which has an AQ-ATF identification number followed by suffix "A" embossed in lid of container. Fluids not identified by suffix "A" are not recommended. To accurately check fluid level of transmission, car must be driven (shifting transmission into all driving ranges) until transmission is at normal opertating temperature. Fluid level should then be at FULL mark on gauge rod with transmission in Park (P) position. If oil level is checked without following these instructions, a false fluid level maybe indicated.

### AS REQUIRED

### REAR WHEEL BEARINGS

Rear wheel bearings need not be lubricated. Whenever axle shafts are removed, it is advisable, however, to inspect rear wheel bearings and oil seals. Replace seals if they appear worn.

Visually check linings and adjust brakes.

# SPEEDOMETER & TACHOMETER DRIVE CABLES

The speedometer and tachometer drive cables are factory-lubricated with special greases and normally require no further service. If the cable becomes noisy, however, lubricate with any good grade of speedometer cable grease.

APOLLO INTERNATIONAL CORPORATION 690 Arroyo Parkway Pasadena, California APOLLO

OWNER'S MANUAL (TEMPORARY)

#### INSTRUMENTS

### Gauges:

Tachometer - although Tach reads to 8000 rpm for use with optional engine, standard Buick 300 c.i. engine should not be revved above 5500 rpm or serious damage may occur. Speedometer - Oil Temperature (Olio) normal range 85 to 120 (Centigrade). Oil Pressure-(Olio) normal range 20 to 30.

Ammeter (Ampere) normal range plus 15. Water Temperature (Acqua) normal range 75 to 100 (Centigrade).

## Switches (left to right):

Dash Lights - turn to vary brightness. Headlights and Parking Lights Ignition - turn right to start - turn to left for accessories.

Windshield Wipers

Heater Fan - turn to vary speed.

Fresh Air Intake (A) - pull for fresh air. Heater (R) - pull for warm air.

#### BREAK-IN-PERIOD:

Manufacturer recommends that for the first 500 miles, your car should not be driven faster than 50 mph.

## FUEL SELECTION:

The Apollo Buick 300 c.i. engine is designed to operate on Ethyl or "Premium" grade gas.

#### HEATER:

To admit fresh air to cockpit, pull Fresh Air Intake (A) knob. For warm air, pull Heater (R) knob and Fresh Air Intake knob. For either fresh or warm air, make sure the cockpit vent is open. For Defroster to operate at maximum efficiency, close heater door vent completely (keeping Heater knob & Fresh Air knob pulled all the way out). When vent is half open half the air is directed through the defroster & half through the cockpit heater outlet.

### DRIVING ON SNOW OR ICE

It is strongly recommended that snow tires or special Apollo tire chains be used instead of conventional tire chains for driving on snow or ice, due to the restricted clearance between wheels and wheel wells in the rear, and the resulting possibility of damage.

### GENERAL INFORMATION:

Tires - the Pirelli Cinturato tires provided with your Apollo are the finest tires made. The rear tires should be inflated to 30 lbs. The front tires should be inflated to 25 lbs.

Brakes - (Rear) the braking system incorporates heavy duty drums with special heavy duty Lasco Mountain Master brake linings. The brake shoes are special machined. (Front) The front brakes are composed of Dunlap/Bendix Discs. The brakes are individually balanced and machined to the peak of perfection, to insure safe smooth braking.

Front Suspension Geometry - Castor is 8° and toe-in is 1/16 inch.

Cooling System - your Apollo's radiator is filled with two gallons of permanent antifreeze at the factory. The radiator is of a sealed pressure type and the pressure must be released before removing radiator cap. Hot Weather Driving - the Buick 300c.i. engine is designed to operate at somewhat higher temperature than most engines. Therefore, in sustained driving during hot weather, it is not unusual for the oil temperature to register 130° and water temperature 100° for prolonged periods. In extremely hot weather it is recommended that speed be kept under 70 mph and that the radiator be checked frequently for loss of coolant. Any sudden rise in Oil or Water temperatures without obvious cause is an indication of serious trouble and continued operation of your car may result in damage.

WASHING & POLISHING - your car should never be washed in an "automatic car wash" because of the danger of the fine finish being injured by mechanical brushing. Similarly, a mechanical buffer should never be used in waxing or polishing, unless by a highly-skilled person.

PUTTING CAR ON HOIST - care must be taken in putting the car on a hoist to insure that the arms or ramp of the hoist are anchored securely under the main frame rails, and not touching any part of the body.

### ENGINE OIL

Initial Oil Change - the oil with which your crankcase was filled at the factory is a high quality oil meeting General Motors Standard G.M. 4745M. It is, therefore, no longer necessary to drain the original oil from the engine after 1000 miles. The original factory oil should be retained for the normal change interval, check the oil level each time you purchase gasoline, since most new engines use an increased amount of oil until the piston rings are properly seated.

## ANTICIPATED LOWEST TEMPERATURE

Above Freezing (plus 32 degrees F)

Below Freezing (plus 32 degrees F) and above (0 degrees F)

Below 0 degrees F

SAE 20W

SAE 10W

SAE 5W

NOTE: For prolonged high-speed driving (above 60 mph) SAE 30W is recommended.

## EVERY 3000 MILES

Chassis: Wipe dirt from lubrication fittings, then apply a good grade of water resistant chassis lubricant. Follow the standard Buick 300 c.i. lubrication chart. When the car is placed on a hoist, make sure the arms of the hoist make contact with the main frame rails only and do not touch any part of the body.

### ENGINE OIL

Drain oil and refill with grade as recommended above.

### ENGINE

Apply a good grade of water resistant chassis lubricant to the tachometer drive on the rear of the generator. <u>CAUTION!</u> Use a hand grease gun only, for pressurized guns may damage the tachometer drive case.

### FOUR-SPEED TRANSMISSION

Check oil level at filler plug. Maintain level using SAE 90W mineral oil gear lubricant. Do not use lubricants containing extreme pressure additives. Seasonal or periodic draining and flushing is not required.

### AUTOMATIC TRANSMISSION

Check transmission oil level with transmission oil at normal operating temperature, selector lever in Park (P) position, and engine idling. If level is below ADD mark on gauge rod, add oil but do not fill above FULL mark. Distance between ADD and FULL marks represents one pint. Use oil specified under "Every 25,000 miles," below.

## REAR AXLE

Check level at filler plug. Maintain level between filler plug opening and ½ inch below using multi-purpose Hypoid Lubricant meeting requirements of MIL-L-2105-B. The use of incorrect lubricant can cause chattering on turns.

## LIMITED-SLIP DIFFERENTIAL

Requires special lubrication properties and must use only special limited-slip lubricant or equivalent meeting requirements MIL-L-2105-B The use of incorrect lubricant can cause chattering on turns.

### STEERING BOX

Seasonal or periodic change of lubricant is unnecessary. Maintain level using Multi-Purpose Gear Lubricant.

#### BATTERY

Add water to bring level to ledge at bottom slot in well. Do not overfill!

### MASTER CYLINDER

Maintain fluid level 1/8 inch below top of filler opening. Ordinarily, fluid level need only be checked when brakes are adjusted or if there is any evidence of leakage. Never use reclaimed fluid, any mineral oil or fluid inferior to SAE Standard 70-R-1.

## AIR CONDITIONING

Check system for proper charge of refrigerant. Every Spring, your Dealer should check the entire system.

# EVERY 6000 MILES

#### OIL FILTER

It is recommended that the oil filter be changed at the first 6000 miles or six months, then every 6000 miles or six months thereafter, whichever occurs first. After new filter is installed, do not accelerate engine beyond normal idle until oil pressure is indicated. NOTE: In extremely dusty areas, more frequent filter changes are desirable.

## HOOD LATCH MECHANISM

Lightly coat hood latch lever & pilot with grease.

# DOOR LOCKS AND STRIKERS

Apply stick-type lubricant to the mating surfaces of the rotary lock bolt and striker of each door.

## EVERY 12,000 MILES

## ENGINE AIR CLEANER ELEMENT

Every 12,000 miles remove element and wash in a suitable solvent such as kerosene. Squeeze, but do not erring, to remove solvent. Saturate with 10W-30W oil & squeeze again to leave element damp-dry. Install on screen.

## TUNE-UP

Engine tune-ups should be done by your Authorized Apollo Dealer.

### FRONT WHEEL BEARINGS

Pack front wheel bearings with a good quality water-resistant, high temperature-resistant wheel bearing grease. WARNING! Do not overfill bearings, as excessive lubricant may be forced through seals and get on brake linings.

## PROPELLER SHAFT SLIP SPLINE

Use a Multi-Purpose No. 1 grade of waterresistant lubricant.

### FAN BELT

Inspect for cracks and proper tension.

## FUEL FILTER

It is recommended that element be replaced every 12,000 miles or twelve months, whichever occurs first. More frequent replacement may be necessary if contaminants have entered the fuel system.

## EVERY 25,000 MILES

# AUTOMATIC TRANSMISSION

At 25,000 mile intervals, oil pan should be removed & cleaned. The oil strainer should be replaced and transmission re-filled with fresh oil. Transmission must not be flushed when oil is changed. Use Special Buick oil or any Automatic Transmission Fluid, Type A,

which has an AQ-ATF identification number followed by suffix "A" embossed in lid of container. Fluids not identified by suffix "A" are not recommended. To accurately check fluid level of transmission, car must be driven (shifting transmission into all driving ranges) until transmission is at normal opertating temperature. Fluid level should then be at FULL mark on gauge rod with transmission in Park (P) position. If oil level is checked without following these instructions, a false fluid level maybe indicated.

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