

Viscous Coupling

```
graph TD; A((Viscous Coupling)) --- B((Uses friction heated silicon fluid to transfer drive between plates)); A --- C((Transfers the useable torque between wheels to the wheel with the most traction.)); A --- D((Can be used as a control unit to limit speed differences (accelerating and braking forces) between the front and rear axles. These speed differences are commonly known as transmission wind-up (All wheel or full time 4WD systems).)); A --- E((The viscous coupling is also used in transfer cases to engage or disengage the FWD system to the RWD system on demand. The viscous coupling also absorbs transmission wind up for this type of vehicle.)); A --- F((Progressively engages as loss of wheel traction increases resulting in smooth operation. Very little resistance is offered when the speed difference is small, but the resistance progressively develops as the speed difference increases resulting in smooth operation.))
```

Uses friction heated silicon fluid to transfer drive between plates

Transfers the useable torque between wheels to the wheel with the most traction.

Progressively engages as loss of wheel traction increases resulting in smooth operation. Very little resistance is offered when the speed difference is small, but the resistance progressively develops as the speed difference increases resulting in smooth operation.

Can be used as a control unit to limit speed differences (accelerating and braking forces) **between the front and rear axles**. These speed differences are commonly known as transmission wind-up (All wheel or full time 4WD systems).

The viscous coupling is also used in transfer cases to engage or disengage the FWD system to the RWD system on demand. The viscous coupling also absorbs transmission wind up for this type of vehicle.