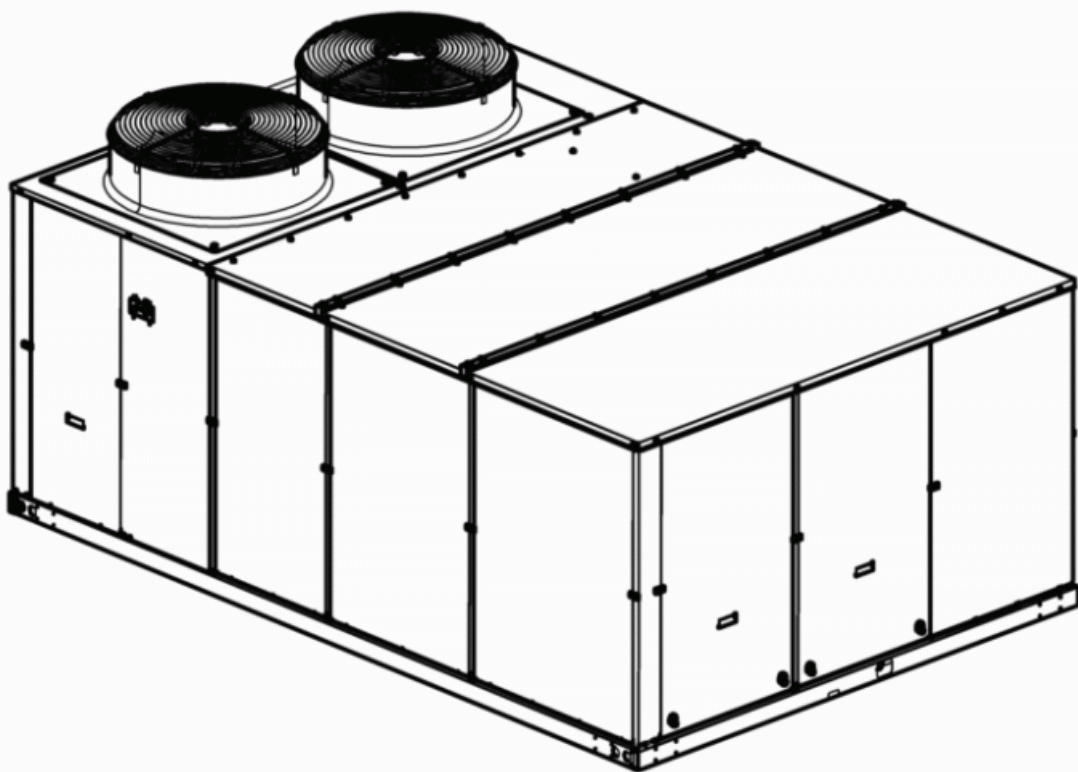




BY JOHNSON CONTROLS

100 kW high-power burner conversion kit Roof Top ACTIVA 045/090 (Accessory)



Options and Accessories, Installation manual

Ref.: N-40330_EN 0809



Index

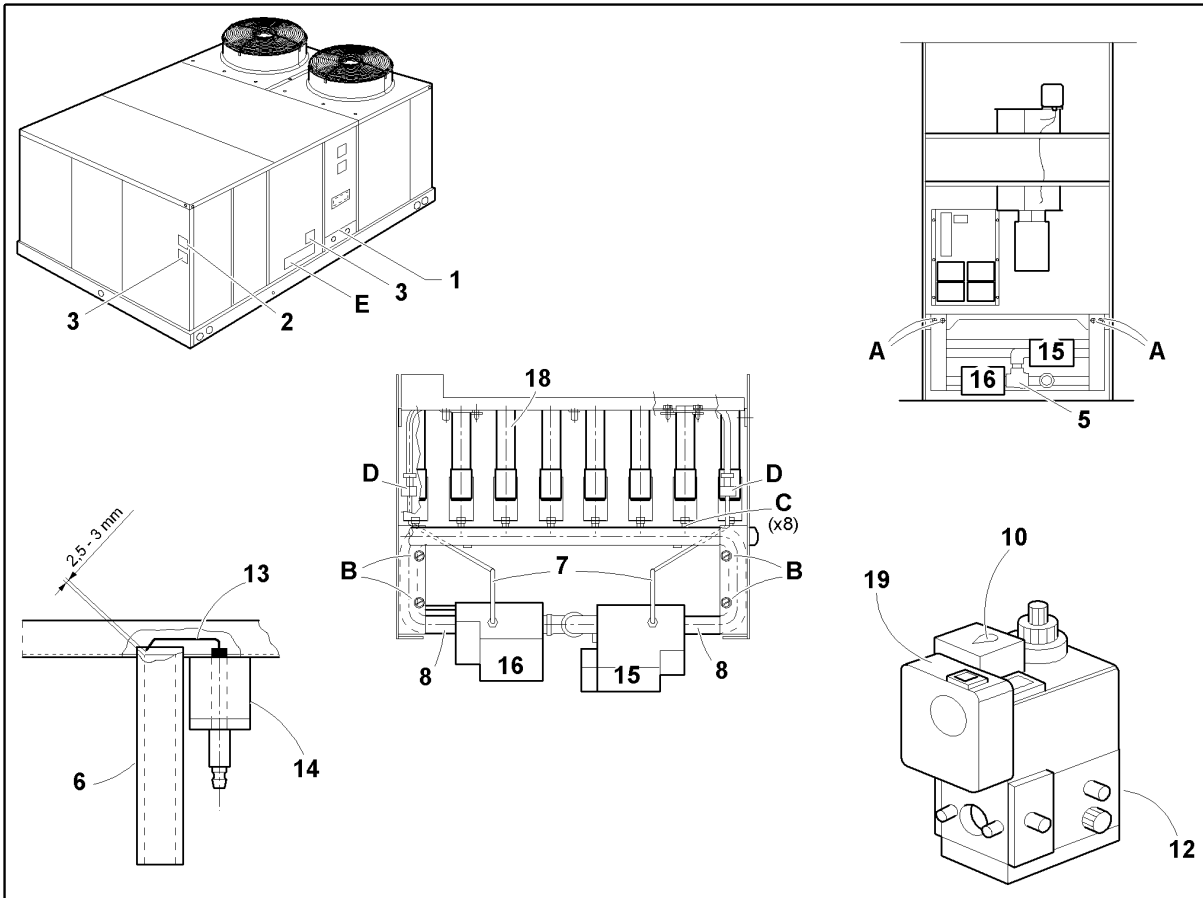
1	100 kW high-power burner conversion kit.....	1
1.1	Installation.....	2
1.1.1	General.....	3
1.1.2	Burner conversion (before electricity and gas connection).....	3
1.1.3	Labels.....	5

1

100 kW high-power burner conversion kit

1.1 Installation

Installation details, Roof Top ACTIVA 045/090 models



- | | |
|---------------------------------------------------------------|-----------------------------------------------|
| 1. Access panel (2 piece) | 14. PTFE support |
| 2. Rating plate | 15. Gas valve 1 |
| 3. Conversion label | 16. Gas valve 2 |
| 5. Burner assembly | 18. Burners (8) |
| 6. Burner | 19. Gas pressure switch (on gas valve 1 only) |
| 7. Pilot tube | A. Set screws |
| 8. Supply manifold | B. Set screws for the supply manifolds |
| 10. Main regulator (PBr) | C. Burner injector |
| 12. Pressure intake on supply manifold (on connection flange) | D. Pilot injector |
| 13. Ignition electrode | E. Original gas hole label |

1.1.1 General

The Roof Top ACTIVA ARG/ARD 045/090 units are factory-issued with a burner with a total heat content (L.H.V.) = 85 kW and set to run off 2ND-H/E (G-20) natural gas. Using this accessory kit, the burner can be converted, increasing the total heat content (L.H.V) to 100 kW, keeping the original setting of the gas valves.

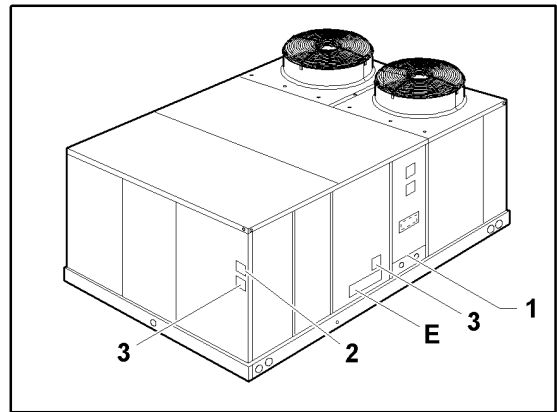
Where applicable, depending on the type of gas used, the gas valve regulators can be suitably adjusted (see table of settings and follow the adjustment procedure indicated in the Installation manual).

Unit	Type of burner	Gas family	Gas valve adjustments	
			Main regulator (mbar)	Stage regulator (mbar)
ACTIVA ARG/ARD 045/090	N320/N380	2ND - H/ E (G-20)	10,5	9,9
		2ND - L (G-25)	15,2	14,6

1.1.2 Burner conversion (before electricity and gas connection)

Remove the access panel to the heating section.

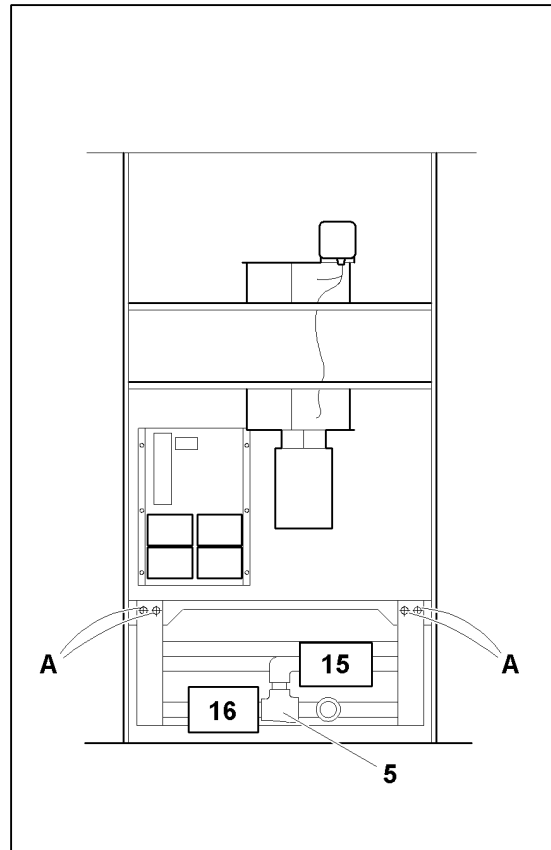
Disconnect the cables from the flame sensor, ignition electrode and gas valve.



1.1 Installation

Loosen the four set screws **-A-** from the burner assembly.

Pull the burner assembly out of the unit.



With the burner assembly out of the unit, loosen the screws **-B-** securing the position of both supply manifolds.

Carefully remove the valve/manifold assembly, pulling it back enough to be able to remove the burner injectors **-C-** (four on each manifold)

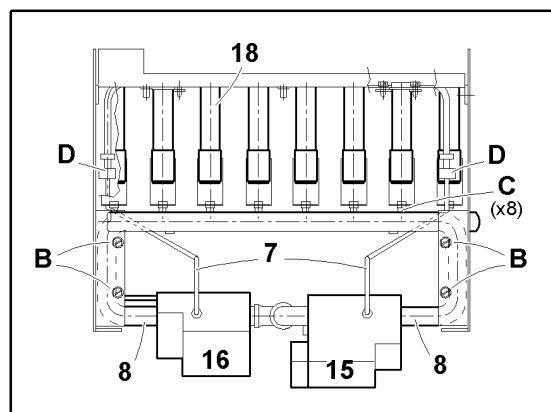
**CAUTION**

*Do not remove the two pilot injectors **-D-**. The original ones from the unit are kept (0.9 mm).*

Remove and dispose of the burner injectors **-C-** on both supply manifolds (four on each manifold) and fit those supplied (ITEM 1) measuring 3 mm.

**CAUTION**

- *Before fitting the burner injectors **-C-** apply the Loctite-542-type sealant supplied (ITEM 5) to all male threads.*
- *To not apply to much sealant to prevent the injector hole from becoming blocked.*

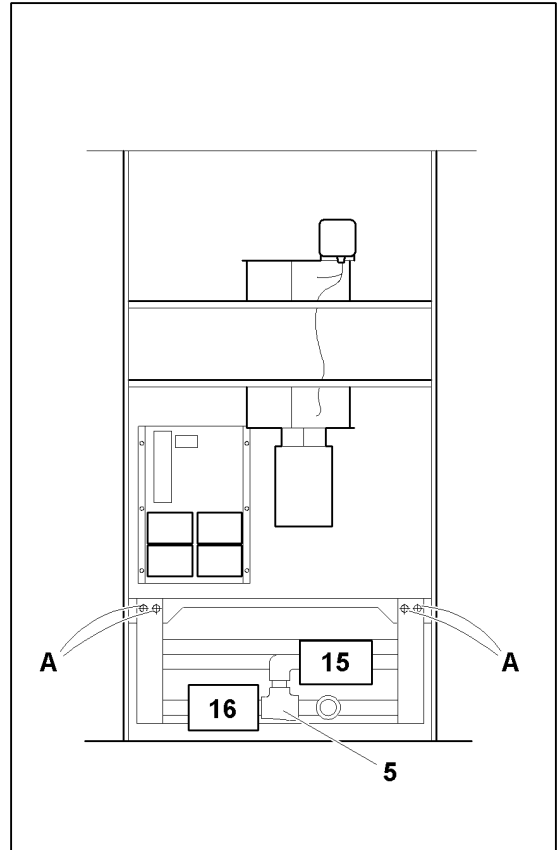


Fit the burner assembly in its housing inside the unit, ensuring it is correctly supported on the guides at the bottom and securing it with the screws -A-.

Reconnect the flame sensor, ignition electrode and gas valve cables.

START-UP

Connect the electricity and gas supply to the unit, start the unit and check for leaks according to the installation/operating/maintenance manual.

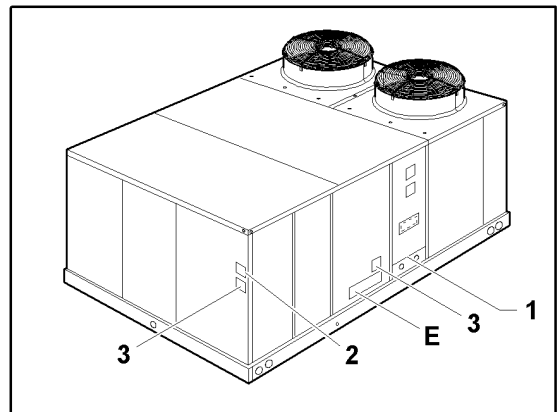


1.1.3 Labels

Complete the details on the label (ITEM 3) supplied using a permanent marker.

Place the completed label over the label on the original gas hole -E-.

Place a second label next to the unit rating plate.



Unit	Heat capacity (kW)		Gas consumption gas m ³ /h (ND-H G-20)	Minimum supply air flow m ³ /h	Increase in temperature (°C) at 100% capacity	
	Total (P.C.I)	Net			Min.	Max.
ACTIVA ARG/ARD 045/090	100	90	9,75	10000	17	33