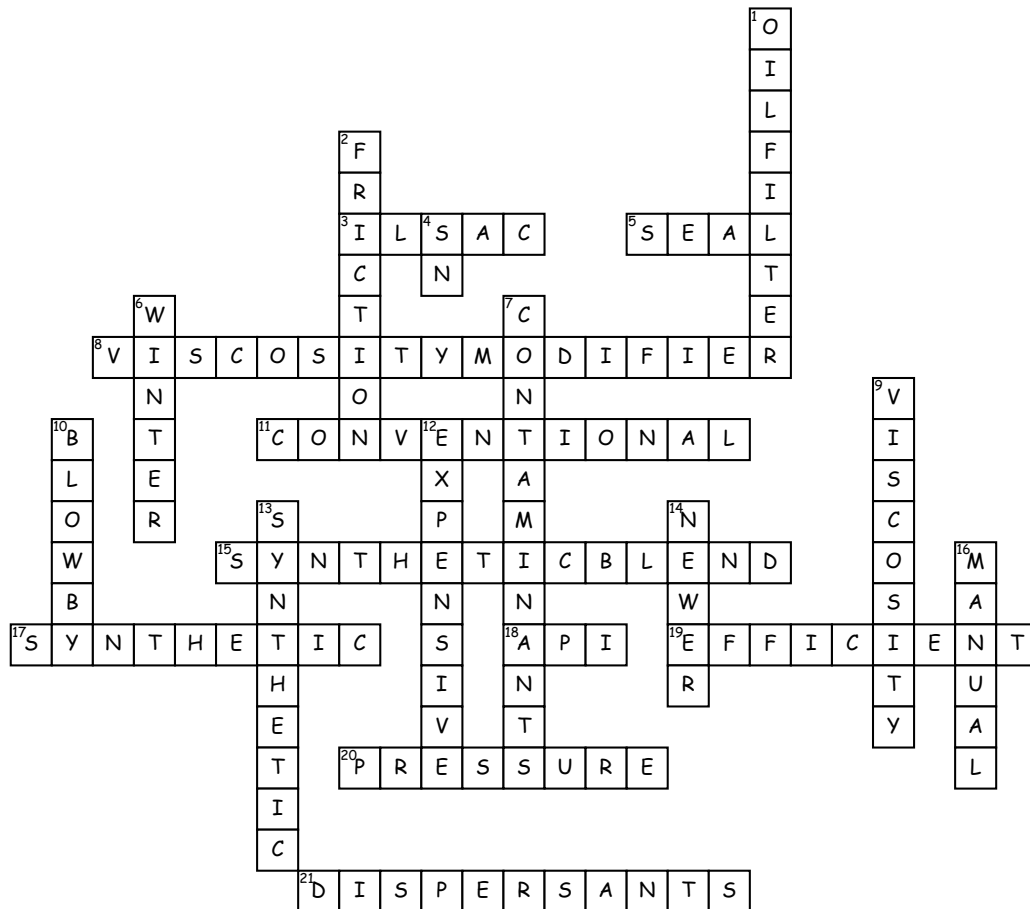


# Ch 10 Lubrication System



## Across

3. \_\_\_\_\_ develops standards for gasoline fueled engine oils.  
 5. The purpose of engine oil is to cool, clean and \_\_\_\_\_.  
 8. This oil additive prevents oil from getting too thin.  
 11. Oil with varied molecular structure.  
 15. This type of oil is a combination of synthetic and conventional oil.  
 17. Oil with consistent (same) molecular structure.  
 18. \_\_\_\_\_ rates the engine oil.  
 19. By lowering the friction, the engine becomes more \_\_\_\_\_.

20. If the oil warning light comes on it means the engine has low or no oil \_\_\_\_\_ and shut the car off.

21. This type of engine oil additive keeps contaminants suspended and helps prevent sludge from forming.

## Down

1. When installing an \_\_\_\_\_ tighten it 1/2 to 1 full turn.  
 2. What is the force that resists motion between two objects?  
 4. What is the current API rating?  
 6. What type of weather temp does the W stand for in 5W-20?  
 7. Oil filters remove \_\_\_\_\_ from the oil.  
 9. What is the resistance to flow?

10. What is it called when gas escapes past the piston rings and into the crank case?

12. Is synthetic oil cheaper or more expensive than conventional oil?

13. The type of oil has fewer impurities, better lubrication, reduces sludge and protects at high temps.

14. Most \_\_\_\_\_ vehicles have an oil monitoring system.

16. Refer to the owner's \_\_\_\_\_ for oil recommendations.

## Word Bank

pressure  
 API  
 oil filter  
 contaminants  
 newer

synthetic  
 synthetic blend  
 blow by  
 dispersants

expensive  
 viscosity modifier  
 SN  
 manual

ILSAC  
 viscosity  
 synthetic  
 friction

efficient  
 winter  
 conventional  
 seal