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INTRODUCTION TO SERVICING

The purpose of this section is to outline the requirements for maintaining the Model G58 in a condition equal to that of its original manufacture. This information sets the time intervals at which the airplane should be taken to a Hawker Beechcraft Corporation authorized outlet for periodic servicing or preventive maintenance.

The Title 14 Code of Federal Regulations place the responsibility for the maintenance of this airplane on the owner and operator, who must ensure that all maintenance is done by qualified mechanics in conformity with all airworthiness requirements established for this airplane.

All limits, procedures, safety practices, time limits, servicing and maintenance requirements contained in this handbook are considered mandatory.

Authorized Hawker Beechcraft Corporation outlets can provide recommended modification, service, and operating procedures issued by both FAA and Hawker Beechcraft Corporation, which are designed to get maximum utility and safety from the airplane.

If a question arises concerning the care of the Model G58, it is important that the airplane serial number be included in any correspondence. The serial number appears on the manufacturer's identification plate attached on the right just beneath the horizontal stabilizer.

PUBLICATIONS

The following publications for the Model G58 are available through Hawker Beechcraft Corporation authorized outlets.

1. Pilot's Operating Handbook and FAA Approved Airplane Flight Manual
2. Shop Manual
3. Parts Catalog
4. Service Bulletins
5. Various Inspection Forms
6. Electrical Wiring Diagram Manual
7. Avionics Wiring Diagram Manuals

The following information will be provided, at no charge, to the registered owner and/or operator of this airplane:

1. Reissues and revisions of the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.
2. Original issues and revisions of FAA Approved Airplane Flight Manual Supplements.
3. Original issues and revisions of Hawker Beechcraft Corporation Service Bulletins.

The above publications will be provided only to the owner and/or operator at the address listed on the FAA Aircraft Registration Branch List or the Hawker Beechcraft Corporation Domestic/International Owner's Notification Service List. Further, the owner and/or operator will receive only those publications pertaining to the registered airplane serial number. For detailed information on how to obtain "Revision Service" applicable to this handbook or other Hawker Beechcraft Corporation Service Publications, consult any Hawker Beechcraft Corporation Authorized Outlet or refer to the latest revision of Hawker Beechcraft Corporation Service Bulletin No. 2001.

AIRPLANE INSPECTION PERIODS

1. FAA Required Annual Inspection.
2. FAA Required 100-Hour Inspection (for airplanes operated for hire).
3. Hawker Beechcraft Corporation Recommended Inspection Guide.
4. Continuing Care Inspection Guide.
5. See “Recommended Servicing Schedule” and “Overhaul or Replacement Schedule” in this section for further inspection schedules.

NOTE

In event of any gear or flap extension at speeds above the respective normal extension speeds, inspect gear retract rods, gear doors and flaps, for damage or distortion before the next flight.

PREVENTATIVE MAINTENANCE THAT MAY BE ACCOMPLISHED BY A CERTIFICATED PILOT

1. A certificated pilot may perform limited maintenance. Refer to 14 CFR Part 43 for the items which may be accomplished.

NOTE

To ensure proper procedures are followed, obtain a Beech Baron Shop Manual before performing preventative maintenance.

2. All other maintenance must be performed by licensed personnel.

NOTE

Pilots operating airplanes of other than U.S. Registry should refer to the regulations of the registering authority for information concerning preventative maintenance that may be performed by pilots.

ALTERATIONS OR REPAIRS TO THE AIRPLANE

The FAA should be contacted prior to any alterations on the airplane to ensure that the airworthiness of the airplane is not violated.

NOTE

Alterations and repairs to the airplane must be made by properly licensed personnel.

WARNING

Use only genuine Hawker Beechcraft Corporation or Hawker Beechcraft Corporation approved parts obtained from Hawker Beechcraft Corporation approved sources, in connection with the maintenance and repair of Beechcraft airplanes.

Genuine Hawker Beechcraft Corporation parts are produced and inspected under rigorous procedures to ensure airworthiness and suitability for use in Beechcraft airplane applications. Parts purchased from sources other than Hawker Beechcraft Corporation, even though outwardly identical in appearance, may not have had the required tests and inspections performed, may be different in fabrication techniques

and materials, and may be dangerous when installed in an airplane.

Salvaged airplane parts, reworked parts obtained from non-Hawker Beechcraft Corporation approved sources, or parts, components, or structural assemblies, the service history of which is unknown or cannot be authenticated, may have been subjected to unacceptable stresses or temperatures or have other hidden damage, not discernible through routine visual or usual nondestructive testing techniques. This may render the part, component or structural assembly, even though originally manufactured by Hawker Beechcraft Corporation, unsuitable and unsafe for airplane use.

Hawker Beechcraft Corporation expressly disclaims any responsibility for malfunctions, failures, damage or injury caused by use of non-Hawker Beechcraft Corporation approved parts.

GROUND HANDLING

The three-view drawing in Section 1, GENERAL, shows the minimum hangar clearances for a standard airplane. Allowances must be made for any special radio antennas.

CAUTION

To ensure adequate propeller clearance, always observe recommended shock strut servicing procedures and tire inflation pressures.

TOWING

One person can move the airplane on a smooth and level surface using the hand tow bar furnished with the loose tools and equipment. Attach the tow bar to the tow pin on the nose gear lower torque knee. It is recommended to have someone in the airplane to operate the brakes.

CAUTION

Do not exert force on the propellers, control surfaces, or horizontal stabilizer. When towing with a tug, limit turns to prevent damage to the nose gear. Do not attempt to tow airplane backward by the tail tiedown ring. Do not tow when the main gear is obstructed by mud or snow. Also ensure the rudder lock is removed.

Care should be used when removing the tow bar to prevent damage to the lubrication fittings on the landing gear.

PARKING

The parking brake control is located just left of the elevator tab wheel on the pilot's subpanel. To set the parking brakes, pull control out and depress each toe pedal until firm. Push the control in to release the brakes.

CAUTION

Excessive pedal pressure may prevent releasing of the parking brake.

The parking brake should be left off and wheel chocks installed if the airplane is to remain unattended. Changes in ambient temperature can cause the parking brake to release or to exert excessive pressures.

TIE-DOWN

It is advisable to nose the airplane into the wind. Three tie-down lugs are provided; one on the lower side of each wing and a third at the rear of the fuselage.

1. Install the control locks.
2. Chock the main wheels, fore and aft.
3. Using nylon line or chain of sufficient strength, secure the airplane at the three points provided. DO NOT OVERTIGHTEN; if the line at the rear of the fuselage is excessively tight, the nose may rise and produce lift due to the angle of attack of the wings.
4. Release the parking brake.

If high winds are anticipated, a vertical tail post should be installed at the rear tie-down lug, and a tie-down line attached to the nose gear.

MAIN WHEEL JACKING

Individual main wheels may be jacked by placing a floor jack under the jacking point located under each axle.

CAUTION

Prior to jacking the airplane, ensure that an unbalanced fuel condition does not exist. Fuel should be distributed evenly in both wings to prevent an unbalanced condition which could cause the airplane to be unstable while on jacks.

1. Check the shock strut for proper inflation to prevent damage to the landing gear door by the jack adapter and to facilitate installation of the adapter.

NOTE

Persons should not be in or on the airplane while it is on a main wheel jack.

2. Insert the main wheel jack adapter into the main wheel axle.
3. A scissors-type jack is recommended for raising and lowering the wheel.
4. When lowering the wheel, exercise care to prevent compression of the shock strut, which would force the landing gear door against the jack adapter.

PROLONGED OUT OF SERVICE CARE

STORAGE

The storage procedures listed are intended to protect the airplane from deterioration while it is not in use. The primary objectives of these measures are to prevent corrosion and damage from exposure to the elements.

Flyable Storage (7 to 30 days) has been considered here. For more extended storage periods, consult the Beech Baron Shop Manual and Continental Service Bulletin M81-3 or later issue.

FLYABLE STORAGE (7 TO 30 DAYS)

MOORING

Place the airplane in a hangar. If the airplane cannot be placed in a hangar, tie down securely at the three tie-down points provided on the airplane. Do not use hemp or manila rope. It is recommended a tail support be used to lightly compress the nose strut and reduce the angle of attack of the wings.

ENGINE PREPARATION FOR STORAGE

Engines in airplanes that are flown only occasionally tend to exhibit cylinder wall corrosion much more than engines that are flown frequently.

Run engines at least five minutes at 1200 to 1500 rpm with oil and cylinder head temperatures in the normal operating range.

Check for correct oil level and add oil if necessary to bring level to full mark.

DURING FLYABLE STORAGE

WARNING

Before rotation of propeller blades, ascertain magneto/start switches are OFF, throttles are in the CLOSED position, and mixture controls are in the CUT OFF position. Always stand in the clear while turning the propellers.

Each seven days during flyable storage, the propellers should be rotated by hand. After rotating the engine six revolutions, stop the propeller 60° to 120° from the position they were in.

If at the end of 30 days, the airplane has not been removed from storage, the engines should be started and run. The preferred method is to fly the airplane for 30 minutes, and up to, but not exceeding normal oil and cylinder head temperatures.

FUEL CELLS

Fill to capacity to minimize fuel vapor and protect cell inner liners.

FLIGHT CONTROL SURFACES

Lock with internal locks.

GROUNDING

Static ground airplane securely and effectively.

PITOT TUBE

Install cover.

WINDSHIELD AND WINDOWS

Close all windows and window vents. It is recommended that covers be installed over windshield and windows.

PREPARATION FOR SERVICE

Remove all covers and tape, clean the airplane and give it a thorough inspection, particularly landing gear, wheel wells, flaps, control surfaces, and all openings.

Preflight the airplane.

EXTERNAL POWER

An external power receptacle is located on the outboard side of the left nacelle and accepts a standard AN-type plug. The airplane has a negative ground system. Exercise care when utilizing any external power source to avoid reversed polarity. An external power unit (APU) should be capable of delivering at least 300 amperes for starting. Serviceable batteries must be installed in the airplane. Starting with external power when the battery is dead is not recommended. The battery manufacturer warns against this, also, the battery will not recharge sufficiently for use if an emergency arises.

Before connecting any external power source, turn the Battery switch ON, and all Avionic/Electrical switches OFF to avoid damage due to electrical surges. If the external power source does not have a standard AN-type plug, check for polarity (negative ground) and connect the positive lead from the external power source to the center and aft external power receptacle posts. Connect the negative lead to the most forward external power receptacle post.

NOTE

If polarity is reversed, a diode in the coil circuit will prevent contactor operation.

CHECKING ELECTRICAL EQUIPMENT

Connect an auxiliary power unit as outlined above. Ensure that the current is stabilized prior to making any electrical or avionic equipment check.

CAUTION

If the auxiliary power unit has poor voltage regulation or produces voltage transients, the airplane electrical equipment connected to the unit may be damaged.

SERVICING

FUEL SYSTEM

FUEL CELLS

See the *Baron Maintenance Manual* for recommended fuel grades.

The standard 200 gallon capacity fuel system has a fuel filler cap in each wing box section and each wet wing tip and in each outboard wing leading edge. The optional 172 gallon capacity system has a filler cap in each outboard wing leading edge. Refer to Section 2, LIMITATIONS for the usable fuel in each system.

NOTE

To obtain the maximum capacity of the fuel system when the wet wing tips are installed, fill the fuel system from the wet wing tip tank filler caps.

CAUTION

Caution must be taken when the wet wing tip tanks are filled with fuel. DO NOT open the outboard wing leading edge filler cap, as fuel will exit from that opening. If this occurs, wash the fuel from the wing surface to prevent possible paint damage.

Ground the airplane with a static line before refueling and secure the filler caps immediately after filling. Before letting the airplane stand for several days, it is a good practice to fill the wing fuel system to ensure that the cell inner liners do not dry out and crack, allowing fuel to diffuse through the cell walls. Also, less moisture condensation will occur when fuel cells are full. If the cells are to be drained before storage, a coating of light engine oil should be sprayed or flushed onto the inner liners of the cells as a preservative.

NOTE

The 200 gallon fuel system should be filled from the wing leading edge filler cap when airplane must stand for several days. Check and fill to capacity at wet wing tip filler cap before flight if required for the mission.

The fuel fillers are equipped with spring-loaded anti-syphon valves which may restrict large fuel nozzles. Push the valve plate down carefully to fully insert filler nozzle.

FUEL DRAINS

Open each of the snap-type fuel drains daily to purge any water from the system. The two sump drains extend through the bottom of each wing. The fuel strainer in each wheel well is provided with a drain extending through the wheel well skin. Two additional flush-type fuel drains are located at the mid-

point, inboard lower surface of the wet wing tip fuel system (if installed). These tank drains should be purged daily with the drain wrench provided in the loose tools and accessories.

FUEL STRAINERS

To preclude the possibility of contaminated fuel, always cap any disconnected fuel lines or fittings. The fuel strainer in each wheel well should be inspected and cleaned with solvent at regular intervals. The frequency of inspection and cleaning will depend upon service conditions, fuel handling cleanliness, and local sand and dust conditions. At each 100-hour inspection, the strainer plug should be removed from the fuel injection control valve and the fuel injection control valve screen washed in fresh cleaning solvent. After the strainer plug has been reinstalled and safetied, the installation should be checked for leakage. A leading edge sump strainer, accessible through an access door on the bottom of the wing, should be cleaned periodically.

OIL SYSTEM

The engines are equipped with a wet sump, pressure type oil system. Each engine sump has a capacity of 12 quarts. The oil system may be serviced through access doors in the engine cowling. A calibrated dipstick attached to the filler cap indicates the oil level. Due to the canted position of the engines, the dipsticks are calibrated for either right or left engines and are not interchangeable.

The oil and oil filter should be changed every 100 hours under normal operating conditions. The oil drain is accessible through the cowl flap opening. The engines should be warmed to operating temperature to assure complete draining of the oil.

The engine manufacture specifies Ashless Dispersant Oils only. However, for the first 20 hours, MIL-C-6529, Type II Multi viscosity 20W-50 Corrosion-Preventive Oil is used. It is recommended that this oil be removed and the oil filter changed at 20 hours of engine operation (not to exceed 25 hours). If oil con-

sumption has not stabilized at this point, MIL-L-6082 Mineral Oil may be used.

After the break-in period, when oil consumption has stabilized, MIL-L-22851 Ashless Dispersant Oil should be used. Oils must meet the latest revision of Teledyne Continental Motors Corporation Specification MHS-24B or current applicable Teledyne Continental Service Bulletin. Refer to APPROVED ENGINE OILS in this section for a list of approved oils.

CAUTION

Do not exceed 25 hours of operation with factory break-in oil (MIL-C-6529, Type II, Multi viscosity, 20W-50 Corrosion-preventative). When changing to MIL-L-22851 Ashless Dispersant oil, change the oil and oil filter as previously described.

Failure to remove the corrosion-preventative oil and replace the oil filter within the time interval specified may cause varnish deposits to form on the pistons and cylinder walls and deteriorate the filter element.

Ambient Air Temperature	Single Viscosity Grade Oil	Multiviscosity Grade Oil
Below 5°C	SAE 30 (Max.)	15W-50,20W-50
Above 5°C	SAE 50 (Min.)	15W-50,20W-50, 25W-60

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When operating temperatures overlap indicated ranges, use the lighter grade of oil.

BATTERIES

The batteries are installed in dedicated compartments below the nose floor boards. Hinged battery access panels permit easy access. The batteries are lead acid non-spillable valve regulated design rated at 24 VDC and 13.6 ampere-hour.

Refer to the *Baron Maintenance Manual* for battery maintenance service instructions.

TIRES

An inflation pressure of 52 to 56 psi should be maintained on the 6.50 x 8 main wheel tires. The 5.00 x 5 nose wheel tire should be inflated to 55-60 psi. Maintaining recommended tire inflation will minimize tread wear and aid in preventing tire failure caused from running over sharp stones and ruts. When inflating tires, visually inspect them for cracks and breaks, or evidence of internal damage.

CAUTION

Hawker Beechcraft Corporation cannot recommend the use of recapped tires. Recapped tires have a tendency to swell as a result of the increased temperature generated during takeoff. Increased tire size can jeopardize proper function of the landing gear retract system, with the possibility of damage to the landing gear doors and retract mechanism.

NOTE

While Hawker Beechcraft Corporation cannot recommend the use of recapped tires, tires retreaded by an FAA-approved repair station with a specialized service-limited rating in accordance with the latest revision of TSO-C62 may be used.

SHOCK STRUTS

CAUTION

DO NOT taxi with a flat shock strut.

The shock struts are filled with dry air or nitrogen and hydraulic fluid. The same procedure is used for servicing both the main and the nose gear shock struts. To service a strut, proceed as follows:

1. Jack the airplane, remove the air valve cap, depress the valve core, and allow the strut to fully deflate.

WARNING

Do not unscrew the air valve assembly until all air pressure has been released or it may be blown off with considerable force, causing injury to personnel or damage to equipment.

2. Carefully remove the air valve assembly.
3. Compress the strut and fill through the air valve assembly hole with hydraulic fluid (approximately one pint) until the fluid overflows.
4. Cycle the strut from full extension to compressed and refill. Repeat until no more fluid can be added to the strut in the compressed position.

NOTE

Cycling of the shock strut is necessary to expel any trapped air within the strut housing.

5. Install the air valve assembly.
6. With the airplane resting on the ground and the fuel cells full, inflate the nose gear strut until 3-1/2 to 3-3/4 inches of the piston are exposed and inflate the main gear struts until 3 inches of the piston are exposed. Rock the airplane gently to prevent possible binding of the piston in the barrel while inflating.

NOTE

It is recommended that the nose strut inflation dimension and the tire inflation pressures be carefully adhered to. Properly inflated tires and struts reduce the possibility of ground damage occurring to the propellers. Exercise caution when taxiing over rough surfaces.

7. The shock strut piston must be clean. Remove foreign material from the exposed piston with a soft cloth moistened with hydraulic fluid.

CAUTION

If a compressed air bottle containing air under extremely high pressure is used, exercise care to avoid over-inflating the shock strut.

WARNING

NEVER FILL SHOCK STRUTS WITH OXYGEN.

SHIMMY DAMPER

The shimmy damper has a reservoir of fluid carried in the piston rod. Two coil springs installed in the piston rod keep fluid in the shimmy damper under pressure. As fluid is lost through leakage it is automatically replenished from the reservoir until the reservoir supply is exhausted.

To check the fluid in the shimmy damper, insert a wire approximately 1/32 inch in diameter through the hole in the disc at the aft end of the piston rod until it touches the bottom of the hole in the floating piston. Mark the wire, remove it, and measure the depth of the insertion. When the shimmy damper is full, insertion depth is 2-3/16 inches; when empty, 3-1/16 inches.

NOTE

The measuring wire should be inserted in the hole in the floating piston rather than against the piston face, to give a more accurate reading. To determine if the wire is inserted in the hole in the floating piston, insert the wire several times, noting insertion depth each time. When the wire is inserted in the hole, the depth will be about 1/4-inch greater than when it rests against the piston face.

When the shimmy damper is found empty or nearly empty, it should be refilled. See Beech Baron Shop Manual.

BRAKES

The brake hydraulic fluid reservoir is accessible through the nose baggage compartment. A dipstick is attached to the reservoir cap. Refer to the *Baron Maintenance Manual* for hydraulic fluid specification.

The brakes require no adjustments since the pistons move to compensate for lining wear. The brake linings should be replaced before the metal back plate is exposed through the abrasive surface. The minimum allowable thickness for the abrasive surface is .010 inch. The brake disc should be replaced when its thickness measures .330 inch.

INDUCTION AIR FILTERS

The filters should be inspected for foreign matter at least once during each 50-hour operating period. In adverse climatic conditions, or if the airplane is stored, preflight inspection is recommended.

To Remove and Clean the Filter:

1. Remove the access plate in the top of the engine cowling.
2. Remove the filter and clean as noted by the manufacturer's instructions.
3. Reinstall the filter and the plate.

PROPELLERS

The daily preflight inspection should include a careful examination of the propeller blades for nicks and scratches.

Propeller operation, servicing, and maintenance instructions are contained in the propeller owner's manual furnished with the airplane.

WARNING

When servicing a propeller, always make certain that the ignition switch is off and that the engine has cooled completely. WHEN MOVING A PROPELLER, STAND IN THE CLEAR; THERE IS ALWAYS SOME DANGER OF A CYLINDER FIRING WHEN A PROPELLER IS MOVED.

MINOR MAINTENANCE

RUBBER SEALS

To prevent sticking of the rubber seals around the windows, doors, and engine cowling, the seals should be coated with Oakite 6 compound. The compound is non injurious to paint and can be removed by employing normal cleaning methods.

HEATING AND VENTILATING SYSTEM

The heater fuel pump filter in the nose wheel well should be removed and cleaned after each 100 hours of airplane operation. Remove the filter by turning the base of the pump counterclockwise. Wash the filter in fresh cleaning solvent (see the *Baron Maintenance Manual*) and dry with compressed air.

The iris valve at the heater blower inlet should be lubricated occasionally with molybdenum disulfide (see *the 55/58/G58 Baron Shop Manual*). The valve should never be lubricated with oil or any liquid lubricant which would collect dust.

Do not reset the overheat circuit breaker until a thorough inspection of the system has determined the cause and the malfunction has been corrected.

ALTERNATORS

Since the alternator and electronic voltage regulator are designed for use on only one polarity system, the following precautionary measures must be observed when working on the charging circuit, or serious damage to the electrical equipment will result:

1. When installing a battery, make certain that the ground polarity of the battery and the ground polarity of the alternator are the same.
2. When utilizing an external power source, ensure polarity of the external power source and polarity of the airplane electrical system is maintained (Negative to Negative; Positive to Positive).

3. Do not operate an alternator on an open circuit. Be sure all circuit connections are secure.
4. Do not short across or ground any of the terminals on the alternator or electronic voltage regulator.
5. Do not attempt to polarize an alternator.
6. Do not charge batteries while installed in the airplane. Refer to the *Baron Maintenance Manual* for battery removal and charging procedures.

MAGNETOS

Ordinarily, the magnetos will require only occasional adjustment, lubrication, and breaker point replacement. This work should be done by a Hawker Beechcraft Corporation Authorized Outlet.

WARNING

To be safe, treat the magnetos as hot whenever a switch lead is disconnected at any point; they do not have an internal automatic grounding device. Otherwise, all spark plug leads should be disconnected or the cable outlet plate on the rear of the magneto should be removed.

CLEANING

EXTERIOR PAINTED SURFACES

CAUTION

Polyester urethane finishes undergo a curing process for a period of 30 days after application. Wash uncured painted surfaces with a mild non-detergent soap (MILD detergents can be used on urethane finishes) and cold or lukewarm water only. Use soft cloths, keeping them free of dirt and grime. Any rubbing of the surface should be done gently and held to a minimum to avoid damaging the paint film. Rinse thoroughly with clear water. Stubborn oil or soot deposits may be removed with automotive tar removers.

Prior to cleaning, cover the wheels, making certain the brake discs are covered. Attach the pitot covers securely, and plug or mask off all other openings. Be particularly careful to mask off all static air buttons before washing or waxing. Use special care to avoid removing lubricant from lubricated areas.

Hand washing may be accomplished by flushing away loose dirt with clean water, then washing with a mild soap and water, using soft cleaning cloths or a chamois. Avoid harsh, abrasive, or alkaline soaps or detergents which could cause corrosion or scratches. Thorough clear-water rinsing prevents buildup of cleaning agent residue, which can dull the paint's appearance. To remove oily residue or exhaust soot, use a cloth dampened with an automotive tar remover. Wax or polish the affected area if necessary.

WARNING

Do not expose control surface trim tab hinge lines and their pushrod systems to the direct stream or spray of high-pressure, soap and water washing equipment. Fluid dispensed at high pressure could remove the protective lubricant, allowing moisture from heavy or prolonged rain to collect at hinge lines, and then to freeze at low temperatures. After high pressure or hand washing, and at each periodic inspection, lubricate trim tab hinge lines and trim tab pushrod end fittings (Brayco 300 per Federal Specification VV-L-800 preferred). See the *Baron Maintenance Manual.*

When using high-pressure washing equipment, keep the spray or stream clear of wheel bearings, propeller hub bearings, etc., and openings such as pitot tubes, static air buttons, and battery and avionic equipment cooling ducts, which should be securely covered or masked off. Avoid directing high-pressure sprays toward the fuselage, wings, and empennage from the rear, where moisture and chemicals might more easily enter the structure, causing corrosion damage to structural members and moving parts.

CAUTION

When cleaning landing gear areas with solvent, especially if high-pressure equipment is used, exercise care to avoid washing away grease from landing gear components. After washing the landing gear areas with solvent, lubricate all lubrication points, or premature wear may result.

During the curing period, do not make prolonged flights in heavy rain or sleet, and avoid all operating conditions which might cause abrasion or premature finish deterioration.

CAUTION

Do not apply wax, polish, rubbing compound or abrasive cleaner to any uncured painted surface. Use of such items can permanently damage the surface finish. Also, waxes and polishes seal the paint from the air and prevent curing.

Waxing of polyester urethane finishes, although not required, is permitted; however, never use abrasive cleaner-type waxes, polishes, or rubbing compounds, as these products cause eventual deterioration of the characteristic urethane gloss.

For waxing, select a high quality automotive or aircraft waxing product. Do not use a wax containing silicones, as silicone polishes are difficult to remove from surfaces. A buildup of wax on any exterior paint finish will yellow with age; therefore, wax should be removed periodically. Generally, aliphatic naphtha (see the *Baron Maintenance Manual*) is adequate and safe for this purpose.

NOTE

Before returning the airplane to service, remove all maskings and coverings, and relubricate as necessary.

LANDING GEAR

After operation on salty or muddy runways, wash the main gear and nose landing gears with low-pressure water and a mild detergent as soon as practical. Rinse with clear water and blow dry with low-pressure air immediately after rinsing. Relubricate as necessary.

WINDSHIELD AND WINDOWS

The windshield and plastic windows should be kept clean and waxed. To prevent scratches, wash the windows carefully with plenty of soap and water, using the palm of the hand to dislodge dirt and mud. Flood the surface with clean water to rinse away dirt and soap. After rinsing, dry the windows with a clean, moist chamois. Rubbing the surface of the plastic with a dry cloth should be avoided, as it builds up an electrostatic charge on the surface which attracts dust particles.

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

After a thorough cleaning, waxed the surface with a good grade of commercial wax that does not have an acrylic base. 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.

SURFACE DEICE BOOTS

The surfaces of the deice boots should be checked for indication of engine oil after servicing and at the end of each flight. Any oil spots that are found should be removed with a non-detergent soap and water solution. Care should be exercised during cleaning. Avoid scrubbing the surface of the boots as this will tend to remove the special graphite surfacing. The deice boots are made of soft, flexible stock which may be damaged if gasoline hoses are dragged over the surface of the boots or if ladders and platforms are rested against them.

ENGINE

Clean the engine with a neutral solvent. Spray or brush the fluid over the engine, then wash off with water and allow to dry.

CAUTION

Do not use solutions which may attack rubber or plastic. Protect engine switches, controls and seals; fluid applied at high pressure can unseat seals, resulting in contamination of the sealed systems.

INTERIOR

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. Do not 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 a 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 panels, 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 isopropyl alcohol. Volatile solvents, such as mentioned in the article on care of plastic windows should never be used since they soften and craze the plastic.

CONSUMABLE MATERIALS

For a complete list of Consumable Materials refer to the *Baron Maintenance Manual.*

APPROVED ENGINE OILS

COMPANY	BRAND NAME
BP Oil Corporation	BP Aero Oil
Castrol Ltd (Australia)	Castrolaero AD Oil
Continental Oil Co.	Conoco Aero S
Delta Petroleum Co.	Delta Avoil
Exxon Company, USA	Exxon Aviation Oil EE
Gulf Oil Corporation	Gulfpride Aviation AD
Mobil Oil Co.	Mobil Aero
Penzoil Company	Penzoil Aircraft Engine Oil
Philips Petroleum Co.	Philips 66 Aviation Oil Type A X/C Aviation Multiviscosity SAE 20W50 X/C Aviation Multiviscosity SAE 20W60
Quaker State Oil and Ref.	Quaker State AD Aviation Engine Oil
Red Ram Ltd (Canada)	Red Ram X/C Aviation Oil 20W50
Shell Oil Co.	Aeroshell Oil W SAE 15W50
	Aeroshell Oil W
Sinclair Refining Co.	Sinclair Avoil
Texaco, Inc.	Texaco Aircraft Engine Oil Premium AD
Union Oil of California	Union Aircraft Engine Oil HD

This chart lists all oils which were certified as meeting the requirements of Teledyne Continental Motors Corporation Specification MHS-24 at the time this handbook was published. Any other oil which conforms to this specification may be used.

LAMP REPLACEMENT GUIDE

Anticollision Light, Flashing. . . . . 34-0226010-91 (Whelen)
Cabin Light 303
Close Focus Reading Light. 303
Compass Light 327
Flap Position Indicator Light 327
Ice Light A-7079B-24
Landing Gear Position Light 327
Landing Light 4596
Map Light WL41069R
Navigational Light,
Tail w/Strobe . . . . . 34-0428070-64 (Whelen)
Navigation Light, Wing . . . . . .A7512-24 (Grimes)
Nose Baggage Light 307
Reading Light 303
Step Light 1495
Tab Position Indicator Light 334
Taxi Light 4596

SUPPLEMENTS

NOTE

The supplemental data contained in this section is for equipment that was delivered on the airplane including standard optional equipment that was available, whether it was installed or not. Airplane Flight Manual Supplements for equipment for which the supplier obtained a Supplemental Type Certificate were included as loose equipment with the airplane at the time of delivery. These and other Airplane Flight Manual Supplements for other equipment that was installed after the airplane was delivered new for the factory should be placed in this section.

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Beechcraft

LOG OF SUPPLEMENTS

Model G58 Baron

Pilot's Operating Handbook and FAA Approved Airplane Flight Manual

P/N 58-590000-67

March, 2017

FAA Supplement must be in the airplane for all flight operations when subject equipment is installed.

PART NUMBER	SUBJECT	REV NO.	DATE
36-590002-77	Airplanes Registered in Brazil	1	Jul, 2008
36-590002-89	Mode S Enhanced Surveillance Transponder (For Airplanes Which Have Mode S Enhanced Surveillance Transponder Installed at the Factory)		Apr, 2009
58-590000-73	Air Conditioning System	1	Jan, 2007
58-590000-77	Airplanes Operating on the Argentine Register (Non-FAA Approved)		Dec, 2007
58-590000-85	Airplanes Registered in Canada		Sep, 2010
58-590000-0091	Airplanes Equipped with AC Systems LLC Air Conditioning System		Mar, 2017