CLAIMS

1. A muffler adapted to be fitted to a single cylinder engine, the muffler comprising:

   a body having an interior chamber,

   a first end section,

   a second end section, and

   an outlet opening through which the exhaust discharges from the muffler, the outlet opening located between the first end section and the second end section,

   the first end section being adapted for mounting onto the engine with the interior chamber in communication with an exhaust outlet of the single cylinder engine to receive exhaust flow therefrom, and

   the second end section being mounted by a resilient coupling with respect to the engine,

      wherein the resilient coupling provides a yielding resistance, such that the resilient coupling yieldingly resists movement between the engine and the second end section when mounted thereto,

      the resilient coupling being in the form of one or more spring means wherein the one or more spring means extend between the second end section, or adjacent thereto, and the engine,

      the resilient coupling biasing the first end section into mating engagement with the engine.

2. A muffler comprising a body having an interior chamber, a first end section, and a second end section, the first end section being adapted for mounting onto an engine with the interior chamber in communication with an exhaust outlet of the engine to receive exhaust flow therefrom, and the second end section being mounted in a manner yieldingly resisting movement with respect to the engine, the mounting being in the form of a resilient coupling which mounts the second end

section with respect to the engine, wherein the resilient coupling provides a yielding resistance.

3. A muffler comprising a body having an interior chamber, a first end section, a second end section and an outlet opening through which the exhaust discharges from the muffler, the outlet opening located between the first end section and the second end section, the first end section being adapted for mounting onto an engine with the interior chamber in communication with an exhaust outlet of the engine to receive exhaust flow therefrom, and the second end section being mounted in a manner yieldingly resisting movement with respect to the engine, the mounting being in the form of a resilient coupling which mounts the second end section with respect to the engine, wherein the resilient coupling provides a yielding resistance.

4. A muffler adapted to be fitted to a single cylinder engine, the muffler comprising a body having an interior chamber, a first end section, and a second end section, the first end section being adapted for mounting onto the engine with the interior chamber in communication with an exhaust outlet of the single cylinder engine to receive exhaust flow therefrom, wherein a resilient coupling mounts the second end section with respect to the engine, the resilient coupling providing a yielding resistance, such that the resilient coupling yieldingly resists movement between the engine and the second end section when mounted thereto, the resilient coupling biasing the first end section into mating engagement with the engine.

5. The muffler according to claims 2, 3 or 4 wherein the resilient coupling comprises one or more springs operably connected to the second end section.

6. The muffler according to claim 1 or 5 wherein the one or more springs comprises one or more leaf springs.

7. The muffler according to any one of the preceding claims wherein the resilient coupling exerts a force on the muffler body at the second end section in a direction to resist any tendency for the connection at the first end section between the muffler and the exhaust outlet of the engine to open under the influence of thermal expansion or contraction.

8. The muffler according to claim 7 wherein the force comprises a preload applied through the resilient coupling.

9. The muffler according to any one of the preceding claims wherein the second end section is adapted for mounting onto the engine or onto a structure adjacent the engine.

10. The muffler according to claim 9 further comprising a first mount for mounting the first end section onto the engine.

11. The muffler according to claim 10 wherein the first mount is configured as an exhaust pipe section providing an interface between the exhaust outlet of the engine and an inlet opening associated with the first end section of the body of the muffler.

12. The muffler according to claim 11 wherein the exhaust pipe section comprises a first mounting flange at one end for attachment to the exhaust outlet of the engine and a second mounting flange at another end for attachment to the first end section of the body of the muffler.

13. The muffler according to claim 12 wherein the exhaust pipe section further comprises strengthening means between the first and second mounting flanges.

14. The muffler according to claim 13 wherein the strengthening means comprises a strengthening element extending between the first and second mounting flanges.

15. The muffler according to any one of the preceding claims further comprising a second mount for mounting onto the engine or a structure adjacent the engine.

16. The muffler according to claim 2, 3 or 4 wherein the second mount provides the resilient coupling operable to yieldingly resist movement with respect to the engine.

17. The muffler according to any one of the preceding claims wherein the muffler body is elongate having a longitudinal extent between the first and second end sections.

18. The muffler according to any one of the preceding claims wherein the muffler body presents an outer surface, wherein outer surface is arcuate in a longitudinal direction.

19. A muffler comprising a body having an interior chamber, and first and second end sections, a first mount for mounting the first end section onto an engine with the interior chamber in communication with an exhaust outlet of the engine to receive exhaust flow therefrom, and a second mount for mounting the second end section to the engine in a manner yieldingly resisting movement with respect to the engine, the mounting being in the form of a resilient coupling which mounts the second end section with respect to the engine, wherein the resilient coupling provides a yielding resistance.

20. A muffler comprising a body having an interior chamber and first and second end sections, a first mount for mounting the first end section onto an engine with the interior chamber in communication with an exhaust outlet of the engine to receive exhaust flow therefrom, and a second mount for mounting the second end section to the engine yieldingly resist movement with respect to the engine, the mounting being in the form of a resilient coupling which mounts the second end section with respect to the engine, wherein the resilient coupling provides a yielding resistance.

21. A muffler comprising a body having an interior chamber and first and second end sections, a first mount for mounting the first end section onto an engine with the interior chamber in communication with an exhaust outlet of the engine to receive exhaust flow therefrom, and a second mount for mounting the second end section to the engine under a preload yieldingly resisting movement of the second end

section with respect to the engine, the second mounting biasing the first end section into mating engagement with the engine at the first mount.

22. The muffler according to claim 21 comprising an outlet opening through which the exhaust discharges from the muffler, the outlet opening being located between the first end section and the second end section.

23. A vehicle comprising an internal combustion engine fitted with a muffler according to any one of the preceding claims.

24. The vehicle according to claim 23 further comprising an exterior surface, wherein the muffler presents an outer surface coincident with or recessed with respect to the exterior surface of the vehicle whereby during motion of the vehicle the outer surface of the muffler is exposed to airflow.

25. The vehicle according to claim 24 further comprising means for redirecting air to flow over the outer surface of the muffler.

26. A UAV comprising a fuselage presenting an exterior surface, and an internal combustion engine fitted with a muffler, wherein the muffler presents an outer surface coincident with or recessed with respect to the exterior surface of the fuselage, and wherein the muffler is in accordance with any one of claims 1 to 19.

27. The UAV according to claim 26 wherein the fuselage is generally cylindrical at least in part and wherein with the exterior surface at the cylindrical part is curved in cross-section.

28. The UAV according to claim 27 wherein the muffler body is elongate and configured to be arcuate in a longitudinal direction.

29. The UAV according to claim 28 wherein the curvature of the arcuate outer surface of the muffler conforms generally to the cross-sectional curvature of the fuselage.

30. The UAV according to claim 29 wherein the muffler is disposed crosswise within the fuselage, wherein the curved outer surface of the muffler is coincident with or recessed with respect to the curved exterior surface of the fuselage.

31. The UAV according to claim 30 wherein the curved outer surface of the muffler is recessed with respect to the exterior surface of the fuselage and wherein means are provided for redirecting air to flow over the curved outer surface of the muffler.

32. The UAV according to claim 31 wherein said means comprises a cover fitted to the fuselage over the recessed muffler and wherein the cover is adapted to cooperate with an adjacent section of the fuselage to redirect air to flow over the curved outer surface of the muffler.