

Cessna 172SP Systems:

<u>System</u>	<u>Notes:</u>		
Landing Gear	<ul style="list-style-type: none"> ◇ Fixed tricycle gear, tubular spring steel, bungee steering on nosewheel, 15 deg and 30 deg w/ brakes ◇ Nose wheel has oleo strut – nitrogen and oil ◇ No antiskid system. 		
Brakes and Tires	<ul style="list-style-type: none"> ◇ Main tires are 6.00-6 (tire proportion-wheel radius), 6-ply with max PSI of 38 ◇ Nose is 5.00-5, 6-ply with max PSI of 45 		
Engines	<ul style="list-style-type: none"> ◇ Lycoming, 4 Cylinder, IO-360 engine, 180 HP ◇ Fuel injected ◇ Normally aspirated ◇ Air cooled ◇ No fire detection or prevention devices ◇ Induction ice is prevented/resolved via alternate air source door behind air filter, which is not heated 		
Propellers	<ul style="list-style-type: none"> ◇ McCauley ◇ Fixed pitch ◇ 76 in diameter 		
Fuel System	<ul style="list-style-type: none"> ◇ 53 gal total useable fuel (56 gal Total) ◇ 5 Drains in each tank, 3 Drains underneath cowl for: Fuel reservoir, Fuel strainer, Fuel selector valve ◇ Aux boost pump for priming and emergency operation ◇ Pilot side has fuel tank vent tube – both sides have vented caps 		
Oil System	<ul style="list-style-type: none"> ◇ Used for cooling, lubrication, and cleaning ◇ Wet sump oil system ◇ Limits are Min – 5qts, Max – 8qts ◇ Temps: 100 deg to 245 deg ◇ Idle pressure: 20 PSI, Normal pressure: 50-90 PSI, Max pressure: 115 PSI ◇ Use ash-less dispersant, aviation grade oil 		
Hydraulic System	<ul style="list-style-type: none"> ◇ Only the brakes, master cylinders are behind the pilot's rudder/brake pedals ◇ Use Mil-H-5606 – Red 		
Electrical System	<ul style="list-style-type: none"> ◇ 28 Volt DC System, 60 Amp Alternators ◇ 24 volt battery in engine compartment 		
Enviro. Systems	<ul style="list-style-type: none"> ◇ Heating – shroud around the exhaust muffler ◇ No air conditioning, no oxygen system, and no pressurization system 		
Avionics and Comm.	<ul style="list-style-type: none"> ◇ Dual-KX-155A NAV/COMM ◇ KLN-94 Panel Mount IFR GPS ◇ Dual-axis autopilot with altitude pre-select ◇ Disconnect via red button on yoke or AP button on AP or pulling circuit breaker 		
Ice Protection	<ul style="list-style-type: none"> ◇ Pitot Heat ◇ Alternate Static Source ◇ Defrost via cabin heat ◇ No prop de-ice, increase RPM to shed ice ◇ No leading edge protection, no windshield protection, no tail protection 		
Crew and PAX Equip	<ul style="list-style-type: none"> ◇ No plumbed oxygen system ◇ Survival kit optional 		
Flight Controls	<ul style="list-style-type: none"> ◇ Primary controls all utilize direct cable connections ◇ Cable connections also control elevator trim tab ◇ Electrically actuated trim switch on pilot's yoke ◇ Flaps are electrically operated single slotted type flaps ◇ T/O flaps = 10 deg, Landing flaps = 30 deg 		
Flight Instruments	<ul style="list-style-type: none"> ◇ Attitude Indicator and DG: Vacuum ◇ Turn Coordinator: Electric ◇ Dual dry vacuum pumps with annunciators for failure ◇ Annunciator panel: Volts (Below 24.5), L LOW FUEL R (Below 5 gals for 60 seconds), L VAC R (Below 3 in Hg), PITCH TRIM (Failure), OIL PRESS (Below 20psi) 		
Speeds and Limitations	<table style="width: 100%; border: none;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◇ All Speeds in KIAS ◇ Va: 105 ◇ Vx: 65 ◇ Vy: 73 ◇ Vg: 68 ◇ Vno: 129 ◇ Vne: 163 </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◇ Vso: 40 ◇ Vs: 48 ◇ Vfe (15 flaps): 110 ◇ Vfe (30 flaps): 85 ◇ Vr (0 flaps): 55 ◇ MGTOW: 2550 lbs ◇ Service Ceiling: 14,000' </td> </tr> </table>	<ul style="list-style-type: none"> ◇ All Speeds in KIAS ◇ Va: 105 ◇ Vx: 65 ◇ Vy: 73 ◇ Vg: 68 ◇ Vno: 129 ◇ Vne: 163 	<ul style="list-style-type: none"> ◇ Vso: 40 ◇ Vs: 48 ◇ Vfe (15 flaps): 110 ◇ Vfe (30 flaps): 85 ◇ Vr (0 flaps): 55 ◇ MGTOW: 2550 lbs ◇ Service Ceiling: 14,000'
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