



Your Guide

FOR OPERATING
AND CARING FOR
YOUR PACKARD

25th SERIES

ASK THE MAN WHO OWNS ONE



Your Guide

**FOR OPERATING
AND CARING FOR**

Your Packard

25th SERIES

L-334—1st Edition

CONTENTS

	Page
MANUFACTURER'S WARRANTY	4
TIRE WARRANTY	4
PACKARD OWNER'S SERVICE POLICY	5
TELE-GLANCE INSTRUMENT CLUSTER	6
Temperature Gauge	6
Fuel Gauge	6
Battery Charge Indicator	7
Oil Pressure Indicator	7
Speedometer	8
Clock	8
SMART—FUNCTIONAL CONTROLS	8
Ignition Switch	8
Light Switch	9
Front Seat Adjustment	9
Directional Signal	10
Cigar Lighter	10
Power Brake	10
Parking Brake	11
Glove Drawer	11
Ash Receivers	11
Windshield Wipers	12
Headlight Beam Selector	12
Door Handles and Locks	12
Trunk Lock	13
Bonnet Lock	13
Ultramatic Drive	14
Starting the Engine (With Ultramatic Drive)	14
Heating and Ventilation System	15
Overdrive	17
LUBRICATION	18
Lubrication Chart	19
Types of Engine Oil	20
Selecting Engine Oil	20
Oil Grade and Temperature Chart	20
Engine Oil Level	21
Engine Oil Additives	21
Changing Engine Oil	21
Air Cleaners	21
Transmission Oil	22
Ultramatic Drive Fluid	22
Rear Axle Lubricant	22
Universal Joints	22
Rear Springs	22
Chassis	22
Seasonal and Periodic Operations	22

CONTENTS

	Page
GENERAL INFORMATION	23
Starting the Engine	23
The Right Gasoline	23
Pushing or Towing (With Ultramatic Drive)	24
Pushing or Towing (With Overdrive)	24
Break-In Period	24
Starting After a Stop	25
Driving on the Highway	25
Warm-Up in Cold Weather	25
A Tip on Safe Driving	25
COOLING SYSTEM	26
Coolant Level	26
Draining the System	26
Rust Preventive	27
Anti-Freeze	27
Anti-Freeze Chart	27
ELECTRICAL SYSTEM	27
Battery Care	27
Light Bulb Chart	28
Fuse Chart	29
Headlights	29
WHEELS AND TIRES	29
Tire Pressure	29
Safety Rim Wheels	30
Cross Switching Tires	30
Changing Wheels	30
CLEANING THE CAR	32
Painted Surfaces	32
Glass	32
Chromium Plating	32
Upholstery	32
Convertible Top and Rear Window	33
SPECIFICATIONS	34-35
ACCESSORIES	41-61
ABOUT YOUR PACKARD	63

MANUFACTURER'S WARRANTY

Packard Motor Car Company makes this warranty to you, as the original retail purchaser of a new Packard car. The warranty will be effective for a period of ninety (90) days from the purchase date or 4,000 miles of operation, whichever event shall occur first.

Should your new Packard car, during such period, require replacement of any original part (except tires) adjudged by the selling Packard Dealer and acknowledged by us to be defective in material or workmanship, we will pay such Dealer for your account, for the Packard part used and for the labor of replacing the part. Arrangements for the necessary work will be made by you with such Dealer, to whom you will look in respect to the quality of the work performed.

If your car or any functional part thereof becomes inoperative, the provisions of the preceding paragraphs will apply to the arrangements you make with any Packard Dealer for the replacement of the functional part.

This warranty shall not apply if your new Packard car shall have been repaired or altered in any way so as in our judgment to affect its stability or reliability, or has been subjected to misuse, neglect or accident.

Other than the foregoing, no warranty, express or implied, is made by, nor shall any obligation or liability accrue against, Packard Motor Car Company.

The Manufacturer reserves the right to change the design or specifications of any Packard product or part thereof. If Manufacturer shall make such changes of design or specification there will be no obligation to make such changes upon any Packard product or parts previously shipped, or to install or furnish any other or different parts than were thereon when shipment was made.

TIRE WARRANTY

All tires supplied as original equipment carry the following tire manufacturer's warranty:

"Every tire of our manufacture, bearing our name and serial number, is guaranteed by us to be free from defects in workmanship and material, without limit as to time or mileage, and to give satisfactory service under normal operation conditions.

"If our examination shows that any tire has failed under the terms of this guarantee, we will either repair the tire or make an allowance on the purchase of a new tire."

Packard Owner's Service Policy As Supplied By Your Dealer

We issue this "Packard Owner's Service Policy" to furnish you with credentials needed to obtain the benefits of the "Manufacturer's Warranty" and to describe the additional services provided by us as an independent business organization.

Delivery Preparation—We have given your new Packard car careful inspection and adjustment before delivery in accordance with Packard Motor Car Company's recommendations.

Owner Identification Card—We have also issued to you an "Owner Identification Card," which is supplemental to the Owner's Service Policy, and provides convenient evidence of the date of original purchase, the vehicle identification, and our name as the selling Packard Dealer. It is primarily intended for your use when touring.

Service During the Warranty Period—If your new Packard car does not function to your entire satisfaction during the first 90 days or 4,000 miles of operation, whichever occurs first, and the difficulty can be remedied by adjustment, we will, during such period, furnish this service to you without charge, provided the difficulty is not due to misuse, neglect, or damage due to accident or otherwise.

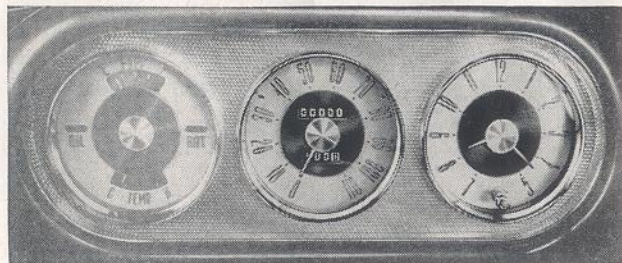
If in our judgment the replacement of an original part (except tires) is required because of a defect in material or workmanship, we will, during such period, make the replacement, and present your account for this service to the Manufacturer for payment under the terms of the "Manufacturer's Warranty," printed in "Your Guide for Operating and Caring for Your Packard," provided your new Packard car has not been repaired or altered in any way so as in our judgment to affect its stability or reliability, and has not been subjected to misuse, neglect or accident.

Due to present or prospective material shortages caused by the national emergency, or for other valid reasons, we reserve the right hereunder, in making replacements, to use parts, accessories, or equipment made of such materials and of such specifications as in our or the Manufacturer's absolute discretion shall appear proper, without regard to the composition or specifications of the items replaced, or to refrain from making any such replacement should such course appear advisable to us or to the Manufacturer.

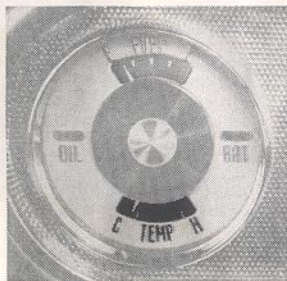
1000 and 3000-mile Inspection and Adjustment—We will perform the services as listed on the attached coupons without charge. In the event you are 50 miles or more away from our Service Department when these services become due, you may obtain them without charge from any Packard Dealer, who will be reimbursed by us.

TELE-GLANCE INSTRUMENT CLUSTER

The instruments are located in a raised cluster on the instrument panel directly in front of the driver. They are recessed in the cluster panel for the purpose of eliminating sun glare or reflections. Their location and size have been calculated to provide the maximum in convenience and readability.



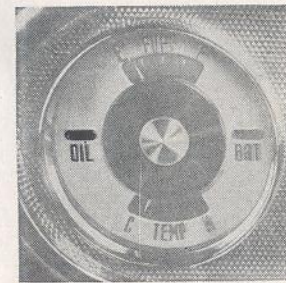
Temperature Gauge—The temperature gauge, marked “TEMP,” registers the temperature of the water or anti-freeze in the engine cooling system. The gauge will register when the ignition key is turned either to the left or to the right. When the engine is running at a normal temperature the pointer should center approximately between the “C” (cold) and “H” (hot) position. If, however, under normal driving conditions the pointer remains on the “H” mark, there is reason for concern and the difficulty should be determined. When the ignition key is in its off position, the pointer will come to rest on the “C” side of the gauge.



Fuel Gauge—The fuel gauge indicates the quantity of gasoline in the tank and this gauge also operates when the ignition key is turned from its off position without the engine running.

Battery Charge Indicator—The battery charge indicator marked “BAT”, is a signal light which determines for you whether electrical current is being delivered to the battery.

This indicator will light up when the ignition key is turned to the on position. When the engine is running at idle or slow speeds, the light will remain on due to more electrical energy being consumed than is being delivered to the battery. Headlights, radio and heater will affect battery output. With these in operation, driving at slow speeds reduces generator output and will cause the signal light to indicate a discharge condition. However, driving under normal conditions, the light will remain out indicating that the proper amount of electrical energy is being delivered to the battery.



Oil Pressure Indicator—The oil pressure indicator, marked “OIL,” also is a signal light and it will light when the ignition key is turned from its off position and before the engine is started. This indicator sometimes will light up or will flicker when the engine is idling even though the idle oil pressure is adequate; however, the light should go out when the engine is speeded up. If the light remains lit after the engine speed is increased, the engine should be shut off at once and the cause of the trouble determined.

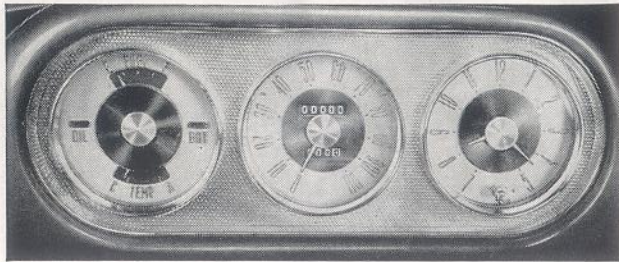
NOTE

The three instruments you have just read about, the “TEMP” gauge and the “BAT” and “OIL” indicators, will tell you when something is not working right and it is advisable to visit an Authorized Packard Service Station if:

- the “TEMP” gauge pointer should go over to “H” and stay there.
- the “BAT” indicator should stay lighted all the time you’re driving.
- the “OIL” indicator should stay lighted when the engine is speeded up above idle speed.
- the “BAT” and “OIL” indicators do not light at any time which may be caused by a burned-out bulb.

Speedometer—The speedometer, in addition to registering car speed, also indicates total mileage driven. If the speedometer includes a trip mileage indicator, figures may be set at zero by pushing upward on the re-set knob (located under the instrument panel and to the left of the speedometer) and then held there and turned to the right.

Clock—The clock is electrically operated and may be set by pulling out the re-set knob and turning it either to the right or to the left. Should it lose or gain time, turn the notched sleeve behind the re-set knob either to the left or to the right as required or note the amount of loss or gain per day and have it adjusted the next time you visit your Packard Dealer.



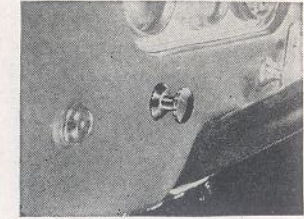
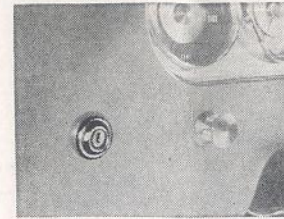
SMART—FUNCTIONAL CONTROLS

The controls of your new Packard have been designed for the utmost convenience of operation. They were handsomely styled to blend with the car's design and they create a smart ensemble that enhances its beauty.

The ignition key is your symbol of the right to safe comfortable driving. Besides operating the ignition switch, this key will lock or unlock the doors. A separate key (octagonal handle) will operate the luggage compartment and glove drawer locks. Safeguard the treasured possession that is your new Packard by always removing the keys when leaving it unattended.

Ignition Switch—The ignition switch has three positions. When the key is in the center position or, in other words, straight up and down in the lock, the switch is "off." When the key is turned to the left, the engine cannot be started but electrically operated accessories can be used and the instruments can be checked. The engine can be started when the key is turned to the right.

For convenience, the switch keyhole is lighted when the light switch knob is pulled out to the first or parking light position.



Light Switch—The light switch is a combination switch which controls the lighting of the parking lights, headlights, instrument cluster lights, and map lights.

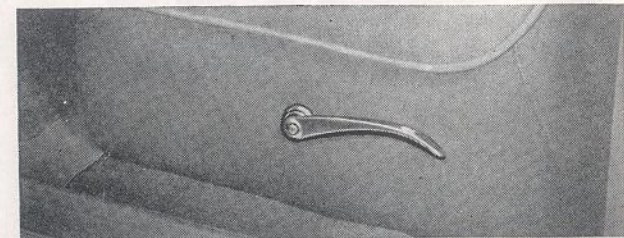
The *Parking Lights* are turned on by pulling the switch knob out to the first notch.

The *Headlights* are lighted by pulling knob out all the way.

The *Instrument Cluster Lights* and the *Map Lights* are controlled by turning the light switch knob. When the knob is turned all the way to the left, the instrument lights and the map lights will be out.

◆ The *Map* lights are installed for your convenience. They will light when the knob is turned to the right far enough to reach a "notch" and these can be turned on without pulling the knob out to light the parking lights or the headlights.

When the knob is turned past the "notch" with the parking lights or headlights on, the map lights will go out and the instruments will be brightly lighted when a second "notch" is reached. When the knob is turned further to the right the instrument lights will gradually become dimmer as the knob is turned. The instruments will be very dimly lighted when the knob is turned all the way to the right.

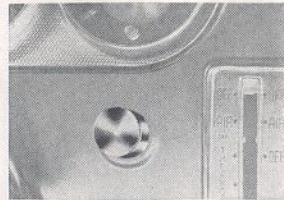
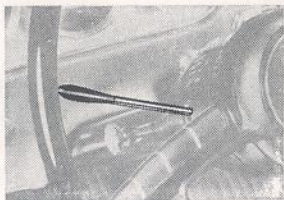


Front Seat Adjustment—A front seat adjustment makes it possible for you to set your seat in its most comfortable position—forward and up for drivers of short stature, or backward and down for taller drivers. Adjustment is made by raising the handle and sliding the seat to the desired position. It will lock in place when the handle is released. Enjoy all the comfort that is built into your Packard seat by occasionally changing its position during long drives.

Directional Signal—The directional signal indicates the direction in which you intend to turn. It does this by causing the affected front parking light and tail light to flash on and off.

To signal a turn, move the lever in the direction in which you are going to turn the steering wheel to make the turn. In other words, move the lever upwards to signal a right turn and downwards to signal a left turn. It is not necessary to hold the lever in either position since it will remain in position until the turn is completed.

While the directional signal is in operation, a green light between the figures "70" and "80" in the speedometer dial will flash on and off.



Cigar Lighter—The cigar lighter is operated by pushing inward on the lighter knob. The lighter will return to its normal position when it is hot enough to light your cigar or cigarette. Rear compartment lighters work in the same manner.

Power Brake—All 25th Series Packard Patrician "400's" are equipped with the Easamatic Power Brake as special equipment. It is also available as optional special equipment on the "200", "250", and "300" models.

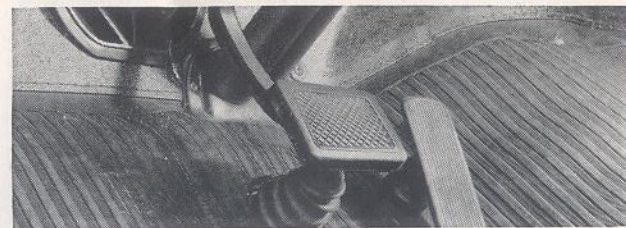
Packard cars when equipped with Easamatic Power Brakes provide an outstanding safety feature by having positive brake action available for the driver the instant the brake foot pedal is depressed.

The Easamatic unit is a combined vacuum and hydraulic unit for power braking, utilizing engine intake manifold vacuum and atmospheric pressure for its operation. It is a self contained unit having no external rods or levers exposed to dirt and moisture.

Packard Easamatic Power Brakes have a triple safety factor for providing brake action at all times — vacuum from the engine manifold, an emergency vacuum reserve tank that provides vacuum should the engine stall, and conventional brake pedal action.

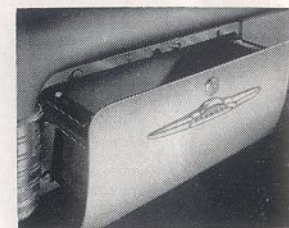
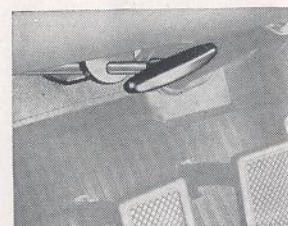
The foot brake pedal unit used with the Easamatic brake unit is conveniently located by being suspended from a bracket attached to the dash panel. This location allows more foot room for the driver, as the brake pedal is three inches nearer to the floor in the released position than a car equipped with conventional brakes. This reduced pedal travel brings the height of the pedal down to the approximate height of the accelerator pedal, permitting the driver to shift his toe from one pedal to the other without lifting his heel

from the floor. Lighter pedal pressures are required to apply the brakes.

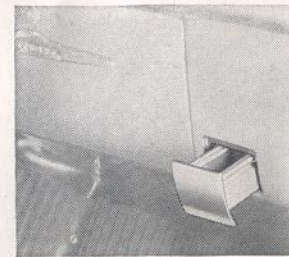
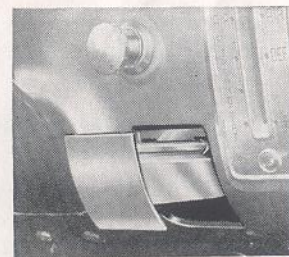


Driving Operation — It should be remembered that only gentle pressure of the toe is required to obtain brake action, and care should be exercised when applying the brakes that only light toe action is used to avoid stopping the car too fast.

Parking Brake—Packard's "Safti-set" parking brake, or hand brake, is applied merely by pulling straight back on the handle located to the left of the steering column. There are no intermediate positions for the parking brake handle—the brake is either all the way "on" or all the way "off." This eliminates the possibility of driving with "half-on" brakes. Release the brakes by turning the handle to the left, allowing it to return to release position.



Glove Drawer—Packard's spill-proof glove drawer provides spacious storage for maps and other items. It is opened by means of a finger grip at the bottom of the drawer and may be locked with the octagonal handled (cornered) key which also operates the trunk lock.

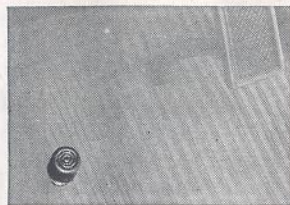
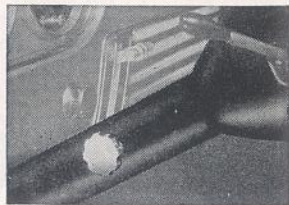


Ash Receivers—The front compartment ash receivers slide outward and have recessed finger grips in the bottom near the front edge.

Windshield Wipers—The windshield wipers can be started by turning the control knob (located on the left side of the steering column) toward you or, in other words, toward the rear of the car. The speed of the wiper blades also can be regulated by turning the knob in this direction.

A windshield washer is available as accessory equipment and this washer does away with poor visibility when the windshield is smeared with mud or road spray from other cars.

To operate the washer, first turn the wiper control knob away from you and hold it there for a few seconds to start the washer and then turn the knob toward you to start the wipers.



Headlight Beam Selector—The headlight beam selector ("dimmer" switch), operated by a button with the left foot, controls the beam thrown by the headlights which have a high beam for country driving and a low beam for city or traffic driving and for meeting oncoming cars.

When the lights are on the high beam, a red light will light up between the figures "30" and "40" in the speedometer dial.

The high beam enables you to see far ahead at night but, to a driver coming in the opposite direction, its glare is dangerous. Good drivers are always courteous. If you are driving with the high beam switched on and a car approaches from the opposite direction, step on the selector button and thereby switch to the low beam until the car has passed and then again step on the button to switch back to the high beam. This will pay off in safety both for yourself and for others.

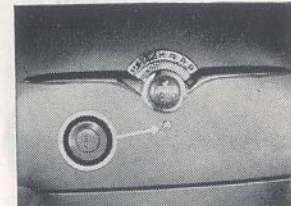
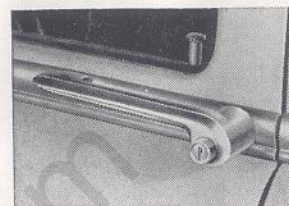
Door Handles and Locks—The outside door handles are of the newest snag-proof design. To open a door, simply grasp the handle, push inward on the button, and pull outward on the handle.

A hold-open device is incorporated in each door to prevent it from closing of its own weight after being fully opened.

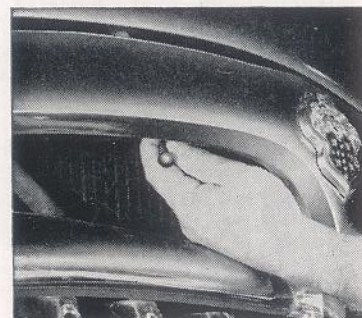
All doors may be locked from the inside by pushing downward on the locking knobs or buttons located on the window reveal moulding. A front door locked from the inside can be opened just by turning the inside door handle. On rear doors, the lock button first must be raised.

Either of the front doors may be locked from the outside with the ignition key. The front doors cannot be locked accidentally. If an inside lock button is placed in the locked position while the door is open, it will snap to its unlocked position when the door is closed.

Rear doors may be locked from the outside by pushing down the lock button and then closing the door. The lock button first must be raised before the door can be opened.



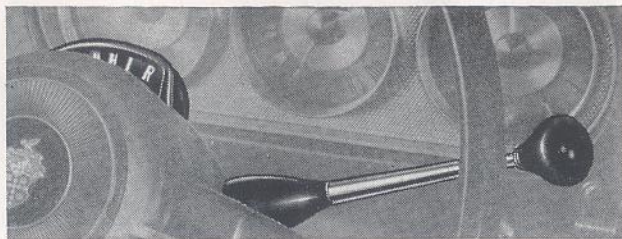
Trunk Lock—The luggage compartment is opened simply by turning the octagonal handled (cornered) key to the right and the lid will raise effortlessly. Hold-open springs prevent the lid from lowering when it is fully opened. The lid will be locked automatically when it is pushed downward and closed.



Bonnet Lock — The bonnet release lever is located at the front of the car, at the right side of the center grille bar. The bonnet can be released by reaching under the radiator grille upper bar and pulling the lever forward. This will permit the bonnet to lift high enough so the safety catch, which is located under the front edge of the bonnet directly above the center grille bar, can be released. The safety catch is released by pulling it upward and raising the front end of the bonnet at the same time. Spring loaded hinges assist in raising the bonnet and hold it in its fully open position.

The bonnet will lock automatically when lowered.

Ultramatic Drive—The ultimate in automatic transmissions is yours exclusively in a Packard. Ultramatic Drive, which was perfected after years of research and development by Packard, is one of today's finest engineering achievements. You drive Ultramatically, without pushing clutch pedals or shifting gears by simply positioning the Control lever and "stepping on the gas."



"H" means HIGH range. This position is used for all normal forward driving. When driving below 50 miles per hour in the high range, an extra burst of speed for quick passing of another car can be had by pressing the accelerator pedal firmly down against the floor. The high range position usually is used when starting on ice or in snow when gradual rear wheel traction is desired.

"L" means LOW range. Low range is used in deep sand and on long, hard pulls. It also should be used when going up or down steep grades. Driving down a steep grade in low range lets the engine act as a brake to reduce car speed.

"R" is for REVERSE. The control lever must be raised before it can be pulled downward into the reverse position.

"N" stands for NEUTRAL. This position is used when the car is standing with the engine running. In the neutral position, the engine may be speeded up without moving the car.

"P" means PARK. The rear wheels are not free to turn when the control lever is in the parking position and this position should be used when parking on a hill. The control lever NEVER should be placed in the parking position while the car is moving. The lever must be raised before it can be pushed upward into the parking position.

Starting the Engine (with Ultramatic Drive)—The engine, in cars with Ultramatic Drive, can be started only if the control lever is in the neutral position "N" or the parking position "P". The starting motor will not operate if the lever is in any other position.

The engine usually is started with the control lever in the neutral position. In extremely cold climates, especially after the car has been standing for a long time, the engine should be started with the lever in the parking position. This will overcome creeping because the rear wheels are not free to turn.

Heating and Ventilation System—Control your comfort by the simple manipulation of two levers and a switch, located on the instrument panel at the right of the steering column. They will regulate the flow of fresh air to the exact amount that you find comfortable.

Every Packard is equipped with a built-in ventilating system that is designed to provide a complete change of air every 45 seconds at 40 MPH.

Ventilation is regulated by sliding the left lever down to release a flow of air through the left dash panel grille at your feet. Manipulating the right lever in the same way will regulate the flow of air through the right side dash panel grille.

"OFF"—Fresh air supply completely closed off.

"AIR"—Wide open or, in other words, a full flow of fresh air.

Positions between "OFF" and "AIR" can be used to reduce or increase the flow of air as desired.

The remaining lever positions are not used unless the car is equipped with heater and defroster.

The fresh air heater and defroster equipment is available for all Packard cars as an accessory. This system operates along with the built-in ventilation system to provide comfortable, even temperatures inside the car as well as clear-across windshield defrosting.

Accurate temperature regulation is achieved by manipulating the left lever. The flow of warm air that passes through the windshield defroster and heat outlets is regulated by manipulating the right lever.

When moved below "AIR" position into the range marked "THERMOSTAT" the *left lever* closes off the left side air supply and becomes a temperature regulator. The temperature is made higher as the lever is lowered.

When moved below "AIR" position the *right lever* closes off the right side air supply and directs the air into a compartment where it is heated for distribution either to the inside of the windshield or toward the floor of the front compartment as desired.

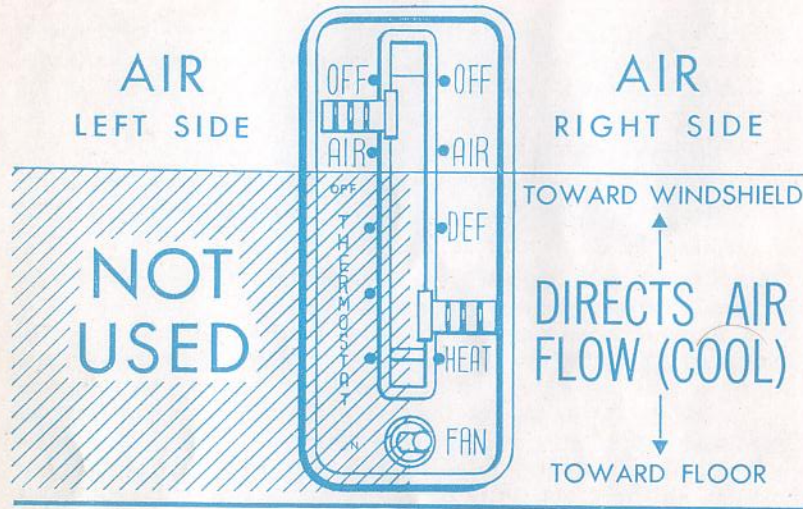
With the lever at "DEF," all of the heated air is directed against the windshield.

With the lever at "HEAT," all of the heated air is directed toward the front compartment floor.

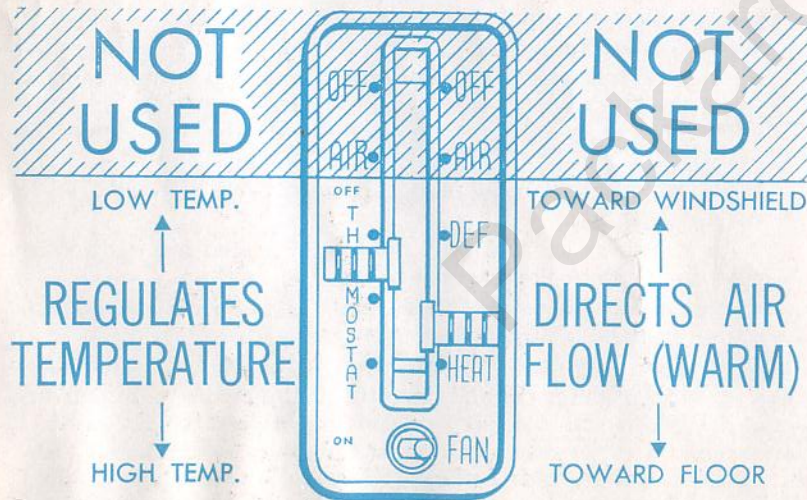
Lever positions between "DEF" and "HEAT" may be used to divide the flow of air as desired.

The "FAN" switch, when moved to "ON," starts a blower which draws in outside air for circulation through the heating and defrosting outlets. It is not necessary to use the blower fan for normal driving conditions because enough air usually is forced into the system by the forward motion of the car. The fan is generally used when driving slowly, to speed up defrosting of the windshield or to prevent windshield and window fogging.

WARM WEATHER



COLD WEATHER



Overdrive—Packard's overdrive operates along with the manual-shift transmission to provide a fourth forward speed or cruising range. This saves gasoline because the engine runs slower at a given car speed compared to the speed it would have to run in high gear without an overdrive.

The overdrive control knob is used to lock in or to lock out the overdrive as desired.

When the knob is pulled all the way out, the overdrive is locked out and the cruising speed cannot be used.

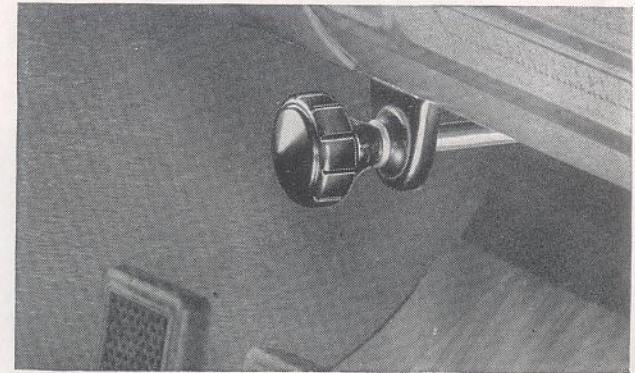
When the knob is all the way in, the overdrive is locked in and the cruising speed is ready for use after the car speed reaches approximately 22 miles per hour. Just lift your foot from the accelerator pedal for a moment and then return it. The overdrive will shift into cruising speed automatically while your foot is off the pedal. The overdrive also will shift back to high gear automatically when the car speed drops below approximately 17 miles per hour.

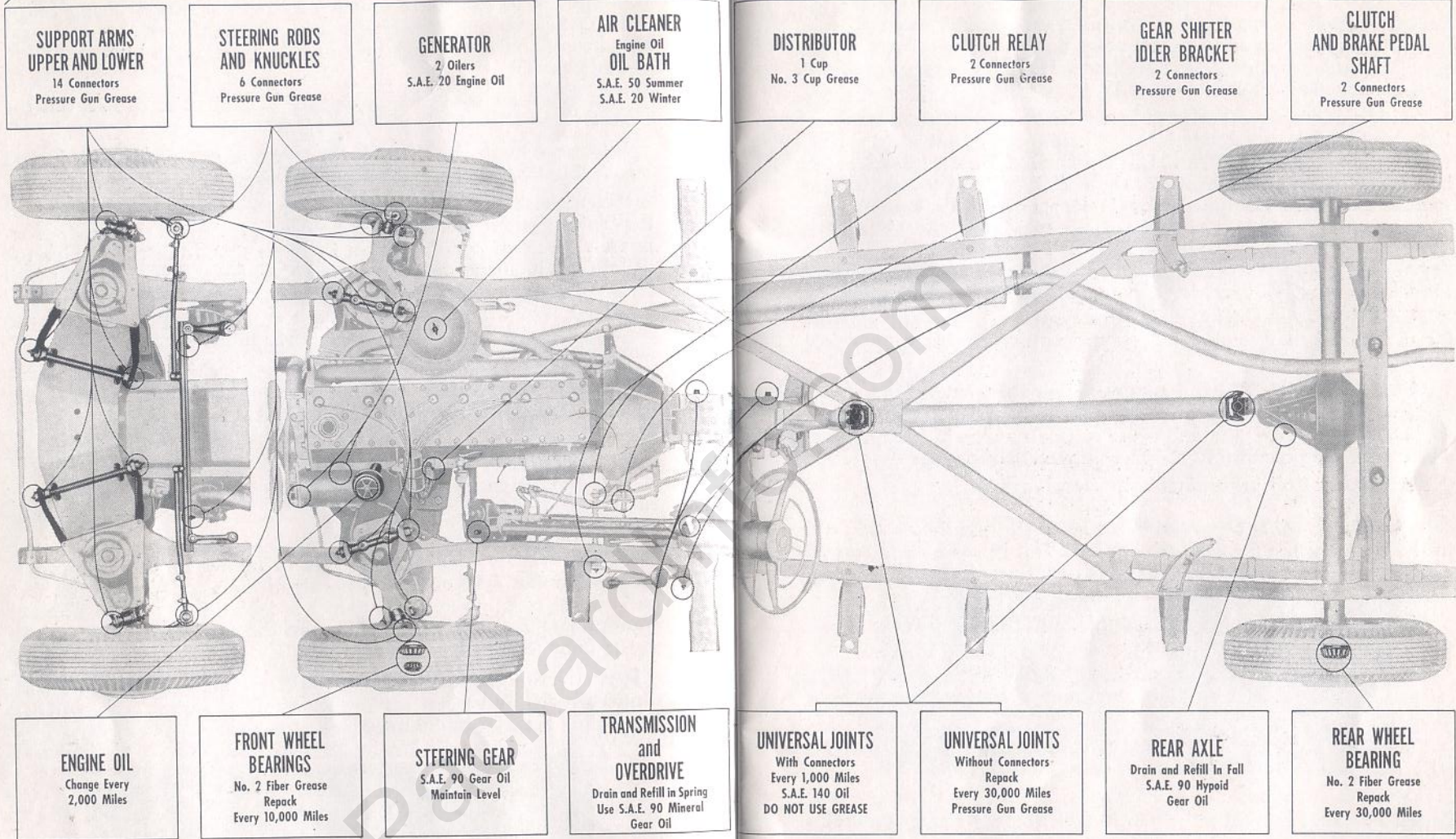
While cruising along in overdrive, you may want a sudden burst of speed to pass another car. If so, push the accelerator pedal firmly to the floor to shift back into high gear. After passing, lift your foot from the accelerator pedal to automatically shift into overdrive or cruising speed again.

The overdrive can be locked in at any speed just by pushing the control knob all the way in.

There are two things to remember if you want to lock out the overdrive: (1) to lock it out while in high gear below approximately 22 miles per hour, press lightly on the accelerator pedal and pull out the control knob, (2) to lock it out while in overdrive above approximately 22 miles per hour, press the accelerator pedal firmly to the floor to shift back to high gear and then pull out the knob.

It is advisable to lock out the overdrive when driving on icy or slippery roads and when driving down steep grades. This will let the engine act as a brake to reduce car speed.





**SUPPORT ARMS
UPPER AND LOWER**
14 Connectors
Pressure Gun Grease

**STEERING RODS
AND KNUCKLES**
6 Connectors
Pressure Gun Grease

GENERATOR
2 Oilers
S.A.E. 20 Engine Oil

AIR CLEANER
Engine Oil
OIL BATH
S.A.E. 50 Summer
S.A.E. 20 Winter

DISTRIBUTOR
1 Cup
No. 3 Cup Grease

CLUTCH RELAY
2 Connectors
Pressure Gun Grease

**GEAR SHIFTER
IDLER BRACKET**
2 Connectors
Pressure Gun Grease

**CLUTCH
AND BRAKE PEDAL
SHAFT**
2 Connectors
Pressure Gun Grease

ENGINE OIL
Change Every
2,000 Miles

**FRONT WHEEL
BEARINGS**
No. 2 Fiber Grease
Repack
Every 10,000 Miles

STEERING GEAR
S.A.E. 90 Gear Oil
Maintain Level

**TRANSMISSION
and
OVERDRIVE**
Drain and Refill in Spring
Use S.A.E. 90 Mineral
Gear Oil

UNIVERSAL JOINTS
With Connectors
Every 1,000 Miles
S.A.E. 140 Oil
DO NOT USE GREASE

UNIVERSAL JOINTS
Without Connectors
Repack
Every 30,000 Miles
Pressure Gun Grease

REAR AXLE
Drain and Refill in Fall
S.A.E. 90 Hypoid
Gear Oil

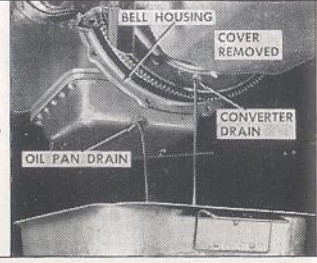
**REAR WHEEL
BEARING**
No. 2 Fiber Grease
Repack
Every 30,000 Miles

**SERVICING
THE
ULTRAMATIC
DRIVE**

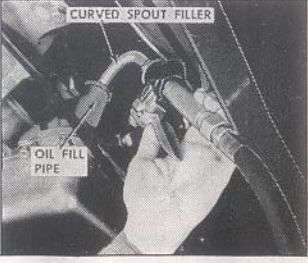
CHECK THE
FLUID LEVEL
EVERY 1,000
MILES



CHANGE
REMOVE
AND
EVERY
25,000
MILES



REFILL WITH
PACKARD
ULTRAMATIC
DRIVE FLUID



LUBRICATION

Packard Service as rendered by Authorized Packard Dealers specializes in safety service and in preventive service for the protection of your Packard investment and the safe and economical operation of your car for many thousands of miles.

Periodic lubrication and inspection assure smooth operation and long car life. Ask your Dealer about the convenient low cost Packard Lubrication-Inspection Plans. Use Authorized Packard Service. It's best for your Packard. It assures the use of Packard Parts, Packard special tools and equipment by factory trained Packard Master Servicemen.

Types of Engine Oil—Different types of engine oil are made to meet the various needs of everyday driving. These are defined as follows:

The **REGULAR TYPE** designates engine oil generally suitable for use in internal combustion engines under moderate operating conditions.

The **PREMIUM TYPE** designates engine oil having the oxidation stability and bearing corrosion preventive properties necessary to make it generally suitable for use in internal combustion engines where operating conditions are more severe than regular duty.

Both types of oil are available in several grades.

Selecting Engine Oil—During the first 500 miles, use the oil that was in the engine when the car was delivered. If it is necessary to add oil during this period, use nothing heavier than 10-W oil in cold weather and S.A.E. 20 or 20-W in warm weather.

After the first 500 miles, oil should be selected to meet different driving and climatic conditions.

During warm weather, use S.A.E. 20 engine oil; however, if the car is regularly driven at high speeds or if the average daylight temperature is above 90°F, use S.A.E. 30 oil.

The "OIL GRADE AND TEMPERATURE CHART" lists the oil grades to use during cold weather.

If there is any doubt as to which grade of oil to use, consult your Packard Dealer; he will assist you in selecting the proper grade.

OIL GRADE AND TEMPERATURE CHART

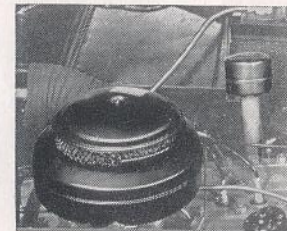
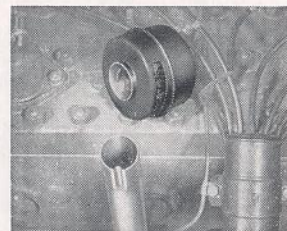
If the anticipated minimum atmospheric temperature will be:	Use the grade indicated:
Not lower than 32°F above zero.....	S.A.E. 20 or 20-W
As low as 10°F above zero.....	20-W
As low as 10°F below zero.....	10-W
Below 10°F below zero.....	5-W or 10-W plus 10% kerosene

Engine Oil Level—The engine oil level should be checked every time gasoline is purchased. Two level marks are stamped on the oil stick, one marked "LOW" and the other marked "FULL." The oil level should be maintained between these marks. Never permit the oil level to get below the "LOW" mark and, when necessary, add only enough oil to bring the level up to the "FULL" mark. Always check the oil level before starting on a long drive.

Special Engine Oils—"Break-in" oils or compounds which are added to the engine oil are unnecessary. They should not be used under any circumstances unless the supplier can furnish satisfactory proof that they contain no harmful ingredients.

Changing Engine Oil—It is recommended that the engine oil be changed every 2,000 miles if the car is operated under normal driving and climatic conditions. However, it may be necessary to change the oil more frequently if the following conditions prevail.

1. **DUST.** When driving through dust storms or on very dusty roads the dust may get into the engine oil in spite of the engine air cleaners.
2. **COLD WEATHER.** Frequent starts and short runs in cold weather does not permit the engine to warm up thoroughly and water may get into the oil from condensation of moisture.
3. **HARD DRIVING.** Hard driving and heat tends to thicken the oil and this may interfere with easy starting in cold weather.



Air Cleaners—The mesh in the combination oil filler cap and air cleaner should be cleaned and re-oiled each time the engine oil is changed. Clean the mesh by swishing the cap in gasoline, shake dry, and then dip it in clean engine oil.

The mesh type carburetor air cleaners also should be cleaned and re-oiled at each engine oil change. After the mesh has been cleaned in gasoline, re-oil it with engine oil using an oil can.

The heavy duty oil bath cleaner oil should be changed and the oil reservoir cleaned every 5,000 miles or oftener if driving conditions warrant. When refilling, use approximately one pint of S.A.E. 50 engine oil in warm weather and S.A.E. 20 in cold weather.

Transmission Oil—The transmission, and the overdrive if the car is so equipped, is to be lubricated with a high grade mineral gear oil of S.A.E. 90 viscosity.

The oil level should be checked every 1,000 miles and oil added if necessary. The oil should be drained and replaced with fresh oil each spring.

If difficulty in gear shifting is experienced during extremely cold weather, use S.A.E. 80 mineral gear oil.

Ultramatic Drive Fluid—The fluid level in the Ultramatic Drive unit should be checked every 1,000 miles and, if necessary, fluid added to maintain the level at the full mark on the dip stick.

Every 25,000 miles the unit should be drained and refilled. Packard Ultramatic Drive Fluid, obtainable at Packard Dealers, should be used or any type "A" automatic transmission fluid which has an AQ-ATF number embossed on the top of the can may be used.

It is recommended that the Packard Ultramatic Drive be serviced by Authorized Packard Service Stations.

Rear Axle Lubricant—The rear axle is to be lubricated with S.A.E. 90 Hypoid Lubricant.

The level should be checked every 1,000 miles and Hypoid Lubricant added if required. The axle should be drained and refilled with fresh Hypoid Lubricant each fall with the approach of cold weather.

S.A.E. 80 Hypoid Lubricant should be used where the temperature drops to 10 degrees or more below zero for long periods of time.

Universal Joints—All 25th Series Packards equipped with Ultramatic Drive use a propeller shaft with sealed universal joints which require repacking only at 30,000 mile intervals.

Cars having the manual shift transmission are equipped with universal joints having oil fittings and these universal joints should be lubricated with S.A.E. 140 oil every 1,000 miles. Grease never should be used in these joints.

Rear Springs—The rear springs of your car never should be lubricated. Liners are installed between the spring leaves to control the spring action and grease or oil is harmful to these liners. Should a squeak develop in the rear springs, do not have them lubricated. Consult a Packard Dealer for correction.

Chassis—Detailed instructions for lubrication are listed and illustrated in the "Lubrication Chart." All chassis lubricating points require attention every 1,000 miles.

Seasonal and Periodic Operations—Following are several items of lubrication and maintenance regularly required which are emphasized here for your convenience.

PERIODIC OPERATIONS

Front wheel bearings.....	Repack every 10,000 miles
Rear wheel bearings.....	Repack at 30,000 miles
Oil filter (where used).....	Renew cartridge 8,000 miles
Brakes.....	Check fluid level every 1,000 miles
Cooling system.....	Flush twice a year—spring and fall
Gasoline lines and strainers....	Clean out twice a year—spring and fall
Engine oil pan.....	Remove and clean once a year
Ultramatic oil screen.....	Remove and clean every 25,000 miles

GENERAL INFORMATION

Starting the Engine—The Packard engine has been designed to give quick, easy starting even in the coldest weather.

When starting the engine, always disengage the clutch on non-Ultramatic Drive equipped cars by holding the clutch pedal down until the engine has started. The starting motor then can turn the engine over without having to turn the transmission gears along with the engine. The additional load of turning the transmission gears is especially high in cold weather when the transmission oil is cold and thick.

Turn the ignition key to the right and then slowly press down on the accelerator pedal just far enough to engage the starter. Release the accelerator pedal as soon as the engine starts. Do not race the engine during the warm-up period.

If the engine does not start within a reasonable length of time, it may be over-choked or flooded. If so, press the accelerator pedal slowly to the floor and hold it there until the engine starts.

CAUTION

Never start or run an engine in a closed garage. Exhaust gases from gasoline engines contain carbon monoxide gas—a deadly poison gas which gives no warning of its presence . . . it is colorless and odorless.

The Right Gasoline—Your 25th Series Packard, if equipped with Ultramatic Drive, has a high compression engine which should be operated only on premium fuels such as "Ethyl" gasoline.

A lower compression engine is used in 25th Series Packards which have a manual-shift transmission and these engines will operate satisfactorily and efficiently on the so-called "regular" grades of gasoline.

Pushing or Towing (with Ultramatic Drive)—Occasionally Ultramatic Drive equipped vehicles are pushed to start the engine or, if disabled as the result of a collision, are towed into a Packard Dealer's service station.

If it is necessary to push the car to start the engine, which sometimes is done if the battery is weak, the selector lever should be placed in the neutral position, "N," and the ignition switch turned on. When the car reaches a speed of 25 miles per hour, the selector lever should be moved to the high range position, "H," at which time the engine will turn over.

A disabled vehicle may be towed on the rear wheels if the Ultra-matic Drive unit is not damaged and no oil has been lost; however, the selector lever must be placed in the neutral, "N," position. If the selector lever is in any other position, unnecessary damage may result. Towing speed should be limited to 30 miles per hour and long distance towing (over approximately 300 miles) is not recommended.

Sometimes a collision may damage the shift linkage to the extent that the selector lever cannot be shifted to the neutral, "N," position. In this event, the driveshaft should be removed or the car should be towed in on its front wheels. This procedure also should be followed if the transmission is damaged, the transmission oil pan distorted, or when oil is lost.

Pushing or Towing (with Overdrive)—No special instructions apply to pushing or towing the car when it is equipped with an overdrive. However, if the car is being pushed to start the engine, the overdrive should be locked out.

Sometimes the overdrive can be locked out while the car is standing just by pulling out the lockout knob. If the knob cannot be pulled all the way out, move the car forward or backward a few feet and pull out on the knob.

Break-In Period—The manner in which your new car is driven for the first 250 miles has much to do with the way it will operate at a later date. This applies to the brakes, gears, rear axle, and other units, as well as to the engine.

During this period, do not open the throttle wide for acceleration or hill climbing and limit the speed to 50 miles per hour. In the long run, this will pay off in many thousands of miles of motoring pleasure.

Starting After a Stop—The driver who makes a fast getaway from traffic lights before getting into direct drive or high gear will find this form of driving expensive.

These fast starts waste gasoline and will cause undue wear even on the best of parts. The driver who gets into direct drive or high gear at moderate speeds will save on both gasoline and service expense.

Driving on the Highway—Maintaining a steady speed on the highway will save gasoline. A steady accelerator pedal will always result in more miles per gallon than one which is continually being operated up and down for passing other cars, for curves, and for inter-sections.

Warm-Up in Cold Weather—When any car engine is started in cold weather, it needs more gasoline to run smoothly without stopping than it does after it is warmed up. It also is true that the engine will warm up faster while the car is standing than it will while moving.

The good driver makes it a habit to let the engine warm up for a minute or two before starting to drive in cold weather.

Safe Driving Tips—Safe driving is careful—not timid driving but competent driving. It requires concentration and courtesy.

The competent driver is always sure of his car. He knows what it will do when he accelerates. He knows what it will do when he decelerates. He drives so he can stop within a clear distance ahead. He has his car under control at all times.

He keeps his brakes adjusted so he knows what he can expect when he wants to stop. His tires and battery are checked at proper intervals. He always takes traffic, pavement, visibility and weather conditions into consideration.

A good driver keeps his windshield and rear view mirrors clean and his windshield wipers and lights in order and adjusted. He signals his turns and stops, slows down for schools and cross roads, watches railroad crossings, and never passes on hills, curves, or crossings.

A good driver exercises due regard for the rights of others and assumes responsibility for the safety of pedestrians and playing children.

* * * *

COOLING SYSTEM

Your Packard has a sealed, pressure type cooling system to provide the best cooling possible. This pressure is made possible by the use of a special radiator cap.

Without pressure in the system, water would boil at 212° F; however, in the Packard pressure type system, this boiling point is raised to approximately 227°F.

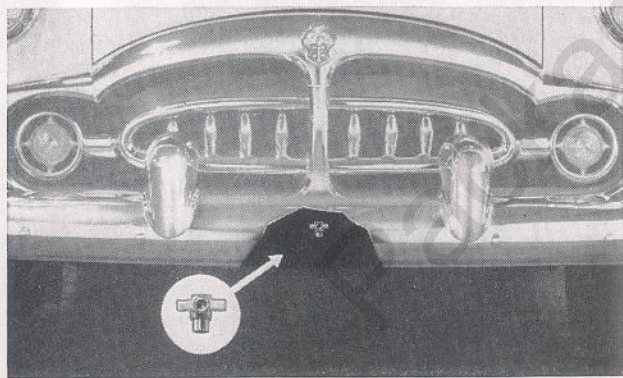
CAUTION

When removing the radiator cap while the engine is hot, first loosen the cap to the first notch and allow the pressure in the radiator to escape before completely removing the cap.

Coolant Level—The system requires regular attention. The coolant level in the radiator should be kept at about one inch below the bottom of the filler neck. If coolant is added above this level, it will flow out of the radiator vent after the engine has warmed up.

NOTE

If for some reason the water in the radiator should get very low and the engine very hot, let the engine cool off before adding cold water. After the engine has cooled off, add the water slowly with the engine running. Cold water in a very hot engine might crack the cylinder block or head.



Draining the System—The cooling system should be drained and flushed twice a year. To completely drain the system, first remove the radiator cap and then open the radiator drain cock behind the front bumper near the center of the car and remove the plug from the cylinder block near the starter.

Rust Preventive—Packard Rust Preventive, available through your Packard Dealer, is a special solution that cuts down the formation of scale and rust. Packard Rust Preventive should be added at least twice a year or whenever the cooling system is drained for any reason. This inexpensive service can save you dollars in repairs at some later date.

Anti-Freeze—Among the anti-freeze solutions that have been found satisfactory are those made from ethylene glycol (permanent type), denatured ethyl alcohol (ethanol) and methyl or wood alcohol (methanol). Your Packard Dealer can obtain for you Packard Permanent Type Anti-Freeze (ethylene glycol), a factory approved product.

Kerosene or other oils, or solutions containing calcium chloride, magnesium chloride, sodium silicate or other inorganic salts, honey, glucose, or sugar are not satisfactory for use in the cooling system.

Before installing anti-freeze solution, the cooling system should be inspected and serviced for winter operation. After the anti-freeze has been installed, the entire system, including the hose connections, cylinder head gasket, and the water pump should be inspected regularly to make sure that no leaks have developed.

Anti-Freeze Chart—The cooling system capacity of your Packard is 20 quarts. If the car is equipped with heater and defroster, the capacity is approximately 20½ quarts. The following table shows the amount of anti-freeze solution required to protect your car down to the temperatures indicated.

ANTI-FREEZE CHART

COOLING SYSTEM CAPACITY	FOR PROTECTION DOWN TO	QUARTS ETHYLENE GLYCOL	QUARTS ALCOHOL
20 Quarts	Zero Fahrenheit	7	7
	10° Below Zero Fahrenheit	8	9
	20° Below Zero Fahrenheit	9	10

ELECTRICAL SYSTEM

Battery Care—The life of your battery depends upon the care it receives. The water level should be checked every 1,000 miles or every two weeks in warm weather and once a month in cold weather and distilled water added when necessary.

When filling the battery, the electrolyte (the fluid in the battery) should not be allowed to overflow because it is very corrosive. Should this happen, however, the battery fluid should be washed away with a solution of bicarbonate of soda and then rinsed.

If the battery requires a considerable amount of water, the electrical system may not be operating properly and you should consult your Packard Dealer for correction.

If your car is to be stored for a period of more than a month, have the battery removed by your Packard Dealer so that it will be properly serviced and kept in a healthy state of charge.

Do not add battery dopes or any chemicals, oils, or other substances to your battery because they reduce battery life. (This also will void the battery warranty).

CAUTION

Never allow a flame or spark near the battery because gas produced within the battery may be ignited and explode.

LIGHT BULB CHART

LOCATION	CANDLE-POWER	MAZDA NO.
Courtesy and Map Lights.....	6	82
Glove Box Light.....	2	55
Headlights.....	35-45 Watt	—
Ignition Switch.....	2	55
Indicator Light Bulbs		
Headlight High Beam.....	1	51
Direction Signal.....	1	51
Oil Pressure.....	2	55
Battery Discharge.....	2	55
Selector Lever (Ultramatic).....	1	51
Instrument Lights.....	2	55
License Light.....	3	63
Parking and Direction Signal Light (Front).....	3-21	1154
Reading Lights (Dome).....	15	210
Stop and Tail Light.....	21-3	1154
Models 300 and 400.....	21-3 and 3	1154 and 63
Trunk Light.....	6	81

FUSE CHART

CIRCUIT	LOCATION	CAP. AMPS	NO.
Clock	In cable at rear of clock.....	3	SFE-3
Direction Sig. Flasher	} { Circuit breaker on instrument cluster.....	10	—
Radio			
Overdrive	On relay on dash panel.....	30	SFE-30
Heater	In cable near ignition switch.....	20	SFE-20
Head, Tail and Stop Lights	} { Circuit Breaker on headlight switch.....	30	

Headlights—Your Packard is equipped with the finest “Sealed Beam” headlights built today. The only services required are wiping off the lenses, checking aim periodically, and replacing the unit in case it burns out or becomes damaged.

It is recommended that the car be taken to an Authorized Packard Service Station every six months to have the aim of the headlights checked. Your Dealer has equipment to do this aiming job properly and quickly.

WHEELS AND TIRES

Tire Pressure—Having the proper amount of air in the tires at all times is most important if high tire mileage and a satisfactory ride are to be obtained. Too much air will adversely affect the ride, while not enough air will cause tire wear.

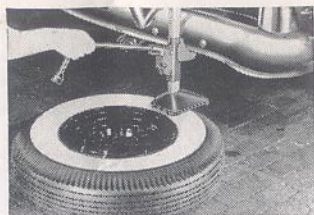
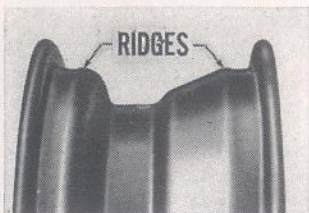
Tires should be checked every week or ten days and inflated to the proper pressure. When touring or driving several hundred miles a day, check the tire pressure every day or two. Always reinstall the tire valve caps because they keep out dirt and seal the valve opening.

The recommended cold or starting tire pressure is 24 pounds for both the front and the rear tires.

After the car has been driven at normal speeds in the city, the pressure should be 27 pounds—3 pounds over the starting pressure of 24 pounds.

After driving on the highway at moderately high or high speeds, the pressure should be 29 pounds—5 pounds over the starting pressure.

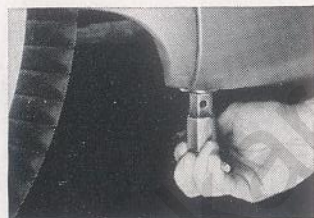
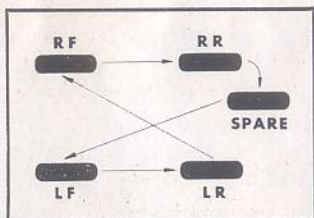
Never bleed the tires to reduce the pressure built up by heat. The tires are designed to build up a safe pressure of a few pounds after they are run.



Safety Rim Wheels—The new, carefully balanced, demountable, drop center, disc-type wheels incorporate a safety feature in the form of a raised ridge, or section, between the rim flange and the drop center of the wheel rim. This ridge tends to keep the tire bead tightly against the rim flange, even in case of a sudden deflation of the tire.

When inflating the tires, the air pressure within the tube snaps the bead over the ridge and holds it tightly against the rim flange. When removing the tire from the rim, additional force is required to push the tire bead over the ridge into the drop center. This can be accomplished by using the car jack under the bumper.

Cross Switching Tires—Cross switching the wheels and tires every 3,000 to 4,000 miles greatly increases tire life. By doing this, all five tires will get the same amount of wear over a given period of time.



Changing Wheels—Emergency wheel changing in case of a flat tire is most easily accomplished by observing the following procedure exactly:

If a rear wheel is to be changed, the wheel shield is removed by removing the screw at the rear of the shield using the wrench furnished in the tool kit. The shield will then drop down at the rear and can be swung clear of the fender.

Make sure the hand brake is set.

Remove the hub cap, using flattened end of combination wheel wrench and jack handle as a pry.

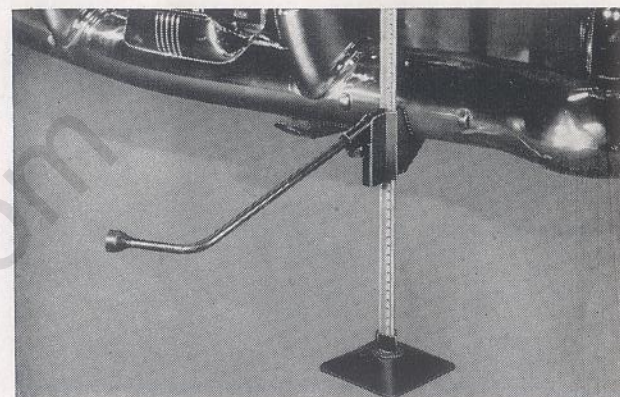
Loosen the wheel mounting bolts not more than a turn or two.

Assemble the jack to its base and place the jack under the bumper bar directly between the two bolt heads in the bumper, behind the wheel to be changed. Be sure the jack bar is in a vertical position before attempting to lift the car.

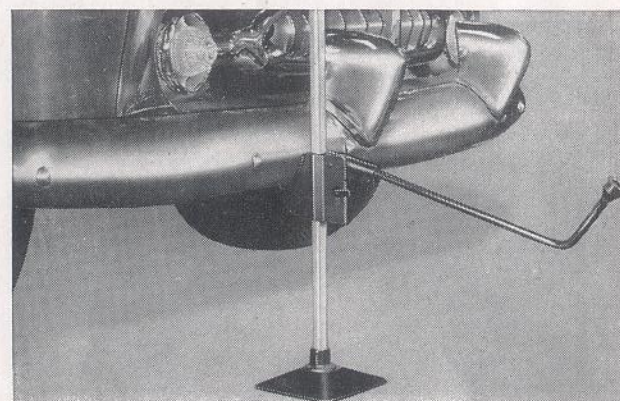
Raise the car to a height just sufficient to remove the wheel.

Remove the wheel retaining bolts and lift off the wheel and tire.

Install the spare wheel by reversing the foregoing operations.



To install the wheel shield, engage the projecting dowels in the shield at the lower front corner of the shield into their respective holes in the fender. Swing the shield upward into place over the remaining dowels. Install the retaining screw at the rear of the shield and tighten with the wrench.



If a front wheel is to be changed, locate the jack under the front bumper between the bolt heads.

CLEANING THE CAR

Painted Surfaces—Fine dust may be safely removed by dusting with a soft, clean, cloth but "scrubbing" a dirty car with dry cloths is almost certain to scratch it.

Clean the car by washing with plenty of cold or luke-warm water. Soak the dirt off as much as possible and rinse sponges frequently to remove grit and dirt. Dry with a clean chamois. Avoid washing the car in the sun or when the lacquered surfaces are hot. Never use hot water.

In sections where salt, calcium chloride, or similar chemicals are used on the roads, frequent washing of the car is necessary to preserve the finish. Where cars are to be exposed to freezing temperatures immediately after washing, all water must be removed from the lock cylinders and the edges of the doors and adjustable windows to prevent sticking due to the formation of ice.

A high luster can be restored with a Packard Lustur-Seal Treatment (available at your Packard Dealer) or any other properly formulated body polish. The presence of color on the rubbing cloths simply indicates the removal of chalked or dead surface pigment loosened by exposure.

Any lacquered surface upon which alcohol solutions have been spilled should immediately be flushed with water.

Glass—Plate glass although hard can quite easily be scratched. Cleaning a dirty windshield when dry by operation of the wiper blade or with dry cloths is apt to cause minute surface scratches. Wet glass before cleaning.

Chromium Plating—Among the more common elements that attack chromium plating are: sulphur dioxide present in the air, especially in large industrial centers; calcium chloride used on city streets to melt ice and on dirt roads to prevent dust; also the salt air of coastal territories. When plating is scratched or scuffed to the base metal, ordinary moisture becomes a damaging agent. Rust, originating at the root of a scratch, will continue to spread underneath the plating unless attended to when it first appears.

Due to present material shortages caused by the national emergency, we, the Manufacturer, are supplying chrome in accordance with Government regulations. For proper care and protection of this chrome, see your Packard Dealer.

Upholstery—Where the use of cleaning fluid is indicated, use Packard Fabric Cleaner or a cleaning fluid in which carbon tetrachloride is the principal ingredient. To avoid rings, work from the outside toward the center.

Battery Acid will destroy upholstery if allowed to remain. Neutralize the acid as soon as possible by pouring household ammonia water directly on the spot to saturate the fabric as far as the acid extends. Give the ammonia water a full minute to neutralize the acid and then sponge the fabric with a wet cloth. Use cold water.

Blood Stains, rub with a clean cloth wet with cold water.

Candy or Fruit stains should be rubbed with a clean cloth wet with very hot water. If chocolate is present in the candy stain, use lukewarm water. After drying, sponge with a clean cloth wet with cleaning fluid.

Gum, moisten with cleaning fluid; remove with a dull knife.

Ice Cream, rub with a clean cloth wet with very hot water. If this is not satisfactory, use a cloth wet with warm soap suds and rinse with a cloth wet with cold water. After drying, sponge with cleaning fluid.

Lipstick, pour cleaning fluid directly on spot and immediately hold a clean blotter on stain. Repeat until clean.

Shoe Polish, for black or tan polish, use a cloth wet with cleaning fluid. If white polish cannot be brushed off, wet with cold water, allow to dry, and then brush off.

Grease or Oil, small spots should be rubbed with a cloth wet with cleaning fluid. Pour cleaning fluid on large spots and blot with clean blotters.

Tar, moisten with cleaning fluid and remove with a dull knife. Sponge with cloth wet with cleaning fluid.

Paints and Lacquer, rub with a cloth wet with turpentine and then sponge with a cloth wet with cold water.

Water Spots, sponge the entire panel with a cloth dampened with cold water; then sponge the spots with a cloth moistened with cleaning fluid.

Convertible Top and Rear Window—Packard Fabric Cleaner or common upholstery cleaners, such as naphtha, carbon tetrachloride, etc., may be used for removing spots from top material. Do not use dry or damp cloth to clean rear window panel. Flush with clear, cold water to remove dust, etc. If further cleaning is required, lather panel with mild soapsuds, using palm of hand, and then rinse thoroughly.

CAUTION

Before lowering top, unzip rear window panel at the sides and top and drop it into top compartment.

SPECIFICATIONS

Model	200	250	300	400
Over-all length	212 ³ / ₄ "	212 ³ / ₄ "	217 ³ / ₄ "	217 ³ / ₄ "
Max. width	77 ⁷ / ₈ "	77 ⁷ / ₈ "	77 ⁷ / ₈ "	77 ¹ / ₁₆ "
Wheelbase	122"	122"	127"	127"

Weight—Consult the dealer who sold you the car, or the Motor Vehicle Commissioner in your state.

Model	200	250 & 300	400
-------	-----	-----------	-----

ENGINE

	200	250	300	400
Type	8 Cyl. "L" Head	8 Cyl. "L" Head	8 Cyl. "L" Head	8 Cyl. "L" Head
Bore	3 ¹ / ₂ "	3 ¹ / ₂ "	3 ¹ / ₂ "	3 ¹ / ₂ "
Stroke	3 ³ / ₄ "	4 ¹ / ₄ "	4 ¹ / ₄ "	4 ¹ / ₄ "
A.M.A. Horsepower	39.2	39.2	39.2	39.2
Oil Capacity	7 qt	7 qt	7 qt	7 qt
Water Capacity	20 qt	20 qt	20 qt	20 qt
Heater Capacity	1/2 qt	1/2 qt	1/2 qt	1/2 qt
Thermostat Rating				
Low reading	148	148	148	148
Standard	157	157	157	157
High reading	175	175	175	175
Fuel Tank	20 gal.	20 gal.	20 gal.	20 gal.
Valve Clearance				
Intake	0.007"	Hydraulic	Hydraulic	Hydraulic
Exhaust	0.010"	Hydraulic	Hydraulic	Hydraulic

COMPRESSION RATIO

	200	250	300	400
Std. Compression	7.00 to 1	7.00 to 1	7.00 to 1	7.80 to 1
High Compression	7.50 to 1	7.80 to 1	7.80 to 1	7.80 to 1

BRAKE HORSEPOWER

	200	250	300	400
Std. Compression	135 @ 3600 rpm	150 @ 3600 rpm	155 @ 3600 rpm	155 @ 3600 rpm
High Compression	138 @ 3600 rpm	155 @ 3600 rpm	155 @ 3600 rpm	155 @ 3600 rpm

ELECTRICAL

	200	250	300	400
Battery	17 Plate—100 hr.	17 Plate—100 hr.	17 Plate—120 hr.	17 Plate—120 hr.
Generator	45 Amp. Shunt	45 Amp. Shunt	45 Amp. Shunt	45 Amp. Shunt
Regulator	Voltage & Current Control	Voltage & Current Control	Voltage & Current Control	Voltage & Current Control
Breaker Gap	0.013"—0.018"	0.013"—0.018"	0.013"—0.018"	0.013"—0.018"
Spark Plugs	14 mm	14 mm	14 mm	14 mm
Spark Plug Gap	0.023"—0.028"	0.023"—0.028"	0.023"—0.028"	0.023"—0.028"
Ignition Timing	6° btdc	6° btdc	6° btdc	6° btdc
Headlights	Sealed Beam	Sealed Beam	Sealed Beam	Sealed Beam

Model	200	250 & 300	400
-------	-----	-----------	-----

CLUTCH

	200	250 & 300	400
Type	Dry Disc 10"	Dry Disc 10 ¹ / ₂ "	Dry Disc 10 ¹ / ₂ "
Clutch Pedal Free Play	1 ¹ / ₄ "-1 ¹ / ₂ "	1 ¹ / ₄ "-1 ¹ / ₂ "	1 ¹ / ₄ "-1 ¹ / ₂ "

TRANSMISSION

	200	250 & 300	400
Type	Selective Silent Synchronized	Selective Silent Synchronized	Ultramatic Drive
Oil Capacity	2 pt	2 pt	12 qt
Overdrive Capacity	1 ¹ / ₄ pt	1 ¹ / ₄ pt	3 ¹ / ₄ pt
Total Capacity	3 ¹ / ₄ pt	3 ¹ / ₄ pt	3 ¹ / ₄ pt

REAR AXLE

	200	250	300	400
Type	Hypoid	Hypoid	Hypoid	Hypoid
Oil Capacity	4 pt	4 pt	4 pt	4 pt
Ratio				
Standard	3.9 to 1	3.9 to 1	3.9 to 1	3.54 to 1
Overdrive	4.1 to 1	4.1 to 1	4.1 to 1	3.54 to 1
Ultramatic Drive	3.54 to 1	3.54 to 1	3.54 to 1	3.54 to 1

SUSPENSION

	200	250	300	400
Type	Independent Parallelogram	Independent Parallelogram	Independent Parallelogram	Independent Parallelogram
Springs				
Front	Coil	Coil	Coil	Coil
Rear	Leaf	Leaf	Leaf	Leaf
Shock Absorbers				
Front & Rear	Direct Acting	Direct Acting	Direct Acting	Direct Acting

STEERING

	200	250	300	400
Gear Make	Gemmer	Gemmer	Gemmer	Gemmer
Gear Oil	S.A.E. 90	S.A.E. 90	S.A.E. 90	S.A.E. 90
King Pin Angle	5° 50'	5° 50'	5° 50'	5° 50'
Caster Angle	-1°±1/2°	-1°±1/2°	-1°±1/2°	-1°±1/2°
Camber Angle	0°+3/4°-1/4°	0°+3/4°-1/4°	0°+3/4°-1/4°	0°+3/4°-1/4°
Toe-In	0+1/16"-0	0+1/16"-0	0+1/16"-0	0+1/16"-0
Tire Pressure				
Front & Rear	24 lb	24 lb	24 lb	24 lb

“The Best for the Finest”



To give the “best” in service for the finest Packard ever built, every Packard Dealer’s Service Department is staffed by Factory trained servicemen who are thoroughly familiar with every part of your car and who can best service it in the most efficient manner without lost time. There is a sincere desire of everyone in the Packard organization to be of service to you. This attitude exists with the Factory, Zone, Dealer, and the Dealers’ Personnel.

The Packard Master Serviceman’s emblem and certificate is awarded only to those selected Dealer Servicemen who have attended the Factory Schools and performed the actual mechanical work as prescribed by the Packard Service Department of the Factory.

These trained men are proud to have earned this award and are eager to serve your needs. When you visit your Packard Dealer and notice the emblem or certificate, you may have complete confidence that the service you receive will be the finest.

The Finest Packard Ever Built Deserves
the Best Service Available



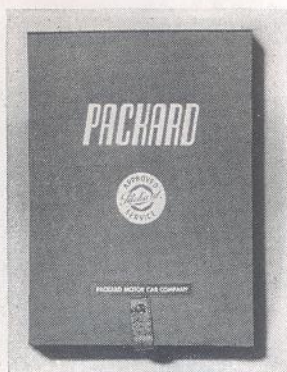
The Service Department at the Factory provides educational and training programs for the Dealer Servicemen, Service Managers, Parts Managers, and Partsmen to assure the Packard customer that the service he receives will always be the best.

At the Packard Dealership guesswork is never used to solve your wants or needs of the car, because skilled men and scientific diagnosis equipment is used to seek out and find your needs quickly.

Your Packard Dealer’s Servicemen receive a constant flow of technical information from the Factory where the idea or method must be proven before being released. This data in the form of charts, manuals, books, bulletins, films, and records never ceases in the effort to provide the best for your car in the form of improvements whether they be mechanical or a better way to perform a service operation.

A few of these instructive publications are illustrated on the following two pages:

MANUALS AND PUBLICATIONS



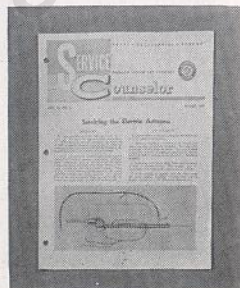
Technical charts are used in the presentation of training programs. In these charts, all major assemblies are graphically illustrated, providing a keener insight into the operation of your car.

The Packard Service Manual—a thorough manual complete in detail, giving all service operations in a step-by-step manner, assuring efficient service for Packard cars.



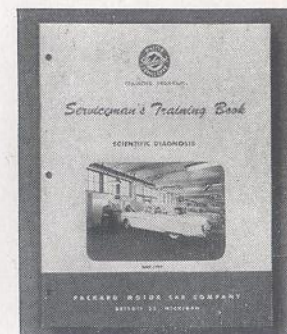
The Packard Parts Book is constantly maintained to assist Dealers in keeping Packard Parts available at all times.

The Packard Service Counselor—a publication issued monthly to all Packard Dealers for the servicemen, acquainting them with the latest methods or changes in servicing your car.

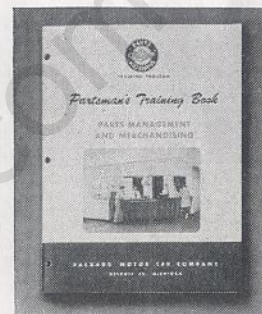


MANUALS AND PUBLICATIONS

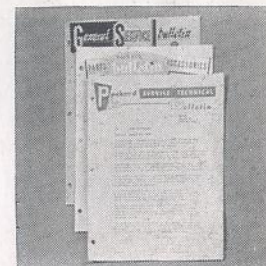
Serviceman's Training Books are constantly supplied through Training Programs to Dealer men to keep them abreast on car servicing, and many other varied subjects related to improving Packard servicing procedures.



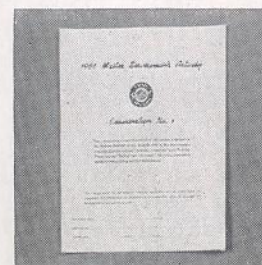
The Partsman's Training Book for Packard Dealers, Partsmen, and Parts Managers provides a greater understanding of owner parts requirements.



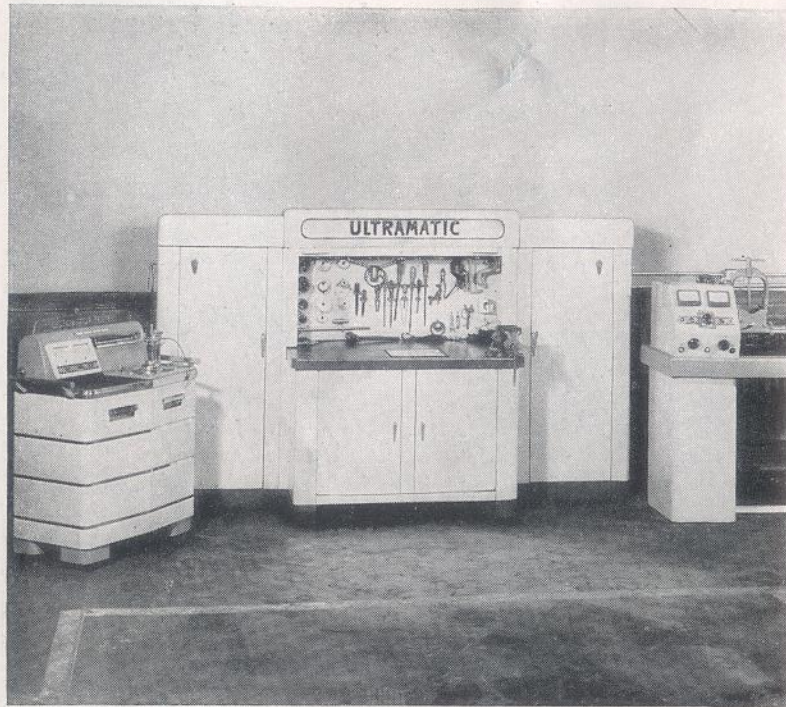
Service Bulletins immediately notify the Dealer of any product changes or servicing procedure. By this means, his service personnel are always informed.



Written examinations covering all mechanical units of your car, such as Ultramatic Drive, front suspension, etc., are taken by all servicemen to determine whether or not they are eligible for a Serviceman's award emblem and certificate.



MODERN TOOLS and EQUIPMENT USED



Your Packard Dealer carries Factory recommended tools and equipment that are specially designed to do the job better, faster, easier, and more economically. They are always of the highest quality and represent safe and effective means of making repairs without damage to the parts.

The Packard Dealer has a well equipped shop with diagnosis equipment to service the owner's car. This equipment quickly seeks out and finds the service needs for your car promptly without lost time and eliminating unnecessary repairs or adjustments.

Visit your Packard Dealer for normal periodic maintenance and adjustments. When you follow this counsel, you may feel confident your Packard car will operate with the utmost efficiency and provide many thousands of miles of carefree driving.

Packard Precision Parts are engineered and manufactured to rigid Factory production standards to provide safety and long life for the owner's car. These parts are precision made, always available, and nationally distributed. Packard Parts are so designed that the fit will always be perfect.

Packard ACCESSORIES

DESIGNED FOR
ENGINEERED FOR
APPROVED FOR

} Your Packard

PERSONALIZE YOUR PACKARD WITH THESE CUSTOM-DESIGNED ACCESSORIES

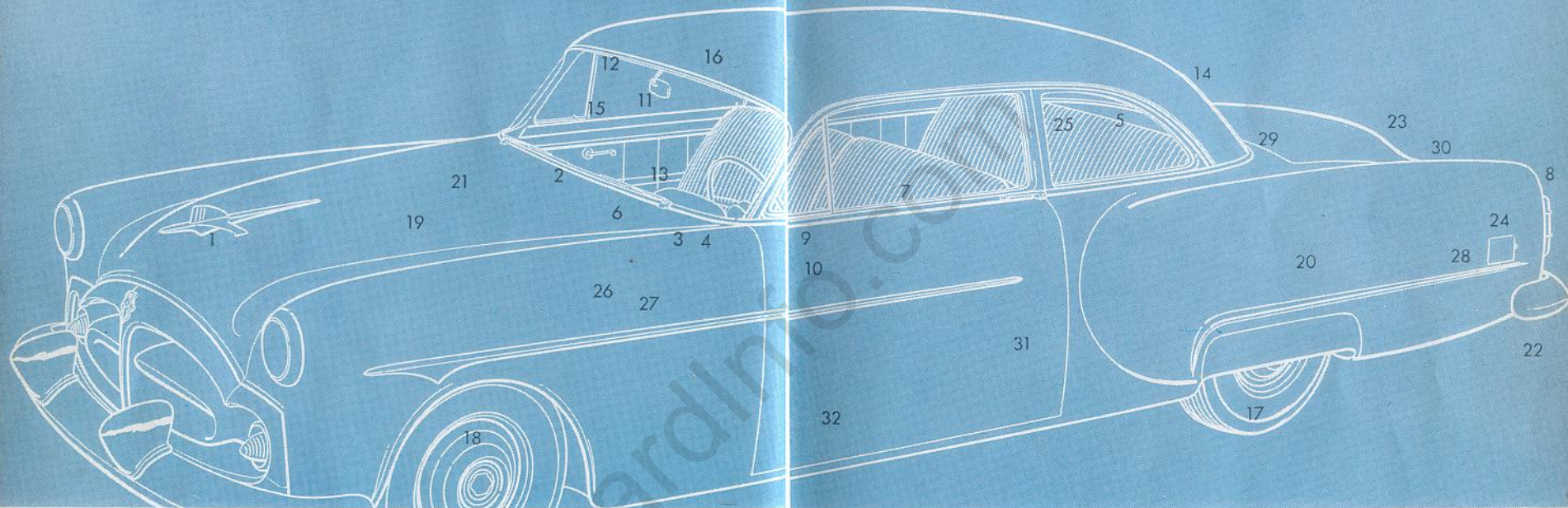


On the pages that follow you will see a complete selection of Packard approved accessories—all designed to satisfy your individual tastes and desires.

These new, all-new Packard accessories are engineered with the same regard for perfection as the car itself. All are styled to enhance the distinctive appearance of your new Packard. All contribute immeasurably to your enjoyment . . . safety . . . and comfort.

ACCESSORIES ADD

Beauty... Safety... Comfort



NO.	DESCRIPTION	PAGE
1	Bonnet Ornament—Pelican	50 <input type="checkbox"/>
2	Radio	45 <input type="checkbox"/>
3	Antenna, Electric	45 <input type="checkbox"/>
4	Antenna, Manual Rear Compartment Radio	45 <input type="checkbox"/>
5	Speaker	44 <input type="checkbox"/>
6	Heaters	46-47 <input type="checkbox"/>
7	Seat Covers	52-53 <input type="checkbox"/>
8	Backing Lights	48 <input type="checkbox"/>
9	Spotlight	48 <input type="checkbox"/>

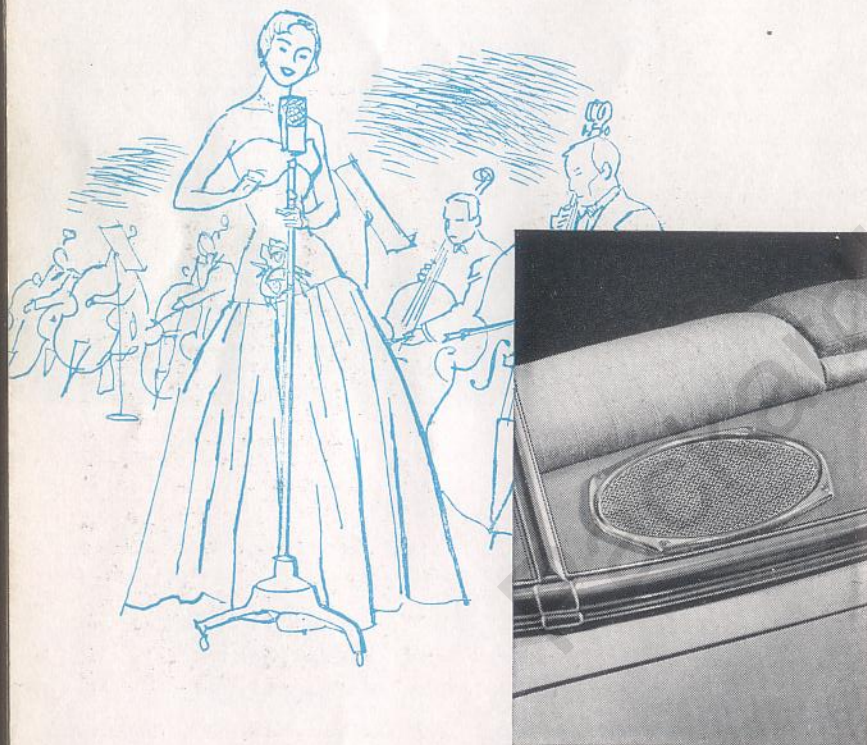
NO.	DESCRIPTION	PAGE
10	Rear View Mirror— Side Mount	49 <input type="checkbox"/>
11	Non-Glare (Tilt Type) Rear View Mirror	49 <input type="checkbox"/>
12	Vanity Mirror	49 <input type="checkbox"/>
13	Windshield Washer	54 <input type="checkbox"/>
14	Rear Window Wiper	54 <input type="checkbox"/>
15	Windshield Light Filter	56 <input type="checkbox"/>
16	Outside Custom Visor, All Metal	56 <input type="checkbox"/>

NO.	DESCRIPTION	PAGE
17	Wheel Trim Ring	51 <input type="checkbox"/>
18	Wheel Hub Shell Cover	51 <input type="checkbox"/>
19	Oil Filter	55 <input type="checkbox"/>
20	Fender Louvres	51 <input type="checkbox"/>
21	Gasoline Filter	55 <input type="checkbox"/>
22	Exhaust Pipe Extension Trim	58 <input type="checkbox"/>
23	License Plate Frames	50 <input type="checkbox"/>
24	Gasoline Door Lock	58 <input type="checkbox"/>

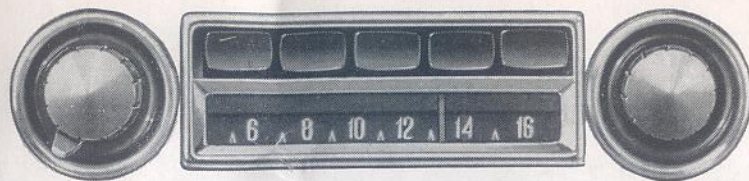
NO.	DESCRIPTION	PAGE
25	Coat Hook	59 <input type="checkbox"/>
26	Accelerator Pedal Pad	57 <input type="checkbox"/>
27	Auxiliary Floor Pad	57 <input type="checkbox"/>
28	Gasoline Door Guard	58 <input type="checkbox"/>
29	Trunk Compartment Light	48 <input type="checkbox"/>
30	Spare Tire Valve Extension	59 <input type="checkbox"/>
31	Lustur-Seal	60 <input type="checkbox"/>
32	Car Care	61 <input type="checkbox"/>

Radio

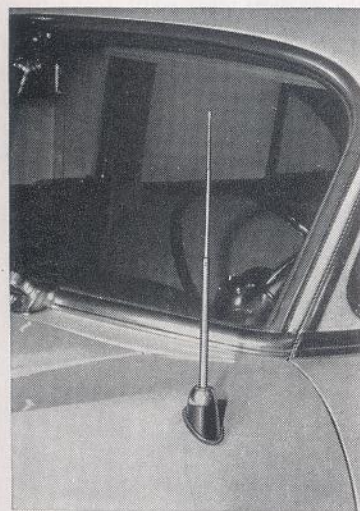
Packard makes available for your listening pleasure the latest developments in radio reception. Your pleasure from fine car motoring is greatly enhanced by the clear, faithful reproduction of all types of radio programs. Enjoy the thrill of hearing them with a Packard radio while driving.



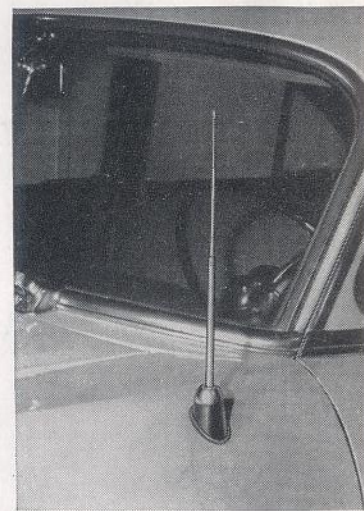
Rear Compartment Radio Speaker—A permanent magnet, auxiliary speaker gives you the ultimate in refined radio reception. Separate volume control permits operation independently of the instrument panel speaker to equalize radio sound distribution. It is mounted flush in the package shelf and the grille cloth of the speaker harmonizes with car interior trim.



Push Button Radio—This seven tube radio plus rectifier offers long range reception with clear lifelike tone. It features light touch automatic push buttons controlling five pre-selected stations. The manual control also permits selection of other stations.



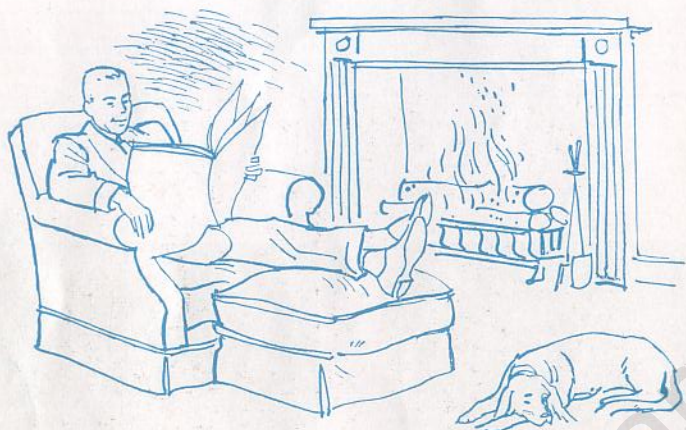
Electric Antenna—Complete automatic range of the antenna, from the top of the fender to an extended height of approximately five feet can be selected by depressing or pulling the control button for this Packard engineered electric antenna.



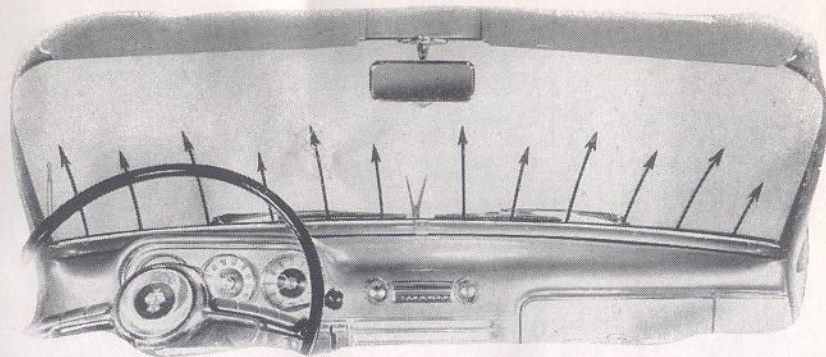
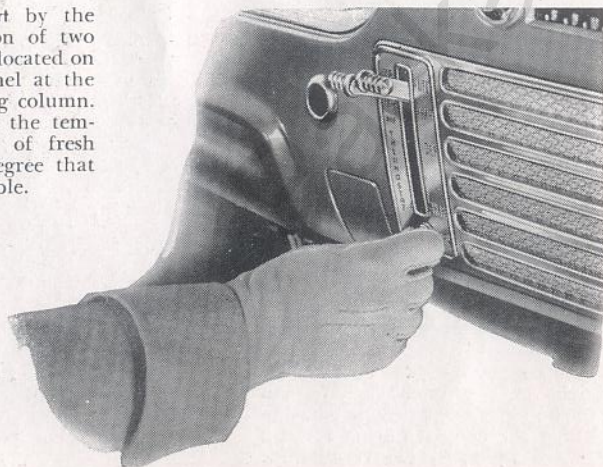
Manual Antenna—This telescoping stainless steel antenna is manually controlled and mounted on the left front fender. From 2 3/4" above the fender, it can be extended to a height of approximately five feet.

Heater

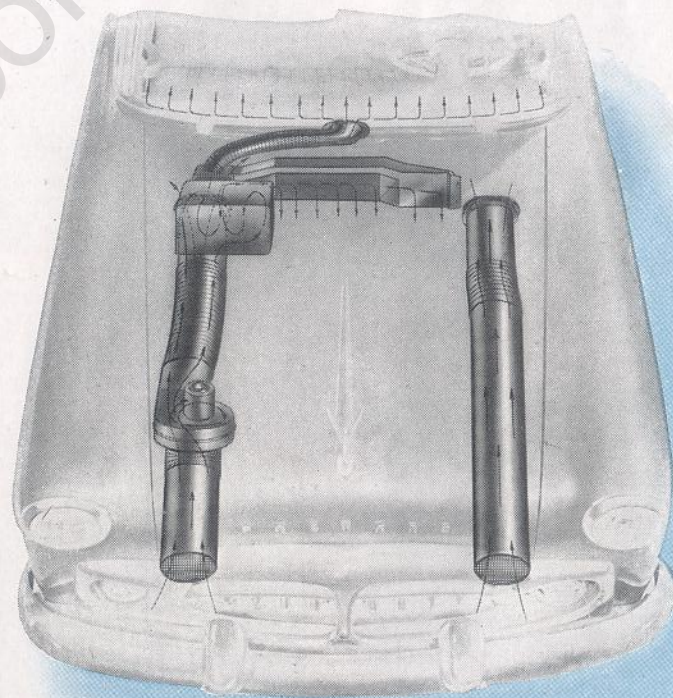
Year-around comfort in motoring is assured with a new heating and ventilating system perfected by Packard engineers. Outstanding features include automatic temperature control—clear across windshield defrosting for complete safe visibility.



Control your comfort by the simple manipulation of two levers and a switch located on the instrument panel at the right of the steering column. They will regulate the temperature and flow of fresh air to the exact degree that you find comfortable.



New defrosting vents closely spaced across the entire width of the windshield keeps it clear and free of snow and ice.



A constant flow of fresh air through this heating system assures continued comfort. Fresh air is forced through the heating system; while car is in forward motion; when standing still the heater motor pulls in fresh air, heats it and circulates warm fresh air inside the car. Inside pressure created through the introduction of outside air eliminates cold drafts.

Lights

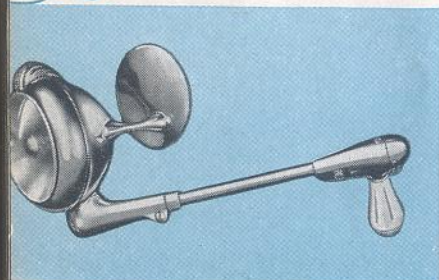
Functional lighting is carefully planned. For motoring safety and convenience while driving at night Packard special purpose lights are designed and engineered for maximum efficiency.



Backing Lights—A pair of these attractive Packard backing lights mounted on the lower trunk deck panel will assist you in all backing operations at night. They automatically cast their extremely bright beam when the gear shift lever or selector lever is in reverse.



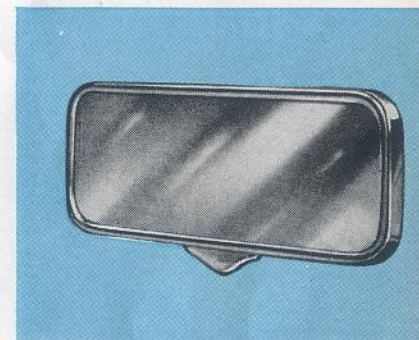
Luggage Compartment Light—Groping around the trunk compartment at night is eliminated with this handy light which operates automatically when the deck lid is raised.



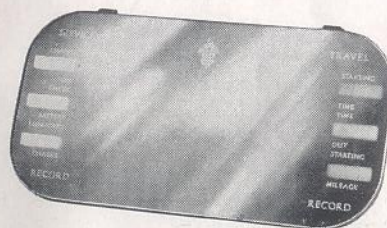
Spotlight—Handsomely styled, this spotlight is mounted through the door and is available in both right and left hand models. It casts a powerful beam of light approximately a quarter mile and is controlled by a pistol grip handle inside the car. A rear view mirror attaches to the spotlight.

Mirrors

Distinctly Packard, these new glare proof mirrors make it possible for the driver to have complete, clear rear vision at all times. They provide greater safety by assuring the driver a rear view of oncoming cars.

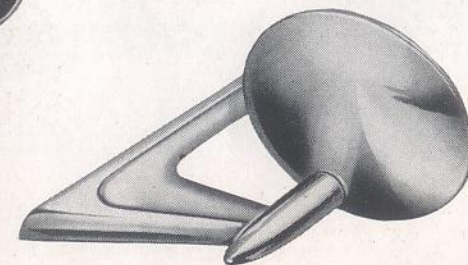


Tilt Type Mirror—A flick of the mirror tab eliminates bothersome headlight glare of cars approaching from the rear. The high quality optical glass provides undistorted visibility day or night.



Vanity Mirror—This convenient 4" x 8" vanity mirror can be easily attached on the back of either inside sun visor. This mounting permits adjustment to the position desired.

Side Mount Rear View Mirrors—Mounted on the stainless steel belt mouldings, right and left side, these new mirrors, heavily chromed and styled by Packard, appear to be a "built in" part of the car. They provide for maximum rear vision of traffic.

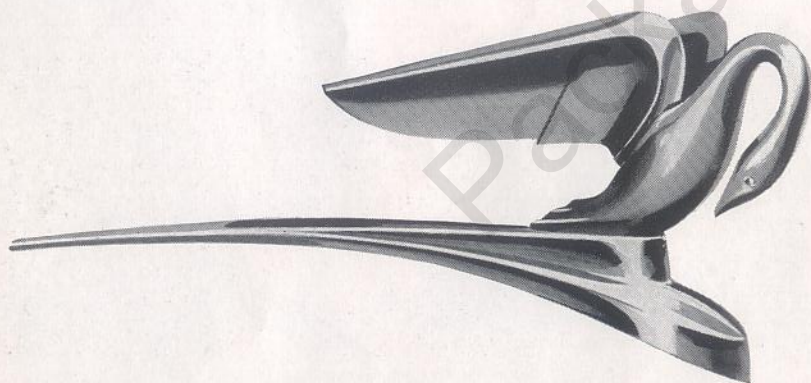


Trim

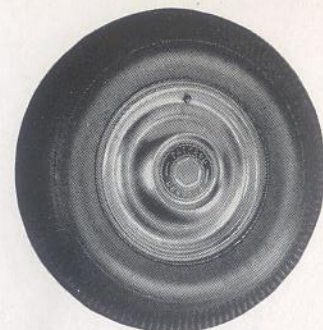
Then there are the little things that mean so much to your motoring pleasure. Though small and very inexpensive, they add that final touch to assure lasting satisfaction.



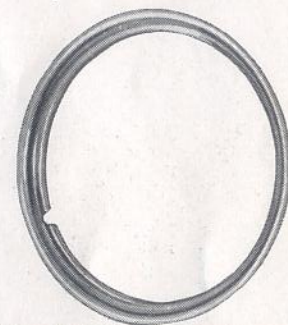
License Plate Frames—These bright chromium plated, adjustable frames improve the overall appearance. They are smart, distinctive and easily attached to any size plates.



Pelican—This graceful, ever beautiful, chromium plated ornament complements the clean-lined styling of your new Packard.



Wheel Hub Shell Cover—Completely covering the wheel, these bright wheel hub shell covers add flashing beauty and luxurious appearance. A set of four is required.



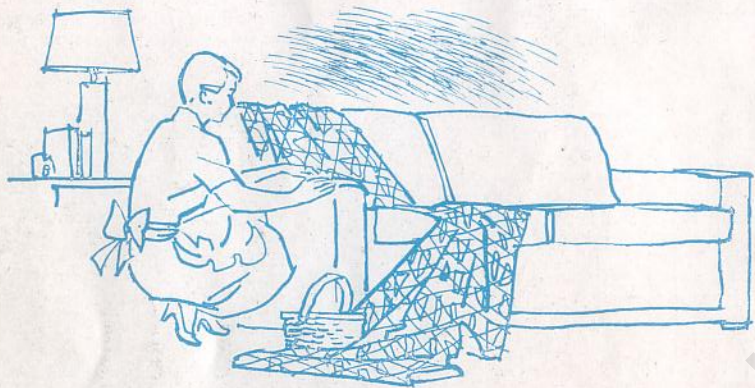
Wheel Trim Ring—Gleaming stainless steel wheel trim rings create a shining frame-like contrast with the painted wheels. They lock firmly in place and are rattleproof.



Fender Louvres—Newly designed gleaming stainless steel louvres add to that dressed up appearance and will give your Packard that distinctive look.

Seat Covers

Packard now offers a selection of 14 seat covers. They are custom tailored of the finest fabrics and materials. Not only do they beautify your car, add freedom of movement, greater summertime coolness and comfort to year-round driving, but they also serve to preserve and protect the upholstery.



Nylon Seat Covers—Made of all nylon material, these seat covers are available in three pleasing colors of maroon, green or blue. You will enjoy the comfort, neat appearance and extra long life that these "best of all" seat covers provide.

Saran Plastic Seat Covers—The combination of new styling plus new Saran Plastic provide a very attractive and durable seat cover for your motoring comfort. Easy to keep clean, they are available in special color combinations of maroon, green, blue, candy stripe or Highland Plaid. Trimmed in Sealtuft Bolster.



Rayon Seat Covers by Packard are handsomely tailored and add a smart, neat appearance. They offer long lasting service and are available in a solid color of maroon, green or blue.

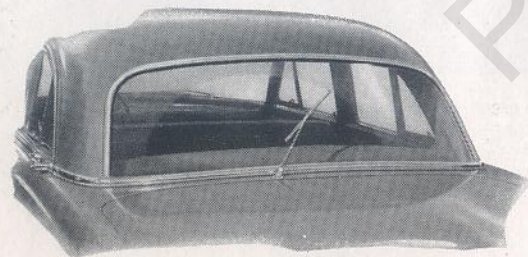
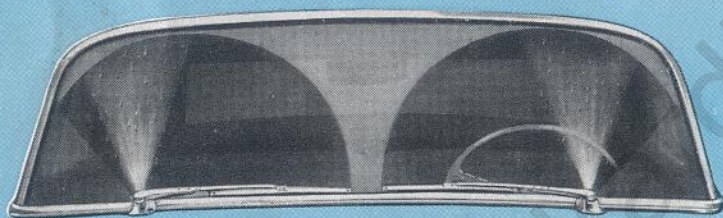
San-Tex Seat Covers. For those who prefer the woven fiber type of seat cover, Packard has made available a new design in color combinations of maroon, green or blue. Trimmed with rayon material in a solid matching color, these seat covers are especially attractive and are budget-priced.

Windshield Washer



A clear view ahead is vital for relaxed, safe driving. With a Packard windshield washer and your wipers turned on, the windshield is cleaned in a flash! Traffic film, road splash, dust, mud, grime and bug stains disappear.

Packard Automatic Windshield Washer—Assures clear vision when needed most. It controls two jets of water that spray on the windshield so that a few strokes of the wipers provide a thorough cleaning. (Add Packard all season mixture to water in the windshield washer reservoir for more efficient cleansing. It also prevents freezing and windshield frosting in winter).



Rear Window Wiper—Clear vision to the rear especially in rain and inclement weather is provided by a Packard rear window wiper. Vacuum operated, control is mounted on instrument panel.

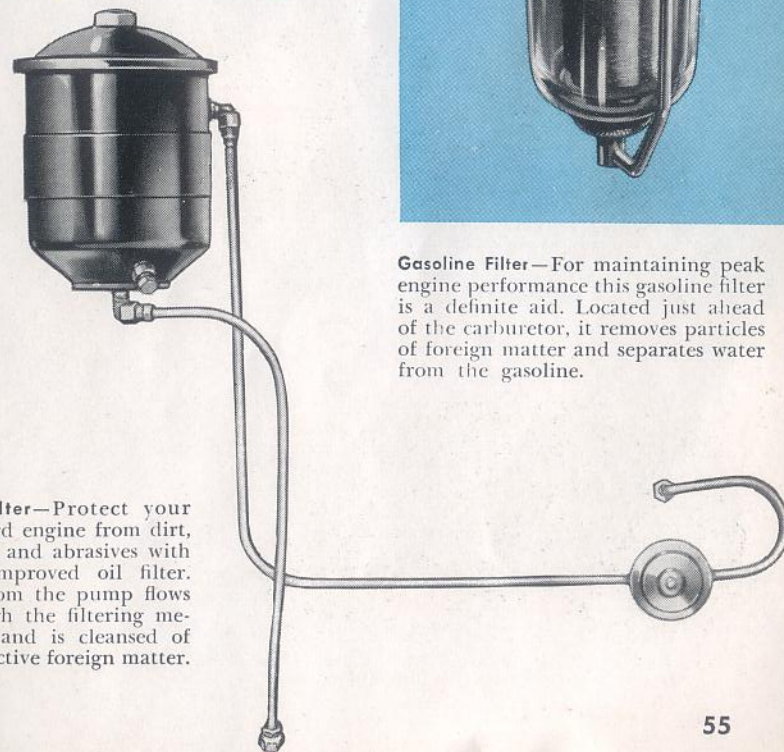


The Packard engine is the finest power plant in the automotive field. It gives thrilling acceleration, speed on the hills, satin-smooth cruising and remarkable top speed—all balanced with new improved economy and trouble-free engine life. Protect and lengthen its life with a Packard filter.

Cleaner and Filters



Gasoline Filter—For maintaining peak engine performance this gasoline filter is a definite aid. Located just ahead of the carburetor, it removes particles of foreign matter and separates water from the gasoline.



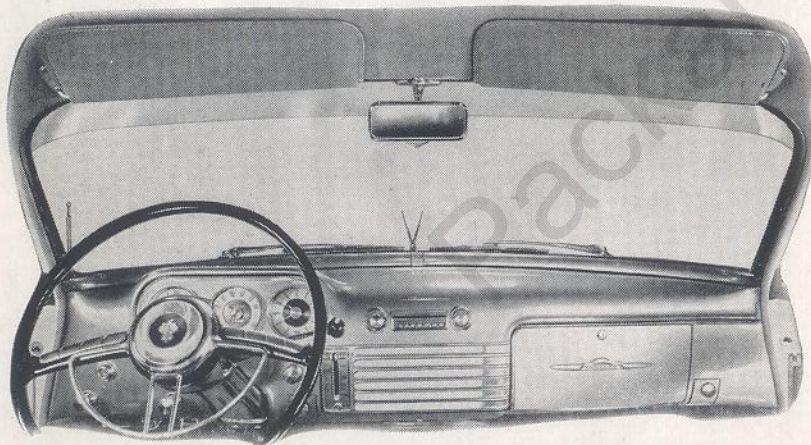
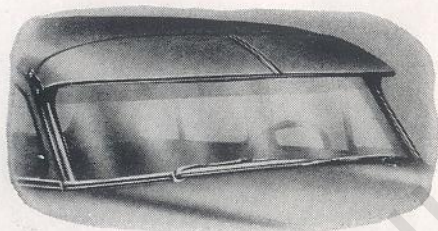
Oil Filter—Protect your Packard engine from dirt, sludge and abrasives with this improved oil filter. Oil from the pump flows through the filtering medium and is cleansed of destructive foreign matter.

Eye Comfort



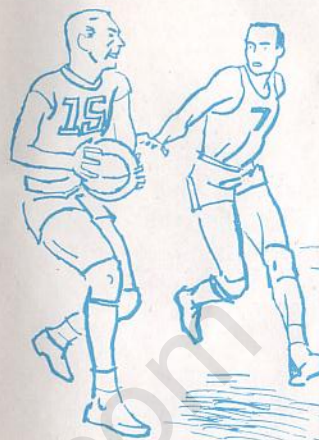
In both summer and winter Packard custom outside visor and windshield light filter reduce eye strain and fatigue under all driving conditions.

Outside Custom Visor—Exclusively Packard, this visor is streamlined to the body styling and adds dashing new beauty as well as comfort and safety while driving. It shields the front seat passengers from the hot glaring rays of the sun and helps to keep the windshield free of ice and snow.



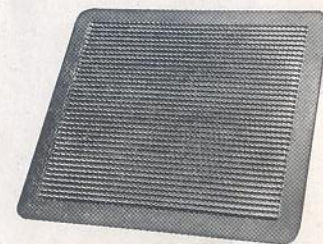
Windshield Light Filter—This soft green inside visor is made of the highest quality optic plastic. It shields front seat passengers from the hot sun and permits full undistorted view of overhead traffic signals.

Wear Pads



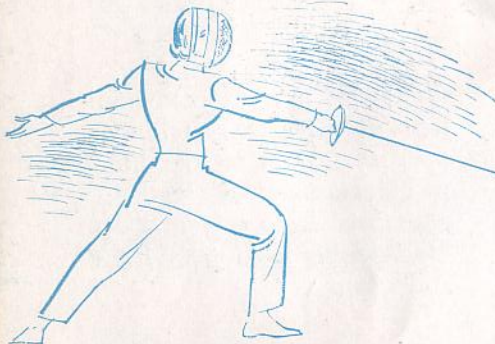
Maximum protection at minimum cost! Packard auxiliary pads add years to the life of permanent floor coverings and make it so easy to keep car interiors looking fresh and clean.

Accelerator Pedal Wear Pad—Provides the much needed protection from the localized wear and abuse to the front compartment floor mat where the heel of the driver normally rests.

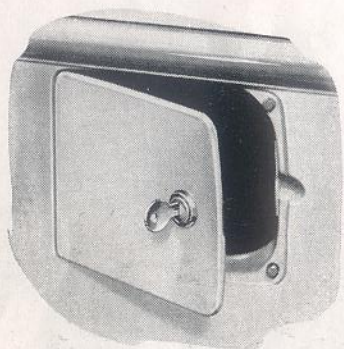


Auxiliary Floor Mat—Heavily ribbed rubber auxiliary floor mats protect your permanent floor covering against snow, mud and dirt. Removable for easy cleaning. Available in maroon, green, gray and black.

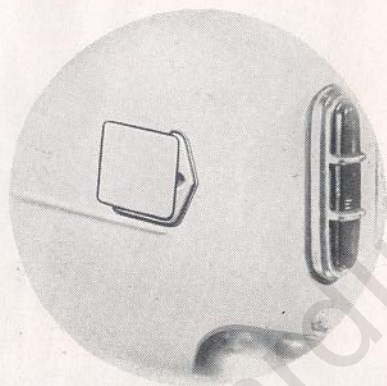
Complete Protection



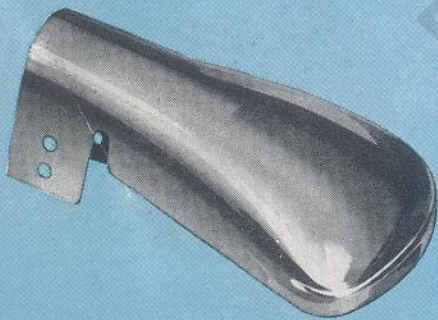
Designed especially for your Packard: Exhaust Pipe Extension Trim, Gasoline Door Lock, Gasoline Door Guard. Each, individually and distinctively engineered to meet the needs of present day motoring.



Gasoline Door Lock—A specially designed key-controlled lock protects your gasoline from theft or tampering. The locking mechanism is sheltered from snow, rain, ice and dirt.

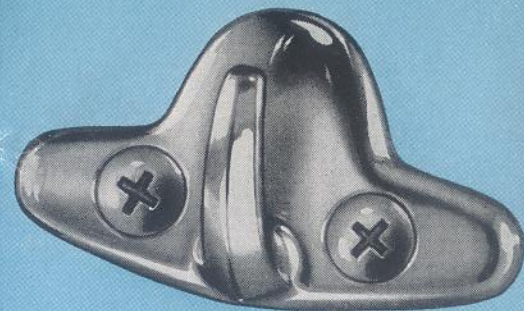


Gasoline Door Guard—Made of stainless steel—it provides protection for the finish of your car when your gasoline tank is being filled.

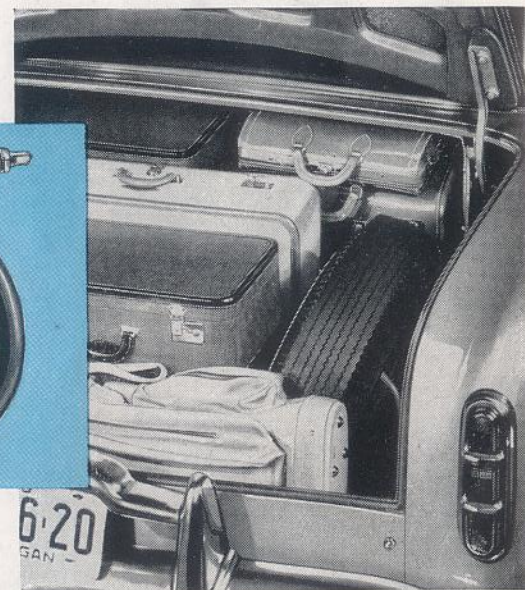
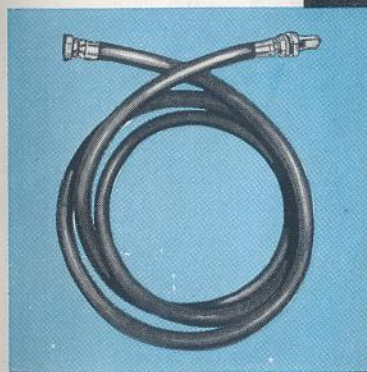


Exhaust Extension Trim—Made of stainless steel, its gleaming bright appearance is an attractive shield over the exhaust pipe. It protects the bumper from discoloration by exhaust gases.

Coat Hooks—A pair of Packard coat hooks are indispensable for any owner. They provide a real convenience and help to retain the well pressed appearance of clothes.



Convenience



Spare Tire Valve Extension—No need to unlock and raise the rear deck lid, no need to shift luggage or soil clothing to service your spare tire when you have this handy spare tire extension.



To give the finish of your car the care that it truly deserves, there can be but one choice . . . Packard Lustur-Seal. It is a scientific method of cleaning, restoring and protecting the finish of your car.

Car Care



Packard Lustur-Seal is your best buy in car beauty insurance!

Lustur-Seal will retain the original luster of your car and seal the finish against sun, salt-air, chemicals, dust and grime. It will last indefinitely, if cared for periodically with Lustur-Seal Haze Cream.

Let us show you what Packard Lustur-Seal can do to your car's appearance.

TREAT YOUR CAR TO

LUSTUR-SEAL



Body Cleaner and Polish—Easily applied, cleans and polishes in a single operation.



Fabric Cleaner—Safely and quickly removes spots, smudges and stains.



Chrome Cleaner—Thoroughly cleans and restores original brilliance and gleam to all chromium and bright metal parts.



Rust Preventive is a specially prepared chemical liquid. Added to the cooling system, it prevents formation of rust and scale. Mixes with standard anti-freeze solutions.



Tar Remover—A quick acting harmless solvent to soften and dissolve tar, asphalt and road oil.



Windshield Washer Solvent—An all-season mixture for effectively cleaning windshields. Prevents water in reservoir from freezing in winter.

Sealzit — Quickly seals leaks in windshield and rear window.



Packard White Side Wall Tire Cleaner is an effective cream paste soap. It quickly and easily removes all dirt and scuff marks to help retain the distinctive beauty of white side wall tires.



NOTES:

About Your Packard

Every fine piece of workmanship is worth caring for and this is true of your Packard. Advanced engineering and manufacturing have built luxury, durability and safety into your car. You can easily become familiar with your new Packard by reading this book, and for future reference please keep it in the glove compartment. Packard Authorized Service can best assist you with its proper care and maintenance. At home your Packard Dealer knows your car best. When traveling, a nationwide network of authorized dealers is ready to provide any service your Packard may require.

Packard Dealers are interested in keeping Packard owners well satisfied with their cars at the lowest maintenance cost possible.

You, as a Packard owner, deserve the best in service so see your nearest Packard Dealer whenever the occasion arises and your Packard will receive the attention of factory trained experts.

PACKARD MOTOR CAR COMPANY
Service Department

Use Packard Service

