



Section IV CARE OF THE AIRPLANE

If your airplane is to retain that new plane performance, stamina, and dependability, certain inspection and maintenance requirements must be followed. It is always wise to follow a planned schedule of lubrication and maintenance based on the climatic and flying conditions encountered in your locality.

Keep in touch with your Cessna dealer, and take advantage of his knowledge and experience. He knows your airplane and how to maintain it. He will remind you when lubrications and oil changes are necessary and about outer seasonal and periodic services.

GROUND HANDLING

The airplane is most easily and safely maneuvered by hand with a tow-bar attached to the nose wheel

NOTE

When using the tow-bar, never exceed the turning angle of 29° either side of center, or damage to the gear will result.

MOORING YOUR AIRPLANE

Proper tie-down is the best precaution against damage to your parked airplane by gusty or strong winds.

To tied down your airplane securely, proceed as follows:

1. Set parking brake and install control wheel lock
2. Install a surface control lock between each aileron and flap
3. Tie sufficiently strong ropes or chains (700 pounds tensile strength) to wing, and tail tail-down fittings and secure each rope to ramp tie-down
4. Install a pitot tube cover

WINDSHIELD -- WINDOWS

The plastic windshield and windows should be kept clean and waxed at all times. To prevent scratches and crazing, wash them carefully with plenty of soap and water, using the palm of the hand to feel and dislodge dirt and mud. A soft cloth, chamois or sponge may be used, but only to carry water to the surface. Rinse thoroughly, then dry with a clean moist chamois. Rubbing the surface of the plastic with a dry cloth builds up an electrostatic charge so that it attracts dust particles in the air. Wiping with a moist chamois will remove both the dust and this charge

Remove oil and grease with a cloth moistened with kerosene. Never use gasoline, benzine, alcohol, acetone, carbon tetrachloride, fire extinguisher or anti-ice fluid, lacquer thinner or glass cleaner. These materials will soften the plastic and may cause it to craze.

After removing dirt and grease, if the surface is not badly scratched, it should be waxed with a good grade of commercial wax. The wax will fill in minor scratches and help prevent further scratching. Apply a thin even coat of wax and bring it to a high polish by rubbing lightly with a clean, dry, soft flannel cloth. Do not use a power buffer; the heat generated by the buffing pad may soften the plastic.

Do not use a canvas cover on the windshield unless freezing rain or sleet is anticipated. Canvas covers may scratch the plastic surface.

ALUMINUM SURFACES

The clad aluminum surfaces of your Cessna require only a minimum of care to keep them bright and clean. The airplane may be washed with clear water to remove dirt; oil and grease may be removed with gasoline, naphtha, carbon tetrachloride or other non-alkaline solvents. Dulled aluminum surfaces may be cleaned effectively with an aircraft aluminum polish.

After cleaning and periodically thereafter, waxing with a good automotive wax will preserve the bright appearance and retard corrosion. Regular waxing is especially recommended for airplanes operated in salt-water areas as a protection against corrosion.

PAINTED SURFACES

The painted surfaces of your new Cessna require an initial curing period which may be as long as 90 days after the finish is applied. During this curing period some precautions should be taken to avoid damaging the finish or interfering with the curing process. The finish should be cleaned only by washing with clean water and mild soap, followed by a rinse with water and drying with cloths or a chamois. Do not use polish or wax, which would exclude air from the surface, during this 90-day curing period. Do not rub or buff the finish and avoid flying through rain, sleet or hail.

Once the finish has cured completely, it may be waxed with a good automotive wax. A heavier coating of wax on the leading edges of the wings and tail and on the engine nose cap and propeller spinner will help reduce the abrasion encountered in these areas.

PROPELLER CARE

Preflight inspection of propeller blades for nicks, and wiping them occasionally with an oily cloth to clean off grass and bug stains will assure long, trouble-free service. It is vital that small nicks on the propellers, particularly near the tips and on the leading edges, are dressed out as soon as possible since these nicks produce stress concentrations, and if ignored, may result in cracks. Never use an alkaline cleaner on the blades. Remove grass and dirt with carbon tetrachloride or Stoddard solvent.

INTERIOR CARE

To remove dust and loose dirt from the upholstery, headliner, and carpet, clean the interior regularly with a vacuum cleaner.

Blot up any spilled liquid promptly, with cleansing tissue or rags. Don't pat the spot; press the blotting material firmly and hold it for several seconds. Continue blotting until no more liquid is taken up. Scrape off sticky materials with a dull knife, then spot-clean the area.

Oily spots may be cleaned with household spot removers used sparingly. Before using any solvent, read the instructions on the container and test it on an obscure place on the fabric to be cleaned. Never saturate the fabric with a volatile solvent; it may damage the padding and backing materials.

Soiled upholstery and carpet may be cleaned with foam-type detergent, and used according to the manufacturer's instructions. To minimize wetting the fabric, keep the foam as dry as possible and remove it with a vacuum cleaner,

The plastic trim, instrument panel and control knobs need only be wiped off with a damp cloth. Oil and grease on the control wheel and control knobs can be removed with a cloth moistened with kerosene. Volatile solvents, such as mentioned in paragraphs on care of the windshield, must never be used since they soften the craze the plastic.

INSPECTION SERVICE AND INSPECTION PERIODS

With your airplane you will receive an Owner's Service Policy. Coupons attached to the policy entitle you to an initial inspection and the first 100-hour inspection at no charge. If you take delivery from your Dealer, he will perform the initial inspection before delivery of the airplane to you. If you pick up the airplane at the factory, plan to take it to your Dealer reasonably soon after you take delivery on it. This will permit him to check it over and to make any minor adjustments that may appear necessary. Also, plan an inspection by your Dealer at 100 hours or 90 days, whichever ever comes first. This inspection also is performed by your Dealer for you at no charge. While these important inspections will be performed for you by any Cessna Dealer, in most cases you will prefer to have the Dealer from whom you purchased the airplane accomplish this work.

Federal Air Regulations required that all airplanes have a periodic (annual) inspection as prescribed by the administrator, and performed a person designated by the administrator. In addition, 100-hour periodic inspections made by an "appropriately-rated mechanic" are required if the airplane is flown for hire. The Cessna Aircraft Company recommends the 100-hour periodic inspection for your airplane. The procedure for this 100-hour inspection has been carefully worked out by the factory and is followed by the Cessna Dealer Organization. The complete familiarity of the Cessna Dealer Organization with Cessna equipment and factory-approved procedures provides the highest type of service possible at lower cost.

AIRPLANE FILE

There are miscellaneous data, information and licenses that are a part of the airplane file. The following is a checklist for that file. In addition, a periodic check should be made of the latest Civil Air Regulations to insure that all data requirements are met.

- 1) To be displayed in the airplane at all times:
 - a) Aircraft Airworthiness Certificate (Form FAA-1362)
 - b) Aircraft Registration Certificate (Form FAA -500A)
 - c) Airplane Radio Station License (Form FCC-404, if transmitter installed)
- 2) To be carried in the airplane at all times
 - a) Weight and Balance, and associated papers (latest copy of the Repair and Alteration Form, FAA-337 if applicable)
 - b) Airplane Equipment List
- 3) To be made available upon request:
 - a) Airplane Log Book
 - b) Engine Log Book

NOTE

Cessna recommends that these items, plus the Owner's Manual and the 'Cessna Flight Guide" (Flight Computer) be carried in the airplane at all times.

Most of the items listed are required by the United States Federal Aviation regulations. Since the regulations of other nations may require other documents and data, owners of exported airplanes should check with their own aviation officials to determine their individual requirements.

LUBRICATION AND SERVICING PROCEDURES

Specific servicing information is provided here for items requiring daily attention. A Service Frequency checklist is included to inform the pilot when to have other items checked and serviced

DAILY

Fuel Tank Filler

Service after each flight with 80/87 minimum grade fuel. The capacity of each wing tank is 42.0 gallons with optional long-range tanks

Fuel Strainer

On the first flight of the day and after each refueling, drain for about four seconds, to clear fuel strainer of possible water and sediment. Turn the drain knob, then check that strainer drain is close after draining.

Oil Dipstick

Check oil level before each flight. Do not operate on less than 9 quarts. To minimize loss of oil through breather, fill to 10-quart level for normal flights of less than 3 hours. For extended flight, fill to 12 quarts. If optional oil filter is installed, one additional quart is required when the filter element is changed.

Oil Filler

When preflight check shows low oil level, service with aviation grade engine oil: SAE 20 below 40°F and SAE 40 above 40°F. Your Cessna was delivered from the factory with straight mineral oil (non-detergent) and should be operated with straight mineral oil for the first 25 hours. The use of mineral oil during the 25-hour break-in period will help seat the piston rings and will result in less oil consumption. After the first 25 hours, either mineral oil or detergent oil may be used. If a detergent oil is used, it must conform to Continental Motors Corporation Specification MHS-24. Your Cessna Dealer can supply an approved brand.

SERVICING INTERVALS CHECKLIST

EACH 50 HOURS

BATTERY - - Check and Service. Check oftener (at least every 30 days) if operating in hot weather)

ENGINE OIL AND OIL FILTER - - Change engine oil and replace filter element. If optional oil filter is not installed changed oil and clean screen every four months even though less than 50 hours have been accumulated. Reduce periods for prolonged operation in dusty area, cold climates, or when short flights and long idle periods result in sludging conditions.

CARBURETOR AIR FILTER - -Clean or replace. Under extremely dusty conditions, daily maintenance of the filter is recommended

NOSE GEAR TORQUE LINKS - - Lubricate

EACH 100 HOURS

FUEL STRAINER - - Disassemble and clean

FUEL TANK SUMP DRAIN PLUGS - Remove and drain

FUEL LINE DRAIN PLUG - - Remove and drain

BRAKE MASTER CYLINDERS - -Check and Fill

SHIMMY DAMPENER - - Check and Fill

VACUUM SYSTEM OIL SEPARATOR (OPT) - - Clean

SUCTION RELIEF VALVE INLET SCREEN (OPT) - -Clean

EACH 500 HOURS

WHEEL Bearings - -Lubricate. Lubricate at first 100 hours and at 500 hours thereafter

VACUUM SYSTEM AIR FILTER (OPT) - - Replace filter element. Replace sooner if suction gauge reading drops to 4.6" Hg.

AS REQUIRED

NOSE GEAR SHOCK STRUT - - Keep inflated and filled

Gyro instrument air filters (OPT) - - Replace at instrument overhaul