The Caterpillar 621 Wheel Tractor-Scraper was introduced in 1965. It was the “replacement” for the Caterpillar 619C Scraper. The 621 however was equipped with fully hydraulic controls. The 621 had a Caterpillar D336 diesel Engine producing 300 flywheel horsepower (FWHP) and a Heaped capacity of 20.0 yd3 and a top speed of 30MPH.

The 621(A) was given a 23H or 43H (USA) and 9NL (Brazil) serial number prefix. Production of the 621 ended in 1973. The Caterpillar 621 was replaced by the Caterpillar 621