LUBE-08, Front Crankshaft Oil Seal Replacement

Tools

- Metric Wrench Set
- Metric Socket Set
- Jack stands or ramps
- Floor Jack
- Porsche Timing Belt Tension tool (P9201)
- Flywheel Lock (P9206)
- Balance Shaft Pin Spanner (P9200) or equivalent
- Gear puller
- Seal Puller

<u>Parts</u>

PARTS				
Part No.	Description	Model	Year	Engine Code
999 113 268 40	Seal 38 x 55 x 7 mm	944	1982 - 1984	Up to 43 E 14858 (MT) Up to 43 E 21783 (AT)
999 113 331 50	Seal 38 x 52 x 7 mm	944	1984 - 1991	From 43 E 14859 (MT) From 43 E 21784 (AT)
999 707 283 40	O-Ring	944	1982 - 1991	ALL

Other Procedures Needed

- ENG-05, Camshaft and Balance Shaft Belt Removal
- ENG-03, Flywheel Lock Installation
- ENG-13, Locating and Setting Engine to Top Dead Center (TDC), Cylinder 1
- <u>AF-01</u>, Air Filter Housing and Air Flow Sensor Removal and Installation
- <u>IGN-01</u>, Distributor Cap and Rotor Replacement
- ENG-06, Camshaft and Balance Shaft Belt Installation
- ENG-08, Balance Shafts Sprocket Installation and Alignment Check
- ENG-10, Camshaft and Balance Shaft Belt Tension Checking and Adjusting

Procedure

- 1. Disconnect the battery negative lead.
- 2. Raise the vehicle on jack stands or ramps.
- 3. Using <u>ENG-05</u>, remove the timing and balance shaft belts.
- 4. Remove the rear timing cover.
- 5. Remove the oil pump thrust washer, o-ring, and drive sleeve.

- 6. Inspect the drive gear closely. It will over time develop a ridge which will prevent proper sealing with the crankshaft oil seal. If a ridge is evident on the drive gear, it should be replaced. Refer to <u>LUBE-07</u> for drive sleeve (drive gear) part numbers.
- 7. Using a seal puller, remove the crankshaft oil seal.
- 8. Install a the new seal into the oil pump housing.
- 9. Install the oil pump drive sleeve on to the crankshaft.
- 10. Install the o-ring and oil pump thrust washer on to the crankshaft.
- 11. Install the rear timing cover.
- 12. Using <u>ENG-06</u>. install the timing and balance shaft belts.
- 13. Lower vehicle and connect battery negative lead.

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