



SKY DYNAMICS CORPORATION

AEROSPACE DESIGN AND FABRICATION

1900 Skyway Drive
Moneta, Virginia 24121
540-297-6754
FAX: 540-297-2240

www.skydynamics.com

LYCOMING SIX CYLINDER LIGHTWEIGHT COLD AIR INTAKE SYSTEM INSTALLATION INSTRUCTIONS

These tubes are extremely fragile, handle with care

1/ The intake plenum is supported to the sump with four (4) 5/16" N.C. drilled bolts that are to be safety-wired to prevent loosening.

2/ The intake tubes are number stamped on the underside of the flange face per their respective cylinders. One Silicon O-ring is used to complete the seal at the cylinder port. The area where the flange is located on the intake tube is formed into a type of ball joint. This allows the flange to swivel slightly and mate perfectly to the cylinder. Twelve (12) 1/4"x1" bolts are supplied for attaching the intake tube flanges to the cylinder port.

3/ The intake tubes use a Viton O-ring to seal the ID of the intake tube to the OD of the plenum outlet port tube. **These slip-fit joints are tight and require lubrication to easily slide onto the plenum port tube.** Care must be taken when sliding the intake tubes onto the plenum ports as the O-ring can squeeze out of the tube's O-ring groove and be pinched or cut leading to an intake pressure leak.

4/ The order for tube installation is: 1,5,2,6. You can then look through #3 and #4 plenum ports to see if the O-ring is properly seated on 1, 5, 2, & 6. If the O-ring squeezed out upon installation you will see it protruding into the port.

5/ Then install #4 intake tube and look through #3 port to check O-ring. Then install #3. Use a small extension mirror and flashlight to look through the fuel servo hole to check the #3 O-ring after installing #3 intake tube.

6/ For tight cowl situations, the fuel servo can be rotated but linkages will have to be modified accordingly.

7/ An inlet angle adapter is available for applications that require the fuel servo to be placed at an angle that is parallel to the engine, rather than the 15 degree angle of the plenum's servo mounting face.

8/ With installation complete, seal the fuel servo air inlet and perform a pressure test on the intake assembly using compressed air. A solution of soapy water sprayed onto potential leak areas will quickly show if a leak exists.

9/ If you require additional O-rings or gaskets for your installation in the future, please contact us.

Please feel free to call or email us with any installation questions:

Phone: 1 (540) 297-6754

Email: sales@skydynamics.com