

BUMPERS AND FRAME

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BUMPERS

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REMOVAL AND INSTALLATION

FRONT BUMPER FASCIA

It is not necessary to remove the headlamp assemblies to remove the front bumper fascia.

REMOVAL

- (1) Release hood latch and open hood.
- (2) Remove screws holding top of grille to headlamp adapter assembly (Fig. 1).
- (3) Hoist and support vehicle on safety stands. Refer to Group 0, Lubrication and Maintenance, for proper hoisting and jacking procedures.
- (4) Remove push-in fasteners holding fascia to underside of bumper reinforcement.
- (5) Remove inner wheelhouse as necessary to access nuts holding fascia wings to fender.
- (6) Remove nuts holding fascia wings to fender.
- (7) Slide fascia forward and separate fascia from vehicle.
- (8) Disengage fog lamp wire connectors from back of fog lamps, if so equipped.

INSTALLATION

- (1) Ensure that energy management foam is properly installed in front fascia (Fig. 2).
- (2) Engage fog lamp wire connectors to back of fog lamps, if so equipped.
- (3) Position fascia on vehicle and slide rearward, being careful to ensure that the grille slides between hood latch handle and headlamp adapter assembly.
- (4) Install nuts holding fascia wings to fender.
- (5) Install inner wheelhouse.

REAR BUMPER FASCIA	2
REAR BUMPER REINFORCEMENT	3

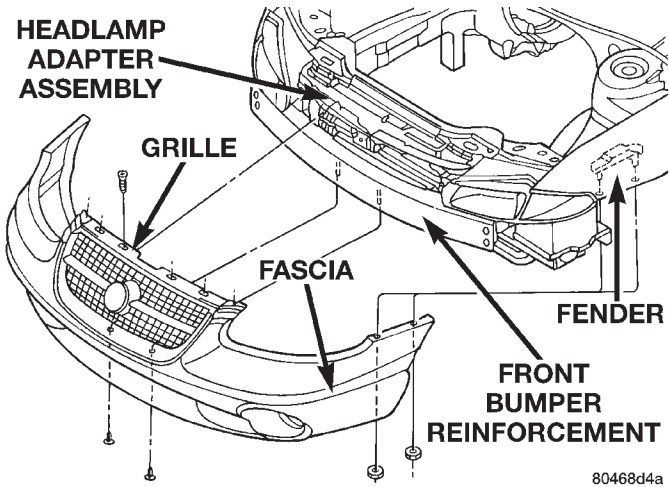


Fig. 1 Front Bumper Fascia

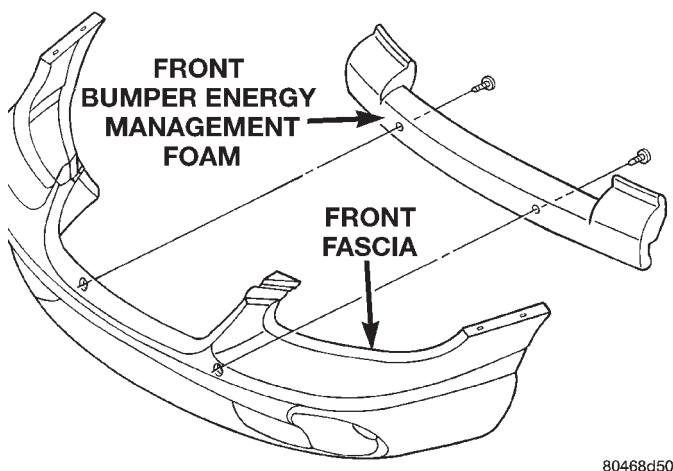
- (6) Install push-in fasteners holding fascia to underside of bumper reinforcement.
- (7) Install screws holding top of grille to headlamp adapter assembly.

HEADLAMP ADAPTER ASSEMBLY

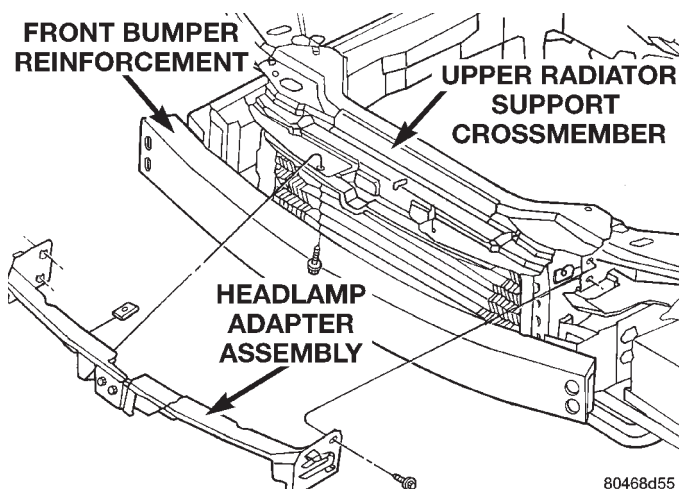
REMOVAL

- (1) Remove headlamp assemblies. Refer to Group 8L, Lamps, for proper procedure.
- (2) Remove front fascia.
- (3) Remove bolts holding headlamp adapter to radiator closure panel from headlamp cavities (Fig. 3).
- (4) Remove bolts holding underside of adapter assembly to upper radiator crossmember.

REMOVAL AND INSTALLATION (Continued)

**Fig. 2 Front Bumper Energy Management Foam**

(5) Separate headlamp adapter assembly from vehicle.

**Fig. 3 Headlamp Adapter Assembly****INSTALLATION**

- (1) Position headlamp adapter assembly on vehicle.
- (2) Loosely install bolts holding headlamp adapter to radiator closure panel from headlamp cavities.
- (3) Loosely install bolts holding underside of adapter assembly to upper radiator crossmember.
- (4) Tighten all bolts.
- (5) Install front fascia.
- (6) Install headlamp assemblies. Refer to Group 8L, Lamps, for proper procedures.

REAR BUMPER FASCIA**REMOVAL**

- (1) Release trunk latch and open trunk.
- (2) Remove trunk lining as necessary to access nut holding rear fascia to rear closure panel.

(3) Remove screws holding fascia to rear closure panel and nuts securing to inner quarter panel (Fig. 4).

(4) Hoist and support vehicle on safety stands. Refer to Group 0, Lubrication and Maintenance, for proper procedure.

(5) Remove push-in fasteners holding bottom of fascia to rear bumper reinforcement.

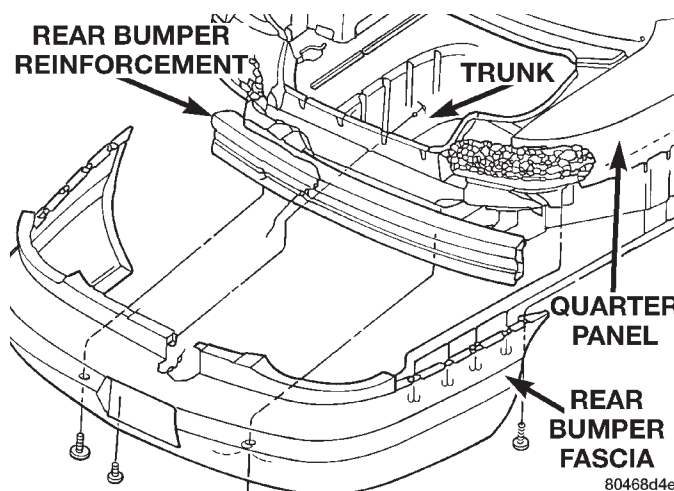
(6) Disengage license plate lamp wire connector.

(7) Remove rear wheelhouse splash shields as necessary to access nuts holding fascia to quarter panels.

(8) Remove nuts holding rear fascia to quarter panels.

(9) Remove screw holding fascia to right rear quarter panel.

(10) Slide fascia rearward and separate from vehicle.

**Fig. 4 Rear Bumper Fascia****INSTALLATION**

(1) Ensure that the energy management foam is properly installed in rear fascia (Fig. 5).

(2) Position fascia on vehicle and slide forward to engage studs on quarter panel.

CAUTION: Ensure that license plate wire connector is properly routed through energy management foam and fascia.

(3) Install nuts, starting with rearward nut working forward, to hold rear fascia to quarter panels.

(4) Install screw holding rear fascia to right rear quarter panel.

NOTE: Hold fascia completely forward until first nut is secured.

(5) Install rear wheelhouse splash shields.

(6) Engage license plate lamp wire connector.

REMOVAL AND INSTALLATION (Continued)

- (7) Install push-in fasteners holding rear fascia to rear bumper reinforcement.
- (8) Install nuts holding rear fascia to inner quarter panel.
- (9) Install screws holding rear fascia to closure panel.
- (10) Install trunk lining.

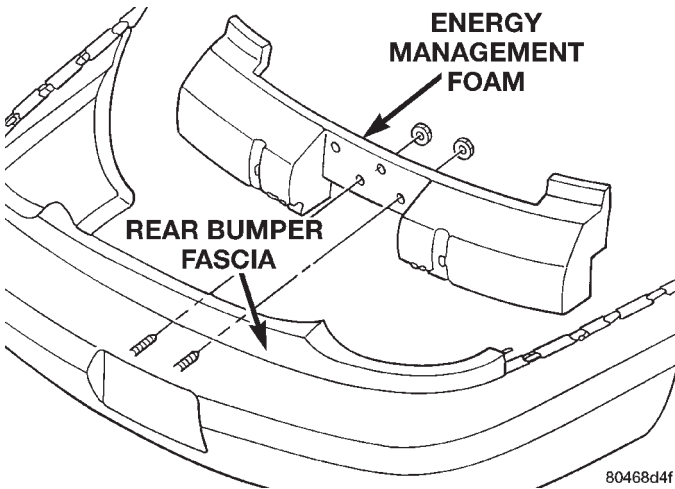


Fig. 5 Rear Bumper Energy Management Foam
REAR BUMPER REINFORCEMENT

REMOVAL

- (1) Remove rear fascia.

- (2) Support bumper reinforcement on a suitable lifting device.
- (3) Mark position of nuts on frame rail to aid in installation.
- (4) Remove nuts holding rear bumper reinforcement to frame rail (Fig. 6).
- (5) Separate bumper reinforcement from vehicle.

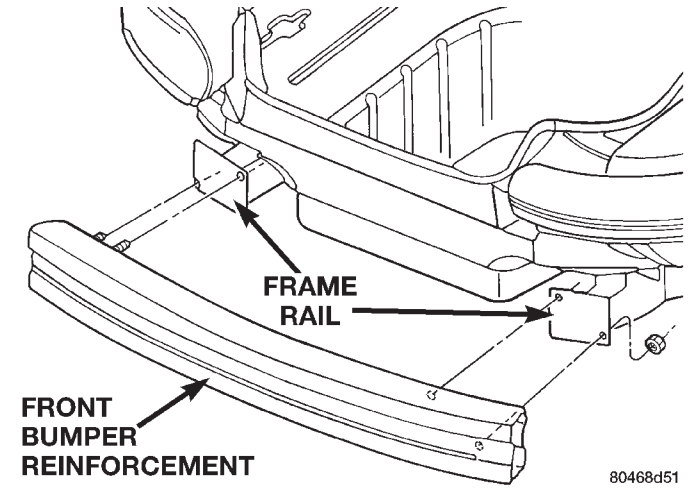


Fig. 6 Rear Bumper Reinforcement

INSTALLATION

- (1) Position rear bumper reinforcement on vehicle.
- (2) Install nuts holding bumper reinforcement to frame rail. Use previously made marks to properly position bumper reinforcement.
- (3) Install rear fascia.

FRAME

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REMOVAL AND INSTALLATION

ENGINE SUPPORT MODULE

It is not necessary to support the engine during the following operation, unless the engine/transaxle side mounts or transaxle are to be removed. Refer to Group 9, Engine or Group 21, Transaxle, for proper methods of supporting the engine.

REMOVAL

- (1) Hoist and support vehicle on safety stands. Refer to Group 0, Lubrication and Maintenance, for proper procedure.
- (2) Remove bolt holding engine support to rear engine mount isolator (Fig. 1).
- (3) Remove bolt holding engine support to front engine mount isolator.
- (4) Place a suitable lifting device under engine support module.
- (5) Remove bolts holding radiator support crossmember to bottom of radiator closure panel.
- (6) Remove bolts holding engine support module to front suspension crossmember.
- (7) Separate engine support module and radiator support crossmember from vehicle.
- (8) Separate engine support module and radiator support crossmember.

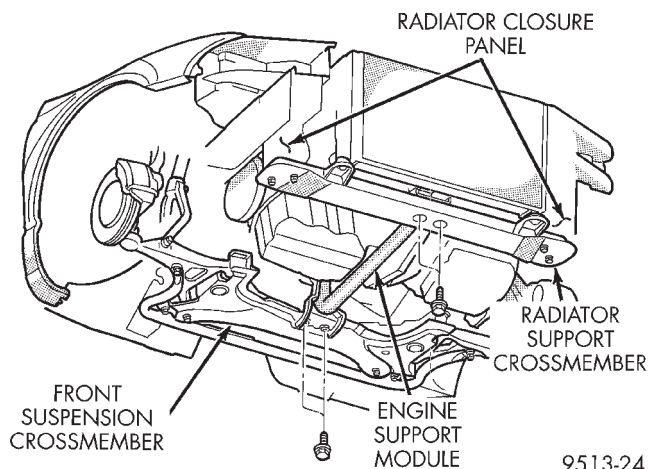


Fig. 1 Engine Support Module

INSTALLATION

- (1) Install bolts holding engine support module to radiator support crossmember.
- (2) Position engine support module and radiator support crossmember on vehicle.
- (3) Install bolts holding engine support module to front suspension crossmember.
- (4) Install bolts holding radiator support crossmember to radiator closure panel.
- (5) Install bolt holding engine support module to front engine mount isolator.
- (6) Install bolt holding engine support module to rear engine mount isolator

FRONT SUSPENSION CROSSMEMBER

REMOVAL

- (1) Hoist and support vehicle on safety stands. Refer to Group 0, Lubrication and Maintenance, for proper procedure.
- (2) Remove engine support module.
- (3) Place a suitable lifting device under front suspension crossmember.
- (4) Remove bolts holding suspension strut to the lower control arm. Refer to Group 2, Suspension, for proper procedure.
- (5) Disengage lower ball joints from lower control arms. Refer to Group 2, Suspension, for proper procedure.
- (6) Remove bolts holding front of suspension crossmember to frame rails under upper control arms.
- (7) Loosen bolts holding rear of suspension crossmember to frame rail torque boxes.
- (8) Allow the front of the suspension crossmember to swing away from the frame rails.
- (9) Remove bolts holding steering gear to top of suspension crossmember (Fig. 2).

CAUTION: Do not allow steering gear to hang by the pressure or return hoses. Damage to hoses can result.

- (10) Using mechanic's wire, tie steering gear to structure above.
- (11) Raise crossmember back into position.

REMOVAL AND INSTALLATION (Continued)

- (12) Remove bolts holding rear of crossmember to frame rail torque boxes.
- (13) Lower front suspension crossmember away from bottom of vehicle.

SPECIFICATIONS

TORQUE SPECIFICATIONS

DESCRIPTION	TORQUE
Rear Bumper Reinforcement	
Attaching Nut	271 N·m (200 ft. lbs.)
Front Suspension Crossmember	
Attaching Bolt	115 N·m (85 ft. lbs.)
Radiator Support Crossmember	
Attaching Bolts	115 N·m (85 ft. lbs.)
Headlamp Adapter Assembly	
Attaching Bolts	34 N·m (25 ft. lbs.)
Engine Support Module:	
Bolts, Front-Module to Radiator Support	
Crossmember	34 N·m (25 ft. lbs.)
Bolts, Rear-Module to Radiator Support	
Crossmember	61 N·m (45 ft. lbs.)
Bolts, Rear-Module to Front Suspension	
Crossmember	61 N·m (45 ft. lbs.)
Bolts, Engine Isolator Through .	61 N·m (45 ft. lbs.)

FRAME DIMENSIONS

Frame dimensions are listed in metric scale. All dimensions are from center to center of Principal Locating Point (PLP), or from center to center of PLP and fastener location.

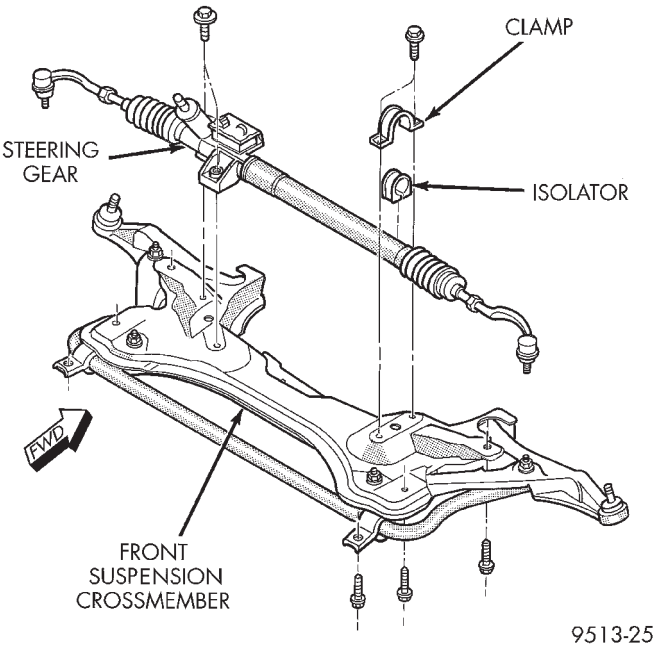


Fig. 2 Front Suspension Crossmember

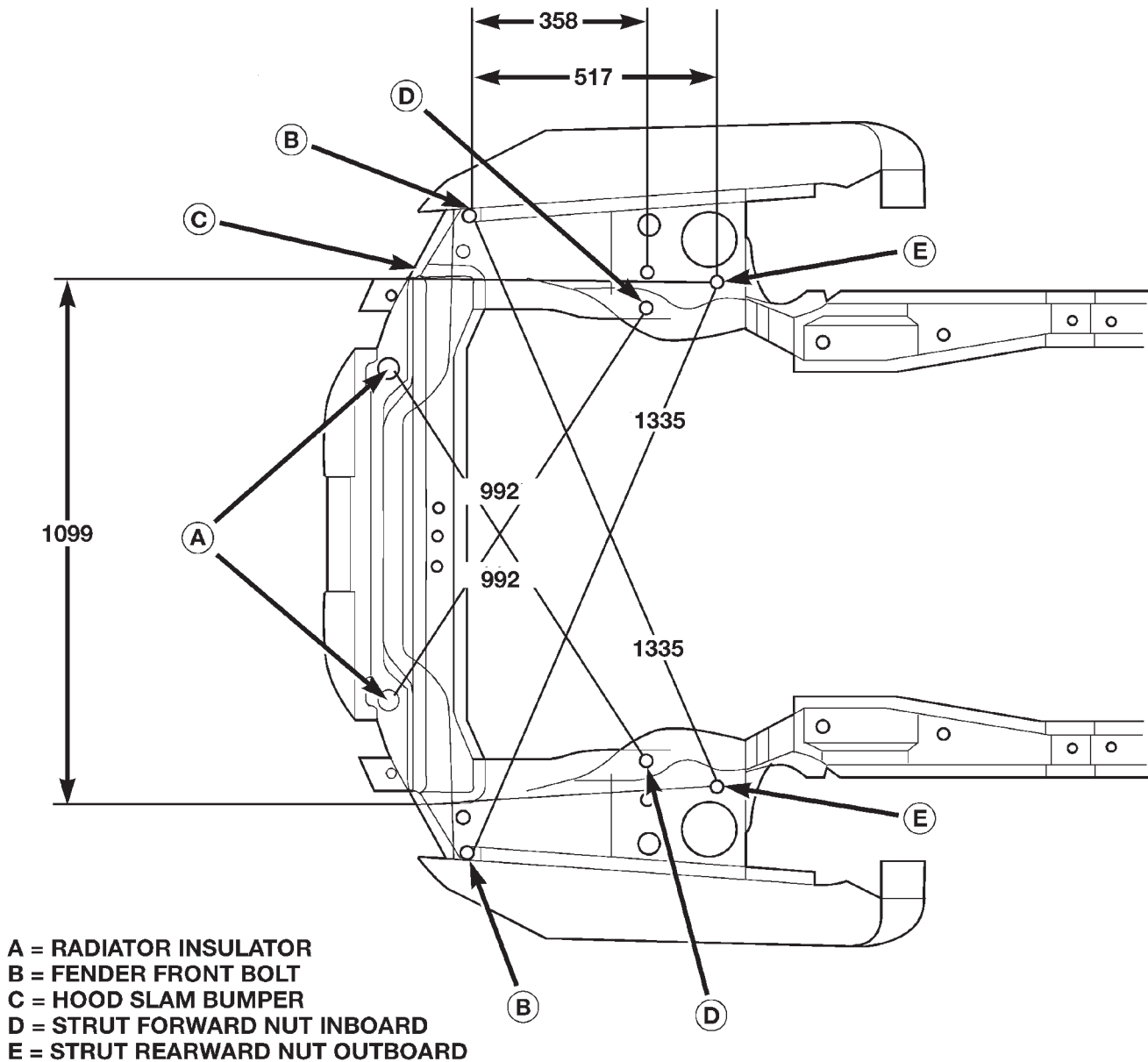
INSTALLATION

- (1) Raise front suspension crossmember into position on vehicle.
- (2) Loosely install bolts holding rear of crossmember to frame rail torque boxes.
- (3) Lower crossmember and install bolts holding steering gear to top of suspension crossmember.
- (4) Raise crossmember into position.
- (5) Tighten bolts holding rear of suspension crossmember to frame rail torque boxes.
- (6) Install bolts holding front of suspension crossmember to frame rails under upper control arm.
- (7) Engage lower ball joint to lower control arms. Refer to Group 2, Suspension, for proper procedure.
- (8) Install bolts holding suspension strut to lower control arm. Refer to Group 2, Suspension, for proper procedure.
- (9) Install engine support module.

SPECIFICATIONS (Continued)

VEHICLE PREPARATION

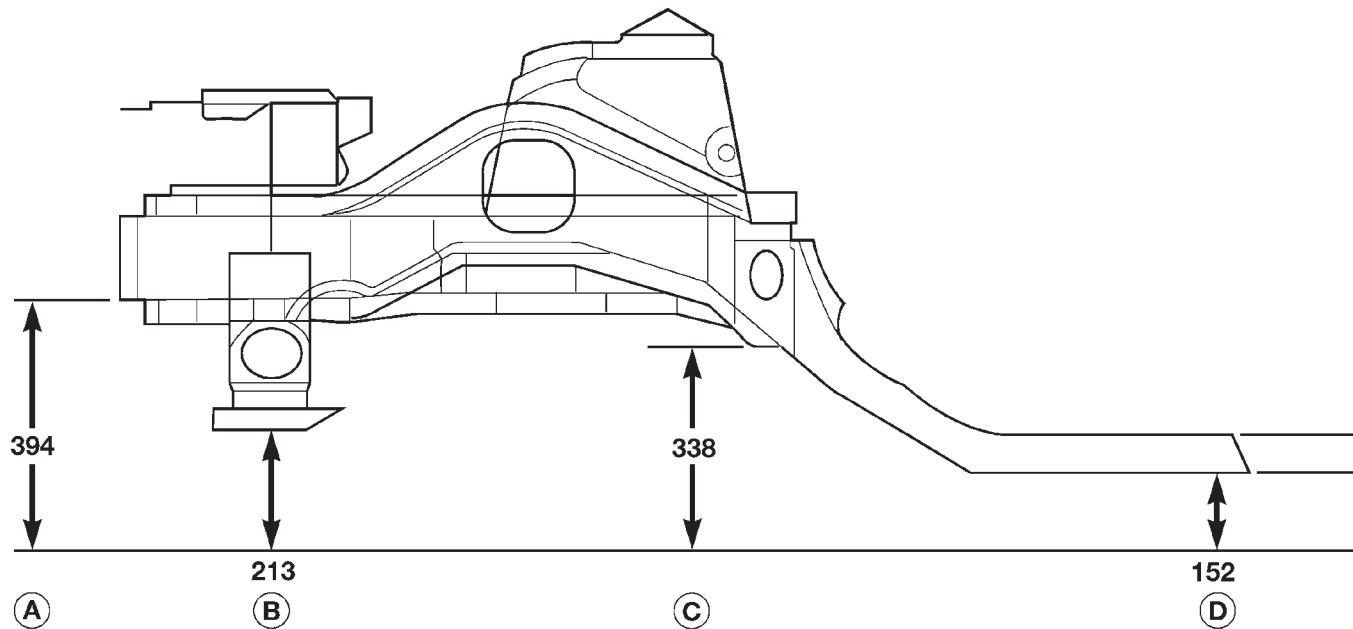
Position the vehicle on a level work surface. Using screw or bottle jacks, adjust the vehicle PLP heights to the specified dimension above a level work surface. Vertical dimensions can be taken from the work surface to the locations indicated were applicable (Fig. 3), (Fig. 4), (Fig. 5), (Fig. 6), (Fig. 7), (Fig. 8), (Fig. 9), (Fig. 10), and (Fig. 11)



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Fig. 3 Engine Compartment Top View

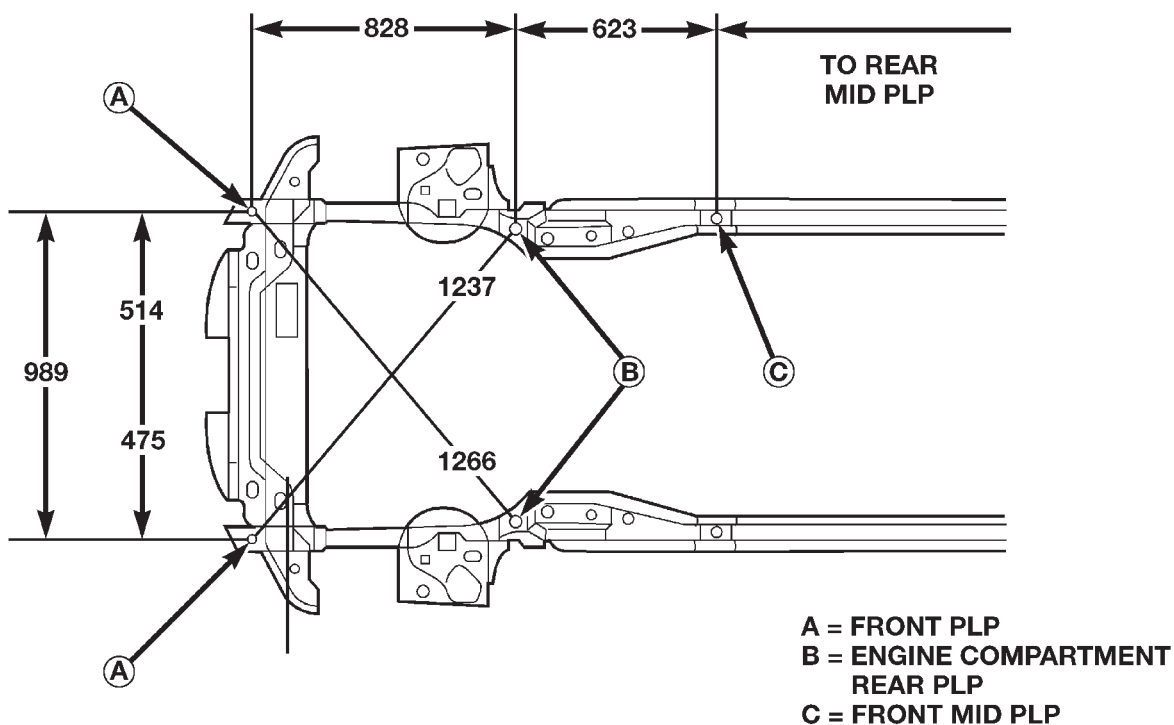
SPECIFICATIONS (Continued)



A = BOTTOM OF EXTENSION
 B = BOTTOM OF RADIATOR CLOSURE
 C = ENGINE COMPARTMENT REAR PLP
 D = PLP

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Fig. 4 Engine Compartment Side View

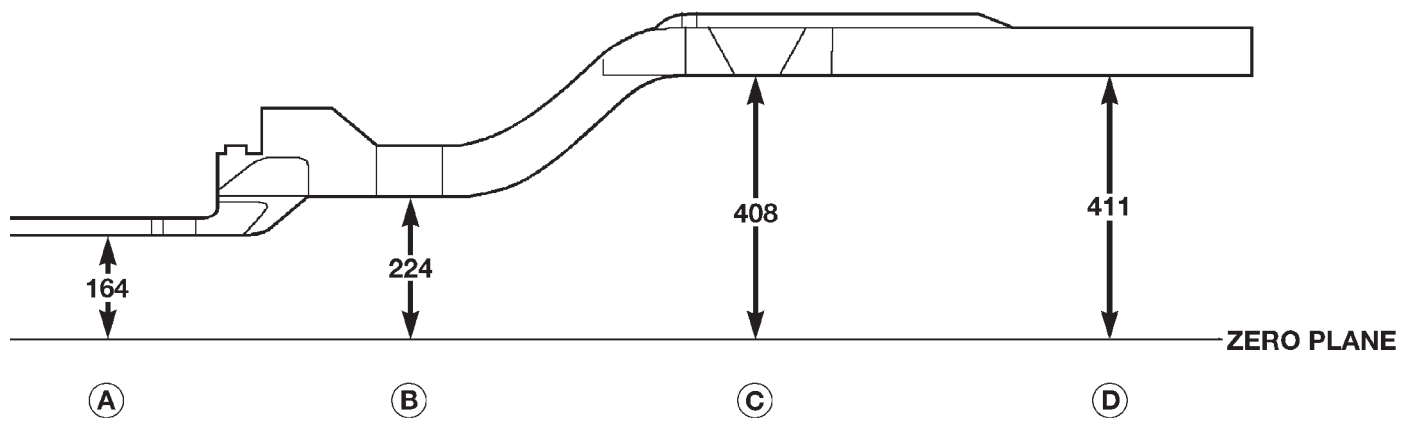


A = FRONT PLP
 B = ENGINE COMPARTMENT
 REAR PLP
 C = FRONT MID PLP

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Fig. 5 Forward Frame Section Bottom View

SPECIFICATIONS (Continued)

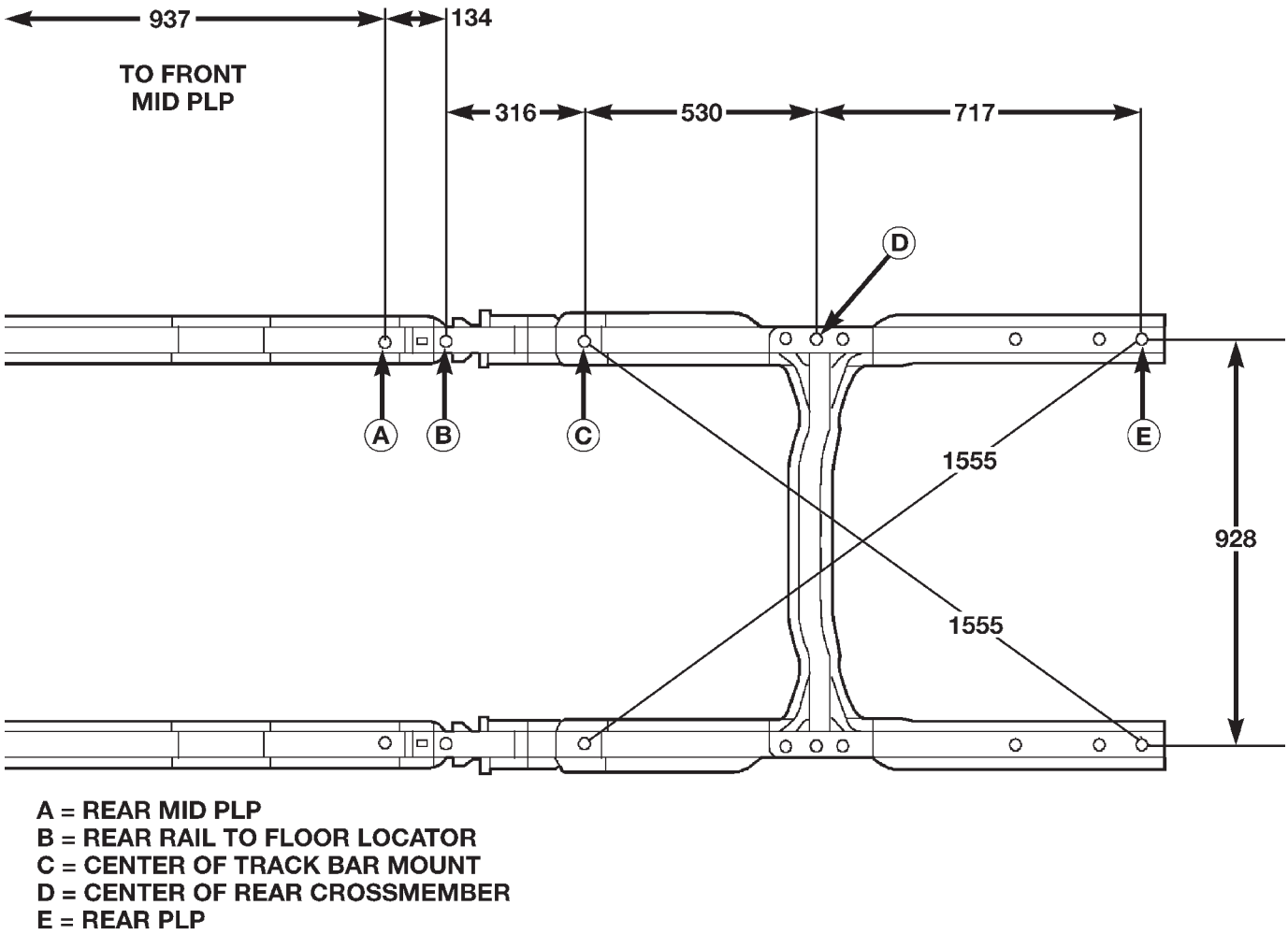


A = REAR MID PLP
B = CENTER OF TRACK BAR MOUNT
C = CENTER OF REAR CROSSMEMBER
D = REAR PLP

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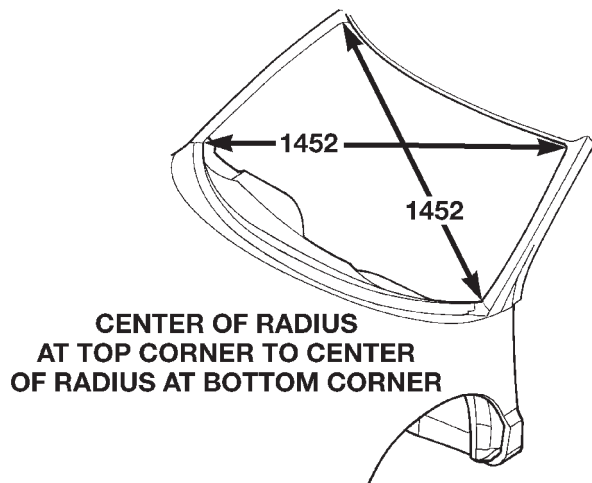
Fig. 6 Rear Frame Section Side View

SPECIFICATIONS (Continued)



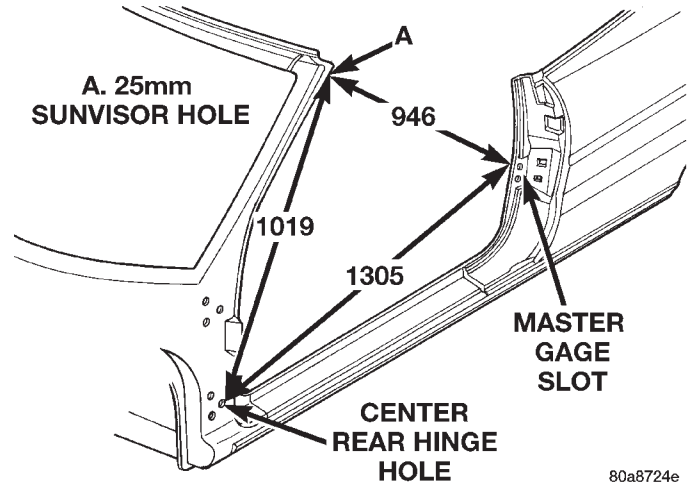
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Fig. 7 Rear Frame Section Bottom View



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Fig. 8 Windshield Opening

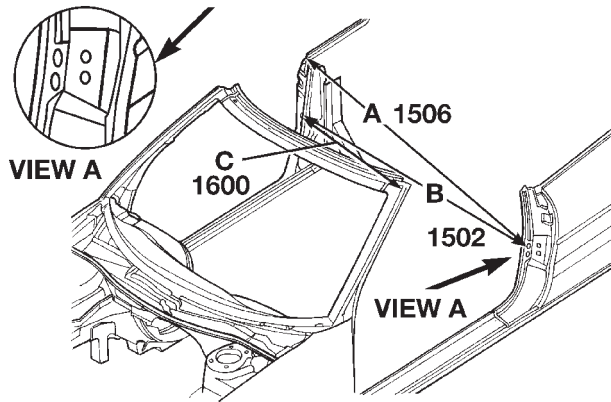


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Fig. 9 Door Opening

SPECIFICATIONS (Continued)

CENTER OF MASTER GAGE SLOT

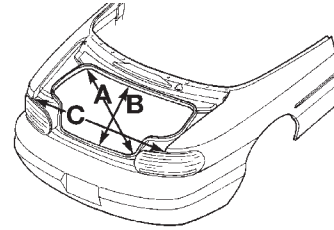


- A. DOOR OPENING PLP TO TOP CORNER OF OPPOSITE B-PILLAR.
- B. DOOR OPENING PLP TO OPPOSITE DOOR OPENING PLP.
- C. CENTER OF 25mm SUNVISOR HOLE TO OPPOSITE DOOR OPENING PLP.

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Fig. 10 Cross-Body Dimensions

- A. 998
- B. 569
- C. 1193



- A. CENTER OF DECK OPENING FRONT CORNER RADIUS TO REAR TAIL PANEL DECK OPENING RADIUS.
- B. FRONT DECK OPENING WEATHERSTRIP FLANGE TO DECK OPENING TAIL PANEL WEATHERSTRIP FLANGE.
- C. REAR OF QUARTER PANEL AT TAIL-LIGHT OPENING TO OPPOSITE POINT.

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Fig. 11 Trunk Opening