CLAIMS

1. A pilot valve assembly comprising:

a manifold with a pair of ported blocks, each ported blocking being machined with bores to collectively form an internal flow network when attached to one another; and

flow controls connected to the internal flow network to permit fluid to flow amongst them, the flow controls comprising:

a fixed pilot valve;

a first adjustable pilot valve;

an adjustable restrictor; and

a check valve.

2. The pilot valve assembly of claim 1, wherein the internal flow network connects an outlet of the first adjustable pilot valve with the adjustable restrictor.

3. The pilot valve assembly of claim 1, wherein the internal flow network connects an outlet of the first adjustable pilot valve with ports on the manifold that receive fittings.

4. The pilot valve assembly of claim 1, wherein the internal flow network connects an outlet of the fixed pilot valve to an inlet of the first adjustable pilot valve.

5. The pilot valve assembly of claim 1, wherein the manifold comprises blocks separable from one another, each having part of the internal flow network.

6. The pilot valve assembly of claim 1, wherein the manifold comprises blocks separable from one another and wherein the fixed pilot valve and the adjustable restrictor are disposed in different blocks.

7. The pilot valve assembly of claim 1, wherein the manifold comprises blocks separable from one another and wherein the first adjustable pilot valve and the adjustable restrictor are disposed in different blocks.

8. The pilot valve assembly of claim 1, wherein the flow controls further comprise:

a second adjustable pilot valve.

9. The pilot valve assembly of claim 1, wherein the manifold comprises blocks separable from one another and wherein the first adjustable pilot valve and the second adjustable pilot valve are disposed in different blocks.

10. A pilot valve assembly comprising:

a manifold with a pair of ported blocks, each ported blocking being machined with bores to collectively form an internal flow network when attached to one another; and

flow controls connected to the internal flow network to permit fluid to flow amongst them, the flow controls comprising:

a fixed pilot valve;

a first adjustable pilot valve;

an adjustable restrictor; and

a check valve,

wherein the ported blocks are separable from one another.

11. The pilot valve assembly of claim 10, wherein the first adjustable pilot valve and the check valve are disposed in different blocks.

12. A pilot valve assembly comprising:

a manifold comprising a first ported block and a second ported block, each being machined with bores to collectively form a flow network when attached to one another;

a fixed pilot valve and a first variable pilot valve disposed on the first block;

an adjustable restrictor disposed on the second block; and

a check valve disposed on the second block,

wherein the first block is separable from the second block.

13. The pilot valve assembly of claim 12, further comprising:

a third block disposed between the first block and the second block that forms part of the flow network when attached to one another,

wherein the third block is separable from the first block and the second block.

14. The pilot valve assembly of claim 13, further comprising:

a second variable pilot valve disposed on the third block.

15. A pilot valve assembly comprising:

a first ported block housing a fixed pilot valve and a variable pilot valve; and

a second ported block separably attached to the first ported block, the second ported block having ports for receiving fittings, wherein each of the first ported block and the second ported block are machined with bores to collectively form an internal flow network when attached to one another, and wherein the internal network places outlets on the variable pilot valve in flow connection with the ports,

a check valve disposed in the internal flow network,

wherein the internal flow network includes parallel pathways that terminate at the ports and cross-wise pathways that connect the parallel pathways to one another.

16. The pilot valve assembly of claim 15, further comprising:

a variable restrictor disposed in the internal flow network.

17. The pilot valve assembly of claim 15, further comprising:

a variable restrictor disposed in one of the cross-wise pathways.

18. A pilot valve assembly comprising:

a first ported block housing a fixed pilot valve and a variable pilot valve; and

a second ported block separably attached to the first ported block, the second ported block having ports for receiving fittings, wherein each of the first ported block and the second ported block are machined with bores to collectively form an internal flow network when attached to one another, and wherein the internal network places outlets on the variable pilot valve in flow connection with the ports,

a check valve disposed in one of the cross-wise pathways,

wherein the internal flow network includes parallel pathways that terminate at the ports and cross-wise pathways that connect the parallel pathways to one another.

19. The pilot valve assembly of claim 18, further comprising:

a variable restrictor disposed in the internal flow network.

20. The pilot valve assembly of claim 18, further comprising:

a variable restrictor disposed in one of the cross-wise pathways.