

PACKARD CLIPPER BODY NOTES—Model 1951

BONNET

LOCKS

The bonnet is locked in place and unlocked by means of control levers located inside the body just below the instrument board. An additional safety catch outside at the front must be released manually.

Be sure always to lock the bonnet by pulling the levers to the fully locked position before delivering the car to the owner. Check the safety catch to see that it always returns to the locked position when the bonnet is closed. If the operation is stiff, remove the safety catch and insert a thin shim between the ends of the piece of sheet metal forming the hinge to give the safety catch more clearance. If more spring tension is required, one coil may be cut off the spring.

The holes in the bonnet guide pins in the fenders opposite the cowl should extend from front to rear. If they extend crosswise of the car, the bonnet may catch in them and make it difficult to raise. Loosen the lock nuts on the underside, properly align the pins and retighten the lock nuts.

The Tenite knobs on the bonnet locks and cowl ventilator handles of early cars may become loose. This can be corrected by removing the knobs, inserting plastic wood in the openings and forcing them on the handles securely. Allow plenty of time for the plastic wood to set.

BONNET FIT

The radiator grille should project forward beyond the line of the body approximately $\frac{3}{8}$ " and no attempt should be made to line up the bonnet with the face of the grille. The clearance between the forward end of the bonnet and the upper face of the grille should not exceed $\frac{1}{4}$ ". The front of the bonnet can be brought down lower by reducing the height of rubber pads on which it rests, working back from the forward end. In addition, the grille itself may be moved up to help reduce the clearance. The holes in the grille for the attaching screws are large enough to permit a certain amount of shifting.

If the bonnet is high at the rear so that it projects above the cowl, it can be lowered by reducing the height of the rubber bumpers on which it rests.

VENTILATING WINDOWS

A rattle at the upper pivot of the ventilating window caused by looseness of the pivot pin, may be corrected by pulling back rubber on outside and peening steel stamping to close up excess clearance.

The lower pivot has a spring adjustment the same as the Nineteenth Series.

The ventilating windows have drain holes through the rubber weather strip at the bottom just ahead of the lower pivot. These holes should be kept open.

A leak at upper pivot should be corrected by carefully fitting and sealing rubber around pivot pin.

FRONT SEAT

The front seat adjustment mechanism is similar to that used on the Nineteenth Series except that the cross shaft gear rack is assembled on top of the seat side members and is above the cross shaft gears rather than under the gears. The gear racks should be adjusted so that the gears mesh at approximately the center of the openings. The racks can be moved slightly on the bolts or bent if necessary.

If the cross shafts are noisy, tape the shaft directly over the two center seat braces.

DOORS

WATER LEAKS

In case of leaks at the lower front face of the front doors, remove the rubber weather seal which is fastened under the front fender and reset to contact the rubber weather strip on the door.

In case of leaks over tops of doors, the weather strips which are cemented in place should be removed and shimmed out with waterproof material similar to Everseal, which is used to seal around the glass.

If water gets in over the top of the doors, it will run down behind the window finish moulding and come out on the door trim panels at the wainscot panels.

When removing the door weather strips, particularly the ones with metal reinforcements in them, it is necessary to first remove the door trim pads. These weather strips are cemented in place and have metal prongs which slide into the door inside panels and are clinched over to prevent them from pulling out.

There are three drain holes in the front doors and two in rear doors. The door bottom weather seals have cutouts provided to allow the water to drain out of the doors. Drain holes should be kept open.

When air leaks around the doors, it should be corrected by shimming the windlace over until it fills the opening around the door rather than trying to shim the door in to meet the windlace.

ADJUSTMENT

Front doors may be adjusted fore and aft, up and down. The doors may be adjusted out by placing metal shims between the hinge and the door. There is no means provided for adjusting the doors "in" on the early cars. On later cars, the center pillar depression for the lock keeper will be made deeper to permit adjusting the doors in. The rear doors are not adjustable fore and aft or up and down.

DOOR GLASS

To replace a broken glass in the front door, remove the garnish moulding and door trim panel. Run the glass all the way down and lift the rollers, on the ends of the regulator arms, out of the guides. Then run the regulators up and allow the glass to drop to the bottom of the door. Now tip the glass towards the front of the car and lift out through the access opening at the bottom of the door.

To remove broken rear door glass, remove garnish moulding and door trim panel. Run glass all the way down and lift rollers, at the ends of the regulator arms, out of guides. Then run regulators up and let glass drop to the bottom of the door. Remove screws holding ventilator window and glass channel assembly and lift it out. The window glass may now be removed through the access hole at the bottom of the door or through the top opening as desired.

On early cars, the felt lined door glass channel did not extend all the way to the end of the channel supporting frame at the rear side of the door. To prevent breakage due to the glass striking the metal frame when the door is slammed, cement a piece of felt on the lower end of the channel support extending from the point where the felt channel stops to the end of the metal support.

When replacing door glass, be sure none of the rivets holding the felt channel project enough to contact the glass. As an additional precaution, a patch of thin felt should be cemented over the rivet heads. A squeak in the front door hinges may be caused by a weld spot on the hinge strap rubbing against the body. Grind off any high spots where hinge is welded to door until positive clearance is obtained.

SQUEAKS AND RATTLES

A squeak in the rear doors may be caused by the rear bottom corner rubbing against the body. The correction, of course, is to bend the corner of the door out slightly to provide a positive clearance. A squeak may develop at the door window garnish moulding. It may be checked by pushing down with the fingers on the outside edge of the moulding near the glass. If a squeak develops, the moulding should be removed and the outside flange bent slightly to produce a clearance.

There should be two wedge bumpers on the front edge of the front door opening. These bumpers were omitted on some early cars. In case of rattles, check to see that both bumpers are in place.

MISCELLANEOUS

Lubrication of door hinge pins on early jobs is done before assembly of the pins. On later jobs, oil holes in the hinges and grooved pins will be provided so that by opening the doors, the pins may be lubricated with a pressure gun. (Alemite Model 6564 Nozzle 2737 or similar.) The easiest way to lubricate the present hinge is to remove the door and hinges, then remove the pins and apply the lubricant.

Removal of doors in the field is quickly done by removing the screws which hold the hinges in place on the body pillars and removing both door and hinges. If the door hinges are to be removed and serviced, the door trim panels should be removed also. On the front door hinges, it will be necessary to break the arc welds which anchor the hinge to the door inside panel as well as removing the hinge screws in the door.

When servicing the inside rubber treads at bottom of all doors, the large holes which are used for clips should be covered while the treads are off so that no metallic substance can drop through into the box section sill panels and cause noises. Masking tape can be used to cover the holes.

Servicing door check straps needs no explanation but care in installing them is necessary to see that when the door is wide open, the door flanges do not hit the front fenders or center pillar.

DOOR REMOTE CONTROLS

The window regulator and remote control handles are removed in the same manner as the One-Ten Models by removing the pins. Care should be taken to replace the handles in same position as removed so that the greatest amount of clearance can be obtained between the regulator and remote handles.

The window regulators are of a new cross arm type and can be removed by disengaging the two rollers which operate on the lifter channel on the bottom of the window glass. Then remove the screws which

fasten the regulator and cross arm to the door inside panel and slide the other roller out of its guide which is located at rear bottom end of cross arm. When this is done, the whole regulator assembly can be removed through the large access hole in the bottom of the door inside panel.

To remove the remote control assemblies, it is necessary to remove both the door lock and remote control assembly. The lock does not have to be entirely removed but to get the remote control off the "T" headed bolt on the lock, the lock has to be turned at an angle so as to slip off the slot in remote link.

DOOR OUTSIDE HANDLES

Front door outside handles are different than the ones for the rear doors. They are not interchangeable right and left. Whether right or left is plainly marked on the escutcheon plate.

The outside door handles can be removed by removing the screw which goes through the door trim panel from the inside. By turning the handle down, screws can be removed from handle escutcheon plate.

On early bodies the outside door handles may not return to a horizontal position. On later jobs, the handle will have less friction and should be satisfactory; also the gap between the escutcheon plate and handle will be closed. Early handles can be freed up with oil temporarily.

If the screw which goes through the door trim panel from the inside goes in too far, it will compress the trim panel enough to prevent return of the handle to the horizontal position. The friction can be relieved by placing one or more thin washers between the screw and handle shaft.

DOOR LOCKS

The door locks can be removed without removing the remote control by removing the lock screws which are on the outside face of door inside panels.

If trouble is experienced with sticky rear door lock push buttons, the operation may be eased by loosening the rivet and operating lever just beneath the push button. This is being done on later bodies.

The reason the action of the rear door push buttons is so much stiffer than the front doors, is that the rear door push button has to operate at the extreme opposite end of the door from the lock through a series of levers or connecting shafts or links. The front door push button is directly over the lock, thus eliminating a lot of friction and tight joints.

When replacing the mechanism, be sure all parts are well lubricated.

DOOR LATCHES

When the door lock rotor does not engage striker plate deeply enough, the striker plate can be shimmed out from the body pillar.

Front Door Lock Striker Plate Spacer (thick) 376220, (thin) 376221; Rear Door Lock Striker Plate Spacer (thick) 376224, (thin) 376225.

When the door striker safety catch does not function, it should be removed at once and a new one installed; particularly the rear doors should be watched. If the part of rear door striker which contains the safety catch is at all loose, it should be removed and replaced to avoid lack of operation of the catch.

If the door striker plate does not seat squarely on the body pillar, tightening the attaching screws may spring the plate. When this occurs, shims should be installed so that the attaching screws may be tightened without springing the plate.

TRUNK

In case of leaks in trunk, there are three places to watch:

- (1) If the trunk lid door handle leaks, remove and pack inner face of escutcheon plate with dumdum.
- (2) If water leaks through the quarter belt moulding clips, seal from the inside with dumdum.
- (3) If leaks develop at the top corner of the trunk lid, the openings should be sealed by cementing a piece of rubber weather strip to the lid. Start on the top edge about 10" in from the side and extending around the corner about half way down the sides. Use weather strip, 376589.

The trunk lid hinge reinforcements are welded in place. The part that is welded to the trunk lid drain trough should in addition to the gun welds, have an arc or gas tack weld at each end.

Trunk lid outside handles can be made to stay in vertical position when closed by swedging the part of door handle shaft which engages square in lock.

Trunk lid locks lock in the center only and not on each side as on other Nineteenth Series bodies.

If trunk lid has too much play when lid is down and in locked position, it can be remedied by welding just a trifle to front face of trunk lid lock striker.

Trunk lid hinges are easily serviced but care should be taken to see that springs on hinges are thoroughly lubricated with Lubriplate.

FRONT FENDERS

Removing front fenders from body requires the removal of cowl side trim pads in order to get at the screws which fasten fenders to cowl sides. Sill moulding should be loosened or removed from fender.

Care should be taken when assembling the front fenders to be sure they are flush with the outside face of doors. If the fender sticks out beyond door, when door is opened, it will jam into the fender.

REAR FENDERS

The rear fenders are formed as part of the rear quarter panel. The wheel housing is a separate stamping welded to the quarter panel and underbody.

In case of a bad tear which would ordinarily require replacement of the fender, the entire rear quarter panel should be ordered. Repair is made by cutting out whatever portion is damaged and welding a corresponding new part in place. The rear quarter panel may be ordered separately or as an assembly with the wheel housing.

Rear fender gravel shields are welded to wheel housing and bolted to fender. Servicing depends upon the damage as the rear fenders are one unit and a part of the rear quarter panels.

WINDSHIELD WIPER

To remove the windshield wiper motor, the instrument cluster and glove box must be removed to permit reaching the two screws which attach the steady rest bracket to wiper motor base.

In some cars the plastic in which the ash tray is mounted is too thick. This prevents the windshield wiper control shaft nut from going on the shaft far enough. If control knob comes off, remove the shaft nut and countersink the plastic to permit the nut and control knob to go on the shaft farther.

GLOVE BOX

If glove box doors do not drop far enough to light the light, these doors can be removed and the spring on lid which is next to the center of car can be unhooked, leaving the spring on the other end to function.

GENERAL DESCRIPTION

The toe board is not a separate unit but is part of the front floor assembly.

The roof is a single unit running from front of dash to trunk opening.

The underbody consists of two units, the front floor which runs from dash to rear seat and the rear floor which runs from front of rear seat to extreme rear of body. Both of these units are welded together.

The rear body panel is a separate stamping and is welded to both quarter panels which leaves an open joint which is sealed against leaks with sealer and cork flanges.

The doors are a two-piece stamping similar to our Nineteenth Series, namely, inside and outside door panels are stamped from one piece of metal reinforced and welded together.

Windshields and rear window glass and finish mouldings are installed same as Nineteenth Series.

If body has to be removed from chassis there are 24 bolts to be removed and if chassis has not been damaged, the body shims should be replaced as before body was removed, to insure proper fit of doors.

The front seat tracks are removed by removing four screws on each track which hold seat to underbody.

Knockouts on face of dash to be used in installing dash heaters, etc.

All finishing mouldings on outside of body are clipped in place except on the trunk; these are riveted to lid. Here the belt moulding retainer is riveted to the lid and belt moulding snapped over retainer.

When servicing the electric wire connectors for courtesy lights on underside of instrument panels, it is important to use the connector that is insulated and not like those used for tail lamps. See parts list.

In removing the instrument panel, be sure to remove the screw which is attached to instrument panel from steering gear to cowl brace. Do not remove the top screw which is attached to cowl panel unless it is absolutely necessary. If it is necessary to remove this brace, be sure to fasten it to the cowl panel first.

The door scuff plates exposed metal part is a snap-on metal cover and in servicing, if the piece this cover snaps on is not damaged, a new snap-on cover can be installed.

At the front of the rear floor carpet you will note that the padding on carpet has been cut back. This is done to provide maximum space between foot rest on front seat and carpet when seat is in rear position.

For center radio antenna you will find that the windshield rubber weather strip has clearance notches and clips for wires which run down center of windshield through top of instrument panel. The clips mentioned should be looked at before covering, making sure there is no paint on them as they are used as grounds. These wires to be installed behind the windshield division center finishing moulding.