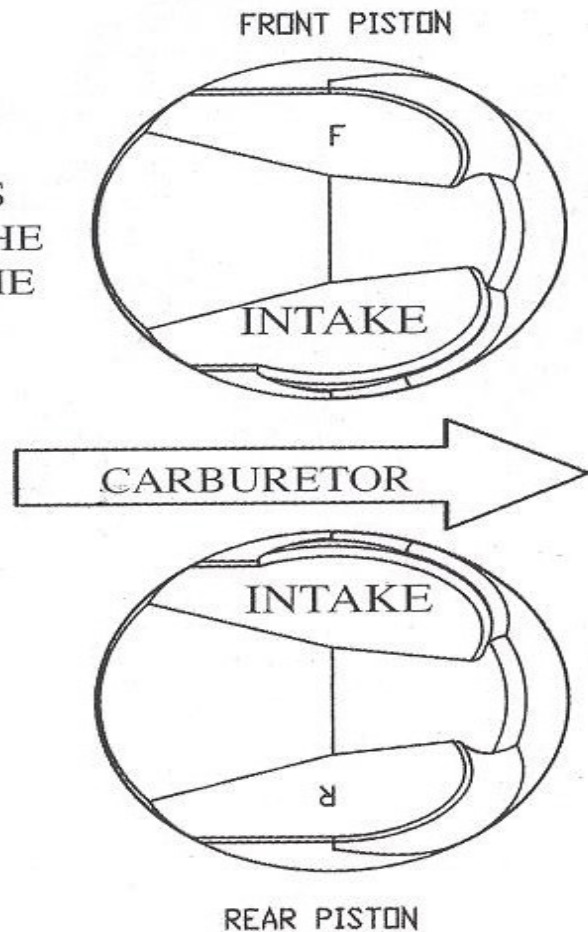
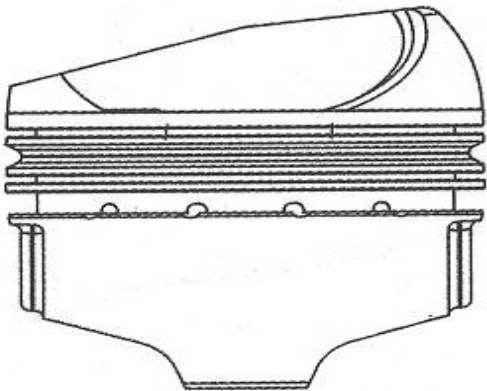


# Keith Black Piston Installation Guide for XL Dome Type Pistons

THE PISTONS ARE MARKED  
FRONT AND REAR. INTAKES  
TOWARD THE MIDDLE OF THE  
ENGINE. DOME TOWARD THE  
CARBURETOR.



V-Twin Mfg.  
Cylinder and Piston Kit  
Evolution Big Twin or Sportster

Proper Installation of any Evolution Big Twin or Sportster Piston that is not marked with arrows.

All Evolution pistons have wrist bore that are offset in the piston for proper loading during operation.

To determine the correct way to install a non-marked piston:

1. Measure from wrist pin bore to back of edge of piston.
2. Measure from wrist pin bore to front edge of piston.

The shorter distance of the two goes to the back of the motor.  
Procedure is the same for both front and rear piston.



## Shop Tip Piston Installation

Caution: Do not install piston pin without lubricating it first with motor oil or assembly lube. Touch up outer edges of piston pins with emery cloth before installation.

1. Refer to applicable service manual for proper installation methods.
2. Piston should be measured front-to-rear at the base of piston skirt, perpendicular to wrist pin.
3. Piston should be set-up with the following tolerances:

Recommended piston/cylinder running clearances:

	Minimum	Maximum	Preferred
Evolution) Models (Aluminum Cylinders)	.0015	.0022	.002
Big Twin Models (Cast Iron Cylinders)	.0015	.003	.0025
Sportster Models (Cast Iron Cylinders)	.003	.004	.0035

Specifications for ring end-gap are supplied with the ring sets and vary by type and size.

Note: Run engine at moderate speeds for at least 500 miles, avoiding excessive running in lower gears, in order to properly break-in new pistons and rings.