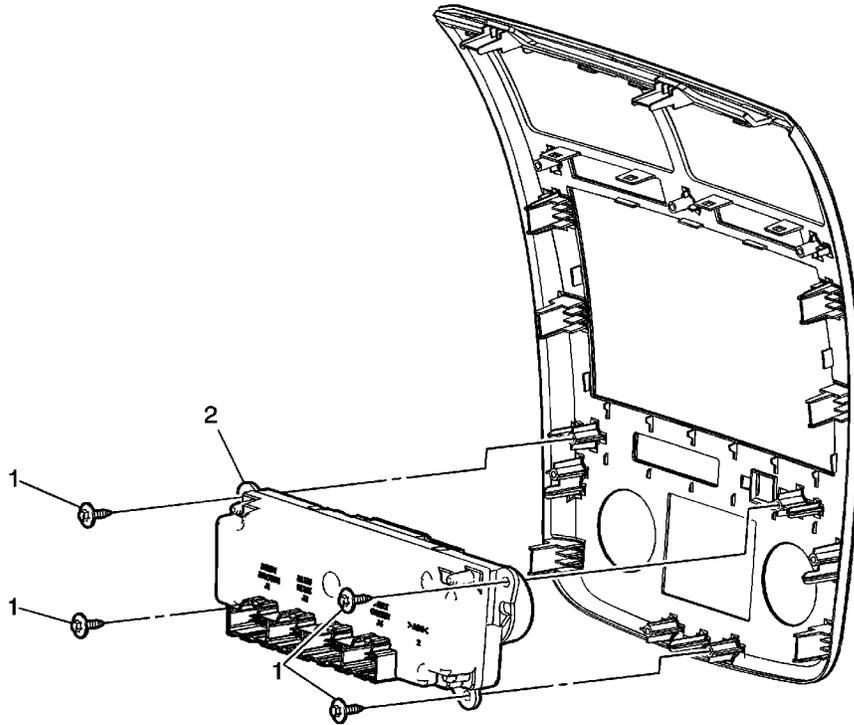
Fastener Tightening Specifications

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

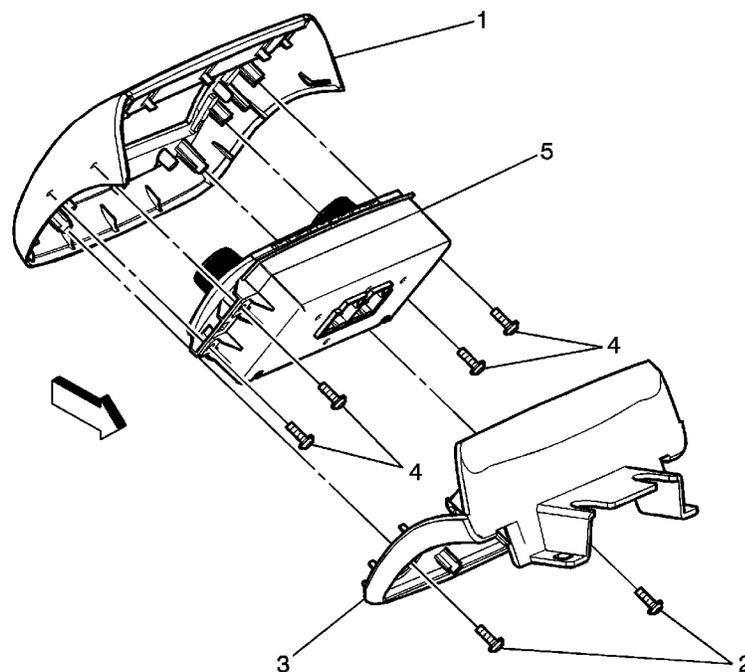
Temperature		Ambient Air Temp Sensor	Duct Air Temperature Sensors and Inside Air Temperature Sensor	Evaporator Air Temperature Sensor
°C	°F	(K ohms)	(K ohms)	(K ohms)
-40	-40	333.56	169.4	92.76
-30	-22	176.08	88.74	48.79
-20	-4	96.8	48.58	26.76
-10	14	55.2	27.67	15.25
0	32	32.6	16.33	9
10	50	19.9	9.95	5.48
20	68	12.4	6.24	3.44
30	86	8.05	4.02	2.22
40	104	5.32	2.66	1.47
50	122	3.6	1.8	0.993
60	140	2.48	1.24	0.685
70	158	1.75	.877	0.482

HVAC Control Module Replacement



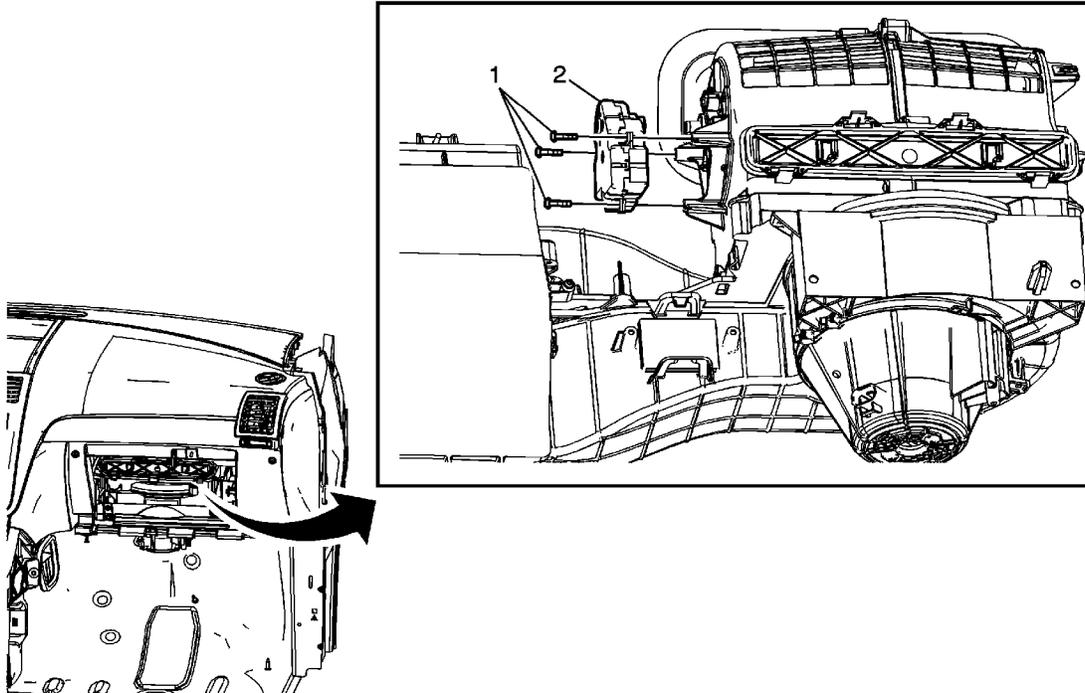
Callout	Component Name
<p>Preliminary Procedure</p>	
<p>Remove the instrument panel (I/P) accessory trim plate. Refer to Instrument Panel Accessory Trim Plate Replacement.</p>	
<p>1</p>	<p>HVAC Control Module Screw (Qty: 4)</p> <p>Caution: Refer to Fastener Caution in the Preface section.</p> <p>Tighten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

Auxiliary Heater and Air Conditioning Control Module Replacement



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

Air Inlet Valve Actuator Replacement

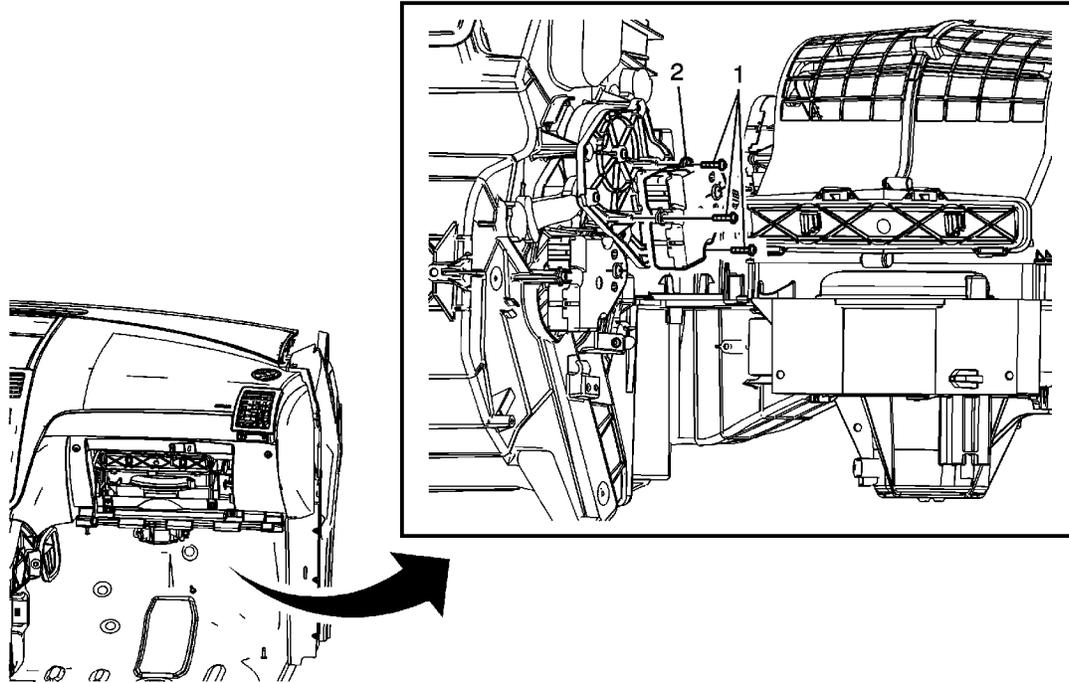


Callout	Component Name
<p>Caution: In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p>Preliminary Procedures</p> <ol style="list-style-type: none"> 1. Remove the instrument panel insulator - right side. Refer to Instrument Panel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

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

Mode Valve Actuator Replacement

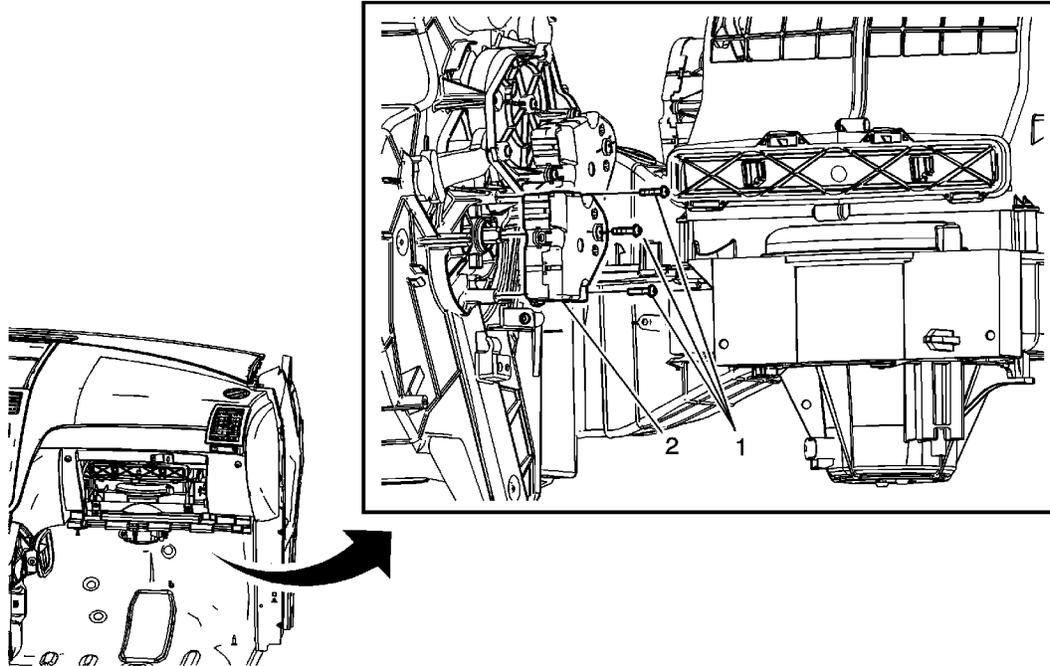


Callout	Component Name
<p>Caution: In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p>Preliminary Procedures</p>	
<ol style="list-style-type: none"> 1. Remove the instrument panel insulator - right side. Refer to Instrument Panel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

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

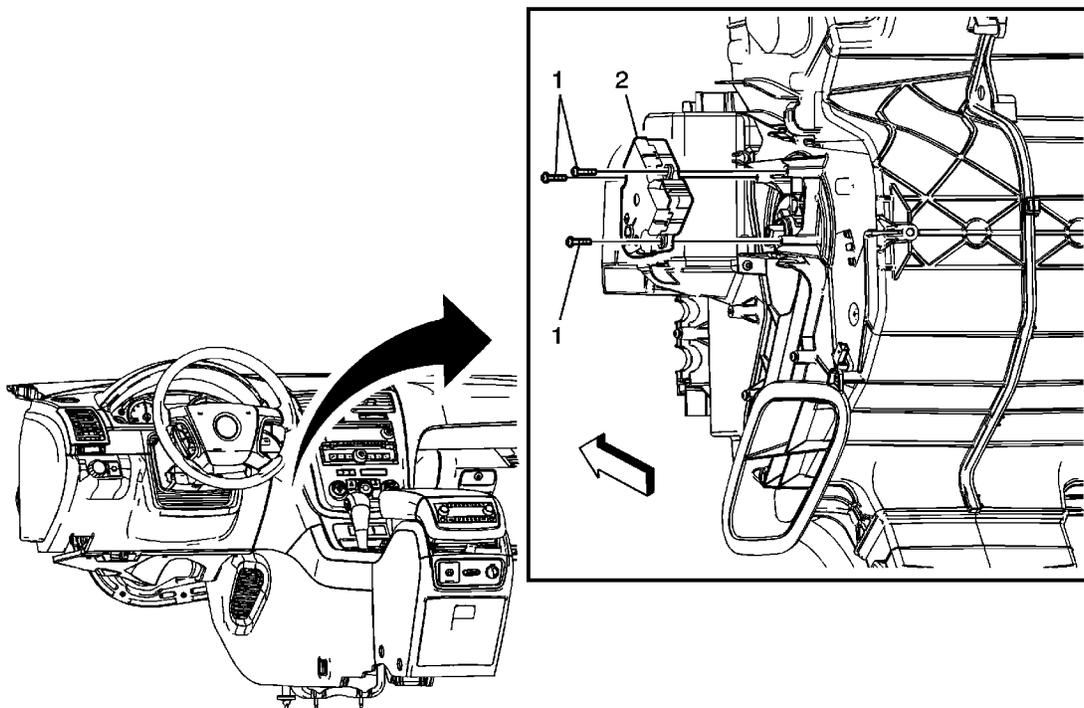
Temperature Valve Actuator Replacement - Right Side



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

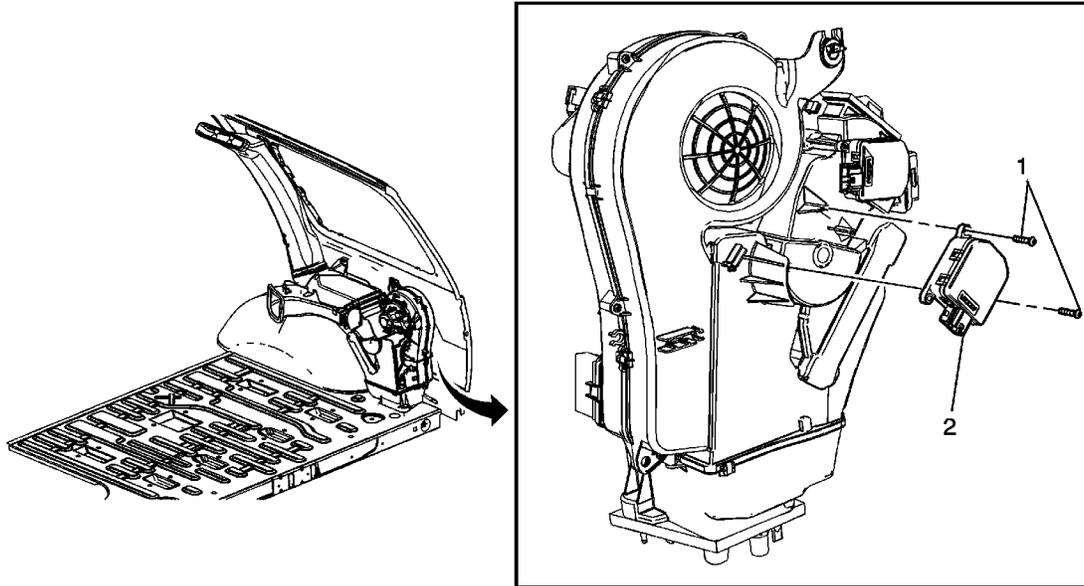
1. Disconnect the electrical connectors.
2. Re-calibrate the right temperature actuator. Refer to [Actuator Recalibration](#).

Temperature Valve Actuator Replacement - Left Side



Callout	Component Name
<p>Caution: In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p>Preliminary Procedure</p> <p>Remove the instrument panel insulator - left side. Refer to Instrument Panel Insulator Panel Replacement - Left Side.</p>	
<p>1</p>	<p>Left Temperature Actuator Screw (Qty: 3)</p> <p>Caution: Refer to Fastener Caution in the Preface section.</p> <p>Tighten 2 N·m (18 lb in)</p>
<p>2</p>	<p>Left Temperature Actuator</p> <p>Procedure</p> <ol style="list-style-type: none"> 1. Disconnect the electrical connectors. 2. Re-calibrate the right temperature actuator. Refer to Actuator Recalibration.

Auxiliary Temperature Valve Actuator Replacement



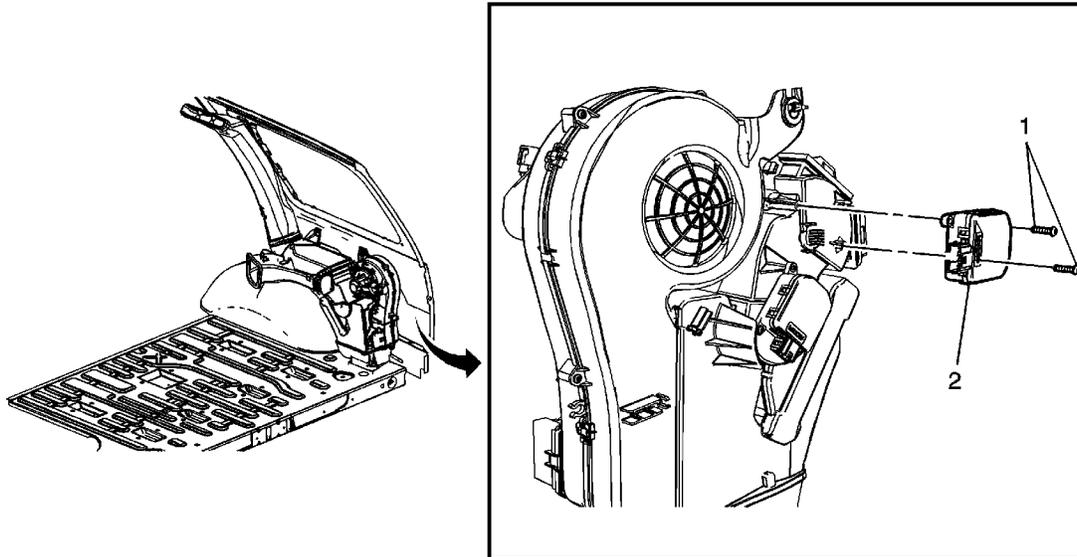
Callout	Component Name
<p>Caution: In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p>Preliminary Procedures</p>	
<ol style="list-style-type: none"> 1. Remove the rear quarter lower trim panel. Refer to Quarter Lower Rear Trim Panel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



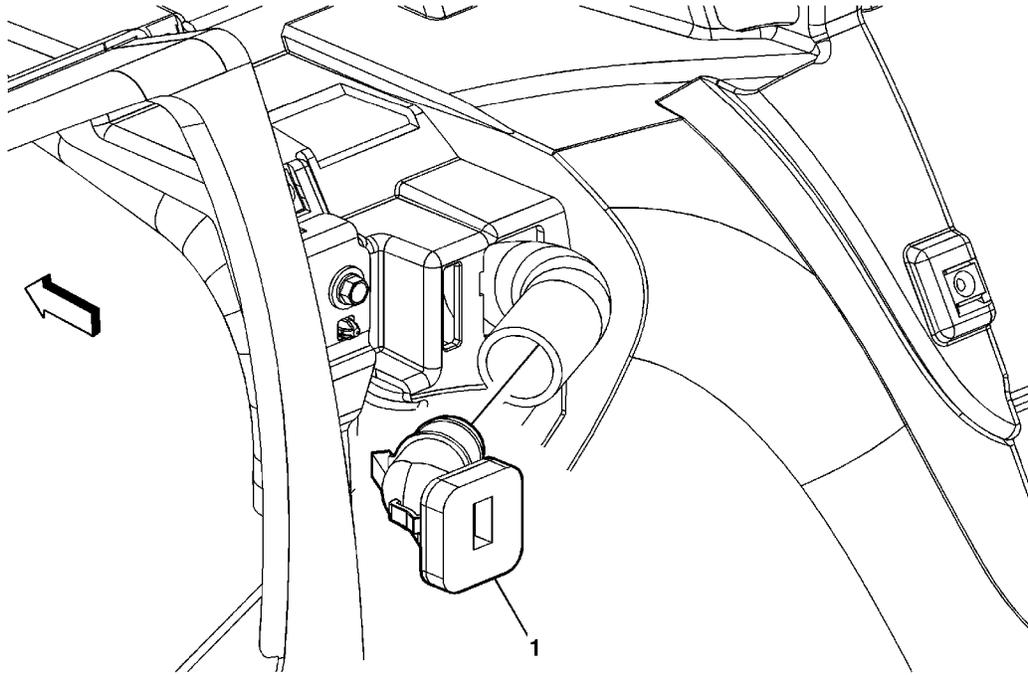
Callout	Component Name
<p>Caution: In order to avoid actuator damage, DO NOT apply power to the actuator when it is not installed in the HVAC module.</p>	
<p>Preliminary Procedures</p>	
<ol style="list-style-type: none"> 1. Remove the right rear quarter trim panel. Refer to Quarter Lower Rear Trim Panel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

2

Procedure

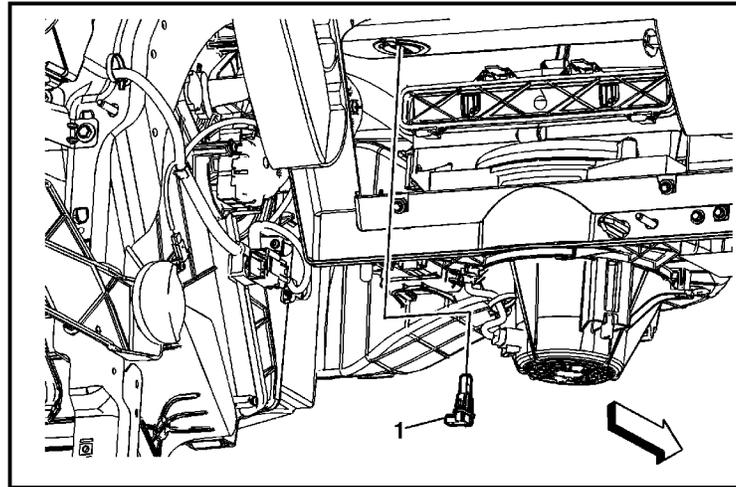
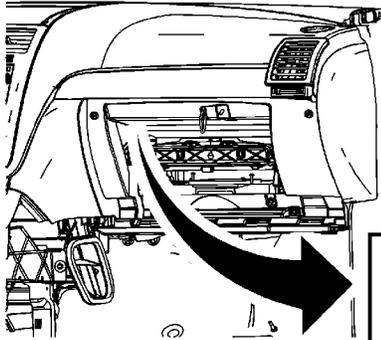
Re-calibrate the mode actuator. Refer to [Actuator Recalibration](#).

Inside Air Temperature Sensor Aspirator Replacement



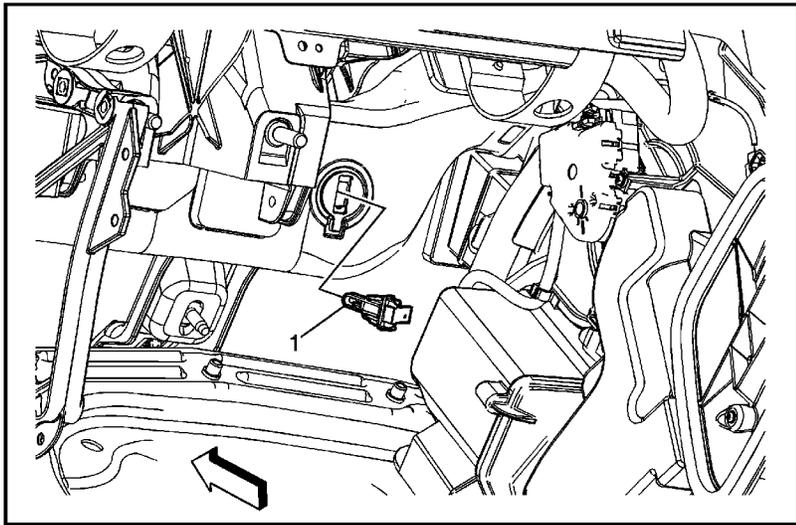
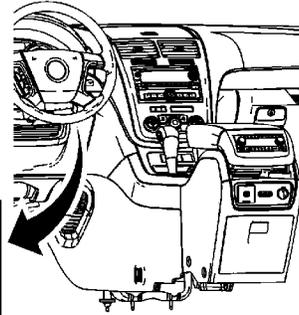
Callout	Component Name
<p>Preliminary Procedure</p>	
<p>Remove the driver knee bolster. Refer to Driver Knee Bolster Replacement .</p>	
<p>1</p>	<p>Aspirator Assembly</p> <p>Procedure</p> <ol style="list-style-type: none"> 1. Disconnect the electrical connector. 2. Rotate the aspirator to remove from inlet hose.

Duct Air Temperature Sensor Replacement - Upper Right Side



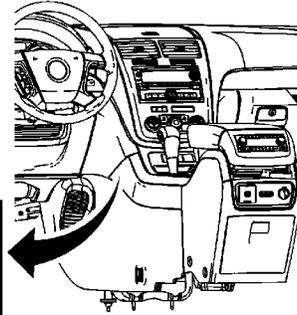
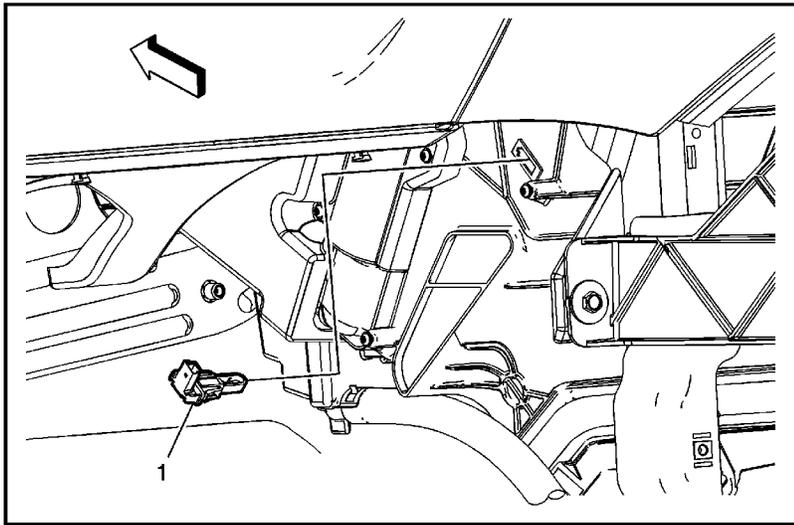
Callout	Component Name
<p>Preliminary Procedure</p> <p>Remove the I/P compartment. Refer to Instrument Panel Compartment Replacement .</p>	
<p>1</p>	<p>Air Temperature Sensor - Upper Right</p> <p>Procedure</p> <ol style="list-style-type: none"> 1. Disconnect the electrical connector. 2. Grasp and pull sensor straight downward from air duct.

Duct Air Temperature Sensor Replacement - Upper Left Side



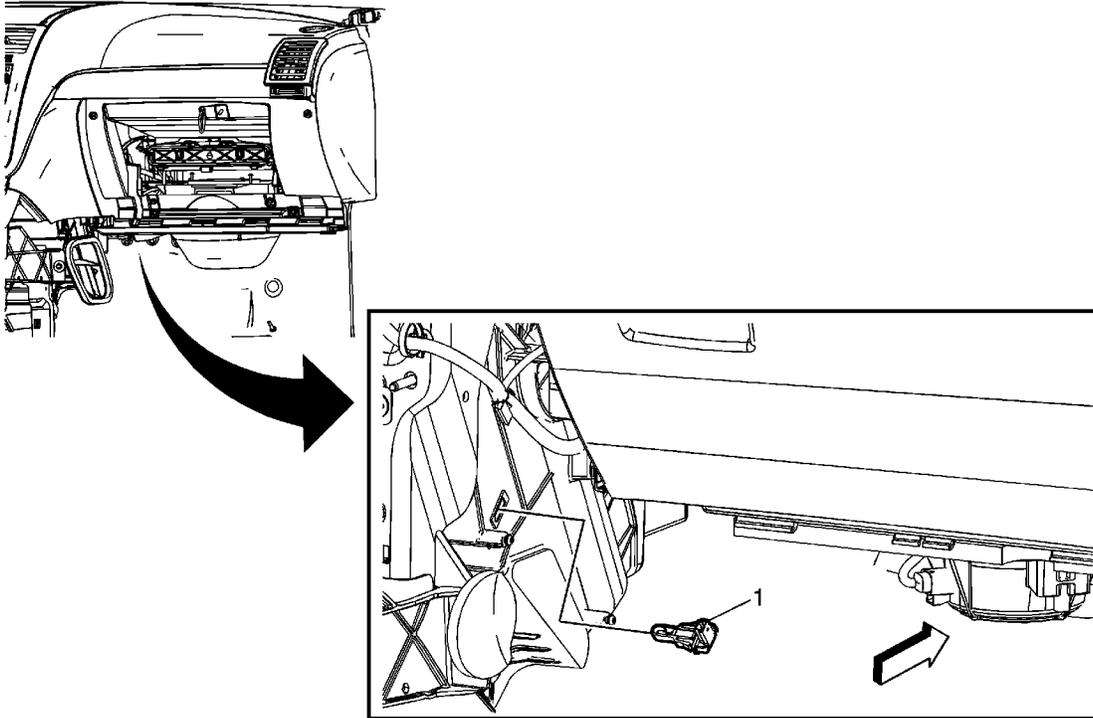
Callout	Component Name
Preliminary Procedure	
Remove the driver knee bolster. Refer to Driver Knee Bolster Replacement .	
1	Air Temperature Sensor - Upper Left Procedure <ol style="list-style-type: none"> 1. Disconnect the electrical connector. 2. Grasp and pull sensor straight downward from air duct.

Duct Air Temperature Sensor Replacement - Lower Left Side



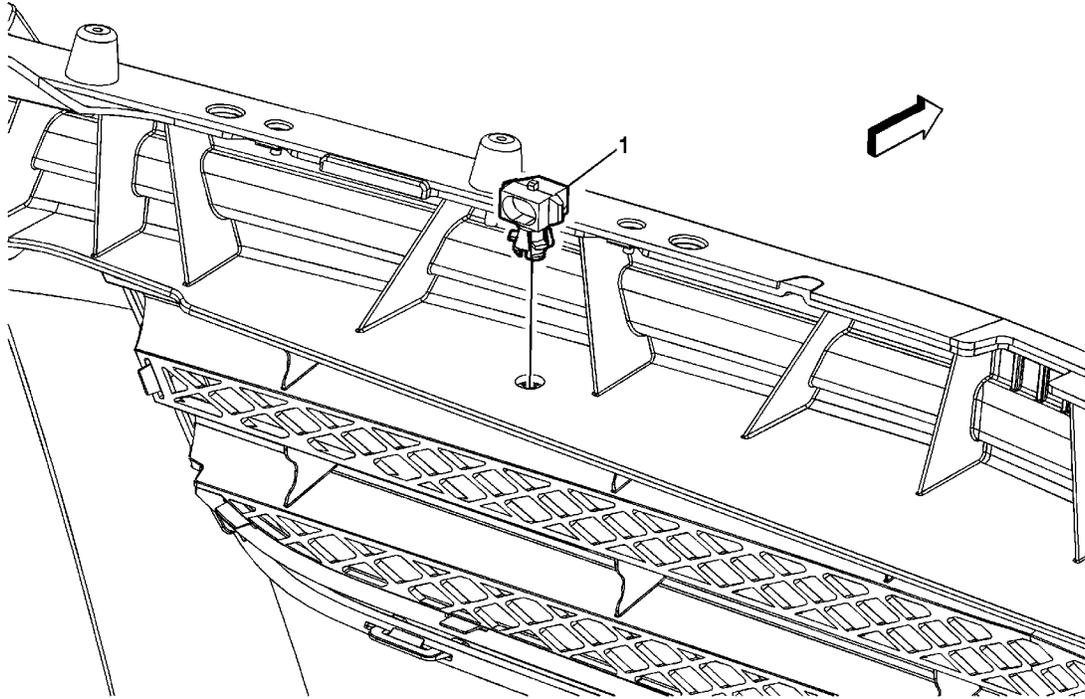
Callout	Component Name
<p>Preliminary Procedure</p> <p>Remove the front floor console extension panel - left side. Refer to Front Floor Console Extension Panel Replacement - Left Side .</p>	
<p>1</p>	<p>Air Temperature Sensor - Lower Left</p> <p>Procedure</p> <ol style="list-style-type: none"> 1. Disconnect the electrical connector. 2. Grasp and pull sensor straight outward from HVAC case.

Duct Air Temperature Sensor Replacement - Lower Right Side



Callout	Component Name
<p>Preliminary Procedure</p> <ol style="list-style-type: none"> 1. Remove the front floor console extension panel - right side. Refer to Front Floor Console Extension Panel Replacement - Right Side . 2. Remove the instrument panel insulator - right side. Refer to Instrument Panel Insulator Panel Replacement - Right Side . 	
<p>1</p>	<p>Air Temperature Sensor - Lower Right</p> <p>Procedure</p> <ol style="list-style-type: none"> 1. Disconnect the electrical connector. 2. Grasp and pull sensor straight outward from HVAC case.

Ambient Air Temperature Sensor Replacement



Callout	Component Name
<p>Preliminary Procedure</p>	
<p>Remove the front compartment sight shield. Refer to Front Compartment Sight Shields Replacement.</p>	
<p>1</p>	<p>Ambient Air Sensor</p> <p>Procedure</p> <p>Squeeze bottom tabs together for removal of sensor.</p>