FRAME AND BUMPERS

CONTENTS

BUMPERS

INDEX

REMOVAL AND INSTALLATION

FRONT BUMPER FASCIA

REMOVAL

(1) Release hood latch and open hood.
(2) Remove front wheelhouse splash shields as necessary to gain assess to fascia fasteners.
(3) Remove fasteners holding bottom of fascia to radiator closure panel.
(4) Disengage fog lamp wire connector from body harness, if equipped.
(5) Remove fasteners attaching fascia to front fenders. (Fig. 1).
(6) Remove fascia from vehicle.

INSTALLATION

(1) Place fascia on position on vehicle.
(2) Install fasteners to hold fascia to front fenders.
(3) Engage fog lamp wire connector to body wire harness, if equipped.
(4) Install fasteners to hold bottom of fascia to radiator closure panel.
(5) Install front wheelhouse splash shields.

REAR BUMPER FASCIA

REMOVAL

(1) Release trunk latch and open trunk.
(2) Remove left rear tail lamp and disengage license plate wire connector from tail lamp. Refer to Group 8L, Lamps, for proper procedures.
(3) On CP-model, remove right rear tail lamp. Refer to Group 8L, Lamps, for proper procedures.
(4) On CP-model, Remove push-in fasteners holding fascia to quarter panel inside tail lamp cavities (Fig. 2).
(5) Remove push-in fasteners holding trunk lid slam bumpers to top of fascia.
(6) Remove push-in fastener holding center of fascia to rear closure panel.
(7) Remove screws holding fascia to rear wheelhouse splash shields.
(8) Remove push-in fastener holding fascia to quarter panel at the wheelwell opening.
(9) Slide fascia rearward to disengage hooks holding fascia to bottom of quarter panel.
(10) Separate fascia from vehicle.

INSTALLATION

(1) Position fascia on vehicle.
(2) Slide fascia forward to engage hooks holding fascia to bottom of quarter panel.
(3) Install push-in fastener holding center of fascia to rear closure panel.
(4) Install push-in fasteners holding trunk lid slam bumpers to top of fascia.
(5) Install push-in fasteners holding fascia to quarter panel at wheelwell opening.
(6) Install screws holding fascia to rear wheelhouse splash shields.
(7) On CP–model, install push-in fasteners holding fascia to quarter panel inside tail lamp cavities.
(8) Engage license plate wire connector to left tail lamp.

REMOVAL AND INSTALLATION (Continued)

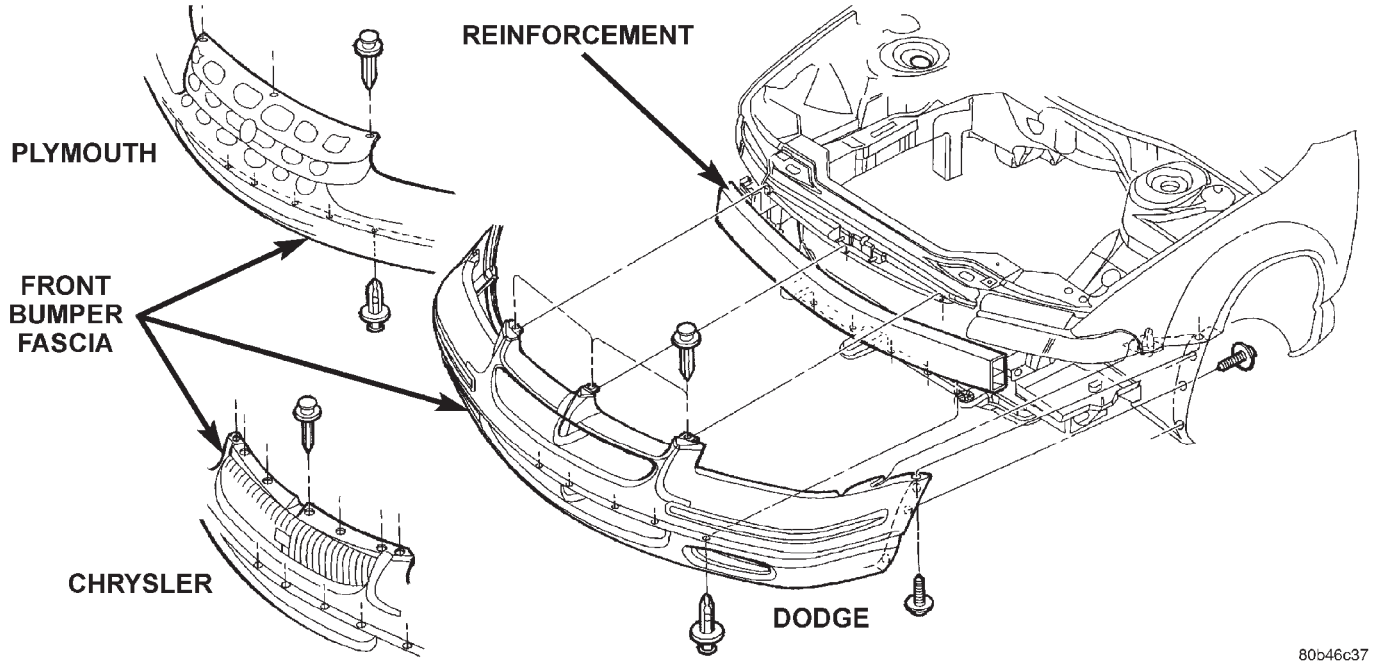


Fig. 1 Front Bumper Fascia

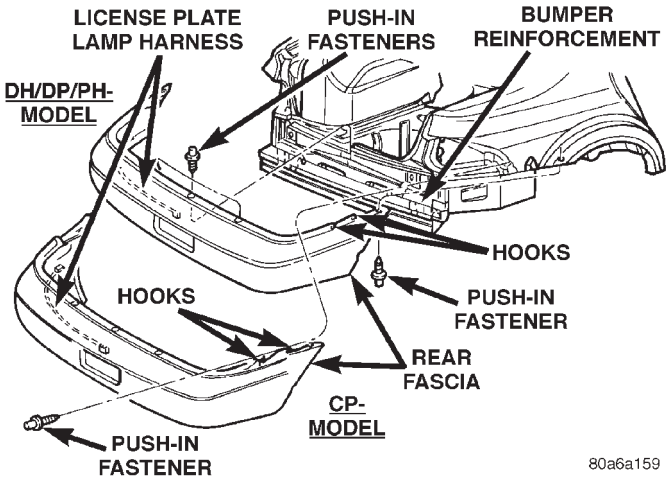


Fig. 2 Rear Bumper Fascia

(9) Install tail lamps. Refer to Group 8L, Lamps, for proper procedures.

REAR BUMPER REINFORCEMENT

REMOVAL

(1) Remove rear fascia.

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

(3) Mark position of nuts on reinforcement to aid in installation.

(4) Remove nuts holding rear bumper reinforcement to frame rail (Fig. 3).

(5) Separate bumper reinforcement from vehicle.

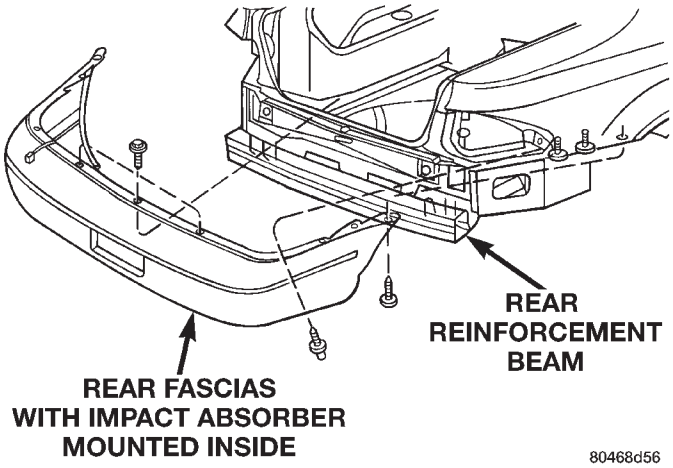


Fig. 3 Rear Bumper Reinforcement

INSTALLATION

(1) Position rear bumper reinforcement on vehicle.

(2) Install nuts holding bumper reinforcement to frame rail. Use marks made previously to properly position bumper reinforcement.

(3) Tighten nuts to 28 N·m (250 in. lbs.).

(4) Install rear fascia.

FRAME

INDEX

DESCRIPTION AND OPERATION

REAR SUSPENSION CROSSMEMBER

This vehicle is equipped with a bolt in type rear suspension crossmember. The crossmember on this vehicle is the same for all of the optional suspensions that are available on the vehicle.

REMOVAL AND INSTALLATION

FRONT SUSPENSION CROSSMEMBER

REMOVAL

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

(2) Place a suitable lifting device under front suspension crossmember.

(3) Remove bolts holding suspension strut to the lower control arm. Refer to Group 2, Suspension, for proper procedures.

(4) Disengage lower ball joints from lower control arms. Refer to Group 2, Suspension, for proper procedures.

(5) Remove bolts holding front of suspension crossmember to frame rails under upper control arms.

(6) Loosen bolts holding rear of suspension crossmember to frame rail torque boxes.

(7) Allow the front of the suspension crossmember to swing away from the frame rails.

(8) Remove bolts holding steering gear to top of suspension crossmember (Fig. 1).

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

(9) Using mechanics wire, tie steering gear to structure above.

(10) Raise crossmember back into position.

(11) Remove bolts holding rear of crossmember to frame rail torque boxes.

(12) Lower front suspension crossmember away from bottom of vehicle.

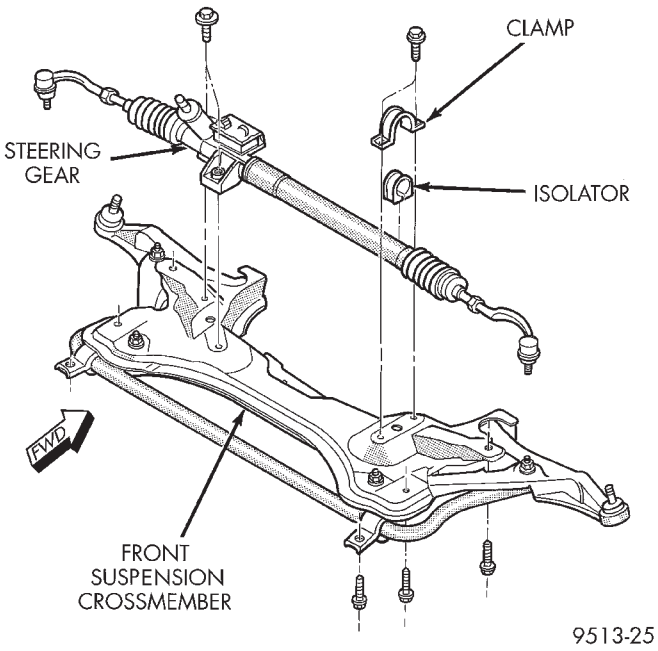


Fig. 1 Front Suspension Crossmember

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 procedures.

(8) Install bolts holding suspension strut to lower control arm. Refer to Group 2, Suspension, for proper procedures.

REMOVAL AND INSTALLATION (Continued)

REAR SUSPENSION CROSSMEMBER

REMOVE

(1) Raise vehicle on jackstands or centered on a frame contact type hoist. See Hoisting in the Lubrication and Maintenance section of this manual, for the required lifting procedure to be used for this vehicle.

(2) Remove both rear wheel and tire assemblies from the vehicle.

(3) Remove the shock absorber clevis bracket to rear knuckle attaching bolt and nut on both sides of the vehicle (Fig. 2).

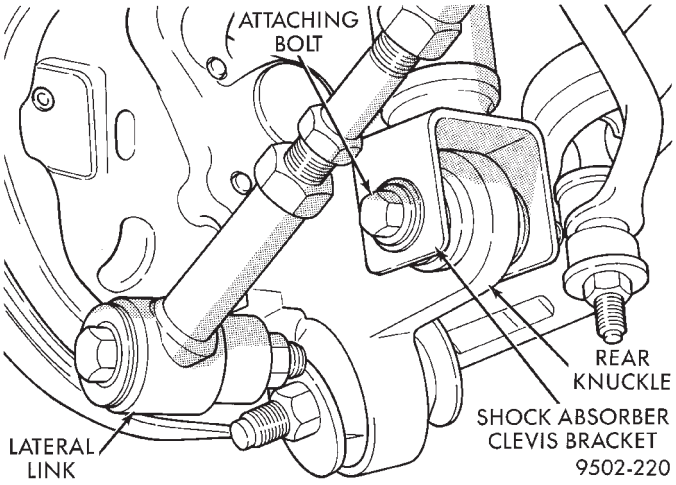


Fig. 2 Shock Absorber To Knuckle Attaching

(4) Remove muffler support bracket from rear frame rail (Fig. 3).

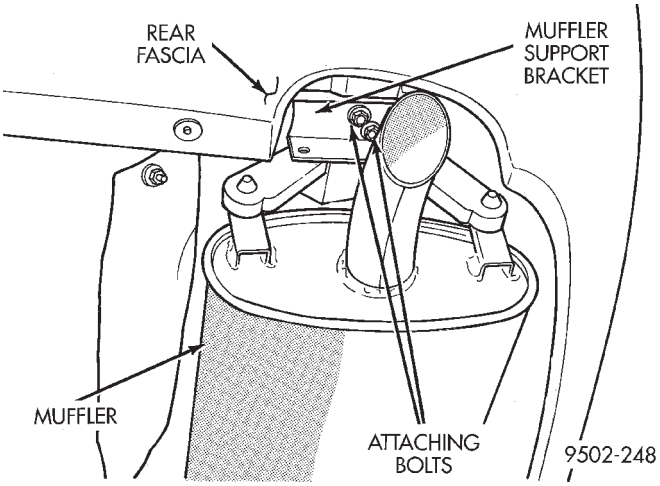


Fig. 3 Muffler Support Bracket

(5) Remove the rear exhaust pipe hanger from the rear suspension crossmember (Fig. 4). Let exhaust system drop down as far as possible.

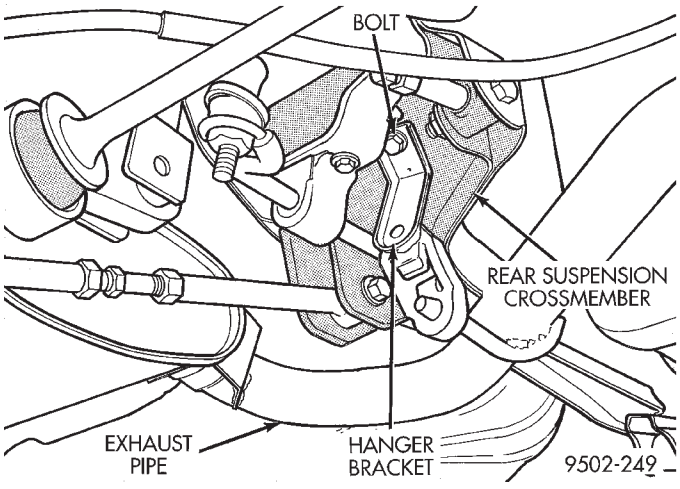


Fig. 4 Exhaust Pipe Hanger At Rear Suspension Crossmember

(6) Position a transmission jack and wooden block under the center of the rear suspension crossmember to support and lower crossmember during removal (Fig. 5).

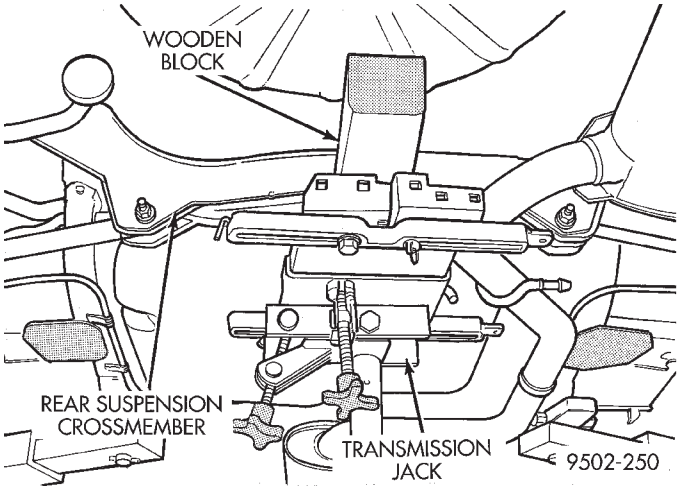


Fig. 5 Lowering And Supporting Rear Suspension Crossmember

REMOVAL AND INSTALLATION (Continued)

(7) If vehicle is equipped with antilock brakes, remove routing clips for wheel speed sensor cable from brackets on upper control arm (Fig. 6).

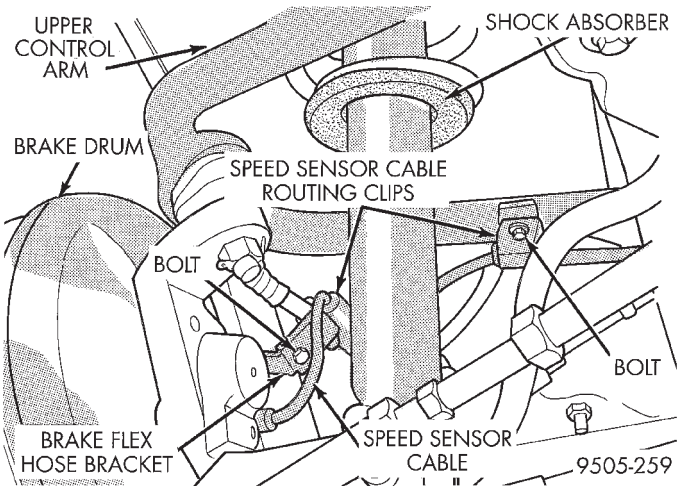


Fig. 6 Speed Sensor Cable Attachment To Control Arm

(8) Remove the nuts and bolts on each side of vehicle attaching the 4 lateral links to the knuckles.

(9) Remove the 4 bolts attaching the rear suspension crossmember to rear frame rails (Fig. 7).

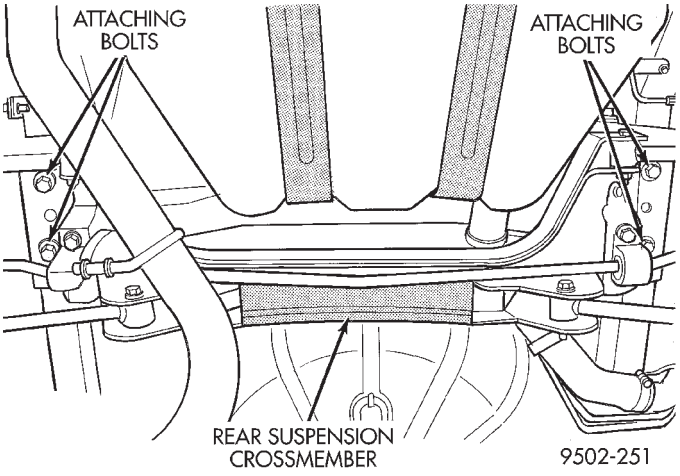


Fig. 7 Suspension Crossmember Attachment To Frame Rails

(10) Lower the rear suspension crossmember enough to access the upper control arm pivot bar to crossmember attaching bolts (Fig. 8). Remove the 4 bolts attaching the upper control arms to the suspension crossmember. Remove the control arms from the crossmember.

(11) Lower the rear suspension crossmember, lateral arms and stabilizer bar as far as possible using the transmission jack. Then with the aid of a helper remove rear suspension crossmember from the vehicle.

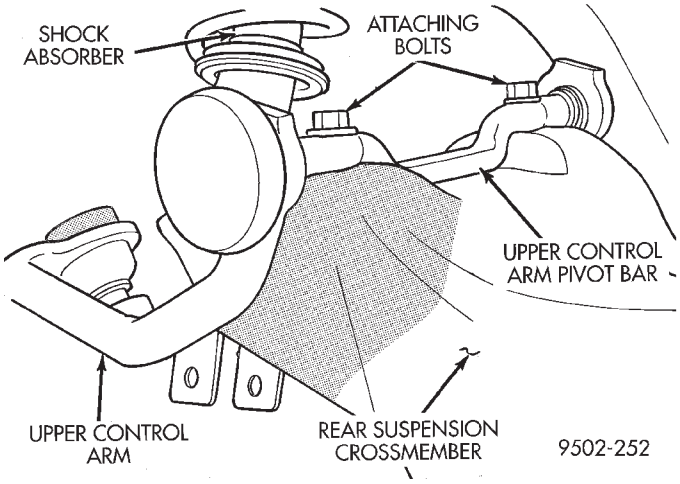


Fig. 8 Upper Control Arm Attachment To Crossmember

NOTE: When installing the lateral links on the crossmember, the lateral link attaching bolts must be installed as listed below. Install the forward lateral link to crossmember bolts so that the head of the bolt will be toward the front of the vehicle when the crossmember is installed. Install the rear lateral link to crossmember bolts so that the threaded end of the bolt will be facing toward the front of the vehicle when the crossmember is installed.

(12) Transfer the lateral links, stabilizer bar mounting brackets and the stabilizer bar and bushings to the replacement crossmember before installing the replacement crossmember in the vehicle. Tighten the stabilizer bar mounting bracket to rear crossmember mounting bolts to a torque of 27 N·m (20 ft. lbs.). Tighten the 4 lateral link to crossmember attaching bolts to a torque of 95 N·m (80 ft. lbs.).

INSTALL

(1) Install the rear suspension crossmember, lateral arms and rear stabilizer bar back into the vehicle as an assembly.

(2) With the aid of a helper position rear suspension crossmember back in vehicle and support it using the transmission jack.

(3) Align the upper control arm pivot bars with the mounting holes in the rear suspension crossmember. Install and tighten the 4 pivot bar to crossmember attaching bolts (Fig. 8) to a torque of 107 N·m (80 ft. lbs.).

(4) Using transmission jack, raise rear suspension crossmember up to the rear frame rails and loosely install the 4 attaching bolts.

REMOVAL AND INSTALLATION (Continued)

(5) Position a drift of the appropriate size into the positioning hole in each side of rear suspension crossmember and locating holes in the frame rail of the body. (Fig. 9). This is required to properly position rear suspension crossmember side-to-side and front-to-rear in the body of the vehicle. Then tighten the 4 crossmember to frame rail attaching bolts to 95 N·m (70 ft. lbs.). Remove drifts from rear suspension crossmember.

(6) Align lateral links with knuckles and install the lateral arm to knuckle attaching bolts. Tighten the 4 lateral arm to spindle attaching bolts to a torque of 95 N·m (70 ft. lbs.).

(7) Remove transmission jack supporting rear suspension crossmember.

(8) Install muffler support bracket on rear frame rail (Fig. 3). Install rear exhaust pipe hanger on rear suspension crossmember (Fig. 4).

(9) If vehicle is equipped with antilock brakes, install the wheel speed sensor cable routing clip on upper control arm mounting bracket (Fig. 6). Install and securely tighten attaching bolt.

(10) Install wheel and tire assembly on vehicle. Tighten the wheel mounting stud nuts in proper sequence until all nuts are torqued to half specification. Then repeat the tightening sequence to the full specified torque of 129 N·m (95 ft. lbs.).

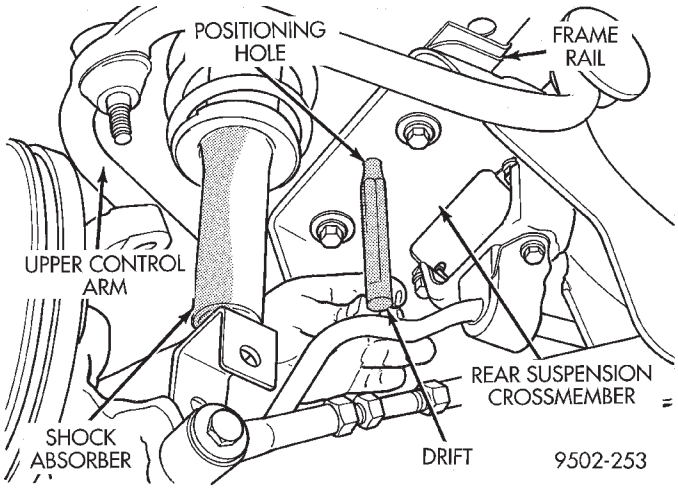


Fig. 9 Locating Rear Suspension Crossmember In Vehicle

(11) Lower vehicle to the ground.

(12) Check and reset if required, rear wheel alignment to meet the preferred specifications.

SPECIFICATIONS

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.

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. 10), (Fig. 11), (Fig. 12), (Fig. 13), and (Fig. 14).

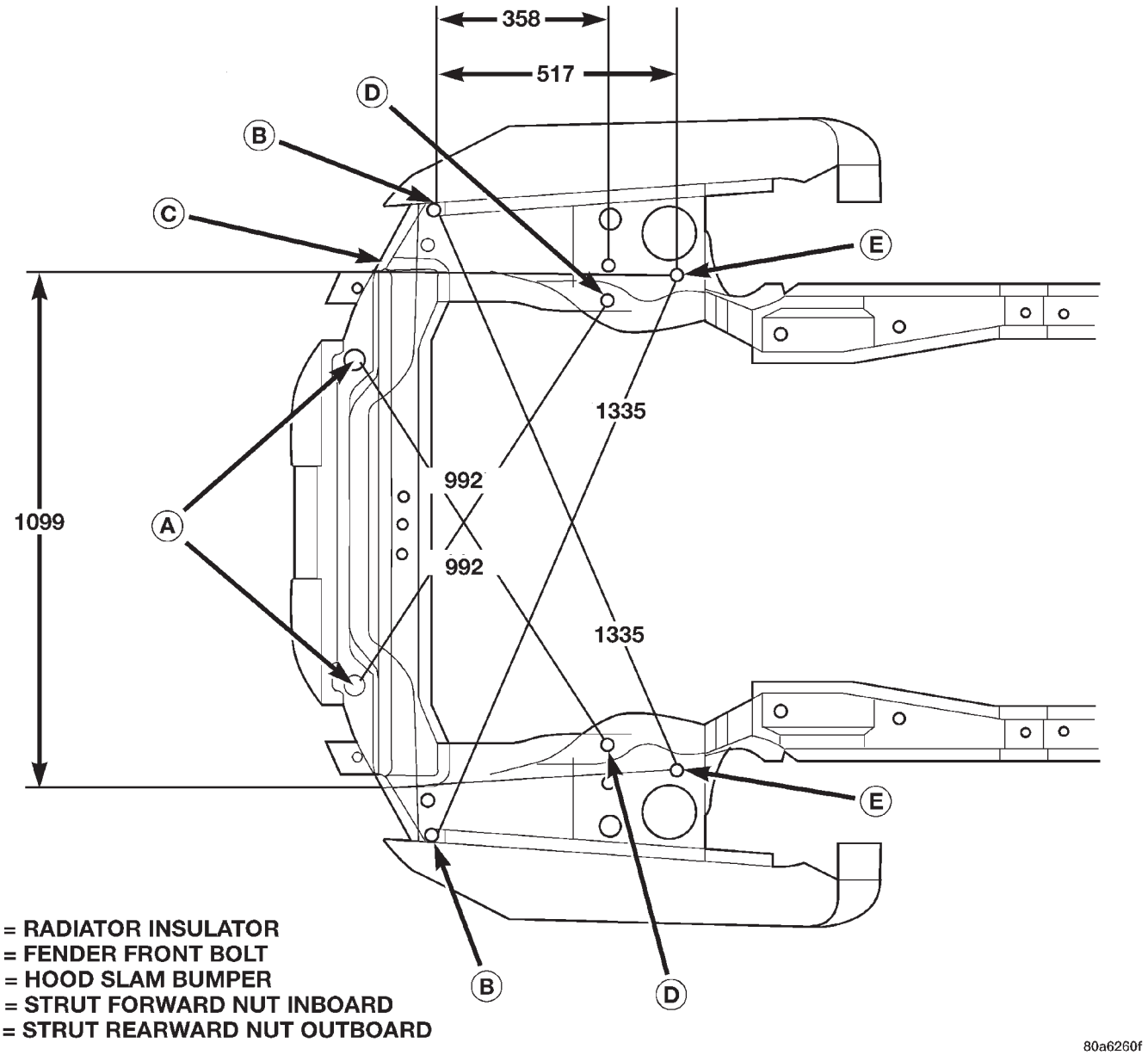
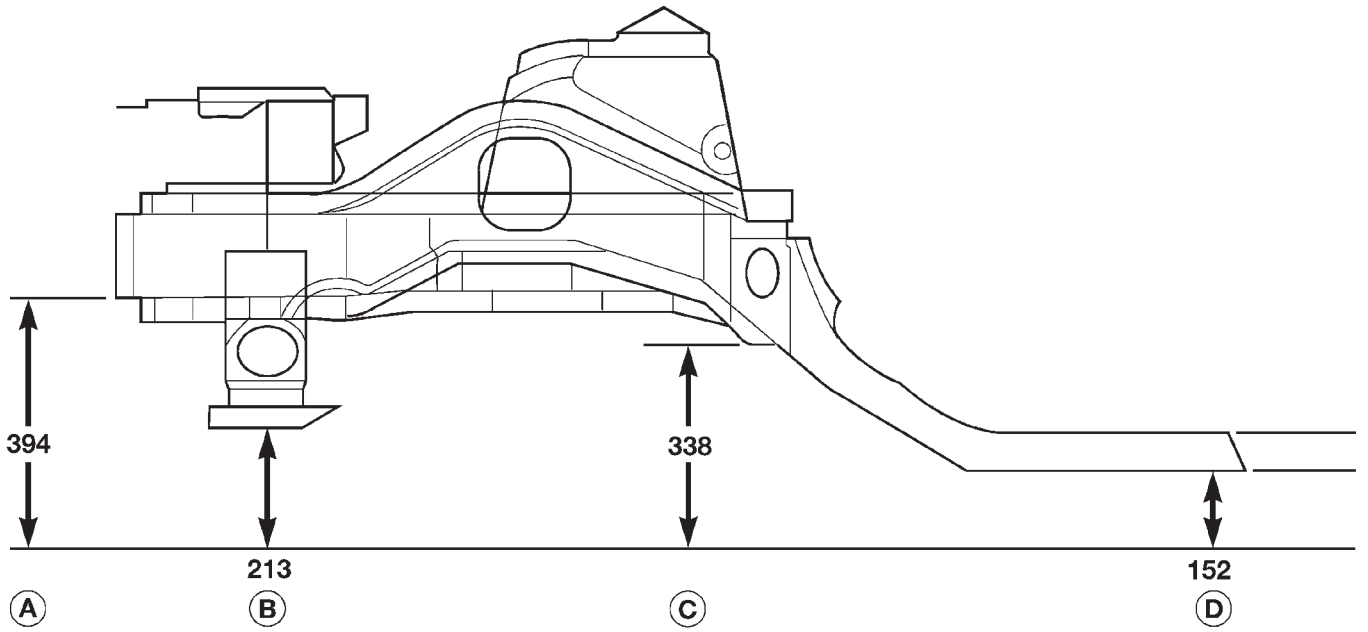


Fig. 10 Engine Compartment Top View

SPECIFICATIONS (Continued)



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

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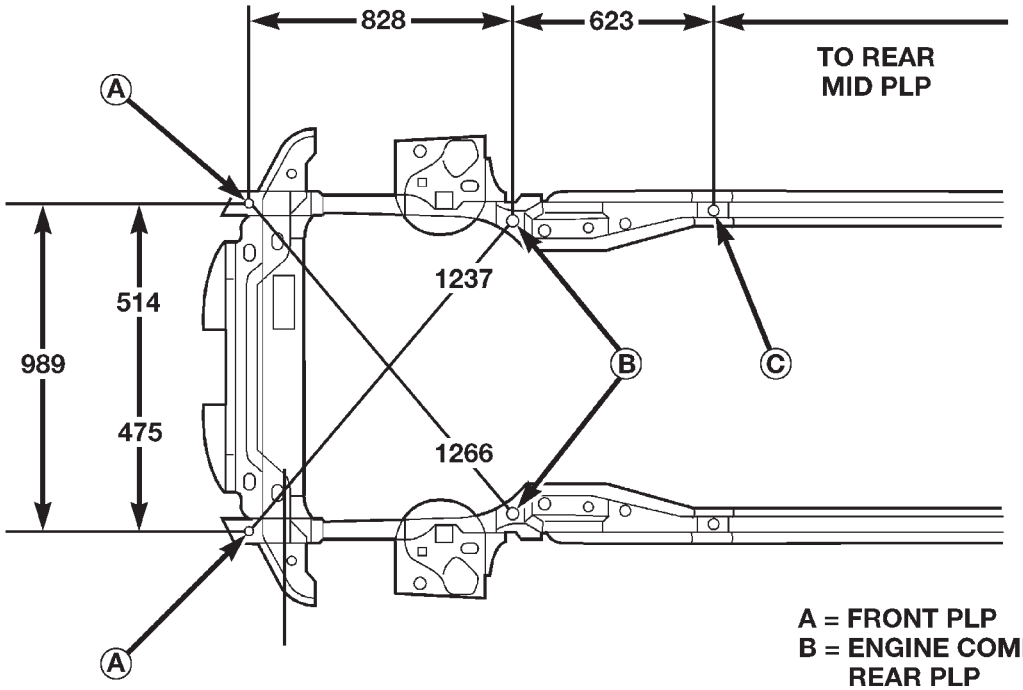
Fig. 11 Engine Compartment Side View



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

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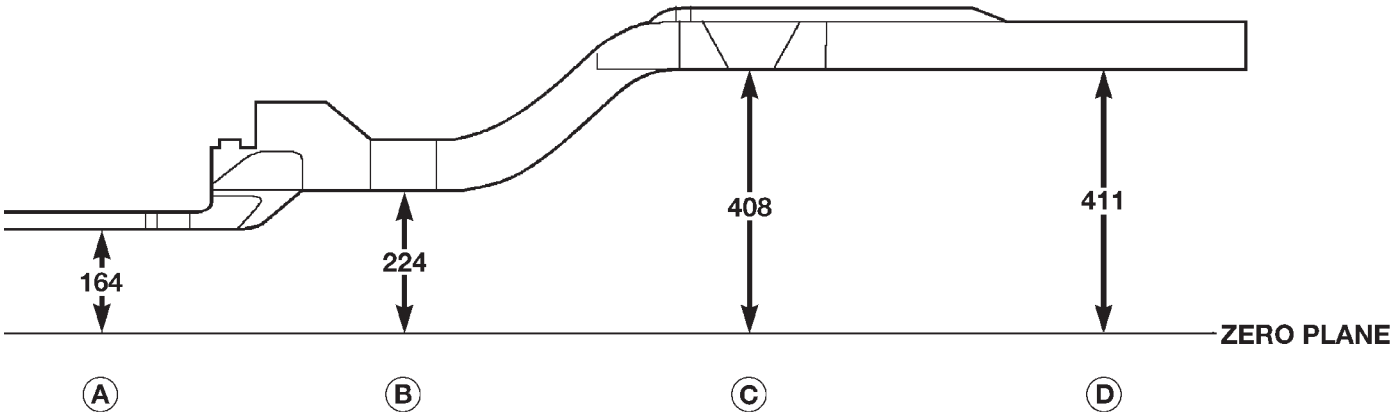
Fig. 12 Forward Frame Section Bottom View

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. 13 Rear Frame Section Side View

SPECIFICATIONS (Continued)

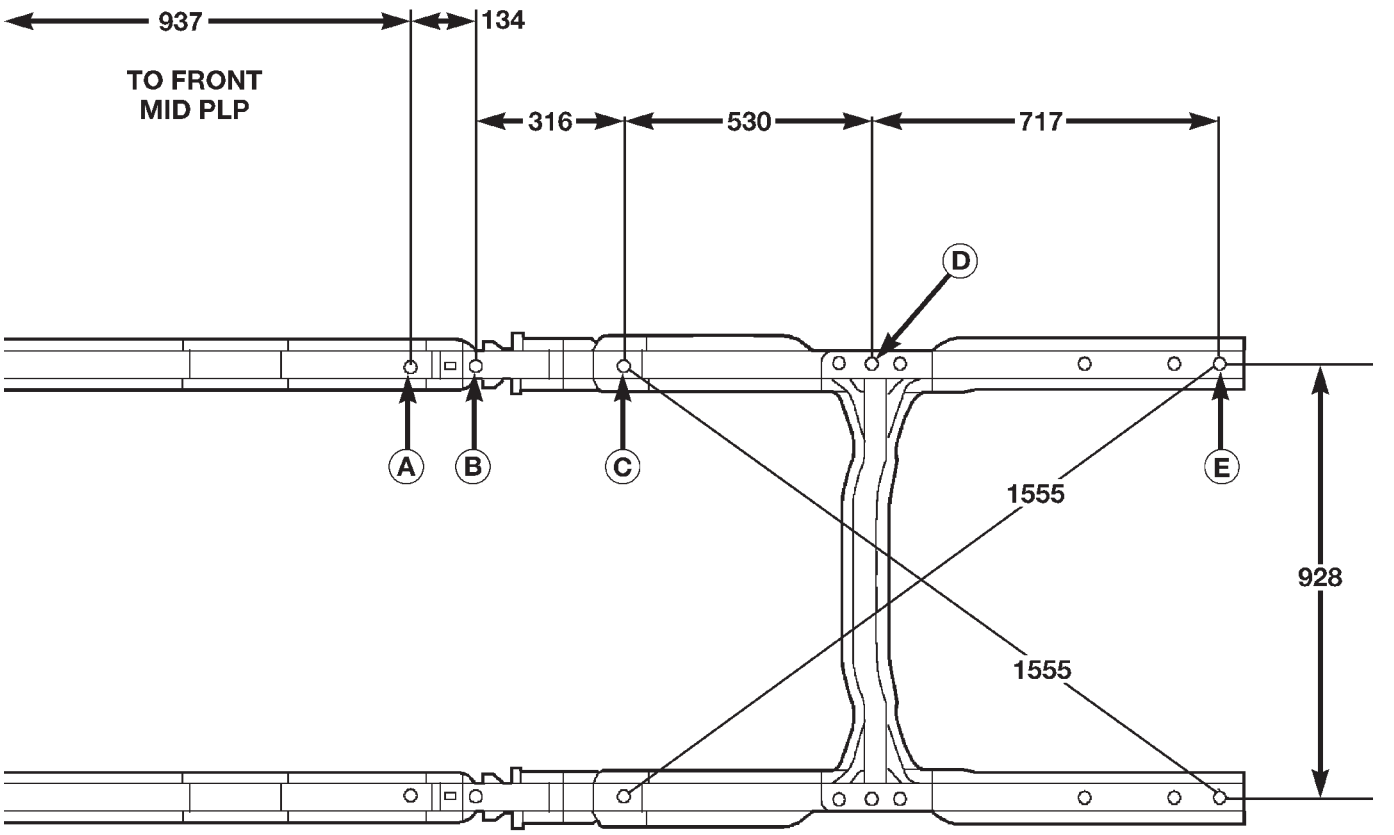

Fig. 14 Rear Frame Section Bottom View

TORQUE SPECIFICATIONS

DESCRIPTION	TORQUE
Rear Bumper Reinforcement	
Attaching Nut	28 N·m (21 ft. lbs.)
Front Suspension Crossmember	
Attaching Bolt Front	109 N·m (80 ft. lbs.)
Attaching Bolt Rear	102 N·m (75 ft. lbs.)
Radiator Support Crossmember	
Attaching Bolts	51 N·m (45 ft. lbs.)