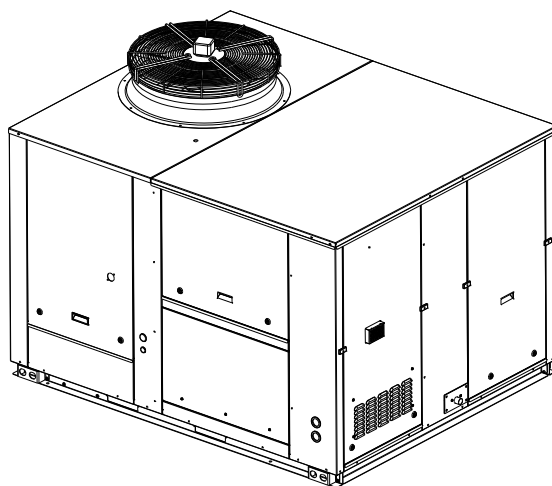




BY JOHNSON CONTROLS

# Propane gas conversion kit for ROOF TOP ACTIVA 017/040



**Options and Accessories, Installation manual**

**Ref.: N-40418\_EN 0112**

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**Propane gas conversion kit for ROOF  
TOP ACTIVA 017/040**

## 1.1 List of components

## 1.1 List of components

This accessory consists of the components indicated in the table.

Item	Description	Qty.
1.	Ø1,5 mm burner injector	7
2.	Conversion label	2
3.	Thread sealant	1
4.	Installation instructions	1
Propane gas conversion kit ROOF TOP ACTIVA 017-040		

## 1.2 General information



### CAUTION

- *The gas valves on these units are only suitable for gas operating. Do not try to make them work with liquid hydrocarbons.*
- *These installation instructions only cover the conversion of the unit to work with propane gas. For any other issue related to the installation, please use the installation manual of the unit.*

The ROOF TOP ACTIVA ARG-ARD units are factory-supplied to operate with natural gas 2ND-H/E, G20. They can be transformed to run with propane gas 3P, G31, 37 or 50 mbar using this conversion kit that is installed on site.



### NOTE

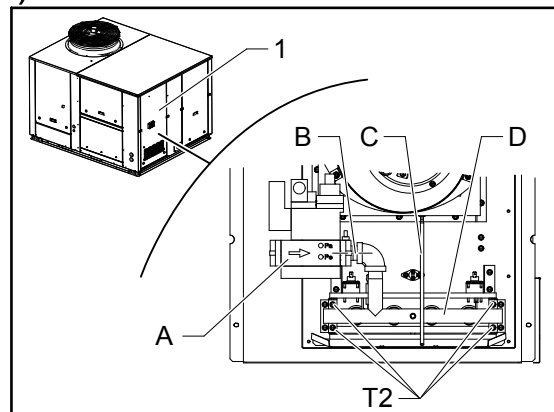
*LPG propane gas tank and component manufacturers, as well as their suppliers, can provide complete information about the sizing of the tank in regards to evaporation, pipes, and recommended regulator adjustments.*

## 1.3 Installation

### Burner conversion (before electricity and gas connection)

1. Remove the access panel to the gas section -1-.
2. Loosen the bolts of the securing flange -B- of the valve -A- to the gas manifold, but do not remove them.
3. Separate the fitting flange valve and place it to one side, making sure not to pull the cables and not to remove the valve body O-ring.
4. Loosen the four bolts -T2- that secure the gas manifold -D- to the burner frame.
5. Remove the manifold assembly from the unit.

- |   |              |   |                   |
|---|--------------|---|-------------------|
| A | Gas valve    | C | Silicone tube     |
| B | Valve flange | D | Manifold assembly |



6. Remove and dispose of the original injectors -1-.



**NOTE**

- Four injectors in units 017/022.
- Seven injectors in units 032/040.



**ATTENTION**

*Do not apply excessive sealant. The injector hole can become blocked.*

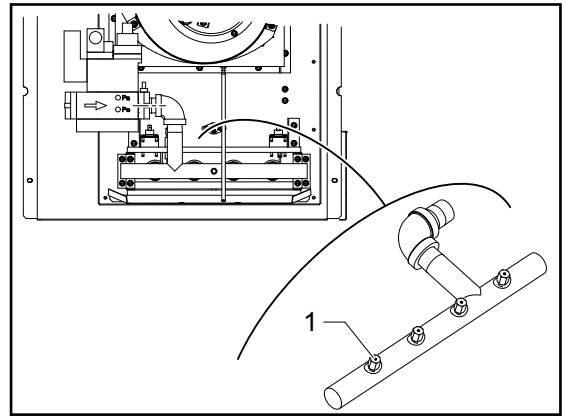
7. Clean the threads and fit the Ø1,5 mm injectors supplied with the kit. Before fitting, apply Loctite-542 type sealant to the male threads.



**ATTENTION**

*Fit the valve with the O-ring.*

8. Re-fit the manifold assembly and the gas valve, following in reverse order points 2 to 5.  
9. Check that the silicone tube -C- (see figure in section [Installation](#), see on page 2) is placed above the manifold.



**Start-up and adjustments**

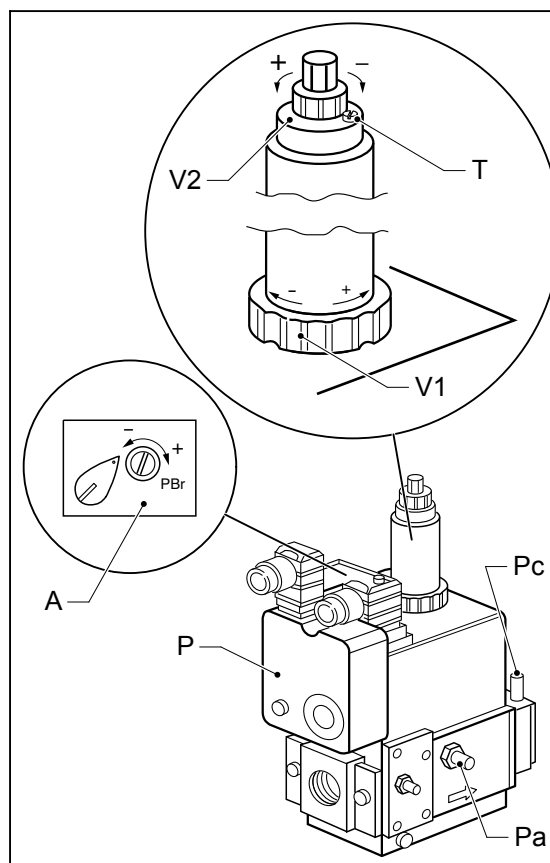
1. Connect the electricity and gas supply of the unit. Carry out the start-up and leak detection, according to the installation manual of the unit.
2. Adjust the value of the pressure switch -P- (see corresponding figure) and gas pressures according to the table and the procedure indicated in section [Gas valve application and adjustment details](#), see on page 3.

## 1.4 Gas valve application and adjustment details

ARG/ARD model	Heat capacity [kW]		Gas family	Gas pressure switch adjustment [mbar]	Gas valve regulation [mbar]			Burner injector [mm]
	Total (LHV)	Net			Main regulator	2 stages	1 stage	
017/022	27	24,8	3P (G31)	26	24,5	23,2	13	1,5
032/040	46,8	42,8						

## 1.5 Gas consumption

1. With both stages of heat operating:
  - Adjust the main regulator (pressure reading -**Pa**-).
  - Adjust the 2nd stage regulator -**V2**- (pressure reading -**Pc**-).
2. With only heat stage no. 1 operating:
  - Adjust the 1st stage regulator -**V1**- (pressure reading -**Pc**-).
3. Once adjusted, tighten the securing bolt -**T**- of the regulating wheels.
4. Put the unit into operation with both stages of heat for a minimum of 15 minutes, and check the CO and CO<sub>2</sub> content.
  - A. Main regulator adjustment
  - P. Pressure switch



## 1.5 Gas consumption

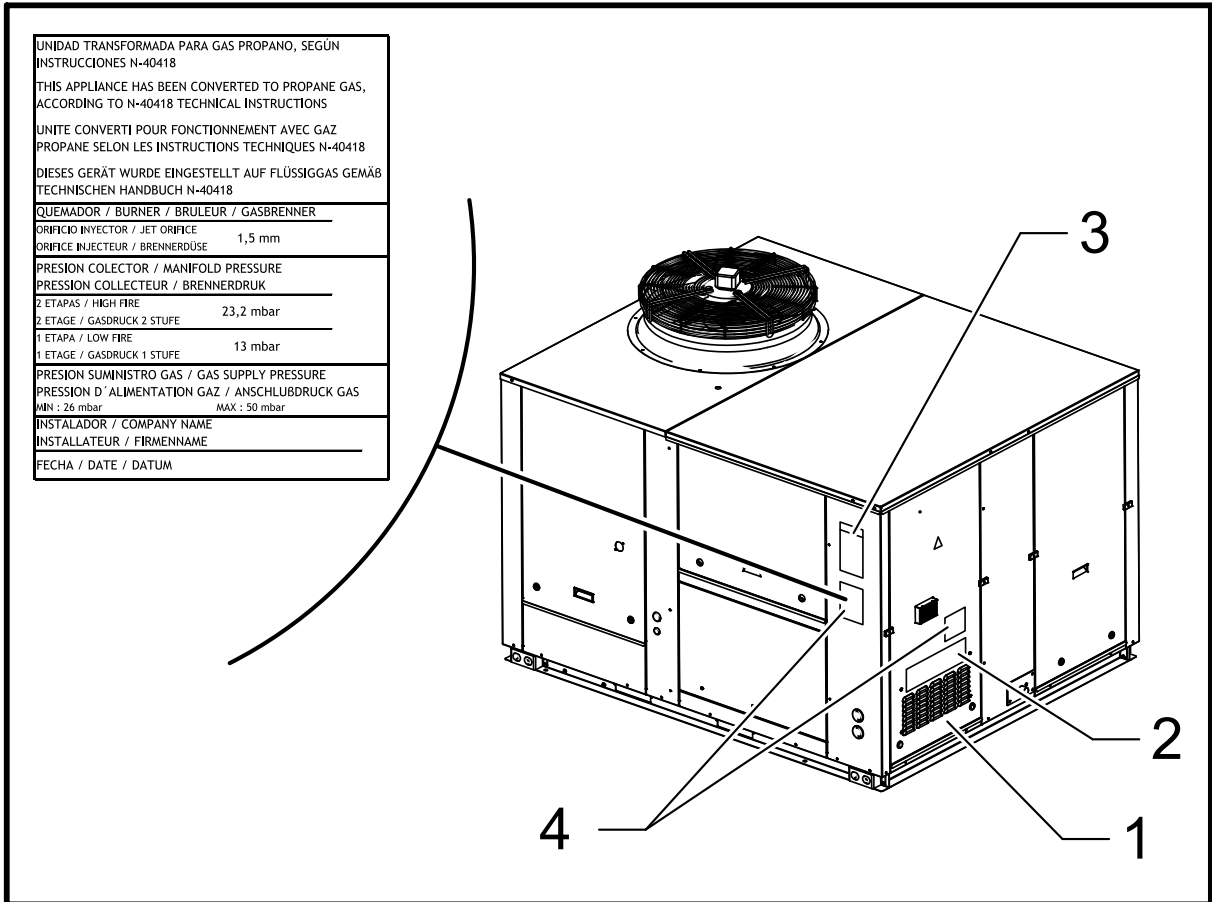
ARG/ARD model	Heat stages	Consumption [m <sup>3</sup> /h] (G31 to 37 mbar and 15 °C)
017/022	2 stages (100%)	1,1
	1 stage (50%)	0,8
032/040	2 stages (100%)	1,9
	1 stage (50%)	1,3

## 1.6 Labels

Complete the details on the 2 conversion labels **-4-** supplied, using a permanent marker.

Place one of the labels, with all the details completed, over the original gas label **-2-**.

Place the second label directly below the unit rating plate **-3-**.



- 1 Access panel
- 2 Original gas label
- 3 Rating plate
- 4 Propane conversion label