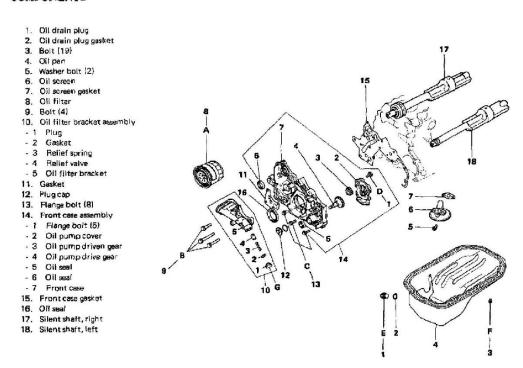


# 1986 Mitsubishi Galant L4-2350cc 2.4L SOHC

### Oil Pump: Service and Repair

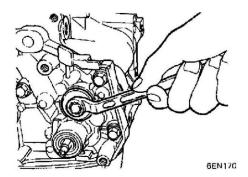
## FRONT CASE OIL PUMP AND SILENT SHAFT COMPONENTS



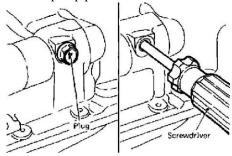
	Nm	ft. ibs
A	11-12	8-9
В	15-21	11-15
C	20-26	15-19
D	15-17	11-13
E	59-78	44-57
F	6.7	4.5-5.5
G	40-49	29-36

#### **REMOVAL**

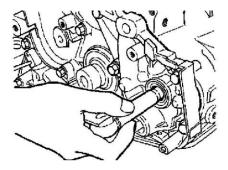
- 1. Remove the oil filter.
- 2. Remove the oil pan and gasket.
- 3. Remove the oil screen and gasket.
- 4. Remove the oil relief plunger plug and gasket, and then take off the relief spring and relief valve from the oil filter bracket.
- 5. Remove the four bracket securing bolts and remove the oil filter bracket and gasket.



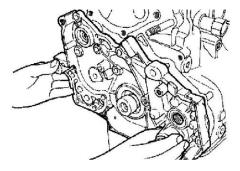
6. Remove the plug cap from the oil pump portion of front case.



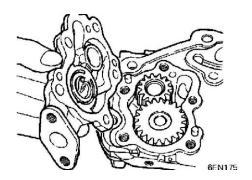
7. Remove the plug from cylinder block left side and insert a screwdriver with 8 mm (.32 in.) diameter shaft into plug hole. Screwdriver shaft must be inserted more than 60 mm (2.4 in.).



8. Remove the oil pump driven gear and left silent shaft retaining bolt.

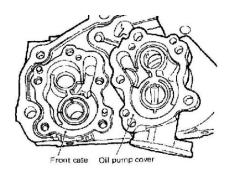


- 9. Remove the front case mounting bolts and remove front case assembly and gasket.
- 10. Remove the two silent shafts from the cylinder block.



- 11. Remove the oil pump cover from the front case.
- 12. Remove the oil pump gears from front case.

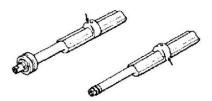
#### **INSPECTION**



#### Oil Pump

- 1. Visually check gear contact surfaces of front case and oil pump cover for step wear. If case or cover has excessive step wear, replace front case assembly.
- 2. Check the oil passage of case and cover for clogging clean if necessary.

#### Silent Shaft



1. Check journals for wear or seizure.

Note: If excessive wear or seizure is evident, check bearing as well. If necessary, replace silent shaft, bearing or both.

2. Check oil passage for clogging. Clean or repair if necessary.

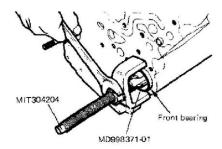
#### Oil Seals

1. Check front case oil seals for damaged or worn lips. Replace defective seals.

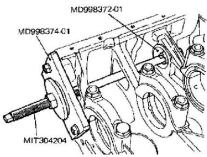
#### Relief Plunger and Spring

- 1. Insert the relief plunger into the oil filter bracket and check for smooth operation. Clean or repair if necessary.
- 2. Check free length of spring, replace springs which are excessively collapsed. Relief spring free length 46.6 mm (1.835 in.)

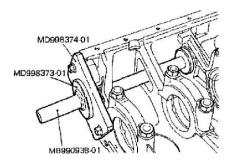
#### SILENT SHAFT BEARING REPLACEMENT PROCEDURE



 Using special tool MD998371-01 and MIT304204, remove right silent shaft front bearing from cylinder block.

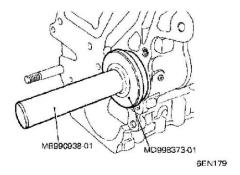


2. Using special tool MD998374-01 (left side only) MIT304204 and MD998372-01, remove silent shaft rear bearing from cylinder block.

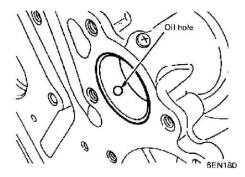


3. Using special tool MD998374-01 (left side only) MB99O438-01 and MD998373-01, install silent shaft rear bearing.

Note: Before hearing is installed, apply engine oil to inner surface of bearing.

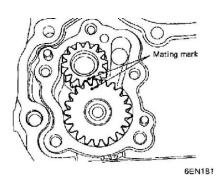


4. Using special tool MD998373-01 and MB990938-01, install right silent shaft front bearing.

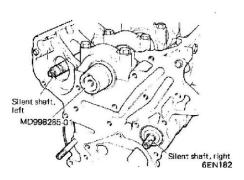


Note: When bearing is installed with installer, make sure that oil hole of bearing is aligned with oil hole of cylinder block.

#### **INSTALLATION**

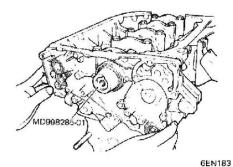


1. Apply engine oil to oil pump gears and install gears to front case. Align mating marks as shown in illustration. 2. Install the oil pump cover to the front case and tighten the five bolts to  $15-17\,$  Nm ( $11-13\,$  ft.lbs.)



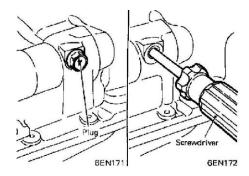
3. Insert the left and right silent shafts into the cylinder block.

4. Install special tool MD998285-01 to the crankshaft front end and apply engine oil all around. Oil seal guide has a conical periphery. Install guide so that its smaller diameter end will face front of engine.

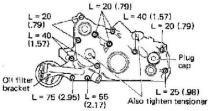


Note: If crankshaft front oil seal is already mounted to front case, use this Guide (MD998285-01) for protection of oil seal.

- 5. Install new front case gasket.
- 6. Install the front case and lightly tighten the eight bolts.

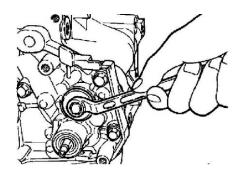


7. Insert a screwdriver through plug hole in left side of cylinder block to keep shaft in position~ and then tighten bolt to 34-39 Nm (25-28 ft.lbs.).

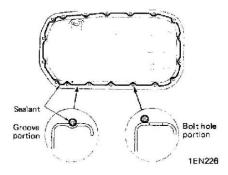


L = length of bolt mm (in.)

8. Install oil filter bracket and gasket and then tighten front case mounting bolts to the specified torque. Tightening torque Front case bolt 20-26 Nm (15-19 ft. lbs.) Oil filter bracket bolt 15-21 Nm (11-15 ft. lbs.)



- 9. Install plug cap
- 10. Apply engine oil to relief plunger and then insert the plunger and spring into oil filter bracket.
- 11. Install the relief plug and gasket, and tighten plug to 40 49 Nm (29-36 ft.lbs.)
- 12. Install the oil screen and gasket.
- 13. Clean gasket surfaces of cylinder block and oil pan.



14. Apply sealant (Part No MD997110 or equivalent) into groove of oil pan flange.