The Anatomy of a Bulldozer



Here at Marley Dozer Service, we use bulldozers all the time for land clearing, road building and general construction dirt work services for both residential and commercial. They are a vital part of what we do. We thought we'd take the time to share this breakdown of the bulldozer we got from *WiseGeek.com* to show you just what these powerhouses are made of.

Many different bulldozer parts are required to make up a complete machine. Engine parts, chassis and hydraulic parts make up some of the more complex components of the bulldozer. The blade, tracks and control levers are different bulldozer parts that are unique to this type of earth-mover. Some parts that are very similar or bear a resemblance to parts used on other types of heavy equipment are the seat, muffler and hydraulic cylinders. As it is created from many solid steel components, the bulldozer is often one of the heaviest pieces of earth-moving machinery found on the typical job site.

The large diesel engine contributes a large portion of the bulldozer's weight. The heavy, cast-iron engine block contains water passages to allow coolant from the radiator to be pumped through the engine by the water pump. This provides cooling for the rotating crankshaft, pistons and connecting rods. The radiator on a bulldozer is often responsible for cooling not only the machine's engine, but the hydraulic fluid, engine oil and transmission fluid. This multi-function system is one of the most important of all the parts.

Some of the most notable and distinguished of all the different bulldozer parts are the tracks and the large front blade. Created by linking many heavy steel sections together with solid steel pins, the tracks allow the bulldozer to operate on soft ground while providing traction. The large blade is mounted on heavy arms and allows the machine to push tremendous amounts of earth, rock and debris. The blade also contains an often overlooked component of the many different parts: the cutting blade. Attached to the bottom of the large, front bulldozer blade, the cutting blade is a replaceable steel strip that ensures a smooth, straight cut is made by the large blade.

Moving the heavy blade up, down and sometimes tilting fore and aft is tasked to large hydraulic cylinders. With pressurized hydraulic fluid fed into the cylinders by the hydraulic fluid pump, the operator controls the movement of the blade through the manipulation of several control levers mounted in the operator's compartment. Newer bulldozer designs often incorporate the blade controls, along with the transmission and steering controls, on a single joystick mounted beside the operator's seat on the machine. Optional computer-assisted features designed to interact with many of the different bulldozer parts allow the machine to produce nearly perfectly level finish work.

When you need **dozer work**, there's no need to Google **"excavation contractors near me**" since you already found the experts at Marley Dozer Service. Give us a call today at (940) 229-1839.