



## SECTION V CARE OF THE AIRPLANE

---

If your airplane is to retain that new-plane performance and dependability, certain inspection and maintenance requirements must be followed. It is wise to follow a planned schedule of lubrication and preventive maintenance based on 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 other seasonal and periodic services.

### GROUND HANDLING

The airplane is most easily and safely maneuvered during ground handling by a tow-bar attached to the nosewheel. A tow-bar, supplied with the airplane, is located in the baggage compartment.

#### NOTE

When using the tow-bar, never exceed the nosewheel turning radius of 55° either side of center, or damage to the gear will result. Never use a tug for towing by nose gear. Refer to Cessna Model 310 Service Manual for towing procedures.

### MOORING YOUR AIRPLANE

Proper tie-down procedure is your best precaution against damage to your parked airplane by gusty or strong winds. To tie-down your airplane securely, proceed as follows:

- (1) Set the parking brake and install control wheel lock.
- (2) Tie strong ropes or chains (700 pounds tensile strength) to wing tie-down fittings.
- (3) Caster the nosewheel to the extreme left or right positions.
- (4) Tie a strong rope or chain (700 pounds tensile strength) to the tail skid.
- (5) Install pitot tube cover.

## WINDOWS AND WINDSHIELDS

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 which 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.

## PAINTED SURFACES

The painted exterior 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 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, hail, or sleet.

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 front 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 grease 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, 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 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 and 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 of 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 180 days, whichever comes first. This inspection is also performed for you by your Dealer 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 Aviation Regulations require that all airplanes have a periodic (annual) inspection as prescribed by the administrator, and performed by 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 with factory-approved procedures provides the highest type of service possible at lower cost.

## **OWNER FOLLOW-UP SYSTEM**

Your Cessna Dealer has an Owner Follow-up System to notify you when he receives information that applies to your Cessna. In addition, if you wish, you may choose to receive similar notification directly from the Cessna Service Department. A subscription card is supplied in your airplane file for your use, should you choose to request this service. Your Cessna Dealer will be glad to supply you with details concerning these follow-up programs, and stands ready through his Service Department to supply you with fast, efficient, low cost service.

## **PUBLICATIONS**

Included in your airplane file are various manuals which describe the operation of the equipment in your airplane. These manuals, plus many other supplies that are applicable to your airplane, are available from your Cessna Dealer, and for your convenience, are listed below.

- \* OWNER MANUALS FOR YOUR  
AIRCRAFT  
ELECTRONICS - 300, 500 and 800 SERIES  
AUTOPILOT - NAV-O-MATIC 400 and 800
- \* SERVICE MANUALS AND PARTS CATALOGS FOR YOUR  
AIRCRAFT  
ENGINE AND ACCESSORIES  
ELECTRONICS - 300, 500 and 800 SERIES  
AUTOPILOT - NAV-O-MATIC 400 and 800
- \* COMPUTERS
- \* SALES AND SERVICE DEALER DIRECTORY
- \* DO'S AND DON'TS ENGINE BOOKLET

Your Cessna Dealer has a current catalog of all Customer Services Supplies that are available, many of which he keeps on hand. Supplies which are not in stock, he will be happy to order for you.

## **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 Federal Aviation Regulations to insure that all data requirements are met.

- A. To be displayed in the airplane at all times:
- (1) Aircraft Airworthiness Certificate (Form FAA-1362B).
  - (2) Aircraft Registration Certificate (Form FAA-500A).
  - (3) Airplane Radio Station License (Form FCC-404, if transmitter installed).
  - (4) Pilots Checklist.

B. To be carried in the airplane at all times:

- (1) Weight and Balance, and associated papers (latest copy of the Repair and Alteration Form, Form FAA-337, if applicable).
- (2) Airplane Equipment List.

C. To be made available upon request:

- (1) Airplane Log Book.
- (2) Engine Log Book.

#### NOTE

Cessna recommends that these items plus the Owner's Manual and the Cessna Model 310 Power 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 Servicing Intervals Checklist is included to inform the pilot when to have other items checked and serviced.

### DAILY

**FUEL TANK FILLERS** -- Service after each flight. Keep full to retard condensation in tanks. Refer to Servicing Requirements table on inside back cover for fuel specification, grade, and quantity.

**FUEL TANK DRAINS** -- Drain before first flight each day and after each refueling.

**FUEL STRAINER DRAINS** -- Drain about two (2) ounces of fuel from each fuel strainer before first flight each day and after refueling.

**OIL FILLER** -- When preflight check shows low oil level, service with aviation grade engine oil; SAE 50 above 40° F and SAE 10W30 or SAE 30 below 40° F. (Multi-viscosity oil with a range of 10W30

is recommended for improved starting in cold weather.) Detergent or dispersant oil conforming to Continental Motors Spec. MHS-24A is recommended but straight mineral oil may be used. The aircraft is delivered from the factory with straight mineral oil. Your Cessna Dealer can supply approved brands of detergent oil or mineral oil.

**TIRES** -- Check tires for proper inflation. Refer to Servicing Requirements table on inside back cover for proper tire pressure.

## **SERVICING INTERVALS CHECKLIST**

### **EACH 50 HOURS**

**BATTERIES** -- Check electrolyte level every 50 hours (at least every 30 days) or more often in hot weather.

**ENGINE OIL AND OIL FILTER** -- Change engine oil and replace filter element. If optional oil filter is not installed, change oil and clean screen every 25 hours. Change engine oil every fifty hours, or, every four months even though less than 50 hours have been accumulated. Reduce periods for prolonged operation in dusty areas, cold climates, or when short flights and long idle periods result in sludging conditions.

**INDUCTION AIR FILTER** -- Service every 50 hours, more often under dusty conditions.

### **EACH 100 HOURS**

**SHIMMY DAMPENER** -- Check and fill as required.

**BRAKE MASTER CYLINDERS** -- Check fluid level in reservoirs and fill as required through plugs on cylinder heads. Fill with hydraulic fluid (Red).

**SUCTION RELIEF VALVE** -- Remove breather and clean.

**HEATER FUEL FILTER** -- Remove and clean with unleaded gasoline.

**OIL SEPARATORS** -- Remove and clean.

**EACH 500 HOURS**

SHOCK STRUTS -- Check and fill as required.

VACUUM SYSTEM FILTER -- Replace.

WHEEL BEARINGS -- Lubricate. Lubricate at first 100 hours and each 500 hours thereafter.

**EACH 2 YEARS (IF AIRPLANE IS USED FOR IFR FLIGHT)**

STATIC SYSTEM -- Check for leak rate.

ALTIMETER -- Calibrate.