FRAME AND BUMPERS

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REMOVAL AND INSTALLATION

FRONT BUMPER FASCIA

REMOVAL

(1) Remove nuts holding front bumper fascia bracket to bottom of fender forward of front wheels.

(2) Remove screws holding front fascia to inner wheelhouse.

(3) Remove bolts holding fascia to bumper reinforcement forward of radiator (Fig. 1).

(4) Remove bolts holding fascia to bottom of bumper reinforcement.

(5) Separate fascia from vehicle.

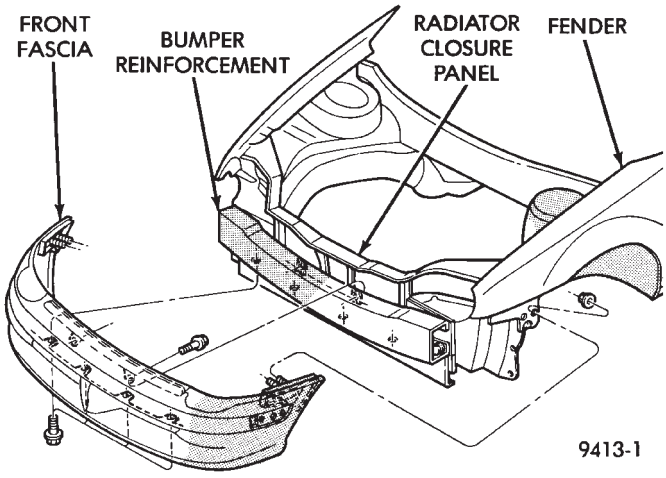

Fig. 1 Front Bumper Fascia

INSTALLATION

(1) Position fascia on vehicle.

(2) Install bolts holding fascia to bottom of bumper reinforcement.

(3) Install bolts holding fascia to bumper reinforcement forward of radiator (Fig. 1).

(4) Install screws holding front fascia to inner wheelhouse.

(5) Install radiator grille, refer to Group 23, Body for proper procedures.

FRONT BUMPER REINFORCEMENT

REMOVAL

(1) Remove front fascia.

(2) Support bumper reinforcement on a suitable lifting device.

(3) Remove nuts holding reinforcement to radiator closure panel (Fig. 2).

(4) Separate bumper reinforcement from vehicle.

INSTALLATION

Reverse the preceding operation.

REAR BUMPER FASCIA

REMOVAL

(1) Release trunk lock and open trunk lid.

(2) Remove bolts holding fascia to tail closure panel.

(3) Remove push–in fasteners holding fascia to bottom of rear bumper reinforcement (Fig. 3).

REMOVAL AND INSTALLATION (Continued)

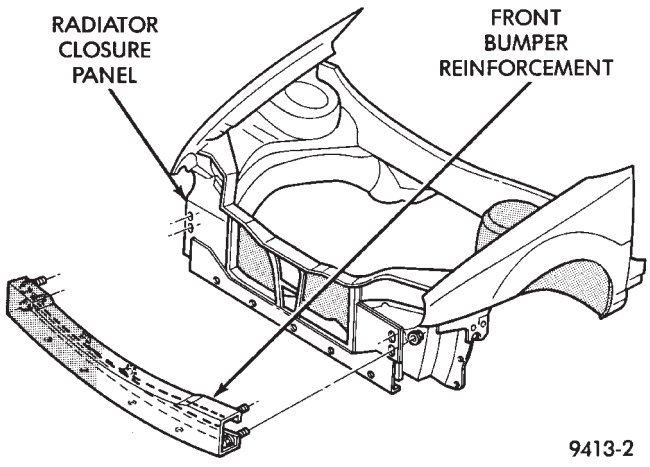

Fig. 2 Front Bumper Reinforcement

(4) Remove bolts holding fascia bracket to lower quarter panels.

(5) Separate fascia from vehicle.

INSTALLATION

(1) Position fascia on vehicle.

(2) Install bolts holding fascia bracket to lower quarter panels.

(3) Install push–in fasteners holding fascia to bottom of rear bumper reinforcement (Fig. 3).

(4) Install bolts holding fascia to tail closure panel.

REAR BUMPER REINFORCEMENT

REMOVAL

(1) Remove rear fascia.

(2) Support bumper reinforcement on a suitable lifting device.

(3) Remove nuts holding reinforcement to rear closure panel (Fig. 4).

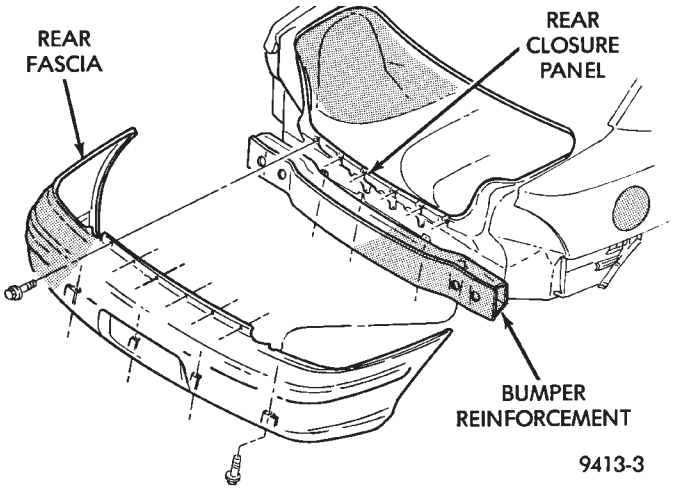

Fig. 3 Rear Bumper Fascia

(4) Separate bumper reinforcement from vehicle.

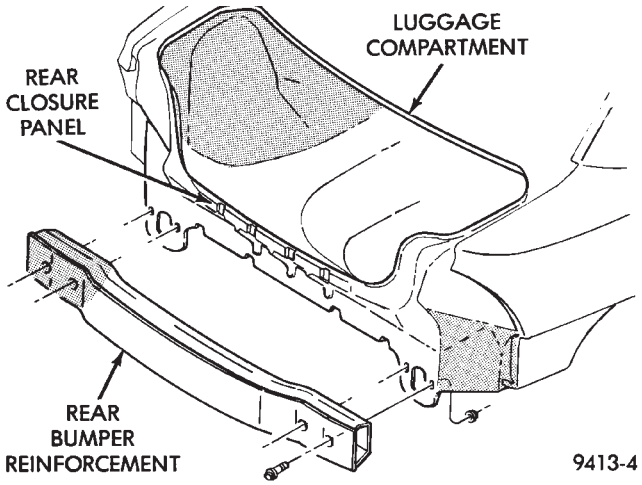

Fig. 4 Rear Bumper Reinforcement

INSTALLATION

Reverse the preceding operation.

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REMOVAL AND INSTALLATION

FRONT SUSPENSION CROSSMEMBER

WARNING: IF SUSPENSION CROSSMEMBER IS REPLACED DUE TO COLLISION DAMAGE, INSPECT THE STEERING COLUMN TO STEERING GEAR COUPLING FOR DAMAGE. REFER TO GROUP 19, STEERING FOR INSTRUCTIONS.

Before removing front suspension crossmember, index mark location of crossmember on frame to aid installation .

The front suspension crossmember must be properly installed to achieve design camber, caster settings and wheel stagger. The crossmember can be installed out of position on the frame rails due to its design. Bolts and cage nuts hold the rear of the crossmember to the frame torque boxes. Bolts and J-nuts hold the front of the crossmember to the frame rails. No designed in locating device is used to position the crossmember in the vehicle. Before removing the crossmember mark the frame torque box around the rear mounting location to aid installation. A crossmember that is removed during service must be installed in the same position from which it was removed. To verify that crossmember is in the proper position, refer to the dimensions provided. Front end dimensions are gauged from the principal locating point (PLP) holes located under the frame torque boxes rearward of the front wheels. After removal and installation of the crossmember is performed, verify that front suspension alignment is within specifications. If camber, caster settings and wheel stagger is not within specifications, loosen and reposition crossmember to bring suspension within specifications. Refer to Group 2, Front Suspension and Driveshaft for additional information.

REMOVAL

(1) Hoist and support vehicle on safety stands.
(2) Using a suitable marking device, mark the outline of the suspension crossmember on the frame torque box around the rear mounting location.
(3) Remove front wheels from vehicle.
(4) Remove pinch bolts holding front ball joints to spindles.
(5) Separate ball joints from spindles.
(6) Position a suitable lifting device under the crossmember.
(7) Remove bolts holding suspension crossmember to frame rails above lower control arms (Fig. 1).
(8) Remove bolts holding crossmember to frame torque boxes and allow front of crossmember to swing down.
(9) Remove bolts holding steering gear to crossmember.
(10) Separate steering gear from crossmember.
(11) Tie steering gear to a suitable structure above to support gear after crossmember is removed.
(12) Separate front suspension crossmember from vehicle.

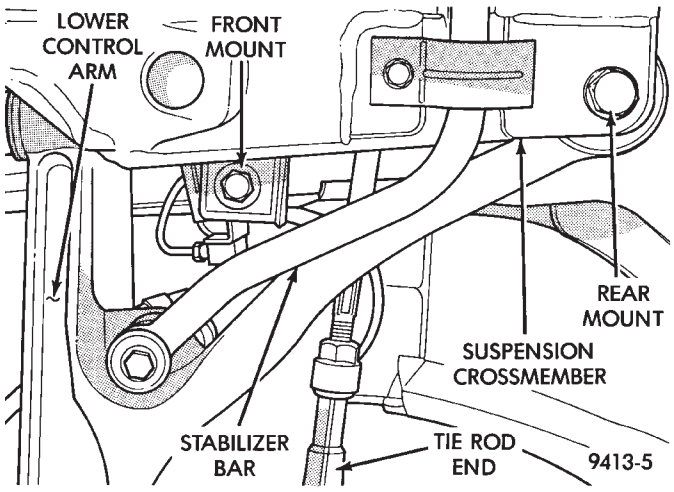


Fig. 1 Front Suspension Crossmember

INSTALLATION

If a new crossmember is to be installed, transfer stabilizer bar and lower control arms from original crossmember. Refer to Group 2, Suspension and Driveshaft for proper procedures.

(1) Place front suspension crossmember in position on vehicle.
(2) Remove tie device supporting steering gear.

REMOVAL AND INSTALLATION (Continued)

(3) Place steering gear in position on crossmember.
(4) Install bolts to hold steering gear to crossmember.
(5) Position lifting device under the crossmember.
(6) Lift crossmember to frame rails.
(7) Engage bolts to hold crossmember rear mounts into cage nuts in the frame torque boxes. Do not tighten bolts.
(8) Install bolts to hold crossmember to frame rails above lower control arms.
(9) Lower and remove lifting device.
(10) Align crossmember to index marks. Verify that crossmember is at the specified dimensions from the PLPs (Fig. 2).
(11) Tighten bolts to hold suspension crossmember to frame rails and torque boxes.
(12) Insert ball joints into spindles.
(13) Install pinch bolts to hold front ball joints to spindles.
(14) Install front wheels on vehicle.
(15) Lower vehicle and verify front suspension alignment. If camber, caster settings and wheel stagger is not within specifications, loosen and reposition crossmember to bring suspension within specifications. Refer to Group 2, Front Suspension and Driveshaft for additional information.

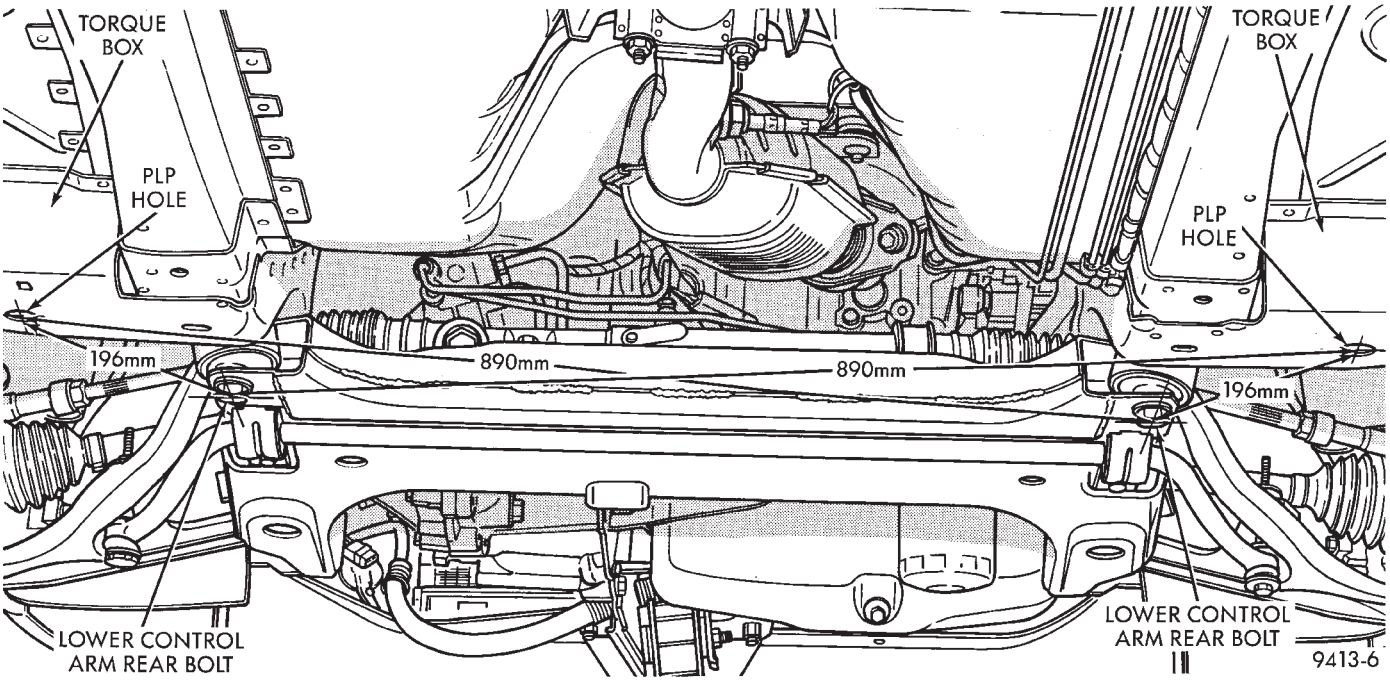


Fig. 2 Forward Frame and Suspension Crossmember

SPECIFICATIONS

STRUCTURAL DIMENSIONS

Structural dimensions are listed in metric measurements. All dimensions are from center to center of Principal Locating Point (PLP), or from center to center of PLP and fastener location (Fig. 3), (Fig. 4), (Fig. 5), (Fig. 6), (Fig. 7), and (Fig. 8).

PT	MM	PT	MM
A.	150.0	E.	1184.0
B.	149.0	F.	973.0
C.	1299.0	G.	1305.0
D.	1028.0		

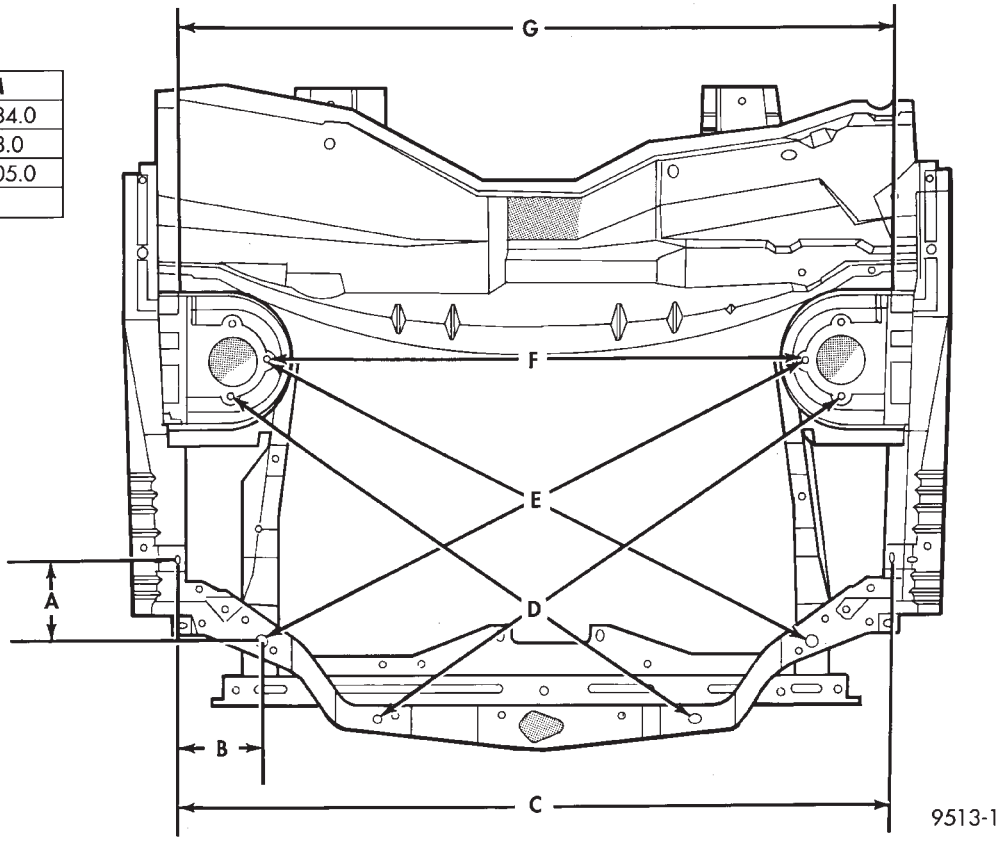
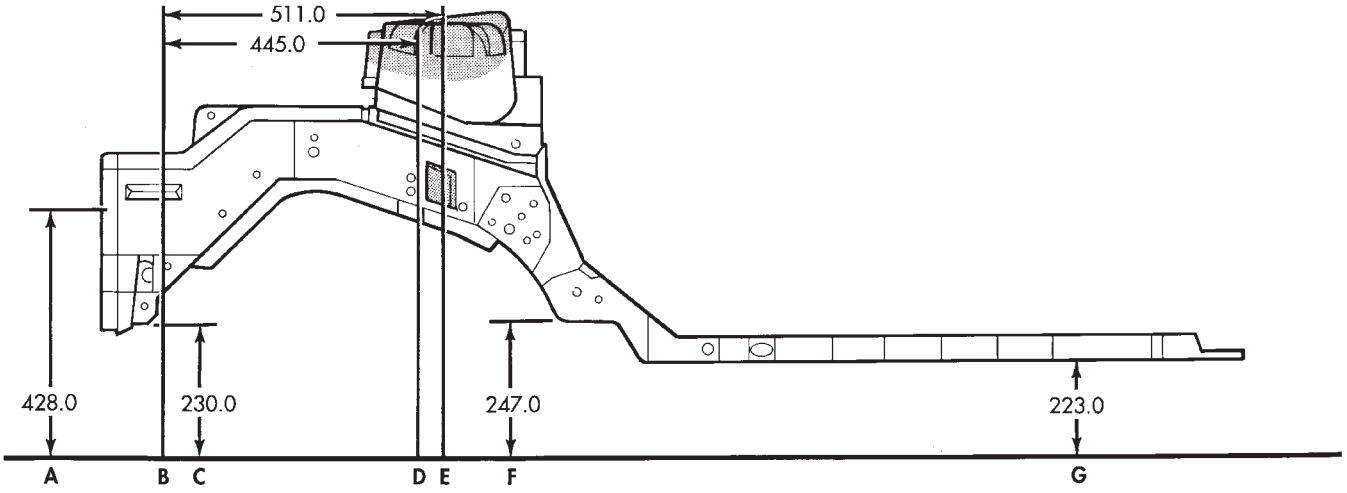


Fig. 3 Engine Compartment Top View

SPECIFICATIONS (Continued)

A. CENTER OF FRONT REINFORCEMENT
B. TRAILING EDGE OF HEADLAMP SUPPORT
C. LOWER EDGE OF FRONT RAIL
D. FORWARD STRUT MOUNTING HOLE
E. INBOARD STRUT MOUNTING HOLE
F. LOWER EDGE OF FRONT SIDE RAIL REAR RAIL
G. LOWER EDGE OF FRONT SIDE RAIL REAR EXTENSION



H. WIDTH OF ENGINE COMPARTMENT FRONT PRINCIPLE LOCATING POINTS (PLP)
I. CENTER OF LOWER CROSSMEMBER TO ENGINE COMPARTMENT FRONT PLP
J. CENTER OF LOWER CROSSMEMBER
K. ENGINE COMPARTMENT FRONT PLP
L. ENGINE COMPARTMENT REAR PRINCIPLE LOCATING POINTS (PLP)
M. FRONT RAIL REAR EXTENSION REAR PLP

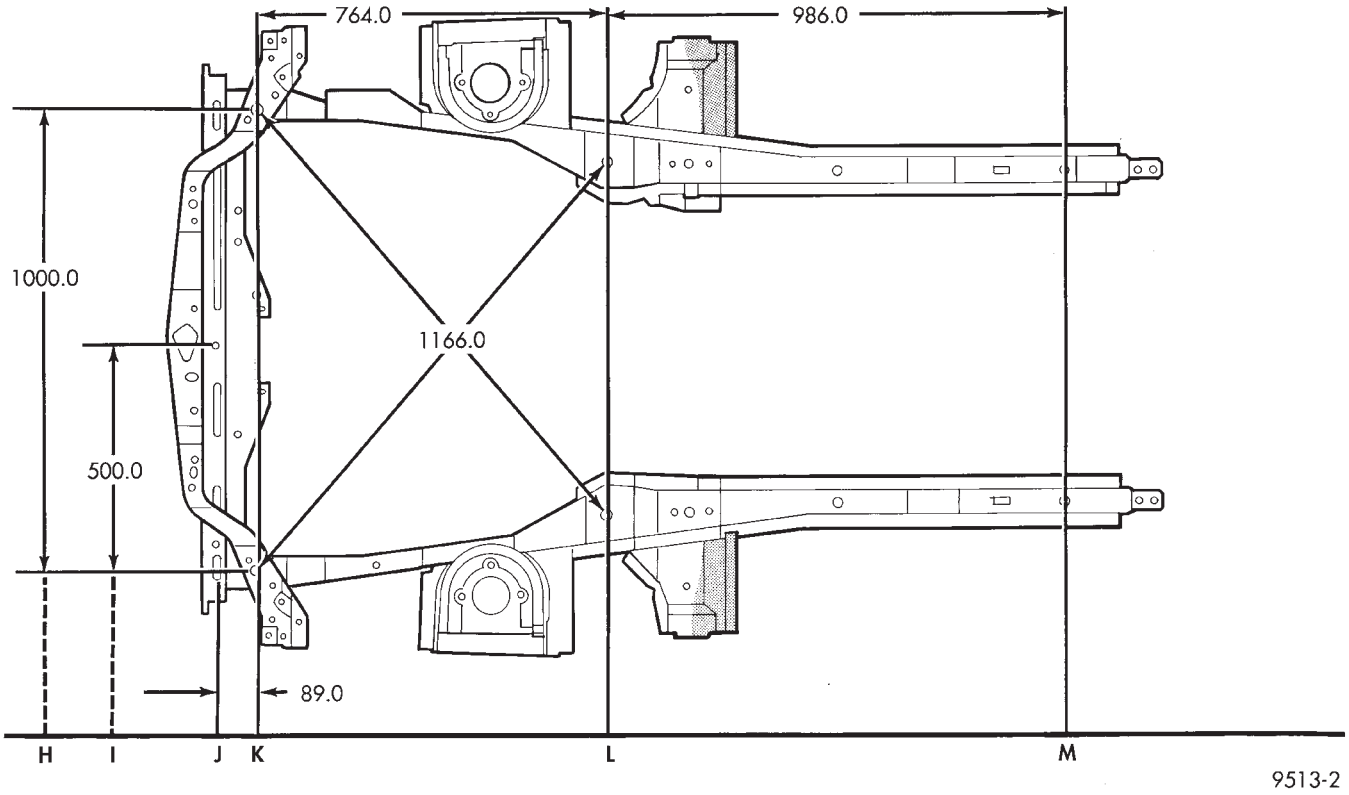
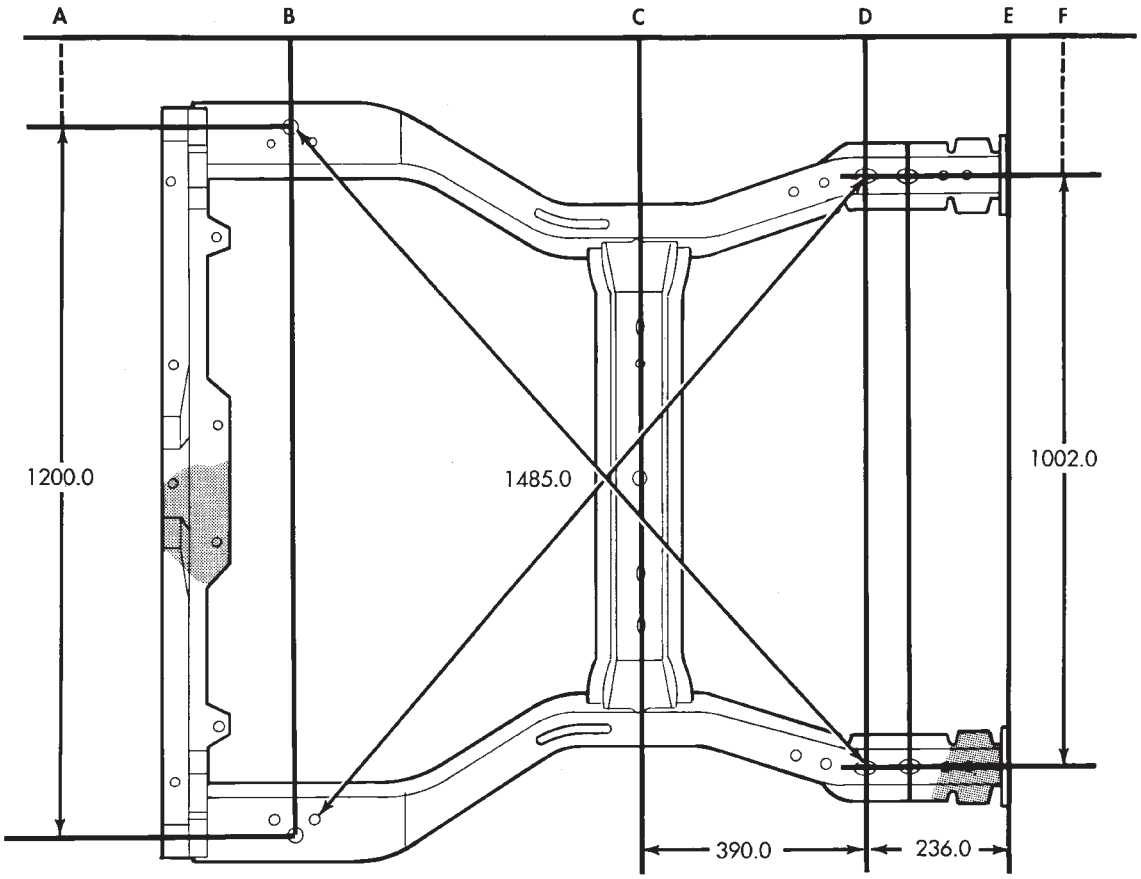


Fig. 4 Engine Compartment Side and Bottom View

SPECIFICATIONS (Continued)



A. WIDTH OF REAR PLP
B. REAR RAIL REAR PRINCIPLE LOCATING POINTS
C. CENTER OF REAR SUSPENSION CROSSMEMBER
D. REAR RAIL SECOND FORWARD PLP
E. FRONT OF REAR RAIL
F. WIDTH OF REAR RAIL FORWARD PRINCIPLE LOCATING POINTS (PLP)

G. FRONT LOWER SURFACE OF REAR RAIL
H. LOWER SURFACE OF SUSPENSION CROSSMEMBER
I. REAR LOWER SURFACE OF REAR RAIL

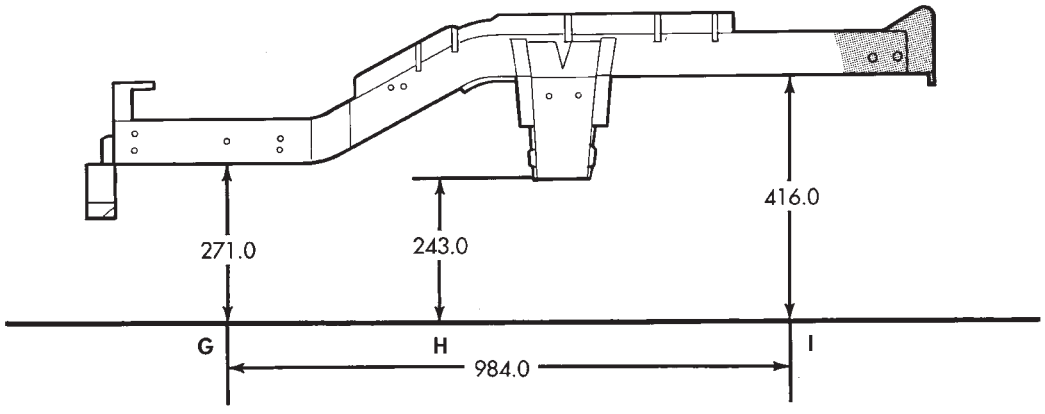


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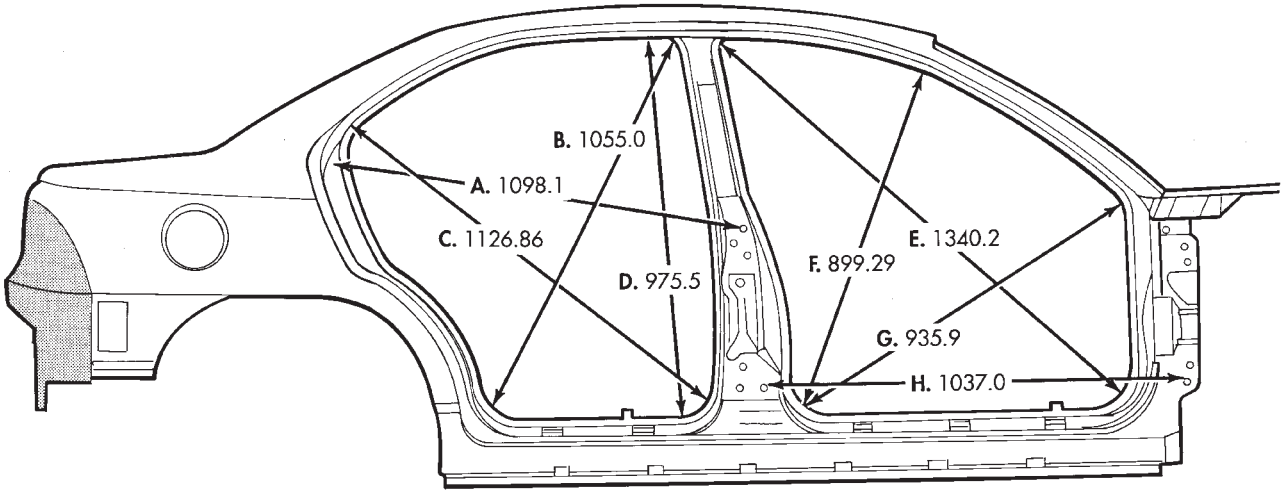
Fig. 5 Rear Frame Section Side and Bottom View

SPECIFICATIONS (Continued)



A. REAR DOOR HINGE MOUNTING HOLE TO SHELF PANEL TO QUARTER PANEL JOINT.

B. UPPER FRONT CORNER CENTER OF RADIUS TO LOWER REAR CORNER CENTER OF RADIUS.

C. UPPER REAR CORNER CENTER OF RADIUS TO LOWER FRONT CORNER CENTER OF RADIUS.

D. CENTER PILLAR TO BODY SIDE APERTURE UPPER SEAM TO CENTER PILLAR TO BODY SIDE APERTURE LOWER SEAM.

E. UPPER REAR CORNER CENTER OF RADIUS TO LOWER FRONT CORNER CENTER OF RADIUS.

F. FRONT EDGE OF ROOF PANEL OF A–PILLAR TO CENTER OF FRONT DOOR LOWER FRONT CORNER.

G. CENTER OF RADIUS AT BOTTOM TO CENTER OF RADIUS AT LOWER A–PILLAR.

H. & I. CENTER OF RADIUS AT TOP CORNER TO CENTER OF RADIUS AT BOTTOM CORNER.

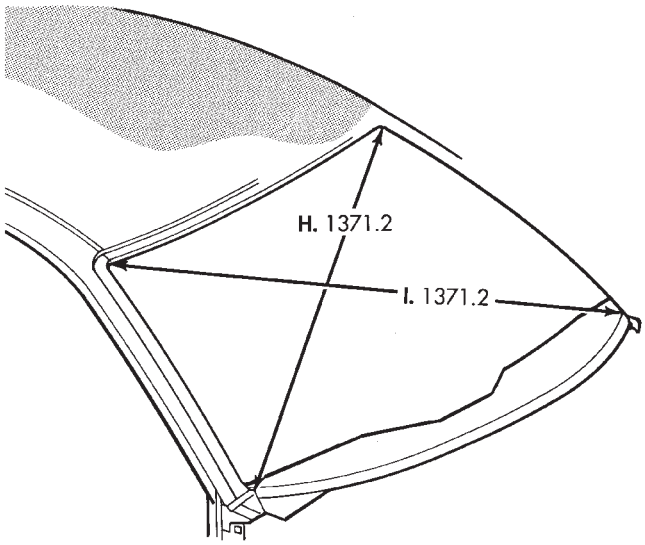


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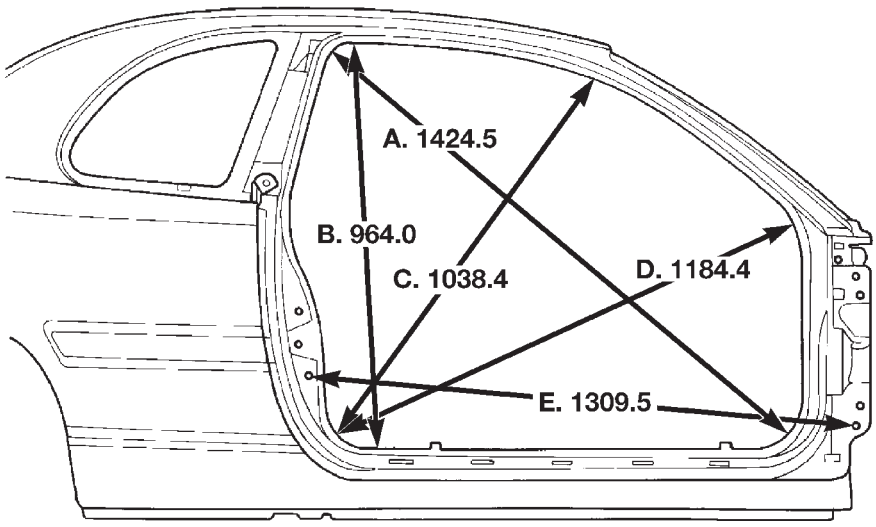
Fig. 6 Door and Windshield Openings—4 Door

SPECIFICATIONS (Continued)



A. Upper rear corner center of radius to lower front corner center of radius.

B. Rear pillar to body side aperture upper seam to body side aperture lower seam.

C. Front edge of roof panel of A-pillar to center of front door lower front corner.

D. Center of radius at bottom to center of radius at lower A-pillar.

E. Courtesy lamp switch hole to front lower bottom hinge bolt hole.

F.&G. CENTER OF RADIUS AT TOP CORNER TO CENTER OF RADIUS AT BOTTOM CORNER.

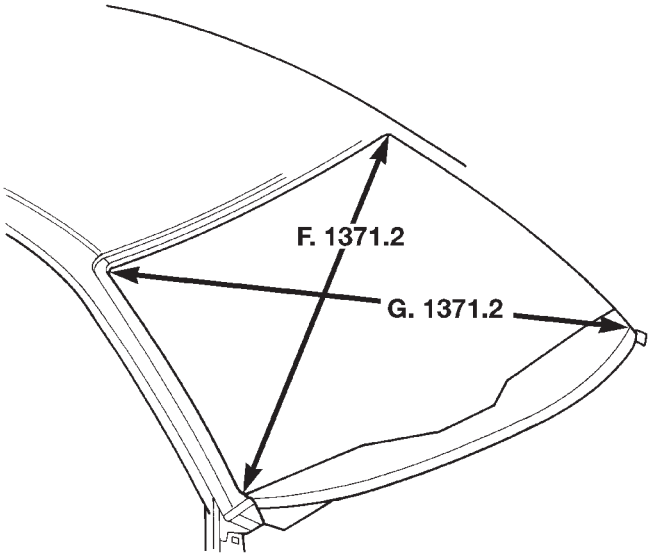


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Fig. 7 Door and Windshield Openings—2 Door

SPECIFICATIONS (Continued)

A. & B. CENTER OF RADIUS UPPER CORNER TO CENTER OF RADIUS LOWER CORNER.

C. LOWER EDGE OF BACK GLASS UPPER MOUNTING FLANGE OF REAR DECK OPENING WEATHERSTRIP FLANGE.

D. & E. CENTER OF DECK OPENING FRONT CORNER RADIUS TO REAR TAIL PANEL DECK OPENING RADIUS.

F. FRONT DECK OPENING WEATHERSTRIP FLANGE TO DECK OPENING TAIL PANEL WEATHERSTRIP FLANGE.

G. REAR EDGE OF DRAIN THROUGH JOINT.

H. REAR CORNER OF BODY SIDE APERTURE.

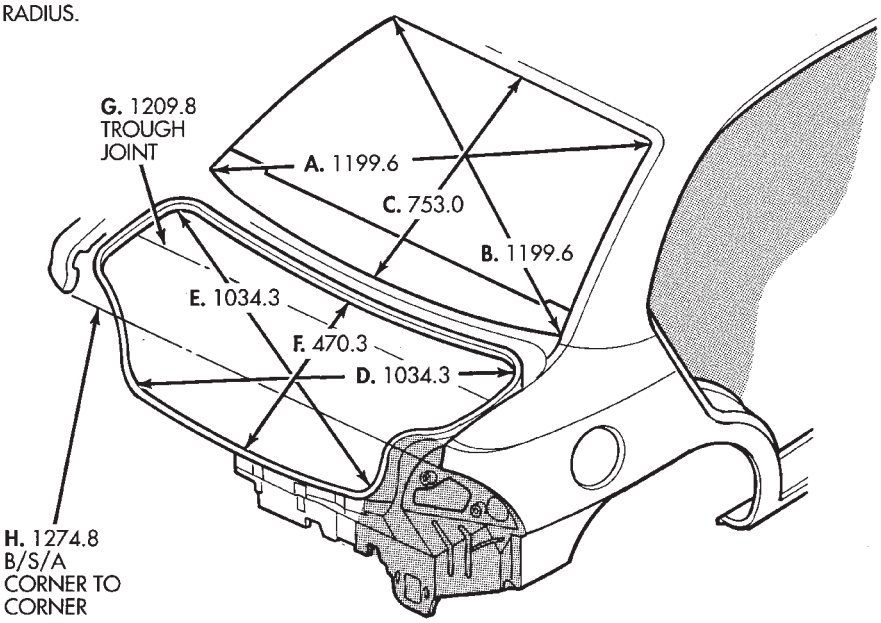

Fig. 8 Rear Window and Trunk Openings

TORQUE SPECIFICATIONS

DESCRIPTION	TORQUE
Front Bumper Reinforcement Nut. .	156 N·m (115 ft. lbs)
Rear Bumper Reinforcement Nut .	156 N·m (115 ft. lbs)
Front Crossmember To Body Mounting Bolts .	163 N·m (120 ft. lbs)

FRAME AND BUMPERS

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REMOVAL AND INSTALLATION

FRONT TOW HOOK BRACKET

REMOVAL

(1) Hoist and support vehicle. Refer to Group 0, Lubrication and Maintenance, for proper lifting procedures.

(2) Remove bolts holding front tow hook bracket to lower radiator crossmember.

(3) Separate front tow hook bracket from vehicle.

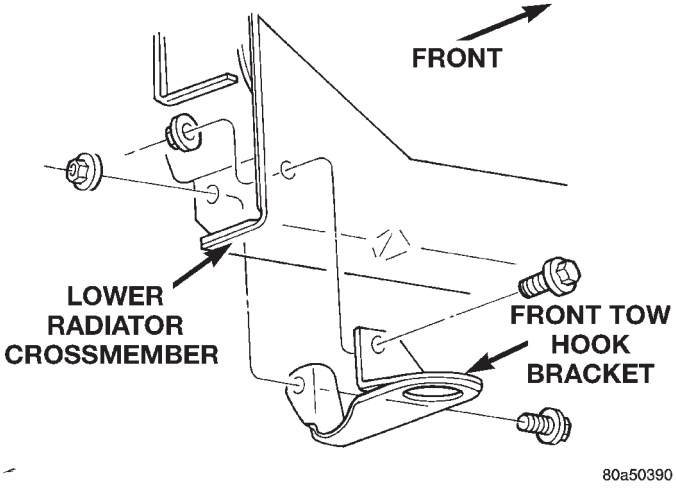

Fig. 1 Front Tow Hook Bracket

INSTALLATION

(1) Position front tow hook bracket to vehicle.

(2) Install bolts to hold front tow hook bracket to lower radiator crossmember.

(3) Lower vehicle.

REAR TOW HOOK BRACKET

REMOVAL

(1) Hoist and support vehicle. Refer to Group 0, Lubrication and Maintenance, for proper lifting procedure.

(2) Remove bolts holding rear tow hook bracket to rear frame rail (Fig. 2).

(3) Separate rear tow hook bracket from vehicle.

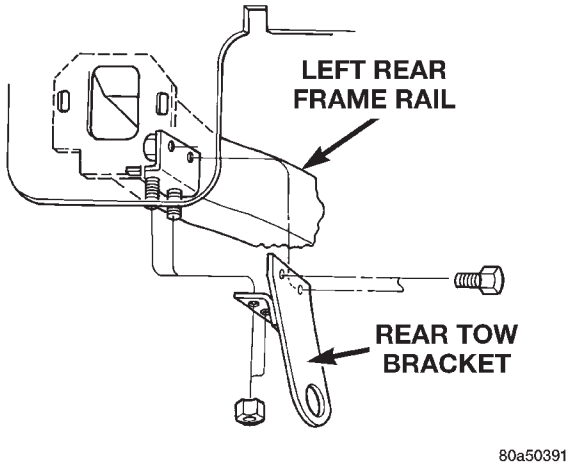

Fig. 2 Rear Tow Hook Bracket

INSTALLATION

(1) Position rear tow hook bracket on vehicle.

(2) Install bolts to hold rear tow hook bracket to rear frame rail.

(3) Lower vehicle.