

2011: Building an AMA Class One Mouse Race Engine from parts by Paul Gibeault

Essentially, what we'd like to do here is build a Cox Venom replica. We need to assemble an engine that's as close as possible. Fortunately, thanks to **Cox International** (www.coxinternational.ca) & other eBay Stores, all the parts that are required can easily be ordered.

Here's the list:

1. Glow plug (1 req'd): P/N **490GHTD**. You'll want several of course.
****Optional: 49ADARG** w/ med. Merlin plug is also reported to run well
2. Tee Dee Piston/Cylinder Assembly (1 req'd): P/N: **49OCYTD**
3. Crankcase (1 req'd): Any anodized crankcase is fine although I prefer original Cox color hard anodizing P/N **4900CCR**
4. Prop spinner & screw (1 req'd): P/N **4900SPI**
5. Killer Bee/Venom crankshaft (1 req'd): P/N **49KBCRA**
6. Front Drive-plate (1 req'd): P/N **49DPRAL**
7. Zero Drag spring starter (1 req'd): P/N **49SSNOD**
8. Tank – 8cc Stunt Tank (1 req'd): P/N **49TNKBW**
9. Tank Back - Ventless (1 req'd): P/N **49BPABW**.

****Optional:** The preferred one is metal but they are difficult to come by. You might end up having to get an engine attached to it though, but you'll be able to use many of the other parts. The black nylon tank back is quite useable but not as robust. If it has the Babe Bee venting, you'll need to plug the holes with JB Weld epoxy. ****Optional:** Order 2 nylon backplates so you'll have a spare.
10. Needle valve & spring (1 req'd): P/N **49ONVBB**
11. Tank screws (4 req'd): P/N **49OFTSL**

12. Gaskets: Order a bunch & be done with it!

1. 10x Crankcase gaskets (1 req'd): P/N **49CCGCL**
2. 10x Tank o-rings (1 req'd): P/N **49VEGAS**
3. 5x Mylar reeds (1 req'd): P/N **49ORMYL**
4. 5x Reed retainers - cilclips (1 req'd): P/N **49RRCIR**
5. 10x Head shim gaskets (4 req'd): P/N **49OOGHG**
6. 5x Pick up tubes (1 req'd): P/N **49FTPUL**
7. 5x Pick up tube springs (1 req'd): P/N **49FTLSP**
****Optional:** home made from 3/32" alum tubing
& attached w/ small silicone tubing

13. Cox piston ball-socket reset tool (1 req'd): P/N 49RESET

Just to put this to the test, I ordered my parts by telephone (as I'm an old guy) but on-line works fine too. The newly assembled engine was bench tested & ran a smooth 20,000 rpm. It was mounted to my back up Streaker.

First contest was flown by a pilot just coming back after a 10 year lay off. No sweat. He ended up winning the Final race (even beating out my own entry) with a very respectable time of 5:24 !

Thank you Cox International and long live mouse racing!

Source appendix for equipment:

1. Cox International: All the Cox parts you need + SUPER service

www.coxengines.ca

2. EX Model Engines: Lots of new OEM Cox engines & parts

www.exmodelengines.com

3. eBay stores: Even more sources of Cox parts

www.ebay.com

4. Doug Galbreath: High performance Cox heads/plugs

F1Cdoug@aol.com

5. Streaker plans available from

pgibeault@shaw.ca

6. MBS Model Supply: Solid lines & racing supplies, PO Box 282, Auburn KS 66402

Contact Melvin Schuette 1-785-256-2583