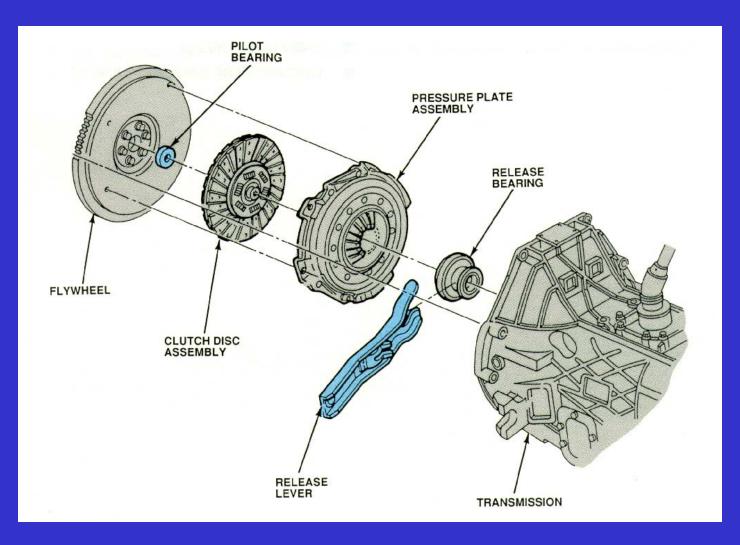
## Clutch Systems

Brookhaven College

# Clutch Components



#### Flywheel

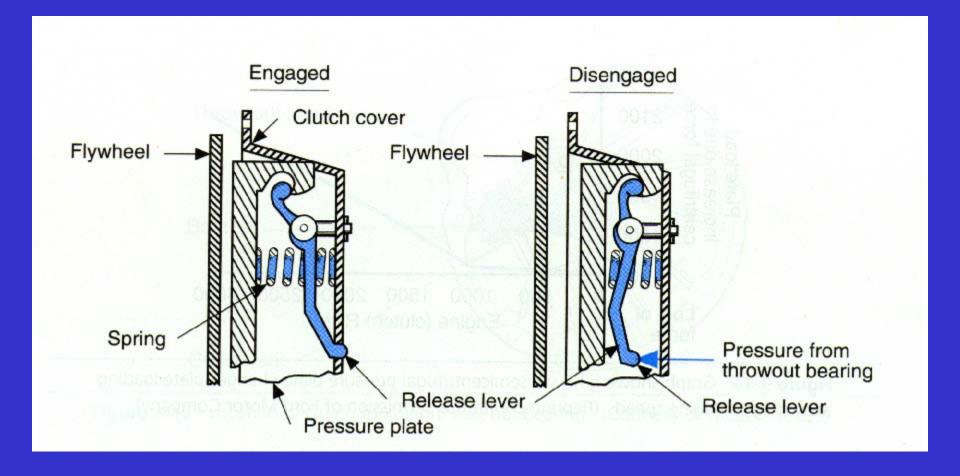
- Dampens engine vibration
- Provides inertia between power strokes
- Friction surface and heat sink for one side of the clutch disc
- Dual-Mass flywheels
  - further reduce crankshaft oscillations with a spring and damper system

#### Pressure Plate



- Squeezes clutch disc between flywheel and pressure plate
- Diaphragm or Belleville spring type
- Multiple coil spring
- Semicentrifugal

## Pressure Plate Operation

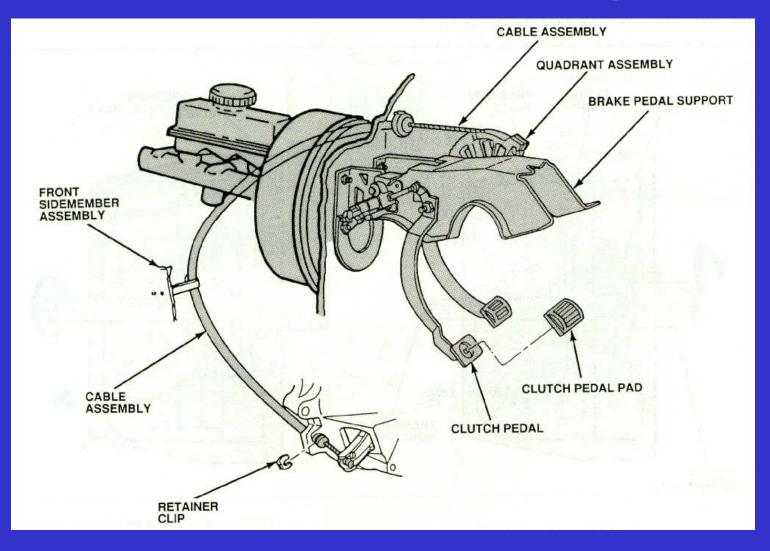


#### Clutch Disc

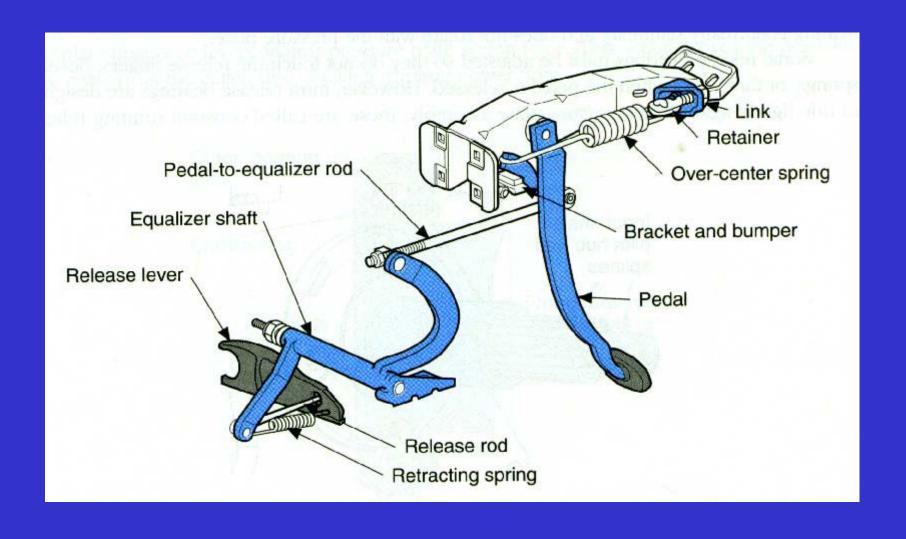
- Splined to Input Shaft
- Friction Material
  - molded or woven
  - paper based and ceramic materials
- Wave Springs
- Torsional Damper Springs



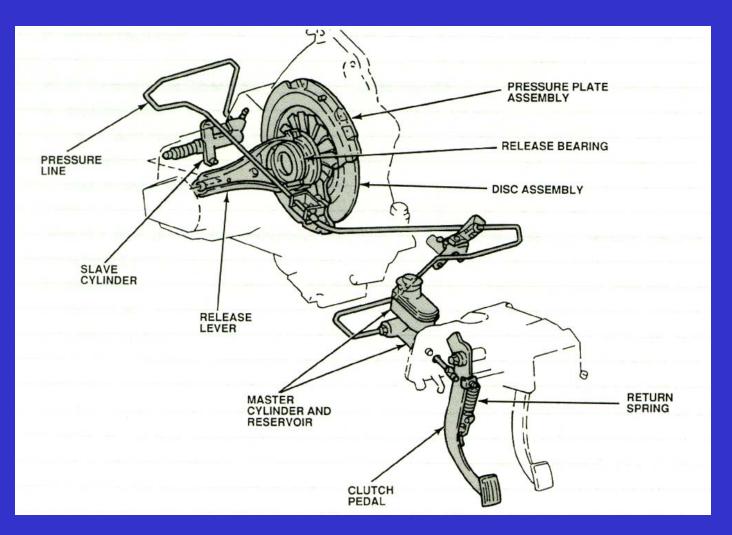
# Cable Clutch Linkage



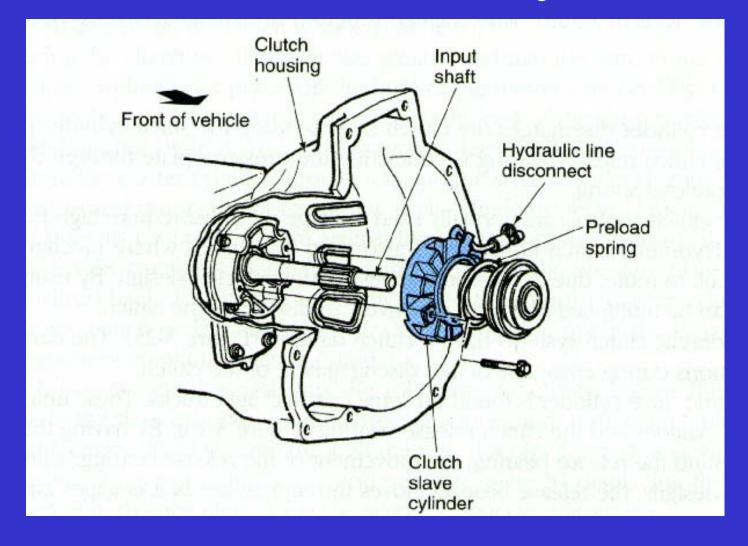
# Mechanical Clutch Linkage



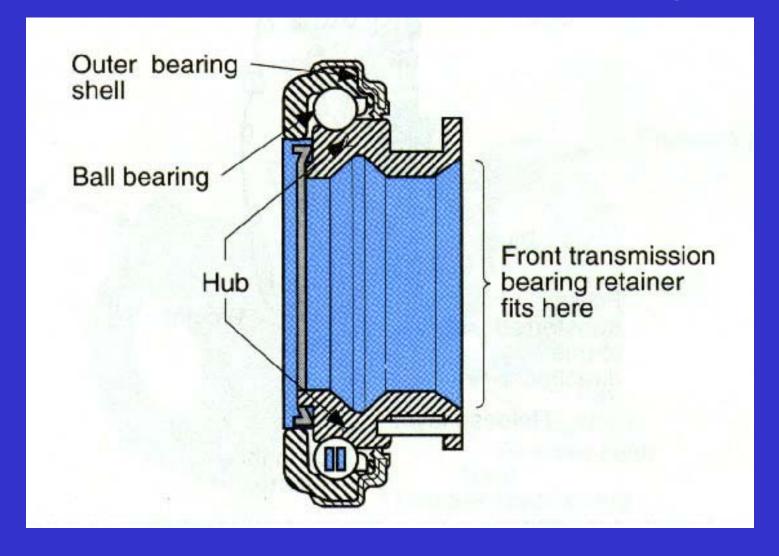
# Hydraulic Clutch Linkage



#### Concentric Slave Cylinder



#### Clutch Release Bearing



#### Release Bearing Operation

