

1-2157-1-M1 Actuator for Retractable Floats on
G-44 Widgeon

24V System.

Ref.Dwg. MPD 2056

- A) Internal settings of wafers to give neutral travel, of shaft, of 5-1/8" linear.
- B) Adjustment of microswitches to give a linear travel of 3/4" either side of neutral, (A), for desired final Up and Down position of float.

NOTE: Rotate motor so that microswitches are not on wafer lobes before removing top plate or wafers will jump and upset your settings.

- A) Remove top plate and move red and green wafers till desired position is located, that will give the following results. Re-install plate while adjusting set screws.
- B) Green wafer - shaft retracted position - microswitch on motor side.

SIZE

Rotate 'Allen' set screw, .051, out till microswitch touches set screw nut and spring will not move microswitch any further out. At this point the wafer lobe might pass microswitch trigger without activating it. Turn set screw in until it will activate microswitch. Add half-turn. This is microswitch max. outer position.

Rotate set screw in approx. 2-3/4 turns to locate inner position, Too far in and microswitch will not reset itself as wafer lobe moves off microswitch trigger.

These are inner and outer settings for microswitch and will allow approx. 7/8" of travel of shaft.

Rotate set screw approx. 1-3/8 turns to get neutral position for microswitch.

Red wafer - shaft extended position - microswitch on name plate side.

Rotate microswitch set screw out as described for retract microswitch and observe same precautions and limits. Rotate set screw in as described, same as above.

Rotate set screw to locate neutral position of microswitch again as described above.

NOTE: All references to number of turns and inches of linear travel are approximate and actual figures used should be found from each actuator and each microswitch.

- A) With microswitches set in their neutral position, move wafers until a travel of 5-1/8" of the shaft is obtained.

NOTE: Wafer position on their shaft has no bearing on settings.

With both microswitches at their maximum setting, shaft linear travel is approximately 5-3/4".

With both microswitches at their minimum setting, shaft linear travel is approximately 4 1/4".

Quarter turn of microswitch set screw will result in approximately 1/8" of shaft travel.

INSTALLING ACTUATOR IN WING

Actuator in retracted position.

Rotate shaft at least quarter turn to parallel banjo bolt holes (3/8"). Max. of 1 1/2 turns at this stage.

NOTE: Check that banjo fitting bolt (3/16") is pointing down or it might touch wing upper skin while travelling.
Bolt can be removed and installed in opposite direction if needed.

If adjusting set screw out to get proper float up position, too much adjusting will allow shaft to bottom against gear housing and possibly strip the gears.

From neutral positions - Shaft can be rotated out approx. 2-3/4 turns and still be controlable with a corresponding adjustment of set screw up to 1-3/8 turns.