AIR CONDITIONING 223

# SECTION VII

# **AIR CONDITIONING**

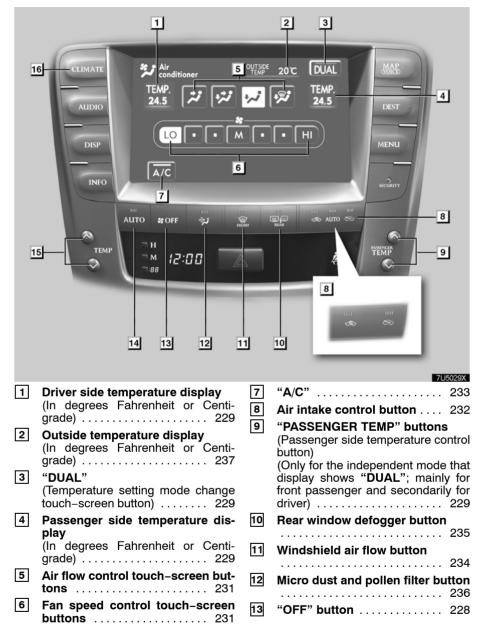
Air conditioning

• Automatic air conditioning controls

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#### AIR CONDITIONING

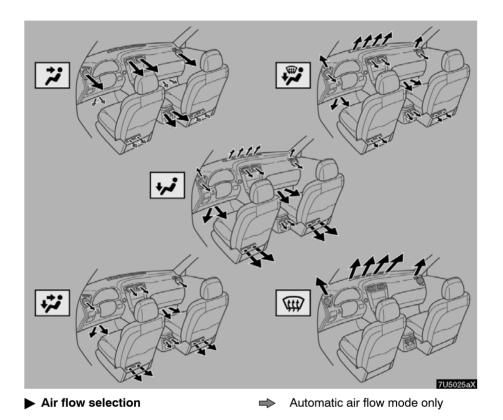
### Automatic air conditioning controls



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#### AIR CONDITIONING 227

#### The automatic air conditioning automatically maintains the set temperature.

In the automatic operation mode, the air conditioning selects the most suitable fan speed, air flow, air intake and on-off the air conditioning according to the temperature.

The engine switch must be in "IG-ON" mode.

"CLIMATE": Push this button to display touch-screen buttons for automatic air conditioning controls.

### NOTICE

To prevent the battery from being discharged, do not leave the air conditioning on longer than necessary when the engine is not running.



By pushing the switch above, you can operate the speech command system. For the operation of the speech command system and the command, see pages 150 and 153.

#### (a) Climate control

SETTING OPERATION – automatic control



#### 1. Push the "AUTO" button.

An indicator light will illuminate to show that the automatic operation mode has been selected.

Air flow quantity, switching of the diffusers, on-off of the air conditioning, and switching of the air intake between RECIRCU-LATED AIR and OUTSIDE AIR are automatically adjusted. The operation status is shown by each indicator.

When one of the manual control buttons is depressed while operating in automatic mode, the mode relevant to the depressed button is set. Other conditions continue to be adjusted automatically.

Push the "OFF" button to turn the fan off.

#### INFORMATION

 This automatic control has additional function as described below, when the "AUTO" button is pushed.

The fan speed is stopped for a little while until warm air preparation, when outside temperature is cold like a winter season in the "Floor", "Bi-level" or "Floor/Windshield" air flow mode. If quick removal for exterior frost, fog and inside fog on the windshield is desired, use the high fan speed setting after the "Windshield" air flow mode has been selected.

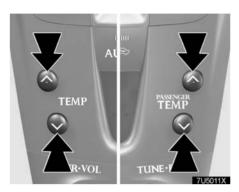
The fan speed is stopped few seconds until cool air preparation, when outside temperature is hot like a summer season in the "Panel" or "Bi–level" air flow mode.

 The "Floor/Windshield" air flow mode may be applied automatically, if the outside temperature is lowered down to below 0°C (32°F).

This is not malfunction. The "Floor/Windshield" air flow mode turns on the defogging and defrosting function with the purpose of cleaning your front view for safe driving.

If the "Floor" air flow mode is desired with the main purpose of heating, "Floor" air flow mode can be selected manually by touching the air flow control button.

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2. Use the "TEMP" or "PASSENGER TEMP" button to set the desired vehicle interior temperature.

The **"TEMP**" or **"PASSENGER TEMP**" (" $\land$ ", " $\lor$ ") buttons are used to set the desired interior temperature. The interior temperature will be controlled on the driver and passenger side simultaneously or individually.

To increase the interior temperature, push the " $\Lambda$ " button, to decrease it, push the " $\vee$ " button.

#### If quick heating or cooling is desired ----

"LO" appears when you hold it until maximum cooling (decrease), and "HI" appears when you hold it until maximum warning (increase).

"**TEMP**" **button** — Changes the temperature on the driver and passenger sides simultaneously or the driver side only.

"PASSENGER TEMP" button — Changes the temperature settings separate from the driver side.



#### "DUAL" —

This button is used to set the temperatures independently for the driver's seat and front passenger seat.

Touching the button changes from the independent mode to the linked mode.

**Independent mode:** Temperatures can be set independently for the driver's seat and front passenger's seat. The indicator will come on to show that the independent mode has been selected.

**Linked mode:** The same temperature is set for the driver's seat and front passenger's seat. The indicator will come off to show that the simultaneous temperature setting mode has been selected.

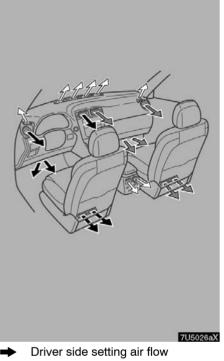
When the temperature for the front passenger's seat is changed in linked mode, the mode is changed automatically to independent mode.

#### INFORMATION

Knowledge for the two-temperature selector operation:

This air conditioning system has two independent temperature selectors: left and right (for the use of driver and front passenger respectively).

- There are cases where the temperature of the airflow may not accurately correlate on the driver and front passenger side according to circumstances, even if the left and right temperature selectors are set at the same temperature. If this situation occurs, use the fine tune operation to adjust the air temperature on one side.
- There are cases where one or both of the airflow temperatures may not accurately correlate with the set temperature according to circumstances, when the airflow temperature settings on the left and right are substantially different. For example, if the left controller is set at central or neutral temperature while the right one is set at maximum heating or maximum cooling, or vice versa. If this situation occurs, use the fine tune operation to adjust the air temperature on each side.



- Passenger side setting air flow
- ⇒ Mixed air flow

# SETTING OPERATION — manual control

When one of the manual control touchscreen buttons is depressed while operating in automatic mode, the operation corresponding to the depressed button is set. Other conditions continue to be adjusted automatically.

If manual air flow selection is desired -



The outlets from which air is delivered can be selected manually by touching the touch-screen button. The function of each mode is as follows:

- **Panel** Air flows mainly from the instrument panel vents and rear vents.
- 2 **Bi-level** Air flows from both the floor vents, instrument panel vents and rear vents.

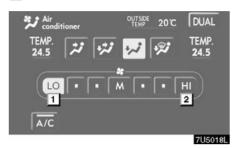
When you set the temperature selector setting at about the middle in automatic operation, warm air flows out of the floor vents and relatively lowtemperature air flows out of the instrument panel vents and rear vents.

- **3** Floor Air flows mainly from the floor vents and rear vents.
- 4 Floor/windshield Air flows mainly from the floor vents, windshield vents and rear vents.

Take in the fresh air with selecting the OUTSIDE AIR mode by the air intake control button.

The selected mode is highlighted.

#### If manual fan speed control is desired



# I Fan speed at low 2 Fan speed at high

The fan speed can be set to your desired speed by touching the appropriate air flow control button.

The higher the fan speed is, the more air is delivered.

Pushing the "**OFF**" button turns the fan off. To remove the exterior windshield frost and interior windshield fog, use the high speed setting.

The selected mode is highlighted.

If manual switching of air intake is desired —



Each time you push the air intake control button, the mode changes in order from the RECIRCULATED AIR mode to AUTO-MATIC mode to OUTSIDE AIR mode, then back to the RECIRCULATED AIR mode. Each indicator light shows which mode is now selected.

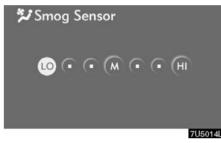
- **1 RECIRCULATED AIR mode** If quick circulation of cooled air is desired, select this mode.
- EXHAUST GAS AUTOMATIC mode (on some models) — If the outside air contains harmful substances like exhaust gas (i.e., when the vehicle running just in front of your vehicle accelerates rapidly), the system changes automatically from the OUTSIDE AIR mode (with indicators
   and 3 on) to the RECIRCU-LATED AIR mode (with indicators
   and 2 on).
- **OUTSIDE AIR mode** The system will take fresh outside air into the vehicle.

Turning off the air conditioning manually will cancel the EXHAUST GAS AUTO-MATIC mode. If you select the "AUTO" mode during fan operating, the air conditioning turns on and the EXHAUST GAS AUTOMATIC mode will operate.

For normal use, it is best to keep the air intake control button set to OUTSIDE AIR mode. If recirculated air is used during heating, the windows will fog up more easily. To change the sensitivity of the sensor switching between the RECIRCU-LATED AIR and OUTSIDE AIR in the AU-TOMATIC mode, push the air intake control button and hold it for a few seconds.

The "Smog Sensor" screen will be displayed.

The sensitivity of the sensor can be adjusted only while the vehicle has been stopped.



The sensitivity of the touch-screen button is set to be higher toward "HI" and lower toward "LO".

#### Touch the desired button on the screen.

When you push the "AUTO" button, the above screen goes off.

# If manual on-off of the air conditioning is desired —



Touch "**A**/**C**" to turn the air conditioning on and touch it again to turn the air conditioning off. If you turn off the air conditioning manually, the EXHAUST GAS AUTOMAT-IC mode will be cancelled.

If the outside temperature is below  $0^{\circ}C$  ( $32^{\circ}F$ ), the air conditioning will turn off automatically. At this time, the indicator on "**A**/**C**" is off and the EXHAUST GAS AUTOMATIC indicator light remains on. However, the EXHAUST GAS AUTOMATIC mode does not operate. When the air conditioning turns on as with the raised temperature, the EXHAUST GAS AUTOMAT-IC mode resumes.

If the system is used for ventilation, heating in dry weather or removing frost or exterior fog on the windshield, turn the air conditioning off once it is no longer required. This will improve fuel economy. The air conditioning can be used for yearround automatic temperature control including cooling and dehumidifying operation.

If the air conditioning compressor does not operate, the indicator of "A/C" will blink. If the indicator of "A/C" blinks even when "A/C" is touched again, have the compressor checked by your Lexus dealer.

(b) Windshield defogging and defrosting

To remove interior fog on the wind-shield —



Push the windshield air flow button.

# To remove frost or exterior fog on the windshield—

1. Push the "TEMP" (" $\Lambda$ ") button to set the "HI".

2. Push the windshield air flow button.

3. Touch fan speed control touch-screen button on the right side to obtain a maximum air flow.



4. Leave "A/C" off.

When the windshield air flow button is pushed while operating in automatic mode, the air conditioning is set to operate.

If you push the windshield air flow button once again while in the windshield air flow mode, the mode then returns to the last mode used.

#### 

Do not use the windshield air flow button during cooled air operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up blocking your vision.

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# (c) Rear window and outside rear view mirror defoging



To turn the electric rear window and outside rear view mirror defogger on, push the button above.

The engine switch must be in "IG-ON" mode.

The thin heater wires on the inside of the rear window and the heater panels in the outside rear view mirrors will quickly clear the surface.

Keep your hands off the mirror faces when the system is on.

The indicator light is on when the defogger is operating.

CAUTION Since the mirror surfaces can get hot, do not touch them when the system is on. The system will automatically shut off when the defogger has operated about 15 minutes.

If further defrosting or defogging is desired, simply actuate the switch again. When the surface has cleared, push the button once again to turn the defogger off. Continuous use may cause the battery to discharge, especially during stop-and-go driving. The defogger is not designed to dry rain water or to melt snow.

If the outside rear view mirrors are heavily coated with ice, use a spray de-icer before operating the system.

#### NOTICE

- When cleaning the inside of the rear window, be careful not to scratch or damage the heater wires or connectors.
- To prevent the battery from being discharged, turn the switch off when the engine is not running.

#### (d) Micro dust and pollen filter

This vehicle is equipped with a micro dust and pollen filter mode. When this mode is activated, air from the vents will remove pollen on the driver and passengers.



# Push the micro dust and pollen filter button.

The indicator light and "**A**/**C**" come on. The RECIRCULATED AIR mode is also turned on at normal outside temperature. Air is delivered from the instrument panel vents to the areas near the driver and passengers to remove pollen on them.

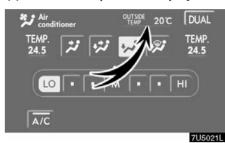
When the interior is purified sufficiently with fresh air (after about 3 minutes at normal outside temperature and about 1 minute at low outside temperature), this mode will be turned off automatically and the indicator light will go out.

When the micro dust and pollen filter is activated, this mode will be turned off by pushing the micro dust and pollen filter button again. The indicator light will also go out.

#### **INFORMATION**

- Use this mode to remove pollen quickly carried by the driver or passengers or through the window in the days with much pollen.
- Use and push the windshield air flow button to remove the fog on the windshield in rainy days.
- Fresh air is delivered even when the micro dust and pollen filter button is turned off.

#### (e) Outside temperature display



# Outside temperature is displayed on the screen.

The displayed temperature ranges from  $-40^{\circ}C$  ( $-40^{\circ}F)$  up to  $50^{\circ}C$  (122°F).

If the temperature shows "--" or "E", take your vehicle to your Lexus dealer.

#### (f) Operating tips

- To help cool down the interior after parking in the hot sun, drive for the first few minutes with the windows open. After the excess heat has blown away, close the windows.
- Make sure the air inlet grilles in front of the windshield are not blocked by leaves or other obstructions.
- If air flow control is not satisfactory, check the dashboard vents and rear vents. (See "(g) Adjusting the position of and opening and closing the air outlets" on page 240.)
- On humid days, do not blow cold air on the windshield. The windshield could fog up because of the difference in air temperature on the inside and outside of the windshield.
- Keep the area under the front seats clear to allow air to circulate throughout the vehicle.
- On cold days, set the fan speed to high for a minute to help clear the intake ducts of snow or moisture. This can reduce the amount of fogging on the windows.
- When driving on dusty roads, close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake control button be set to the OUTSIDE AIR mode to take in the fresh air and set the fan speed selector to any setting except OFF.
- If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake control button be temporarily pressed in to the RECIRCULATED AIR mode, which will close off the outside passage and prevent outside air and dust from entering the vehicle interior.

#### Heating

For best results, set controls to: For automatic operation —

Push in the "AUTO" button. Temperature — To the desired temperature Air intake — OUTSIDE AIR Air conditioning — OFF

For manual operation -

Fan speed — To the desired fan speed		
Temperature — Towards high		
temperature		
Air intake — OUTSIDE AIR		
Air flow — FLOOR		
Air conditioning — OFF		

- For quick heating, select RECIRCU-LATED AIR mode for a few minutes. To keep the windows from fogging, select OUTSIDE AIR mode after the vehicle interior has been warmed.
- Touch "A/C" on for dehumidified heating.
- Choose floor/windshield air flow to heat the vehicle interior while defrosting or defogging the windshield.

#### Air conditioning

For best results, set controls to:

For automatic operation —

```
Push in the "AUTO" button.
Temperature — To the desired
temperature
Air intake — OUTSIDE AIR
Air conditioning — ON
```

For manual operation —

```
Fan speed — To the desired fan speed
Temperature — Towards low
temperature
Air intake — OUTSIDE AIR
Air flow — PANEL
Air conditioning — ON
```

• For quick cooling, select RECIRCU-LATED AIR mode for a few minutes.

### Ventilation

For best results, set controls to:

For automatic operation —

```
Push in the "AUTO" button.
Temperature — Towards low
temperature
Air intake — OUTSIDE AIR
Air conditioning — OFF
```

For manual operation -

```
Fan speed — To the desired fan speed
Temperature — Towards low
temperature
Air intake — OUTSIDE AIR
Air flow — PANEL
Air conditioning — OFF
```

### Defogging and defrosting

– The inside of the windshield

For best results, set controls to:

For automatic operation -

Temperature —	Towards high
-	temperature to heat;
	low temperature to
	cool
Air intake — OL	JTSIDE AIR
Air flow — WINI	

For manual operation -

Fan speed — To the desired fan speed		
Temperature — Towards high		
temperature to heat;		
low temperature to		
cool		
Air intake — OUTSIDE AIR		
Air flow — WINDSHIELD		

When the windshield air flow button is pushed, air flows mainly from the windshield vents and turns on the defogging function with the purpose of clearing the front view.

Pushing this button once again returns the air flow mode to the last one used.

This button allows the air intake to select OUTSIDE AIR mode automatically. This is to clean up the front view more quickly. If you want to return the setting to RECIR-CULATED AIR mode, push the air intake control button once again.

Touch "**A**/**C**" for dehumidified heating or cooling. This setting clears the front view more quickly.

 On humid days, do not blow cold air on the windshield – the difference between the outside and inside temperatures could make the fogging worse.

#### - The outside of the windshield

For best results, set controls to:

For automatic operation —

Temperature —	Towards high
	temperature
Air intake — Ol	JTSIDE AIR
Air flow — WIN	DSHIELD

For manual operation —

Fan speed — To the desired fan speed		
Temperature — Towards high		
temperature		
Air intake — OUTSIDE AIR		
Air flow — WINDSHIELD		

When the windshield air flow button is pushed, air flows mainly from the windshield vents and turns on the defogging function with the purpose of clearing the front view.

Pushing this button once again returns the air flow mode to the last one used.

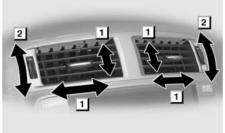
This button allows the air intake to select OUTSIDE AIR mode automatically. This is to clean up the front view more quickly. If you want to return the setting to RECIR-CULATED AIR mode, push the air intake control button once again.

Touch "**A**/**C**" for dehumidified heating or cooling. This setting clears the front view more quickly.

 To heat the vehicle interior while defrosting the windshield, choose floor/ windshield air flow.

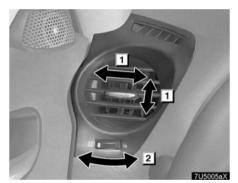
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(g) Adjusting the position of and opening and closing the air outlets

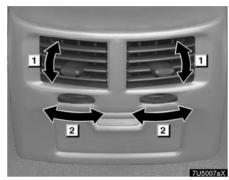


Center outlets

 Adjusting air flow direction
 Open or close the vent



Side outlets
 Adjusting air flow direction
 Open or close the vent



Rear seat outlets

7U5004aX

- Adjusting air flow direction
- 2 Adjusting air flow direction or, open or close the vent

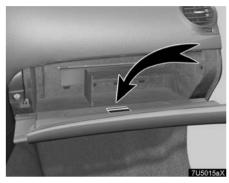
If air flow control is not satisfactory, check the center vents, side vents and rear vents. They may be opened or closed as shown.

When outside temperature is cold like a winter season, air flow temperature from the center vents, side vents and rear vents may not be warmed up enough for a while until that the engine coolant temperature becomes high enough.

If air flow from the center vents, side vents and rear vents is not satisfactory, air flow direction can be changed manually by adjusting the vents fin direction or the vents may be closed.

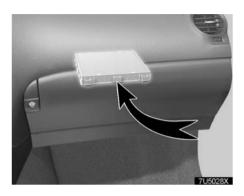
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# (h) Checking and replacing the air conditioning filter



The air conditioning filter information label is placed in the glove box as shown and indicates that a filter has been installed.

The air conditioning filter, in addition to removing odors, prevents dust and pollen from entering the vehicle through the air conditioning vent.



The air conditioning filter is behind the glove box.

The air conditioning filter may clog after long use. The filter may need to be replaced if the air flow of the air conditioner and heater experiences extreme reductions in operating efficiency, or if the windows become to fog up easily.

If the symptoms of air conditioning efficiency problems occur, contact your nearest Lexus dealer to have the filter checked and replaced.

To maintain the air conditioning efficiency, replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, such as inner city or desert areas, early replacement may be required. (For scheduled maintenance information, please refer to the "Owner's Manual Supplement/Scheduled Maintenance".)

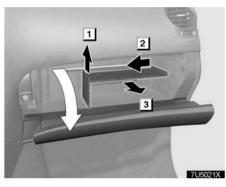
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# 1. Set the air conditioning system to RECIRCULATED AIR mode.

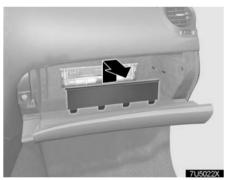
The air conditioning filter case cannot be removed with the OUTSIDE AIR mode.

#### 2. Turn the engine switch off.

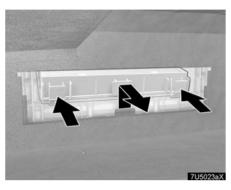
When you replace the filter, be sure to turn off the fan.



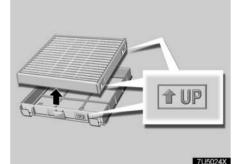
3. Open the glove box. Lift and remove the partition.



4. Remove the filter cover.



5. Remover the filter case as shown.



# 6. Remove the filter from the filter case.

7. Inspect the filter on the surface.

If it is the just moderately dusty, it may be cleaned by blowing compressed air from the reverse surface. Do not wash or oil the filter.

If it is dirty, it should be replaced.

When installing the filter in the filter case, keep the arrow pointing up.

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### **INFORMATION**

The air conditioning filter should be installed properly in position. The use of air conditioning with the filter removed may cause deteriorated dustproof performance and then affect air conditioning performance.

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