

# DID YOU KNOW?

## HOW AUTOMATIC TRANSMISSIONS WORK

### MANUAL VS AUTOMATIC

With a manual transmission the vehicle's operator chooses the gear, usually with a stick shift and clutch pedal. Automatic transmissions choose the gear based on both operator input and automatically based on speed and other driving factors.

### WHAT DOES A TRANSMISSION DO?

A transmission sends power from the engine to the wheels, increasing and decreasing engine torque and speed.

- Automatic transmissions change gear ratios based on driving conditions
- Smaller learning curve (compared to a manual)
- New automatic transmission designs are rivaling manual transmissions in terms of fuel economy

### TYPES OF TRANSMISSIONS:\*

- Manual Transmission
- "Standard" Automatic Transmission (AT)
- Continuously Variable Transmission (CVT)
- Dual Clutch Transmission

### MAIN COMPONENTS

#### Torque converter

Transmits power from the engine to the drive shaft using automatic transmission fluid.

#### Planetary gear sets

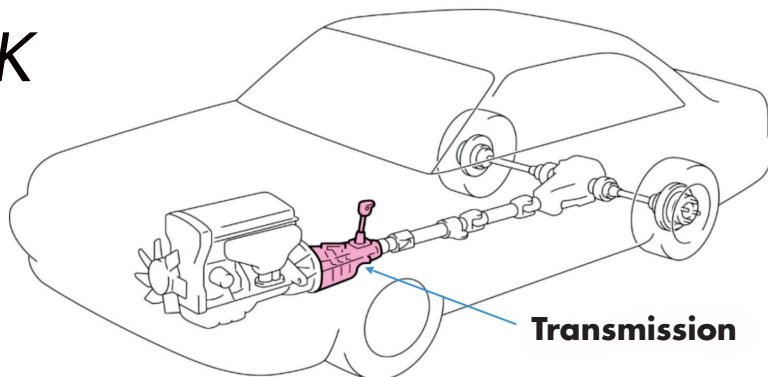
Include gears that rotate in various ratios which control the speed of the vehicle.

#### Hydraulic control unit

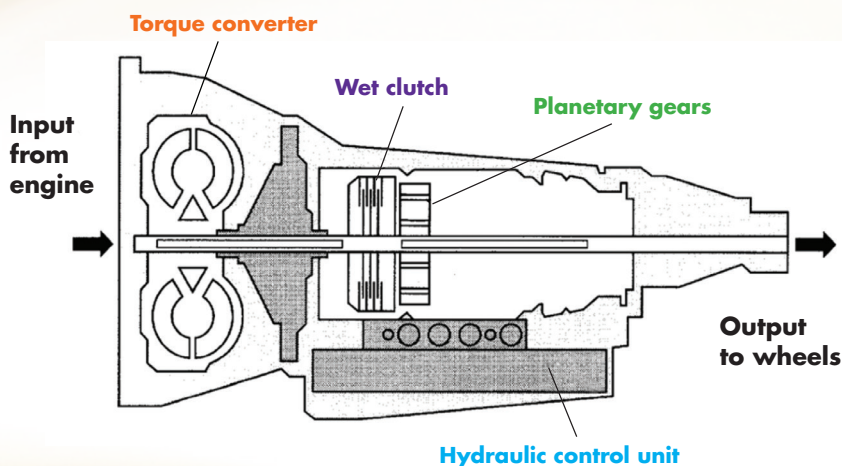
Transmits rotating power from the engine to the transmission.

#### Wet clutch

Engages and disengages the transmission from the drive shaft.



**DIFFERENT KINDS OF TRANSMISSIONS REQUIRE DIFFERENT LUBRICANT OILS**



\*Note: ENEOS sells both ATF and CVTF; CVTs are covered in other materials available at the GARAGE portal

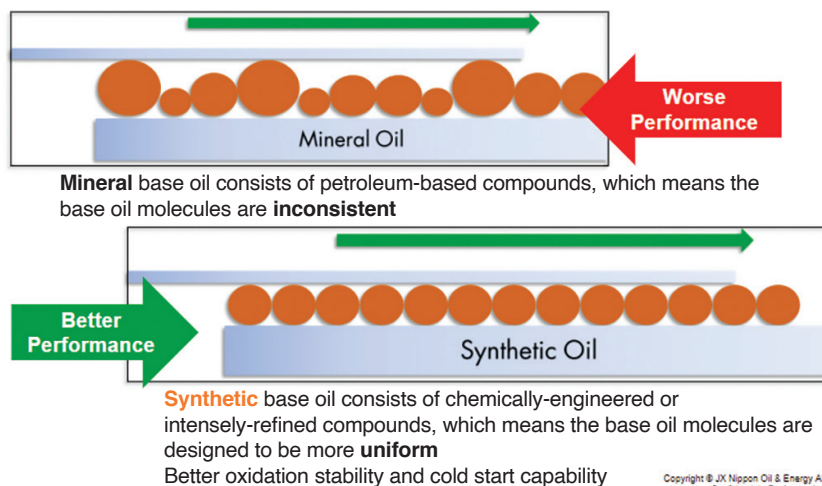


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# IMPORTANCE OF TRANSMISSION FLUID

Transmission fluid is what allows all the transmission components to operate properly. A gear pump draws the fluid from a sump in the bottom of the transmission and feeds it to the hydraulic system, transmission cooler, and torque converter. As the gears rotate, fluid is drawn up from the sump and forced out into the hydraulic system. Using a high-quality full synthetic transmission fluid that covers the specs of your vehicle's transmission is essential to its long life and performance.



## Excellent transmission material compatibility

The friction modifiers and other additives in ENEOS ECO ATF PLUS have been carefully screened for top-level compatibility with the rubber, nylon, and plastic materials used in the components of automatic transmissions.

## Improved fuel economy- better protection

ENEOS ECO ATF PLUS uses a high Viscosity Index (VI) oil to ensure fuel economy at low temperatures while providing transmission protection at high temperatures.

## Compatible with majority of specs

ENEOS ECO ATF PLUS is a fuel efficient, true low viscosity automatic transmission fluid that provides improved fuel economy, high resistance to mechanical shear and fatigue, and wide-ranging compatibility with Asian OEMs, Dexron® VI, Mercon® LV, and other American and European vehicle specifications.

Find vehicle compatibility at the "Oil Selector" feature on our sites.



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