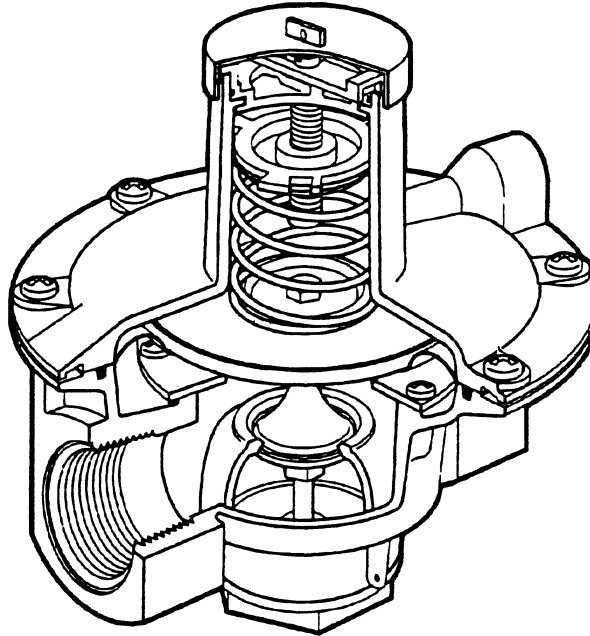


3/4" - 2"



The J48 is a highly versatile proven range of Industrial Low Pressure Regulators, suitable for a wide range of pressure reduction applications. The latest version of the regulator includes a new quick release spring adjustment mechanism unit. This enhancement provides easy access for spring adjustment and routine maintenance. The J48 is available in sizes from 3/4" to 6", the larger sized units from 2 1/2" being described in a separate leaflet. Also available and described on separate leaflets are the zero, H (high inlet), and HL (high inlet, low outlet) versions.

APPLICATION

The J48 is a service and appliance regulator suitable for a wide range of domestic, commercial and industrial applications. All units are designed for natural, liquid petroleum and manufactured gases.

The J48 can be installed in both horizontal and vertical pipelines, with certain sizes available with angled connections for meter services applications. The J48 has been designed for high efficiency and sensitivity with maximum flow and minimum pressure loss.

PRESSURE

Maximum Inlet Pressure: 350mb (5psig)

Maximum Outlet Pressure: 160mb (64"wg)

CONTROL OF OUTLET PRESSURE

A comprehensive range of springs is available, as described overleaf. The outlet pressure can be easily and accurately adjusted by turning the spring adjustment unit located under the top cap. The design of this mechanism provides virtually frictionless adjustment and eliminates "spring wind up".

The complete spring adjustment mechanism can be removed easily for maintenance and spring changes. If required the units can be supplied factory set with a security seal at extra cost.

SIZES

3/4", 1", 1 1/4", 1 1/2", 2"

(2 1/2" - 6", see separate leaflet)

NORMAL OPERATING TEMPERATURE

The J48 range is suitable for operation in a wide range of temperatures from -20°C to +70°C.

CONNECTIONS

The J48 is supplied as standard with a tapered screwed thread to BS21 (ISO 7) or NPT. Other threads may be available upon request.

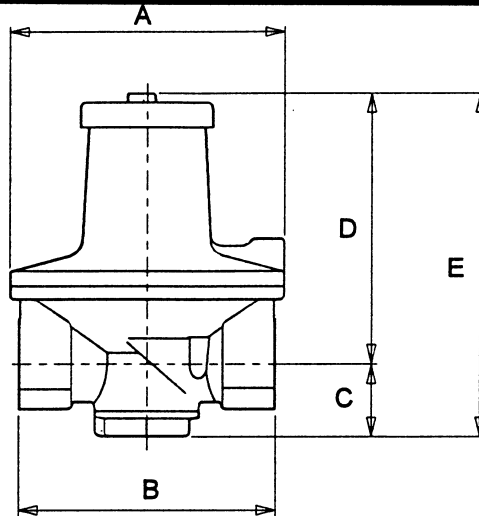
SERVICING

The J48 has been designed for ease of access, inspection and servicing of all internal components. A standard soft spares kit is available for all sizes.

3/4" - 1" reference number SK4806-01

1 1/4" - 1 1/2" reference number SK4808-01

2" reference number SK4809-01



DIMENSIONS AND WEIGHTS

SIZE	A	B	C	D	E	Weight (Kg)
3/4" & 1"	134	125	34	132	166	1.0
1 1/4" & 1 1/2"	185	155	45	149	194	1.9
2"	234	200	52	167	219	3.1

MATERIAL SPECIFICATION

A summary of the material specification for the J48 is given below for reference. All material has been carefully selected to provide maximum durability and reliability of operation.

COMPONENTS	SPECIFICATION
Body, cover, spring adjusting bush, spring adjusting screw and bottom plug.	Aluminium Alloy
Top cap, locking lever, spring holder, diaphragm spacer, valve spacer and valve disc holder.	Acetal Resin (Top cap and locking lever UV stabilised)
Diaphragm plate.	Mild Steel
Main diaphragm, secondary diaphragm, valve disc and "O"rings.	Nitrile (Buna)
Springs	Carbon Steel
Impulse tube	Brass

PERFORMANCE

Detailed performance data is provided on separate technical data sheets.

QUALITY

Jeavons is committed to a programme of continuous quality enhancement. All equipment designed and manufactured by Jeavons benefits from the company's quality assurance standards which are approved to BS EN ISO 9001 : 1994.

Jeavons has a programme of continuous product development and improvement and in consequence the information in this leaflet may be subject to change or modification without notice.

OUTLET PRESSURE SPRINGS

All springs are colour coded for ease of identification

Spring Range		3/4" & 1"	1 1/4" & 1 1/2"	2"
mbar	" wg			
5 - 15	2 - 6	J4806-007 Yellow	J4808-004 Red / Yellow	J4809-007 Dark Blue / Yellow
12.5 - 25	5 - 10	J4806-004 Black	J4808-007 Red / Black	J4809-004 Dark Blue / Black
22.5 - 35	9 - 14	J4806-005 Orange	J4808-008 Red / Orange	J4809-005 Dk Blue / Orange
25 - 75	10 - 30	J4806-101 Yellow / Black	J4808-077 Yellow / Orange	J4809-066 Yellow / Dk Green
70 - 100	28 - 40	J4806-069 Pink / Gold	J4808-075 Pink / Silver	J4809-065 Grey / Gold
90 - 160	36 - 64	J4808-077 Yellow / Orange	J4809-065 Grey / Gold	

REGULATING CAPACITY

All capacities in SCFH 0.64 sg

REGULATOR SIZE: 3/4"

Setting flowrate: 100 SCFH

OUTLET PRESSURE SETTING ("W.G)/DROOP (%)

		4"		7"		8"		11"		20"	
		10%	20%	10%	20%	10%	20%	10%	20%	10%	20%
Pin "w.g.											
	6	216	221								
	8	247	441	252	464						
	10	278	472	296	561	318	587				
Pin PSIG											
	0.50	344	530	366	786	406	883	477	883		
	0.75	375	574	433	861	552	971	728	1,104	441	927
	1.00	318	618	477	927	750	993	883	1,192	795	1,280
	1.50	362	618	525	949	949	1,170	1,059	1,280	1,015	1,523
	2.00	371	662	556	927	1,059	1,280	1,148	1,324	1,192	1,633
	3.00	291	552	592	927	1,280	1,457	1,368	1,545	1,589	1,810
	5.00	256	503	534	993	1,501	1,545	1,368	1,501	2,119	2,295

REGULATOR SIZE: 1"

Setting flowrate: 100 SCFH

OUTLET PRESSURE SETTING ("W.G)/DROOP (%)

		4"		7"		8"		11"		20"	
		10%	20%	10%	20%	10%	20%	10%	20%	10%	20%
Pin "w.g.											
	6	313	459								
	8	397	552	353	795						
	10	441	790	455	883	441	883				
Pin PSIG											
	0.50	662	927	662	971	618	1,059	574	1,324		
	0.75	662	927	971	1,148	927	1,236	861	1,633	750	1,589
	1.00	839	1,015	1,104	1,280	1,170	1,324	1,059	1,766	1,015	1,854
	1.50	1,413	1,457	1,104	1,324	1,148	1,457	1,324	1,898	1,368	1,942
	2.00	1,236	1,368	1,192	1,457	1,589	1,589	1,501	2,031	1,457	1,986
	3.00	1,368	1,501	1,368	1,589	1,368	1,677	1,457	2,119	1,545	2,207
	5.00	1,501	1,810	1,501	1,986	1,545	2,207	1,677	2,207	1,766	2,428

REGULATOR SIZE: 1 1/4"

Setting flowrate: 100 SCFH

OUTLET PRESSURE SETTING ("W.G)/DROOP (%)

		4"		7"		8"		11"		20"	
		10%	20%	10%	20%	10%	20%	10%	20%	10%	20%
Pin "w.g.											
	6	640	1,324								
	8	795	1,545	706	1,324						
	10	817	1,677	883	1,589	795	1,589				
Pin PSIG											
	0.50	883	1,920	1,015	1,986	1,148	2,031	1,280	2,119		
	0.75	883	1,810	1,236	2,384	1,413	2,604	1,854	2,913	1,280	2,163
	1.00	927	1,722	1,457	2,516	1,722	3,002	2,207	3,399	1,854	3,046
	1.50	971	1,722	1,942	2,604	2,295	3,531	2,825	4,061	2,649	4,105
	2.00	971	1,810	2,340	3,002	2,825	3,840	2,472	4,635	3,134	4,767
	3.00	927	2,163	2,913	3,576	3,752	4,591	4,061	5,518	3,973	5,959
	5.00	706	1,413	4,238	4,856	5,076	6,180	3,002	7,019	5,297	7,504

REGULATOR SIZE: 1½"

Setting flowrate: 100 SCFH

OUTLET PRESSURE SETTING ("W.G./DROOP (%))

	10%	4"		7"		8"		11"		20"	
		10%	20%	10%	20%	10%	20%	10%	20%	10%	20%
Pin "w.g.											
6		750	1,545								
8		927	1,810	750	1,501						
10		1,104	1,986	927	1,898	971	1,898				
Pin PSIG											
0.50	1,501	2,428	1,192	2,472	1,280	2,516	1,501	2,516			
0.75	2,119	2,958	1,677	3,134	1,633	3,222	2,340	3,664	1,501	2,516	
1.00	2,604	3,487	1,898	3,708	2,031	3,796	2,869	4,503	2,119	3,708	
1.50	3,487	4,547	2,737	4,591	2,825	4,723	3,929	5,606	2,958	5,297	
2.00	4,105	5,121	4,061	5,385	3,531	5,562	4,767	6,489	3,399	6,357	
3.00	5,827	6,710	6,136	6,798	5,739	6,710	6,268	7,725	4,856	7,769	
5.00	8,167	8,520	7,504	7,902	7,946	8,829	8,387	10,153	7,063	10,418	

REGULATOR SIZE: 2"

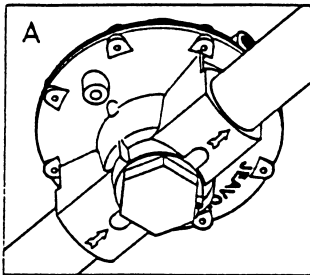
Setting flowrate: 150 SCFH

OUTLET PRESSURE SETTING ("W.G./DROOP (%))

	10%	4"		7"		8"		11"		20"	
		10%	20%	10%	20%	10%	20%	10%	20%	10%	20%
Pin "w.g.											
6	1,148	2,295									
8	1,457	3,267	1,413	2,649							
10	1,854	4,238	1,810	3,443	1,766	3,399					
Pin PSIG											
0.50	3,002	5,297	3,090	4,944	3,002	4,856	2,560	4,679			
0.75	5,694	8,608	5,297	7,284	5,341	6,710	3,973	7,240	3,090	5,297	
1.00	6,180	10,594	7,504	10,153	7,637	9,579	6,842	9,712	5,297	7,946	
1.50	5,739	12,802	11,919	13,243	11,919	13,684	11,919	13,022	9,712	11,036	
2.00	5,959	11,919	13,243	14,126	15,892	16,333	15,671	15,980	11,919	14,567	
3.00	4,414	11,919	11,036	17,657	11,477	18,099	11,477	19,776	12,360	16,774	
5.00	4,414	11,477	4,414	11,477	11,698	14,567	11,919	15,009	16,333	18,540	

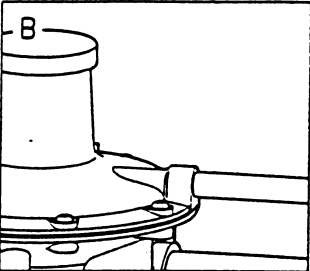
The regular is set at a constant inlet pressure, a predetermined flow rate and the required outlet pressure. The flow rate is then increased whilst keeping the inlet pressure constant. The capacities are recorded when the outlet pressure has fallen by 10% and 20% from the set point.

DS3-J48-4/1991



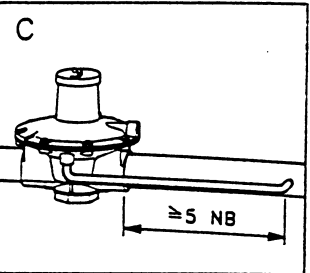
FITTING REGULATOR INTO PIPEWORK. (A)

- 1) Remove the plastic protection plugs from inlet and outlet (and breather if applicable).
- 2) Ensure that installation pipework is thoroughly clean.
- 3) The direction of gas flow must be the same as the arrows on the regulator body.
- 4) Install the regulator into pipework using a jointing compound approved to national standards.



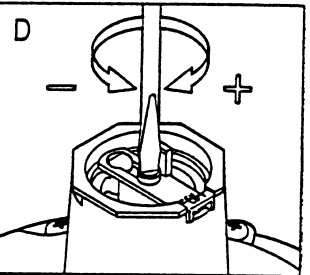
INSTALLATION OF VENT LINE. (B) IF REQUIRED

- 5) Remove the plastic protection plug.
- 6) Connect the vent line (Rc1/4 connection), using a jointing compound approved to national standards, and lead to atmosphere in accordance with national standards. Ensure that no water can penetrate vent pipeline.



INSTALLATION OF EXTERNAL IMPULSE LINE (C) IF REQUIRED

- 7) Remove the plastic protection plug.
- 8) Connect the impulse line (R1/8), using a jointing compound approved to national standards, and lead to a point downstream not less than five times the nominal pipe diameter from the outlet.

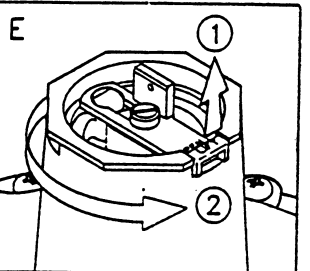


FOR PRE-SET REGULATORS.

- 9) Turn off downstream valves.
- 10) Slowly turn on inlet supply.
- 11) Commission downstream appliance(s).

SETTING OF OUTLET PRESSURE. (D)

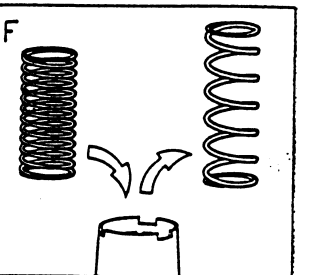
- 12) Turn off downstream valves.
- 13) Remove the top cap.
- 14) Insert a flat bladed screw driver into slot in the end of the spring adjusting screw.
- 15) Turn anti-clockwise to reduce pressure on the loading spring.
- 16) Slowly turn on inlet supply.
- 17) Increase loading on the spring by turning the spring adjusting screw clockwise until the required outlet pressure, plus approximately 2.5mbar, is obtained.
- 18) Commission downstream appliance(s).
- 19) Trim the outlet pressure of the regulator, if necessary, when normal working flow rates have been achieved.
- 20) Replace the top cap (and seal if necessary).



IF THE REQUIRED OUTLET PRESSURE

CANNOT BE ACHIEVED WITH THE SPRING FITTED. (E) & (F)

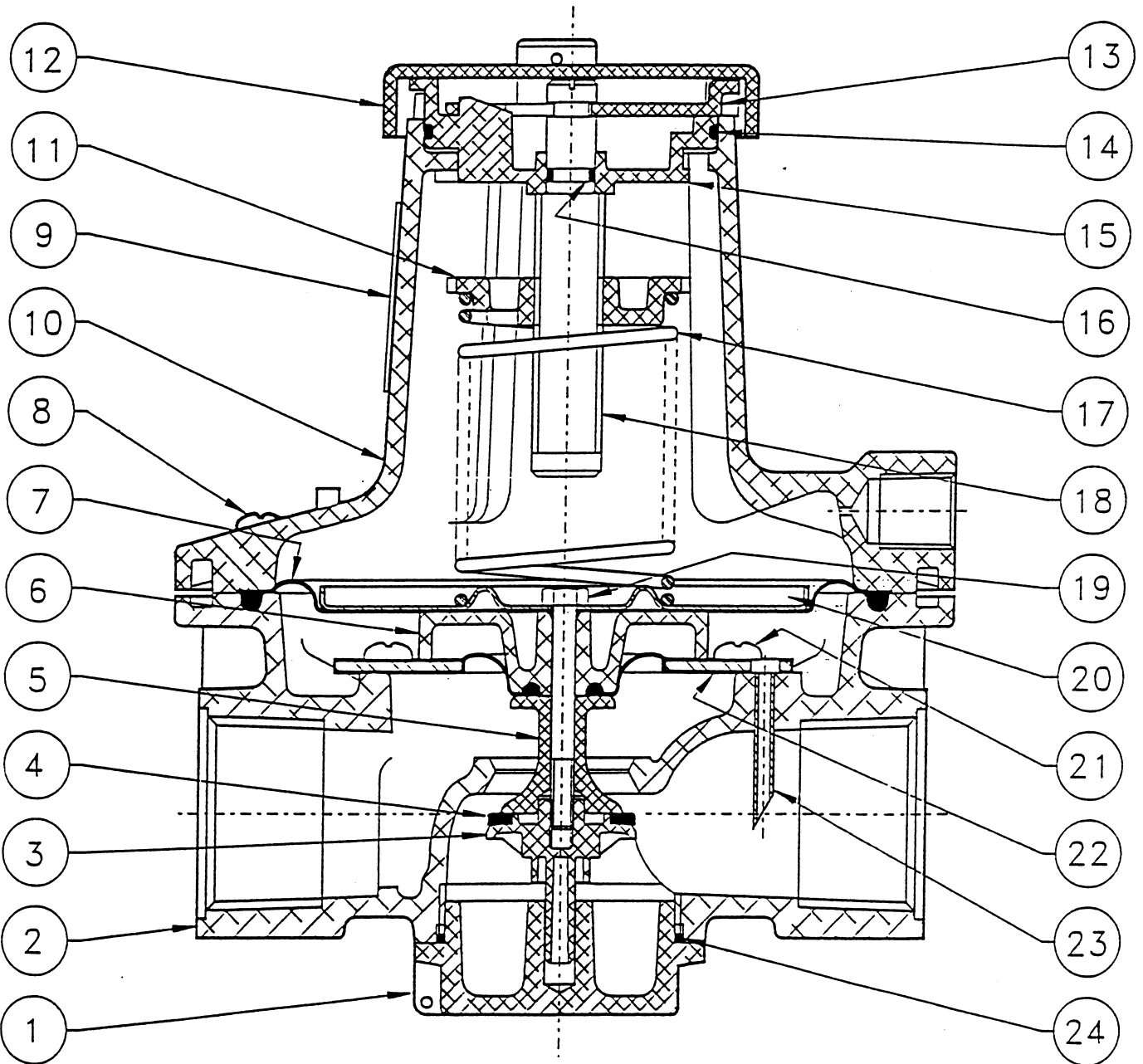
- 21) Choose a loading spring from the catalogue that will give the required outlet pressure range.
- 22) Turn spring adjusting screw anti-clockwise (to reduce loading on spring).
- 23) Carefully lift protruding end of locking lever just clear of adjusting bush (1), whilst in this position turn (octagon shaped) adjusting bush assembly anti-clockwise until disengaged (2). The adjusting bush assembly can then be removed from the top cover.
- 24) Remove the loading spring.
- 25) Insert the new spring - take the label from the spares kit bag and stick it below the nameplate of the regulator.
- 26) Screw top spring holder anti-clockwise to within 10mm of underside of adjusting bush.
- 27) Position underside of top spring holder on to loading spring.
- 28) Align slots in top spring holder with splines in top cover and push adjusting bush assembly into top cover as far as possible.
- 29) Turn adjusting bush assembly clockwise until locking lever snaps into any of the three locking castellations in the top cover.
- 30) Adjust the outlet pressure, as described above, until the required setting is found.
- 31) Replaced the top cap (and seal if necessary).



Jeavons

J48

REGULATOR 3/4" - 2"



DATA SHEET: 046.04 ISSUE A MARCH 1992

Jeavons

**Maintenance Instructions for: J48 MKII Regulator 3/4"-2",
J48 MKII Angled Regulator 3/4"-2", J48 MKII Meter Union
Regulator 3/4"-2" and J48 MKII Zero / Proportionator 1 1/4"-2"**

Diagram Reference Sheet No. D.48.04, D48.06, D.48.11 & D.48.21

Parts List Reference Sheet No. PL.48.03

Dismantling Procedure:

1. Pull off top cap (12).
 2. Turn spring adjusting screw (18) anti-clockwise (to reduce load on spring).
 3. Carefully lift protruding end of locking lever (13) just above adjusting bush (15) whilst in this position turn (octagon shaped) adjusting bush (15) assembly anti-clockwise until disengaged. The adjusting bush (15) can then be removed from the top cover (10).
 4. Remove the loading spring (17) from the top cover (10).
- NOTE: If adjusting bush assembly is to be dismantled for "o" ring replacement, follow procedure. If to be left assembled proceed to instruction number 9.
5. Lift keyhole end of locking lever (13) over sloping peg in adjusting bush (15), and slide forward until, disengaged from spring adjusting screw (18) and remove.
 6. Pull spring adjusting screw (18) from adjusting bush (15).
 7. With slotted end of spring adjusting screw (18) facing up, turn top spring holder (11) clockwise and remove.
 8. Remove "o" rings (16) & (14) from spring adjusting screw (18) and adjusting bush (15) respectively.
 9. Remove top cover screws (8) then carefully remove the top cover (10).
 - 10.1 For J48 Regulator & J48 Zero / Proportionator: Unscrew bottom plug (1) and remove from body (2).
 - 10.2 For J48 Angled Regulator: Unscrew outlet adaptor bush (28) and remove from body (2).
 - 10.3 For J48 Meter Union Regulator: Unscrew meter union assembly (29) and remove from body (2).
 11. Remove "o" ring (24) from (1), (28) or (29).
 12. Restrain valve disc holder (3) with suitable box spanner and unscrew the valve spindle (19).
 13. Withdraw the valve disc holder (3), valve disc (4) and valve spacer (5) through the bottom plug opening.
 14. Remove the valve spindle (19).
 15. Remove the top diaphragm plate (20).
 16. Carefully remove main diaphragm (7).
 17. Remove diaphragm spacer (6).
 18. Remove secondary diaphragm screws (21).
 19. Carefully remove the secondary diaphragm (22).
 20. Check hole in impulse tube (23) is clear. (DO NOT REMOVE FROM BODY).
 21. Wipe valve seat and body clean of any dirt particles, taking care not to damage sealing surface in body.
 22. Inspect all diaphragms and soft seals and replace where necessary (a spares kit is available for this purpose).
 23. For J48 Angled Regulator and J48 Meter Union Regulator, Do not remove counter sunk plug (27) unless required.
 24. For J48 Meter Union Regulator, Do not remove inlet adaptor bush (30), unless required. Note: in some instances an inlet filter may be incorporated into this bush. Remove filter and clean.

Rebuilding procedure:

1. Locate secondary diaphragm (22) with convolution uppermost on to the body (2). Ensure screw holes and impulse tube holes are aligned correctly.
 2. Secure secondary diaphragm (22) in position using screws (21).
 3. Place diaphragm spacer (6) on secondary diaphragm (22) ensuring diaphragm bead is located correctly in the groove.
 4. Place main diaphragm (7) with convolution uppermost, ensuring that the bead is located in the groove in the body (2).
 5. Locate the top diaphragm plate (20) ensuring raised edge is uppermost.
 6. Insert the valve spindle (19) through the centre hole in top diaphragm plate (20), main diaphragm (7) and diaphragm spacer (6).
 7. Locate valve spacer (5) on to valve spindle (19) through bottom plug opening.
 8. Assemble valve disc (4) on to valve disc holder (3) with bead uppermost.
 9. Screw valve disc holder (3) complete with valve disc (4) on to threaded end of valve spindle (19) through bottom plug opening. (DO NOT TIGHTEN).
 10. Restrain valve disc holder (3) with suitable box spanner and tighten valve spindle (19).
 11. Place "o" ring seal (24) into "o" ring seal groove in bottom plug (1), outlet adaptor bush (28) or meter union assembly (29).
 12. Replace the component (1), (28) or (29) complete with "o" ring over centre shaft of valve disc holder (3) into body (2) and screw tightly in position.
 13. Carefully replace top cover (10) on to body (2) with vent facing the outlet and secure with top cover screws (8).
 14. Insert loading spring (17) over spring location ridge in top diaphragm plate (20).
- NOTE: If adjusting bush assembly (15) has been dismantled follow procedure, if it has been left assembled then proceed to instruction number 21.
15. Slide "o" ring seal (16) over slotted end of spring adjusting screw (18) into second groove. (i.e. groove nearest thread).
 16. Carefully screw top spring holder (11), anti-clockwise on to spring adjusting screw (18) with raised lettering facing away from slotted end when assembled. (refer to drawing for correct arrangement).
 17. Slide "o" ring seal (14) into "o" ring groove on adjusting bush (15).
 18. Push spring adjusting screw (18) into hole in the bottom of the adjusting bush (15) until parts are firmly together.
 19. Position key hole slot in locking lever (13) over slotted end of spring adjusting screw (18) and slide over slopping peg in adjusting bush (15) until firmly locked in position.
 20. Screw top spring holder (11) anti-clockwise to within 10mm of underside of adjusting bush (15).
 21. Position underside of top spring holder (11) on to loading spring (17).
 22. align slots in top spring holder (11) with splines in top cover (10) and push adjusting bush (15) assembly into top cover (10) as far as possible.
 23. Turn adjusting bush assembly (15) clockwise until locking lever (13) snaps into any of the three locking castellations in top cover (10).
 24. Set units to required pressure.
 25. Replace top cap (12) by aligning slot in cap with sealing wire lug and push over until it clicks into position, and seal if necessary.

Parts list for J48 MKII Regulator, Zero Regulator, Proportionator,
Angled Regulator and Meter Union Regulator.
Sizes 3/4" - 2" only

ITEM	DESCRIPTION	3/4"	No. Off	1"	No. Off
1	BOTTOM PLUG	J4806-017Z03	1	J4806-017Z03	1
2	BODY	J4805-005+	1	J4806-094+	1
3	VALVE DISC HOLDER	J4806-015	1	J4806-015	1
4	VALVE DISC	J4806-025	* 1	J4806-025	* 1
5	VALVE SPACER	J4806-014	1	J4806-014	1
6	DIAPHRAGM SPACER	J4806-018	1	J4806-018	1
7	MAIN DIAPHRAGM	J4806-011	* 1	J4806-011	* 1
8	SCREW	JSA516XPTZ	6	JSA516XPTZ	6
9	NAME PLATE	J8112-124	1	J8112-124	1
10	TOP COVER	J4806-103+	1	J4806-103+	1
11	TOP SPRING HOLDER	J4806-098	1	J4806-098	1
12	TOP CAP	J4806-099	1	J4806-099	1
13	LOCKING LEVER	J4806-105	1	J4806-105	1
14	"O" RING SEAL	JO200032-4475	* 1	JO200032-4475	* 1
15	ADJUSTMENT BUSH	J4806-100	1	J4806-100	1
16	"O" RING SEAL	JORM0051-16	* 1	JORM0051-16	* 1
17	LOADING SPRING	SEE TABLE	1	SEE TABLE	1
18	SPRING ADJUSTING SCREW	J4806-097	1	J4806-097	1
19	VALVE SPINDLE	JSA440IPNZ	1	JSA440IPNZ	1
20	TOP DIAPHRAGM PLATE	J4806-003	1	J4806-003	1
21	SCREW	JSA410XPTZ	6	JSA410XPTZ	6
22	SECONDARY DIAPHRAGM	J4806-095	* 1	J4806-095	* 1
	AIR SECONDARY DIAPHRAGM	J4806-084	* 1	J4806-084	* 1
23	IMPULSE TUBE	J4706-072	1	J4706-072	1
24	"O" RING SEAL	JORM0376-24	* 1	JORM0376-24	* 1
25	TENSION SPRING	J4806-106	1	J4806-106	1
26	VALVE SPINDLE (FOR ZERO)	J4806-019	1	J4806-019	1
27	COUNTER SUNK PLUG	JMFC14906	1	JMFC14906	1
28	OUTLET ADAPTOR BUSH	J4806-024+	1	J4806-024+	1
29	METER UNION ASSEMBLY	-----	-	-----	-
30	INLET ADAPTOR BUSH	-----	-	-----	-
31	LOADING SPRING	-----	-	-----	-

ITEM	DESCRIPTION	1 1/4"	No. Off	1 1/2"	No. Off	2"	No. Off
1	BOTTOM PLUG	J4808-017Z03	1	J4808-017Z03	1	J4809-017Z03	1
2	BODY	J4807-009+	1	J4808-072+	1	J4809-071+	1
3	VALVE DISC HOLDER	J4808-015	1	J4808-015	1	J4809-015	1
4	VALVE DISC	J4808-035	* 1	J4808-035	* 1	J4809-027	* 1
5	VALVE SPACER	J4808-014	1	J4808-014	1	J4809-014	1
6	DIAPHRAGM SPACER	J4808-021	1	J4808-021	1	J4809-018	1
7	MAIN DIAPHRAGM	J4808-011	* 1	J4808-011	* 1	J4809-011	* 1
8	SCREW	JSA520XPTZ	8	JSA520XPTZ	8	JSA516XPTZ	8
9	NAME PLATE	J8112-124	1	J8112-124	1	J8112-124	1
10	TOP COVER	J4808-078+	1	J4808-078+	1	J4809-067+	1
11	TOP SPRING HOLDER	J4806-098	1	J4806-098	1	J4806-098	1
12	TOP CAP	J4806-099	1	J4806-099	1	J4806-099	1
13	LOCKING LEVER	J4806-105	1	J4806-105	1	J4806-105	1
14	"O" RING SEAL	JO200032-4475	* 1	JO200032-4475	* 1	JO200032-4475	* 1
15	ADJUSTMENT BUSH	J4806-100	1	J4806-100	1	J4806-100	1
16	"O" RING SEAL	JORM0051-16	* 1	JORM0051-16	* 1	JORM0051-16	* 1
17	LOADING SPRING	SEE TABLE	1	SEE TABLE	1	SEE TABLE	1
18	SPRING ADJUSTING SCREW	J4806-097	1	J4806-097	1	J4806-097	1
19	VALVE SPINDLE	JBA650HEXZG	1	JBA650HEXZG	1	JBA865HEXZG	1

ITEM	DESCRIPTION	1 1/4"	No. Off	1 1/2"	No. Off	2"	No. Off
20	TOP DIAPHRAGM PLATE	J4808-003	1	J4808-003	1	J4809-003	1
21	SCREW	JSA510XPTZ	6	JSA510XPTZ	6	JSA510XPTZ	8
22	SECONDARY DIAPHRAGM	J4808-070	* 1	J4808-070	* 1	J4809-070	* 1
	AIR SECONDARY DIAPHRAGM	J4808-074	* 1	J4808-074	* 1	J4809-064	* 1
23	IMPULSE TUBE	J4808-076	1	J4808-076	1	J4709-060	1
24	"O" RING SEAL	JORM0546-24	* 1	JORM0546-24	* 1	JORM0745-30	* 1
25	TENSION SPRING	-----	-	-----	-	-----	-
26	VALVE SPINDLE (FOR ZERO)	-----	-	-----	-	-----	-
27	COUNTER SUNK PLUG	JMFC14907	1	JMFC14907	1	JMFC14909	1
28	OUTLET ADAPTOR BUSH	J4807-003+	1	J4807-003+	1	J4809-022+	1
29	METER UNION ASSEMBLY	JMU020LJ48	1	JMU050LJ48	1	JMU100LJ48	1
30	INLET ADAPTOR BUSH	J4707-003	1	J4707-003	1	J4709-044	1
31	LOADING SPRING	J4806-020	1	J4806-020	1	J4806-020	1

Note: Parts numbers marked + require connection thread to be specified with order.

SPARES KIT

Spares kit contents are marked * on parts list above.

SPARES KIT CODE	SIZE
SK4806-01	3/4" - 1"
SK4808-01	1 1/4" - 1 1/2"
SK4809-01	2"

SPRINGS FOR J48 (3/4", 1", 1 1/4", 1 1/2" & 2")

(J48 Regulator, Angled Regulator and Meter Union Regulator)

SPRING RANGE		PART NUMBER AND COLOUR CODE		
"w.g.	mbar	3/4" & 1"	1 1/4" & 1 1/2"	2"
2 - 6	5 - 15	J4806-007 YELLOW	J4808-004 RED / YELLOW	J4809-007 DARK BLUE / YELLOW
5 - 10	12.5 - 25	J4806-004 BLACK	J4808-007 RED / BLACK	J4809-004 DARK BLUE / BLACK
9 - 14	22.5 - 35	J4806-005 ORANGE	J4808-008 RED / ORANGE	J4809-005 DARK BLUE / ORANGE
10 - 30	22 - 75	J4806-101 YELLOW / BLACK	J4808-077 YELLOW / ORANGE	J4809-066 YELLOW / DARK GREEN
28 - 40	70 - 100	J4806-079 PINK / GOLD	J4808-075 PINK / SILVER	J4809-065 GREY / GOLD
36 - 64	90 - 160	J4808-077 YELLOW / ORANGE	J4809-065 GREY / GOLD	-----

Note: For Zero Regulator and Proportionator see parts list for spring part number.