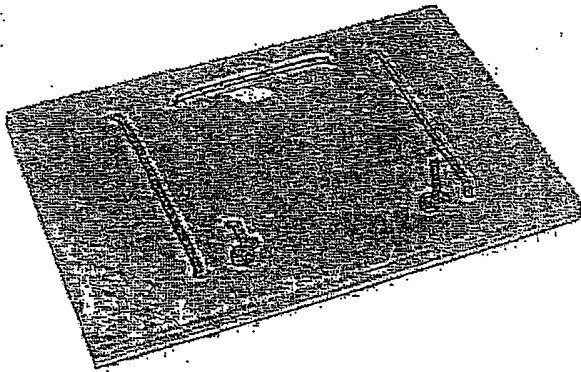
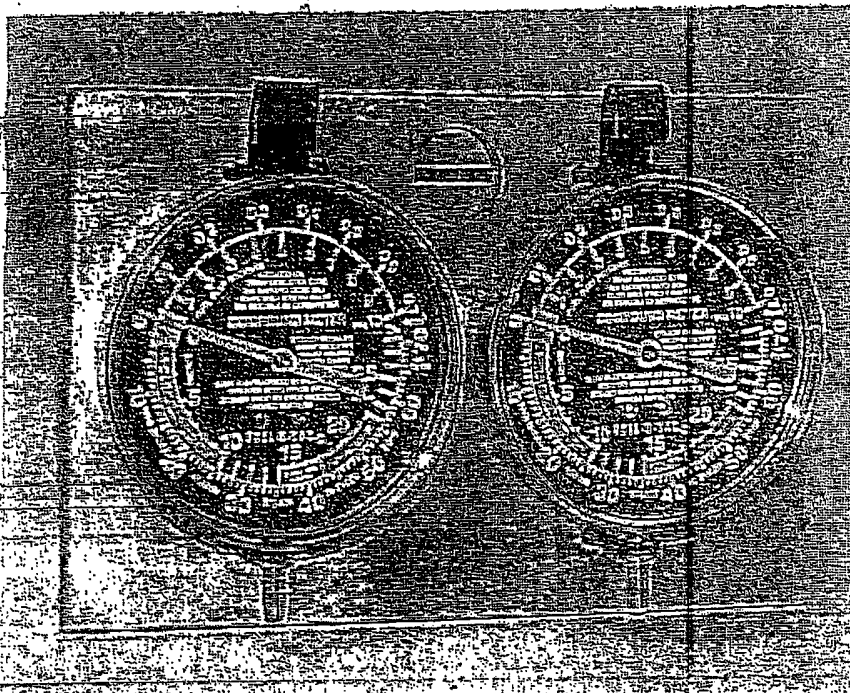


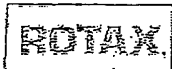
Product #13535 Instruction Sheet

Your #13535 Carb Synchronizer Kit comes with a gauge mounting board. To mount gauges simply thread small bungee supplied through board as shown in photo below. Tie knots at ends as shown.



Turn board over and lift bungee to slide gauges into place. See Photo below.





AIRCRAFT ENGINES

MAINTENANCE MANUAL

4) Fuel system

4.1) Carburetor synchronization

4.1.1) Verification of the synchronization at idle speed

See fig. 8 and 8/1.

By detaching the hose (9) of the compensating tube (4) the two intake systems will be separated. At this condition no distinct difference in the engine run should be noticeable.

⚠ CAUTION: Don't damage the compensating hose or tube. Replace as required.

If necessary carry out synchronisation as per the following instructions.

4.1.2) Mechanical synchronization

See fig. 7.

For synchronous basic throttle adjustment (mechanical synchronization) proceed as follows.

- Adjust the two Bowden cables for simultaneous opening of the throttles.
- Remove throttle cable locking mechanism (4) from throttle actuating arm (1).
- Release automatic full throttle spring (5) from its attachment on the throttle arm (1).
- Return the throttle actuating arm (1) to its idle stop position by hand, there should be no resistance during this procedure.
- Unscrew the carburetor idle speed adjustment screw (2) by turning it counter-clockwise, until it is no longer contacting the carburetor idle stop (3).

Insert a 0,1 mm (.004 in) feeler gauge (gap X) between the idle speed adjustment screw (2) and the carburetor idle stop (3), gently turn the idle screw clockwise until contact is made with the 0,1 mm feeler gauge.

From this point turn each idle speed adjustment screw (2) clockwise 1,5 turns.

ROTAX
AIRCRAFT ENGINES
MAINTENANCE MANUAL

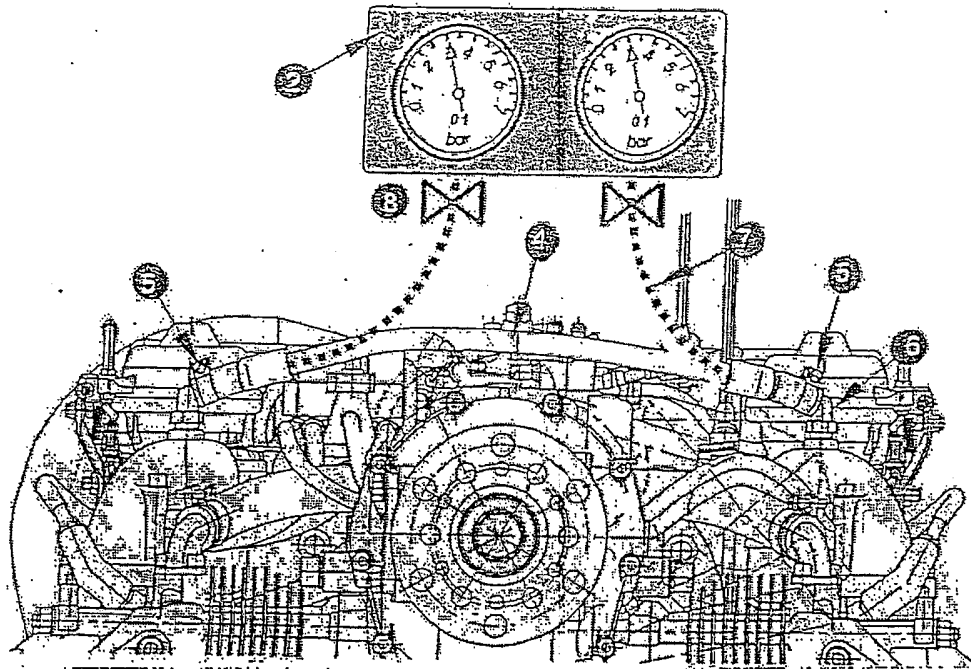
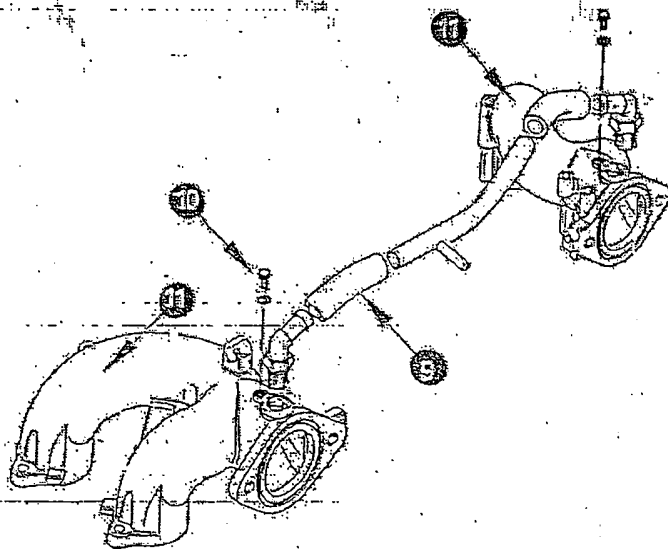
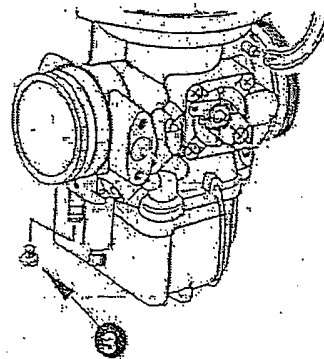


Fig. 8



05494 Fig. 8/1



02726 Fig. 8/2

403013

4.1.3) Pneumatic synchronisation

|| See fig. 8, 8/1 and 8/2.

◆ NOTE: Mechanical synchronisation has already established. With suitable vacuum gauges both carburetors are adjusted to equal flow rate at idling.

Three connection options are possible.

Option 1. Remove plug screw (3) M3,5x5 and connect the depression gauge(s).

◆ NOTE: Also possible to install vacuum gauges directly on the intake manifolds, because it is the same depression as at the slotted head screw of the carburetors. See fig. 8.

Remove the compensating tube (4) (connection between intake manifolds) plug the connections. See fig. 8/1 and 8/2.

Option 2. Remove hex. hd. screw (10) M6x6 from the intake manifolds and connect the depression gauge(s).

Remove the compensating tube (4) (connection between intake manifolds) plug the connections.

Option 3. Remove one end of the tube (4) from its location by removing the securing clamp (5) from the push on connection (6).

Using the push on connection (6) and the balance tube (4), install a flexible rubber hose (7) leading to a vacuum gauge (2). See fig. 8

Before proceeding any further secure the aircraft on the ground by chock blocks and ropes.

▲ WARNING: Secure and observe the propeller zone during engine operation.

Start the engine and verify the idle speed. If necessary correct as per Chapter 12-00-00, para 4.1.2.

▲ WARNING: Do not adjust idle speed screws more than 1/2 turn either way to achieve proper idle speed.

If a setting of more than 1/2 turn is required, repeat mechanical synchronization and make the necessary adjustments of the idle screw (2) accordingly to achieve the proper idle speed. i.e.: if the idle speed is too high, the idle screw must be turned in less than one complete turn.