

SURVIVAIR DISTRIBUTOR NOTICE
URGENT SAFETY NOTICE (Revised 11/27/90)
HIP PAC INSPECTION

SURVIVAIR has been advised by a supplier that a potentially hazardous condition may exist with some 1st stage regulators used in SURVIVAIR Hip Pacs. Although no failures have been reported, SURVIVAIR is initiating a mandatory inspection and retrofit program based on the supplier's recommendation. Hip Pacs using the Conshelf regulator (see drawing) may have a defective high pressure seat which may fail when using the escape cylinder as the air source, creating a free-flow of air and reducing the escape time provided by the Hip Pac.

SURVIVAIR requires a field inspection of Hip Pac regulators (part number 988150) assembled since July 1988, spare high pressure seats (part number 105321), and any units overhauled since July, 1988 which utilize high pressure seats (part number 105321).

Inform customers of this mandatory inspection. Review sales and service records to identify all customers who purchased Hip Pacs since July 1988. Notify these customers of the potential hazard and ask them to refrain from using any suspected units until they have been inspected. If you need assistance in this, contact SURVIVAIR Customer Service.

Inspect all new first stage regulators and Hip Pac units. The assembly date is located on the box label. Do not sell or use regulators with assembly dates after July 1988. Suspect regulators can be identified by part number 9881-60 and a serial number beginning with "S", "T", or "U" cast into the regulator body. See Figure 1. Regulators without this part/serial number, which have not been overhauled, are not suspect and can be sold without an inspection of the high pressure seat.

Inspect all spare parts inventory of high pressure seats (part number 105321). Suspected seats can be identified by examining the stem side of the seat. All seats with either no check mark or a single pronounced check mark hand-scratched into the stem side of the seat should be taken out of service and set aside for return to SURVIVAIR. See Figure 2. All seats bearing a double check mark or an engraved five-digit date code are not suspect and can continue in service or be used as replacement seats. See Figure 3.

Check all overhaul and service records and notify customers who have had Conshelf regulators rebuilt or overhauled since July 1988.

Contact the nearest SURVIVAIR Warranty Center for assistance in scheduling inspection and rework for suspect Hip Pac regulators. Each center will assist in returning these regulators promptly. Mail all defective high pressure seats in shelf stock to SURVIVAIR in Santa Ana for replacement.

This field inspection is being conducted with the safety of your customers in mind and we thank you in advance for your immediate attention to this matter.

For additional information, contact Customer Service at (800) 821-7236.

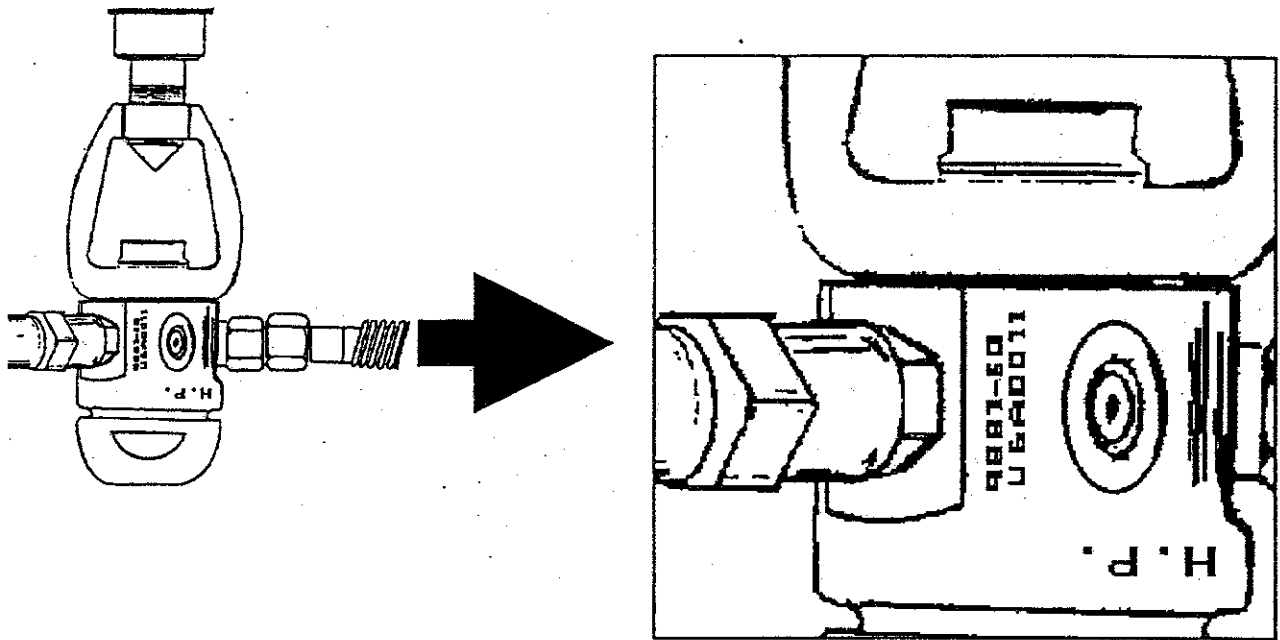


Figure 1. Location of Part & Serial Numbers
Serial numbers beginning with "S", "T", and "U" must be inspected.

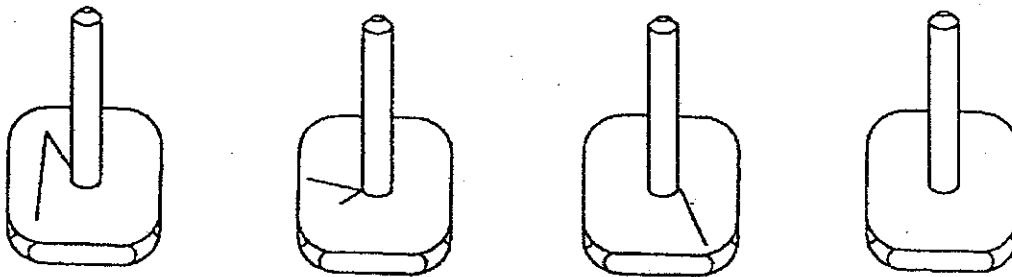


Figure 2. H.P. Seats To Be Replaced

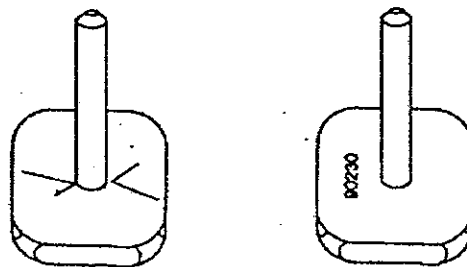


Figure 3. Good H.P. Seats



SURVIVAIR

HIP PAC 1st STAGE REGULATOR, P/N 988150

Inspection Instructions

Revised November 27, 1990

I. INTRODUCTION

This sheet provides instructions to authorized Survivair Technicians for proper identification, disassembly, and reassembly of the Hip Pac first stage regulator, and identification of suspect High Pressure seats, P/N 105321. Regulators requiring inspection are:

1. Those bearing P/N 9881-60 and the letter "S", "T", or "U" cast into the body. See Figure 1.
2. Those overhauled since July 1988. Overhauled regulators must look like the one in Figure 1.

This inspection is to be performed only by SURVIVAIR-certified technicians. Read this instruction sheet completely before performing this operation. For additional information, call Customer Service at 1-800-827-7236.

II. SAFETY PRECAUTIONS

The Warnings, Cautions, and Notes contained in this manual have the following significance:

WARNING

Maintenance or operating procedures and techniques that will result in personal injury or death if not carefully followed.

CAUTION

Maintenance or operating procedures and techniques that will result in damage to equipment if not carefully followed.

NOTE

Maintenance or operating procedures and techniques or information considered important enough to emphasize.

III. DESCRIPTION

These instructions contain a simple method inspecting all high pressure seats without complete disassembly of the first stage. Inspection time for new regulators in inventory is approximately 5 minutes; units in service, approximately 8 minutes. Seats and Inspection labels will be provided by SURVIVAIR vendors. Label, P/N 995342 must be installed after inspection.

IV. TOOL LIST

1. Retaining ring pliers
2. Medium flat blade screwdriver
3. Tweezers
4. Intermediate pressure gauge, P/N 111610
5. 1/2 inch wood dowel (optional)
6. Test Hose
7. Air Source, 2500 psi

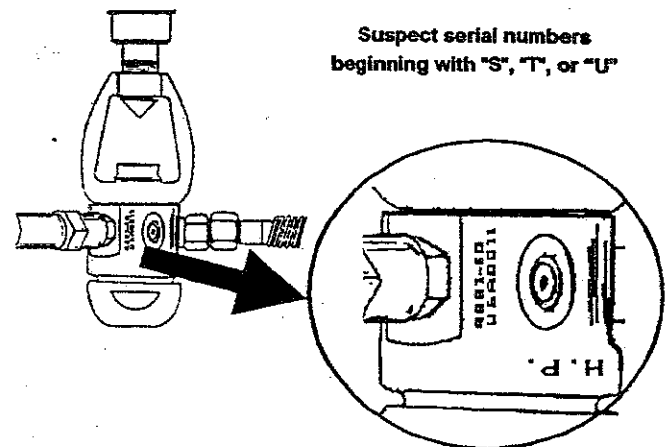


Figure 1. Location of Serial Numbers

V. INSTALLATION

NOTE

Units which have not been in service do not require an intermediate pressure check. Units already in service should have an intermediate pressure check prior to disassembly. If the intermediate pressure is not within 120-140 psig, a complete overhaul (beyond the scope of these instructions) may be required.

A. Disassembly - Refer to Figure 2.

1. Turn the yoke screw (#1) counterclockwise and remove.
2. Rotate the yoke (#3) counterclockwise until it is stopped by the yoke retaining ring (#2).

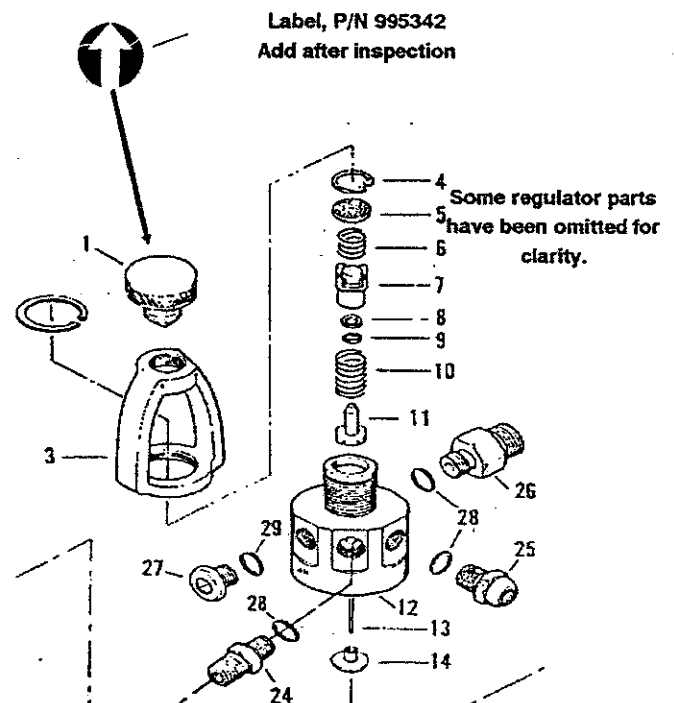


Figure 2. First Stage Regulator

CAUTION

The components beneath the filter retaining ring (#4) are under spring tension. Remove the retaining ring carefully. Failure to place a finger over the sintered filter (#5) while removing the retaining ring will cause loss or damage of these parts.

NOTE

Once the retaining ring is removed DO NOT tip the regulator over.

3. With internal retaining ring pliers, remove the retaining ring (#4) from the high pressure inlet. Parts #5 through #7 will pop out with the retaining ring.

NOTE

THE HIGH PRESSURE SEAT DOES NOT NEED TO BE REMOVED FOR INSPECTION. If the seat is removed and reinstalled, perform an intermediate pressure check. If an intermediate pressure creep occurs and cannot be stabilized, install a new seat.

5. Using tweezers, lift out the spring (#6), spring block (#7) and high pressure seat spring (#10).

6. Inspect the high pressure seat (#11) with a bright light and magnifier by shining the light through the high pressure inlet of the first stage body (#12).

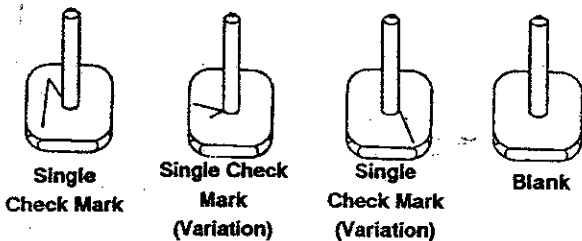
B. High Pressure Seat Identification

Figure 3. Suspect H.P. Seats — REPLACE

1. Seats with no check mark or a single, hand-etched check mark on the stem side of the seat require that the seat be replaced. The four variations of suspect seats are shown in Figure 3.

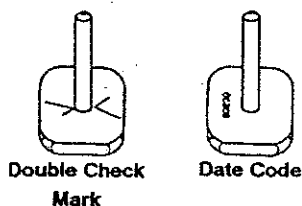


Figure 4. Good H.P. Seats
OK To Use

2. Seats marked with double hand-etched check marks or 5 digit date codes need not be replaced and can continue in service. See Figure 4.

C. Reassembly**NOTE**

For units in which the seat does not require replacement, proceed to step 2.

1. Carefully place a new high pressure seat (#11) in the first stage body inlet boss, ensuring that the pin (#13) slides into the hole in the center of the new seat.

2. Install the high pressure seat spring (#10), spring block assembly (#7), and spring (#6) into the first stage body inlet.

3. Drop the sintered filter (#5), rough side up into the body.

4. Place the retaining ring (#4), flat side up, on top of the sintered filter.

5. Press the retaining ring into the inlet with the flat end of a 1/2 inch wooden dowel or similar instrument until the sintered filter seats.

6. Using the retaining ring pliers, install the retaining ring (#4).

7. Ensure that the seat spring, spring block, spring, and sintered filter are correctly positioned and locked in the inlet.

8. Install the yoke screw (#1) into the yoke (#3).

D. Testing**NOTE**

New units do not require testing. Apply label P/N 995342 and return to stock.

1. Connect regulator to air source.

2. Remove adapter P/N 960133 (#24) and install test gauge P/N 111610 and adapter hose into the port.

3. Apply 500 psi air pressure to regulator and bleed test gauge twice.

4. Adjust intermediate pressure to 120-140 psi.

5. Increase pressure to 2500 psi and bleed gauge twice.

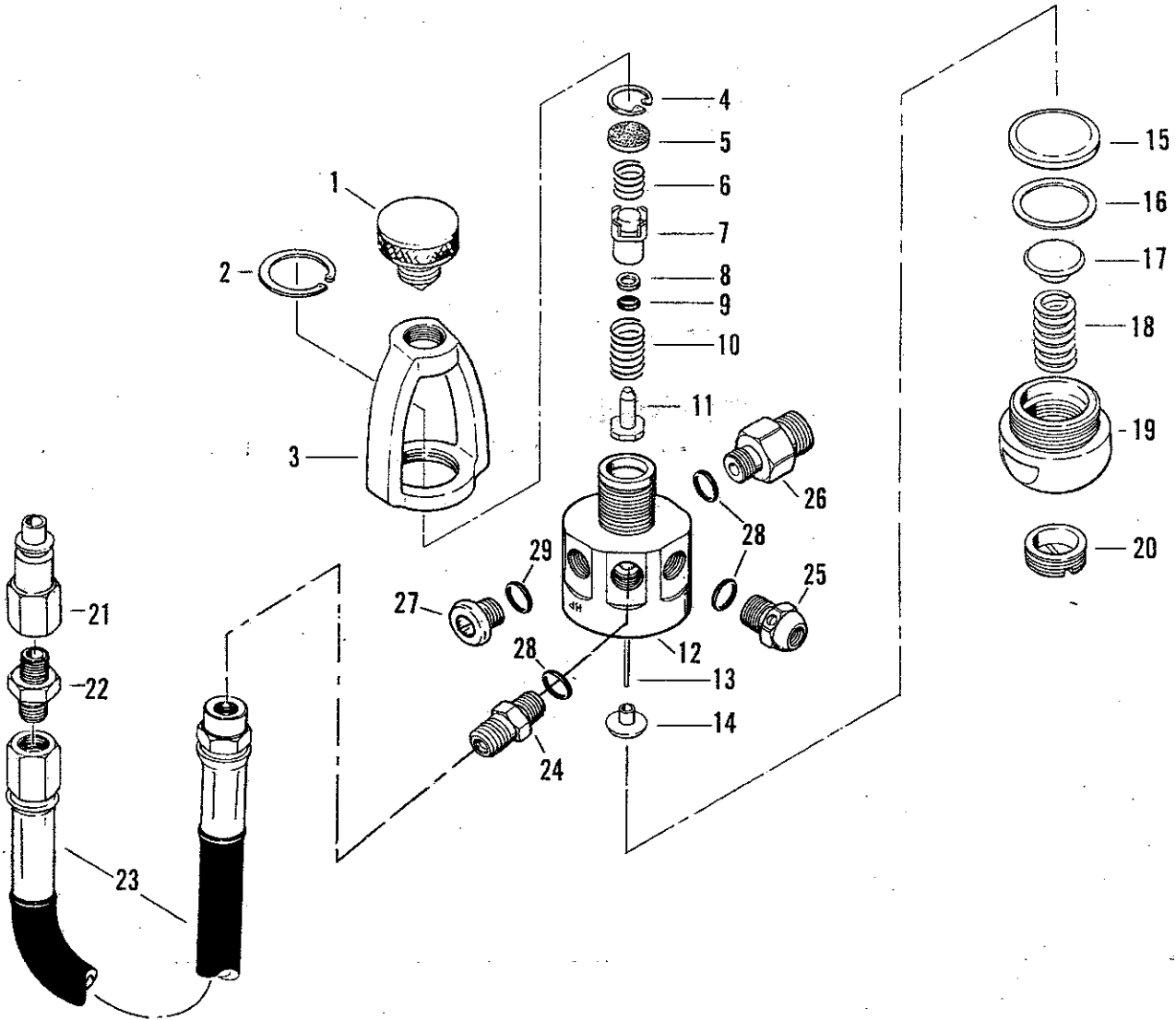
6. Intermediate pressure should lock up at 120-140 psi. No creep is allowed.

7. Release air pressure and apply label P/N 995342 to the top of the yoke screw (#1) as shown in Figure 2.

8. Complete paperwork and return unit to service.

9. Return defective seat to SURVIVAIR for replacement.

988150 First Stage Regulator For Hip Pac (Current)



Item—Part No.	Description	List	Item—Part No.	Description	List
1—988165	Yoke Screw	8.20	19—105326	Spring Retainer	15.94
2—861068	Retaining Ring	1.31	20—101549	Adjustment Screw	3.81
3—700411	Yoke	19.50	21—930432	Quick Disconnect Plug (Foster)	3.27
*4—863051	Retaining Ring	1.06	—930439	Quick Disconnect Plug (Schrader)	8.11
*5—105106	Filter	.97	22—960123	Check Valve	40.57
6—104613	Spring	1.53	23—930656	Pigtail Hose	21.19
7—105324	Spring Block	3.31	24—960133	Hose Adapter	9.46
*8—828005	Backup Ring	.69	25—910920	Relief Valve	40.57
*9—820006	O-ring	.56	26—910247	Hose Adapter	11.36
10—101504	Spring	.84	*27—102003	Plug	2.79
*11—105321	Seat	6.90	*28—820011	O-ring	.56
12—104302	Body	30.00	*29—957004	O-ring	.56
13—105323	Pin	1.12	—988150	First Stage Assembly (See Note)	128.57
14—101727	Pin Support	1.40			
*15—103429	Diaphragm	.56			
16—821026	Thrust Washer	.56			
17—101728	Spring Pad	1.56			
18—105327	Spring	2.35			

*Standard Overhaul Replacement Parts

NOTE: 988150 Regulator First Stage does not include items 21 thru 29. These parts have to be ordered separately.