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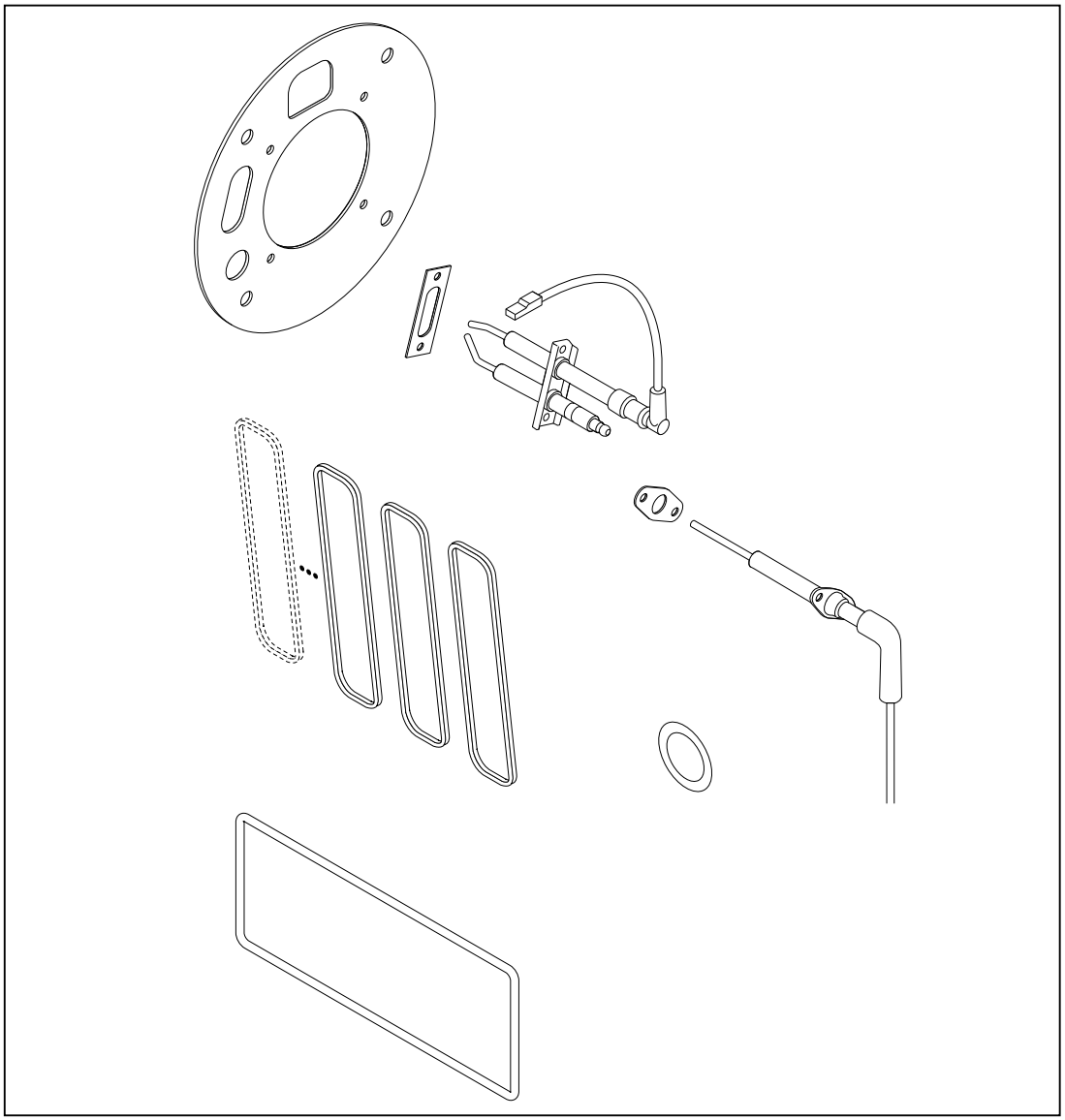
manual

Installation instructions



Service set WTC-GB 120 ... 300-A

83196702 ▪ 1/2010-10

1 Servicing

Observe safety instructions given in the installation and operating manual of the condensing boiler.

► Carry out servicing in accordance with the enclosed inspection card (Print No. 7570).

► (Picture **1**) Open flap on boiler control panel.
► Undo screw ① and remove front panel ②.
► (Picture **2**) Remove plug connections ③ from ignition electrode ④ by slightly rotating and remove ignition electrode.
► (Picture **3**) Remove plug X14 ⑥ and earth wire ⑦ from boiler electronics.
► Remove ionisation electrode ⑧.

Removing burner tube WTC-GB 120-A

► (Picture **4**) Remove plugs for gas valve ⑩, gas pressure switch ⑪ and fan ⑫.
► Undo screwed union ⑬ on gas pipe, counter holding with a spanner.
► Remove hoses on gas/air interconnection.
► Remove nuts ⑭ on burner flange.
► (Picture **5**) Remove burner flange with gas/air interconnection ⑮.
► Remove gasket on burner flange ⑯.
► Remove burner tube ⑰.
► Remove deposits from combustion chamber.
► Check burner tube for visible damage, replace if necessary.

Removing burner tube WTC-GB 170 … 300-A

► (Picture **6**) Remove plugs for gas pressure switch ⑱, gas valve ⑲ and fan ⑳.
► Undo screwed union ㉑ on gas pipe, counter holding with a spanner.
► Remove screws ㉒ between sound absorber and Venturi.
► Remove hoses on gas/air interconnection.
► Remove nuts ㉓ on burner flange.
► (Picture **7**) Remove burner flange with gas/air interconnection ㉔.
► Remove gasket on burner flange ㉕.
► Remove burner tube ㉖.
► Remove deposits from combustion chamber.
► Check burner tube for visible damage, replace if necessary.

Cleaning the burner tube

Clean burner tube if required:

► Clean the inside of the burner tube (if necessary use compressed air to blow through from outside to inside).
► If dust deposits are present, brush out burner fleece using a soft brush to prevent damaging the burner fleece.

Once finished cleaning, ensure that the fibres of the burner fleece do not stick out too far in the area near the ionisation electrode (danger of short circuit with ionisation electrode).

1 Servicing

Cleaning the heat exchanger

- ► (Picture **8**) Remove left panel.
- ► Remove service covers from heat exchanger ㉗ and the condensate collector ㉘.
- ► Remove deposits from the heat exchanger from the bottom up using the appropriate tools (no wet cleaning). Weishaupt recommend the use of the heat exchanger cleaning kit ㉙ (Order No. 482 000 00 032).
- ► Vacuum out deposits from the condensate collector through the service opening.
- ► Remove siphon ㉚ and clean.

Refitting

- ► Refit heat exchanger in reverse order and
  - fit burner tube ⑰/㉖ to locator pins in heat exchanger, ensuring correct alignment of groove pins,
  - fill siphon ㉚ with water,
  - fit new gaskets ㉛ and ㉜ and refit service cover (7 Nm torque),
  - refit burner flange with gas/air interconnection (10 Nm torque) and fit new gaskets to burner flange ⑯/㉕ and gas connection ⑬/㉑,
  - fit new ignition electrode ④ and new gasket ⑤ (2 Nm torque),
  - fit new ionisation electrode ⑧ and new gasket ⑨ (2 Nm torque)

Check operation of flue gas damper

- ► (Picture **9**) Switch on main switch.
- ► Set boiler to Standby (I & O Ch. 6.2.2). If a remote control station is fitted, see operating instructions WCM-FS.
- ► Remove pressure measuring hose from test point ㉝ on the condensate collector.
- ► Check pressure measuring hose for damage.
- ► Connect test equipment ㉞.
- ► Generate test pressure of > 5.5 mbar.
- ✓ The flue gas pressure switch functions correctly if the display shows `F38`.
- ► Reconnect pressure measuring hose.
- ► Reset system using [reset] button.

Check operation of water level interlock

- ► (Picture **10**) Close supply ㉟ and return ㊱.
- ► If necessary shut off expansion vessel.
- ► Reduce pressure in the appliance to 0.8 bar using inlet/outlet tap ㊲.
- ✓ The display shows error `F36`.
- ► Open supply and return.
- ► If necessary open expansion vessel.
- ► Exit Standby mode.

1 Servicing

Check differential pressure at air pressure switch

► (Picture **11**) Remove right panel.
► Remove hoses from the test points ㊳ on the air pressure switch.
► Connect test equipment:
  ▪ + to P1,
  ▪ – to P2.
► Switch on main switch.
► Check parameter 37, if necessary set to 100 %.
► Manual start-up (I & O Ch. 6.4).
► Set ratings depending on the type of boiler:
  ▪ WTC 120 = 40 %
  ▪ WTC 170 = 45 %
  ▪ WTC 210 = 45 %
  ▪ WTC 250 = 43 %
  ▪ WTC 300 = 37 %.
► Read differential pressure from measuring device.

If the pressure is above 1.2 mbar the test is ok.

If the pressure is lower:
► Check the following components:
  ▪ Hoses of the air pressure switch
  ▪ Burner tube for soiling
  ▪ Heat exchanger for soiling
  ▪ Air and flue gas ducting unimpeded
► If necessary reset parameter 37 after testing.

2 Notes

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Product		Description	Performance
	**W-Burners**	The compact series, proven millions of times over: Economical, reliable, fully automatic. Gas, oil and dual fuel burners for domestic and commercial applications. The purflam burner gives almost soot-free combustion of oil with greatly reduced NO_x emissions.	Up to 570 kW
	**Monarch and industrial burners**	The legendary industrial burner: Tried and tested, long lived, clear construction. Gas, oil and dual fuel burners for district heat provision.	Up to 11,700 kW
	**multiflam® burners**	Innovative Weishaupt technology for large burners: Minimal emission values particularly at ratings over one megawatt. Oil, gas and dual fuel burners with patented fuel distribution system.	Up to 17,000 kW
	**WK industrial burners**	Modular powerhouses: Adaptable, robust, powerful. Oil, gas and dual fuel burners for industrial plant.	Up to 22,000 kW
	**Thermo Unit**	The Thermo Unit heating systems from cast iron or steel: Modern, economic, reliable. For environmentally friendly heating. Fuel: Gas or oil as desired.	Up to 55 kW
	**Thermo Condens**	The innovative condensing boilers with the SCOT system: Efficient, low in emissions, versatile. Ideal for domestic heating. Floor standing gas condensing boiler with ratings of up to 1200 kW (cascade), for higher heat demands.	Up to 1,200 kW
	**Heat pumps**	The heat pump programme offers solutions for utilisation of heat from air, soil and ground water. The systems are suitable for refurbishment or new builds. It is possible to use several heat pumps in cascade operation.	Up to 130 kW
	**Solar systems**	Free energy from the sun: Perfectly coordinated components, innovative, proven. Pleasantly shaped flat roof collectors to support heating and of domestic water	
	**Water heater / energy reservoir**	The attractive domestic water heating range includes classic water heaters which are supplied through a heating system and energy reservoirs which can be fed through solar systems.	
	**Control technology / building management**	From control panels to complete building management systems – at Weishaupt you can find the entire spectrum of modern control technology. Future oriented, economical and flexible.	