

COLTRI-SUB C 30 FIRST STAGE PARTS

Italiano		English	
No. Codice	Denominazione	Position number	Name
0	Tappo antipolvere completo	0	Dust cap assembly
1	Galletto nylon	1	Hand wheel
2	Nuevo Staffa Int.	2	Yoke (new style)
3	Clips Tenuta Filtro	3	Snap ring (stainless steel)
4	Filtro conico int	4	Conical filter ("A" clamp)
5	Bloccastaffa I. ST	5	Yoke bolt
7	Plastiglia Convenz.	7	Seat
9	Corpo 1 Stadio Genius	9	1 st Stage valve body
10	Rond. Taratura Bil.	10	Adjusting shim
11	Molla 1 stadio convenzionale	11	1 st Stage spring
12	O ring Pistone (piccolo)	12	O ring Piston (small end)
13	Pistone	13	Piston
14	O ring Pistone (grande)	14	O ring Piston (large end)
15	Nuevo Cappuccio Conv. Int.	15	1 st Stage valve cap
25	Tappo LP 3/8	25	LP plug 3/8 UNF
26	Tappo HP 7/16	26	HP plug 7/16 UNF
38	OR filtro	38	O ring (filter)
39	OR tenuta tappo (LP)	39	O ring (LP plug)
40	OR raccordo staffa	40	O ring (yoke bolt)
43	OR tenuta tappo (HP)	43	O ring (HP plug)
45	OR	45	Styling O ring (on cap)
45	OR	45	Styling O ring (on body)
50	Frusta	50	Interstage Hose
51	OR tubo flessibile 1 stadio	51	O ring (Hose connector)
Din connector version			
0			
01			
02			
03			
04			
05			
06			

3. Invert the valve body in the vice. Put the style ring (45) onto the body (9).
4. Press a new seat (7) into the piston small end taking care not to mark or damage it. Fit O rings (12) and (14) to the piston.
5. Put the shim(s) (10) and spring (11) into the valve body and push the piston into place.
6. Fit the styling ring (45) into the groove in the end cap
7. Screw the end cap (15) onto the body (9) and tighten firmly with a “C spanner”.
8. Replace O rings (39) and (43) on all hoses and plugs and fit to the appropriate connections.

The valve is now fully assembled.

Final adjustment

1. Connect the regulator to a 200 bar supply and connect an intermediate pressure (IP) gauge to a low-pressure port.
2. Turn the air supply on slowly while watching the I.P. Gauge; the I.P. should not exceed **10.5 bar**.
3. Repeat with a 20 bar supply. The I.P. should not be less than **9.5 bar**.
4. The I.P. is adjusted by adding or removing shims under the spring. If more than **3** shims (10) are required, the spring should be replaced.
5. Return the supply pressure to 200 bar, watch the I.P. gauge for thirty seconds; **the I.P. should not creep more than X Bar**.
6. Purge the regulator fully, the I.P. should not drop more than **X** bar.
7. If all is satisfactory, disconnect the test equipment, ensure all connections are tight and all ports are plugged.

The regulator is now ready for use.

COLTRI SUB – C 30 UNBALANCED PISTON FIRST STAGE

Maintenance Instructions

Tools Required

Seat removal tool, “C spanner ” Part no xxx, 4mm hex key, 14 and 15mm spanners, and 25mm offset ring spanner, Interstage (IP) pressure gauge.

Disassembly

1. Remove all hoses and plugs. With the yoke facing upwards, clamp the valve body (9) in a soft jawed vice, (refit a blanking plug to stop the body slipping).
2. With a 25mm offset ring spanner, remove the yoke bolt assembly (5). Unscrew the hand wheel (1) and remove the dust cap (0).
3. Remove the snap ring (3), filter (4) O rings (38) and (40) from the yoke bolt (5).
4. Invert the valve body in the vice. Using a “C spanner”, remove the end cap (15), piston (13), spring (11) and style ring (45).
5. Remove O rings (12) and (14) from the piston (13) then using a seat removal tool, push the seat (7) out of the piston tip.
6. Remove the Styling ring (45) from the valve body (9).

The regulator is now completely disassembled.

Cleaning

All plastic and rubber parts should be washed in warm soapy water, rinsed and dried thoroughly.

All metal parts should be cleaned in an ultra sonic cleaner using a mild degreaser followed by a mild acid (e.g. citric 5% solution), optimum temperature 60° C, rinsing thoroughly between baths. Dry in a clean dry air stream.

Replacement parts

Fit a service kit which includes all essential O rings, the seat (7) and filter (4).

Lubrication

Lubricate all O rings, sliding surfaces and any threads exposed to ingress of water.

Reassembly

1. Fit O rings (40) and (38), filter (4) and snap ring (3) to the yoke bolt (5).
2. Holding the valve body (9) in a soft jawed vice (use a blanking plug to prevent the body from rotating); attach the yoke (2) with the yoke bolt assembly (5). Tighten 37 – 42 Nm with a 25mm offset ring spanner.