

TROUBLE SHOOTING OF VARIOUS SYSTEM OF PT-6 AC

ENGINE

Probable troubles of the engine during starting and operation, causes for the trouble and remedy methods.

Troubles at engine starting

1. Rotation of propeller by hand is difficult

Probable cause		Remedy
a.	Unpack decrease incompletely.	Unpack and degrease Again.
b.	Excessively heavier viscosity for oil (in winter).	Heat engine. Fill 2 – 3 lit. hot oil case.
c.	Accumulated oil fuel in lower cylinder.	Unscrew front row spark plugs of the No. 4,5,6,7 cylinders and open the oil draining cocks (or unscrew the oil draining plugs) of the intake pipes of the No 4,5,6 cylinder. Turn propeller through 3-4 revolutions. Drain out oil or fuel.
d.	Excessively worn piston.	Replace the faulty piston.
e.	Seizing of air valve in guide.	Check air valve, remedy the seizing.
f.	Hydraulic impingement of engine makes bend of connecting rod.	Send it to factory repair.

2. Without compression in the cylinder

Probable cause		Remedy
a.	Close air valve faultily.	Check the clearance between rocker pulley and valve lever, which should be 0.3 ~ 0.4 mm.
b.	Sealing of spark plug or starting valve is not computer.	Tighten the spark plug or the starting valve.
c.	Piston ring is burnt, excessively worn or broken.	Remove the cylinder without compression. Replace defective parts.
d.	Starting valve is damaged.	Replace the starting valve.

3 Engine fails in start

Probable cause		Remedy
a.	Pressure in balloon too low.	Fill air into balloon for 4 ~5 Mpa.
b.	Leak in start system. Air pressure is lost.	Check starting system for sealing. Remedy troubles.
c.	Incorrect installation of distribution, air comes simultaneously into several cylinders.	Dismount the air start distributor, finishing the working surface.
d.	Worn working surface of air start distributor, air comes simultaneously into several cylinders.	Dismount the air start distributor, finishing the working surface.
e.	Incorrect installation of air pipe.	Remount.
f.	Lack of fuel injected in engine.	Supplement.
g.	Too rich fuel injection in engine.	Make throttle at "Full open" position. Remedy troubles.
j.	Lack of cylinder or wet spark plug.	Unscrew spark. Wash it and dry it.
k.	Starting oil is damaged. There is a short circuit in wire.	Check wire. Replace the starting coil.
l.	Engine is overcooled (in winter).	Heat engine Replace the starting coil.
m.	Charge of battery is not sufficient.	Replace battery.

4 The engine can start, but which after several popping will be stopped.

Probable cause		Remedy
a.	No fuel in the carburetor.	Unscrew the threaded plug of fuel chamber; check whether there is fuel in carburetor. Check whether fuel pump is well. Fuel inlet pipe. Should not leak fuel.
b.	Clog of air limited nozzle of carburetor.	Unscrew the air – limited nozzle. Clean it and blow it dry.
c.	Clog of filter of carburetor.	Unscrew filter and clean it.
d.	There is water in fuel.	Drain out condensing water from fuel setter (depositing unit).
e.	Clog of fuel pipe and filter tank.	Blow fuel pipe through, clean filter.
f.	Incurrent installation angle of magneto.	Check and regulate installation angle.
g.	Oil splashed contactor of magneto.	Remove the oil and dirt on the c contactor.
j.	Outside the required clearance between contactor of magneto breaker.	Adjust clearance to 0.25 ~ 0.35 mm.
k.	Incorrect condition of magneto distributor.	Check the wire for connection.

5 When start, the propeller turns reversely.

Probable cause		Remedy
a.	Improperly assembled air- starting distributor.	Abject air –starting distributor.
b.	Excessively big pre-ignition angle.	Abject pre-ignition angle.
c.	Incorrect connection of magneto distributor.	Check distributor. Correct wire.

Troubles at engine operation.

6. There is interruption or vibrating during engine operation

Probable cause		Remedy
a.	Wire for ignition had damaged or incorrect connection with center electrode of spark plug.	Replace damaged wire. Check connection between the wire and the spring plug.
b.	Incorrectly connected ignition wire.	Check and connect each wire correctly.
c.	Defective of oil splashed spark plug.	Replace or clean spark plug.
d.	Not close fit between air valve and air valve seat.	Check Clearance between rocker pulley and air valve leaver. Dismount cylinder if necessary, lap air valve and air valve seat.
e.	Not close seal of air intake pipe.	Check sealing at flange of air intake pipe.
f.	There is water in gasoline.	Drain off water from fuel settler.
g.	Excessively lean or rich.	Adjust mixture ratio of mixture.
h.	Too cold mixture.	Heat
i.	Freeze of carburetor throttle, venture or of copper bushing of fuel needle.	Check heating system of intake passage for work reliability.
j.	Rocker of carburetor high altitude govern stands in lean position.	Shift high altitude governor to "Full open" position.
k.	Clearance between contactors of magneto breaker doesn't meet specification.	Adjust the clearance to 0.25 ~0.35 mm.
l.	Loose set screw for magneto breaker or distribution brush.	Tighten the screw.
m.	Lower fuel pressure or air clog.	Regulate fuel pressure to 0.02 ~ 0.05 Mpa. Remedy fuel leak and air leak in fuel system.
n.	Clog of fuel filter and fuel pipe.	Check and clean complete fuel pipe and the fuel filter.
o.	Improper fix on engine frame or in airplane.	Check fix of engine on frame and in airplane, and check damper.
p.	Damaged balance of propeller or incorrect installation of propeller blade.	Balance propeller. Check installation and jumping of propeller blade.

7. When pull to idle, engine will stop.

Probable cause		Remedy
a.	Improperly adjusted idle mixture.	Adjust mixture with idle needle. Adjust main needle if necessary/
b.	Incorrectly adjusted idle rotating speed.	Adjust opening of throttle by idle adjusting screw.
c.	Air leak in intake system (Defective tight of intake pipe nut or with gasket at adapter).	Check tightness at each seal in air intake system, and check whether there is gasket.

8. Backfire of carburetor at idle rating.

Probable cause		Remedy
a.	Excessively opened throttle while starting (Particularly in cold weather)	Close throttle smaller.
b.	Too lean mixture.	Make mixture rich by idle needle.
c.	Air lean in air intake system.	Check sealing at each connection in air intake system.
d.	Excessive pre-ignition angle of the magneto.	Decrease pre-ignition angle.
e.	Clog of carburetor filter.	Check and clean carburetor filter.
f.	High altitude control stands not in "Full open" position.	Regulate high altitude control lever to "Full open" position.
g.	Lower fuel pressure.	Adjust fuel pressure to 0.02 ~ 0.05 Mpa.
h.	Burnt or deformed air valve.	Lap air valve if it burns a little; replace it; if badly burnt.
i.	Burnt or deformed air valve seat.	Dismount defective cylinder, lap air valve seat, if defective lapping in due to excessive damage, replace it.

9. Excessive of engine

Probable cause		Remedy
a.	Improper regulates of screw of idle of carburetor.	Adjust throttle open angle with idle stop screw.
b.	As incorrectly regulated length of control lever, it makes throttle to open excessively.	Adjust the length of the control lever.
c.	Present play in throttle controlling system of airplane.	Remedy the play.

10. Overheat of engine

Probable cause		Remedy
a.	Improper circulation in oil system, too lower level of oil tank.	Check oil pressure, temperature, and oil amount of oil tank and oil pump.
b.	Clog of honeycomb hole of oil radiator.	Clean and blow the honeycomb hole through.
c.	Oil freeze of oil radiator.	Heat the oil radiator.
d.	Faulty oil return of engine (oil leak, clog and clog in oil pump).	Check and clean all connections in returning pipe line. Fill oil connections in returning pipe line. Fill oil into oil pump, turn propeller to remove air in oil pipe line.
e.	Too dirty oil.	Replace oil.
f.	Too lean mixture.	Make the mixture rich.
g.	Gas leaking into case.	Check cylinder compression. Replace worn piston ring.
h.	Defective close of air valve.	Check compression of each cylinder. If faulty compression is due to defective close of valve, should lap valve and seat or replace cylinders.
i.	Too big pre-ignition angle.	Adjust pre-ignition angle to 31 + 1 before TDC in compression stroke.
j.	Air leak in air intake system.	Remedy air leak.
k.	Damaged thermocouple or wire of it.	Replace defective parts.
l.	Thermometer of cylinder head fell out.	Check or replace the meter.
m.	Too long time at high pitch Work of engine.	Pull pitch lever to low pitch position.
n.	Exhaust gas leaks, impinges on thermal couple.	Remedy troubles. If gas will leak from a bushing of a spark plug, repair cylinders.
o.	Exhaust gas leaks, impinges on exhaust collector, on cylinders.	Remedy gas leak
p.	No open of shutter.	Open shutter.

11. Engine smoking

Probable cause		Remedy
a.	Too rich mixture.	Make mixture to lean.
b.	Clog of air-limited nozzle.	Take down air- limited nozzle, clean and blow it.
c.	Sizing, serious worn or broken the piston ring.	Check the compressor of cylinder. Replace the trouble piston ring.
d.	Bent or worn piston	Check cylinder compression, find out the trouble piston. Replace it if necessary.
e.	Excessively accumulated oil in case.	Check the scavenge system of engine and working condition of oil pump.

12. Too lower oil pressure

	Probable cause	Remedy
a.	Air clog of oil passage of oil pump. In winter oil is heavier. Clog of vent pipe of oil tank.	Remedy air clog. Heat the oil. Blow vent pipe of oil tank throughout.
b.	Clogged filter in oil passage from oil tank to engine.	Check oil passage and clean the oil filter.
c.	Seizing pressure – regulating valve of oil pump, spring damaged.	Check pressure regulating valve, replace defective parts.
d.	Improper pressure regulation valve of oil pump.	Readjust the pressure –regulating valve.
e.	Excessively diluted oil.	Check leak proneness of the dilution switch for oil, and replace oil.
f.	Faulty oil pressure gage and its pipe.	Check pipe, replace pressure gage if necessary.
g.	Too lower oil level of oil tank.	Fill oil sufficiently.
h.	Oil bubble.	Clean oil system and replace oil.
i.	Improper work of oil pump.	Unmounts oil pump, and remedy the trouble.
j.	Oil overheats.	Check oil system.

13. The engine can't reach to maximum rotating speed

	Probable cause	Remedy
a.	Excessive propeller pitch or improper adjusted governor.	Change in stallion angle of propeller or adjust governor.
b.	Improper connected tachometer or wire (The indicated rotation is not really).	Check connection of tachometer and its wire.
c.	Overheat of engine.	Proceed analysis remedy it according to the fifth item of this section(see 7.2.5)
d.	Cloggy screen of carburetor.	Clean carburetor screen.
e.	Not sufficient supplied fuel for carburetor.	Check fireproof switch. The switch should strand in full open position. Fuel screen should be clean.
f.	Improper adjust carburetor.	Check regulation of carburetor.
g.	Too large or too small resignation angle of magneto.	Adjust in stallion angle of magneto.
h.	Smaller clearance of magneto breaker. Burnt	Adjust contactor clearance and wipe clean
i.	Improper work of spark plug, oil splashed or wet.	Wipe spark plug clean. And then dry it, make a jump test, if fails, replace it.
j.	Ignition system failed.	Check the spark plug, wire or magneto.
k.	Air lack in air intake system.	Remedy air leak.
l.	Not closely fitted valve. Clog or deformation.	Lap or replace the air valve.
m.	Too large or too small air valve clearance.	Adjust clearance to 0.3 ~ 0.4 mm.
n.	Not full opened throttle or have presented gap in control system.	Remedy trouble in control system.

14. Propeller fails to proper pitch

Probable cause		Remedy
a.	Oil freezes in oil cylinder of propeller.	Unmounts oil cylinder, drain frizzed oil.
b.	Improper mounted propeller.	Check propeller assemble.
c.	Incorrectly adjusted or installation of governor.	Remount and adjust it.
d.	Seizing oil distribution piston of governor, loose spring or it is break.	Check the oil distribution piston or replace governor.
e.	Loose nipple of propeller shaft.	Tighten it with torque of 80-100 Nm

15. Dropping of rotating speed for single magneto exceeds tolerance

Probable cause		Remedy
a.	Incorrect contactor clearance of magneto breaker, Dirt on contactor	Adjust clearance to 0.25-0.35 mm. Wipe contactor clean.
b.	Incorrect preignition angle of magneto.	Check preignition angle. Adjust preignition angle according tgo upper limit if necessary.
c.	Check of magneto distribution brush.	Replace distribution brush.
d.	Fuel lean.	Regulate fuel consumption.
e.	Improper work of spark plug, incorrect clearance, electrode wet, oil splashed, or accumulated carbon.	Adjust clearance. Clean and dry the spark plug.
f.	Air leak in air intake system.	Remedy air leak.

16. Compressor fails to make air pressure of board balloon

Probable cause		Remedy
a.	Not closely for air pipe connected in air system.	Tighten the nuts, and replace the defective gasket or washer.
b.	Not close nipple of pressure valve.	Replace the washer.
c.	Not close of intake valve, piston valve and pressure valve.	Disassemble compressor. Check and clean valve. Lap it and make a close test if necessary.
d.	Elasticity of spring of piston valve is lost.	Replace the spring.
e.	Burnt piston or seizing and break of piston ring.	Clean the carbon deposit. Replace trouble parts.

17. When engine operates at high rotating speed, which will be "surge"

Probable cause		Remedy
a.	Small installation angle of magneto or improper preignition unit of magneto.	<ol style="list-style-type: none"> 1. Check and adjust the preignition angle of magneto, it should be 31°C 2. Check the automatic advanced unit of magneto for flexibility. When turn distribution brush by hand, it may be spring back flexibly.
b.	Due to storage or long periodic idle operation, accumulated oil in interior of piston of lower cylinder (the No. 5 and No. cylinder), and on spark plug.	<ol style="list-style-type: none"> 1. Unmount the spark plug of the No 4, 5, 6, cylinder and clean it, for long periodic storage engine. 2. Pay attention to burn out spark plug before take-off.

18. When engine operates at high rotating speed, which will be “surge”

Probable cause		Remedy
a.	Lean at idle condition of the engine.	Regulate mixture of carburetor. Don't employ excessive lean at idle condition.
b.	Lower temperature of cylinder head.	Should heat cylinder head to more than 140°C, before take off.
c	Lower temperature of air intake.	Air intake heating unit should not be leak, and control unit should be flexible. Before take-off, maintaining the intake temperature is higher than 15°C
d	Too quick pushed throttle at accelerating.	Check the throttle control for flexibility, idle stroke should not be excessive. Open throttle not too quickly at take-off, especially at less than 1400 rpm, it should be slow.

19. Hydraulic impingement

Probable cause		Remedy
a.	While long periodic pracked, oil flows into lower cylinder form clearance between the piston and cylinder wall.	Open oil drain cock of the no. 4,5,6 Cylinder air intake pipe, positively turn propeller, drain out accumulated oil, if more than two days of engine non-work or failure of thrice started engine.
b.	Excessively high engine temperature at last Engine stop or excessively long warming time in winter by heating furnace, oil becomes lighter, oil flows from case cylinder combustion chamber.	While employ in summer, pay attention to the temperature of cylinder head at engine stop seriously, it is prohibited to exceed 165°C. While Heating of the engine in winter warning time should not be too long, outlet temperature of heating furnace should not exceed 180°C.
c	While apply oil dilution in winter, due to not mounting restrict bowl in fuel line, make oil diluted too thin, the thin oil flows into lower cylinder.	As employ in winter, pay attention to check whether restrict bowl of fuel has been mounted in oil dilution line.
d	Due to not complete unpack and degrease of new mounted engine, preservative oil in	Before using the engine, make unpack and degrease according to specification,

AIR FRAME

Trouble at landing gear

1. Landing gear does not retracted & extension.

Probable cause		Remedy
a.	Pressure is not up to the limit	Pressure charged the system from the ground source up to the limit, main- 35 to 45kg/cm ² .
b.	Pressure trap in the system .	Trap pressure release with the help of brake liber and dump valve. fast able closed the main system then deflected the pressure then open the bottle knob and retracted the landing gear. If L/G does not retracted then removed the two a valve quty 08 and svc in CRS fitted back and secured. Again retraction test given.
c.	Both C/Pit L/G control valve is not proper placed.	If operate the front c/pit. Rear c/pit control valve must be neutral position.
d.	Main air bottle knob may be closed.	Open the air bottle knob.
e.	Actuator faulty.	Actuator internally and externally may be faulty. It is svc in CRS or replaced the actuator.
f.	Pressure hose faulty.	Pressure hose replaced with svc hose.

2. When the main sys fails L/G extension inoperable by emergency sys .

Probable cause		Remedy
a.	L/G control valve placing not proper.	Check the control valve for proper placed both c/pit in neutral position.
b.	Main air bottle don't close.	Check the main air bottle at closed position.
c.	Two way valve faulty	Check the two way valve for Svc in CRS.
d.	House faulty	House is to be checked with shopy water, Faulty house replaced with Svc one
e.	Up lock actuator faulty	Up lock actuator is to be Checked in CRS. Svc or replaced
f.	Micro switch stuck up.	Micro switch Check if faulty replaced with Svc one.
g	Up lock hook faulty	Up lock hook Measured and adjusted with in the limit.

3. During Taxi ac swings to left or right.

Probable cause		Remedy
a.	Tyre pressure less	Changed tyre pressure up to the limit (3.2 kg ² /cm).
b.	Wheel drum oily.	Cleaned and checked properly.
c.	brake shoes oily, less thickness.	Cleaned and checked if require replace it.
d.	Wheel rotation more or less.	Check the wheel rotation and adjust.
e.	Shimmy damper faulty.	Shimmy damper removed svc in CRS fitted back and secured.
f.	Shock strut pressure less.	Shock strut pressure charged and adjust.
g	Shock strut hyd less.	Hyd charged as per manual.
h.	Brake pressure distributor faulty.	Brake pressure distributor removed and svc in CRS fitted back and secured.
j.	Brake pressure reducer faulty	Brake pressure reducer removed and svc in CRS fitted back and secured

Pneumatic System

4. Pneumatic pressure does not build up when engine in operation.

Probable cause		Remedy
a.	Air compressor faulty	Faulty air compressor replaced
b.	Air compressor filter problem	It is cleaned properly or replaced and fitted back
c.	Connector faulty	Repaired or replaced the faulty connector
d.	Two stage valve faulty or Blockage	[1] If it is found blockage cleaned by compressed air [11] Faulty two stage valve replaced with Svc set.
e.	Water separator Faulty.	[1] If found water separator open tighten properly [11]If found It is dirty cleaned it by compressed air [111]Faulty water separator repaired or replaced
f.	Pressure regulator faulty.	Pressure regulator adjusted and secured. Or repaired by CRS or Replaced.
g	Air bottle knob faulty.	Air bottle knob checked and tighten properly if required replaced it. U/S Air bottle replaced
h	Air bottle U/S	Faulty two way valve replaced or repaired by CRS
j	Two way value faulty	Check all the actuator, Replaced faulty actuator
k.	Actuator Faulty	Faulty air filter removed and svc in CRS or replaced.
l.	Air filter faulty	

Pneumatic System

5. Pneumatic pressure does not build up on ground.

Probable cause		Remedy
a.	System some where lacking	a. (i) Thoroughly check the system. If found leaking from the joint the light if properly. (ii) If found pipeline damage or crack, repair or replaced it.
b.	Pressure regulator does not work properly	b. (i) Check the regulator (ii) Regulator adjusted or repaired by CRS
c.	NRV Faulty valve	c. NRV check and serviced by CRS
d.	L/G & Flap control or faulty	d. LIG & Flap value checked properly. and all the operating lever placed proper place
e.	Two way value faulty	e. Faulty two way value replaced or repaired by CRS
f.	Air filter faulty	Faulty air filter removed and svc in CRS or replaced.

6. During full power break does not hold or sluggish

Probable cause		Remedy
a.	Break pressure less.	Break pressure measured and adjusted it.
b.	Brake hose faulty.	Faulty hose replaced with svc/new hose.
c.	Wheel drum oily.	Cleaned it properly with the help of rags & raft the shoes by Amery paper.
d.	Break cable faulty.	Faulty break cable replaced or tightens properly.
e.	Break pressure reducer faulty.	Faulty pressure reducer svc by CRS or if required replace.
f.	Break pressure distributor faulty.	Faulty break pressure distributor svc in CRS or if required replaced.

Trouble at Control System

7. Rolling Tendency.

Probable cause		Remedy
a.	Wing heavy	a. Wing heavy due to uneven fuel feeding
b.	Fixed tab faulty	b. Fixed tab adjusted & secured
c.	Aileron faulty	c. Checked the aileron displacement and adjusted with in the limit

Trouble at Control System

8. Control Stick Heavy.

Probable cause		Remedy
a.	Control linkage joint dry/dirty	a. All the control linkage greased properly.
b.	belcrank loose	b. Adjusted the blockage
c.	Pushpul rod faulty	c. Checked thoroughly the pushpul rod and adjusted
d.	Control stick faulty	d. check the control stick thorough

Trouble at L/G

9. During prefft insp found LT or RT L/G up lock actuator play loose

Probable cause		Remedy
a.	Up lock hook fix ed nut & bolt loose	a. Up look hook fixation nut & bolt tighten properly..
b.	Up lock mechanism leage faulty	b. Faulty mechanism repaired by GE shop or replaced
c.	Up lock mechanism spring faulty	c. Faulty up lock mechanism spring replaced.

Trouble at fuel system.

10. Uneven Fuel feeding.

Probable cause		Remedy
a.	Fuel level transmitter faulty.	Fuel level transmitter check & svc in IRS.
b.	Vent line blockage faulty.	Thoroughly checked the vent line and cleaned by the compressed air.
c.	Check valve of sve tank faulty.	Svc tank remove and cleaned the check valve of svc tank and fitted back and seared.
d.	Fuel quently gauge faulty.	Fuel quently gauge removed. Checked and svc by IRS.
e.	Continues banking flying in one direction.	Banking flying both directions equally.
f.	Un ever wing level.	Wing level checked and adjusted.

11. Fuel leaking from the svc tank.

Probable cause		Remedy
a.	Seal faulty.	Replace seal.
b.	Svc tank fuel drains valve lock nut faulty.	Fuels drain valve locknut thread check, repaired locally or replaced it.
c.	Wing nut & bolt faulty	Faulty wing nut & bolt is to be replaced

CANOPY

12. Canopy Vibrate/Poor Visibility

Probable cause		Remedy
a.	Bearing faulty.	Checked the bearing
b.	Bearing lock nut faulty	Bearing lock nut checked and fixed properly
c.	Rail faulty	Checked the rail clean and oily properly
d.	Fixing lock nut and spring faulty	Checked fixing lock nut and lever spring and adjusted properly
e.	Fixing hole faulty	Checked the fixing hole if req repaired in GE shop
f.	Glass rough/scratch	Clean the glass with Mr Bruso if not OK then replace the canopy glass

13. Trim Cable Heavy for Ops or Obstruct for Ops

Probable cause		Remedy
a.	Pully faulty.	Checked the pully
b.	Trim cable torn off	Checked the cable if not with in limit replace the cable
c.	Cable dry and dirty	Clean the cable properly and grease properly
d.	Trim wheel faulty	Checked the trim wheel
e.	Cable tension high/obstruct	Checked the cable tension and its ops for any obstruction

ELECTRIC

1. During G/R VA meter Flauqtuate

Probable cause		Remedy
a.	Volt Regulator and generator are faulty	a. Remove the generator and volt regular check in elect & fitted back. Check the battery volt in battery Shop. Power supply relay box remove and check in shop
b.	Battery volt less power supply relay box faulty	b. VA meter guage is to be remove and check in inst shop. All the above are to be checked and secured R/R given and check.

2 LDG Light & Nauigation Light Faulty

Probable cause		Remedy
Bulb faulty Plug connection prob. Holder faulty. Wire damage. Lead wire short		Check the bulb Plug holder and connection check. Check the electrical wire for any damage and short. Checked and secured power on check C/O.
Battery volt less power supply relay box faulty		b. VA meter guage is to be remove and check in inst shop. All the above are to be checked and secured R/R given and check.

3. LDG in Board and out Board Signal Light Does Not Show

Probable cause		Remedy
Bulb faulty Plug connection loose. Micro S/W faulty Lead wire faulty		Check the bulb Plug holder and connection check. Check the holder Check the Micro S/W Check the lead for any damage Check the wire for any damage or short Power on check
Battery volt less power supply relay box faulty		b. VA meter guage is to be remove and check in inst shop. All the above are to be checked and secured R/R given and check.

4. During Ops found Reverse Current more than Limits (10 Ams)

Probable cause		Remedy
Battery volt less V A meter gauge faulty		Check battery volt in battery charging shop. Gauge are to be check in instrument shop. Generator and power supply relay box is to be check in electric shop.
Power supply relay box faulty		S/W is to be check.
Generator faulty		All the above are to be fitted back and secured. G/R is to be given and check for operation.
Switch faulty		

5. During Engine Operation Generator does not Take Over/Intime

	Probable cause	Remedy
a.	Generator faulty	Remove and checked the generator in ERS
b.	Voltage regulator faulty	Checked the regulator in ERS
c.	Power supply relay box faulty	Remove and check the power supply relay box in ERS
d.	Electric harness faulty/short	Checked the electric harness/wire if req charge
e.	Generator s/w faulty	Checked the generator s/w

INSTRUMENT TRADE

Two

1. During G/run RPM difference cockpit to more than 35 RPM

Probable cause		Remedy
a.	Gauge faulty	Gauge are to be removed and check in shop
b.	Plug faulty	Plugs and holders are to be checked.
c.	Leads torn off leads soldering torn off.	Leads and shouldering points are to be check for damage.
d.	Tachometer Generator faulty.	Check the tachometer damage. All the above are to Fitted back and secured. G/run is to be given and check.

2. During ops found CHT difference between two cockpit more than limit.

Probable cause		Remedy
a.	Thermo couples faulty.	Check the thermocouples for any impropriety.
b.	thermo couples lead faulty.	Leads are to be checked for any damage
c.	Gauges are faulty	Gauges are to be removed and check in shops
d.	Cylinder head is oily.	Cylinder head is to be checked for oily. All the above are to be checked and secured. G/R is to be given and checked for ops.

3. During ops found Altimeter Faulty.

Probable cause		Remedy
a.	Gauge faulty	Remove the gauge and check in shop
b.	Static pressure block.	static pressure line check by Air pressure.
c.	Durite hose and connector faulty.	Check the durite hose and connectors. Checked and secured. Sub to next Flt Report.

4. During ops found oil pressure flaugcuate .

Probable cause		Remedy
a.	Adaptor block.	Adaptor line blown off by rotating the propeller.
b.	Oil pressure transmitter faulty.	Remove the oil pressure transmitter and check in shop.
c.	Gauge faulty.	Remove the gauge and check in shop.

5. During ops found Fuel pressure fluctuate .

Probable cause		Remedy
a.	Adaptor block.	Adaptor line blown off by hand pump. Triple gauge remove and check in shop.
b.	Fuel pressure transmitter faulty.	Fuel pressure transmitter remove and check in shop. (P.S)
c.	Triple gauge faulty.	Triple gauge removed & secured back and G/Run given and check. in IRS

6. During ops found oil temperature high.

Probable cause		Remedy
a.	Gauge faulty.	Gauge are to removed and check in shop. (R.O)
b.	Thermocouple and connectors faulty	Check the Thermocouple and leads.
c.	Leads faulty.	Check the connectors.
d.	Radiator honeycomb block.	Clean the radiator by air.
e.	Dirt in oil.	Check the oil if dirt changed oil. Checked and scoured G/Run is to be given and check.

7. ASI over reading on Air.

Probable cause		Remedy
a.	ASI gauge faulty.	Remove the gauges and check in shop.
b.	Lines block (pitot and static line).	Pitot and static line check by air pressure.
c.	durite hose and connector loose.	Check the durite hose for proper fixing. Check the connectors for proper fixing. Checked and secured and ac is to be sub to next fit report.

RADIO

1. Compass U/S

Probable cause	Remedy
Battery volt low	Check the battery volt in shop.
Knob faulty	Check the know for any damage or looseness.
Lead wire damage or short	Check the wire for any damage or short.

2. During Pre Flt Insp Found ADF U/S

Probable cause	Remedy
Vol know faulty	Check the knob
ADF faulty	Check the ADF
Leads wire damage	Check the wire for any damage
Leads wire disconnect	Check the wire for any disconnect

3. Intercom very Low and RT nearly audible with full volume

Probable cause	Remedy
Intercom faulty	Check the intercom & box
Intercom box faulty	Check the knob for any discrepancies.
Intercom knob faulty	Check the lead for any damage.
Leads faulty	Check the S/W
S/W U/S	

Rt Whistling Noise After Pressing PTT-3

4.

Probable cause	Remedy
RT faulty	Check the RT set
Wire damage or short	Check the wire for any damage or short
Radio S/W U/S	Check the Radio S/W
Head set faulty	Check the head set in shop
Intercom box faulty	Check the RT intercom magic gain and adjust
Magic gain faulty	

During Pre Flt Insp Found RT Cracking Noise

Probable cause	Remedy
RT faulty	Check the RT set
Wire short or damage	Check the RT leads and wire for any damage or short
RT knob and S/W U/S	Check the RT knob and S/W
FSG-60 faulty or U/S	Check the RT FSG-60

ARMAMENT

1. Signal Pistol Housing Cord Loose

Probable cause	Remedy
Felt u/s	Check the gun box felt if damage change.
Rubber belt u/s	Rubber belt check if damage change.
Housing fixing screw loose	Check the fixing screw for it's proper tightness. Check and secured.

7. Bullet Box Torn Off

Probable cause	Remedy
Canvass torn off	Canvass is to be change in o/h shop.
Rivet Loose	Box rivet is to be check and secured.
Stich torn off	Stich is to be check if damage. Stich it properly.