

## Appendix A

### List of Parts Required for Thermo Top C Installation in Puma Defender

Note: parts in *Blue* are those you'd need to get from either a Webasto dealer or ebay

1. *Webasto Thermo Top C Diesel heater (including coolant pump)*
2. *Standard Webasto fixing plate*
3. Approx 1 metre 1 inch steel bar to fabricate mounting bracket
4. 4x 6mm stainless dome head set screws, nyloc nuts and washers for mounting bracket
5. *Webasto Wiring Loom*
6. *Webasto Air intake filter*
7. *Webasto Air intake pipe*
8. 1x 22-24mm Stainless Jubilee clip for air intake (heater end, other end 'screws' onto filter)
9. *Webasto 22mm silencer*
10. *Webasto silencer mounting bracket*
11. 1x 6mm rivnut (to secure mounting bracket to chassis)
12. 6mm stainless set screw and locking washer for above
13. *Webasto 1.2m 22mm stainless exhaust pipe (if buying at a dealer ask for a 'generous' metre!)*
14. *Exhaust pipe end cap*
15. *Webasto 1.2m exhaust lagging*
16. *3x 22mm exhaust clamps (1 at heater end, 2 at silencer)*
17. 1x Stainless 'P' clip (to secure exhaust pipe)
18. Aluminium sheet and aluminium rivets to fabricate exhaust heat shield
19. *Webasto low profile diesel pick-up pipe (Webasto part no: 41S45017A)*
20. Optional – Fuel pump removal tool(Land Rover part no: 310-118) {can use home made tool}
21. *5-6m 2mm plastic fuel line*
22. 2 small plastic P clips for securing fuel line
23. *Webasto fuel dosing pump*
24. *Webasto Rubber fuel pump holder/bracket( sometimes comes with dosing pump)*
25. 1x 6mm rivnut (to secure dosing pump to inner chassis)
26. 6mm stainless set screw and locking washer for above
27. *4x lengths (approx 5-6 cm) 5mm reinforced rubber tubing for connecting fuel line (1 at fuel tank, 2x at pump, 1 at heater) plus 8x stainless 9mm jubilee clips for fuel line/connecting pieces {can get kits off ebay but check rubber tubing carefully}*
28. *2x Webasto 18mm pre-formed hoses*
29. *Optional -: Webasto inline coolant one way valve (Webasto part no: 12780A)*
30. 1x 19mm-16mm reducing hose (look on ebay for silicone reducers )
31. 1x 19mm straight coolant pipe connector (reinforced glass plastic)
32. 1x 22mm stainless jubilee clip (for 16mm end of reducing hose){could use existing Land Rover clip}
33. 3x 24-26mm stainless jubilee clips for heater hose connections (could use existing Land Rover clip for one of them)
34. 2x 5mm rivnuts to secure Webasto relay and fuse holder (part of wiring loom) to bulkhead

35. 2x stainless 5mm set screws and washers for above
36. Approx 2m 12AWG or equivalent red wire to extend main power lead of Webasto loom
37. Plastic cable ties, rubber grommet, electrical connectors, heat shrink tubing, etc for wiring changes and securing fuel pipe.

**Land Rover parts to consider:**

1. Plastic wheel arch securing clips Land Rover part no: MWC 9918PMA
2. Plastic square clips for self tapping screws on wing top cover Land Rover part no: RTC 3745