



PRODUCT INFORMATION

NAK SEALING SOLUTIONS FOR TRACTORS



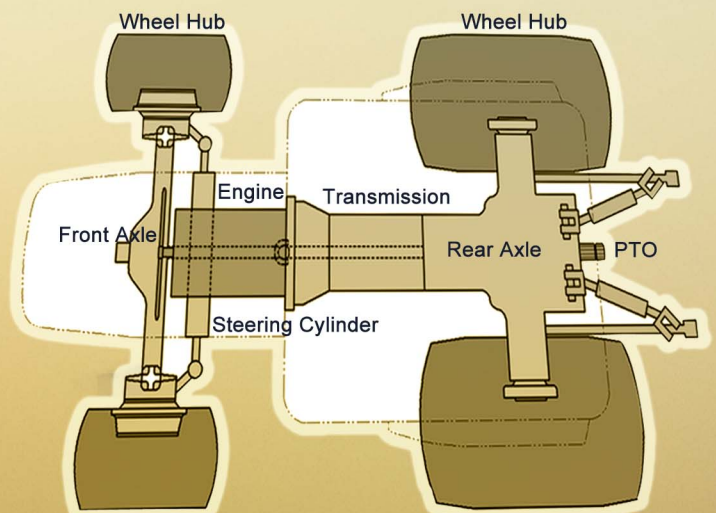
Today's agricultural operations provide multiple challenges to farmers in terms of precision farming, the maintenance of agricultural equipment and minimizing the impact on the environment. These challenges can be overcome by utilizing technological innovations with highly advanced farming equipment, maximizing efficiency and cleaner operation.

For over 40 years, NAK has been an innovative partner for agricultural equipment manufacturers, creating sealing solutions for machinery that is operated in severe conditions.



NAK offers a wide range of sealing solutions such as cassette seals, combi-seals and multiple lip configurations to withstand the intense exposure to dirt and other external contaminants.

For tractor manufacturers, NAK provides a wide range of seals for different applications, such as engine, transmission, wheel hub/axle, power steering cylinder, lift cylinder, and PTO.





Tractors are usually powered with large diesel engines that are especially good at providing high torque at low speeds.

NAK has a range of engine seals types and styles with improved high performance materials and excellent hydrodynamic helix design.



A wheel hub unit is an integral part of the tractor wheel in providing support through the wheels and protection against dust contamination.

NAK provides a wide range of seals for Tractor wheel hub applications focusing on the heavy contamination issue with advanced elastomeric materials with different sizes and designs.



Automatic transmission is a transmission type that automatically changes the gears with regard to speed of the vehicle. The primary components of automatic transmission include planetary gear sets, hydraulic system, seals and gaskets, torque converter, governor, modulator and computer. The modern automatic transmission system comprises many components and devices that are designed to achieve all the sophisticated functions demanded by acute buyers.

These components of transmission require higher stability and response.



Axle Seals



An axle is an integral component of the most practical wheeled vehicles. They serve to transmit driving torque to the wheel as well as to maintain optimum position relative to each other.

NAK provides a wide range of shaft seals for different axle applications focusing on the heavy contamination issue in these exposed locations with excluder lips and advanced elastomeric materials for various sizes and designs.

PTO Seals



PTO (Power take-off) is a feature most often found in agricultural and construction equipment. In tractors it involves the transfer of power from the powertrain to an implement or attachment through the drive shaft.

For PTO's NAK offers various seals in both standard and custom designs to suit a wide range of rigorous operating conditions.

Lift Cylinder Seals



A lift cylinder is actually a linear hydraulic actuator that is used to give an unidirectional force through a unidirectional stroke. For tractors it's an important part that helps in handling different weight variations depending on the equipment model.

Power Steering Cylinder Seals

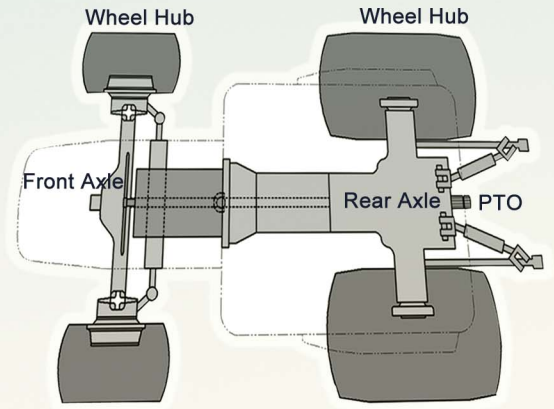


Power steering is the key part of the tractor steering system that helps in steer by augmenting the steering effort via an actuator and a hydraulic cylinder which is a part of a servo system. These systems have a direct mechanical connection between the steering wheel and the linkage that steers the wheels.

AP SEALS

are used for axle, wheel hub, PTO of tractor.

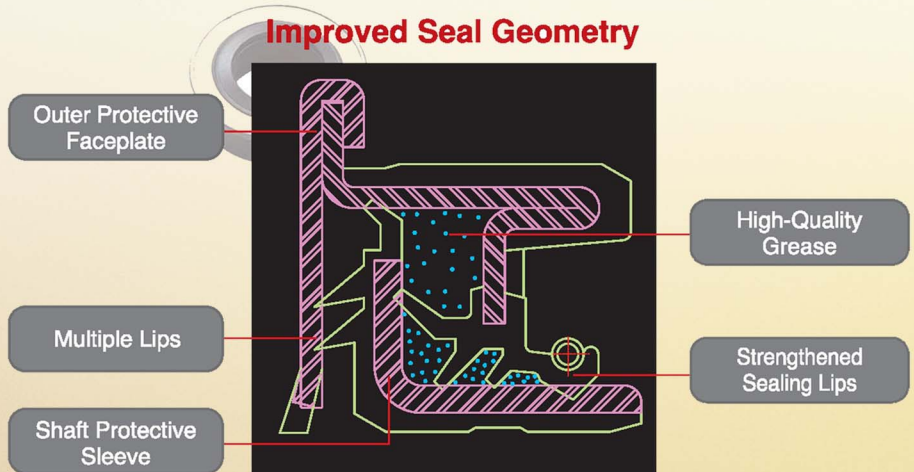
It is ideal for use where oil or grease must be held in contact with rotary shaft and bearing assemblies, while at the same time sealing against external contaminants is required. With the exceptional design of a unitized seal body and multiple lips and bumpers, the NAK AP Seal is the ultimate dirt excluder, Custom designs can be worked out and NAK will ensure that the seal is made to the exact specification.



NAK AP Seal is created for heavy-duty applications especially where seal (such as TC) that consists of a spring loaded radial sealing lip and a static dust lip often falls short in heavy duty and at the same time heavy contaminated applications. In many cases the failure is caused by the penetration of mud and water at the radial lip. NAK AP Seal resolves this problem by providing the optimal protection against mud, water and other contaminants through a variety of design features.

Features

Improved Seal Geometry


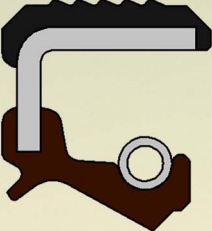
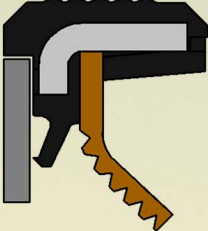
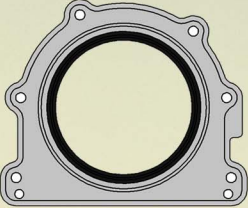


- ✓ Outer faceplate for protection against external contaminants and internal oil and grease leakage
- ✓ Multiple sealing lips which and can be varied to suit required sealing purposes
- ✓ Sleeve to protect the shaft from wear, especially when the roughness of the shaft is larger than 1.0 Ra
- ✓ Strengthened sealing lips can prevent the leak possibilities, and several bumpers can resist the backward of sleeve to enhance the sealing performance
- ✓ High-Quality Grease can avoid the entrance of water, mud, and sand into the seal and can offer the function of pre-lubrication

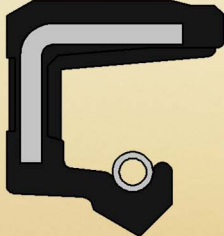
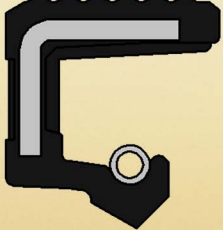

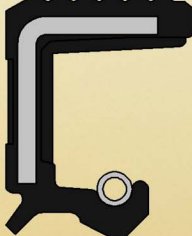


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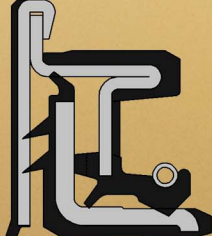
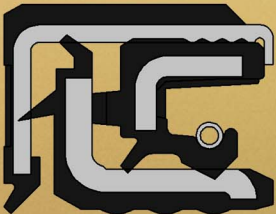
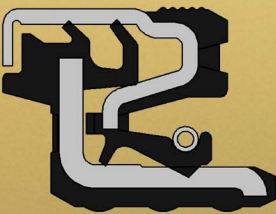

FOR ENGINE

VSG1	TGR-BI	PA11R2	CSS
			



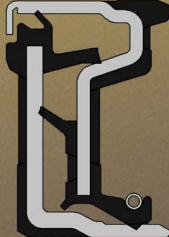

FOR TRANSMISSION

SC	SG	SBG	TG
			

FOR WHEEL HUB

AP5	AP6	ST16	ST19
			

FOR AXLE/PTO

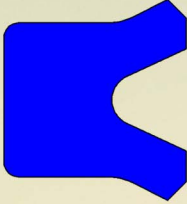
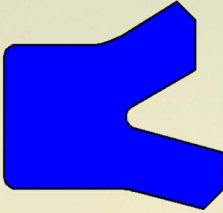

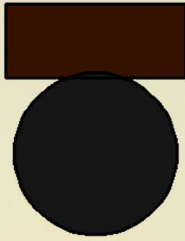
AO	AP23	ST52	CRS2
			

More technical information and customization designs are available upon request. Please contact with us for more information.

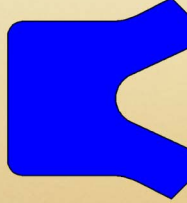
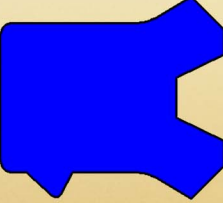
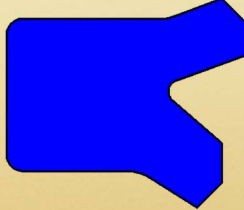
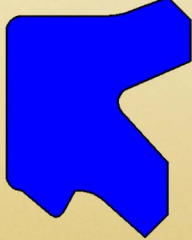
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FOR LIFT CYLINDER / POWER STEERING CYLINDER

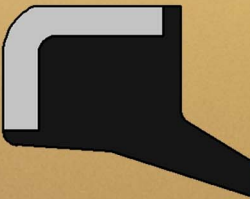

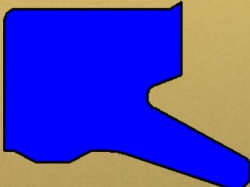

FOR PISTON

UNP	UOP	HPS	HPO
			

FOR ROD

UNP	UNP2	UIP	UIP2
			

FOR WIPER

WPM	WP2	WP21	WP22
			

More technical information and customization designs are available upon request. Please contact with us for more information.



Factory



Service office & warehouse

SUBSIDIARIES MAP



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⚠ For information on your warranty, please refer to <http://www.nak.com.tw/index.php/en/company/disclaimer>

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