

Navion Model A & B
 Inspection Sheet - rev 02
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Date _____	Mechanic _____	N Num _____
A/C Make _____	A/C Ser _____	A/C TIS _____
Eng Make _____	Eng Ser _____	Eng TIS _____
Prop Make _____	Prop Ser _____	Prop TIS _____
Aux Eqp _____	Aux Ser _____	Aux TIS _____
Aux Eqp _____	Aux Ser _____	Aux TIS _____

Inspection PREPERATION

50 100 500 1000

- 1___ Note stains or leaks, tanks, wheels, engine, firewall
- 2___ Engine runnup to operating temperature
 - a. - Instrument, markings & indications
 - b. - Controls, engine & flight
 - c. - Controls, environment, i.e. heater, fresh air
 - d. - Controls, fuel selector
 - e. - Radio(s), operation
 - f. - Doors, windows, latches
 - g. - Check mixture
 - h. - Magneto check, off position check
 - h. - Engine power & RPM
 - i. - Shut engine by mixture shutoff (10-20 rpm increase)
- 3___ Cursory wash and clean inside and out
- 4___ Compression #1___ #2___ #3___ #4___ #5___ #6___
- 5___ ARROWE - airworthy, reg, radio, opp man, wt&bal, equip list
- 6___ Research 337's, AD's, discrepancy list

Inspection ENGINE MECHANICAL GROUP

50 100 500 1000

- | | |
|--|---------------------|
| 1___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Applicable AD's and 337's | Notes: _____ |
| 2___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Remove cowl | _____ |
| 3___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Remove spinner | _____ |
| 4___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Remove Propeller | _____ |
| 5___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Engine & airframe leaks or stains | _____ |
| 6___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Recondition or replace spark plugs | _____ |
| 7___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Inspect interior cylinder walls | _____ |
| 8___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Exhaust stack, muffler, heat shroud & linkage | _____ |
| 9___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Rocker cover, push rod cover, ext cyl, crankcase | _____ |
| 10___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Cooling baffle cracks or looseness | _____ |
| 11___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Engine mount/fuselage fittings | _____ |
| 12___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Drain oil tank and cooler, | _____ |
| 13___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Fill oil, check oil cap, dipstick | _____ |
| 14___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Oil pressure gauge line and cooler lines | _____ |
| 15___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Oil screen drain valve or plug | _____ |
| 16___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Oil filter/screen, drain valve | _____ |
| 17___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Flush oil cooler | _____ |
| 18___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Replace motor mount bolts & cushions | _____ |

Inspection ENGINE ELECTRICAL GROUP

50 100 500 1000

- | | |
|--|-------|
| 1___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Applicable AD's and 337's | |
| 2___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Magnetos, wiring | _____ |
| 3___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Vacuum pump, lines | _____ |
| 4___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Electrical wiring, ground strap, instrument lines | _____ |
| 5___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Test battery, wiring, solenoid | _____ |
| 6___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Ignition harness | _____ |
| 7___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Alternator/generator brushes, drive coupling, wiring | _____ |
| 8___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Starter brushes, clutch, solenoid, wiring | _____ |
| 9___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Voltage regulator, wiring | _____ |
| 10___ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Ignition lead high tension check | _____ |

Notes: _____

Inspection

CARBURATOR GROUP

Notes: _____

50 100 500 1000

- 1___ [] [x] [] [] [] Applicable AD's and 337's
- 2___ [] [x] [] [] [] Remove spinner, prop, and upper cowl half
- 3___ [x] [x] [] [] [] Clean air intake
- 4___ [x] [x] [] [] [] Intake tubes, gaskets, valves & doors
- 5___ [x] [x] [] [] [] Throttle linkage
- 6___ [x] [x] [] [] [] Mixture linkage
- 7___ [x] [x] [] [] [] Check condition of fuel hoses and fittings
- 8___ [] [x] [] [] [] Lubricate carburetor controls
- 9___ [] [x] [x] [] [] [] Drain carb, inspect inlet filter
- 10___ [] [x] [] [] [] Check air straitener in carburetor throat
- 11___ [] [x] [] [] [] Replace air intake

Inspection

FUEL GROUP

50 100 500 1000

- 1___ [] [x] [] [] [] Applicable AD's and 337's
- 2___ [x] [x] [] [] [] Fuel tank caps, filler neck, vents, drains
- 2___ [x] [x] [] [] [] Fuel tank, accumulator, placards
- 3___ [x] [x] [] [] [] Lines, fittings
- 4___ [x] [x] [] [] [] Fuel filter, strainer
- 5___ [x] [x] [] [] [] Fuel pump(s), wiring
- 6___ [x] [x] [] [] [] Fuel selector, valve, linkage
- 7___ [x] [x] [] [] [] Engine primer
- 8___ [] [] [x] [] [] Drain tank and check interior

Inspection

HYDRAULIC GROUP

50 100 500 1000

- 1___ [] [x] [] [] [] Applicable AD's and 337's
- 2___ [x] [x] [] [] [] Reservoir tank, cap, neck, dip stick
- 3___ [x] [x] [] [] [] Selector, valve, linkage
- 4___ [x] [x] [] [] [] Hydraulic pump, wiring, lines, hoses
- 5___ [x] [x] [] [] [] Hydraulic reservoir, lines, hoses
- 6___ [x] [x] [] [] [] Emergency shutoff
- 7___ [x] [x] [] [] [] Hydraulic light
- 8___ [] [] [] [x] [] Flush hydraulic lines, replace filter

Inspection

CABIN MECHANICAL GROUP

50 100 500 1000

- 1___ [] [x] [] [] [] Applicable AD's and 337's
- 2___ [x] [x] [] [] [] Engine controls, linkage
- 3___ [x] [x] [] [] [] Instrument panel fasteners, markings, placards
- 4___ [x] [x] [] [] [] Instrument fasteners, markings, placards
- 5___ [x] [x] [] [] [] Seat/shoulder belts, cargo nets, restraints
- 6___ [x] [x] [] [] [] Seat, stops, glides, rails
- 7___ [x] [x] [] [] [] Doors, windows, latches, locks, linkage
- 8___ [x] [x] [] [] [] Baggage compartment
- 9___ [x] [x] [] [] [] Control column assembly, linkage, lock
- 10___ [x] [x] [] [] [] Elevator trim assembly, linkage
- 11___ [x] [x] [] [] [] Rudder peddle assembly, linkage
- 12___ [x] [x] [] [] [] Hydraulic control, lines
- 13___ [x] [x] [] [] [] Pitot & static/alternate operation
- 14___ [x] [x] [] [] [] Carb heat/alternate air operation
- 15___ [x] [x] [] [] [] Environment control assembly, linkage
- 16___ [x] [x] [] [] [] Below cabin floor lines, hoses, controls
- 17___ [x] [x] [] [] [] Stall warning
- 18___ [x] [x] [] [] [] Inspect gyro hose and fittings
- 19___ [] [x] [] [] [] Compass card
- 20___ [] [x] [] [] [] Upholstery, trim, fasteners
- 21___ [] [] [] [x] [] [] Replace gyro filter

Inspection

CABIN ELECTRICAL GROUP

50 100 500 1000

- 1___ [] [x] [] [] [] Applicable AD's and 337's
- 2___ [x] [x] [] [] [] Lights, landing, navigation, cabin, instrument
- 3___ [x] [x] [] [] [] Switches, fuses, wiring
- 4___ [x] [x] [] [] [] Radio (com), antenna, cables, operation
- 5___ [x] [x] [] [] [] Radio (nav), antenna, cables, operation
- 6___ [x] [x] [] [] [] Intercom, operation
- 7___ [x] [x] [] [] [] ELT, operation

Notes: _____

Inspection
50 100 500 1000

NOSE GEAR GROUP

Notes: _____

- 1___ Applicable AD's and 337's _____
- 2___ Retraction links _____
- 3___ Trunion bearing and pin for wear, and play _____
- 4___ Hydraulic lines hoses _____
- 5___ Gear cylinders and end mounts _____
- 6___ Limit switches and lube _____
- 7___ Gear doors, fairing, mechanism _____
- 8___ Gear extension pads. _____
- 9___ Shimmy dampener _____
- 10___ Nutcracker, steering link, collar, play, torque tube _____
- 11___ Steering torque tube to rudder bar roller clearance _____
- 12___ Lower link to strut attach bolt for deformity _____
- 13___ Hydraulic cylinder mount for sheared rivets _____
- 14___ Grease & check wheel bearings _____
- 15___ Tires, condition, air press _____
- 16___ Retraction check _____
 - a. - Check latch freeness when gear is pumped into up position _____
 - b. - Then release hydraulic pwr and check latch clearance & hooking _____
 - c. - Cycle gear & check normal gear extension _____
 - d. - Emergency gear extension _____
 - e. - Wheel up brake _____
 - f. - Door clearance, fit _____
 - g. - Gear horn operation _____
 - h. - Gear light _____
- 17___ Wheel balance _____
- 18___ Service strut, check extensions _____
- 19___ Replace tire _____

Inspection
50 100 500 1000

MAIN GEAR GROUP

- 1___ Applicable AD's and 337's _____
- 2___ Retraction links _____
- 3___ Trunion bearing and pin for wear, and play _____
- 4___ Hydraulic lines hoses _____
- 5___ Gear cylinders and end mounts _____
- 6___ Limit switches and lube _____
- 7___ Gear door, fairing, mechanism _____
- 8___ Gear extension pads. _____
- 9___ Nutcrackers _____
- 10___ Retraction check _____
 - a. - Check latch freeness when gear is pumped into up position _____
 - b. - Then release hydraulic pwr and check latch clearance & hooking _____
 - c. - Cycle gear & check normal gear extension _____
 - d. - Check emergency gear extension _____
 - f. - Check doors clearance and fit _____
 - h. - Check gear lights _____
- 11___ Brake fluid, lines, hoses, bladders _____
- 12___ Check brake blocks, clips _____
- 13___ Parking brake, lines _____
- 14___ Toe brake, lines _____
- 15___ Tires, condition, air press _____
- 16___ Wheel balance _____
- 17___ Grease & check wheel bearings _____
- 18___ Service struts, check extensions _____
- 19___ Replace brake pads _____
- 20___ Replace tires _____

Inspection
50 100 500 1000

WING GROUP

- 1___ Applicable AD's and 337's _____
- 2___ Damage, loose rivets, panels, screws _____
- 3___ Wing attachment fittings & bolts _____
- 4___ Flap hinges, bearings, bell crank, bolts, and play _____
- 5___ Flap hydraulic cylinder and torque tube _____
- 6___ Aileron hinges, bushings, and bolts _____
- 7___ Aileron cables, turnbuckles, bell cranks, & pulleys _____
- 8___ Control cable tensions, lubricate as required _____

Notes: _____

- Notes: _____
- | Inspection | | | | TAIL GROUP | | |
|------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--|-------|
| 50 | 100 | 500 | 1000 | | | |
| 1___ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Applicable AD's and 337's | _____ |
| 2___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Damage | _____ |
| 3___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Horizontal and vertical attach points | _____ |
| 4___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Elevators, hinges, bushings, and bolts | _____ |
| 5___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Elevator cbls, turnbuckles, bell cranks, & pulleys | _____ |
| 6___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Rudder hinges, bushings, and bolts | _____ |
| 7___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Rudder cables, turnbuckles, bell cranks, & pulleys | _____ |
| 8___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Trim tab hinges, bushings, and bolts | _____ |
| 9___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Trim tab torque rod and bell crank | _____ |
| 10___ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Cable tensions and lubricate as required | _____ |

- | Inspection | | | | FUSELAGE GROUP | | |
|------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|---|-------|
| 50 | 100 | 500 | 1000 | | | |
| 1___ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Applicable AD's and 337's | _____ |
| 2___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Damage | _____ |
| 3___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Tail skid & bulkhead for damage | _____ |
| 4___ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | attach front and upper cowl | _____ |
| 5___ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sta. 170 bulkhead (or cracks & A.D. note compliance | _____ |

- | Inspection | | | | PROPELLER GROUP | | |
|------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--|-------|
| 50 | 100 | 500 | 1000 | | | |
| 1___ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Applicable AD's and 337's | _____ |
| 2___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Pitch change blocks for wear and condition | _____ |
| 3___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Hub for cracks and grease leaks | _____ |
| 4___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Pitch block pins | _____ |
| 5___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Jack plate travel and operation | _____ |
| 6___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Prop bladder for oil leaks | _____ |
| 7___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Blades, remove nicks | _____ |
| 8___ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Re-attach propeller | _____ |
| 9___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proper fit, play, or leaks | _____ |
| 10___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Prop control shaft and linkage | _____ |
| 11___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Replace spinner | _____ |
| 12___ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Replace cowl | _____ |

- | Inspection | | | | RETURN TO SERVICE | | |
|------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--|-------|
| 50 | 100 | 500 | 1000 | | | |
| 1___ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Complete wash/clean inside & outside | _____ |
| 2___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Complete walk around check. | _____ |
| 3___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Run engine to operating temperature | _____ |
| 4___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Engine/prop/flight instruments, and controls | _____ |
| 5___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Shut engine down | _____ |
| 6___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Engine and airframe leaks or stains | _____ |
| 7___ | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Finish paper work and make log book entries | _____ |

Notes: _____
