The Parilla SS20 was introduced in 1972 and was an immediate success winning the World Championship that year in the hands of multiple champion Francois Goldstein from Belgium. Part of the family of “Pineapple Head” motors that stretched from the TG14 in the early 60s and lasted up to the TT31 in the 80s before the look changed completely.
Although superceded at international level the next year by the TT22 it stayed in production until the late 80's for use in various national level classes such as Class Australia and the 100 National and 100 Britain classes in the UK. In fact the TT22 is identical except for the use of a crankcase - or TT - port rather than the boost port in the piston. Many owners modified the SS20 by cutting a TT port to create a their own TT22 or “SS20TT”

The biggest change from the previous version – and previous World Championship winner – the HF17, was reversion to a three piece crank rather than the two piece used in the GP15, MK16 and HF17. This was cheaper to produce and much cheaper to maintain – only a crank pin to replace rather than a crank half in the case of a big end failure – but at the cost of some inlet chamfer.

Over the years the crankcase design was revised to allow a common casting pattern to be used for the SS20 and TT27. The major difference was a larger opening in the crankcase which allowed thicker liners to be used. The thinner liners can break at the bottom when at maximum bore. Early motors still had provision for fitting a Dellorto fuel pump on the front of the crankcase while later versions had fins across this area.
Cylinder heads were also changed over the years with extra ribbing added to reduce ringing and potential fin breakage.

Cylinder heads also differed for class purposes. The SS20s used in Class Australia had high volume heads to reduce compression.
Class Australia cylinders were also marked