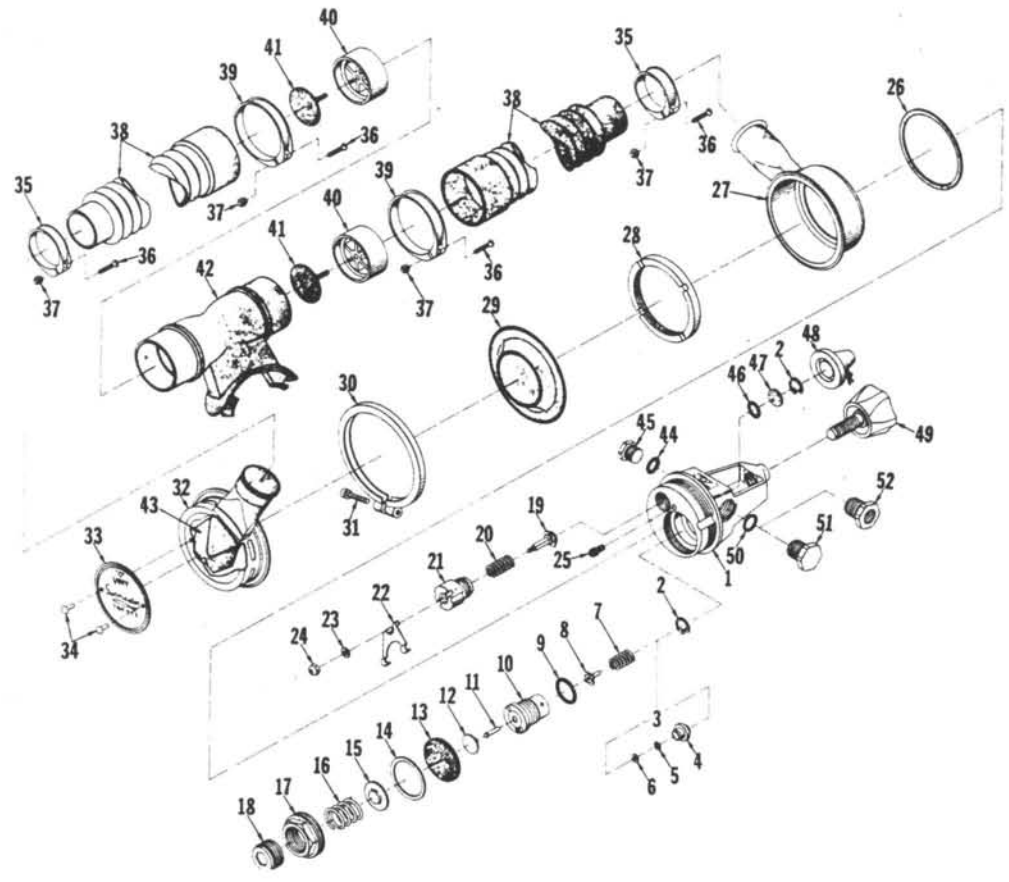
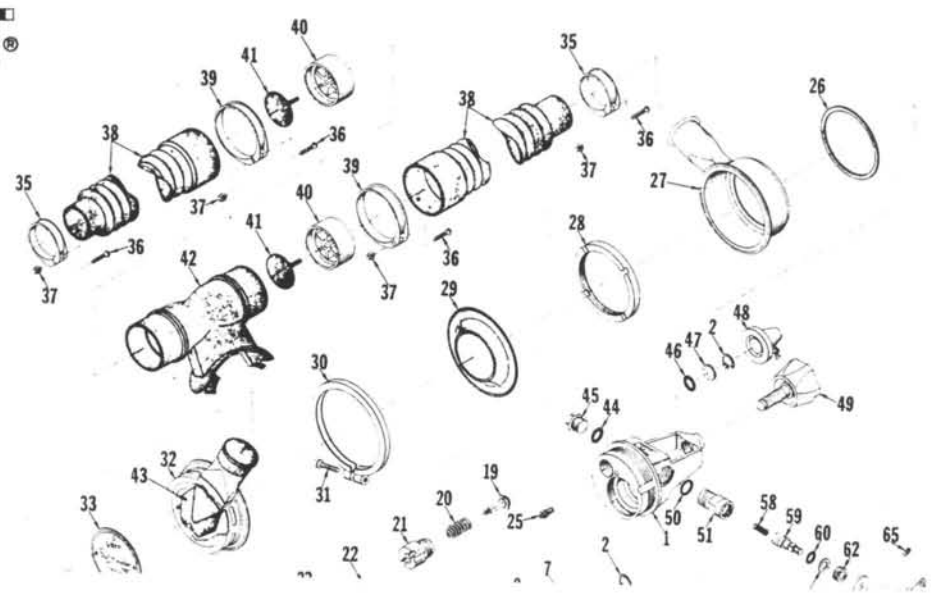




TWO-HOSE REGULATOR – R-22

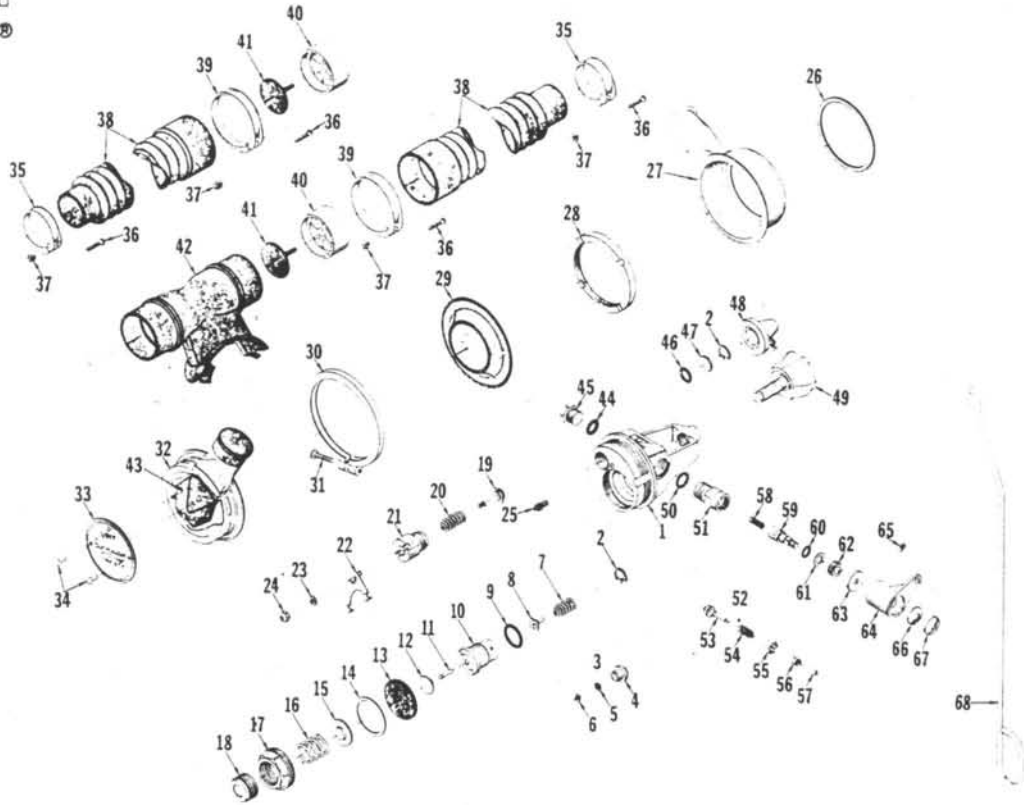


TWO-HOSE REGULATOR R-22J





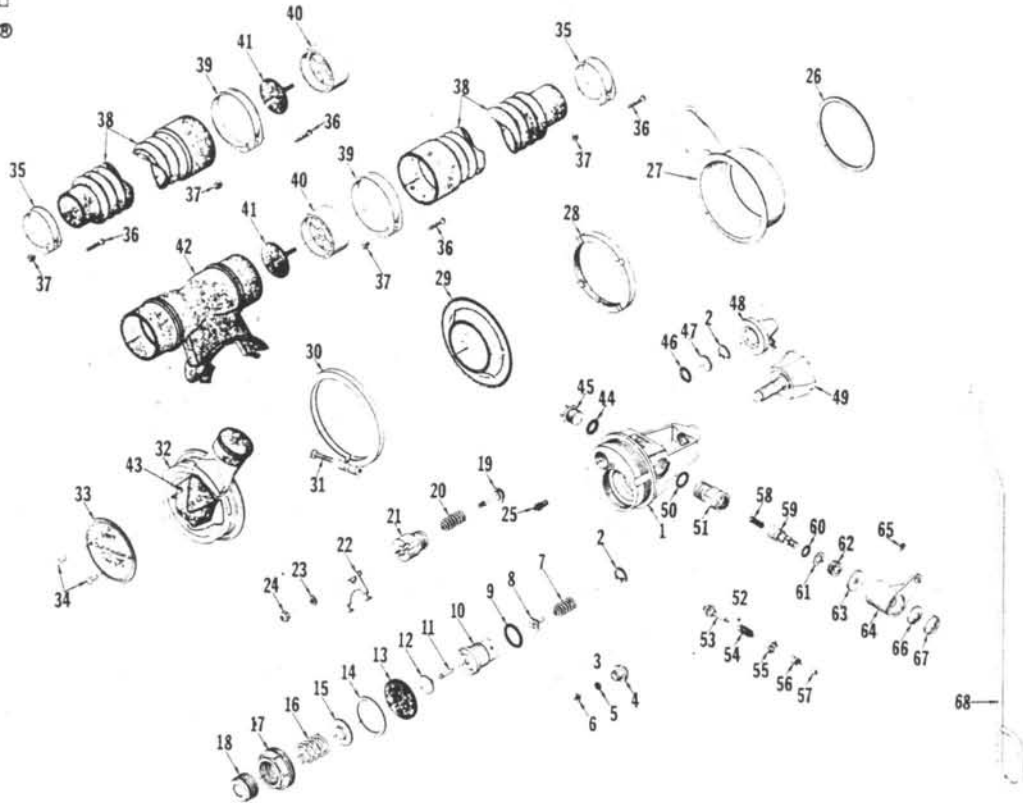
TWO-HOSE REGULATOR R-22J



ITEM	STOCK NO.	DESCRIPTION	ITEM	STOCK NO.	DESCRIPTION
1	85-804	Body—Regulator	37	85-118	Nut—Hose Clamp
2	85-537	Ring—Retaining	38	85-914	Hose—Corrugated 1-1/8" X 1-3/4" X 20"
3	85-862	Assembly—1st Stage Poppet Retainer	39	85-116	Clamp—Hose 1-3/4" Diameter
4	85-863	Retainer—1st Stage	40	85-113	Support—Valve Plastic
5	85-663	O—Ring	41	85-114	Valve—Rubber
6	85-825	Disc—Retaining	42	85-913	Mouthpiece Tee
7	85-830	Spring—1st Stage Poppet	43	85-896	Valve—Exhaust
8	85-838	Assembly—1st Stage Poppet	44	85-699	O—Ring
9	85-881	O—Ring	45	85-393	Plug
10	85-864	Assembly—1st Stage Poppet Housing	46	85-670	O—Ring
11	85-849	Pin—Poppet	47	85-536	Filter
12	85-407	Button—Poppet	48	85-446	Assembly—Storage Cap
13	85-411	Diaphragm—1st Stage	49	85-971	Assembly—Knob
14	85-412	Gasket	50	85-886	Gasket
15	85-413	Plate—Spring Base	51	85-868	Housing—Reserve
16	85-416	Spring—Diaphragm	52	85-869	Assembly—Reserve Detent
17	85-418	Nut—Retaining	53	85-870	Assembly—Reserve Poppet
18	85-419	Nut—Regulating	54	85-872	Spring—Reserve Poppet
19	85-826	Assembly—2nd Stage Poppet Stem	55	85-873	Seat—Reserve Detent
20	85-491	Spring—2nd Stage Poppet	56	85-874	Detent—Reserve
21	85-882	Housing—2nd Stage Valve	57	85-875	Retainer—Reserve Poppet
22	85-854	Lever—Demand	58	85-898	Spring—Reserve Detent
23	85-330	Washer—2nd Stage Poppet	59	85-878	Stem—Reserve Detent
24	85-603	Nut—2nd Stage Poppet	60	85-880	O—Ring
25	85-887	Set Screw—Locking 2nd Stage Housing	61	85-884	Washer—Teflon
26	85-405	Gasket—Rubber	62	85-877	Retainer—Reserve Stem
27	85-858	Assembly—Case	63	85-876	Washer—Reserve Handle
28	85-420	Nut—Retaining	64	85-856	Handle—Reserve
29	85-818	Assembly—Diaphragm	65	85-885	Set Screw—Reserve Handle
30	85-853	Assembly—Cover Ring	66	85-803	Lock Washer—Reserve Handle Nut
31	85-883	Screw—Cover Ring	67	85-879	Nut—Reserve Handle
32	85-908	Assembly—Cover	68	85-897	Rod—Reserve Pull
33	85-906	Nameplate	(Not		
34	85-907	Rivets	Illstd.)	85-809	Universal Pull Rod Clip
35	85-115	Clamp—Hose 1-1/8" Diameter	(Not		
36	85-117	Screw—Hose Clamp	Illstd.)	85-915	Black Hose Assembly (complete with hoses, clamps and non-return valves)
					Available as assembly only See Part #85-869



TWO-HOSE REGULATOR R-22J



ITEM	STOCK NO.	DESCRIPTION	ITEM	STOCK NO.	DESCRIPTION
1	85-804	Body—Regulator	37	85-118	Nut—Hose Clamp
2	85-537	Ring—Retaining	38	85-914	Hose—Corrugated 1-1/8" X 1-3/4" X 20"
3	85-862	Assembly—1st Stage Poppet Retainer	39	85-116	Clamp—Hose 1-3/4" Diameter
4	85-863	Retainer—1st Stage	40	85-113	Support—Valve Plastic
5	85-663	O—Ring	41	85-114	Valve—Rubber
6	85-825	Disc—Retaining	42	85-913	Mouthpiece Tee
7	85-830	Spring—1st Stage Poppet	43	85-896	Valve—Exhaust
8	85-838	Assembly—1st Stage Poppet	44	85-699	O—Ring
9	85-881	O—Ring	45	85-393	Plug
10	85-864	Assembly—1st Stage Poppet Housing	46	85-670	O—Ring
11	85-849	Pin—Poppet	47	85-536	Filter
12	85-407	Button—Poppet	48	85-446	Assembly—Storage Cap
13	85-411	Diaphragm—1st Stage	49	85-971	Assembly—Knob
14	85-412	Gasket	50	85-886	Gasket
15	85-413	Plate—Spring Base	51	85-868	Housing—Reserve
16	85-416	Spring—Diaphragm	52	85-869	Assembly—Reserve Detent
17	85-418	Nut—Retaining	53	85-870	Assembly—Reserve Poppet
18	85-419	Nut—Regulating	54	85-872	Spring—Reserve Poppet
19	85-826	Assembly—2nd Stage Poppet Stem	55	85-873	Seat—Reserve Detent
20	85-491	Spring—2nd Stage Poppet	56	85-874	Detent—Reserve
21	85-882	Housing—2nd Stage Valve	57	85-875	Retainer—Reserve Poppet
22	85-854	Lever—Demand	58	85-898	Spring—Reserve Detent
23	85-330	Washer—2nd Stage Poppet	59	85-878	Stem—Reserve Detent
24	85-603	Nut—2nd Stage Poppet	60	85-880	O—Ring
25	85-887	Set Screw—Locking 2nd Stage Housing	61	85-884	Washer—Teflon
26	85-405	Gasket—Rubber	62	85-877	Retainer—Reserve Stem
27	85-858	Assembly—Case	63	85-876	Washer—Reserve Handle
28	85-420	Nut—Retaining	64	85-856	Handle—Reserve
29	85-818	Assembly—Diaphragm	65	85-885	Set Screw—Reserve Handle
30	85-853	Assembly—Cover Ring	66	85-803	Lock Washer—Reserve Handle Nut
31	85-883	Screw—Cover Ring	67	85-879	Nut—Reserve Handle
32	85-908	Assembly—Cover	68	85-897	Rod—Reserve Pull
33	85-906	Nameplate	(Not		
34	85-907	Rivets	IIIstd.)	85-809	Universal Pull Rod Clip
35	85-115	Clamp—Hose 1-1/8" Diameter	(Not		
36	85-117	Screw—Hose Clamp	IIIstd.)	85-915	Black Hose Assembly (complete with hoses, clamps and non-return valves)
					Available as assembly only See Part #85-869

TWO HOSE REGULATOR

B. Disassembly

Item No.	Stock No.	Description	Procedure
<u>Removing and disassembly of mouthpiece and hose assembly</u>			
36	85-117	Screw-Hose Clamp (2 ea.))
37	85-118	Nut-Hose Clamp (2 ea.))
35	85-115	Hose Clamp (2 ea.))
)
36	85-117	Screw-Hose Clamp (2 ea.))
37	85-118	Nut-Hose Clamp (2 ea.)) DISASSEMBLE
39	85-116	Hose Clamp (2 ea.))
)
38	85-914	Corrugated Hose (2 ea.))
40	85-113	Valve Support (2 ea.))
41	85-114	Valve (2 ea.))
42	85-913	Mouthpiece)
<u>Disassembly of Regulator Can</u>			
31	85-883	Screw-Cover Ring	Remove screw using 7/64" allen wrench.
30	85-853	Cover Ring Assembly	Start with one side and lift off ring assembly.
32	85-908	Cover Assembly	Lift off.
43	85-896	Exhaust Valve	Pull valve from cover assembly.
29	85-818	Diaphragm Assembly	Remove.
49	85-971	Knob Assembly (plastic knob)	Remove.
49	85-714	Knob Assembly (metal knob)	Remove.
28	85-420	Retaining Nut	Regulator body can be held from rotating by putting a flat piece of wood on each side of the yoke to prevent marring the finish and clamping in a bench vise. Remove retaining nut using wrench 85-926.
27	85-858	Case Assembly	Remove from body.
26	85-405	Gasket	Remove from body (may be reused if undamaged).

TWO HOSE REGULATOR

B. Disassembly (cont.)

Item No.	Stock No.	Description	Procedure
<u>Disassembly of 2nd Stage</u>			
24	85-603	Nut - 2nd Stage	Remove using a 1/4" nut driver or socket wrench.
23	85-330	Washer	Remove.
22	85-854	Demand Lever	Remove.
25	85-887	Set Screw	Remove screw using 7/64" allen wrench.
21	85-882	Housing - 2nd Stage	Screw out of body.
20	85-491	Spring	Lift out.
19	85-826	Poppet	Lift out.
<u>Disassembly of 1st Stage</u>			
18	85-419	Regulating Nut	Remove with 3/8" allen wrench.
16	85-416	H.P. Spring	Lift out.
17	85-418	Retaining Nut	Unscrew using 1-1/8" socket wrench.
15	85-413	Spring Plate	Lift out.
14	85-412	Gasket	Remove.
13	85-411	Diaphragm - 1st Stage	Using a small sharp pointed pick, carefully work around outer edges of diaphragm and lift out. (See Caution note.)
 <u>CAUTION:</u> Care must be exercised in removing diaphragm so as not to tear or puncture the rubber. Also, probing too deep will result in scratches or marring the flat sealing surface of the regulator body. This could cause high pressure leaks.			
12	85-407	Poppet Button	Lift out.
11	85-849	Poppet Pin	Lift out.
10	85-864	Housing - 1st Stage	Unscrew housing assembly using special Voit wrench #85-928.
9	85-881	O-Ring	Remove.
2	85-537	Retaining Ring	Remove from 1st Stage housing assembly (85-864) using No. 1 circlip pliers.
3	85-862	1st Stage Poppet-Retainer Assembly	Remove.

TWO HOSE REGULATOR

B. Disassembly (cont.)

Item No.	Stock No.	Description	Procedure
7	85-830	Spring - 1st Stage	Lift out.
8	85-838	Poppet - 1st Stage	Lift out.
<p>NOTE: If parts are frozen in 1st stage housing (85-864), they can be removed by inserting a 3/32" dia. flat ended punch into the base of the 1st stage housing and tap gently. If all the internal parts are frozen together, do not attempt to separate -- replace.</p>			
<p><u>Remove Regulator Body from Bench Vise</u></p>			
2	85-537	Retaining Ring	Remove from regulator body (85-804) using No. 1 angled circlip pliers.
47	85-536	Filter	Remove.
46	85-670	O-Ring	Remove.
45	85-393	Plug (2 ea.)	Unscrew plug using 9/16" open end wrench.
44	85-699	O-Ring (2 ea.)	Remove. (Inspect for damage or nicks, may be reused if left on plug.)
<p>NOTE: On "Trieste" models up to Serial No. 01000 and "Trieste - J" model up to Serial No. 00400 have 1 plug (85-393) and O-Ring (85-699).</p>			
51	85-888	Reserve Plug	Unscrew plug using 3/4" open end wrench.
50	85-886	Gasket	Remove. (Inspect for damage or nicks, may be reused if left on plug.)
<p>NOTE: On R-22J regulators, Items 51 and 50 would be the disassembly of the reserve unit which is covered in detail under the V-1JR section of this manual.</p>			

TWO HOSE REGULATOR

C. Inspection

Item No.	Stock No.	Description	Procedure
38	85-914	Corrugated Hose	With both hands, stretch out hose and check for cracks and holes in rubber.
41	85-114	Rubber Valve	Check to see if it is warped, cracked or torn. Discard if sticky, dust lightly with talc before assembly.
42	85-913	Mouthpiece Tee	Check for cracks.
43	85-896	Exhaust Valve	Stretch valve and check for cracks or tears. (Generally best to replace.)
29	85-818	Diaphragm - 2nd Stage	Notice if rubber has separated from metal plate. Also check for cracks, pinholes and pinching at outer edges.
13	85-411	Diaphragm - 1st Stage	Check for cracks, wear or damage from removal.
26	85-405	Gasket	Check for wear and cracking, may be reused if in good condition.
14	85-412	Gasket	Check for wear and cracking, replace unless in exceptionally good condition.
8	85-838	Poppet - 1st Stage	Check rubber seat for cuts or separation from the metal. Rubber seat with deep groove should be replaced. Make sure hole through shaft is open.
19	85-826	Poppet - 2nd Stage	Check rubber seat for excessive wear and verdigris (green corrosion).
10	85-864	1st Stage Poppet Housing	Check seat located at the bottom of the housing. Look for verdigris, nicks and scratches.
1	85-804	Regulator Body	Check seat in bottom of 2nd Stage port. Look for verdigris, nicks and scratches.
2	85-537	Retaining Ring	Check to see if ring is distorted due to removal.

TWO HOSE REGULATOR

C. Inspection (cont.)

Item No.	Stock No.	Description	Procedure
47	85-536	Sintered Filter	See if any sedimentation has occurred on the outside of the sintered area, replace if corroded or partially sealed.

TWO HOSE REGULATOR

D. Cleaning

Item No.	Stock No.	Description	Procedure
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All rubber and chromed polished parts should be cleaned in warm soapy water and rinsed in fresh water. In hot humid climate, rinse hoses in 20% vinegar or disinfectant mouthwash solution; then wash in fresh water.

All other metal parts with the exception of the sintered filter (85-536), 1st Stage poppet (85-838), 2nd Stage poppet (85-826), 1st Stage poppet retainer assembly (85-862) and 2nd Stage diaphragm (85-818) are given an acid bath of 15-20% nitric acid solution. This solution is used only for removing deeply incrustated verdigris. Be sure that the acid does not eat the metal parts.

All metal parts are thoroughly washed in fresh water.

Extremely heavy verdigris and sedimentation can be removed with a soft wire wheel or wire brush. Exception, shafts running through O-Ring seals.

38	85-914	Corrugated Hose	Make absolutely sure that the inside of the hose has been cleaned and rinsed.
40	85-113	Valve support (2 ea.)	Wash in fresh water.
42	85-913	Mouthpiece Tee	Clean inside thoroughly and rinse.
10	85-864	1st Stage Housing	If the housing seat is nicked, polish with a reseating device. This can be made out of a 7/16" wooden dowel. Place a small amount of fine grinding compound on the end of the dowel. Insert the reseating device in the housing and invert. The housing is then spun a few times. If the seat has been satisfactorily ground, clean grindings out with profuse water flushing followed by compressed air and soft cloth.



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TWO HOSE REGULATOR

D. Cleaning (cont.)

Item No.	Stock No.	Description	Procedure
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NOTE: If 2nd Stage seat on regulator body (85-852) is nicked or scratched, the same reseating device and procedure as above can be used.

Suggested Replacement of the following parts:

All O-Rings should be replaced			
47	85-536	Sintered Filter	
2	85-537	Retaining Rings	
3	85-862	1st Stage Poppet Retainer Assembly	
8	85-838	1st Stage Poppet	Depending on the amount of wear and verdigris.
19	85-826	2nd Stage Poppet	Depending on the amount of wear and verdigris.
26	85-405	Gasket - Rubber	
14	85-412	Gasket	

Lightly lubricate all O-Rings and threads with 4X or Dow Compound 3 silicone lubricant.

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TWO HOSE REGULATOR

E. Assembly and Adjustment

Item No.	Stock No.	Description	Procedure
<u>Assembly of 1st Stage</u>			
10	85-864	1st Stage Housing	Place on clean hard surface. Assemble the following parts.
8	85-838	1st Stage Poppet	
7	85-830	Spring	
3	85-862	1st Stage Poppet Retainer	
2	85-537	Retaining Ring	With the smooth side facing up, place the retaining ring into assembly guide (85-1014). Mount the assembly guide on top of the 1st Stage housing so that the bottom recess of the guide fits squarely on the top of the housing. With a 1/2" wooden dowel, force the retaining ring down into the groove.
9	85-881	O-Ring 3-8	Lightly lubricate O-Ring with silicone grease, slide O-Ring over the threads to seat down in groove. Inspect for thread cuts before proceeding.
1	85-804	Regulator Body	Place regulator flat side down and assemble following parts.
46	85-670	O-Ring 2-12	Lubricate and place into inlet port.
47	85-536	Sintered Filter	Install over O-Ring.
2	85-537	Retaining Ring	Install with circlip pliers #1.
44	85-699	O-Ring 3-3	Lubricate and fit O-Ring over plug (85-393).
45	85-393	Plug	Thread plug into high pressure port - tighten.
50	85-886	Gasket	Seat gasket squarely in bottom of reserve port in regulator body.
51	85-888	Reserve Plug (R-22 only)	Thread plug into body-tighten.

TWO HOSE REGULATOR

E. Assembly and Adjustment (cont.)

Item No.	Stock No.	Description	Procedure
<p><u>NOTE:</u> On R-22J Regulators, the reserve assy. will be installed in place of the reserve plug (85-888). For complete assembly of reserve unit, see Assembly and Adjustment Section of V-1JR Reserve unit of this manual.</p>			
<p>Clamp regulator body (85-804) in bench vise - same manner as disassembly procedures.</p>			
10	85-864	1st Stage Housing Assembly complete	Thread into regulator body. Tighten with Voit wrench #85-928.
11	85-849	Poppet Pin	Place pin in 1st Stage housing hole being sure it seats into hole of 1st Stage poppet (85-838).
12	85-407	Poppet Button	Place on top of pin.
<p><u>NOTE:</u> Press down on poppet button. Check to see that movement is free. Button should bottom against top of 1st Stage housing (approx. 1/16" travel).</p>			
13	85-411	1st Stage diaphragm	Install diaphragm with fabric side facing up. Seat diaphragm against bottom all around.
14	85-412	Gasket	Install on top of diaphragm.
15	85-413	Plate - Spring Base	Lay on top of diaphragm.
17	85-418	Retaining Nut	Screw into body until it seats hard against diaphragm gasket (85-412).
16	85-416	Diaphragm Spring	Place spring on top of spring plate.
18	85-419	Regulating Nut	Screw into retaining nut 1 or 2 threads.
<p><u>NOTE:</u> Do not screw in regulating nut tightly. This will increase intermediate pressure and cause damage to test pressure gauge used later.</p>			
26	85-405	Gasket	Place over body. Make sure it seats flat on surface.
27	85-858	Case Assembly	Insert over body.
28	85-420	Retaining Nut	Screw tight onto body with wrench (85-926).

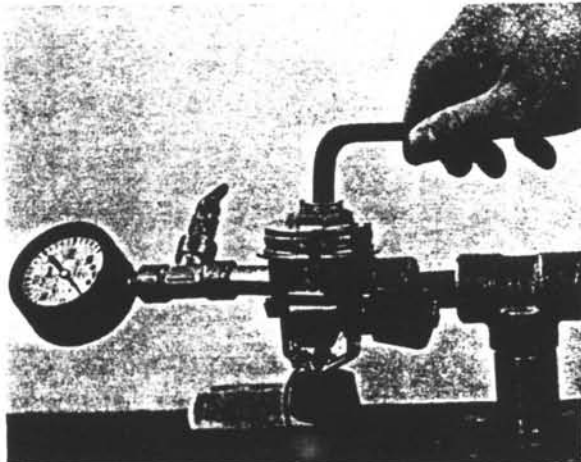
TWO HOSE REGULATOR

E. Assembly and Adjustment (cont.)

Item No.	Stock No.	Description	Procedure
49	85-971	Knob Assembly	Screw into yoke of regulator body.
19	85-826	2nd Stage poppet	Place 2nd Stage poppet in regulator body.
20	85-491	2nd Stage Spring	Place over poppet stem.
21	85-882	2nd Stage Housing	Screw housing into body. Be sure the square hole on housing and screw down almost to bottom.

Adjusting the Intermediate Pressure

Screw test pressure gauge adapter (85-1015) into low pressure port on side of regulator body.



NOTE: Be sure test gauge adapter is not screwed into the high pressure port. The 2nd Stage port can be identified by the large angled hole at the base of the port.

CAUTION: Be sure the bleeder valve of the test gauge is open.

Testing the Intermediate Pressure

- a. With the test gauge on the regulator, bleeder valve open, attach to air supply or a diving cylinder.
- b. Turn on air valve slowly.
- c. Close bleeder valve of gauge.
- d. Turn regulating nut slowly in clockwise direction until the test gauge reads 125#.
- e. Open and close bleeder valves a few times to check correct reading of the gauge.
- f. Readjust regulating nut as necessary.

TWO HOSE REGULATOR

E. Assembly and Adjustment (cont.)

Item No.	Stock No.	Description	Procedure
			Turn off valve of high pressure air source. Leave bleeder closed. If the pressure reading remains the same for 1 minute, the adjustment of the regulator is completed.
			<u>Slow Rise of Pressure Gauge</u>
			This is an indication of a leak in the high pressure housing and is caused by the 1st Stage poppet not seating properly. Usually from dirt on the seat or a marred seat.
			<u>Pressure Drop in Gauge</u>
			An indication of a leak from one or more of the following places. a. 2nd Stage housing not screwed down tight enough. b. Test pressure gauge not tightly screwed into regulator. c. 1st Stage diaphragm not seating. Tighten retaining nut. d. O-Ring (85-881) under 1st Stage housing not sealing properly. Tighten or replace.
			<u>NOTE:</u> A quick way for locating leaks. While test pressure gauge is still attached to the body and regulator is under pressure, immerse unit in water making sure the gauge does not get wet. Bubble will indicate leak.
			<u>Adjustment of 2nd Stage</u>
			With air pressure still on, slowly loosen 2nd Stage valve housing (85-882) until 2nd Stage poppet just starts to leak. Note position of locking set screw groove and tighten housing to line up the next groove.
25	85-887	Locking Set Screw	Install and tighten.
22	85-854	Demand Lever	Place on valve housing straddling 2nd Stage poppet.
23	85-330	Washer	Place over poppet stem.
24	85-603	2nd Stage Poppet Nut	Tighten nut onto poppet until demand lever is just snug.
29	85-818	2nd Stage Diaphragm Assy.	Place on groove of case assembly.

TWO HOSE REGULATOR

E. Assembly and Adjustment (cont.)

Item No.	Stock No.	Description	Procedure
43	85-896	Exhaust Valve	Insert into the cover assembly so that valve lies parallel to the diaphragm. Fold valve lips back over exhaust tube.
32	85-908	Cover Assembly	Place over diaphragm. Align tubes to be approximately 90° apart or so the nameplate is horizontal.
30	85-853	Cover Ring	Holding cover assembly down to prevent moving or slipping, install cover ring with screw lugs on the bottom.
31	85-883	Cover Ring Screw	Tighten screw until cover ring lugs are closed.

Assembly of Mouthpiece and Hose Assembly

42	85-913	Mouthpiece Tee	Lay on table with mouthpiece towards you.
41	85-114	Rubber Valve (2 ea.)	Insert into valve support (85-113).
40	85-113	Valve Support (2 ea.)	Insert into mouthpiece tee.

CAUTION: When assembling valve support, make absolutely sure that the intake is on the right hand side and the exhaust is on the left hand side. Failure to insert these valves properly will prevent proper operation of your regulator. Check operation before and after hose assembly is fitted to regulator.

38	85-914	Corrugated Hose (2 ea.)	Insert large end over mouthpiece tee and disc support. Make sure that the edge of the hose butts flat against the edges of the mouthpiece tee.
39	85-116	Hose Clamp (2 ea.)	Place over hose 1/4" away from the seam on the hose and mouthpiece tee with the ends of the clamp facing down.
36	85-117	Screw (2 ea.)	Install on clamps facing rearwards.

TWO HOSE REGULATOR

E. Assembly and Adjustment (cont.)

Item No.	Stock No.	Description	Procedure
37	85-118	Nut (2 ea.)	Clamp is made to nest nut to prevent from turning.
<p>Place regulator on table so that the nameplate is facing the mouthpiece and insert hoses over intake and exhaust openings. Be sure the exhaust valve is not pulled or rotated when installing hose.</p>			
35	85-115	Hose Clamp (2 ea.)	Place clamp on hose and regulator 1/4" from the end. The ends of the clamp facing to the rear of the regulator. Install on clamps facing down.
36	85-117	Screw (2 ea.)	Install on clamps facing down.
37	85-118	Nut (2 ea.)	Clamp is made to nest nut to prevent from turning.

Be sure to check the operation of the hose assembly by putting the regulator on a diving cylinder and test breathe.

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TWO HOSE REGULATOR

F. Trouble Shooting Chart

<u>Complaint</u>	<u>Origin</u>	<u>Part No.</u>	<u>Cause</u>	<u>Remedy</u>
1st Stage air leak (after inhaling, hissing starts in about a second)	Seat-1st Stage Housing	85-864	Damaged Seat.	Reface or replace.
H.P. Air Leaks	1st Stage Poppet	85-838	Damaged Seat.	Replace Poppet.
2nd Stage Air Leaks	Regulator Body	85-852	Scratched or damaged seat.	Reface.
	2nd Stage Poppet Demand Lever	85-826 85-854	Damaged seat. Lever set too high.	Replace. Adjust height of lever.
Hard to breathe	Demand Lever	85-854	Lever set too low.	Adjust height of lever.
	Regulating Nut	85-419	1st Stage pressure adjustment too low.	Turn clockwise to increase pressure. Employ 85-1015 gauge in low pressure port.
Water Leaks	Hose	85-914	Pinhole in hose.	Replace.
	Diaphragm Assy.	85-818	Not properly seated.	Disassemble cover and reseat.
	Cover Ring	85-853	Cover ring screw not tight.	Tighten screw.
	Body Retaining Nut	85-420	Loose	Tighten.