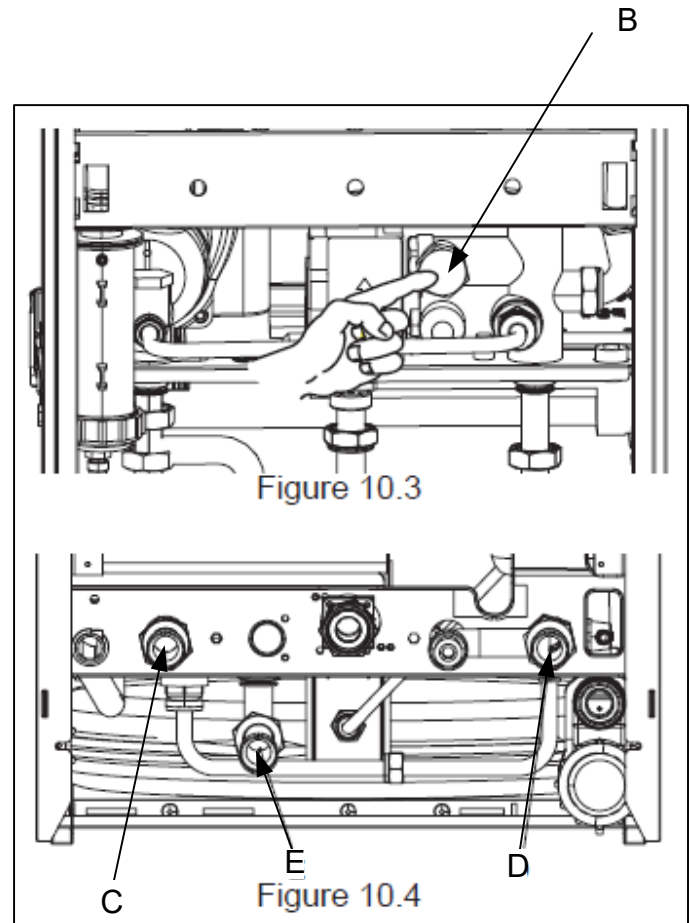
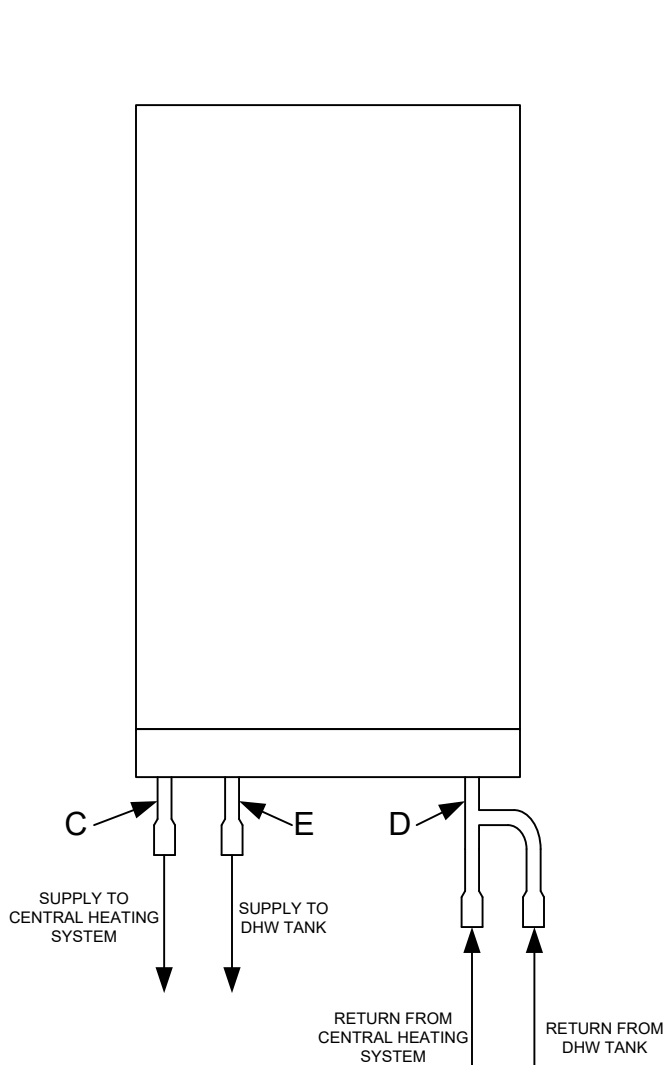


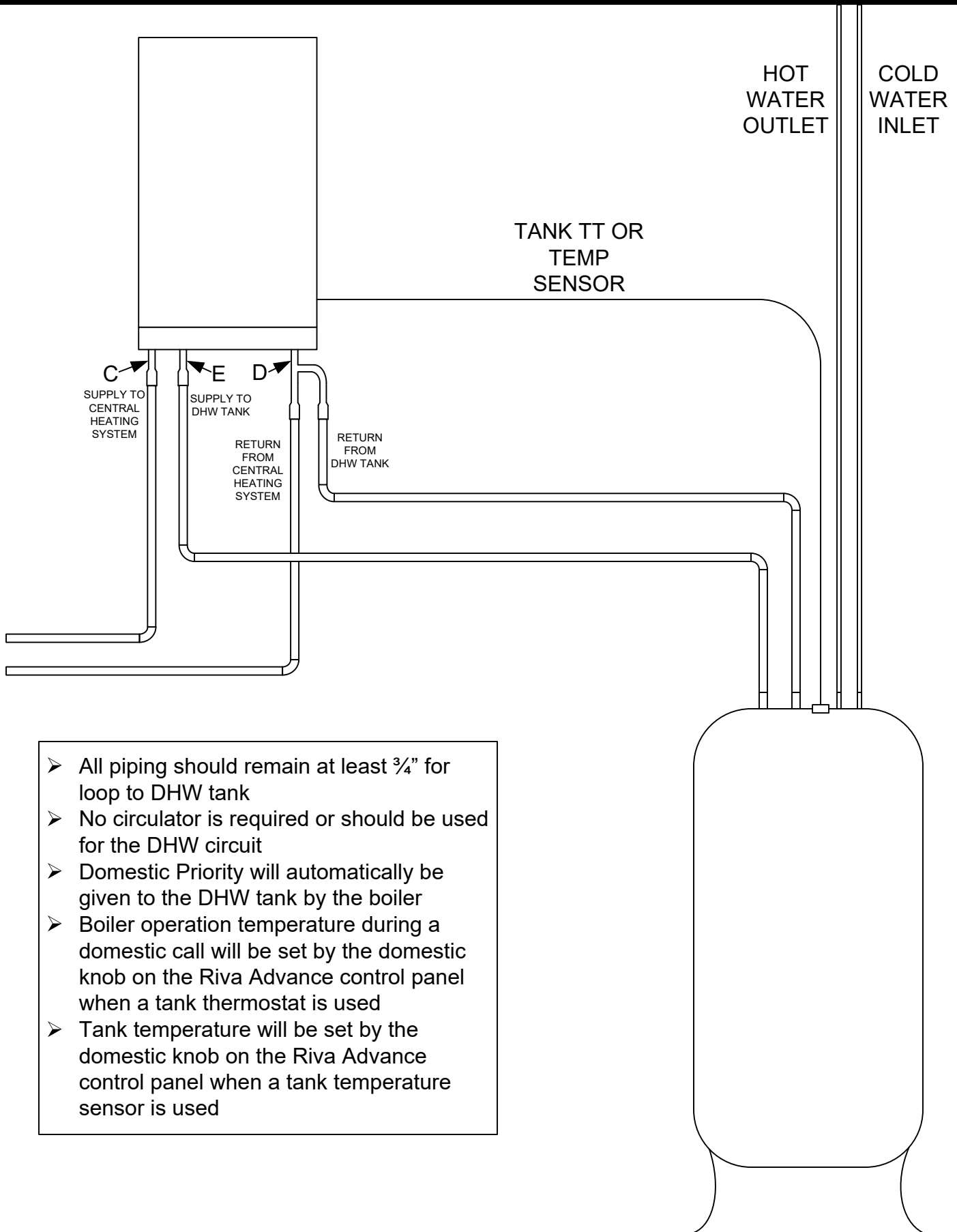
RIVA ADVANCE SV DOMESTIC PIPING ADDENDUM

This booklet will assist you in piping, wiring and setting the controls of the Riva Advance SV boiler to control an indirect fired hot water tank. All pipe tails for the connection to the tank are supplied with the boiler. If the tank will be controlled by a thermostat installed in the tank, no additional parts will be needed. If the boiler will sense and control the tank temperature, a remote temperature sensor must be purchased separate from the boiler. The part number for the sensor is BI1985 104.



- REMOVE CAP B TO EXPOSE PIPE CONNECTION.
- CONNECT PIPE TAIL E (DHW SUPPLY) TO PIPE CONNECTION
- CONNECT PIPE TAIL C (HEATING SUPPLY) TO PIPE CONNECTION
- CONNECT Y PIPE TAIL D (HEATING AND DHW RETURN)

RIVA ADVANCE SV DOMESTIC PIPING ADDENDUM



- All piping should remain at least $\frac{3}{4}$ " for loop to DHW tank
- No circulator is required or should be used for the DHW circuit
- Domestic Priority will automatically be given to the DHW tank by the boiler
- Boiler operation temperature during a domestic call will be set by the domestic knob on the Riva Advance control panel when a tank thermostat is used
- Tank temperature will be set by the domestic knob on the Riva Advance control panel when a tank temperature sensor is used

RIVA ADVANCE SV DOMESTIC PIPING ADDENDUM

SETTING THE BOILER FOR USE WITH DHW TANK THERMOSTAT

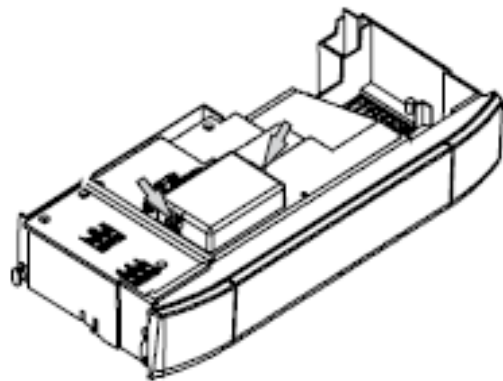
To connect the tank thermostat to the boiler, use electric wires with a diameter of at least 18 AWG.

The electric wire used to connect the thermostat to the boiler may not be run in conduit with line voltage wires as they are low voltage.

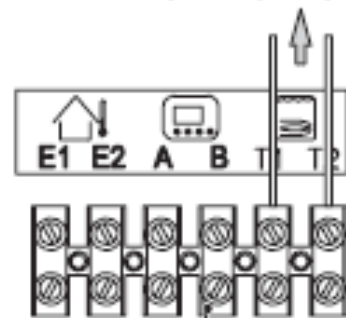
- Remove the two screws shown in figure 12.21 and open the cover of the tank connection terminal board
- Connect terminals T1 and T2 on the terminal board with the two electric wires as shown in Figure 12.22
- Connect the same wire to the tank thermostat terminals.

Programming

The boiler is set at the factory in a heating only mode and can be combined with a DHW tank



TO THE TANK OR NTC PROBE



Tank thermostat/NTC probe connection terminal board

Figure 12.22

RIVA ADVANCE SV DOMESTIC PIPING ADDENDUM

Setting the tank with a thermostat

- Before powering the boiler, turn knobs 10 and 11 as shown in Figure 12.23

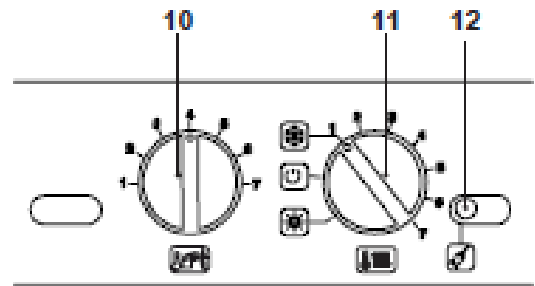


Figure 12.23

- Power the boiler, the following will appear on the LCD display.

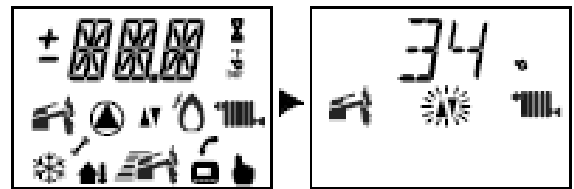


Figure 12.24

- To set the boiler to function with the thermostat, access programming by pressing the rest button 12 in figure 12.23 for 10 seconds, until parameter P01 appears on the LCD display; the following will appear on the LCD display (the sequence P01 alternates with -- -- --).

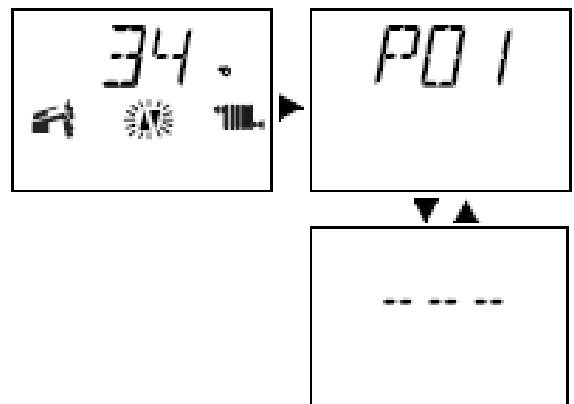


Figure 12.25

- Press the reset button 12, in Figure 12.23 multiple times to scroll the various parameters, until reaching parameter P03, which is used to check the operation of the tank with a thermostat.
- The value displayed on the LCD is already set and must be 04.

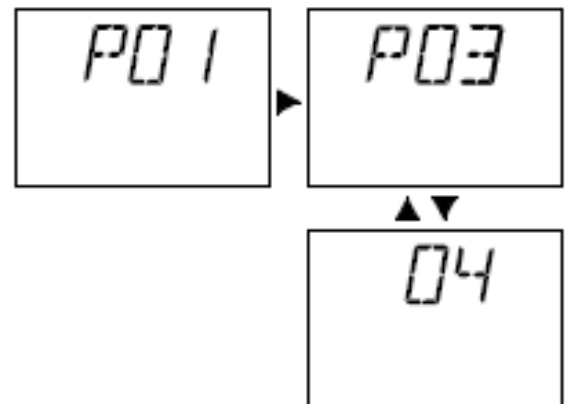


Figure 12.26

RIVA ADVANCE SV DOMESTIC PIPING ADDENDUM

- Once checked, press the reset button 12 to move to parameter P04 and check the parameter is set to 04.

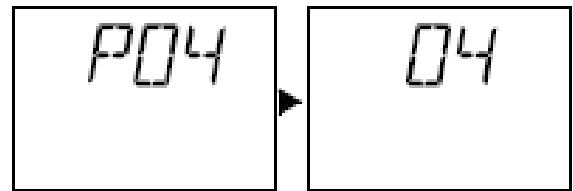


Figure 12.27

SETTING THE BOILER FOR USE WITH EXTERNAL TANK SENSOR

- Remove all power from the boiler for 10 seconds. Power the boiler up, the following will appear on the LCD display.

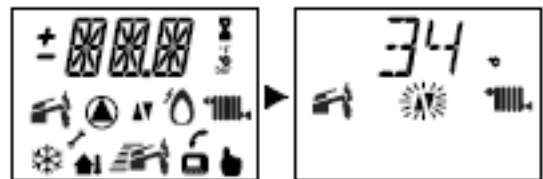


Figure 12.28

- To set operation with the NTC probe, access programming and hold down the reset button 12 in Figure 12.23 for 10 seconds until parameter P01 appears on the LCD display; (the sequence P01 alternates with -- -- --).

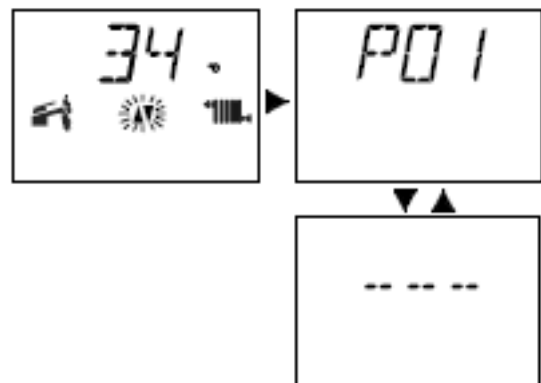


Figure 12.29

- Press the reset button 12, in Figure 12.23 multiple times to scroll the various parameters, until reaching parameter P03, which is used to check the operation of the tank with an NTC probe.

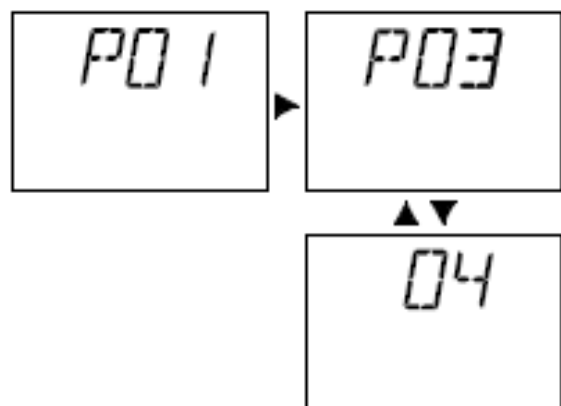


Figure 12.30

RIVA ADVANCE SV DOMESTIC PIPING ADDENDUM

- The value that is displayed on the LCD is 04, turn the boiler knob 10 in Figure 12.23, to the minimum setting.

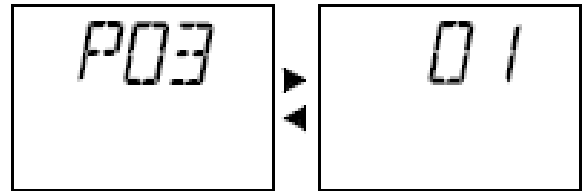


Figure 12.31

The following table shows the correlation between the boiler knob setting 10 in Figure 12.23 and the displays shown on the LCD for parameter P03.

PARAMETER P03	SET KNOB	LCD
Tank thermostat/ heating only	4	04
Tank NTC probe	1	01

Press the reset button 12 to access programming P04, the starting value shown on the LCD is 04, turn the boiler setting knob 10 in Figure 12.23 to the setting 4, the value shown on the LCD display is 04.



Figure 12.32

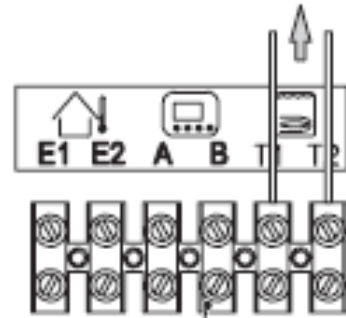
RIVA ADVANCE SV DOMESTIC PIPING ADDENDUM

The following table shows the correlation between the boiler knob setting 10 in Figure 12.23 and the displays shown on the LCD for parameter P04.

PARAMETER P04	SET KNOB	LCD
Tank thermostat/ heating only	4	04
Tank NTC probe	4	04

Once the pcb setting is complete, wire the tank sensor to terminals T1 and T2.

TO THE TANK OR NTC PROBE



Tank thermostat/NTC probe connection terminal board

Figure 12.22

