



**Spears Enterprises L.L.C. "The Sport Twin Specialist"** wants to thank you for your purchase of this piston kit for your Yamaha 320 . **Spears/JE Piston** is forged from premium aerospace materials. These innovative pistons are precision machined to all of our racing specifications. Customers using these pistons have seen dramatic increase in horsepower and torque. Increasing numbers of local and national level racers are using the popular piston by **Spears/CP Pistons**. Your piston kit will include two pistons, four cir clips, two wrist pins, two sets of piston rings. Piston Weight: 132 Grams Part Number SP12-320A

## Important Specifications

### Important Clearance Information Guidelines Only

Set clearance to .0020

**(Some applications may require more clearance)**

Measure clearance 0.25 from bottom point of skirt

Piston to head clearance / Squish should be no less than .040

**\*\*The Squish Band or "Quench"\*\*\*** is defined as the area between the flat of the piston and the flat of the cylinder head at top dead center (TDC). On the compression stroke, as the piston approaches TDC, the compressed mixture of fuel and air is "squished" to the remaining space of the combustion chamber where the spark plug and valves reside. The "squeezing" of the mixture creates turbulence and is expected to promote a better and more complete combustion. Typical figures for this measurement are in the range of .040" to .045" which allows for rod stretch, carbon build-up and other variables. Pure race engines with short duration applications may reduce this figure to .025" as some builders are not happy till the pistons "kiss" the cylinder head. At .025" when you factor in high rpm rod stretch and piston "rock" at TDC you effectively reduce squish to zero.

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