

S-TEC System 50 Runup Test (engine to be running)

Step	Pilot Action	Required Result
1	Set Autopilot Master Switch to TEST position	STB, HDG, NAV, APR, ALT, and REV annunciations all appear, while TRIM UP, TRIM DN, and RDY lamps are illuminated on AP display  TRIM UP lamp extinguishes after 2 seconds TRIM UP lamp re-illuminates after 4 seconds TRIM DN lamp extinguishes after 7 seconds
2	Set Autopilot Master Switch to ON position	All annunciations and lamps are extinguished RDY lamp re-illuminates within 3 minutes
3	Set L-R Turn Knob under its index	Ailerons move freely with normal Yoke pressure
4	Press ON/OFF mode selector switch to engage stabilizer mode	STB annunciation alone appears on AP display
5	Attempt movement of ailerons with Yoke pressure	Yoke's reduced freedom of movement indicates that Roll Servo is engaged Roll Servo can be overridden. If not, disconnect autopilot and do not use
6	Turn L-R Turn Knob to the left side of its index	A/C Yoke turns to the left
7	Turn L-R Turn Knob to the right side of its index	A/C Yoke turns to the right
8	Center L-R Turn Knob under its index	A/C Yoke stops movement
9	Set Heading Bug on DG under Lubber Line	
10	Toggle HDG/GPSS selector indicator to HDG	Note: this is NOT on the AP control unit
11	Press HDG mode selector switch on AP to engage heading mode	HDG annunciation alone appears on AP display
12	Turn Heading Bug to the left side of Lubber Line	A/C Yoke turns to the left
13	Turn Heading Bug to the right side of Lubber Line	A/C Yoke turns to the right
14	Set Heading Bug on DG under Lubber Line	A/C Yoke stops movement
15	Press NAV mode selector switch to engage navigation mode	NAV annunciation alone appears on AP display
16	Press APR mode selector switch to engage navigation mode	APR annunciation alone appears on AP display
17	Press REV mode selector switch to engage navigation mode	REV annunciation alone appears on AP display
18	Press ALT mode selector switch, or ALT ENG/DSNG button to engage altitude hold mode	ALT annunciation appears on AP display
19	Attempt movement of A/C Yoke forward and aft	A/C Yoke's reduced freedom of movement indicates that Pitch Servo is engaged. Pitch Servo can be overridden. If not, disconnect autopilot and do not use.
20	Move A/C Yoke as far forward as possible	After 3 seconds, TRIM UP lamp becomes illuminated on AP display After 7 seconds, TRIM UP lamp flashes
21	Move A/C Yoke aft until TRIM UP lamp is extinguished	
22	Move A/C Yoke as far back as possible	After 3 seconds, TRIM DN lamp becomes illuminated on AP display After 7 seconds, TRIM DN lamp flashes
23	Move A/C Yoke forward until TRIM DN lamp is extinguished	
24	Disconnect autopilot with AP DISC Switch on Yoke	All annunciations are extinguished; TRIM UP and TRIM DN lamps are extinguished RDY lamp is illuminated
25	Move Yoke forward and aft, and left and right	Increased freedom of movement indicates that Roll and Pitch servos have disengaged