

- See Fig. 1-95. This condition may be noticed by
- holding the door handle down and closing the
- door gently. The door flange at the lock section
- stands away from the body panel reveal, while
- the door flange above and below the lock section
- fits flush and is in proper alignment. Also, the
- door has to be "slammed hard" to make it catch,
- and once closed it is difficult to turn the door
- handle to open it again.



Fig. 1-95. A "bowed" door condition. Door fits at top and bottom, but stands away at the belt section.

- This condition creates so much strain against
- the lock bolt that it will not travel its fullest
- length which prevents it from being unlocked
- from either outside or inside. If the striker plate
- is set out farther to make the lock work freely,
- it allows the door to stand away from the body
- still more. The remedy for this condition is to
- use a door bar tool to straighten the door to con-
- form to body pillar at the belt line, see Fig. 1-96.

- When using this tool, care should be used not
- to bend the door too far, or it may develop a kink
- or bulge at a point on the door flange just above
- the lock. By placing the door bar on the outside,
- the door may be straightened, or by reversing
- the bars to the trimmed side, the door may be
- "bowed." See Fig. 1-97. When using the tool,
- exert a steady pressure with the screw clamp and
- tap along the door facing with a light hammer
- as indicated along "A", Fig. 1-96, to equalize
- and relieve the strain. A change of $\frac{1}{4}$ " in the
- bow of the door will make a vast difference in
- the fit of the door at the belt line,

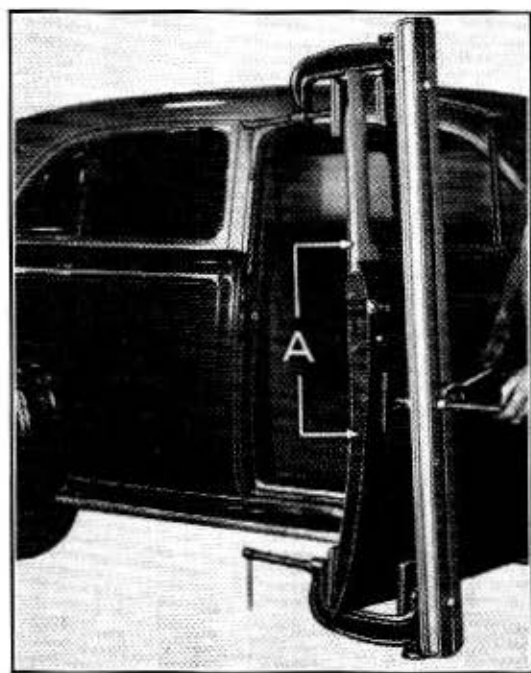


Fig. 1-96. Method of Straightening Door with New Improved Door Bar

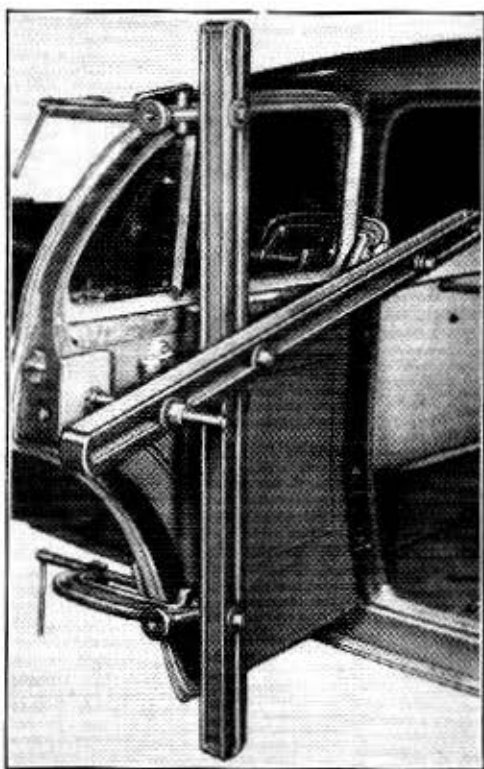


Fig. 1-97. Putting more "bow" in the rear door by reversing the bar to trimmed side of door. On some doors, due to their angle or shape, it is necessary to use two bars as shown.

- After bringing the door to the proper shape
- at the body belt line, it may be found that the
- door aligns perfectly from the bottom to as far
- as the window opening, but from there up it
- stands away from the body. This may be cor-
- rected by bending the upper part of the door
- pillar towards the body, and may be done by
- simply blocking the door open at the belt line
- and pushing sharply on the top of the door lock
- pillar to bend it slightly in towards the body.
- Holding the knee against the lower half of the
- door while pushing at the top will facilitate the
- action.

- The "bowed" condition of the door as ex-
- plained may not necessarily occur at the lock
- side of the door, but may also occur at the hinge
- side as well.

- **IMPORTANT:** In the condition just described,
- where the lock side of the rear door is "bowed"
- at the belt line, some service men form the
- opinion that the rear quarter panel should be
- pushed out to meet the contour of the door and
- accordingly, by the use of a "cross jack," start
- out to perform this operation, with the result
- that a buckle is created in the rear quarter panel
- above the wheel housing, see Fig. 1-98, or in the
- roof panel at the rear quarter. The removal of
- this "buckle" or "ding" is a difficult job and in-
- variably cannot be properly taken care of unless
- the rear quarter pillar is brought back to its
- original position. This method of correcting a
- "bowed" condition on a rear door is bad practice
- unless the workman is a skilled metal man. The
- simplest method of correcting this "bowed" con-
- dition is by using a door bar tool as already
- illustrated.

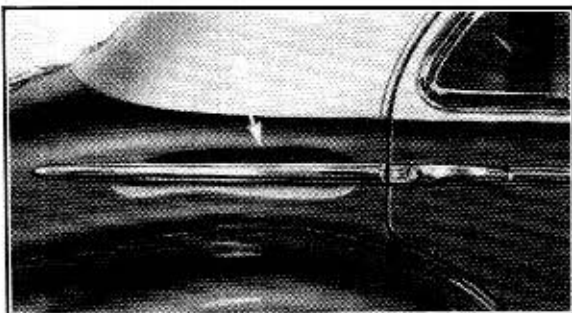


Fig. 1-98. Showing the damage resulting at "A" from "cross jacking" out the quarter panel in correcting a "bowed" rear door condition.

HOOD AND FRONT DOOR ALIGNMENT

Aside from the easy operation of the door on its hinges and attaching hardware parts, and also the correct spacing at the sides and top of the door, one of the chief guiding points to a normal fitting door is the horizontal crease pressing or molding at the belt line on the door and body panel, as shown in Fig. 1-99. If the door is high, low, or in correct alignment, the condition is readily noticed by comparing the crease line on the door with the crease line on the pillar or body panel, as shown in the illustration. Normally, in most cases this crease line on the doors and body panel should be in continuous horizontal alignment along the side of the body from the rear quarter panel to the front edge of the front door at the belt section.

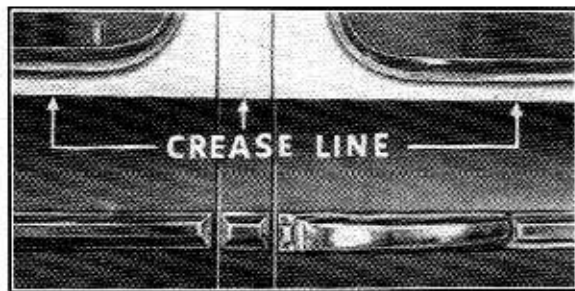


Fig. 1-99. When checking for high or low doors, the crease line on the doors and adjacent body panel should be in continuous horizontal alignment as shown.

Regardless, however, of the correct fit of a door in the door opening and to adjacent body panels as described, instances are continually developing in the field where body men loosen the hinges on a correctly aligned front door and try to make the crease at the door belt section line up with the hood of the car. As a result, a perfectly normal fitting door is thrown out of alignment, is hard to open and close, and is a continual source of annoyance to a car owner. This is bad body practice.

If, upon observation, the front door of a body is in correct alignment as explained and the crease line of this door does not happen to line up with the hood, as shown in Fig. 1-100, the only alternative is to adjust the hood or the fender section of the hood to make it line up with the door.