Installation Manual for Air Outlet Shutter Plate (for 4-Way Cassette)

Model	PI-160LS2

NOTE:
The applicable indoor unit may be different depending on the product series.
Refer to the product catalog for applicable indoor unit models.

IMPORTANT NOTICE:

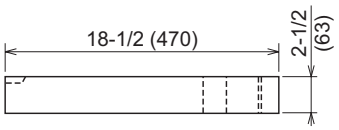
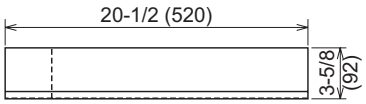
- Johnson Controls pursues a policy of continuous improvement in design and performance of products. We reserve the right to vary specifications without notice.
- No part of this manual may be reproduced without Johnson Controls' written permission.
- Keep this manual for future reference.
- Johnson Controls cannot anticipate every possible circumstance that might involve a potential hazard.
- This kit is designed for a combination of Johnson Control air conditioners. Do not use this kit by itself or in combination with other companies' air conditioners.
- Perform a test run after installation to check for abnormalities.
- Signal words are used to identify levels of hazard seriousness. Definitions for identifying hazard levels are provided below with their respective signal words.

⚠DANGER	:	Indicates a hazardous situation that, if not avoided, will result in death or serious injury.
⚠WARNING	:	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
⚠CAUTION	:	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
NOTICE	:	Indicates information considered important, but not hazard-related (e.g. messages relating to property damage).
NOTE	:	Indicates an useful information for operation and/or maintenance.

- It is assumed that this kit will be installed and serviced by English speaking people. If this is not the case, the customer should add safety, caution and operating signs in the native language.
- If you have any questions, contact your distributor or contractor.
- This manual gives a common description and information for this kit, as well as other models, which you may operate.
- This manual should be considered as a permanent part of the air conditioning equipment and should remain with the air conditioning equipment. Forward this information to the building owner and request that they maintain all the equipment manuals.

1. Factory-Supplied Accessories

Unit: inch (mm)

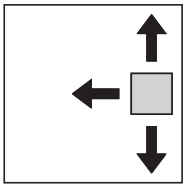
No.	Accessory		Qty.
①	Shutter Plate	 3/8t (10t)	2
②	Sheet	 1/32t (0.6t)	2

2. Blocking Part and Components

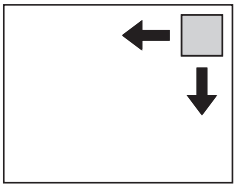
Select the blocking part. Then follow 2.1 and 2.2 below.
Cut the shutter plate using a plastic cutter as shown below.

Example

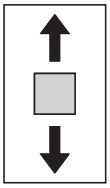
Near the Wall: 3-Way Outlet



In a Corner: 2-Way Outlet



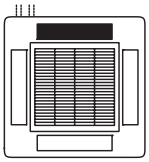
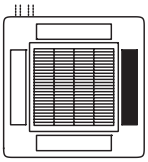
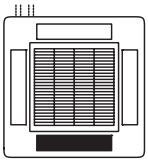
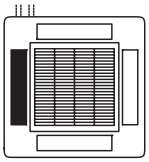
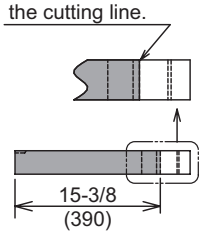
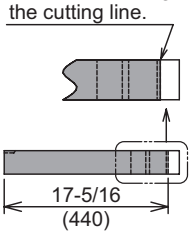
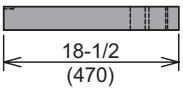
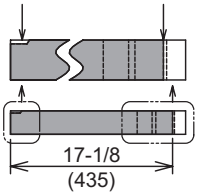
In Rectangular Room: 2-Way Outlet



2.1 3-Way Outlet

■: Blocking Part (Use ▒ Part of Shutter Plate)

Unit: inch (mm)

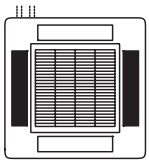
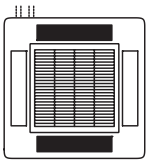
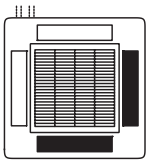
Installation Example / Indoor Unit Capacity (MBH)	Example 1 [1]	Example 2	Example 3	Example 4 [2]
	(Piping Side) 	(Piping Side) 	(Piping Side) 	(Piping Side) 
08 to 48	Cut off here along the cutting line. 	Cut off here along the cutting line. 	No need to cut off. 	Cut off the corner and cut off the cutting line. 

1: Change the position of the outlet temperature thermistor (refer to Section 2.4). Otherwise, a room temperature adjustment may not be possible.
2: In the case of Example 4, use the shutter plate after cutting off the corner along the cutting line and after cutting off the shutter plate according to the dimensions shown above.

2.2 2-Way Outlet

The air outlet directions can not be selected other than those in the figure below.
(If other air outlet directions are selected, condensation may occur.)

■: Blocking Part

Installation Example / Indoor Unit Capacity (MBH)	Example 1	Example 2 [1]	Example 3 [2]
	(Piping Side) 	(Piping Side) 	(Piping Side) 
08 to 48	The size of Shutter Plate for each model is detailed in Section 2.1		

1: Change the position of the outlet temperature thermistor (refer to Section 2.4 below). Otherwise, a room temperature adjustment may not be possible.
2: In the case of Example 3, the airflow volume will decrease compared with other cases. Set the high speed setting according to the following table as needed.

Setting from Controller and Airflow Volume during Setting High Speed Mode

Airflow Volume Setting from Wired Controller		High 2	High	Med	Low
High Speed Mode	Standard	HH2	Hi	Me	Lo
	High Speed 1	HH2	HH1	Hi	Me
	High Speed 2	HH2	HH2	HH1	Hi

"High 2" does not change the airflow volume even if the high speed mode is set.

NOTICE:

1. "High 2" does not change the airflow volume even if the high speed mode is set.
2. When setting "High Speed 1", the airflow volume is increased one level compared with the airflow volume of the standard mode. In the case of "High Speed 2", the airflow volume is increased two levels.
3. When setting "High Speed 2", the airflow volume of "High 2" and "High" is equal.
4. When the high speed mode or "High 2" is set, the sound level may increase during the indoor unit operation.

2.3 Setting of Fan Speed

The airflow volume setting function "High 2" is to adapt to existing airflow volumes of "High", "Med" and "Low". The air conditioning can be supported in the instance of a high ceiling without the high speed setting by the wired controller. Set the ceiling height according to the table below.

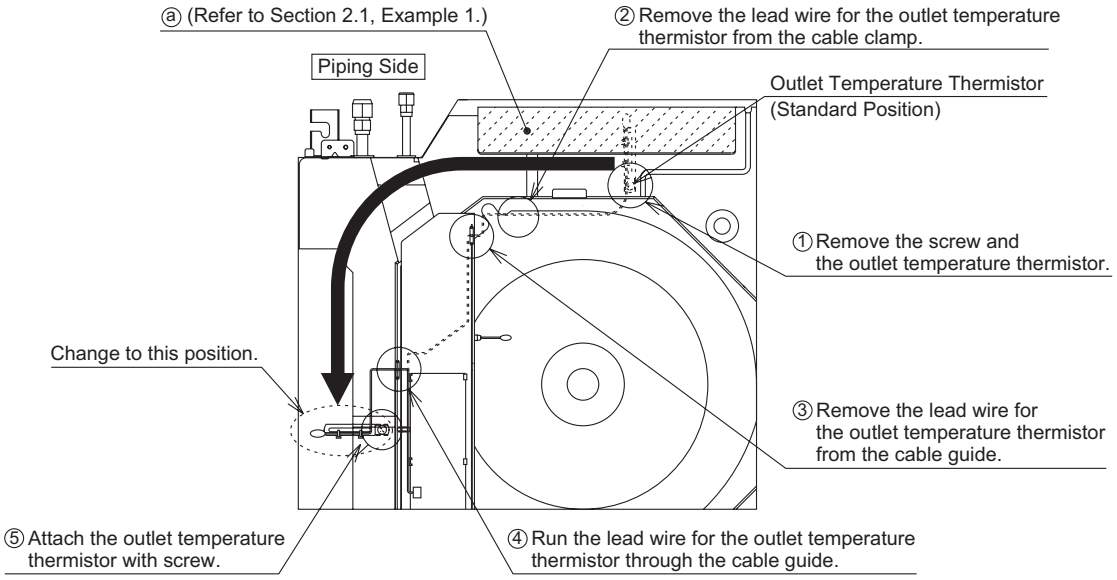
Standard Limit of Ceiling Height (Standard Combination)

MBH / Item / Airflow Mode		Ceiling Height: feet (m)		
		4-Way Outlet	3-Way Outlet	2-Way Outlet
08 - 15	High	8 ft. 11 in. (2.7)	9 ft. 10 in. (3.0)	10 ft. 10 in. (3.3)
	High 2	11 ft. 6 in. (3.5)	11 ft. 10 in. (3.6)	11 ft. 10 in. (3.6)
18 - 24	High	8 ft. 11 in. (2.7)	9 ft. 10 in. (3.0)	10 ft. 10 in. (3.3)
	High 2	11 ft. 6 in. (3.5)	11 ft. 10 in. (3.6)	11 ft. 10 in. (3.6)
30 - 48	High	10 ft. 6 in. (3.2)	11 ft. 10 in. (3.6)	13 ft. 1-1/4 in. (4.0)
	High2	13 ft. 10 in. (4.2)	14 ft. 1-1/4 in. (4.3)	14 ft. 1-1/4 in. (4.3)

2.4 Changing of Outlet Temperature Thermistor (when only blocking ⓐ below)

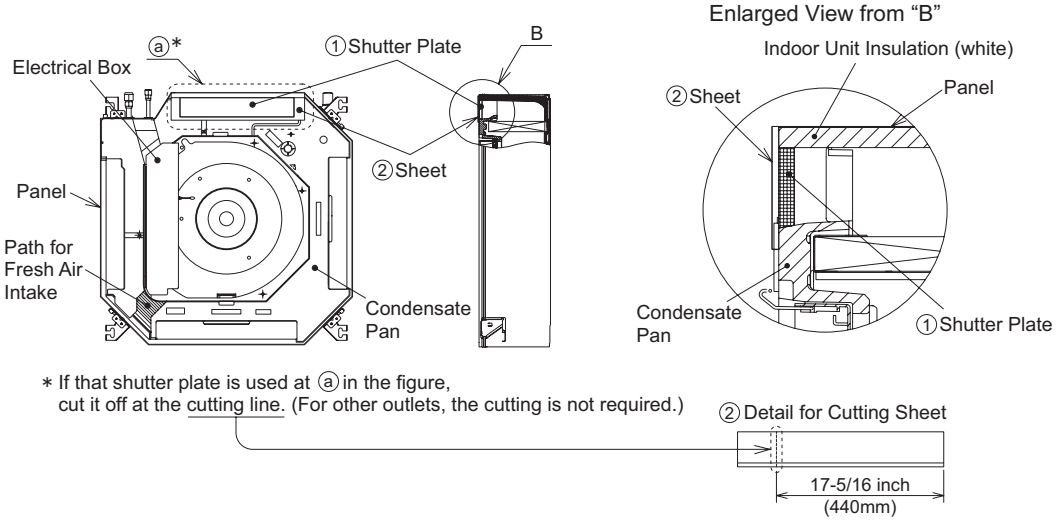
Change the position of the outlet temperature thermistor as shown in the following figure.

After the position of outlet temperature thermistor is changed, clamp the surplus lead wires together.



3. Installing Shutter Plate

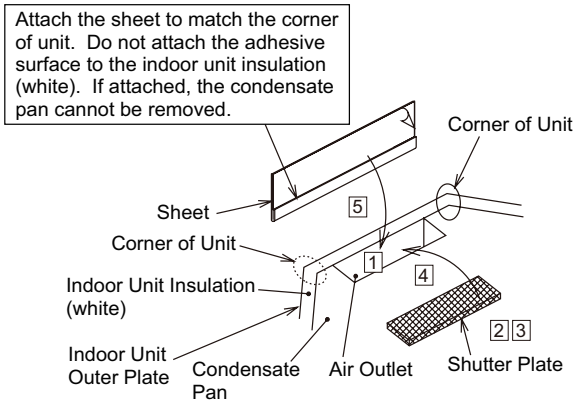
This figure is shown referencing Section 2.1, Example 1 of 3-Way Outlet.



Procedures

1. Determine the air outlet to block. (Refer to Section 2.1 or 2.2.)
2. Check the length of the shutter plate.
3. Cut off the shutter plate. (Refer to Section 2.1.)
4. Attach the shutter plate to the air outlet.
5. Attach the sheet to the condensate pan. (Refer to * part in the figure above.)

NOTE:
Cut off the sheet using adequate dimensions so as not to attach it to wirings and the path for the fresh air intake.
If attached, the condensate pan cannot be removed.



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