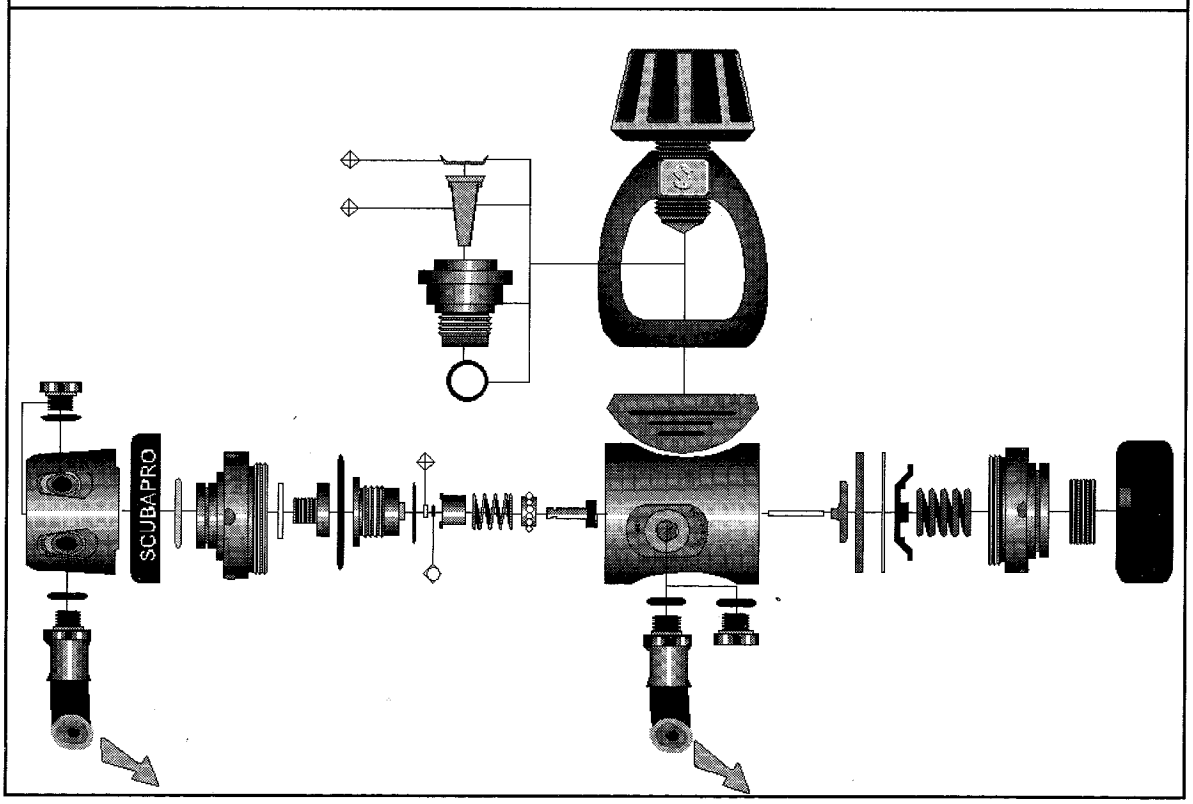
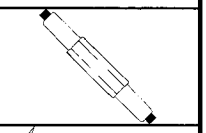
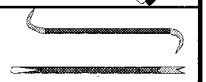
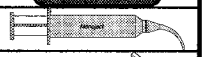
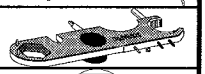
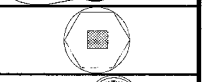
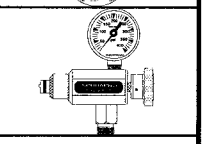
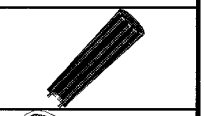
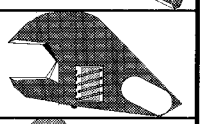
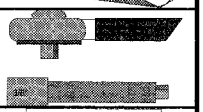
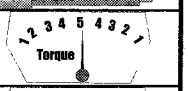
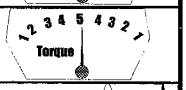
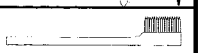
SCUBAPRO
Repair Guide

MK 14 Diaphragm
First Stage



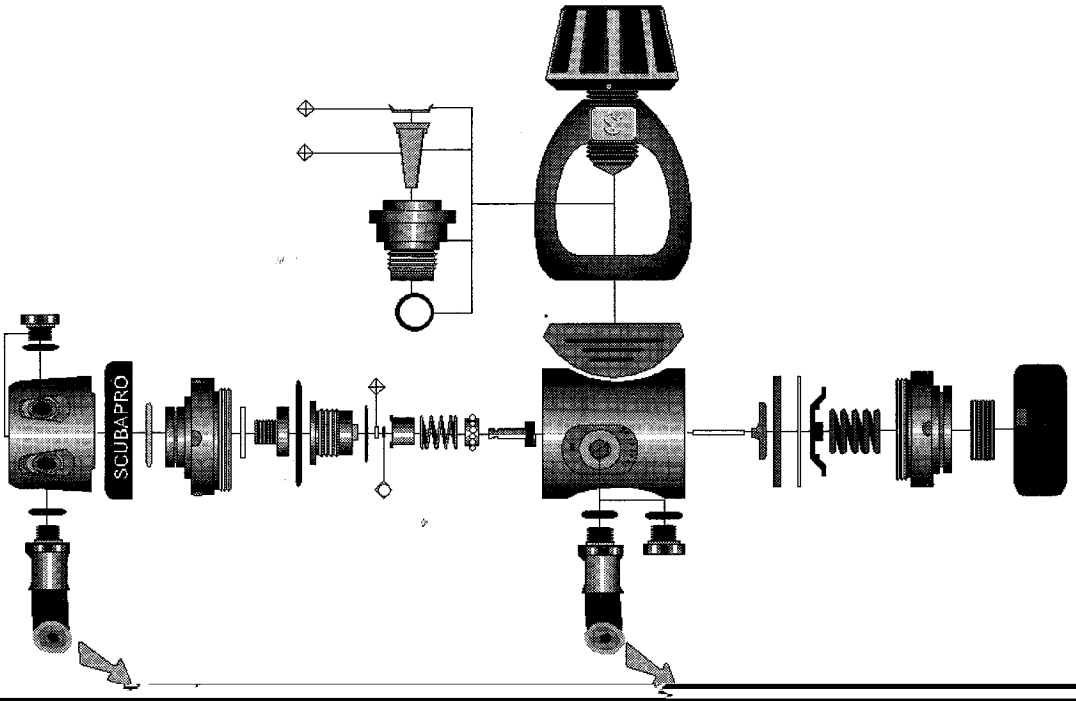
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TOOLS NEEDED FOR REPAIR OF MK 14

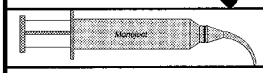
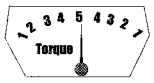
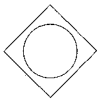
Quantity	Part Number	Description	
2	43.300.114	Field handle	
1 set	43.300.017	Brass o'ring picks	
1 tube	41.047.000	Christo-Lube	
1	47.010.000	Counter Mat	
1	41.496.101	Lubricant syringe	
1	43.040.000	Universal Tool	
1	43.191.103	1" Yoke Nut Socket	
1	43.300.112	Pneumatic Adjusting tool	
1	40.978.000	Blow Gun/Air Nozzle	
1	10.300.229	MK 14 Balance Chamber Tool	
1		7/32" Hex wrench	
1		6mm Hex Wrench	
1		Adjustable Wrench	
1		Socket Wrench with 3/8" drive and 3" extension	
1		Torque Wrench with 3/8" drive - 600 in-lb range	
1		Torque Wrench with 3/8" drive - 100 in-lb range	
1		7/32" socket wrench - 3/8" drive	
1		Soft-bristled toothbrush	

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MK 14 Repair Guide



ICON LEGEND

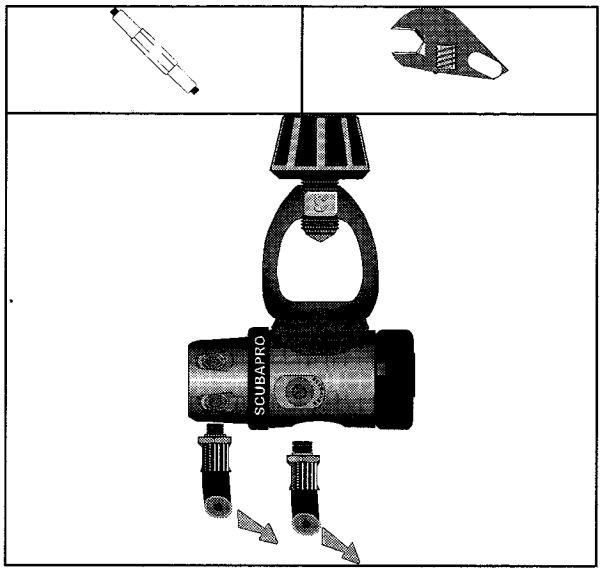
	Inspect carefully, replace if needed
	Lubricate properly
	Use proper torque wrench and specifications
	Replace annually
	Dynamic o'ring, replace annually and lubricate properly
	Tools needed for this step

Important note: The following information is not designed to be a complete training guide for servicing of the SCUBAPRO MK 14 regulator. All SCUBAPRO technicians are required to attend an annual service training program to insure safe handling and servicing of SCUBAPRO products. All SCUBAPRO technicians must be employed by an authorized SCUBAPRO facility.

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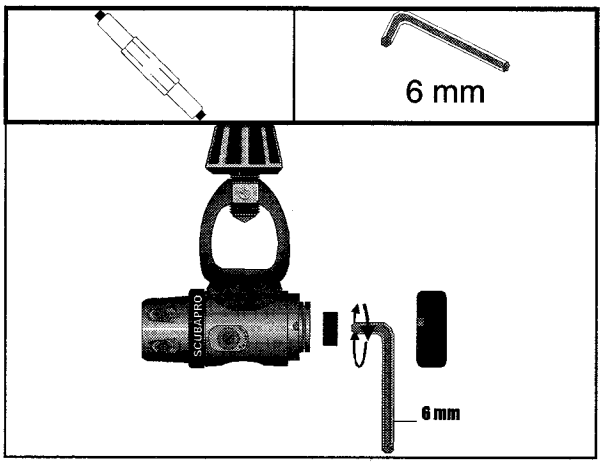


Remove the hoses from the first stage by using an adjustable wrench or 5/8" open-end wrench



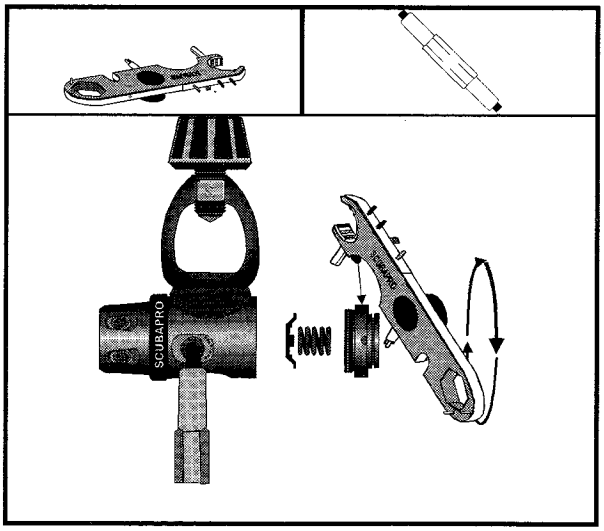


Remove the plastic boot. Using a 6 mm hex wrench, thread out the intermediate pressure adjustment screw.



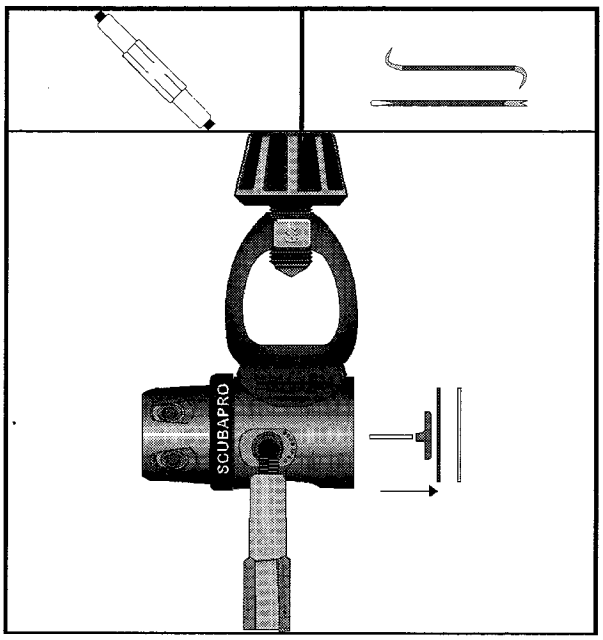


Use the Universal Tool to remove the end cap from the main regulator body. The spring and spring pad can now be removed.



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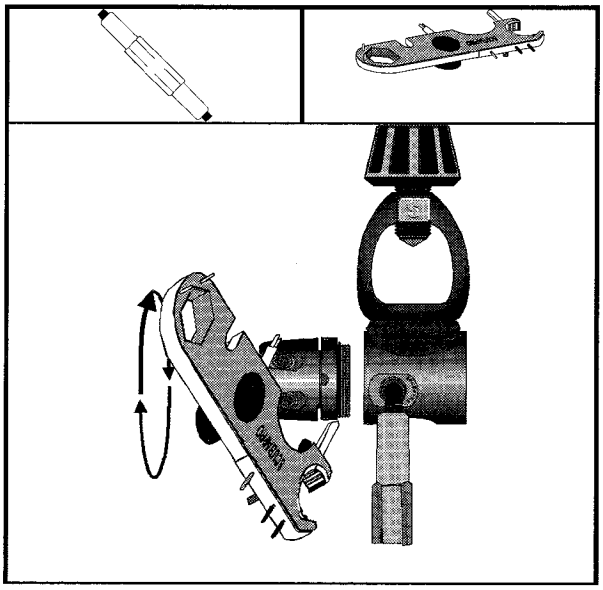




Remove the friction washer and diaphragm carefully.

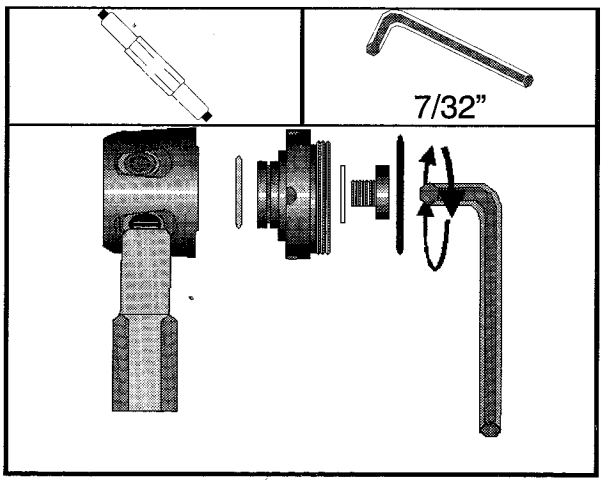
Remove the HP module button and pin. Remove the pin carefully to ensure it is not lost.





Remove the swivel retainer cap by first removing the rubber boot, then use the universal tool to loosen the cap. Hold the regulator body with the field handle or a soft-jawed vice.





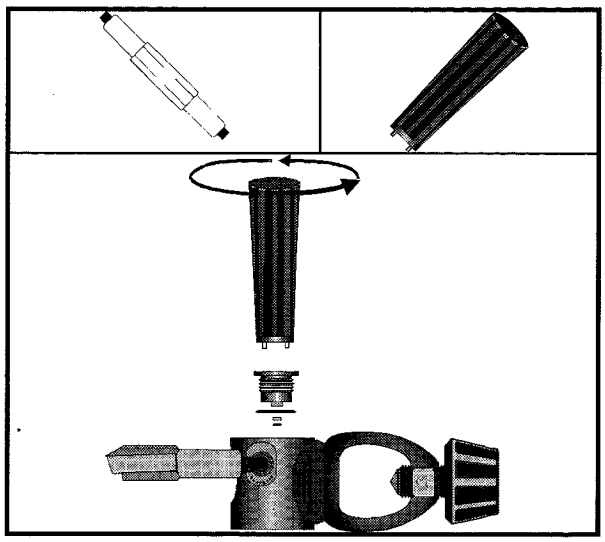
Disassemble the swivel cap with a 7/32" hex wrench. Hold the swivel steady with a field handle. Remove the two o'rings and the teflon spacing washer.

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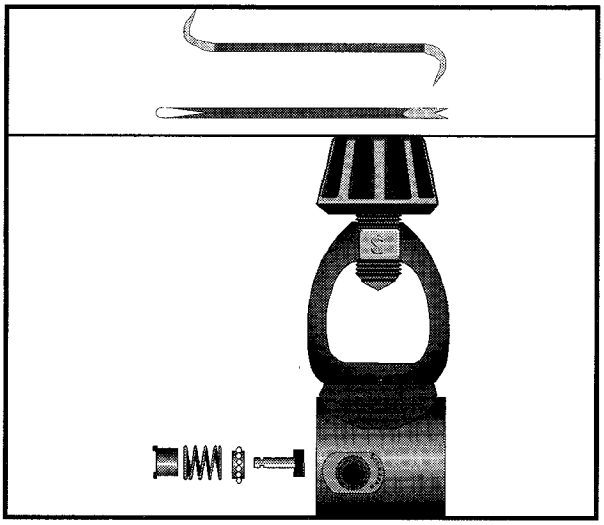
Using the MK 14 Balance Chamber Tool, remove the balance chamber by threading out the unit in a counter clockwise direction. Turn the unit as shown to prevent loss of the HP seat and spring assembly.

Remove the two o'rings and washer from the balance chamber.





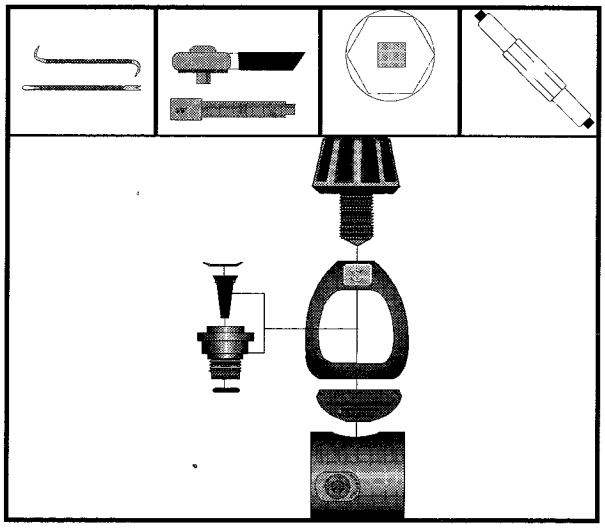
Remove the HP seat and spring assembly. The HP seat slides out of the retainer, and will be replaced.





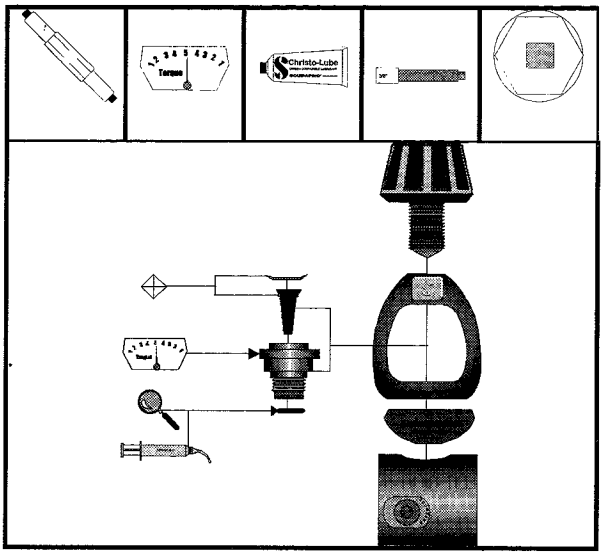
Remove the Yoke Nut, Yoke and Saddle from the regulator body.

Using a brass o'ring pick, remove the star retainer and filter.



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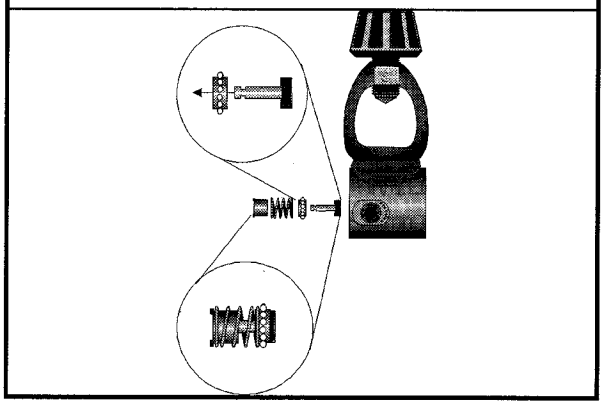


Replace the conical filter. Inspect and lubricate the static yoke nut o'ring. Replace the o'ring if needed.

Torque the yoke nut to 275-325 in-lbs or 30-40 newton-meters.



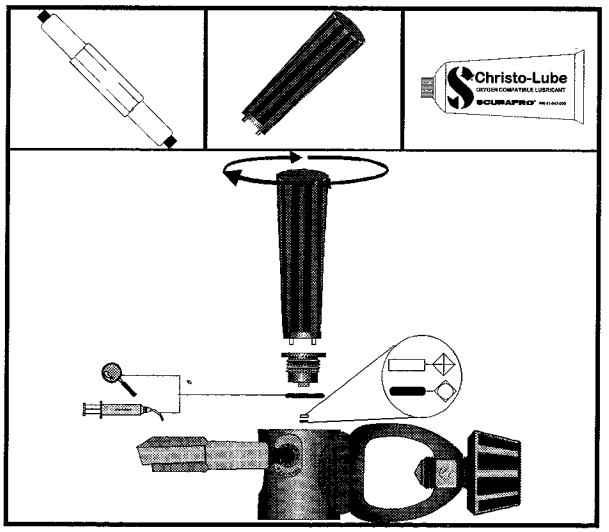
No tools needed for this step



Inspect and re-assemble the HP seat into the retainer. The retainer, seat, spring and spring rest should be assembled as a unit prior to re-inserting into the regulator body.

The HP seat may be replaced as needed.





Inspect, lubricate and re-install the larger balance chamber o'ring. Replace if needed.

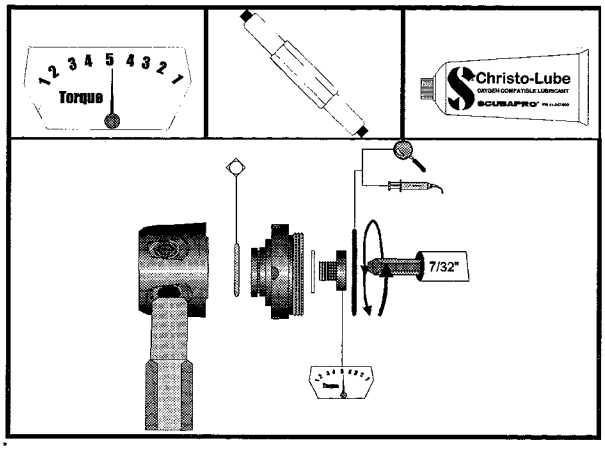
Replace the dynamic o'ring and teflon washer. Tightly thread in the balance chamber using the MK 14 Balance Chamber Tool.

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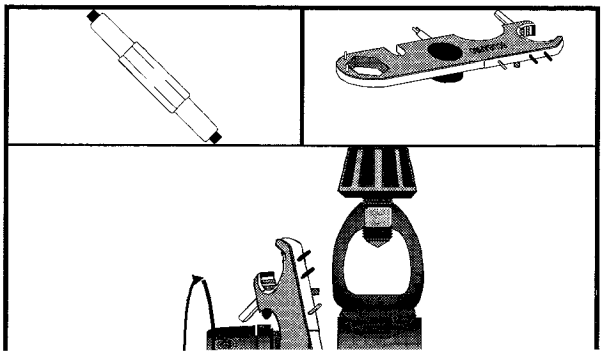
Hold the swivel cap firmly with the field handle. Replace and lubricate the dynamic swivel o'ring. Inspect and re-insert the teflon spacer washer.

Thread in the swivel retaining screw and tighten using the torque wrench to 35-45 in-lbs or 4-5 newton-meters.



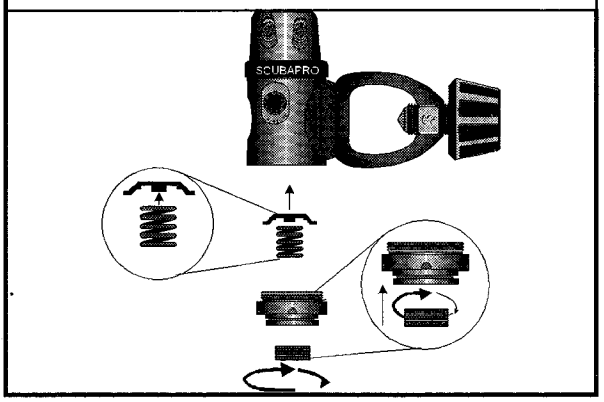


Thread in the swivel cap assembly. Tighten with the universal tool while holding the regulator body firmly with





No tools needed for this step.

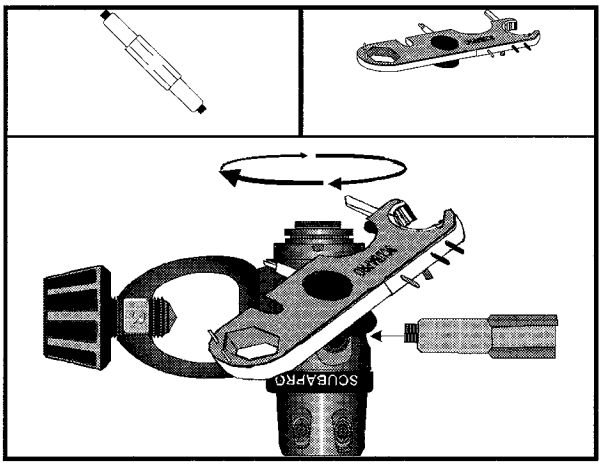


Thread the intermediate pressure adjustment cap into the end cap. Leave approximately 3 - 4 threads showing.

Replace the spring and spring pad on top of the diaphragm as shown.

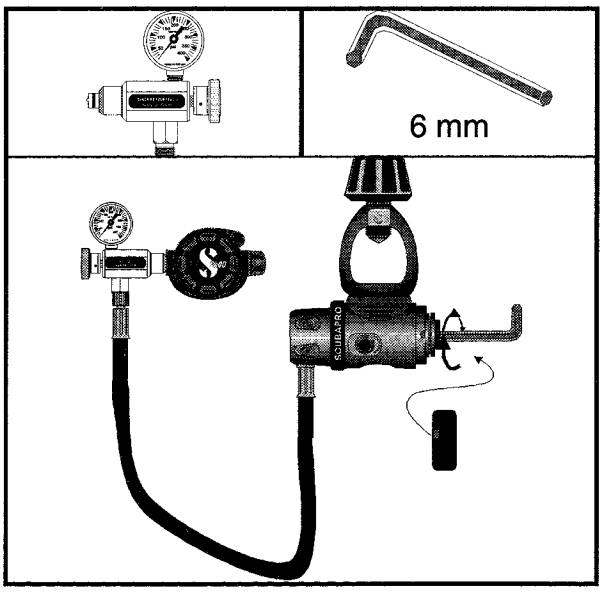
Thread the end end cap into the body of the regulator. Hand tighten.





Use the field handle to hold the regulator body, and tighten the end cap with the universal tool.



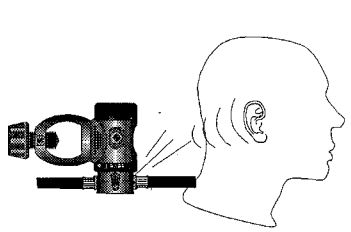
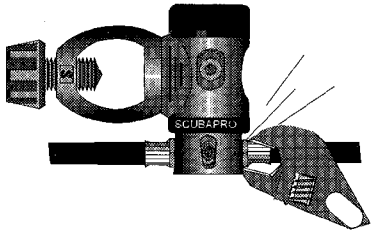
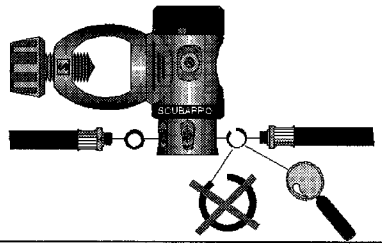
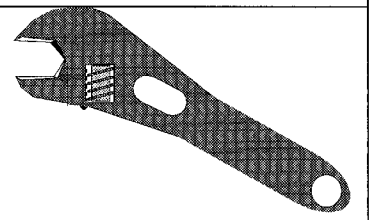


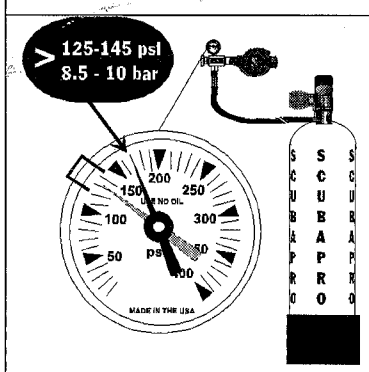
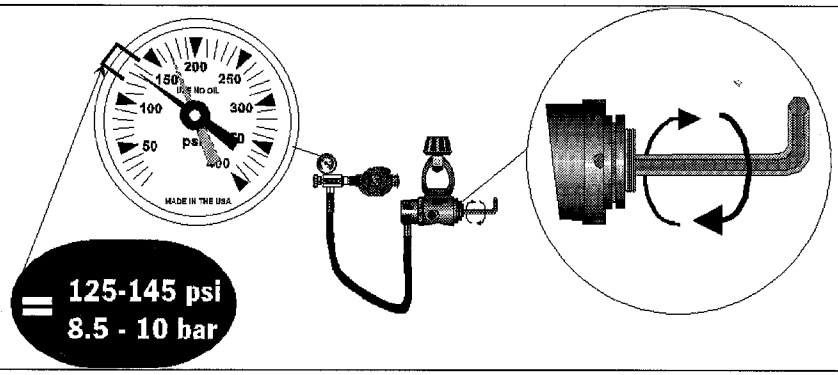
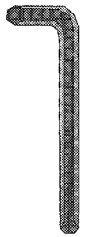
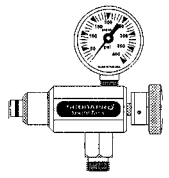
Adjust the intermediate pressure using the pneumatic adjustment tool and 6mm hex wrench. Increase intermediate pressure by turning clockwise.

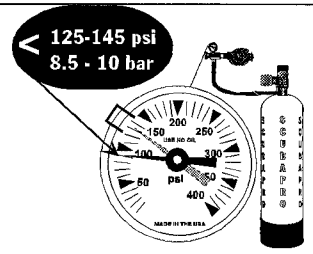
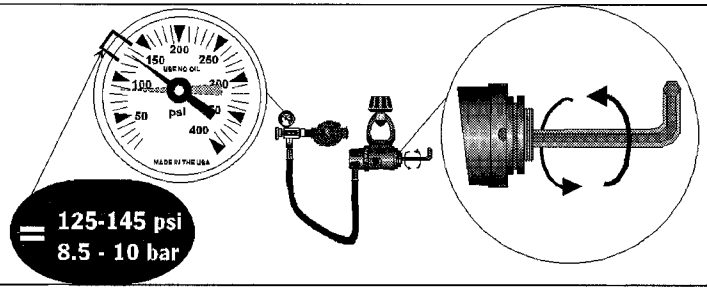
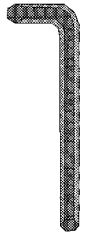
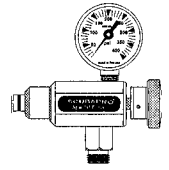
Intermediate pressure should be between 125 and 145 psi.

Replace the rubber boot following final adjustment.

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Symptom	Correction		Tools Needed
Audible leak from ports or plugs	Tighten ports and plugs	Replace damaged o'rings Seat all o'rings properly	Adjustable wrench
			

High IP (3000 psi supply)	Adjust IP down (counterclockwise)	6 mm hex wrench	Pneumatic adjusting tool
			

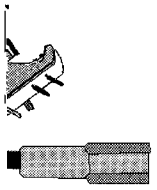
Low IP (3000 psi supply)	Adjust IP up (clockwise)	6 mm hex wrench	Pneumatic adjusting tool
			

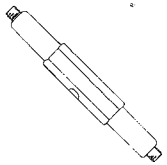
SCUBAPRO MK 14 First Stage

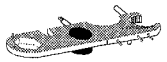
Trouble Shooting Guide

Tools Needed

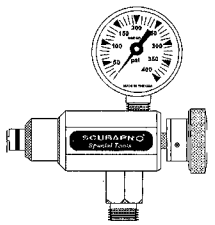
unit with field



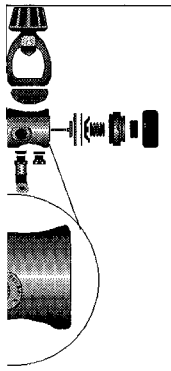




Pneumatic adjustment tool



e body



Various

