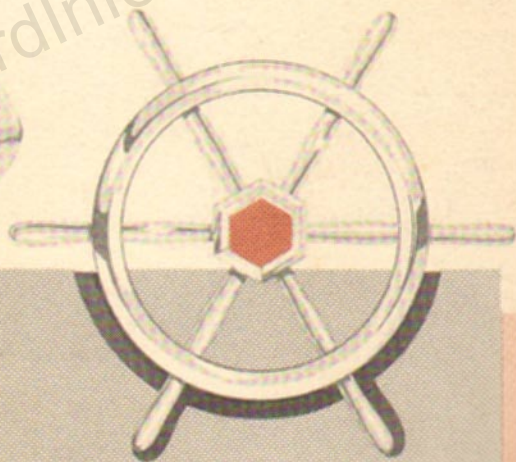


A stylized, light-colored illustration of the front left corner of a car, showing the headlight, grille, and fender, positioned on the left side of the cover.

# PACKARD CLIPPER

*OWNER'S MANUAL*



1956

## Owner's Service Policy

## Owner Identification Card

**OWNER IDENTIFICATION CARD** will introduce you to any Authorized Packard Dealer and enable you to receive the services to which you are entitled under the terms of the Owner's Service Policy.

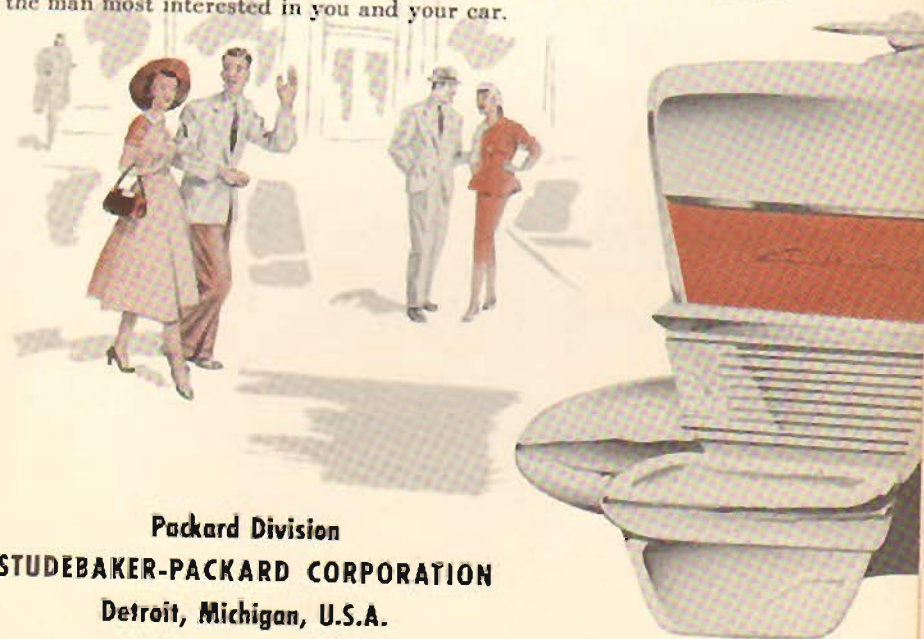
Copyright 1955 Studebaker-Packard Corporation

# Presenting YOUR NEW 1956 CLIPPER

Your new '56 Clipper has been designed and built to reflect your pride of ownership in every detail. It is a fine car through and through in keeping with the Packard tradition of proud craftsmanship.

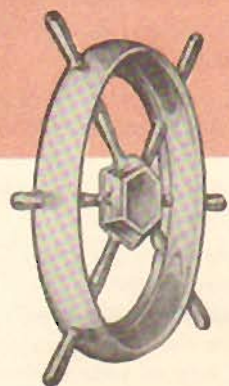
We are proud to call the '56 Clipper the finest car in the medium-price field. And there is ample evidence to confirm this claim. Clipper is the *only* car in its field with famous Torsion-Level Ride. It also brings to its price range new peaks in V-8 engine power and performance . . . new concepts of comfort and convenience . . . thrilling new styling and luxury.

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



Packard Division  
STUDEBAKER-PACKARD CORPORATION  
Detroit, Michigan, U.S.A.





**Master Motor Makers for Over Fifty Years**

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## *Your CLIPPER is protected by these WARRANTIES*

### **DEALER'S WARRANTY**

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

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

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

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

### **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 operating 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 "Dealer'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 the Manufacturer's recommendations.

**Owner Identification Card**—We have also issued to you an "Owner's 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, under the terms of the "Dealer's Warranty," printed in "The Owner's Manual," 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 a 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, and if this Service Policy is validated in the manner as indicated on the face thereof, you may obtain the services without charge from any Packard Dealer, who will be reimbursed by us."



## Getting to Know Your 1956 CLIPPER

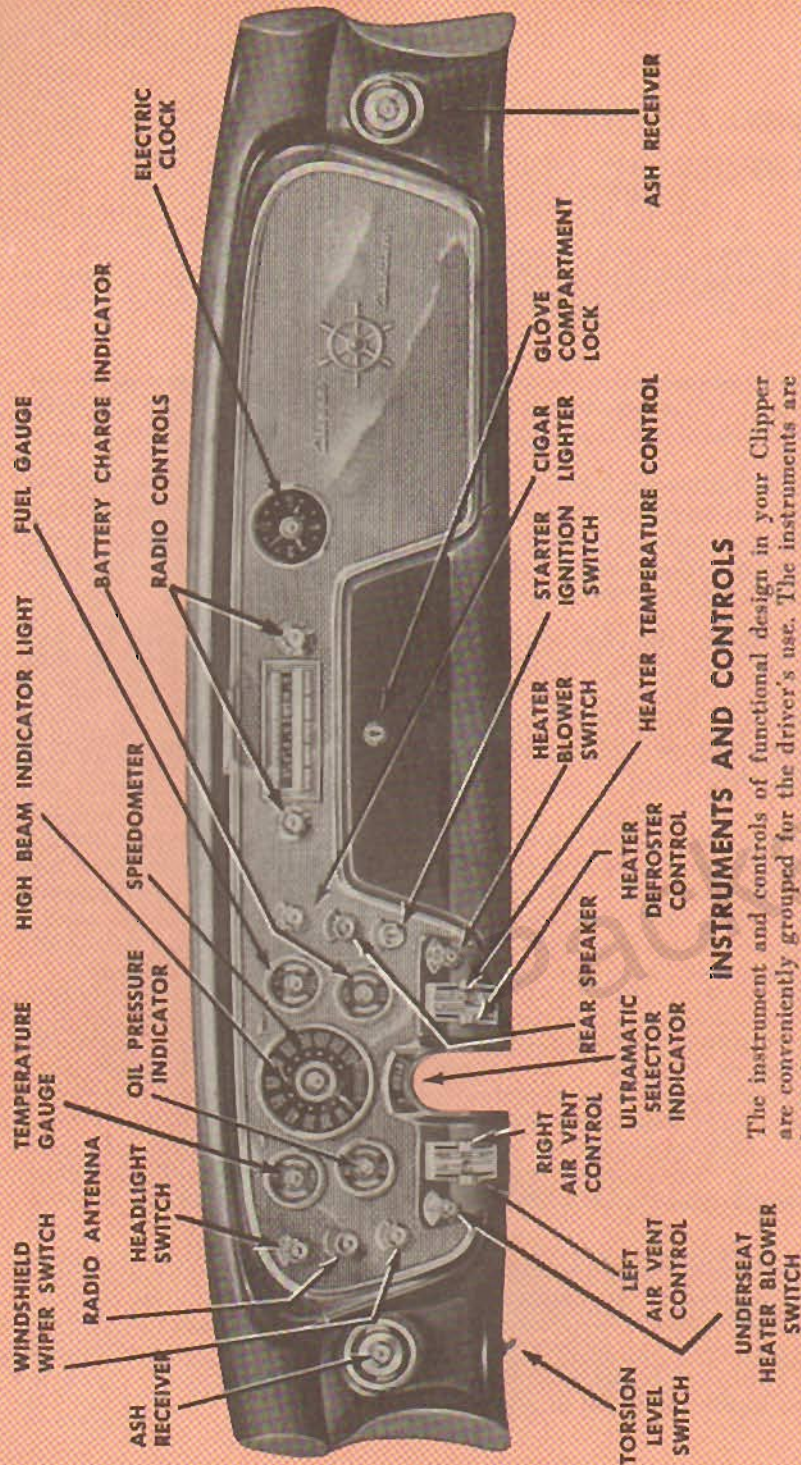
### OIL PRESSURE INDICATOR

The oil pressure indicator marked "OIL," is a signal light and it will light when the ignition key is turned "ON" before the engine is started. This indicator 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 signal light remains illuminated after the engine speed is increased the engine should be shut off and the cause of the trouble determined.

### BATTERY CHARGE INDICATOR

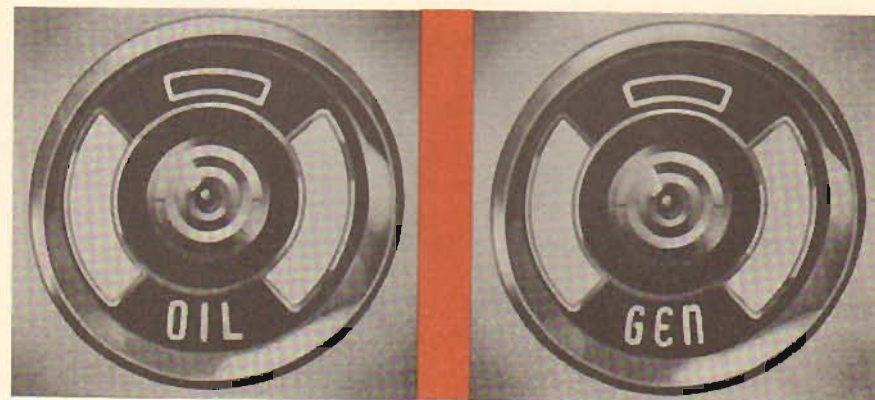
The battery charge indicator marked "GEN" also is a signal light which determines for you whether the battery is being charged or discharged.

This indicator will light up when the ignition key is turned to the "ON" position. When the engine is running at idle or slow speed, the light will remain on due to more electrical energy being consumed than is being delivered to the battery; therefore, the battery is discharging. Headlights, radio, and heater will affect the rate of battery discharge. With these in operation, and while driving at slow speed with reduced generator output, this will cause the signal light to indicate a discharging condition. However, under normal driv-



### INSTRUMENTS AND CONTROLS

The instrument and controls of functional design in your Clipper are conveniently grouped for the driver's use. The instruments are located directly in front of the driver, to inform him at a glance if everything is functioning properly. The controls are located near the driver's hands, so they can be reached for safe and easy operations.



Oil Pressure Indicator

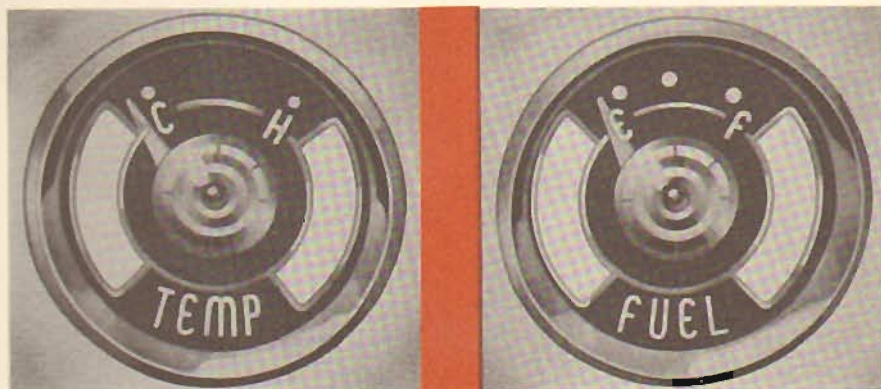
Battery Charge Indicator



ing conditions, the light will remain out indicating that the proper amount of electrical energy is being delivered to the battery to take care of the electrical load.

## ENGINE TEMPERATURE GAUGE

This instrument shows the temperature of the cooling liquid in the engine. At normal operating temperature the pointer should center approximately between the "C" (cold) and "H" (hot) position, except on long hard drives in summer weather, when it may register nearer to the "Hot" side. This condition



Engine Temperature Gauge

Fuel Gauge

need not cause alarm as the pressure type system will normally prevent boiling or fluid losses at temperatures up to 248° F. However, a sudden rise to the "H" mark should be investigated at once.

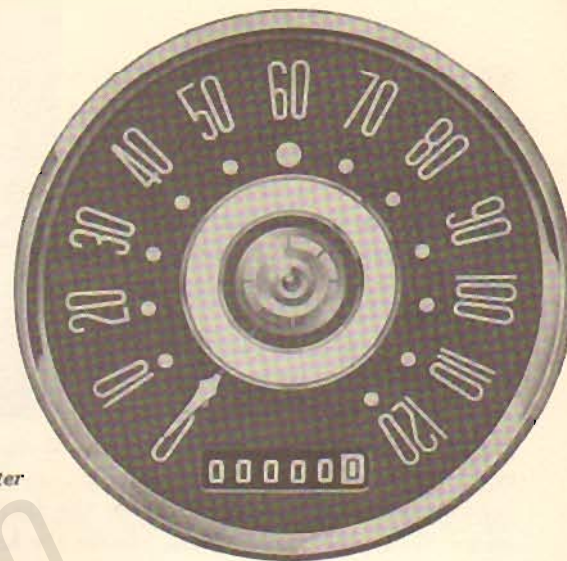
### NOTE

The "Temperature" gauge and the "Battery" and "Oil" indicators will inform you when something is not working properly; it is advisable to visit an Authorized Packard Service Station if:

- the "TEMP" gauge pointer should go over to "H" and stay there.
- the "GEN" indicator remains lighted all the time you're driving.
- the "OIL" indicator remains lighted when the engine is operated above idle speed. Stop the engine immediately and determine the cause.
- the "GEN" and "OIL" indicators do not light at any time which may be caused by a burned out bulb.

## SPEEDOMETER

The speedometer, directly in front of the driver, has an easy-to-read calibrated dial lettered from "0" to "120" mph., with a total mileage indicator at the bottom of the instrument face.



Speedometer

## FUEL GAUGE

The fuel gauge indicates the amount of fuel in the tank. It operates when the ignition key is turned to the right, the ignition "ON" position.

## ELECTRIC CLOCK

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



Electric Clock



## STARTER-IGNITION SWITCH

For your convenience, the ignition key (which also is the door key) controls the electrical circuit to the starter, ignition, instruments, and electrically operated accessories.

The starter-ignition switch has four positions: Ignition on, starting, accessory, and off. In the vertical position the switch is "off." To start the engine turn the key to its extreme right-hand (clockwise) position; this turns on the ignition and operates the starting motor. When the engine starts, release the key and it will automatically return to the "Ignition On" or driving position. In this position the accessories can be turned on. Turning the key to the left (counter-clockwise) "accessory" position allows the use of radio, heater, etc. with the ignition off.

The ignition switch keyhole can be lighted by pulling the light switch knob to the first notch, which also lights the parking lights.

## LIGHT SWITCH

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

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

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

The instrument cluster lights and the map light 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 light will be out.

The map light is installed for your convenience, and provides front compartment illumination for many purposes. To light the map light, turn the light switch knob to the right far



*Starter Ignition Switch*



*Light Switch*

enough to reach the first "notch." This can be done without pulling the knob out to light the parking lights or the headlights. However, when the knob is turned past the first "notch" with the parking lights or headlights on, the map light will go out and the instruments will be brightly lighted as the second "notch" is reached. By continually turning the knob farther to the right the instrument lights will become dimmer.

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

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

## DIRECTIONAL SIGNAL

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

To signal a turn, move the lever in the direction in which you are going to turn the steering wheel to make the turn. In other words, move the lever upward to signal a right turn and downward to signal a left turn. The lever

automatically returns to the center position and stops the signal when the turn is completed or the steering wheel is returned to the straightforward position.

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



*Directional Signal*





*Torsion-Lever Switch*

*Windshield Wipers*

### **TORSION-LEVEL LEVELIZER SWITCH**

On cars equipped with Torsion-Level suspension the levelizer switch, located under the instrument panel at the extreme left, is used to make the levelizer inoperative when changing a tire, or for any other reason of jacking the car.

However, the levelizer can also be used to assist you whenever the car has to be jacked up. For example; if you wanted to jack the rear end of the car, it would be very helpful to press down on the rear bumper to let the levelizer come into operation and raise the rear end of the car as far as possible. After the car has reached its maximum height, turn the levelizer switch off. Then, with the use of the bumper jack, it would only be necessary to raise the rear of the car a short distance to have the wheel clear the ground.

After the wheel and tire is installed and the jack removed turn on the levelizer switch to return the car to its normal height.

### **WINDSHIELD WIPERS**

Your windshield wipers switch knob (located at the lower left side of the oil gauge) controls the operation of the wiper blades. Turning the knob clockwise starts the blades in motion, by continually turning the knob in the same direction the blades move faster.

There also is a wiping arc range control lever located behind the switch knob, which extends downward, this lever controls the wide-arc and super-speed wiping range. The super-speed range (lever in vertical position) is used when driving in heavy downpours or at faster travel on superhighways. The wide-arc driving range (lever in the left hand diagonal position) is used to meet normal driving conditions.

A Mag-Nu-Matic windshield washer with co-ordinator is available as an accessory, which supplies water that sprays on the windshield simultaneously while the wipers are in operation; to remove dust, mud, or splash at the moment driving vision is impaired. To operate the washer, simply press the control knob. This operation will immediately spray water on the windshield glass. At the same time, the wipers will operate automatically for several seconds and then stop. Packard "Windshield Washer Solvent," an effective all season solution, is available at your Packard Dealer. This should be used in the winter to prevent breakage of the reservoir glass, and in other seasons serves as a detergent to dissolve dirt, grime, and stains of all nature.

## **★ Positive Braking**

### **POWER BRAKE**

Packard Power Brakes are available as optional special equipment on all Clipper models.

The brake foot pedal used with the power brake unit is conveniently located by being suspended from a bracket attached to the dash panel. This location permits quicker brake action by 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.

### **CAUTION:**

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 to avoid stopping the car too abruptly.



*Power Brake*

*Hand Brake*

### **PARKING BRAKE**

The "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. Release the brakes by turning the handle to the left, allowing it to return to the release position. If your Clipper is equipped with a parking brake warning light the light will remain on whenever ignition key is turned on and the parking brake set.





*Cigar Lighter*

## ★ Finger-Tip Conveniences

### **CIGAR LIGHTER**

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

### **ASH RECEIVERS**

Both front and rear ash receivers are placed for maximum convenience to driver and passengers. They blend with the interior beauty of the car and are readily removable for easy cleaning.

### **GLOVE COMPARTMENT**

Your glove compartment provides spacious storage for maps and other items. To open, press the lock cylinder inward. Push the door forward to close. The door may be locked with the octagon handled (cornered) key which also operates the trunk lock.

### **FRONT SEAT ADJUSTMENT**

A manual front seat adjustment makes it possible for you to locate the seat in the most comfortable position. Adjustment can be made by pushing back on the lever, located on the left side of the seat, and moving the seat forward and backward to obtain the most suitable driving position. It will lock in place when the lever is released.

However, if your Clipper is equipped with an electric four-way power seat control (special equipment on all models) you will have the extra convenience of being able to position the front seat by moving the toggle switch in the direction of desired travel.

You may drive in comfort, as the seat may be moved either forward or back by merely moving

the toggle switch lever in the same direction you want the seat to travel. It operates in the same manner to automatically raise or lower to your most desired driving position. Enjoy all the comfort that is built into your Clipper seat by occasionally changing its position during long drives.

## ★ Your Clipper Locks

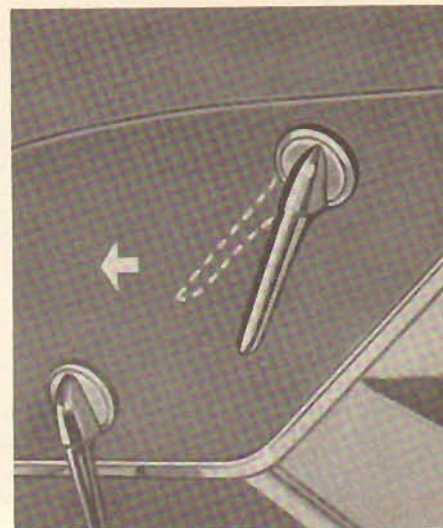
### **DOOR LOCKS**

The front doors may be locked from the inside by pushing the remote control handle toward the front of the car. To lock the rear doors depress the locking button in the window finish moulding. This button has to be raised before the door can be opened.

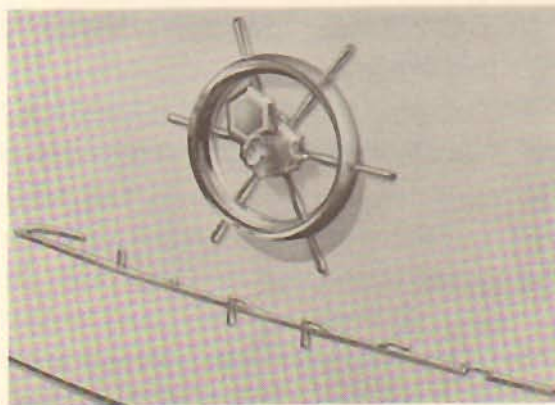
The front doors may be locked from the outside with the ignition key. Rear doors may be locked from the outside by depressing the lock button and then closing the door.

### **TRUNK LOCK**

To unlock the luggage compartment, insert the octagonal handled (cornered) key in the lock and turn it a half-turn to the right (clockwise), then turn the wings of the hex a half-turn to the right until you hear the latch snap open. To lock the lid, close it, insert the key, turn it a half-turn to the left, and remove the key. The lid may be latched (whether it is locked or unlocked) by pushing down firmly.

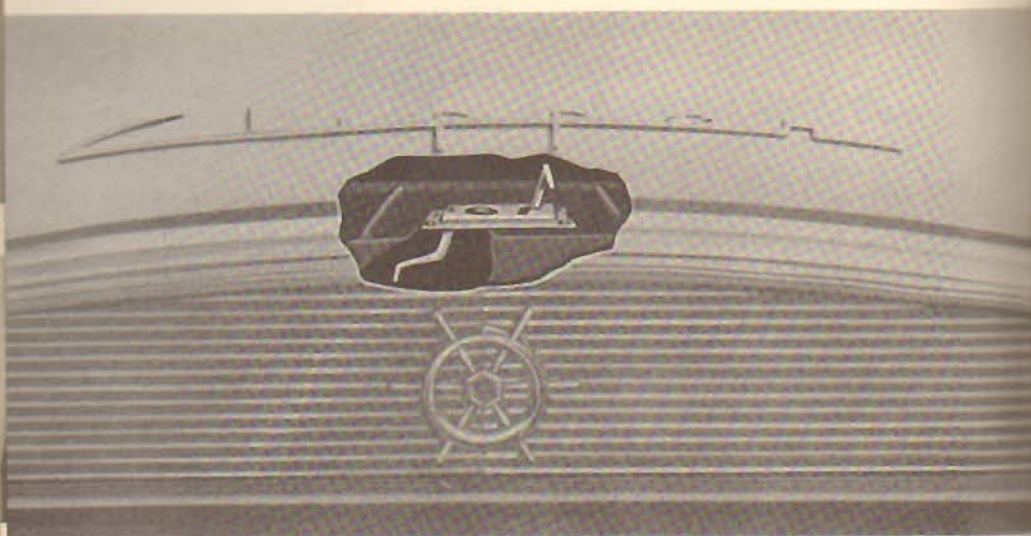


*Door Handle and Lock*



*Trunk Lock*





*Hood Lock Opening*

## HOOD LOCK

The hood lock release lever is located at the front of the car, under the upper radiator grille bar just to the left of center. The hood lock can be released by reaching in the opening under the upper radiator grille bar and pulling the lever toward the center till the hood pops up; this operation releases the primary lock. Further movement of this lever will release the safety catch, and permit the hood to be raised.

Spring loaded hinges assist in raising the hood and hold it in its fully open position. The hood will lock automatically when lowered and gently pushed downward.

## POWER STEERING

The new Clipper Power Steering (optional special equipment), which is operated hydraulically, greatly reduces the physical effort of the driver—thereby resulting in more restful driving and greater ease of parking. With Clipper

Power Steering approximately 80% of the required steering effort is supplied by the hydraulic mechanism.

One of the greatest causes of driving fatigue is road shock, which usually occurs when driving on rough roads. This, of course, is transmitted through the steering linkage, and steering gear, to the steering wheel. The Clipper Power Steering unit counteracts road shock automatically.

The Clipper Power Steering system consists of a hydraulic pump to supply hydraulic pressure; a reservoir in which fluid is held in reserve for operating the power system; a control valve and linkage in which the valve directs the flow of hydraulic pressure to the power cylinder, which operates the steering linkage in accordance with the driver's intention to turn; and the necessary hoses for transmitting the hydraulic pressure. The system also incorporates a safety factor which permits normal mechanical steering control in the event the power system becomes inoperative.

The Clipper Power Steering unit requires no attention except the usual lubrication of steering linkage, the checking of the fluid, and the periodic adjustment of the power steering pump belt.

## FRESH AIR VENTILATION SYSTEM

Enjoy the comfort of your Clipper built-in all weather fresh air ventilating system, which provides a complete change of air every 45 seconds at 45 m.p.h.

Control your comfort by the simple operation of two levers, located on the instrument panel at the left of the steering column. They will regulate the flow of fresh air to the exact amount that you find comfortable.

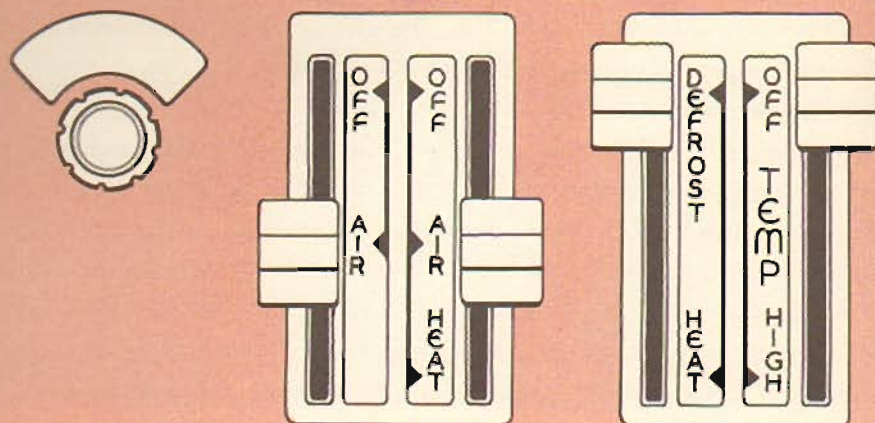
Ventilation is regulated by sliding the left lever down to permit the flow of air through the left dash panel grille at your feet. Operating the right lever in the same way, except that it should not be moved beyond the mark "AIR," will regulate the flow of air through the right side dash panel grille.

"OFF"—Fresh air supply completely closed off.

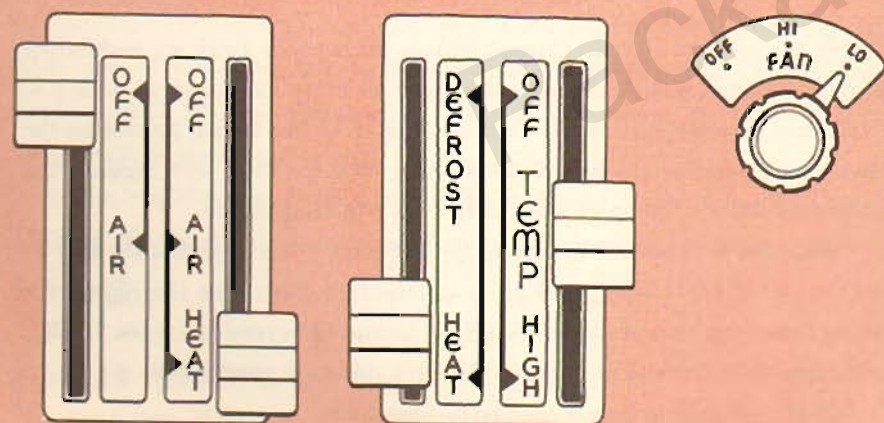
"AIR"—Wide open or, in other words, a full flow of fresh air. Positions between "OFF" and "AIR" can be used to reduce or increase the flow of air as desired.



## ★ OPERATION OF YOUR HEATER



**WARM WEATHER**



**COLD WEATHER**

## HEATING SYSTEM

The fresh air heater and defroster equipment is available for all models 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. The operation of the fresh air heater and defroster is as follows:

1. The fresh air lever on the left side should be placed in the "OFF" position, this closes the valve and shuts out the cold air from the left dash panel grille.
2. Place the ventilating lever that controls the right side at "HEAT," this closes off the air supply through the right dash panel grille and directs it 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.
3. The "TEMP" lever at the right, controls the temperature of the heat entering the car; it can be adjusted to whatever heat is desired.
4. The "DEFROST" lever directs warm air either to the windshield or toward the floor of the front compartment as desired.

With the lever at "Defrost" all the heated air is directed against the windshield. With the lever at "Heat" all the heated air is directed toward the front compartment floor. Lever positions between "Defrost" and "Heat" may be used to divide the air as desired.

A two-speed "Fan" switch, located on the right side of the fresh air heater regulating levers, controls the blower which draws in outside air for circulation through the heating and defrosting outlets.

It is not necessary to use the blower fan for most normal driving conditions because enough air usually is forced into the system by the forward motion of the car. The fan generally is used to speed up defrosting of the windshield or to prevent windshield and window fogging while driving slowly.

An underseat heater (optional equipment) which circulates the warm air throughout the car in conjunction with the fresh air heater, has a two-speed switch located on the left side of the fresh air ventilating levers. A rear window defroster is also available, which operates with the blower switch, assuring clear rear vision for safer driving.



## AIR CONDITIONING

Your Clipper air conditioning, available on Clipper cars as optional equipment, is a mechanical refrigeration system which provides cooled, filtered, dehumidified air for passenger comfort.

By simply turning the control switch, conveniently located on the instrument panel, to the right (clockwise) will start the air conditioning unit in operation. Continued turning of the switch in the same direction will lower the temperature of the air in the car.

For maximum cooling, close all the windows and place both air ventilating levers in the off position. With the levers in these positions, no outside air is admitted and the cool air within the car is recirculated and re-cooled.

If it is desirable to freshen the air within the car or to clear the air of cigar smoke, etc., move the left fresh air lever (the one nearest the left door) downward to the "cold" position. With the lever in this position, a small amount of outside air is admitted for circulation through the cooling system.

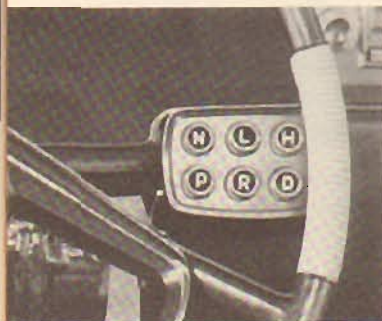
The distribution of air within the car can be controlled by positioning the louvered outlets and vertical fins on the top of the instrument panel as desired and by moving the control knob in the center of the evaporator case under the instrument panel in or out. Pushing the knob in permits cool air to be directed toward the floor while pulling the knob out closes off the air toward the floor.

If the interior of the car is at a high temperature level due to being parked in the sun, it is recommended that the windows be opened for a few minutes to allow the accumulated heated air to be expelled.

When standing with the engine idling, it is suggested that you depress the accelerator pedal slightly so the engine will idle a little faster than normal speed. This results in more efficient engine cooling, a higher generator charge rate, and improves the operation of the air conditioning unit.

If air conditioning is not desired, simply turn the control switch to the extreme left, which is the off position.

## ULTRAMATIC TRANSMISSION



Push Button Selector

The Ultramatic Transmission has a new electric push button type control. By merely pushing a button on the control panel you can select the driving range you desire.

There are six positions indicated on the control panel. When a button is pushed down, an electric motor positions the selector lever in the transmission to the location selected.

The operation of the transmission in the different positions is identical to those described under Manual Selector, except that the ignition key must be turned on before the buttons will operate the transmission selector.

It also embodies a safety feature that after the car is stopped, the "P" button depressed and the ignition switch then turned off; the car will remain in "Park" regardless of what other buttons are pushed until the ignition switch is again turned on.

### The manual selector has six positions:

"P" means *Park*. The rear wheels are not free to turn when the selector lever is in the parking position and this position should always be used when parking on a hill. The selector lever *never* should be placed in the parking position while the car is moving, otherwise damage may result. The lever must be raised before it can be pushed upward in the parking position.

"N" is for *Neutral*. This position is used when the car is standing with the engine running.

"H" means *High Range*. This is an added feature exclusive with Packard. This range provides the driver the ultimate in smoothness with torque converter start. This position can be used to advantage when starting on ice or snow. When driving in this range added acceleration for passing may be obtained by pressing the accelerator pedal firmly to the floor. This reverts from direct clutch to high range converter.

"D" means *Drive Range*. This range is provided for all normal forward driving. Two passing ranges are provided for extra power and quick acceleration.

(a) With car speeds up to approximately 45 miles per hour added acceleration can be obtained with a short quick downward movement of the accelerator pedal, which reverts driving force from direct clutch to high range torque converter. For very rapid acceleration the driver should press the accelerator firmly to the floor and the driving force then is transmitted through the low range torque converter.

(b) When driving at speeds above 45 miles per hour only one passing acceleration is available and this is obtained by pressing the accelerator pedal firmly to the floor.

"L" means *Low Range*. Low range is used in deep sand and on long, hard pulls. It also should be used when going 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 selector lever must be raised before it can be pulled into the reverse position.

The car can be "rocked" to free it from sand, mud, snow or ice by moving the selector lever back and forth between "L" and "R" or by alternately pushing the "L" and "R" buttons while applying a slight pressure on the accelerator pedal.

## STARTING THE ENGINE (With Ultramatic Transmission)

The engine, in cars with Ultramatic Transmission, can be started only if the control lever or push button is in the neutral position "N" or the parking position "P." The starting motor will not operate if the lever or push button is in any other position.



Although the engine will start with the selector lever in neutral, it is recommended that the engine be started with the selector lever or push button in the park position, particularly if the car is parked on a hill. 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 prevent creeping which is caused by extremely cold fluid in the unit.

## OVERDRIVE

The Clipper 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, as 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.

When the knob is all the way in, the overdrive will operate after the car speed reaches approximately 22 miles per hour. Release the accelerator pedal momentarily and the shift to overdrive is completed. The overdrive will shift into cruising range automatically while your foot is off the pedal. The overdrive also will shift back to conventional high gear automatically when the car speed drops below approximately 17 miles per hour.

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

The overdrive can be made available for operation at any speed just by pushing the control knob all the way in.

Locking out the overdrive while in high gear may be accomplished at speeds below 17 miles per hour by pressing lightly on the accelerator pedal and pulling out the control 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.



## TAKING CARE OF YOUR NEW CLIPPER

### LUBRICATION

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

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

### TYPES OF ENGINE OIL

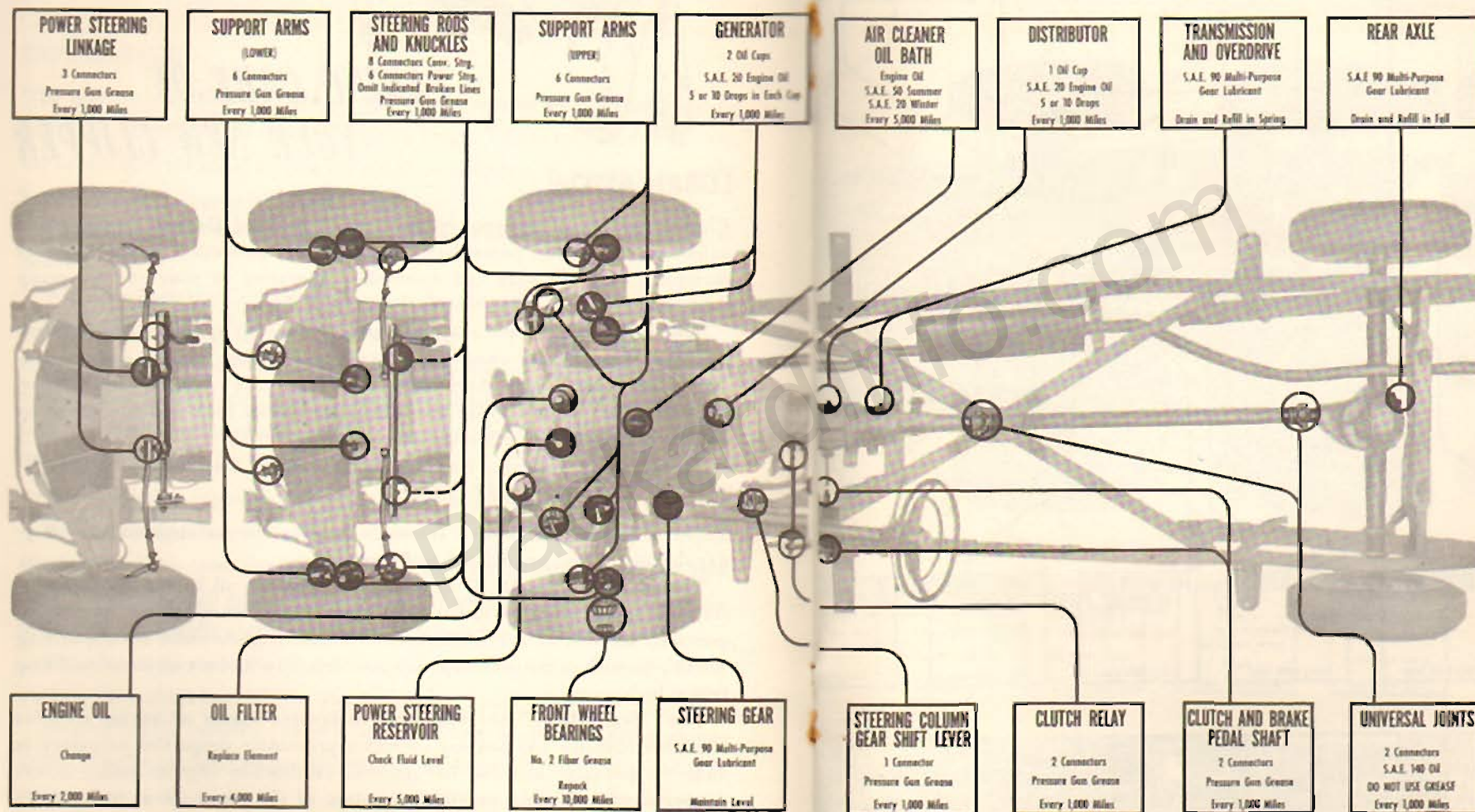
Different types of engine oil are made to meet the various needs of everyday driving. These are defined as follows:

The "Premium" or "MM" 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 under normal driving conditions, such as low and medium speed driving with only an occasional long trip at high speed.

The "Heavy Duty" or "MS" type designates engine oil having a higher oxidation stability and bearing corrosion preventive properties necessary to make it generally suitable for internal combustion engines under severe driving conditions for a greater percentage of the time such as in mountain climbing and at sustained high speeds.

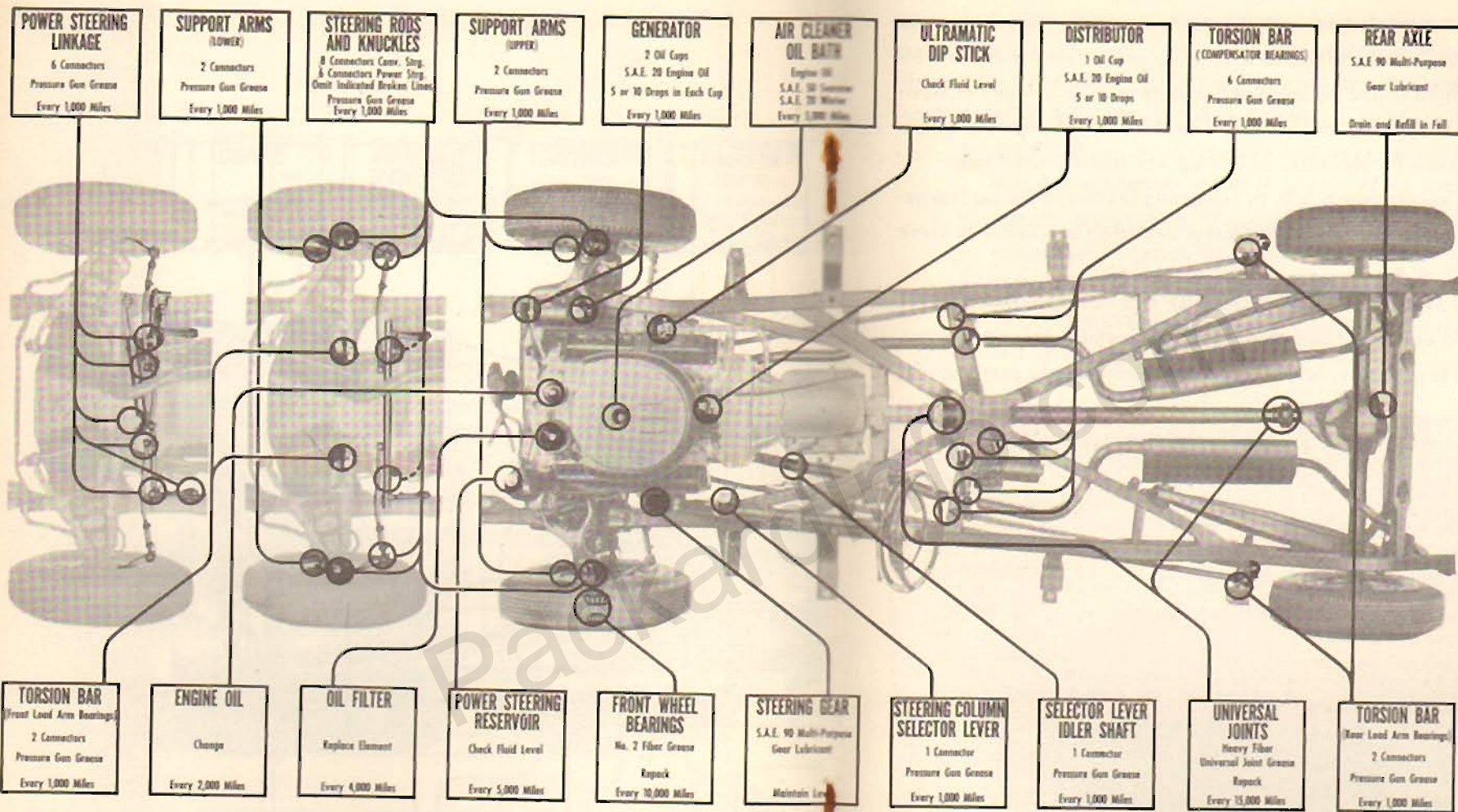
Multiple viscosity oils such as S.A.E. 5 W-20 or S.A.E. 10 W-30 are also available at most service stations, and may be used as an alternate for the recommended viscosity according to the "Oil Grade and Temperature Chart."







# LUBRICATION CHART



## SERVICING THE ULTRAMATIC TRANSMISSION

CHECK THE FLUID LEVEL EVERY 1,000 MILES



CHANGE FLUID, REMOVE SCREEN AND CLEAN EVERY 25,000 MILES



REFILL WITH PACKARD ULTRAMATIC DRIVE FLUID





## 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 S.A.E. 10-W oil in cold weather and S.A.E. 20 or 20-W in warm weather.

After the first 500 miles the oil should be drained and replaced with a grade of oil suitable for the 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

Lowest Temperature Anticipated	Recommended Viscosity	Acceptable Alternate
Not lower than 32° F. above zero	SAE 20 or 20W	SAE 10W-30
As low as 10° F. above zero	20W	SAE 10W-30
As low as 10° F. below zero	10W	SAE 10W-30
Below 10° F. below zero	5W	SAE 5W-20

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

## 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.

## CHANGING ENGINE OIL

After the first oil change, it is recommended that the engine oil be changed every 2,000 miles thereafter 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 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 do 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 tend to cause oxidation and breaks down the lubrication qualities.

## 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 filler cap in gasoline, shake dry, and then dip it in clean engine oil.

The heavy duty carburetor oil bath cleaner oil should be changed and the oil reservoir cleaned every 5,000 miles or oftener if driving conditions warrant. Fill to the oil level mark using S.A.E. 50 engine oil in warm weather and S.A.E. 20 in cold weather.

The air filter element on the Power Brake Unit should be replaced every 10,000 miles.



Oil Filler Cap

Carburetor Air Cleaner



## POWER STEERING FLUID

The fluid level in the reservoir should be checked after the first 1,000 miles of driving and every 5,000 miles thereafter, and maintained about one-half inch above the filter element.

Packard Automatic Transmission fluid, which is available at all Packard Dealers, should be used for the power steering hydraulic system. If this fluid is not available any "A" type automatic transmission fluid may be used which has an AQ-ATF number embossed on top of the can.



*Power Steering Fluid Reservoir*

## ULTRAMATIC TRANSMISSION FLUID

The fluid level in the Ultramatic Transmission 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, oil screen cleaned, and the unit refilled with new fluid.

Packard Automatic Transmission fluid, which is 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 Transmission be serviced only by Authorized Packard Dealers.

## TRANSMISSION LUBRICANT

The transmission, and the overdrive if the car is so equipped, is to be lubricated with a multi-purpose gear oil of S.A.E. 90 viscosity. If difficulty in gear shifting is experienced during extremely cold weather, use S.A.E. 80 multi-purpose gear oil.

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.

## REAR AXLE LUBRICANT

The rear axle is to be lubricated with S.A.E. 90 Multi-Purpose Gear Lubricant. S.A.E. 80 Multi-Purpose Gear Lubricant should be used where the temperature drops to 10 degrees or more below zero for long periods of time.

The level should be checked at each chassis lubrication and Multi-Purpose Gear Lubricant added if required. The axle should be drained and refilled with fresh Multi-Purpose Gear Lubricant each fall with the approach of cold weather.

## UNIVERSAL JOINTS

Clippers equipped with Ultramatic Transmission use a propeller shaft with a ball and trunnion type front universal joint which requires repacking at 15,000 mile intervals with a heavy fiber universal grease. The cross type rear universal joint also requires repacking at 15,000 mile intervals with a heavy fiber universal joint grease having extreme pressure characteristics.

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 gear oil every 1,000 miles. Chassis lubricant should never be used in these joints.

## REAR SPRINGS

The rear springs of your car should not 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.

## TORSION-LEVEL SUSPENSION

The only lubrication required on Torsion-Level suspension cars are at those points where lubrication fittings are provided. All other points of pivot are packed with lubricant for the life of the car, and should be repacked only on disassembly.

## 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
Oil filter.....	Renew cartridge every 4,000 miles
Brakes.....	Check fluid level every 1,000 miles
Brake adjustment.....	Check every 5,000 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
Power Brake air filter.....	Replace element every 10,000 miles

## COOLING SYSTEM

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

Without pressure in the system, water would boil at 212°F.; however, in the Clipper pressure type system, this boiling point is raised to approximately 248°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

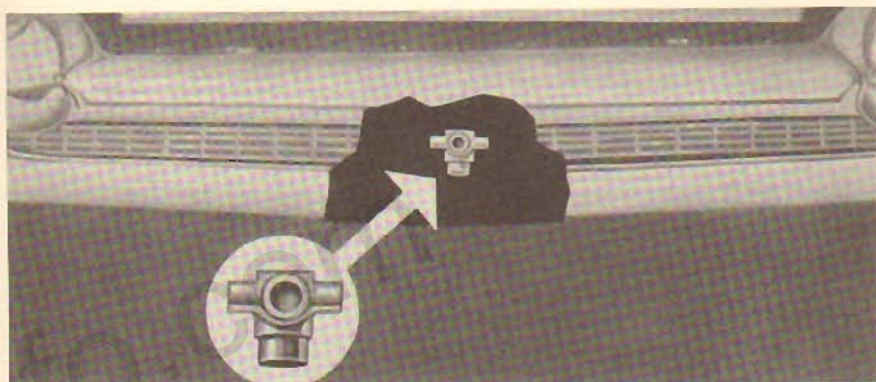
The system requires regular attention. The coolant level in the radiator should be kept at about one inch below the bottom of the filler neck. If coolant is added above this level, it will flow out of the radiator vent after the engine has warmed up.

### 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 plugs on the lower left and right side of the cylinder block.



Radiator Drain Cock

## RUST PREVENTIVE

In spring or early summer, when you have your radiator cleaned and refilled, be sure to have your Packard dealer put in a can of Packard Rust Preventive. This will protect the radiator during the summer months against rust, one of the radiator's worst enemies. This inexpensive service can save you dollars in repairs at some later date.

All good quality antifreezes contain a rust inhibitor which protects the cooling system during the winter months.

## 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 supply 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, and should not be used.

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 "Clipper" is 26 quarts. If the car is equipped with a fresh air heater and defroster, the capacity is approximately 26½ quarts. On cars equipped with both fresh air and underseat heater, the capacity is 27 quarts.

ANTI-FREEZE CHART			
COOLING SYSTEM CAPACITY	FOR PROTECTION DOWN TO	QUARTS ETHYLENE GLYCOL	QUARTS ALCOHOL
26	Zero Fahrenheit	8	8
Quarts	10° Below Zero Fahrenheit	10	10
	20° Below Zero Fahrenheit	12	11

## THE 12 VOLT NEGATIVE GROUND 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	MFR. NO.
Courtesy and Map Lights.....	6	90
Glove Box Light.....	2	57
Headlights.....	50-40 Watt	5400
Ignition Switch.....	1	53
Indicator Light Bulbs:		
Headlight High Beam.....	2	57
Directional Signal.....	2	57
Oil Pressure.....	2	57
Battery Discharge.....	2	57
Selector Lever.....	2	57
Instrument Lights.....	2	57
License Light.....	3	67
Parking and Directional Signal Light (Front)...	32-4	1034
Reading Lights (Dome).....	15	1004
Stop and Tail Lights.....	32-4	1034
Trunk Light.....	6	89
Back Up Lights.....	32	1073

## FUSE AND CIRCUIT BREAKER CHART

CIRCUIT	LOCATION	CAP. AMPS.	NO.
Clock	Fuse Block under Inst. Panel..	2	AGA-2
Direct. Signal Flasher	Fuse Block under Inst. Panel..	9	SFE-9
Radio	Fuse Block under Inst. Panel..	7½	AGW-7½
Overdrive	On Relay on Dash Panel.....	15	AGC-15
Heater	Fuse Block.....	15	AGC-15
Head, Tail and Parking Lights	Circuit Breaker on headlight Switch.....	20	—
Body Wiring			
Glove Box Light	Fuse Block under Inst. Panel...	20	SFE-20
Stop Light			
Courtesy Light			
Tor. Level Susp.—Contr. Cir.	Under Hood Left Side.....	7½	AGW-7½
Tor. Level Susp. Motor Feed	Under Hood Left Side.....	30	AGC-30
Windshield Washer	Fuse Block under Inst. Panel...	9	SFE-9
Instruments	Fuse Block under Inst. Panel...	7½	AGW-7½



## HEADLIGHTS

Your Clipper is equipped with a 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 Packard Dealer has the 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 rear tires.

After the car has been driven at normal speeds in the city, the pressure may be up to 27 pounds (3 pounds over the starting pressure of 24 pounds).

After driving on the highway at moderately high or high speeds, the pressure may be up to 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.

### TUBELESS TIRES

Your new Clipper is equipped with the new tubeless tires as standard equipment. These tires are very similar to conventional tube tires on the outside, but the tubeless tire is completely different in the method of servicing.

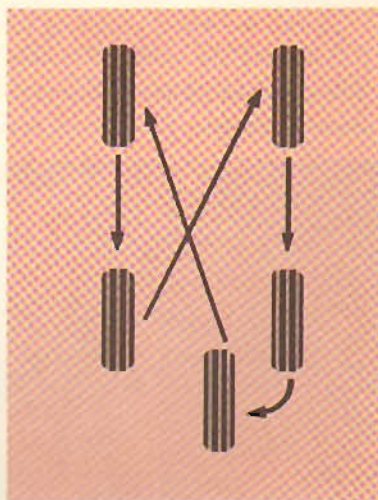
The tubeless tire has a built-in liner which takes the place of the tube. This eliminates the possibility of pinching, chafing or buckling at the bead seats, which often occurs in tires that are equipped with tubes. Blowouts resulting from these conditions are prevented.

Tubeless tires are not puncture proof, but when a nail or some other pointed object penetrates the inner liner of the tire the liner material clings to the penetrating object forming a seal to prevent the sudden outburst of air. This enables the motorist to drive a few miles to a service station to have the object removed and the tire repaired, instead of being stranded on the road. It also has the advantage of preventing a dangerous blowout because when an impact ruptures the cord body, the inner liner contains the average injury. Unlike a tube, which bursts when the cords pinch through, the inner liner will only develop slow air leakage, giving the driver advance warning. Tubeless tires will give you longer tire life and fewer road delays than conventional tube tires.

Your Packard Dealer and most service stations are equipped with the proper tools to repair tubeless tires. The tire can be repaired in some cases, without removing it from the wheel.

### 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.



### CHANGING WHEELS

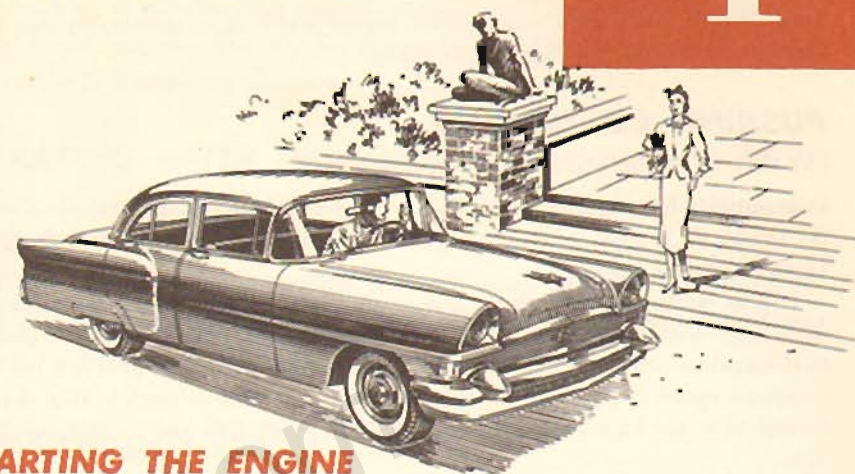
Caution: On Clipper cars equipped with Torsion-Level suspension, turn off the levelizer switch (located under the instrument panel at the extreme left) first before attempting to raise the car. Refer to page 12, for using the levelizer to assist you in raising the car.

Then proceed as follows:

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.



## DRIVING YOUR NEW CAR



### STARTING THE ENGINE

Before starting the engine make sure that the gear shift lever is in the neutral position. Depress the clutch pedal, on non Ultramatic Transmission equipped cars, to avoid turning the transmission gears along with the engine. This relieves the starter of an additional load on the battery, especially in cold weather when the transmission oil is cold and thick.

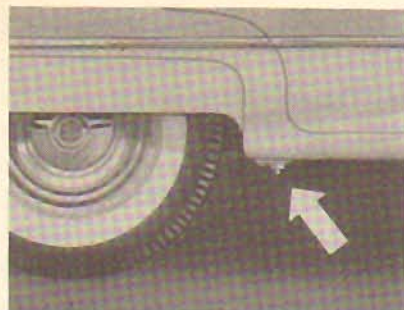
To start the engine, slightly depress the accelerator pedal and turn the ignition-starter switch key all the way to the right. This turns on the ignition and operates the starting motor. When the engine starts, release the key and it will automatically return to the "ignition-on" or driving position.

Do not race the engine during the warm-up period. The engine will warm up sufficiently at slower speeds and you will avoid damage to working parts before oil can protect them.

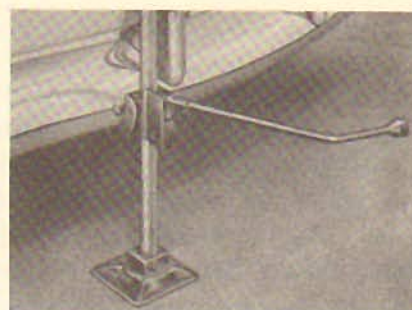
If the engine does not start within a reasonable length of time, it may be overchoked or flooded. If so, press the accelerator pedal to the floor and turn ignition switch to the starting position. The engine then should start in a few seconds.

**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.**

### CAUTION



*Removing Rear Fender Shield*



*Removing Rear Wheel*

The shield will then drop at the rear and can be swung clear of the fender. Make sure the hand brake is set.

Remove the hub cap, using the flattened end of the 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 in line with the bumper support bracket, on the side where the wheel is 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 dowel located on the lower front corner of the shield into its respective hole in the fender. Swing the shield upward into place engaging the remaining dowels in their respective holes. Install the



*Removing Front Wheel*

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 support bracket.

Note: After the wheel and tire is installed and the jack removed turn on the levelizer switch to return the car to its normal height.



## **THE RIGHT GASOLINE**

Your Clipper has a high compression engine and it is recommended that the engine be operated on high octane fuels.

## **PUSHING OR TOWING (With Ultramatic Transmission)**

Occasionally Ultramatic Transmission 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 or push button 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 or push button 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 Ultramatic Transmission unit is not damaged and no oil has been lost; however, the selector lever or push button must be placed in the neutral "N" position. If the selector lever or push button is in any other position, unnecessary damage may result. Towing speed should be limited to 30 miles per hour and long distance towing (over 300 miles) is not recommended.

Sometimes a collision may damage the shift linkage to the extent that the selector lever or push button cannot be shifted to the neutral "N," position. In this event, the propeller shaft should be removed or the car should be towed in with the rear wheels raised off the pavement. 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.

In most cases 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 slightly 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, as well as to the engine and other units.

During this period it is not recommended to open the throttle wide for acceleration or hill climbing and the speed should not exceed 50 miles per hour. In the long run, this will pay off in many additional thousands of miles of trouble free 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 intersections.

## **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. Do not operate a cold engine at excessively high speeds.

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 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.

If your car is equipped with Ultramatic Transmission, never shift from "H" or "D" to "N" and coast as the car is then not under the driver's complete control. This practice will both abuse the transmission and cause abnormal wear on the brakes, and actual saving on gasoline will be negligible.

A good driver keeps his windshield and rear view mirror clean and his windshield wipers and lights in good working 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. He also stops for all school busses.

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

After parking your car always remove the keys from the ignition lock if the car is going to be unattended for only a few moments. By following this practice you will eliminate the possibility of the car being stolen.

## MOUNTAIN DRIVING

When driving in the mountains or hilly country where steep grades are encountered and the car is equipped with overdrive, it should be locked out to provide better control of the car. This can be done when the car is standing or the car speed is below that of 17 miles per hour. This will utilize the engine for braking power when descending steep grades.

On Ultramatic Transmission equipped cars, when descending steep grades in the mountains and hills, the car should be driven in "LOW" range to utilize the braking power of the engine. It is recommended that the shift to low range be made before the car has attained a speed of 25 miles per hour to prevent sudden deceleration.

## GASOLINE MILEAGE DEPENDS ON THE DRIVER

Test reports show that cars in normal satisfactory operating condition will give good gas economy at 20, 30, or 40 miles per hour. In fact, in some cases the gas economy is as much as almost 2 miles per gallon better at 40 MPH than at 50 MPH. The gas economy drops off approximately another 2 miles

per gallon when driving 60 MPH, and another 2 miles per gallon at 70 MPH. Another factor affecting gas economy is frequent stops and starts, which happens mostly when driving in heavy traffic and sudden acceleration. It has been established that one of the causes of poor gas economy is due to poor driving habits of the owner or driving conditions. However, if this is not the cause, the following factors will contribute toward poor fuel economy:

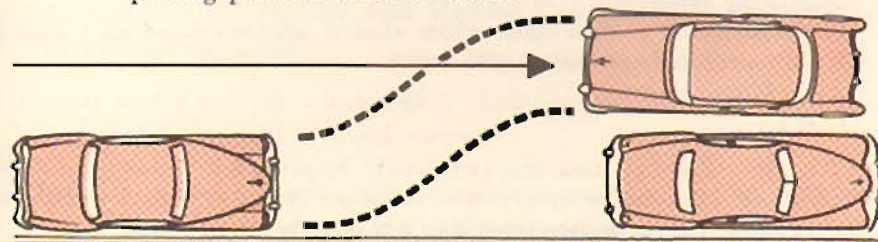
1. Inefficient spark plugs
2. Bad distributor points
3. Gum deposits in carburetor
4. Engine running too cold
5. Dragging brakes
6. Low tire pressure
7. Leaky intake manifold gasket
8. Restricted air cleaner
9. Motor oil too heavy

A combustion analysis by your Packard Dealer will determine if the carburetor or fuel system is at fault. Periodic tune-ups in which many important adjustments are made will have a direct bearing on operating economy.

## PARKING YOUR CAR

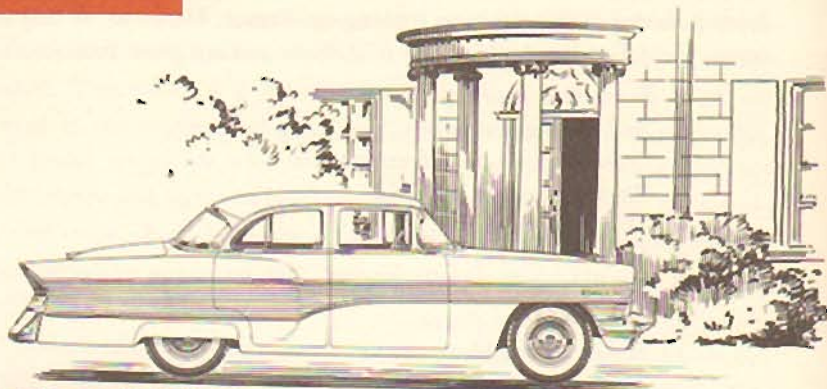
Before you attempt to park make certain that the space you selected is slightly longer than your car. You can then park easily by following these simple steps:

1. Drive your car up even with the car ahead.
2. Turn wheels to right and back car until rear of parked car is about at your windshield.
3. Straighten wheels and back until your front bumper is about opposite rear bumper of parked car. Turn wheels to left and back until parallel to curb.
4. Turn wheels again to right and drive car forward into proper parking position. Set hand brake.





## TAKING CARE OF YOUR NEW CLIPPER



### 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. Packard Luster-Seal car shampoo quickly and effectively produces desired results. 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 and the formation of ice.

A high luster can be restored with a Packard Luster-Seal Treatment (available at your Packard Dealer). A periodic Luster-Seal Haze Cream application assures durability of finish. 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 blades or with dry cloths is apt to cause minute surface scratches. Wet glass before cleaning.

### 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. Packard Tar Remover can be obtained from your Packard dealer.

**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.



## 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 corrosive agent. Rust, originating at the root of a scratch will continue to spread underneath the plating unless attended to when it first appears.

## ★ THE BEST FOR THE FINEST

To give the "best" in service for the finest Clipper 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 Dealer's Personnel.

The Packard Servicemen are trained by Factory personnel at schools held throughout the world. The Servicemen perform the actual mechanical work under the direct supervision of well-informed instructors.

These schools are held periodically to give the Servicemen first hand information on all the new engineering improvements perfected at the Factory and the Proving Grounds. With this assurance in mind that when you visit your Packard Dealer, you may have complete confidence that the service you receive will be of the finest.

## ★ MODERN TOOLS AND EQUIPMENT

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 eliminates unnecessary repairs or adjustments.

Visit your Packard Dealer for normal periodic maintenance and adjustments. When you follow this counsel, you may feel confident your Clipper

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.

## ★ YOUR CLIPPER 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.





# SPECIFICATIONS ON YOUR 1956 CLIPPER

CHASSIS SYMBOLS	5640	5660
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## ENGINE

Type.....	8 Cyl. 90° V	8 Cyl. 90° V.
Bore.....	4"	4"
Stroke.....	3½"	3½"
A.M.A. Horsepower.....	51.2	51.2
Oil Capacity.....	5 qts.	5 qts.
Water Capacity.....	26 qts.	26 qts.
Heater Capacity.....	1 qt.	1 qt.
Thermostat Rating (STD.).....	170°	170°
Fuel Tank.....	20 gals.	20 gals.
Valve Tappets.....	Hydraulic	Hydraulic

## COMPRESSION RATIO

Compression.....	9.5 to 1	9.5 to 1
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## BRAKE HORSEPOWER

Brake H.P.....	240	275
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## ELECTRICAL

Battery.....	9 plate—60 hour	9 plate—60 hour
Generator.....	30 Amp. Shunt	30 Amp. Shunt
Regulator.....	Voltage & Current Control	Voltage & Current Control
Ignition Point Gap.....	.015"	.015"
Spark Plugs.....	14 MM	14 MM
Spark Plug Gap.....	.033"	.033"
Ignition Timing.....	5° BTDC	5° BTDC
Headlights.....	Sealed Beam	Sealed Beam

## TRANSMISSION

Type.....	Selective Silent	Selective Silent
Oil Capacity.....	Synchronized	Synchronized
With Overdrive.....	3¼ pts.	3¼ pts.
Ultramatic Capacity.....	4 pts.	4 pts.
	11 qts.	11 qts.

CHASSIS SYMBOLS	5640	5660
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## CLUTCH

Type.....	Dry Disc 11"	Dry Disc 11"
Clutch Pedal Free Play.....	1¼" to 1½"	1¼" to 1½"

## REAR AXLE

Type.....	Hypoid	Hypoid
Oil Capacity.....	3 pts.	3 pts.
Ratio.....		
Standard.....	3.54 to 1	3.54 to 1
Overdrive.....	3.54 to 1	3.54 to 1
Ultramatic.....	2.87 or 3.07 to 1	3.07 to 1

## SUSPENSION

Type.....	Independent Parallelogram	Independent Parallelogram
Springs.....	Full length torsion-level	Full length torsion-level
Shock Absorbers		
Front and Rear.....	Direct Acting	Direct Acting

## STEERING

Gear Type.....	Worm and Roller	Worm and Roller
Gear Oil.....	S.A.E. 90	S.A.E. 90
King Pin Angle.....	5° 50'	5° 50'
Caster Angle.....	-1° ± ½°	-1° ± ½°
Camber Angle.....	0° + ¾° - ¼°	0° + ¾° - ¼°
Toe-in.....	0 + ¼" - 0	0 + ¼" - 0
Tire Pressure		
Front & Rear.....	24 lbs.	24 lbs.

## DIMENSIONS

Over-all Length.....	214 13/16"	214 13/16"
Maximum Width.....	78"	78"
Wheel Base.....	122"	122"

WEIGHT—Consult the Dealer who sold you the car, or the motor vehicle commissioner in your state.



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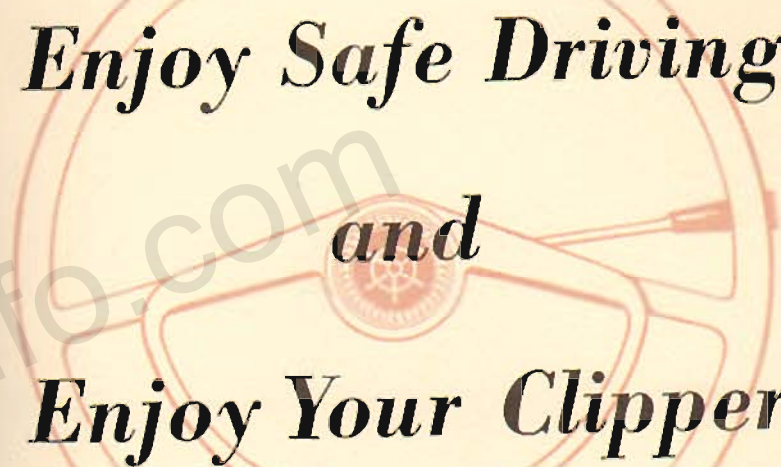
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***Enjoy Safe Driving  
and  
Enjoy Your Clipper***





# **Your Packard Dealer...**

**personally interested in your car...**

**best fitted for its care!**

