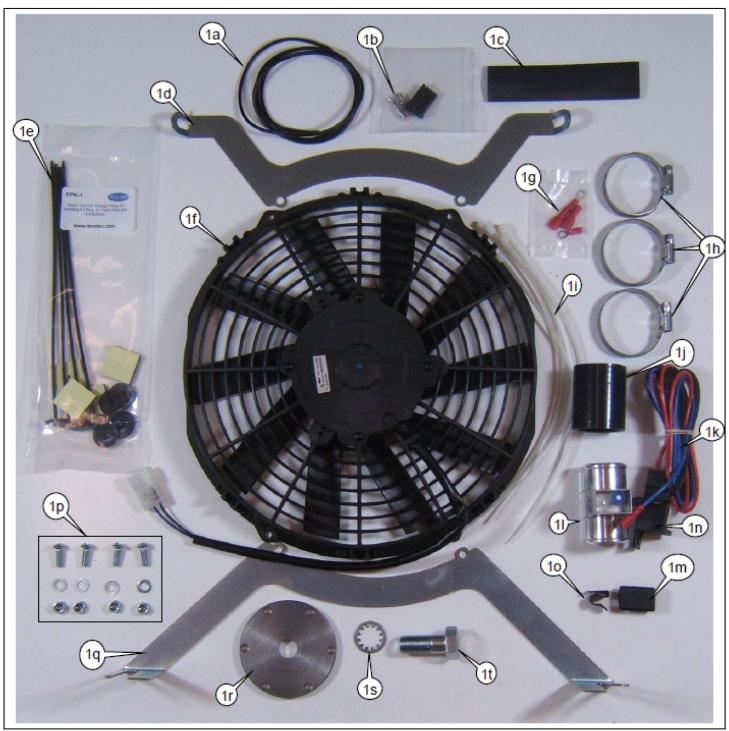


# **B-TR2-4 Cooling Kit Instructions**

As with all instructions, please read through these carefully before you begin. If you feel that this project is outside your "confidence zone", please have the installation done by a professional, or enlist the assistance of a fellow TR Club member. If you are not a member of a Club, consider joining. This is the kind of project that many clubs would take on as a "Tech Session" for the benefit of the members. You still have to do the work, but you will have help and knowledgeable advisors to assist.

## Contents of the Kit



Contents of the Kit (October 2010)

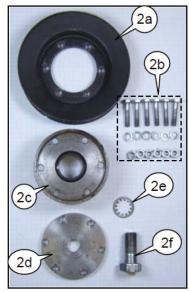
Contents of the fat (Cottober 2010)		
	Description	Qty
1a	Wire, black	39"
1b	Female spade connectors	2
	Black plastic plug for female spade connectors	1
1c	Sleeve, black plastic	1
1d	Bracket #1 (smaller of the 2)	1
1e	Fasteners, for securing fan directly to radiator core	4 sets
1f	Fan Assembly	1
1g	Female Spade connectors, insulated	2
	Ring Connectors, insulated	2
1h	Hose clamps, 32-50mm "Jubilee" (solid band, not perforated)	3
1i	Zip-Ties, 10"	5
1j	Hose, 1 1/2" ID x 2" long	1
1k	Wiring, temp sensor/controller & fan power relay	1
11	Temp Sensor & Adjustable Electric Fan Controller (EFC)	1
1m	Black Plug, for Controller	1
1n	Relay, fan power	1
10	Wiring Clip	1
1p	Screws, securing fan to brackets	4
	Washers, for screws	4
	Nyloc nuts, for screws	4
1q	Bracket #2 (larger of the 2)	1
-	Spacer, Pulley to Crank	1
	Washer, Star, internal tooth, 5/8	1
1t		1

## Installing the Fan

For any TR2-4, the radiator must come out before you can remove the original fan and fan extension. Pulling the radiator means the front apron of the TR2-3B body will have to be removed. Once the original fan is gone, the electric fan can be mounted on the radiator.

#### Preparation – Removing the Original Fan (refer to your workshop manual)

- Disconnect the battery and drain the cooling system.
- TR2-3B: remove the front apron, bonnet & radiator.
- TR4: remove the radiator.
- Remove the mechanical fan and fan extension. You will need a 1 1/8" socket for the large bolt on the end of the fan extension. Once the center bolt is loose, you can pull the entire assembly out and put it on the bench.
- Loosen the six nuts securing the pulley (2a) and fan extension to the hub (2c) using a 7/16" socket and combination wrench. New bolts (320-080) and nyloc nuts (310-100) are available if needed.
- Install the spacer (2d), lock washer (2e), and new center bolt (2f) supplied in the kit.
- Reinstall the six bolts, lock washers and nuts (2b), securing the two halves
  of the pulley (2a) and the spacer (2d) to the hub (2c).
- Refit the pulley & hub assembly to the front of the engine.
- Thread the center bolt (3a) into the nose of the crank. Tighten the center bolt to 40 lbs /ft.





This kit includes the pieces necessary to mount the fan two different ways. The more generic "through-the-core" pins can be used to install the fan (Method 1), or the laser-cut steel brackets specifically designed for the Triumph may be used (Method 2).

#### Method 1: Mounting the Fan Using the Through-the-Core Pins (Fig 4)

- Hold fan in desired position on rear face of radiator. Push the mounting pins through the lugs on the fan and though the core.
- Push the four foam pads and the ratchet buttons onto the tail of each pin which are now protruding through the front of the radiator core.
- Pull the tip of the pin toward you as you push the ratchet buttons home. Pull tight until the fan is solidly mounted.

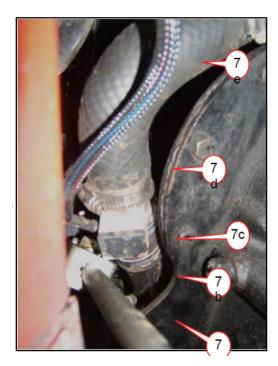
With the fan mounted, follow the instructions for fitting the Electronic Fan Controller. They begin immediately below the instructions for mounting the fan using the laser-cut brackets on the next page.



## Installing the EFC

The cooling system was drained as the first step in installing the fan; unless you have refilled it, you can begin.

- Remove the steel water return pipe.
- Measure 2 ½ inches (65 mm) from the top lip of this pipe and mark it.
- Cut the pipe on your mark with a hacksaw.
- De-burr the cut edge of the pipe with a suitable file.
- Refit the steel tube (7a).
- Fit the 2 inch long piece of hose supplied in the kit onto the lower end of the EFC. Secure it with one of the hose clamps supplied in the kit.
- Attach the EFC (7c) with the short section of hose (7b) to the shortened steel tube.
- Attach the upper hose (7d) between the EFC and the water pump housing.
- Tighten all the clamps.
- Top up the coolant and check for leaks.



### **PLEASE NOTE**

This fan kit **will** move enough air to keep a TR2-4 within normal operating temperatures under normal conditions. The premise of this kit is that you have an engine properly tuned and a cooling system that is in good working order. An electric fan is being installed because

- a) you are installing components (alternator conversion, rack & pinion steering) that require the removal of the stock crank-mounted fan or
- b) the stock engine driven fan is not capable of moving enough air at idle or in stop-and-go traffic (possibly due to modifications that have boosted the power output).

An electric fan absolutely **will not** cure a chronic overheating problem due to a mechanical problem, tuning issue, or other defects. The Revotec fan and controller **cannot** compensate for fundamental problems with the engine and/or cooling system.