HSP SEAL KIT FOR CYLINDER OVERHAUL List of Parts Number for Each Applicable Model

Applicable Machine Models	Cylinder Type	Parts No.
ZX110 ZX110-3	For ARM	YA00009241PS
	For BOOM	YA00009239PS
	For BUCKET	YA00009238PS
ZX120	For ARM	YA00001393PS
ZX120-3	For ARM	YA00001395PS
ZX120 ZX120-3	For BOOM	YA00009240PS
	For BUCKET	YA00011420PS
ZX200	For ARM	YA00001402PS
ZX200-3	For ARM	YA00001400PS
ZX200 ZX200-3	For BOOM	YA00001396PS
	For BUCKET	YA00001392PS
ZX230	For ARM	4631062PS
ZX240-3	For ARM	YA00006591PS
ZX230 ZX240-3	For BOOM	YA00006590PS
	For BUCKET	YA00006592PS
ZX330-3	For ARM	YA00006597PS
	For BOOM	YA00006596PS
	For BUCKET	YA00001398PS
	For ARM	4340621PS
ZX450	For BOOM	4340620PS
	For BUCKET	4438681PS
ZX450-3	For ARM	4653041PS
	For BOOM	4653040PS
	For BUCKET	4653042PS

Seal Kits for other machine models are planned to be sold in sequence.

ON SALE OF SEAL KIT FOR CYLINDER OVERHAUL

The Seal Kit offered in this brochure is sold under the warranty comparable to the Hitachi genuine parts warranty.

Please contact the nearest authorized Hitachi dealer for precise advice on a product or maintenance service.

These specifications are subject to change without notice.

Hitachi Construction Machinery Co., Ltd. www.hitachi-c-m.com

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Hitachi Select Parts

SEAL KIT FOR CYLINDER OVERHAUL





Reliable solutions



YOUR NEXT SELECTION

Hitachi Select Parts SEAL KIT FOR CYLINDER OVERHAUL

High performance is demanded for hydraulic cylinders that are directly coupled to the digging force of a machine and that drive an arm, boom and bucket. In recent years, hydraulic pressure in cylinders has tended to become high, and many seal parts are used in cylinders to seal high hydraulic pressure. Hitachi has uniquely developed a seal package that features a high durability, matching the characteristics of hydraulic systems of Hitachi products.

Roles of Cylinder Seal

1 PREVENTING OIL LEAK

The cylinder seal prevents oil leakage of a cylinder. Oil leakage through a deteriorated seal may cause various troubles.

2 PREVENTING IMPURITY INTRUSION

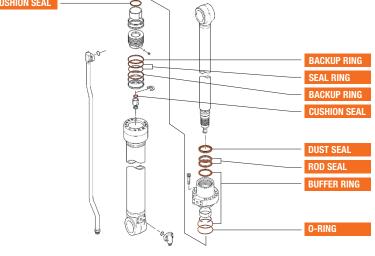
The cylinder seal prevents the intrusion of dust and moisture from the outside. Intrusion of impurities into the hydraulic line may adversely affect other hydraulic devices including pumps, cylinders, and motors by causing scoring, abnormal wear and other problems.

3 MAINTENANCE OF PRESSURE

The cylinder seal maintains pressure inside a cylinder. Low pressure inside a cylinder caused by a damaged seal lowers the front speed and digging force.

When seal deterioration or oil leakage is detected, early replacement of the seal is recommended. Be certain to use cylinder seals made of Hitachi to maintain high machine performance when cylinder seals are replaced.

HITACHI SELECT PARTS SEAL KIT COMES WITH FOLLOWING TYPES OF SEALS. **EXAMPLE FOR ARM CYLINDER OF ZX200-3**



* Seals contained in the kit differ depending on the applicable machine model. * A cylinder hose and O-ring for pipe connection are not included in the seal kit * In case of any deterioration of seals that are not contained in the kit is found, please separately make a purchase of

the corresponding seals, and replace them as early as possible

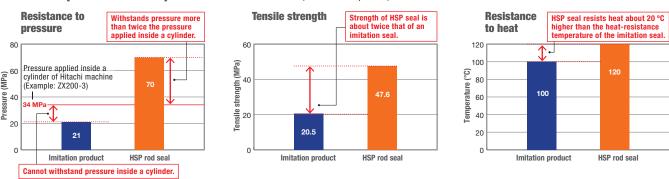
Features of Hitachi Select Parts (HSP) Seal Kit

Long life through high durability and resistance to pressure and heat

1 HIGH-QUALITY MATERIALS

The materials of high durability and resistance to pressure and heat are used for HSP Seal Kit. Imitation seals are low in resistance to pressure and heat, and cannot exhibit adequate performance inside cylinders of Hitachi machines.

Results of performance comparison tests of rod seal (In-house comparison)



2 EXTREMELY HIGH DURABILITY

Comparison test of deterioration durability of HSP Seal Kit and imitation seal was conducted. As the result, the imitation seal caused a large amount of oil leakage due to ruptures and cracks of the seal at an early stage. HSP Seal Kit did not produce major ruptures or cracks that lead to oil leakage even though seals are used for approximately 5-fold test hours compared with imitation seals. HSP Seal Kit features a 5-fold longer life compared with imitation seals.

Result of deterioration durability comparison test (heating and cylinder stroke tests) (In-house comparison) Imitation product HSP Seal Kit

ration of 43 km Leakage of Rod seal A crack or other prominent damage is occured early to the rod seal that prevents oil leakage Buffer rind Test conditions Rupture is occured to the buffer ring that mitigates Pressure: 0 to 42 MPa pressure inside a cylinder. Dust seal Stroke: 1.000 mm No deterioration is detected with a dust seal that prevents

What are Hitachi Select Parts?

intrusion of impurities after operation of 43 km.

Hitachi Select Parts have been developed for the purposes of supplying the high-quality parts exclusively for Hitachi products to its customers at reasonable prices. Hitachi Select Parts are available from a versatile lineup suiting the type and operating conditions of machines. Hitachi Select Parts are sold under the warranty comparable to the Hitachi genuine parts warranty for additional protections

