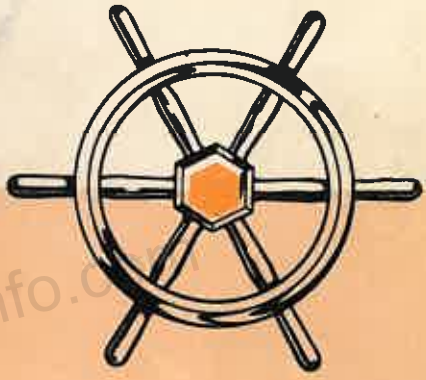
your

1957



PACKARD

Clipper

SERVICE POLICY

With delivery of your car you receive a Service Policy signed by the dealer who sold you the car. Through this Service Policy he provides two inspection and adjustment services, the first at about 1000 miles or after 30 days of operation, and the second within 90 days or 4000 miles.

The Warranty on your car, given by your dealer to you as a part of your Service Policy, is printed in full on the inside back cover of this Owner's Guide. Parts to be replaced under this Warranty can be replaced, without charge for material or labor, by any authorized Packard Clipper dealer in the United States and Canada. The Service Policy, properly signed by your dealer, will serve to identify your car to any other authorized Packard Clipper dealer. You should, therefore, carry your Service Policy with you for presentation when necessary.

Should you have a question about service while traveling, always get in touch with the nearest Packard Clipper dealer for advice and assistance.

Your New 1957 Packard Clipper

Your new '57 Packard Clipper has been designed and built to reflect your pride of ownership in every detail. It is a fine car through and through in keeping with the Studebaker-Packard tradition of proud craftsmanship.

This little book has been written to acquaint you with your new Packard Clipper and its operation, and to explain its many fine features in detail. We believe you will find it interesting reading and the suggestions it contains will help you get more pleasure from your car. And, for the kind of expert service that insures motoring pleasure mile after mile, rely on your Packard Clipper dealer. He is the man most interested in you and your car.

In ***this book we*** *discuss conveniences* ***and units that are standard*** *equipment on* ***some*** *models* ***and*** *optional* ***on others, that are*** *optional* ***on*** *all models,* ***and*** *in* ***some*** *cases, equipment that* ***is*** *available* ***on*** *some models but* ***not*** *on* ***others.*** *Therefore, mention* ***of some*** *item of equipment is* ***not to*** *be* ***taken as*** *making that item standard* ***equipment on*** *any given model* ***except as was*** *explained* ***to you*** *when* ***you*** *purchased the* ***car.***

TABLE OF CONTENTS

REGISTRATION INFORMATION

ENGINE NUMBER

The engine number is on a machined pad at the upper left front of the cylinder block.
Record it here.....

SERIAL NUMBER

The serial number is on the plate attached to the left front door hinge pillar post.
Record it here.....

BODY NUMBER

The body number is on a plate attached to the dash under the hood.
Record it here.....

KEY NUMBERS

IGNITION AND FRONT DOOR—This number is on a metal tag furnished with the keys.
Record it here.....

PACKAGE COMPARTMENT AND TRUNK—This number is on the compartment key or on the lock housing.
Record it here.....

LICENSE DATA

Model Number	57L
Number of Cylinders	8
Cylinder Bore	3-9/16" (91 mm.)
Stroke	3⅝" (92 mm.)
Piston Displacement (cu. in.)	289 (4720 cc.)
Horsepower (NACC or RAC rating)	40.6

Weight—See your dealer. Weight depends on extra equipment you have selected and other factors.

Let's Get Off To A Good Start

A "run-in" schedule gives new parts a chance to heat up and cool off, to rub against one another until they work smoothly as a team. Besides moving engine parts, the transmission, rear axle and differential, steering linkage parts, and brakes must also "wear in" on a new car.

For best run-in results:

1. Drive under 50 miles (80 km.) an hour through the first 500 miles (800 km.).
2. Drive under 60 miles (95 km.) an hour through the second 500 miles (800 km.).
3. Change the engine oil *for sure* at the end of the first 1000 miles (1600 km.).
4. Let the engine warm to normal operating temperature at low speeds before stepping up to 50 or 60 miles (80 or 95 km.) an hour.
5. While driving during the run-in period, don't hold steady mile after mile at 50 or 60 miles (80 or 95 km.) an hour — give the engine a break. Drop down to 30 or 40 miles (45 or 65 km.) an hour every now and then. Driving at *varied* speeds is the important thing. Sustained creeping is just as harmful as sustained high speed during break-in driving. And, of course, never resort to "jack-rabbit" starts or slow speed lugging.

The Right Gasoline

The kind of gasoline you use in your new car has much to do with its performance, economy, and service.

The engine is supercharged and you must use a premium-grade gasoline marketed by a reputable company. Consistent use of regular-grade gasoline may cause severe damage to the engine and, under such circumstances, will void the warranty.

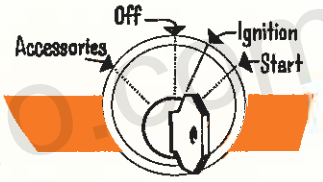
Note — In case of emergency, where regular fuel must be used temporarily, the owner is cautioned to avoid operation at higher speeds and loads until premium fuel can again be obtained.

READY FOR TAKE-OFF!

Your Keys

There are two kinds of keys and you have two of each kind. The hexagonal-headed key (with the metal tag) is for the ignition and door locks. Record the tag number on page 3 of this book, then throw away the metal tag.

The round-headed key is for the package compartment and trunk lid locks.



Starter-Ignition Switch

Turning the ignition key just to the spring-loaded stop at the right completes circuits to the ignition system, heat indicator, fuel gage, radio, and any other accessories wired through the ignition switch. Turning the key to the left completes these same circuits except for ignition. Turning the ignition key all the way to the right against the spring pressure operates the starter.

Starting

Before you start the engine, be sure the parking brake is applied and the transmission is in neutral. If you have automatic transmission, the selector lever must be at the P or N position (the starter won't operate with the selector lever at D, L, or R).

If the Engine is Cold . . .

Before turning on the ignition press the accelerator pedal down firmly all the way to the floor board. Let up on it entirely. Do not repeat this. Never for any reason pump the accelerator. The single movement to the floor board sets the automatic choke mechanism for easy starting when the engine is cold.

Now, turn the key all the way clockwise and hold it until the engine starts. Then release the key; it will spring back to the "ignition" position.

If the Engine is Already Warm . . .

Press the accelerator about one-third the way to the floor board and hold it there while you operate the starter. As soon as the engine starts, release the accelerator. If, after a few seconds, the engine does not start, hold the accelerator fully against the floor board and operate the starter. As soon as the engine starts and as it picks up speed, release the accelerator.

Carbon monoxide is a deadly gas. **It has no odor, no** taste, no color. **It is in** the exhaust fumes **of all gaso**line **engines.** Never **start an** engine in **a** closed garage. Always **open** the **doors wide** before **starting the** engine. Keep them **open wide as long as** the **engine is** running.

HOW TO WARM IT UP

Proper warm-up has much bearing on long engine life and economical operation. High speed or fast getaway before the engine reaches normal heat range is not good for the moving parts inside.

Your car's engine works best when the heat indicator shows in the normal range.

The automatic choke keeps the engine running fast enough to avoid a chance stall while the engine is warming up. Sometimes this may cause the engine to "race." If it does, quickly press down and release the accelerator.

Before driving notice the oil pressure indicator. Be sure that the indicator light is out. If the indicator light remains on, the engine should be stopped immediately and the cause of low oil pressure determined.

Release the parking brake, and you're ready to go, shifting and driving in the usual way.

If your car has automatic transmission just select the driving range you want and away you go. (See page 12 for more information about the operation of overdrive and automatic transmission).

SUPPOSE IT WON'T START

Sometimes — for example, if the battery is dead — you need help to start. Here's how:

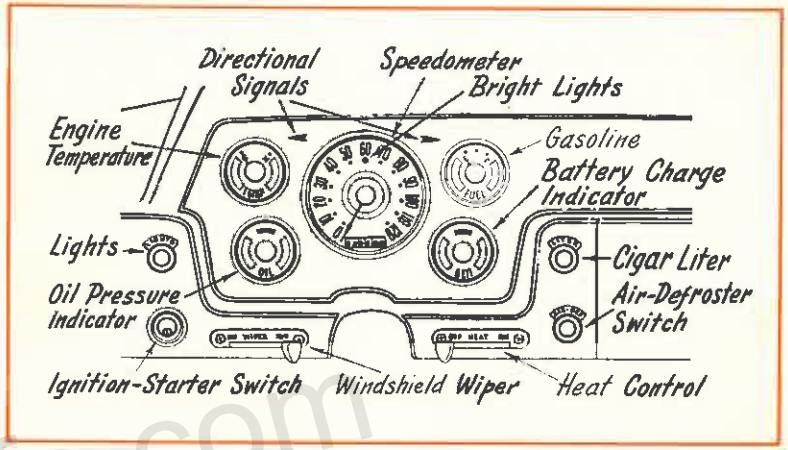
1. Turn on the ignition.
2. Depress and release the accelerator. This sets the automatic choke mechanism.
3. Put the gearshift in high gear (third) position or the automatic transmission selector lever in N position.
4. If you have overdrive, pull the OD control all the way out to lock out the overdrive, otherwise the unit will free wheel.
5. Release the parking brake.
6. Have someone push your car.

In conventional and overdrive-equipped cars, hold the clutch pedal down until your car reaches 10 to 15 miles (15 to 25 km.) an hour. Slowly let up on the clutch pedal. Continue being pushed until the engine starts.

In cars with an automatic transmission press and hold the accelerator pedal halfway down, wait until you are moving at 20 to 30 miles (30 to 50 km.) an hour, then move the selector lever to D or L position.

A push is much safer than a tow. Towing always brings up the possibility that, when the engine starts, your car might overtake the tow car.

Getting To Know Your Packard Clipper



INSTRUMENTS

Oil Pressure Indicator

The oil pressure indicator marked OIL, is a signal light and it will light when the ignition key is turned ON before the engine is started. This indicator may light up or flicker when the engine is idling even though the oil pressure is adequate; however, the light should go out when the engine speed is increased. If the signal remains illuminated after the engine speed is increased, the engine should be shut off and the cause of the trouble determined.

Battery Charge Indicator (Gen)

The battery charge indicator marked GEN also is a signal light which determines for you whether the battery is being charged or discharged.

With the ignition ON and the engine not running or with the engine idling slower than normal and other circuits on, the signal light of the indicator will be ON, showing discharge, i.e., generator not charging. When you're running on the road, the indicator will normally be dark and the light will be out. If the indicator lights up and stays red for a prolonged period while running, see your dealer for a check of the electrical system.

Engine Temperature Gage (Temp)

Electrically operated, this gage indicates the temperature of the coolant of your car's engine. The gage operates as long as the ignition key is turned to the right or left. Give it a few seconds to register.

At normal operating temperature the pointer should center approximately between the C

(cold) and H (hot) position, except on long hard drives in hot weather, when it may register nearer to the H side. A sudden rise in temperature above normal should be investigated at once.

Speedometer

The speedometer, directly in front of the driver, has an easy-to-read calibrated dial lettered from "O" to "120" mph, with a total mileage indicator at the bottom of the instrument face.

Gasoline Gage

It is a simple indicator of your gasoline supply. The gage operates only when the ignition key is turned either to right or left.

SWITCHES

Light Switch

The light switch is a combination switch which controls the lighting of parking lights, headlights, instrument lights, courtesy lights and dome light.

The parking lights are turned ON by pulling the switch knob out to the first notch.

The headlights will light by pulling the knob out all the way.

The instrument lights, courtesy lights, and dome light are controlled by turning the switch knob. The courtesy and dome lights will also light when a door is opened. When the knob is turned all the way to the left, the instrument, courtesy, and dome lights will be OUT. The courtesy and dome lights are turned ON by turning the light switch knob to the first notch to the right. This can be done without pulling the knob out to light the parking lights or headlights. However, when the knob is turned past the first notch with the parking lights or headlights ON, the courtesy and dome lights will go OUT and the instrument lights will be brightly lighted as the second notch is reached. By continuing to turn the knob farther to the right the instrument lights will become dimmer.

In conjunction with the headlight switch, a head lamp beam foot switch is located at the left end of the toeboard. This switch enables you to lower the head lamp when driving in the city or meeting approaching traffic on the highway.

When the lights are on the high beam, a red indicator light located below the figure 60 on the speedometer face will light up. For safety's sake, don't use the high beam in the city or when approaching another vehicle on the highway.

Windshield Wipers

The electrically operated windshield wipers have two speeds. The wiper speed is controlled by a slide-type switch. The first position of the switch is low wiper speed, the second position is high wiper speed.

Directional Signal

The directional signal indicates the direction in which you intend to turn. It does this by causing the affected directional signal filament in the parking light and the tail light to flash on and off. The signal lever is positioned on the steering column for left hand finger-tip operation.

To signal a turn, move the lever in the direction in which you are going to turn the steering wheel to make the turn. Move the lever upward to signal a right turn and downward to signal a left turn. The lever automatically returns to the center position and stops the signal when the turn is completed or the steering wheel is returned to the straight-ahead position.

While the directional signal is in operation a green arrow indicator light at the upper right and left side of the speedometer will flash on and off, indicating the direction that is intended by the driver.

If either front or rear flasher bulb on either side of the car fails to operate, the indicator light on that side will either flash more brightly and rapidly than normal or fail to light.

Air—Defrost

The switch controls both the Climatizer fresh air intake blower and the defroster blower. It is a rotary push-pull type switch.

For Climatizer air, pulling the knob to the first position operates the blower on slow speed; second position operates the blower on high speed.

For defroster blower, rotate the knob clockwise to operate the blower on low speed; to the left (counter clockwise) to operate the blower on high speed.

CONTROLS

Cowl Fresh Air Vents

Opening the cowl vents in hot weather will provide additional fresh air to the front compartment. To open the cowl vent, move the control lever on kick pad to the full "up" position.

Heat Lever

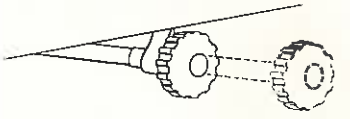
The position of the heat lever controls the amount of heat available through the Climatizer System; slide the heat control lever progressively towards the right for more heat, to the left for "off".

OD Handle

The OD handle permits control of the operation of the overdrive transmission. "In" for available overdrive operation; "out" for conventional transmission operation.

Parking Brake Handle

Pull straight back to apply parking brakes. Turn quarter turn to right and push in to release. Handle will turn to horizontal position about halfway forward; keep pushing forward until it reaches the stop.



Climatizer Damper Knob

The damper knob, located below the right side of the instrument board, controls the damper in the Climatizer fresh air duct. Push in on this knob to open the damper; pull to close the damper.

CIGAR LIGHTER

The cigar lighter is operated by pushing inward on the lighter knob. The lighter will return to its normal position when the element is hot enough to light your cigar or cigarette.

PACKAGE COMPARTMENT

Your package compartment provides storage for maps and other items. To open, press the lock cylinder inward. Push the door forward to close. The door may be locked with the same key which operates the trunk lock.

CLOCK

Your new Clipper is equipped with an electrically wound clock. The clock may be set by pulling out the reset button at the "6" position and turning it in either direction. A fast and slow adjustment can be obtained by turning the notched sleeve at the "12" position to the left or right as required, or note the amount of loss or gain per day and have it adjusted the next time you visit your dealer.

SEAT ADJUSTMENT

You can adjust the front seat by moving the control at the left front corner of the seat cushion upward and sliding the seat forward or rearward to suit you. As the seat moves, the tilt of the seat back automatically adjusts to the best position.

If you find that you want the steering wheel adjusted or the seat raised or the tilt changed, or the whole seat further to the front or rear than you get with the normal adjustment, just ask your dealer to make the necessary adjustments.

POWER SEAT

An electric motor moves the seat backward and forward in cars equipped with power seat.

On the lower front edge of the front cushion, near the center, is the control button for the power seat operation. When you raise the button, the seat moves forward; when you press down on the button, the seat moves backward. The seat movement stops when you release the control button.

POWER BRAKES

Power brakes are especially designed to retain "pedal feel" for you even though the effort requirement is much reduced. Use the brakes exactly as you would conventional brakes, with this one exception: do not apply as much force on the pedal; the power system does most of the work. Therefore, make a few trial applications just to accustom yourself to the light touch. Power is available all the time the engine is running. If the engine is not operating, the brakes are controlled hydraulically by your foot just as in a car not equipped with power brakes.

POWER STEERING

As long as the engine is running, the power steering unit is ready to operate. Its use is no different from the conventional steering except that control is almost effortless and virtually no discernible work on your part is necessary to steer or park the car.

When the engine is not running or if for any reason the pump drive is inoperative, the steering is manual, not under power. Your car will handle and "feel" as though there were only the conventional steering gear.

POWER WINDOW CONTROLS

The master control for power window operation is on the driver's door. This control has as many buttons as there are power operated windows in the car. Each door with a power-operated window also has a control on that door for its window. To raise any given window, push the control button upward; to lower the window, push the button downward. Releasing the button at any point of window travel will stop the window at that point.

From the rear of the car to the front (or left to right as you face the master control) the control buttons operate these windows: left front, right front (only control buttons with power windows in front only), right rear, and left rear.

AIR CONDITIONING CONTROLS

The air conditioning unit is controlled by the three knobs on the special panel at the lower middle of the main instrument panel.

The two outer knobs control the speed of the blowers in the unit at the rear of the car. The knob on the right of the panel operates the blower at the right of the car; the knob at left operates the blower at the left of the car. Both knobs operate their blowers at slow speed when pulled to the first position; at full speed when pulled all the way out.

The center knob controls the amount of cooling action from the air conditioner. The further out the knob is pulled, the cooler will be the air supplied through the transparent outlets by the blower fans.

The maximum cooling action will be obtained by pulling all three knobs as far out (toward you) as they will go. To shut

off the air conditioner, push the three knobs all the way in. Intermediate positioning of the knobs will result in intermediate degrees of cooling.

We suggest that to maintain fresh air circulation in conjunction with the use of your air conditioner, you close all the windows and the cowl vents. On cars equipped with Climatizer, open the Climatizer damper so that the air will enter the car beneath the front seat. This will give the air a chance to lose any heavy dust particles in the entrance ducts and also keep rain water from entering the car. If your car does not have a Climatizer, open one front door ventilator window to admit fresh outside air.

See your authorized Packard Clipper dealer for any service of your air conditioner.

CLIMATIZER—DEFROSTER CONTROLS

Do This for Heat in Winter

Make sure that air intake damper is open. Push the control knob (located under the instrument board just to the right of center) forward to open the damper.

Move the heat control lever to the position that suits you best. The further you move the lever the more heat will be available. A few trials will show you where you like it best. A thermostat in the system maintains the heat output at this setting.

Now, pull the knob marked "Air-Def". The first position is slow speed; full out is high speed. High speed is best for quick heating after which low speed (or even blower OFF) usually provides satisfactory circulation of warm fresh air.

Defroster Is Separate

The defroster is a separate system from the Climatizer car heating system.

To operate the defroster, turn the knob marked "Air-Def" clockwise for slow speed and counter-clockwise for high speed. When the windshield is clear, reduce the defroster blower speed or turn it off.

Air and Defroster

The blowers may be operated at the same time by turning the knob and pulling it out.

Sticky Weather Tips

In some weather conditions, it is particularly hard to rid windows of fog or slushy snow. You can direct more defrosting and Climatizer heat to any particular window just by opening that window about one-eighth of an inch. Usually you will do this with one or both of the front ventilator windows. In such weather you will probably do best to have the Heat control full on and both Climatizer (air) and defroster blowers at full speed.

After the windows are clear, you can close them for best car comfort results from your Climatizer and readjust the Climatizer Heat control and blowers as you wish.

AUTOMATIC TRANSMISSION

The Selector Lever

The selector lever indicator tells you which of the five ranges the transmission is in at any time. These are P (Park), N (Neutral), D (Drive), L (Low), and R (Reverse). The lever must be raised to engage P and R positions.

P (Park) Range

This safely and positively locks the rear wheels when the car is stopped. Raise the lever slightly going into or out of Park.

Do not move lever to P while car is moving.

Start the engine with the selector lever in Park (a decided convenience when on a grade). This also avoids "creep" on cold days.

N (Neutral) Range

This range lets you idle the engine for prolonged periods.

Neutral also lets you rest assured that the car will not start to move should anyone by mischance nudge the accelerator pedal.

Neutral and Park are the only ranges in which the starter switch will work.

D (Drive) Range

When you select the D position, the transmission automatically shifts itself through the various gear ratios whenever it is best to do so. All you have to do is to move the selector lever to D after you start the engine. Then just leave it there. When you want to go faster, step on the accelerator. When you want to stop, step on the brake. Leave the selector alone. To go again, step on the accelerator. For extra quick get-away from a standing start push the accelerator all the way to the floorboard.

L (Low) Range

This is your emergency engine braking range. Use it to go down extra long or steep hills. (See "Engine Braking"). L is also the range you will find easiest to use for rapid shifts to and from R so as to rock the car out of mud, sand, or snow.

R (Reverse) Range

This position gives you the reverse driving ratio to make the car "go backwards."

To prevent damage to the transmission or abrupt braking action, DO NOT MOVE THE SELECTOR LEVER TO R (Reverse) position while the car is moving forward.

Getting The Most From the Automatic Transmission

Here are some ways to use your automatic transmission for the least effort on your part:

Additional Power and Acceleration

for hill climbing or passing

while the selector lever is in D range below about 55 miles (88.5 km.) an hour, may be had by pushing the accelerator pedal all the way to the floor board (kickdown position).

Hard Pulling

such as you encounter in deep snow, mud, or other adverse driving, is best done by moving the selector lever to the L (Low) position.

Engine Braking

is a big help when you come down long, mountainous grades.

Use Low this way: Slow to 60 miles (96,5 km.) an hour and move the lever to L. This gives you intermediate range until speed drops below approximately 5 miles (8,05 km.) an hour. For maximum downhill braking, bring the car to a complete stop before or after moving the lever to L. This will give you Low range and the transmission will operate in Low range until the lever is manually moved to D.

To Rock Out of Mud, Sand, or Snow

depress the accelerator pedal slightly and hold it steady while you make quick, alternate movements of the selector lever between L (Low) and R (Reverse) ranges.

Prolonged Idling

is sometimes unavoidable. In such cases, move the selector lever to the P or N position.

Towing Cars Equipped with Automatic Transmission

If your car must be towed, put the selector lever in the N (Neutral) position if transmission oil level is OK and unit is not damaged. Do not tow the car faster than 30 miles (50 km.) an hour, nor further than 15 miles (25 km.). For any other towing, raise rear wheels or disconnect propeller shaft.

HOW TO USE OVERDRIVE

At any speed above about 22 to 25 miles (35 to 40 km.) an hour, you can place the car "in overdrive," if the OD handle just under the instrument board is pushed all the way to the bracket, by releasing the accelerator pedal. After that, and until you either reduce speed below about 20 to 17 miles (32 to 27 km.) an hour or push the accelerator pedal all the way to the floor board (kickdown position), you will continue to drive in overdrive.

On long hills, or to get a spurt of additional power to pass cars or trucks on the highway, you can "kickdown" — that is, press the accelerator hard against the floor board. This returns the transmission to conventional gear. After a kickdown, you stay in conventional until you again release the accelerator pedal at any speed above about 22 to 25 miles (35 to 40 km.) an hour.

You Can Lock Out Overdrive, Too

There are times as in the mountains, for example, when you may want to remain in conventional gear all the time, at all speeds, to get the benefit of engine braking. Just lock out the overdrive this way:

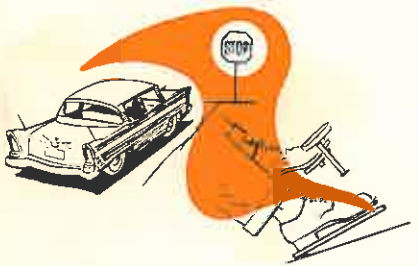
1. Car standing still: Pull OD control handle full out —toward you.
2. Car moving less than 25 miles (40 km.) an hour: Accelerate engine and at same time pull OD control handle full out — toward you.
3. Car moving more than 25 miles (40 km.) an hour and overdrive already engaged: Press accelerator to floor (kickdown). This puts transmission in conventional. While in conventional, pull OD control handle full out — toward you.

Remember, if you use a push to start the engine, you must lock out the overdrive.

You can push the OD control inward, preparing for overdrive engagement, at any time. If the car is moving accelerate a little as you do this.

HILL HOLDER

The Hill Holder (not available on cars with automatic drive) keeps the same pressure on the brakes when you stop on an upgrade as you applied with the brake pedal — as long as you hold the clutch pedal down. This frees your right foot from the brake pedal so that it is ready to use on the accelerator.



When you want to move on, you select your gear, release the clutch, and accelerate as usual. Releasing the clutch also releases the Hill Holder and the brakes.

DOOR LOCKS

All doors have push-button inside lock controls. To lock front doors from the inside, close the door and push down on the push button. You can still open the front door with the inside handle, but no one can open it from the outside. If you open it from the inside or with the key from the outside, the lock button returns to the unlocked position.

To lock rear doors, push the locking button down with the door open or closed. These locks are made especially so that, once locked, you cannot open them with either the inside or outside door handles until the lock button is pulled up into the unlocked position.

You will find outside locks, worked by your ignition key, on both front doors. You can lock either of these doors from the outside after you close the door.

TRUNK LOCK

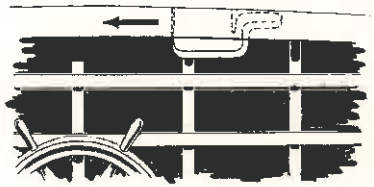
To unlock, put in the key, turn it a quarter-turn to the right (clockwise) or until you

hear the latch snap open. The key must be returned to locked position before it can be removed.

HOOD RELEASE

· The hood lock release lever is located at the upper center of the grille and is moved to the left, as you face the hood.

Move the lever as far as it will go and hold it in release



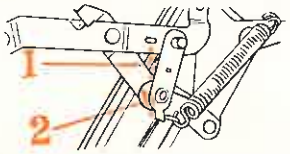
position as you lift the hood. This releases both the hood lock and the safety catch. Raise the hood and insert the prop rod in the hole on the underside of the hood front cross bar.

STATION WAGON

The Station Wagon tail gate, and rear seat conversion for extra cargo space are easy to operate as described below and on the following page.

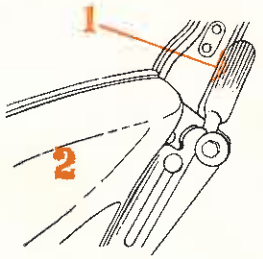
Tail Gate Safety Locks

Put upper tail gate hinge safety strap over stud when you want to hold gate open.

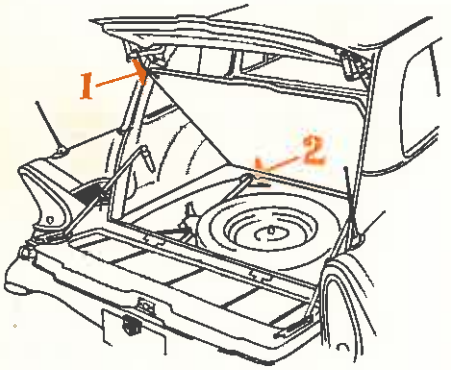


1. Hinge safety strap 2. Stud

Lower tail gate (below) shown locked. To unlock, move handle on each end of gate toward front.



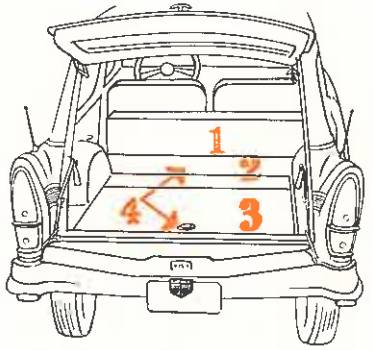
1. Lower tail gate handle
2. Lower tail gate



1. Hook over hinge
2. Notch for jack

Spare Tire Access

Strap and buckle hold jack in place at the left of the tire.



1. Rear seat cushion
2. Rear seat back rest
3. Spare tire access cover
4. Handholds

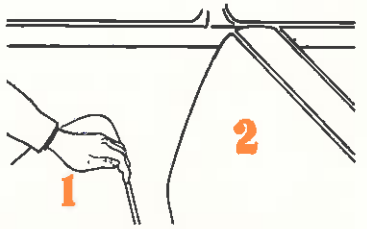
Rear Seat Conversion

View at upper right shows cargo space obtained by folding down the rear seat.

View at the lower right shows how rear cushion (hinged on forward edge) folds neatly upright to provide added cargo space.

View below shows convenient handhold for raising or lowering rear seat back rest.

1. Rear seat back rest 2. Handhold



1. Rear seat cushion
2. Rear seat back rest

Care and Maintenance

ENGINE OIL

Only good quality oil gives the protection a fine engine deserves.

We recommend **only oils from** containers bearing **the label** "For **Service** MS" **alone or in combination** with **any of the** following: **MM, ML, or DG. We recommend** against **the use of oil from a** container bearing the label "For Service DS" **or** showing the classification **DS** in combination with any **other** of the **accepted A.P.I.** service classifications: **MS,** MM, ML, **or** DG. Do **not** use **oil** labeled **only** "For **Service** ML."

Only **clean,** fresh **oil can do** a good job, **so** change **oil regularly.** After **the** initial drain and refill **at** 1000 miles (1600 km.), change **oil** under average operating conditions every 2500 to 3000 miles (4000 **to** 4800 km.). Severe operation, dust-bowl driving, and other **unusual** circumstances **may make more frequent** oil **changes** necessary. **Consult your dealer if you** have **a special operating condition.**

Use thinner oil in **winter than** in **summer, as** shown **by the** viscosities **given in the oil chart below.**

Replace the oil filter cartridge every 5,000 **miles (8,000 km) or** at least **twice a year.**

OIL CHART

Lowest Temperature Anticipated	Recommended Viscosity	Acceptable Alternate
32° above zero F. (0°C.)	S.A.E. 30	S.A.E. 20W-40 S.A.E. 10W-30
10° above zero F. (12° below zero C.)	S.A.E. 20 W	S.A.E. 10W-30
10° below zero F. (23° below zero C.)	S.A.E. 10W	S.A.E. 10W-30
Under 10° below zero F. (23° below zero C.)	S.A.E. 5W	S.A.E. 5W-20

Note—There is a trend by major refiners toward oils marketed for wider ranges. We consider these "multi-viscosity" oils satisfactory if used according to the schedule above in the column "Acceptable Alternate."

REGULAR LUBRICATION A "MUST"

Have your car lubricated every month **or 1000** miles (1600 km.). **Such a rule** will **pay** off. **It saves you money** in **the long run** because **it** avoids **unexpected** need **of** service. The **car runs** better, **steers** better, **rides better if** it **gets** its monthly **or** 1000 **mile** (1600 km.) lubrication.

Another thing, too, about lubrication. **Be sure** to **have an** authorized **Packard** Clipper dealer lubricate **your** car. You will **be** assured **of a** complete car **inspection at every** lubrication. This **is good** preventive **medicine for** your **car.** Inspection **reveals** coming **needs** for adjustments **and** other **service** and **helps you to** prevent neglect **that might** lead **to future inconvenience.**

If You Must Buy a Lubrication Elsewhere . . .

We are quite particular about the types of lubricant used in some parts of your Clipper. If someone other than a Packard Clipper dealer lubricates your car, be sure he understands what points to lubricate and what lubricants to use, as shown on oil company and similar lubrication charts.

Universal Joints

Use lightweight chassis lubricant at 1000 mile (1600 km.) intervals. Use only a low pressure (hand) gun to lubricate these bearings.

Overdrive Transmission

Use S.A.E. 90 mineral oil gear lubricant or S.A.E. 40 engine oil summer and winter. Fill slowly through overdrive case fill hole, insert plug loosely, then fill slowly through main case fill hole. Check level of overdrive case. When both cases are full, insert fill hole plugs securely.

Rear Axle Lubricant

Use hypoid lubricant or any S.A.E. 90 hypoid lubricant (multi-purpose type gear lubricant).

During seasonal periods where temperatures of ten degrees below zero Fahrenheit (23° below zero C.) or below are commonly encountered, S.A.E. 80 gear lubricant may be used. This lubricant, however, is not recommended for year-round use or where an extended trip takes the vehicle from an extremely cold area into warmer climates.

Twin Traction Rear Axle Lubricant

The Twin-Traction rear axle is filled at the factory with a special lubricant which should be used during the first 10,000 miles of operation. After the initial period of operation, use S.A.E. 90 hypoid lubricant (multipurpose gear lubricant) marketed by a reputable company.

Steering Gear

Use a good grade of S.A.E. 90 mineral oil gear lubricant. Note—Do not use a hypoid lubricant.

Power Steering Maintenance

For best results, use only Studebaker-Packard Type A Automatic Transmission Fluid (SP-50024) in the reservoir of your power steering oil pump. If you must add to or refill the reservoir some place where you cannot get Studebaker-Packard Fluid, use a good quality of Type A (AQ-ATF) transmission fluid. Be sure the symbol "AQ-ATF" is on the container.

Check the oil level every 5000 miles (8000 km.). Be sure reservoir cover and head of the screw are clean before removing cover to open reservoir. Allow no dirt or dust to enter the reservoir. Add Type A (AQ-ATF) fluid as needed to maintain fluid at proper level as indicated by level mark on the reservoir.

Supercharger

The supercharger has its own oil supply and oiling system. Use Studebaker-Packard Type A Automatic Transmission Fluid. Check the oil level every 1,000 miles. The oil level should be maintained between the two punch marks on the dipstick. If fluid is needed, add through the dipstick tube. Do Not Overfill.

Drain and refill every 15,000 miles (24.000 km.) or once a year.

Flightomatic Transmission Maintenance

"Check"

the fluid level every 1000 miles (1600 km.).

"Drain and Refill"

every 15,000 miles (24,000 km.), or once a year, with only Studebaker-Packard Type A Automatic Transmission Fluid.

Note — If you must add to or refill your automatic transmission some place where you cannot get Studebaker-Packard Type A Automatic Transmission Fluid, be sure that only such fluids with the following identification on the container are used: brand name including the words "Fluid Type A" plus the symbol "AQ-ATF" embossed on the top of the container.

COOLING

Whenever you buy gasoline, have the attendant check the radiator coolant level. A small amount will evaporate over a period of time, but if you have to add coolant in fairly large amounts, see your dealer. Do not completely fill the radiator. The level should be approximately one inch below the filler opening to allow for expansion of the coolant.

Rust Inhibitor

In spring or early summer, when you have your radiator cleaned and refilled, be sure to have your dealer put in a can of Studebaker-Packard Rust Resistor (SP-50017). This will protect the radiator during the summer months against rust, one of the radiator's worst enemies.

All good quality antifreezes have a rust inhibitor included in them.

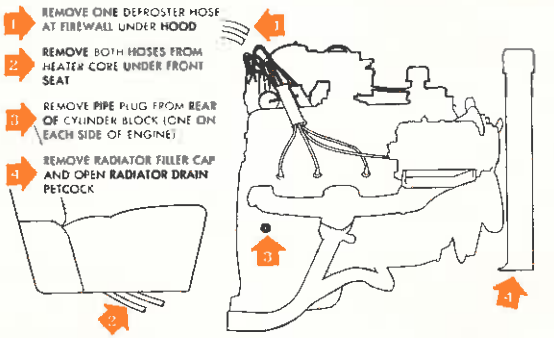
Tailor-made Antifreeze

Because we cannot know the quality or uniformity of all available antifreezes, we have an antifreeze tailor-made for our own label. This permanent-type antifreeze is what our investigation and experience with cars and trucks proves is the best that can be made. Its quality is never below the best to be found, and its formula is always uniform.

We strongly recommend that you have your dealer install the required amounts of Studebaker-Packard Permanent Antifreeze (SP-50027) every fall. We also suggest that you have him check your cooling system protection once a month in cold weather — when you have your car lubricated.

You are protected against cooling system rust formation with Studebaker-Packard Permanent Antifreeze thru-out the season because it contains the proper amounts and chemically correct types of rust and corrosion inhibitors.

TO DRAIN THE COOLING SYSTEM



TUBELESS TIRE INFORMATION

Your new Packard Clipper is equipped with tubeless tires as standard equipment. The tubeless tire has a built-in liner which takes the place of the tube. This eliminates the possibilities of flats caused by pinching, chafing, buckling, shifting and valve shearing. Internal friction between the tube and the casing, with the resulting heat, is eliminated. In the tubeless tire, the air is held within the tire by the seal made by the sealing ridges on the bead of the tire against the wheel rim flange.

Punctures tend to produce only slow leaks rather than fast leaks that result in a flat soon after the puncture of a conventional tire. The material vulcanized to the casing, being

relaxed, will cling around the puncturing object. It is even possible that a puncture will result in no discernible loss of air at all.

It is therefore advisable to inspect the tires from time to time for the presence of nails or other foreign objects. When they are found, remove the objects only when the tire can be properly repaired immediately thereafter. A fast leak will occur as soon as the nail or similar puncturing object is removed.

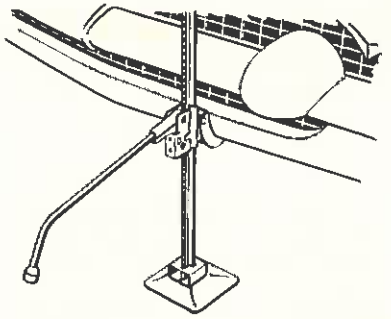
Repairs are not difficult; however, special material and equipment are required. Depending on the nature of the puncture, some repairs can be made without removing the tire from the wheel, but a repair kit is necessary. If the tire must be removed, ordinary tire irons should not be used because of the risk of damaging the sealing ridges on the bead; a bead breaker is used. Therefore, it is not advisable to attempt to remove the tire yourself. Your dealer and, in general most tire dealers and service stations, are acquainted with the repair procedure and have the necessary equipment.

TIRE CHANGING

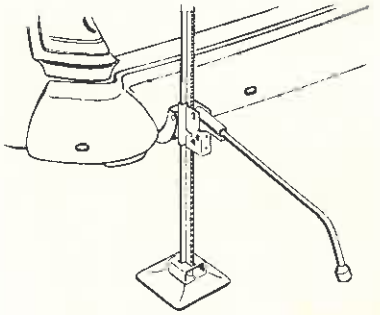
Here's a reminder list about tire changing:

1. Be sure parking brake is on tight.
2. If on a steep grade, block front or rear wheels.

3. Place the jack base so that the jack lip will contact the underside of the bumper squarely and at the same time have the base about one inch inward from the outer edge of the bumper.
4. Wheel lug nuts on left side of car have lefthand threads; those on right side of car have right-hand threads.
5. To store the jack, place it to the right of the spare tire. Attach one end of the hold-down spring to the tab on the floor pan and the other end in the hole of the jack lifting pad. Then operate the jack to apply enough tension on the spring to hold it in position.

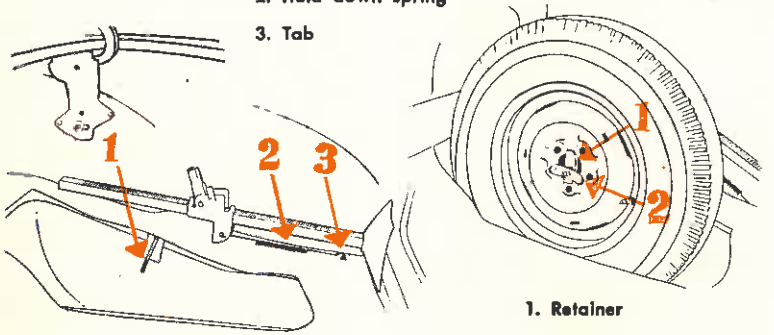


Jack Position—Front



Jack Position—Rear

1. Hold down bolt
2. Hold down spring
3. Tab



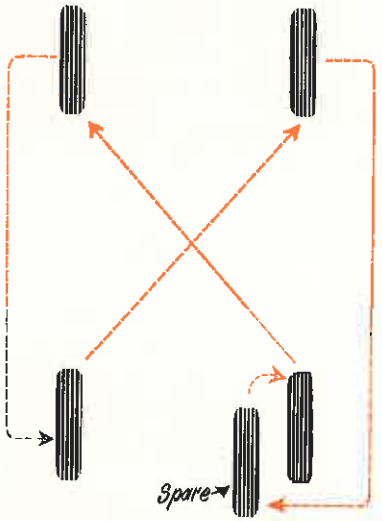
1. Retainer
2. Wing nut

MAKE YOUR TIRES LAST LONGER

Cross-switch your tires every 4000 miles (6400 km.). Balance wheel-and-tire assemblies whenever they need it. Your dealer will advise you. You'll get a good many miles of extra service out of your tires if you do.

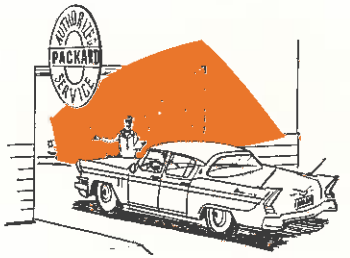
Keep tires properly inflated.

Tire condition and inflation have much to do with the riding comfort of your car, so it is worth while to keep tires balanced and properly inflated at all times.



TIRE ROTATION PLAN

SERVICE



Generally speaking, you need consult your Packard Clipper serviceman at least once a month (or every 1000 miles [1600 km.]) for a regular lubrication and inspection. Twice each year, in the fall and in the spring, he will recommend that you have some extra services performed, according to a schedule he has based on years of experience.

Carburetor in High Altitude

Your dealer can make any adjustments necessary for use of your car in high altitudes.

Supercharger

The supercharger is calibrated at the factory to provide the proper air flow to the engine and the adjustment is then sealed. A change in the air flow may result in severe damage to the supercharger, engine, or related parts. Therefore, this adjustment must not be disturbed. Tampering with the adjustment will void the warranty.

If the unit does not function properly, see only an authorized Packard Clipper dealer for service.

Brake Adjustment

Your brakes are self-centering and self-energizing.

Every time you apply the brakes, the linings wear a little. Occasionally, a minor adjustment should be made to restore full pedal reserve. Have your dealer make this adjustment.

Power Brakes

For any service requirements, see only an authorized dealer.

Flightomatic Transmission

After the adjustment at the 1,000 mile (1.609 km.) inspection, adjust transmission bands at 15,000 mile (24.000 km.) intervals or as frequently as operation of transmission indicates.

Clutch Pedal Travel Adjustment

The clutch pedal moves down a little before you feel the resistance of the release mechanism. This is the free travel. It should be between one inch (25 mm.) and one-half inch (13 mm.). Have your dealer make this adjustment for you when necessary.

Hill Holder

If your car has a Hill Holder, be sure it is checked for adjustment whenever the clutch pedal travel is adjusted.

Fan Belt Adjustment

Your dealer can check this and make any needed adjustment.

Spark Plugs

For maximum engine performance, spark plugs must be maintained in top condition. They should be cleaned and the gap reset at least every 5,000 miles (8.046 km.). Under some operating conditions such as slow speed, lengthy idle periods or heavy traffic driving, it may be necessary to clean and regap the spark plugs every 2,500 miles (4.023 km.). Worn or dirty spark plugs may still fire an idling engine and apparently still be good, but under operating conditions they may cause missing, loss of power, loss of speed, hard starting, and a resultant waste of gasoline.

For peak engine efficiency, new spark plugs should be installed at least every 10,000 miles (16.090 km.).

Front Wheel Camber Adjustment

The camber is set at the factory ½° greater on the driver's side of the car than on the other side. If a front end alignment check shows that camber needs adjustment, have it set as nearly to ¾° positive on the driver's side and ¼° positive on the other side as possible. In any setting, the driver's side should have ½° more camber than the other side.

Air Cleaner

Service every 1,000 miles (1600 km.) or oftener as needed in abnormally dusty operation.

To service the element, slip the hose off the cleaner outlet. Then, remove the two mounting bracket screws on the side and the wing nut from the stud under the center of the cleaner. Remove element and tap against a solid object to remove accumulated dust. Do not use compressed air to remove dust. DO NOT MOISTEN ELEMENT AT ANY TIME. Replace element every 10,000 miles (16.00 km.) in normal service.

Body Drain Holes

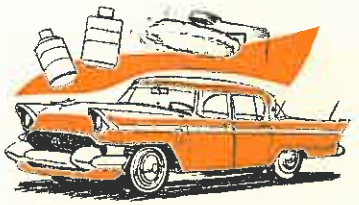
You can clear the door drain holes with a penknife or some similar flat object. Insert it into the holes and run it back and forth a few times to loosen any congestion.

Your dealer will take care of clearing body drain holes.

Battery

Check water level every 1000 miles (1609 km.). Add distilled water as needed to maintain level in each cell. Be sure car is grounded whenever battery is being charged. Hydrogen gas is given off by a charging battery. Keep fire away.

APPEARANCE



Many owners have their new cars Lustur-Sealed with Studebaker-Packard Lustur-Seal No. 1 before delivery or shortly thereafter. Lustur-Seal No. 1 is a marvelous power-applied material that conditions and protects the finish for the years to come.

Once a car is Lustur-Sealed, periodic washing and the no-rub application of Studebaker-Packard Haze-Cream (SP-50002) about three times a year are all that is needed to keep a "like new" appearance.

Do not apply wax or a polish containing wax during the first 60 days. Application of wax may result in a dull haze on the finish. If wax is applied, it will be necessary to use turpentine to remove the haze. Then, wipe with a clean dry cloth.

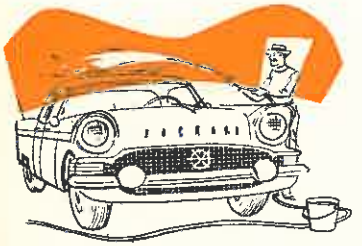
Lustur-Seal No. 1 or Haze Cream are the only materials that we approve for application to the paint during the first 60 days.

After 60 days, if you do not have your car Lustur-Sealed, we suggest you use AC-1468 Cleaner and AC-1489 Polish for keeping the finish in tip-top condition. If there are tar or asphalt specks on the finish, remove them with SP-50011 Tar and Road Oil Remover. Your dealer has all of these car care materials in stock.

Alcohol, antifreeze with alcohol in it, calcium chloride and other salts used to melt snow and ice or settle dust can harm a car's paint, chromium, and stainless steel. As soon as possible after exposure, flush off these chemicals with clear, cold water. If repeatedly subject to chlorides in winter or summer, wash the car once a week to help prevent damage. Heavily coat all chrome and stainless steel with paste wax about once a month.

Washing the Car

First, flush off all foreign matter from the finish with cold water. Then take a clean sponge



and use it with running water to remove dirt. Dry the finish with a clean, damp chamois skin. Use straight horizontal or vertical strokes.

Keep chromium-plated and stainless steel parts clean and free of dirt and foreign matter as much as you can. If not cared for the finish may deteriorate. For general cleaning, use clear water and clean cloth or apply SP-50047 Chrome Cleaner as directed on the container.

Upholstery

You can wash the fabric and vinyl covering on the seat and side upholstery with good frothy suds of neutral soap and warm water. Remove the suds with a clean cloth or sponge and wipe the surface several times with a dry cloth. While the material is still damp, brush the fabric portion lightly with a whisk broom or any brush of medium stiffness. Let air circulate freely over the wet upholstery. Vinyl portion should likewise be brushed, except, more firmly to remove soiling in the crevices of the surface. Then, wiped dry. To remove stubborn spots from vinyl, scrub lightly with kitchen cleanser and wash off as above or with clean water.

Stains

If any bad stain occurs, DO NOT USE ANY COMMERCIAL SPIRITS OR SOLVENT CLEANERS. Instead, get Kar Kleen SP-50005 and follow label directions exactly. (Remove label from container and read both sides.) Solvents only spread staining agent and disperse its concentration over a wider area of the fabric. Some solvents "set" a stain so that even Kar Kleen cannot do a totally satisfactory job of stain removal.

White Sidewall Tires

SP-50047 Chromium Cleaner is just the thing for cleaning white sidewall tires.

Service Information

If emergency adjustments or repairs must be made at shops other than authorized dealerships, ask the repairman to refer to this section of your Owner's Guide to be sure that he understands the several "special-to-Clipper" measurements and other service data given below.

BRAKES

Pedal Free Travel..... ¼" to ⅜" (6,3 to 9,5 mm.)—Standard brakes
⅛" to ¼" (3,2 to 6,3 mm.)—Power brakes
(Before the master cylinder piston starts to move)

CAPACITIES

	U.S.	Imp.	Liters
Engine Oil (Qts.).....	5.00	4.20	4,75
Radiator (Qts.)	17.00	14.30	16,50
w/Climatizer	18.50	15.50	17,75
Trans.—Overdrive (Pts).	3.70	3.08	1,74
Automatic (Qts.)	9.00	7.47	8,60
Rear Axle (Pts.)	3.00	2.50	1,50
Gas Tank (Gal.)	18.00	15.00	68,00

CLUTCH

Pedal Free Travel.....½" to 1" (13 to 25 mm.)

ELECTRICAL

BATTERY is Willard Model No. 2SM-50, 12-volt with negative ground, and 1,260 specific gravity.

CIRCUIT BREAKERS AND FUSES	Amperes	Location
Circuit Breaker—Head, Parking, Tail, Back-up & Instru. Lights....	18	On Headlamp Switch
Body and Stop Lights fuse.....	AGC 15	In Fuse block Behind Instru. Board
Climatizer and Defroster Fuses....	AGW-15	On Switch
Overdrive Fuse	AGC 15A	In Relay on Dash
Radio Fuse	AGW 7½	In Lead Behind Instru. Board
Directional Signal Fuse	AGC 15	In Fuse block Behind Instru. Board
Clock Fuse	1 AG 3	In Lead Behind Instru. Board
Cigar Lighter	Thermal	Back of Socket
Windshield Wiper Circuit Breaker..	5	In Switch
Seat Adjuster Circuit Breaker.....	20	Upper Left Cowl Panel
Window Lift Circuit Breaker.....	20	Upper Left Cowl Panel

IGNITION

Breaker point gap ..... .013"-.018" (0,33-0,46 mm.)
NOTE:—Check breaker point gap every 10,000 miles (16.000 km.)
Breaker arm tension..... 17-21 oz. (482-595 gm.)
Spark Plug Make and Model..... Champion — H-10
Spark Plug gap ..... .033"-.038" (0,84-0,97 mm.)
Firing order 1-8-4-3-6-5-7-2

NOTE—No. 1 is the front cylinder on the left bank and No. 2 is the front cylinder on the right bank.

LAMP BULBS

Back-up		12 Volt Mazda No. 1073
Cigar lighter		12 Volt Mazda No. 1445
Clock		12 Volt Mazda No. 57
Directional	Front & Parking Lamp.....	12 Volt Mazda No. 1034
	Rear, Taillight and Stop.....	12 Volt Mazda No. 1034
	Tell-tale	12 Volt Mazda No. 1445
Dome		12 Volt Mazda No. 1004
Headlight		12 Volt Mazda No. 5400
Instruments		12 Volt Mazda No. 57
License plate		12 Volt Mazda No. 67
Package compartment		12 Volt Mazda No. 57
Parking		12 Volt Mazda No. 1034
Radio		12 Volt Mazda No. 1891
Stop		12 Volt Mazda No. 1034
Tail & Directional Signal		12 Volt Mazda No. 1034
Tell-tale for headlight beam.....		12 Volt Mazda No. 1445
Trunk		12 Volt Mazda No. 67
Oil Pressure Indicator and Charge Indicator.....		12 Volt Mazda No. 1445
Automatic transmission remote control indicator		12 Volt Mazda No. 1445

ENGINE

Valve tappet clearance—hot, idling engine..... .023"-.025" (0,58-0,64 mm.)
—cold engine ..... .025"-.027" (0,64-0,68 mm.)

STEERING

Toe-in ..... 1/16" to ⅛" (1,6 to 3,2 mm.)
Caster ..... —1° to —2½° No load
(Not more than ¾° variation between wheels.)
Camber ..... 0° to +1° No load (See page 25)

TIRES

SIZE—
7.60 x 15 — 4 ply
PRESSURE—

The tires with which your car is equipped are designed for normal driving such as encountered in average passenger car usage. For safety reasons, it is recommended that standard tires not be subjected to extreme driving conditions such as racing. The following starting tire pressure (cold) should be maintained. Tire pressures will build up with normal car operation. Pressures thus built up should not be reduced. Tire pressures for normal operating conditions should be adjusted only when tires are cold.

FOR ALL NORMAL DRIVING	FOR SUSTAINED HIGH SPEED DRIVING
24 lbs. (1,69 Kg/cm²) Front	30 lbs (2,10 Kg/cm²) Front
20 lbs. (1,40 Kg/cm²) Rear except Station Wagon—22 lbs. (1,55 Kg/cm²) rear	30 lbs. (2,10 Kg/cm²) Rear

NOTE—Under conditions where car loading in excess of four passenger weight is considered normal with 4-ply tires, 26 lbs. (1,83 kg/cm²) pressure both front and rear is recommended. When special 6-ply tires are used and under conditions where loading in excess of four passenger weight is considered normal, 26 lbs. (1,83 kg/cm²) front and 30 lbs. (2,10 kg/cm²) rear pressure is recommended.

INDEX

INDEX (continued)

INDEX (continued)

BATTERY WARRANTY

The Willard Storage Battery Company provides a 90 day standard factory warranty on the battery. They also provide an adjustment policy prorated on a sliding scale based on the length of service of the battery. Your Packard Clipper dealer will be pleased to handle details of battery warranty service for you.

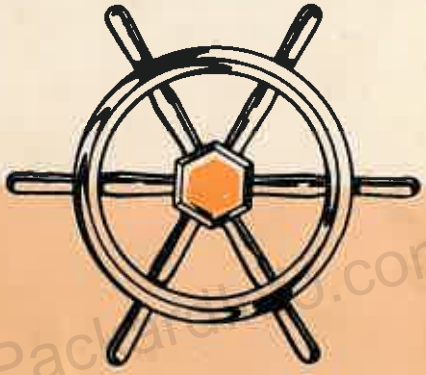
WARRANTY

Dealer warrants to Purchaser each part of each Studebaker-Packard Corporation product sold by Dealer to Purchaser to be free under normal use and service from defects in material and workmanship until such product has been driven, used or operated for a distance of four thousand (4,000) miles or for a period of ninety (90) days from the date of delivery to the original Purchaser, whichever event shall first occur. Dealer makes no warranty whatsoever with respect to tires or tubes. Dealer's obligation under this Warranty is limited to replacement at Dealer's Service Department of such parts as shall be returned to and acknowledged by Dealer to be defective.

This Warranty shall not apply to any product which has been subject to misuse, negligence or accident, or in which parts not made or supplied by Studebaker-Packard Corporation are used if, in Dealer's sole judgment, such use affects its performance, stability or reliability, or which shall have been altered or repaired after delivery in a manner which, in Dealer's sole judgment, affects its performance, stability or reliability.

This Warranty is expressly in lieu of all other warranties, express or implied, and of all other obligations or liabilities on the part of Dealer and Studebaker-Packard Corporation.

Studebaker-Packard Corporation has reserved the right to make any changes in design or to make additions to or upon its product without incurring any obligations to install the same on motor vehicles previously built.



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CAUTION

This supercharger equipped vehicle requires the use of premium grade gasoline. In case of emergency where premium fuel is not immediately available, a minimum requirement of regular fuel may be placed in the gas tank. During the ensuing period of operation avoid high speed and load conditions until premium fuel is again obtained.

Evidence of promiscuous use of regular grade gasoline will void the warranty.

The boost pressure of the supercharger is set and sealed at the factory. Evidence of tampering with the supercharger pressure regulator adjustment will void the warranty.