

AT 2000 STC RV Wiring Schematic



9th March 2016 RV Motorhome

AT2000 STC RV New Features

- Combustion air silencer – This reduces noise levels further.
- Digital interface – allows for plug N play of the new controls
- New fuel pump (DP42) – quieter in operation.
- Zero idle feature (if you use remote temp sensor)
- Altitude function (You need to add a switch)
- Heater on indicator output (if required by type approvals)
- Vent function is now via digital controls

Air Top 2000STC – Control Elements



Standard Knob

Very simple and easy to use. Comes as standard with Air Top 2000STC. Failure diagnosis via LED light indicator. CBE style frame insert option



Smart Control

- Heater on/off.
- Adjustable run countdown time from 2 hrs.
- Permanent running.
- Ventilation function.
- Customisation of the screen functions.
- Surface Mount.
- Temperature adjustment
- Temperature display (at the controller not the heater).
- Day/Night setting
- Further customisation via Technician menu

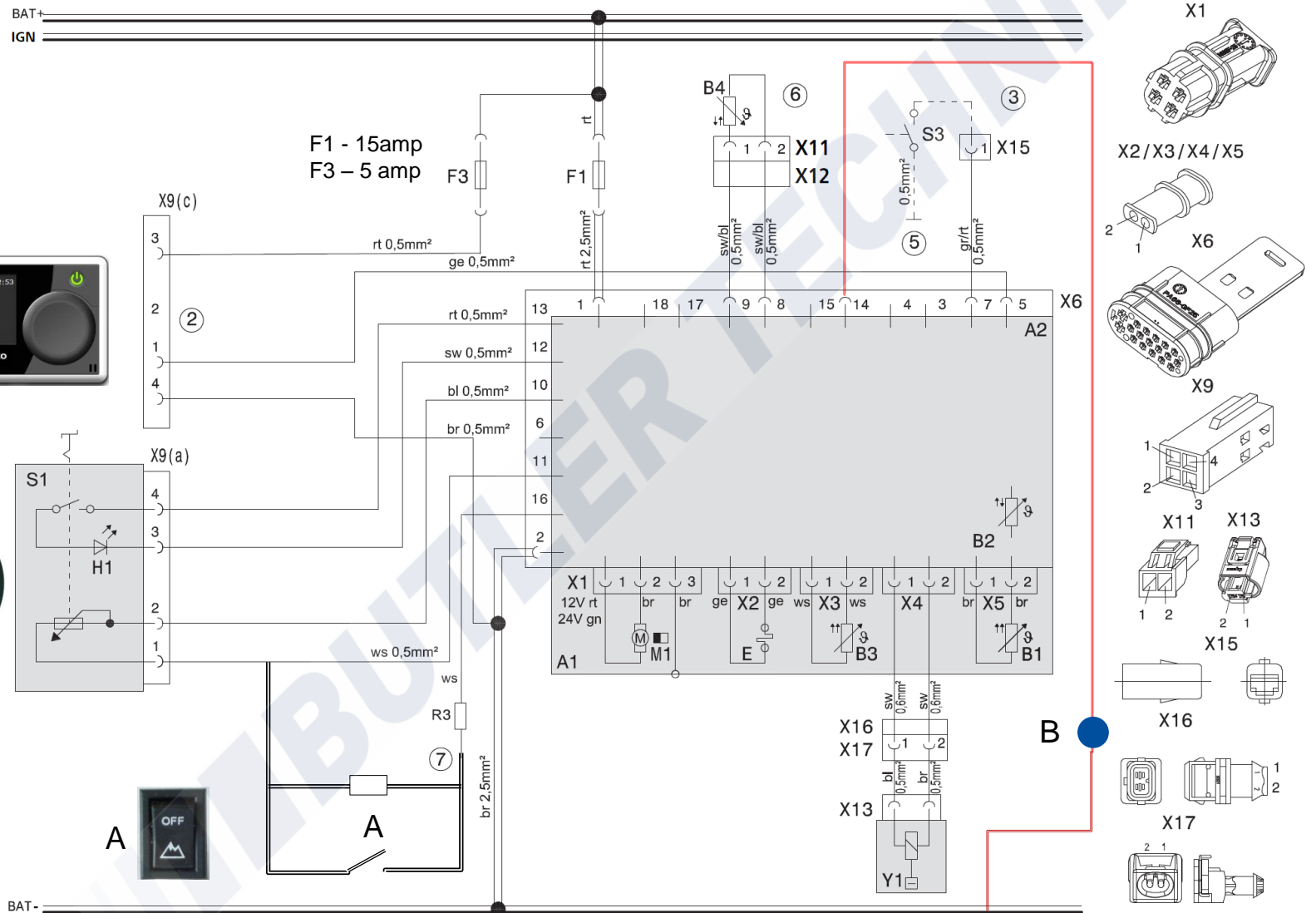
Multi Control

- Heater on/off.
- Adjustable run countdown time from 2 hrs.
- Permanent running.
- Ventilation function.
- 3 event 7 day timer – giving the possibility to activate the heater 3 separate and different on & off times for each day over 1 week.
- Customisation of the screen functions.
- Surface Mount.
- Temperature adjustment
- Temperature display (at the controller not the heater).
- Day/Night setting
- Further customisation via Technician menu

Thermo Call TC4 Comfort

- Heater on/off.
- Adjustable run countdown time from 2 hrs.
- Ventilation function.
- Auto Heat/Vent function
- 2 event 7 day timer – giving the possibility to activate the heater 2 separate and different on & off times for each day over 1 week 24hrs in advance.
- Customization of the screen icons.
- Temperature adjustment (Air Top)
- Temperature check in the vehicle
- Message feedback function
- Activate from upto 5 users
- Vehicle alarm alert function
- Free App download for Android & IOs






Wiring Schematic – AT2000 STC RV - Altitude



A = Altitude switch if used otherwise keep as a permanent connection

B = Remote heater on indicator lamp if required – USE a 12v LED only

Legend to wiring diagram

Cable cross-sections		
	< 7.5 m	7.5 - 15 m
	0.75 mm ²	1.0 mm ²
	1.0 mm ²	1.5 mm ²
	1.5 mm ²	2.5 mm ²
	2.5 mm ²	4.0 mm ²
	4.0 mm ²	6.0 mm ²

Cable colours	
bl	blue
br	brown
ge	yellow
gn	green
gr	grey
or	orange
rt	red
sw	black
vi	violet
ws	white

Item	Description	Remarks
A1	Heater	Air Top 2000 STC
A2	Control unit	Control unit
A3	UniBox	-
B1	Flame monitor	Only for petrol heaters
B2	Temperature sensor	Inside
B3	Overheat sensor	Overheating protection
B4	Room temperature sensor	Outside
E	Glow plug	-
F1	Fuse 24 V, 15 A 12 V, 15A (max. 20 A)	Blade fuse DIN 72581-3
F2	Fuse 1A	Not included in wiring harness
F3	Fuse 1A	Blade fuse DIN 72581-3
F4	Fuse 1A	Not included in wiring harness
F5	Fuse	Value [in A] to be selected corresponding to wire cross section; not included in wiring harness
H1	LED green (in Item S1)	ON indicator, fault code indicator
H2	LED red (in Item P)	Lighting: Quick Heating button, Ready indicator, ON indicator
H3	Heating symbol on display (in Item P)	ON indicator, ready indicator

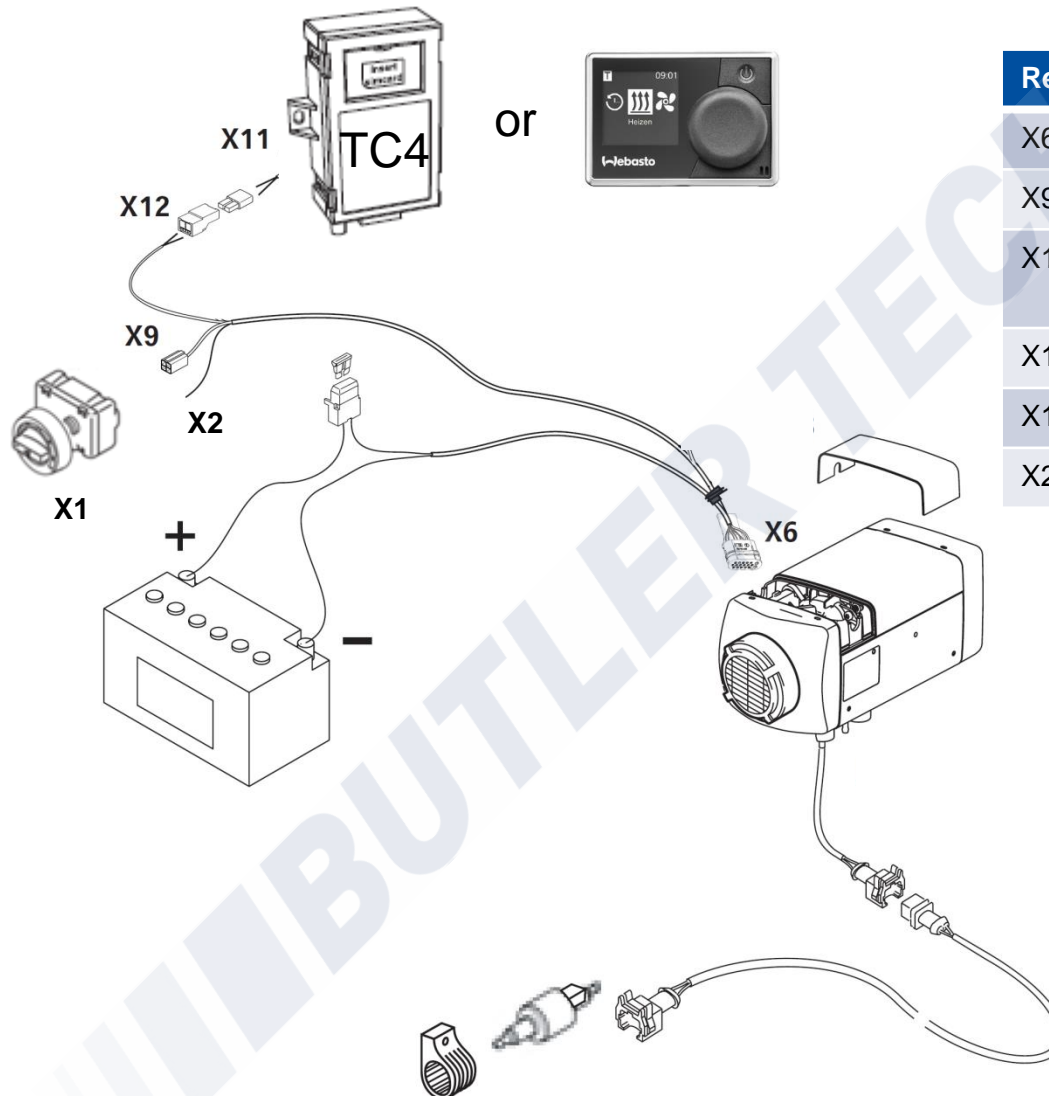
Item	Description	Remarks
H4	Bulb/LED (in Item P)	Display and button lighting
H5	Bulb/LED	ON indicator, pumping device (max. 500 mA)
H6	LED (green, blue, white, red)	Operation indicator, Ready indicator, ON indicator, fault list
H7	Symbol on display	-
K	Relay with free-wheeling diode	Vehicle blower (max. 500 mA)
M1	Drive motor	Heating and combustion air fan
M3	Motor	Vehicle blower
P	Combi timer 1531	Combination digital timer and setpoint sensor
P1	SmartControl	(W-bus)
P2	MultiControl or SmartControl	(W-bus)
R1	Resistor	Only for internal temperature sensor
S1	Control element (rotary switch)	ON/OFF switch and temperature setpoint sensor
S		
S3	Switch	CO ₂ setting
S4	Pushbutton	External Quick Heating button
S5	Switch	auxiliary drive / pumping device
S6	Switch, 1 or 2-pin	Disconnecter
S7	Battery disconnecter	Electronically controlled disconnecter (max. 500 mA)

Item	Description	Remarks
V1-V2	Blocking diode	Min. 500 mA
X1-X6	Plug connection	To Item A2
X9	Plug connection	-
X9 (a)	Plug connection	To Item S1
X9 (c)	Plug connection	W-bus, connection SmartControl/ MultiControl, Telestart (12 V only), ThermoCall or diagnosis
X10	Plug connection	To Item P1 or P2
X11	Plug connection (optional)	To Item B4
X13	Plug connection	To Item Y1
X14	Plug connection	To Item P
X15	Plug connection (optional)	To Item S3
X16	Plug connection	Wiring harness connection DP42
X17	Plug connection	Wiring harness connection DP42
Y1	Fuel pump	DP42
Y2	Solenoid valve / pump	Auxiliary drive / pumping device

③ Co2 setting

⑥ External temp sensor option

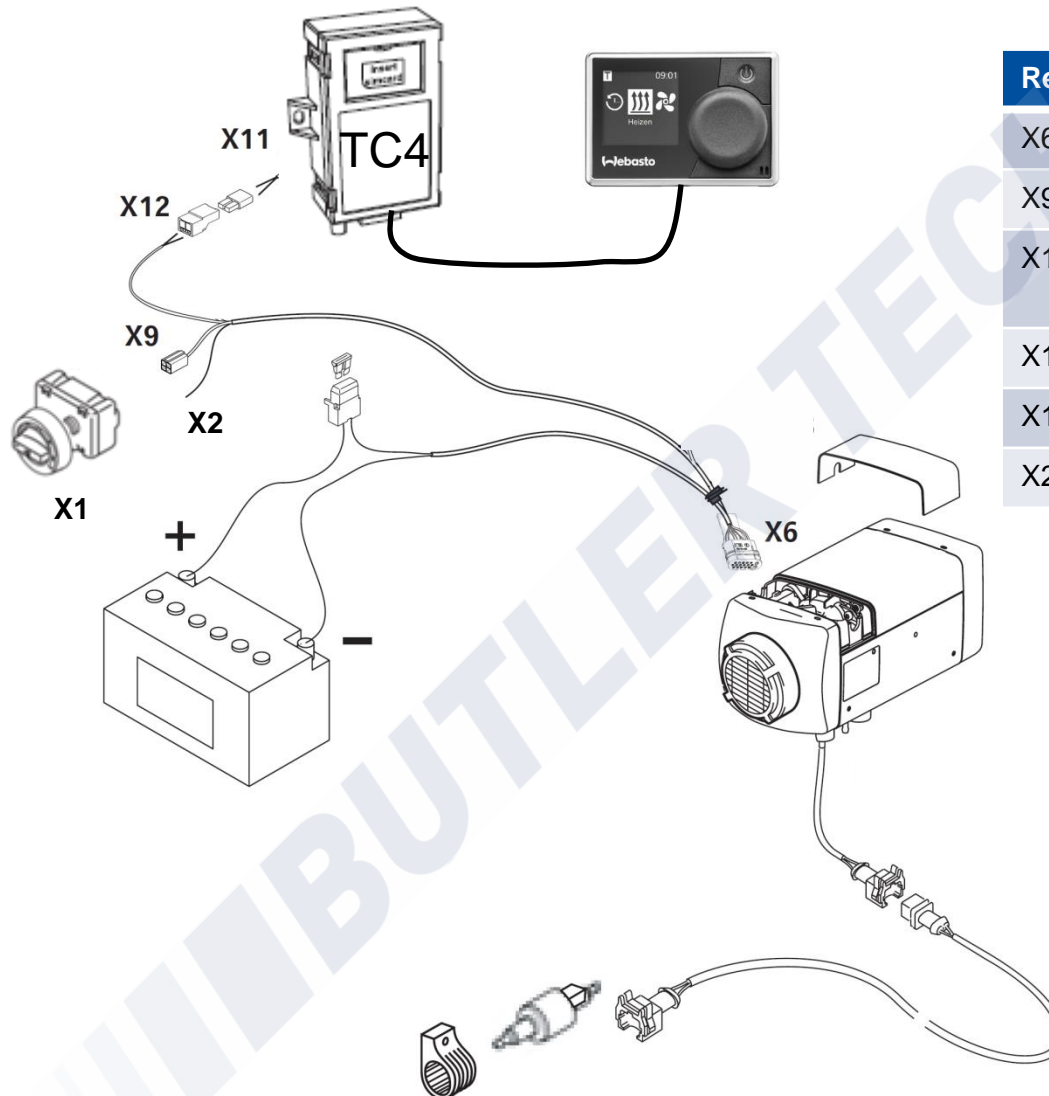
2016 RV electrical Overview – AT2000STC Air Heater



Ref	Function
X6	Main Heater Plug
X9	Switching Loom
X10	Control switching, rotary controller,
X11/12	W bus/Diagnostic plug
X1	Rheostat Controller
X2	Altitude Function

TC4 or Multi Controller

2016 RV electrical Overview – AT2000STC Air Heater



Ref	Function
X6	Main Heater Plug
X9	Switching Loom
X10	Control switching, rotary controller,
X11/12	W bus/Diagnostic plug
X1	Rheostat Controller
X2	Altitude Function

TC4 & Multi Controller