# POWER PLANT MOUNT

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# SPECIAL TOOLS

Tool	Number	Name	Use
	MB991453	Engine Hanger	To support the engine assembly during removal and installation of the centre member
	GENERAL SERVICE TOOL MZ203827	Engine lifter	To support the engine assembly during removal and installation of the centre member
	MB991113 MB990635 or MB991406	Steering linkage puller	Disconnecting the tie rod end from the knuckle

# **ENGINE MOUNTING**

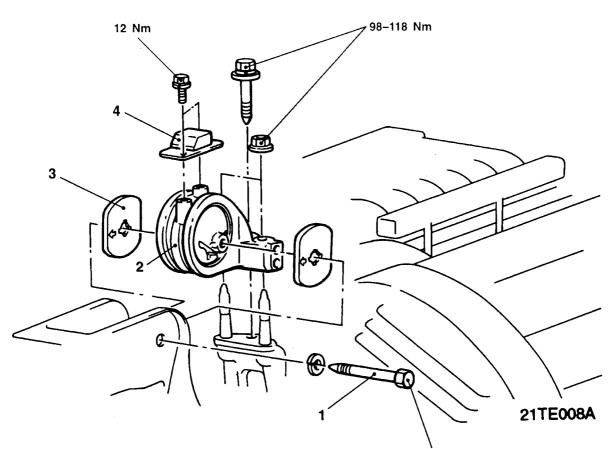
# **REMOVAL AND INSTALLATION**

#### **Pre-removal Operation**

- Raise the engine and transmission assembly to a position where the weight is removed from the insulator
- Remove the washer fluid tank

#### **Post-installation Operation**

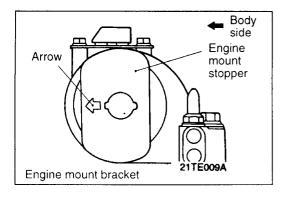
- Lower the engine and transmission assembly to their original position •
- Replace the washer fluid tank •



98-118 Nm

#### **Removal steps**

- 1. Mounting bolt for engine mount insulator
- 2. Engine mount bracket 3. Engine mount stopper
- 4. Dynamic damper



# INSTALLATION SERVICE POINT

### ►A ENGINE MOUNT STOPPER INSTALLATION

Fit the engine mount stopper so that the arrow points in the direction shown in the diagram.

## INSPECTION

- Check each insulator for cracks or damage.
- Check each bracket for deformations or damage.

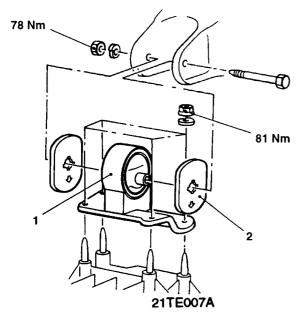
# TRANSMISSION MOUNTING

# **REMOVAL AND INSTALLATION**

#### **Pre-removal Operation**

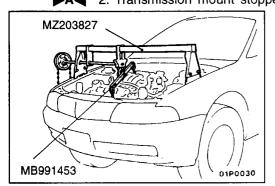
- Remove the air cleaner assembly (Refer to GROUP 15) .
- Remove the battery and battery tray Remove the front roll stopper (Refer to P.32-7) •
- Remove the washer, transmission and rear roll
- stopper coupling bolt (Refer to P.32-7) Remove the rear roll stopper bracket (Refer to P.32-7)

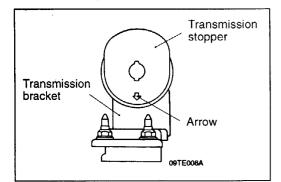
#### <Automatic Transmission>



#### **Removal steps**

1. Transmission mount bracket 2. Transmission mount stopper 

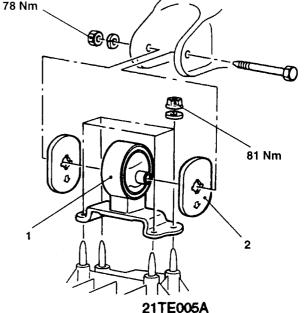




#### Post-installation Operation

- Replace the rear roll stopper bracket (Refer to P.32-7)
- Replace the transmission and rear roll stopper coupling bolt (Refer to P.32-7)
- Replace the front roll stopper (Refer to P.32-7)
- Replace the battery and battery tray Replace the air cleaner assembly (Refer to GROUP 15)

# <Manual Transmission>



# **REMOVAL SERVICE POINT AD** TRANSMISSION MOUNT BRACKET REMOVAL

- Fit the special tool to the vehicle and support the engine 1. and transmission assembly.
- 2. Remove the bolts and nuts from the transmission mount bracket.
- 3. Slightly lower the engine and transmission (while still supporting) and remove the transmission mount bracket.

## INSTALLATION SERVICE POINT

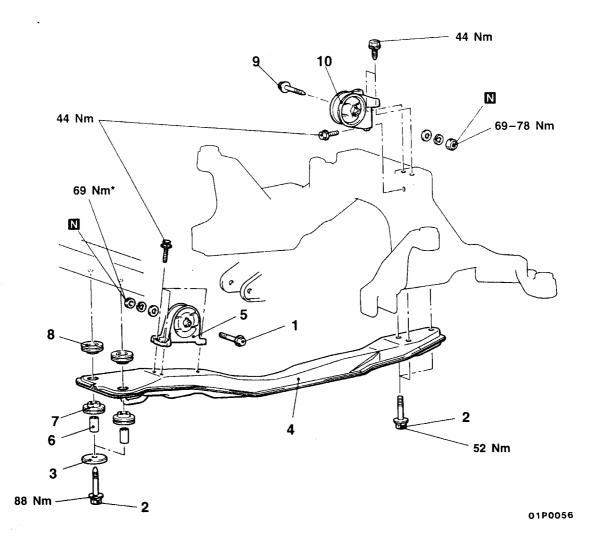
#### ►A TRANSMISSION MOUNT STOPPER INSTALLATION

Fit the transmission mount stopper so that the arrow points in the direction shown in the diagram.

## INSPECTION

- Check each insulator for cracks or damage.
- Check each bracket for deformations or damage.

# ENGINE ROLL STOPPER, CENTRE MEMBER **REMOVAL AND INSTALLATION**



#### Front roll stopper & Centre Member **Removal steps**

- 1. Coupling bolt for transmission and front roll stopper
- 2. Mounting bolt for centre member
- 3. Stopper
- 4. Centre member
- 5. Front roll stopper
- 6. Collar
- 7. Bush (lower) 8. Bush (upper)

#### Rear roll stopper **Removal steps**

- 9. Coupling bolt between transmission and rear roll stopper
- 10. Rear roll stopper

#### Caution

\*: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the ground in the unladen condition.

# CROSSMEMBER

## **REMOVAL AND INSTALLATION**

#### **Pre-removal Operation**

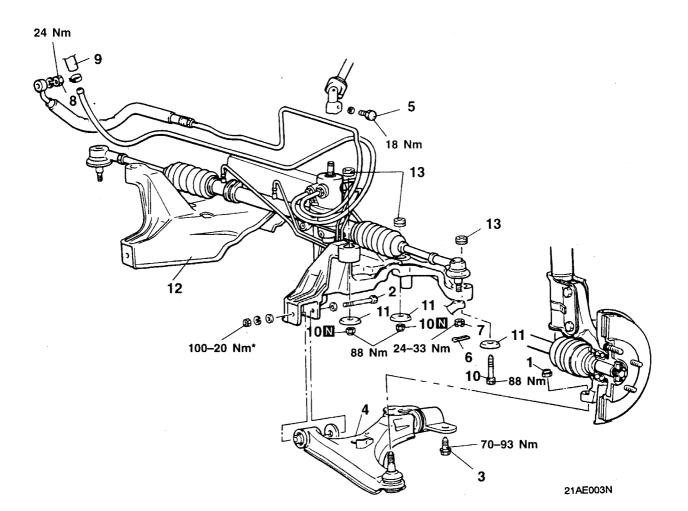
- Drain the power steering fluid (Refer to GROUP 37A) .
- Remove the centre member (Refer to P.32-7) • Disconnect the front exhaust pipe •
- (Refer to GROUP 15) Remove the front stabiliser bar (Refer to GROUP 33A) .
- Remove the rear roll stopper . (Refer to P.32-7)

#### CAUTION: SRS

For vehicles with SRS, before removal of steering rack, ensure you refer to GROUP 52B – SRS Air bag. In addition, place the front wheels in a straight ahead position and remove the ignition key. If you fail to observe this caution, the SRS clockspring may be damaged and could render the SRS system inoperative and could result in serious injury to the driver in the event of an accident.

#### **Post-installation Operation**

- Install the rear roll stopper (Refer to P.32-7) Install the front stabiliser bar (Refer to GROUP 33A) •
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- Reconnect the front exhaust pipe
- (Refer to GROUP 15) Install the centre member (Refer to P.32-7)
- Replenish the power steering fluid (Refer to GROUP 37A) •



#### Removal steps for crossmember

- 1. Self locking nut
- 2. Lower control arm mounting bolt and nut
- 3. Lower control arm mounting bolts
- 4. Lower control arm
- 5. Coupling bolt for steering gear and joint
- 6. Split pin
- 7. Tie rod end coupling bolt
- 8. Coupling nut for pressure hose and oil pump
- 9. Return hose coupling

## IBN

- nut
- 11. Lower stopper
  - Steering gear and linkage (Refer to Group 37A)

10. Crossmember mounting bolt and

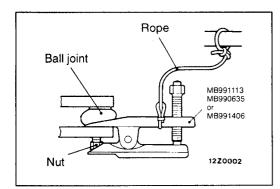
- 12. Crossmember
- 13. Stopper B

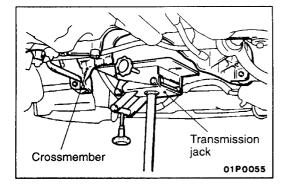
Caution

\*: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the ground in the unladen condition.

#### Caution

Under no circumstances is the front crossmember on this vehicle to be repaired. If it is found to be faulty it must be replaced with a new part.





## **REMOVAL SERVICE POINTS**

AD DISCONNECTING THE TIE ROD END AND KNUCKLE

#### Caution

- 1. Using the special tool, loosen the tie rod end mounting nut but do not remove it until the ball joint has been dislodged.
- 2. Be sure to tie the cord attached to the special tool to a nearby part to prevent the tool from falling.

#### ▲B▶ DISCONNECTING THE CROSSMEMBER MOUNTING BOLT AND NUT

1. Support the crossmember with a transmission jack and remove the bolt and nut.