PBS 124 Engine Conversion Kit for the Fiat 850

PBS in Garden Grove, California used-to market a conversion kit, that when combined with a few items that they did not supply, would allow you to install a 124 engine in an 850 chassis. There are enough of these kits still floating among enthusiasts that I'll detail what you need, what to do, and what you might end up with....

It's no two-weekend diversion putting one of these conversions together. If you don't have "the <u>good</u> pieces", patience, a little insight and the money to do it right, you may give up half-way-through and sell what you have gathered; or if you do finish, it may turn out to be a "weekend hotrod" (an expensive, fragile, rattly toy that is very disappointing to drive).

Fiat-Abarth 1300/124 & Scorpione	PBS kit comparison
A classic sports car that will appreciate in value.	Great fun for the enthuiast but with little resale value.
2. Early 850 coupe and Scorpione coupe body styles only	2. All 850 sedan, coupe, Spider, Racer & Giannini/OTAS. Simca 1000 sedan, & Bertone coupe(w/minor changes).
3. 1197cc Fiat 124 pushrod engine bored out to 128Ccc with 10.5 to 1 compression pistons delivers 88 hp @ 6000 rpm.	3. choice of Fiat 1197 and 1438 pushrod or 1438, 1592, 1608, 1756 twin cam engines. 1592, 1608, 1756 will require a bulge in Spyder or racer deck lid to clear cam-drive belt and gears.
4. Fitted with 3.70 or 3.90 gears for relaxed highway cruising and 105 m.p.h. top speed.	4. 4.38 final drive from Simca 1000 can be fitted to your 850 gearbox. The ideal Abarth 3.70 or 3.90 gears are NLA. standard 4.88 850 Sport or 4.6 OT 1000 and early 850 Sedan gears are too low for pleasant highway use and give poor fuel economy.
5. Special Marelli starter that parts ere no longer available for (note that PBS bellhousing, VW/Bosch starter and special exhaust system could be used as replacement).	5. Special hand-made exhaust system frequently crack from vibration because of poor mounting support attachment locations.

Basic PBS kit

(compare to 1300/124 details on pp 114 of "Abarth")

- 1. Special transexle-to-engine bellhousing (one style for pushrod engines and another for twincams. Swapping, flywheels is all that is required to use other style kit with opposite engine).
- 2. Special transmission input/pilot shaft (124 clutch spline and pilot bearing size on one end, 850 transaxle input spline on the other end).
- 3. Special motor mount crossmember (rectangular tubing "engine sling" fitted between sides of engine compartment. There are not rear battery mounting brackets attached as with Abarth installation).
- 4. Special front radiator (crossflow upright mounting w/bleeder valve).
- 5. Special fiberglass front radiator shroud.
- 6. Special filler tank to replace rear radiator (optional. Rear radiator can be retained).
- 7. Special camshaft-drive gears (to reverse rotation of pushrod engines) or Ford six-cylinder distributor/oil pump drive gears fitted to jack-cam and distributor shaft as well as modified distributer end-thrust, refazing of camshafts, and revised ignition firing order (to reverse rotation of 124 twin-cam engines).
- 8. Special throw-out- bearing adapter sleeve (for use with 200 or 215mm clutches only).