

Body Dimensions

Front suspension----- Crossmember Alignment

NOTE: Ensure that body dimensions are within specified limits prior to commencing any crossmember alignment.

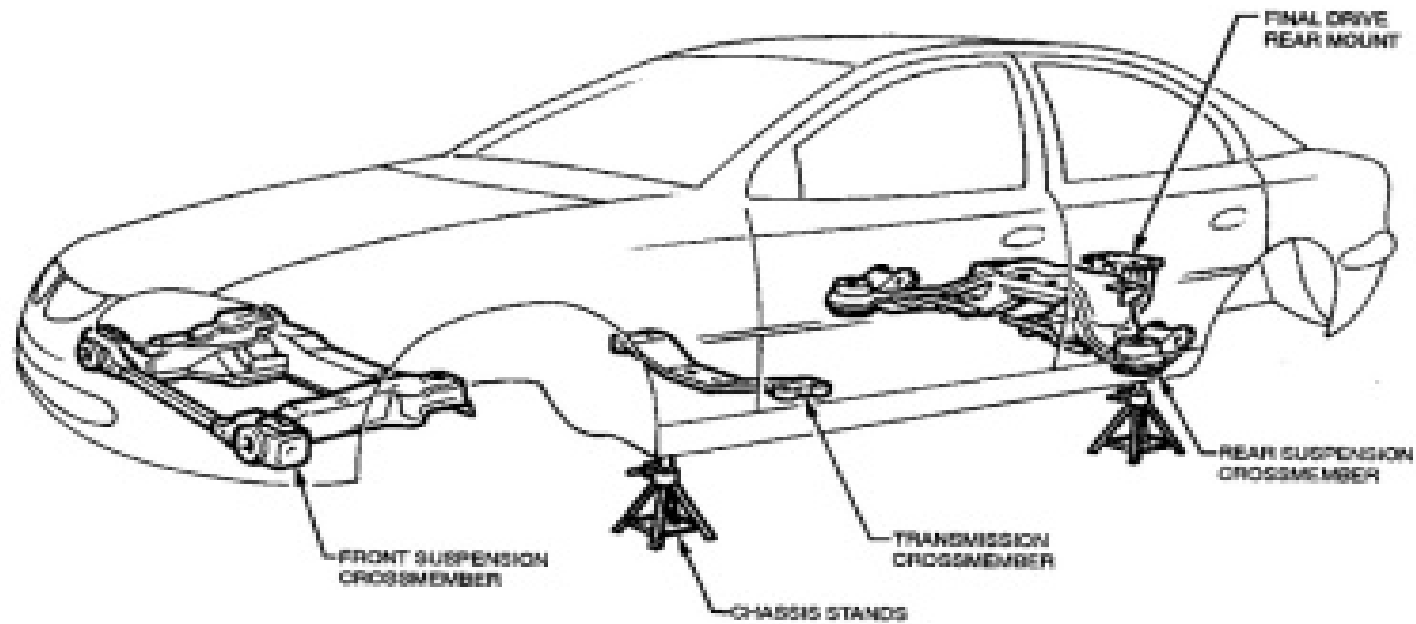


Figure 1A2-10

NOTE: Front suspension crossmember cantering tool needs to be held in position during the alignment procedure. Therefore, assistance will be require to complete this operation.

1. Using chassis stands support vehicle at hoist pad locations.
2. Remove wheels, refer to Section 10 WHEELS AND TYRES in Volume 5 of this Service manual.
3. Remove engine hood, refer to section 1B SHEETMETAL in this Volume.
4. Support engine with over head lifting device and raise slightly to take weight off engine mounts.
5. From underneath vehicle loosen front crossmember attaching bolts.
6. Remove left rear attaching bolt and replace with the locating pin from front suspension crossmember cantering tool No. AU457.
7. Fit front suspension crossmwenber cantering tool No.AU457.

NOTE: Front suspension crossmmember cantering tool locates into \varnothing 19mm body datum holes positioned towards front of vehicle.

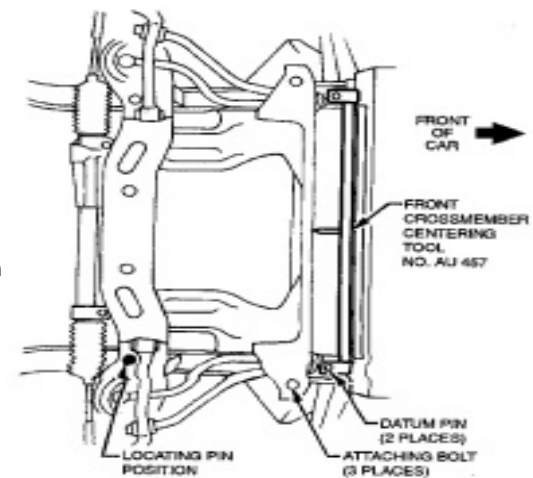


Figure 1A2-11

8. With the help of an assistant manoeuvre the front suspension crossmember so that the reference mark on the crossmember is aligned with the centring tool.

NOTE: Front suspension crossmember has an 'X' stamped on the front to aid in aligning to fixture pointer.

IMPORTANT: Front suspension crossmember attaching bolts must be renewed after each loosening and may be replaced one at a time during this alignment procedure.

Alignment of crossmember must be completed within 20 minutes from installation of new bolts.

Attaching bolts are supplied with a micro-encapsulated locking compound applied to threads that will start to set immediately after installation and will reach 20% adhesion after 30 Minutes.

9. When crossmember is aligned, tighten the three crossmember attaching bolts.

10. Remove locating pin.

CROSSMEMBER ATTACHING BOLTS TORQUE SPECIFICATION	120-125 Nm.
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11. Reinstall left rear crossmember attaching bolt and washer and tighten.

12. Remove crossmember aligning fixture.

13. Gently lower engine and remove lifting device.

14. Attach wheels, refer to section 10 WHEELS AND TYRES in Volume 5 of this Service Manual.

15. Remove vehicle from Chassis stands.

Body Dimensions

Rear suspension ----- Crossmember Alignment

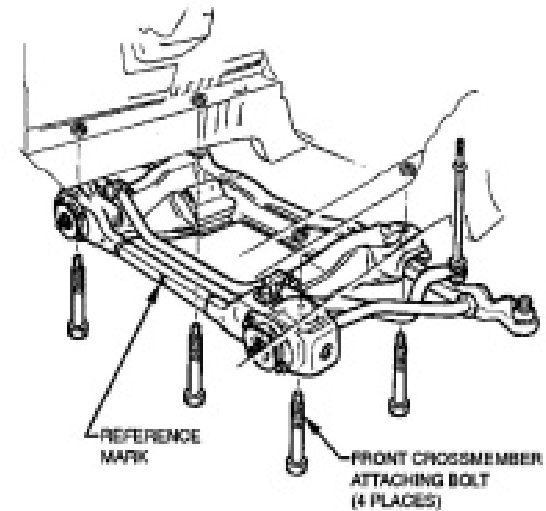


Figure 1A2-12

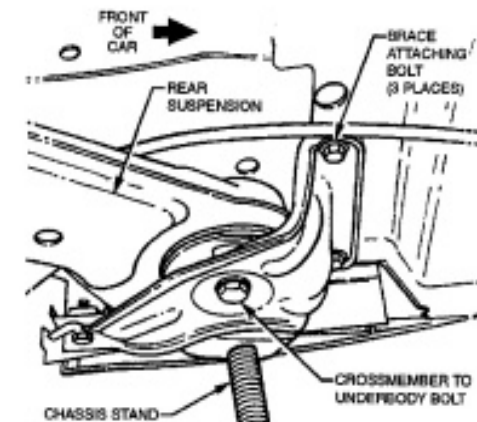


Figure 1A2-14

NOTE: Ensure that body dimensions are within specified limits prior to commencing any crossmember alignment.

NOTE: Rear suspension crossmember centering tool needs to be held in position during the alignment procedure. Therefore, assistance will be required to complete this operation.

1. Using chassis stands support vehicle at hoist pad locations.
2. Remove wheels, refer to Section 10 WHEELS AND TYRES in Volume 5 of this Service manual.
3. Remove intermediate muffler and pipe assembly together with rear muffler and pipe assembly refer to section 8B1 Exhaust System V6, 8B2 EXHAUST SYSTEM V8 in Volume 5 in this service manual.
4. From underneath the vehicle support the final drive with a trolley jack and raise slightly to take weight off final drive mount
5. Loosen M10 screws securing crossmember to body brace lefthand side and righthand side.
6. Loosen rear suspension crossmember attaching bolts (M14) lefthand side and righthand side.
7. Loosen four bolts securing final drive mount.

IMPORTANT: Rear suspension crossmember attaching bolts and final drive rear mount attaching screws must be renewed after each loosening and may be replaced one at a time during this alignment procedure.

Alignment of crossmember must be completed within 20 minutes from installation of new bolts.

Attaching bolts are supplied with a micro-encapsulated locking compound applied to threads that will start to set immediately after installation and will reach 20% adhesion after 30 Minutes.

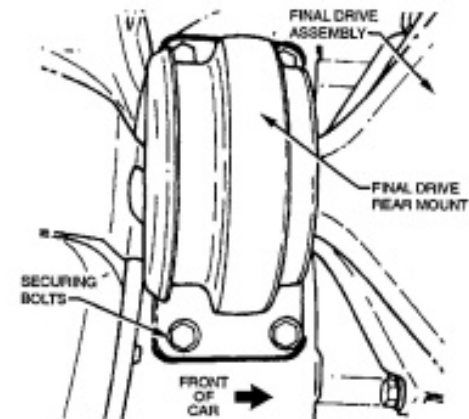


Figure 1A2-15

8. Fit rear suspension crossmember centering tool No.AU458.

NOTE: Rear suspension crossmember centering tool locates into \varnothing 19mm body datum holes positioned forward of rear suspension crossmember.

9. With the help of an assistant manoeuvre the rear suspension crossmember until the location pins of the rear crossmember centering tool engages the alignment holes on the rear suspension crossmember.

10. Tighten rear suspension crossmember attaching bolts (M14) lefthand side and right hand side.

REAR SUSPENSION CROSSMEMBER ATTACHING BOLTS TORQUE SPECIFICATION	125 Nm rotate 30°- 45°with a min of 135 Nm
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11. Tighten four screws securing final drive rear mount.

FINAL DRIVE REAR MOUNT ATTACHING SCREWS TORQUE SPECIFICATIONS	30 - 45 Nm
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12. Tighten three M10 screws securing crossmember to body brace lefthand side and righthand side.

CROSSMEMBER M10 SECURING SCREWS TORQUE SPECIFICATION	60 - 85 Nm
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13. Remove rear crossmember centering tool.

14. Gently lower trolley jack and remove from under vehicle.

15. Attach wheels, refer to section 10 WHEELS AND TYRES in Volume 5 of this Service Manual.

16. Remove vehicle from chassis stands.

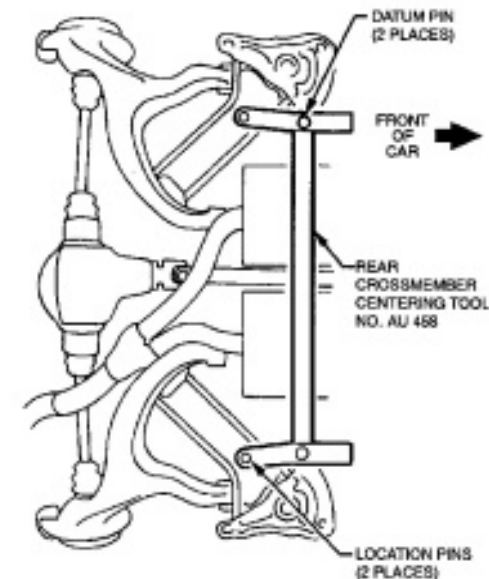


Figure 1A2-16