

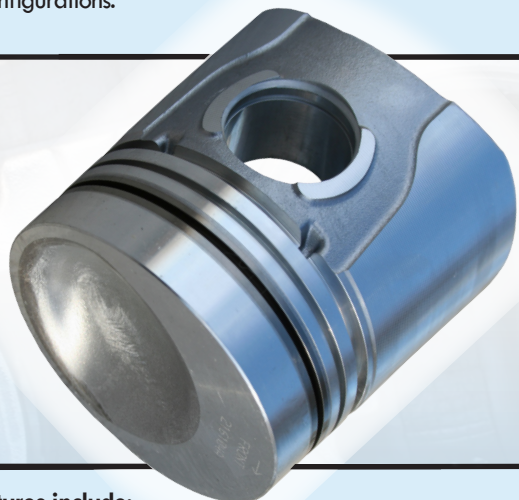


IMPROVED OIL CONTROL

for the VR Series & A Series Engines

VR/A SERIES PISTON with NI-RESIST RING CARRIER 216104A

Arrow Engine Company, in its continued effort to provide our customers with the highest quality products is now introducing the latest addition to the VR / A series engines. This new piston configuration has been totally redesigned and incorporates the latest technology and features you would expect from Arrow Engine Company. This all new piston will be interchangeable with all previous and current configurations.



Improved features include:

- Hardened Ni-resist insert in top ring groove.
- The addition of an oil drain pocket along both sides of piston pin axis.
- Two Cupped oil drain slots on each side of bottom ring groove

Benefits of the improvements include:

- Preserving engine compression during life of engine
- Reduction of deposits in the combustion chamber, liner and piston area.
- Reduction in oil consumption and blow – bye
- Improves emissions and fuel consumption
- Reduces oil contamination
- Reduces wear on key engine components such as piston, liner and engine valves.

VALVE STEM SEALS 208712N

New for the VRG220/330 Engine applications

Arrow Engine Company is pleased to introduce a new product to the VR Series line of parts. The 208712N stem seal has a Graphite/Teflon sealing element that assures oil control but will not “dry run” the valve stems. The steel outer housing diameter is extremely narrow creating sufficient clearance for close tolerance valve spring setups.

- The steel outer housing design will increase the longevity of the seal and will not crack or vibrate loose.
- Durable long life Graphite/Teflon sealing element.

When ordering the new style valve stem seals the user can order new valve guides that will already have the machining process done to the guide.

Exhaust Valve Guide: 224609A (4 for VRG220) - (6 for VRG330)

Intake Valve Guide: 224609D (4 for VRG220) – (6 for VRG330)

If using previous style guides it will be necessary to machine the outside diameter of the existing guides with the 5/8”O.D. to accommodate the new style stem seal which has a 9/16” O.D. For this reason Arrow Engine Company is offering a valve guide cutting tool to make this process faster, easier and more cost effective than waiting on the costly charges associated with the machine shop process.

Valve Guide Cutting Tool: 208712NT

To install the 208712N new style stem seal this will require the user to have the proper stem seal installation tool for ease of application and minimal damage or distortion to the sealing element and body.

Seal Installation Tool: 208712NI

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