AEROSTAR™
INTERNATIONAL, INC.
"Ballooning's Leader Since 1960"

AEROSTAR SERVICE BULLETIN #135

DATE OF ISSUE: *July 15, 1996*

SUBJECT: *REGO 9107 Cylinder Valves and Valve Bonnet* ***Replacement*** *in REGO 9101 Series..*

PROBLEM: *Excess tightening torque during normal usage of 9107 valves. The man-made insert piece, when subjected to excessively high closing torque, can jam in place. When opening of the valve is attempted, the insert may deform or break, resulting in zero or reduced fuel flow, i.e. a failure in the open position.*

DISCUSSION: *This bulletin discusses the REGO 9107 series valve, which is used on all Aerostar cylinders manufactured since mid 1991. This valve is characterized by the CGA-555 outlet fitting which requires a wrench or large hand turn wheel to tighten (as opposed to the POL style with a smaller hand turn wheel). Service Letter 104, issued 2/17/93, addressed this same concern.*

As described in the prior service letter, in April 1992 REGO began using a man-made insert instead of the primarily brass insert previously used. While Service Letter 104 appeared to eliminate the occurrence of inserts jamming, recently several more jammed inserts have occurred.

REGO also changed over replacement bonnets for other styles of valves to this same configuration. A limited number of this style bonnet was distributed for use in REGO 9101 (POL style) valves beginning in 1992.

Later, REGO reverted back to the primarily brass insert previously used.

In light of these occurrences, Service Letter 104 is hereby canceled and replaced by this Service Bulletin.

1812 "E" Ave. • P.O. Box 5057 • Sioux Falls, SD 57117-5057 • (605) 331-3500 • Fax (605) 331-3520
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CORRECTIVE ACTION:

Owner Performed Check for Applicability:

Step One: Remove hose connection from each fuel tank.
Step Two: Loosen tank straps and rotate tanks to allow the valve outlet to be viewed.
Step Three: With a flashlight, view the valve insert by looking into the valve outlet.

NOTE: There is no need to open the tank valve to view the insert. Doing so with fuel in the tank would unnecessarily release propane.

Step Four: The insert will have either a brass or white (plastic) appearance.

If the appearance is white, proceed with this Service Bulletin.

If the appearance is brass, make the following logbook entry: "I have examined this balloon system and found Aerostar Service Bulletin #135 not to be applicable to this balloon system." This will complete your compliance.

Steps to Comply with Service Bulletin:

Step One: Balloon may continue to be flown for up to 25 hours or the next annual inspection. In doing so, the following preflight steps must be followed:

- Prior to lift-off, open the main liquid withdrawal valve on each tank one at a time and burn. Observe the drop in fuel pressure before and during each burn. If the pressure drop during this burn exceeds 20 psi, discontinue launch and complete compliance with bulletin before the next flight.

Step Two: Within 25 hours of flight or the next annual inspection, contact your repair station/service center to schedule the valve bonnets for replacement. Planning for the repair station work should include bringing the system in with tanks empty or nearly so. The repair station should then contact Aerostar Customer Service to obtain replacement bonnets. Replace bonnets as described in the following:

1. *Remove valve handle from valve.*
2. *Remove bonnet using 13/16" socket or wrench.*
3. *Thread bonnet into valve using 13/16" socket.*

NOTE: Ensure that the valve bonnet is in the full open position when tightening the bonnet in place.

4. *Replace valve handle, use locktite on screw.*
5. *Check for smooth operation of valve, do not over tighten.*
6. *Pressurize tank and check for valve stem leaks and leaks through the valve when in the closed position.*

The repair station should then send the removed parts along with the compliance card to Aerostar for payment of labor. The repair station should also make the appropriate log book maintenance entry to show compliance with this Service Bulletin.