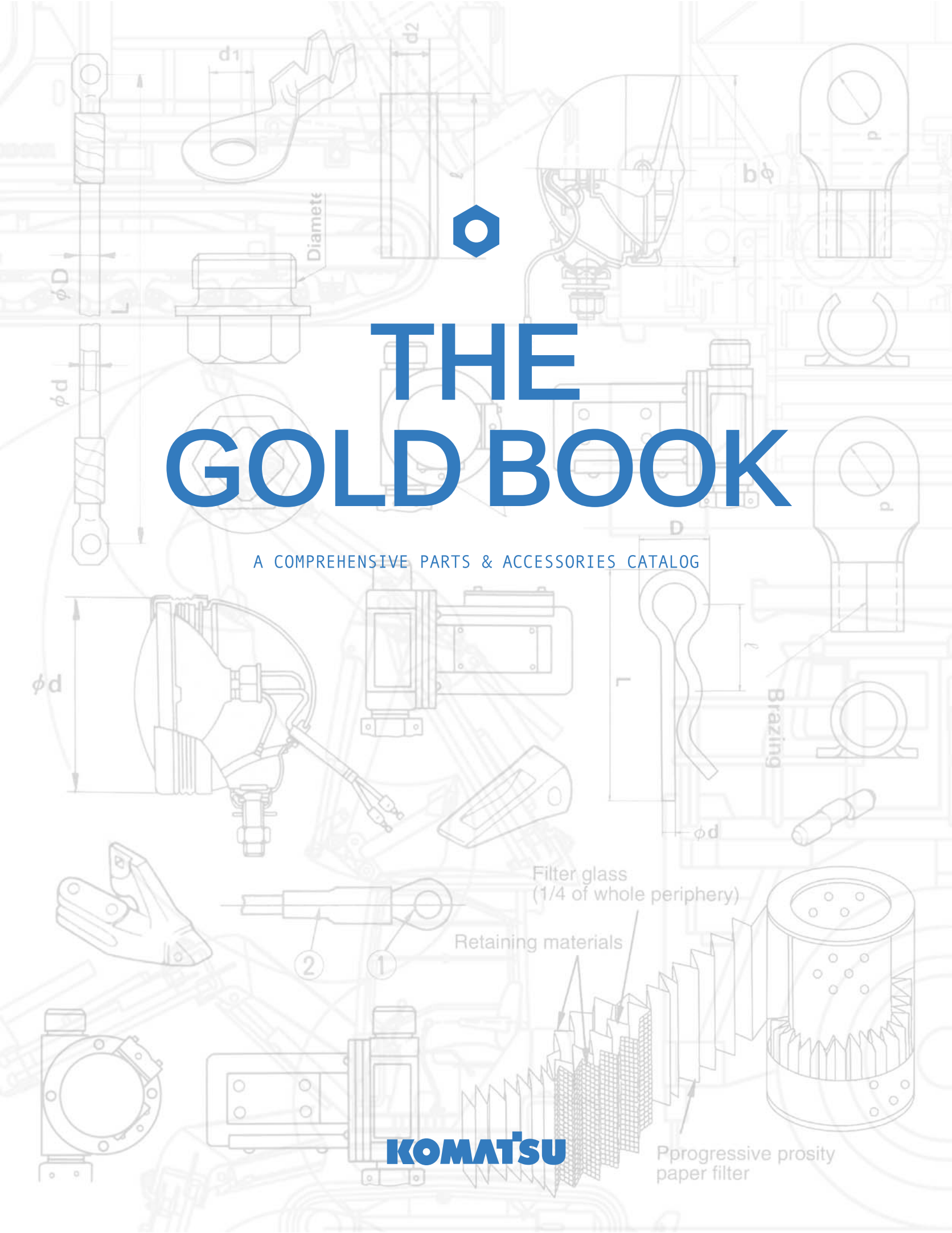
THE GOLD BOOK

A COMPREHENSIVE PARTS & ACCESSORIES CATALOG



KOMATSU

1. Features

To allow the machine to display its maximum performance and to extend its service life to the full

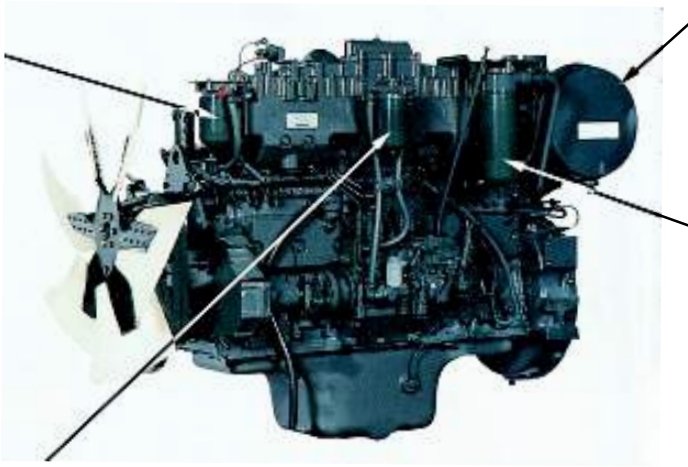
However good a machine may be, if it is used in conditions of dusty air or dirty oil, or if the fuel contains dirt or water, it will not be able to demonstrate or maintain the expected performance. The air cleaner and filters act to remove any harmful dirt, dust, wear particles, or other items, and to provide a good working environment. Among the daily maintenance items, there is a surprising tendency to place little importance on the handling of the air cleaner and filters, but this may well be because of their simple structure. Please do not forget that despite their simplicity, the air cleaner and filters play a vital role.

Engine Filters

Corrosion Resistor

The scale and dirt in the cooling water collects at places where the water flow is slow, and lowers the cooling effect. In extreme cases, it may even block the water line.

Corrosion resistors act to suspend the magnesium and calcium, which are the main components of scale. In this way, they prevent the scale from sticking to the liner heads. In addition, the corrosion resistors form a hard protective film on the surfaces in contact with the cooling water. This prevents direct contact by air bubbles with the liners, and the liner heads from corrosion.



Fuel Filter

The fuel also acts to lubricate the injection pump. The injection pump and injection nozzle are machined to extremely high precision. If there is any dirt or moisture in the fuel flowing through the injection pump or nozzle, it will cause seizure of the injection pump or clogging of the nozzle. The fuel filter removes this dirt or moisture, and supplies clean fuel to maintain engine performance and extend engine life to the maximum.

Hydraulic Filters

Hydraulic filters are the filters used in the torque converter, transmission, steering, and hydraulic circuits of the machine. The feature of these circuits is that the pressure and oil temperature are both high. Hydraulic filters act to remove the metal particles caused by wear of the sliding parts in the torque converter, transmission, and other parts of the power train, together with wear particles from the lining inside the steering and brake circuits, and the dirt and dust in the circuit. In this way, they ensure that clean oil is sent to the valves and actuators.

In these circuits, the oil passes through small orifices, and the oil pressure is finely adjusted, so clean oil is essential.

Air Cleaner

If the engine sucks in the dust in the air, there will be serious wear of the cylinders and piston rings which will result in lack of power and black exhaust smoke. At the same time, it will cause other problems such as high oil consumption. The air cleaner acts to filter out this dust, and to provide clean air to the engine, thereby maintaining engine performance and also extending engine life.

Oil Filter

The engine oil acts to lubricate, clean cool, and seal the rotating and sliding parts of the engine. If there is any dirt or water in this oil, there will be abnormal wear or seizure of the piston or bearings. The oil filter removes this dirt and moisture to enable the oil to carry out its role properly, thereby maintaining engine performance and extending engine life.

3. Comparison of genuine parts and imitation parts

WE RECOMMEND USE OF GENUINE PARTS

It is necessary to replace the cleaner and filter periodically, as you are no doubt well aware. However, it is probably true to say that it is not fully understood how important the performance and quality of the cleaner and filter are. As a result of this, we have had many complaints because of cases where imitation parts have been used for the filter instead of genuine parts during maintenance. Komatsu genuine parts have been developed as the result of thorough and repeated tests when installed on the machine from all angles of filtering efficiency and durability. To keep the machine operating in good condition and to extend its life, it is necessary not only to pay careful attention to maintenance, but also to use cleaners and filters that have been designed and developed for use on that engine.

Comparison of genuine parts and imitation parts

Let us compare here the genuine part and an actual imitation part for an oil filter. In appearance, there is no great difference from the genuine part, but if we look at the internal parts and the performance, big differences can be found.

Komatsu genuine filters feature large filtering area

- Large number of paper folds
- Paper surface is corrugated to increase surface area and to prevent interference between paper.

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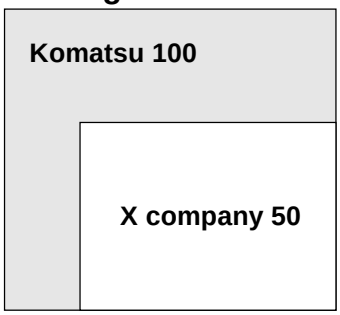
X company

Comparison of filtering area



Uniform mesh filter paper

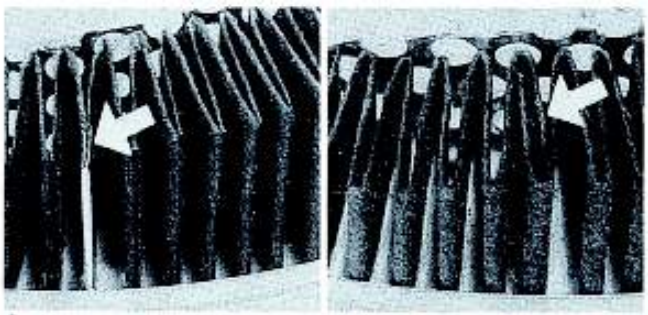
- Since specially manufactured Komatsu genuine filter paper is fine with uniform mesh, superb filtering performance is demonstrated.

KOMATSU **X company**

Never fails to trap contaminants

- Joint sections of filter paper are secured firmly by metal strips, ensuring that Komatsu genuine filters always trap contaminants.

KOMATSU **X company**



Secured by metal strips Secured by staples

4. Hybrid hydraulic filters

Hybrid Hydraulic Filter Elements

- **High performance filtration**
  Double life, lower maintenance costs
- **Keeps the oil clean**
  Increase the life of hydraulic components

The hybrid element, combining a high-performance, glass fiber filter and a paper filter with progressive porosity, ensures improved quality filtration for cleaner oil and reduced maintenance costs.

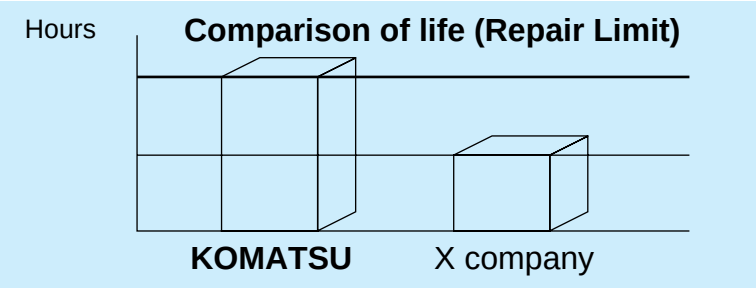
Features of Komatsu Genuine Ground Engaging Tools

Superb durability

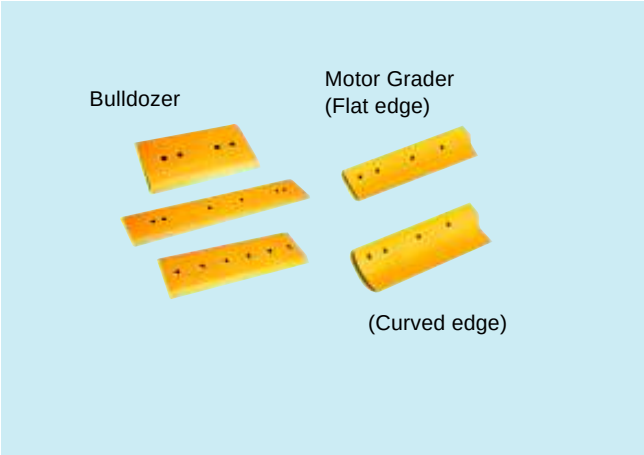
• Komatsu **genuine** GET parts are made of superior material and have undergone excellent heat treatment, providing superb durability. In addition, their high impact resistance ensures that Komatsu genuine GET parts can withstand any heavy-duty operation.

High economy

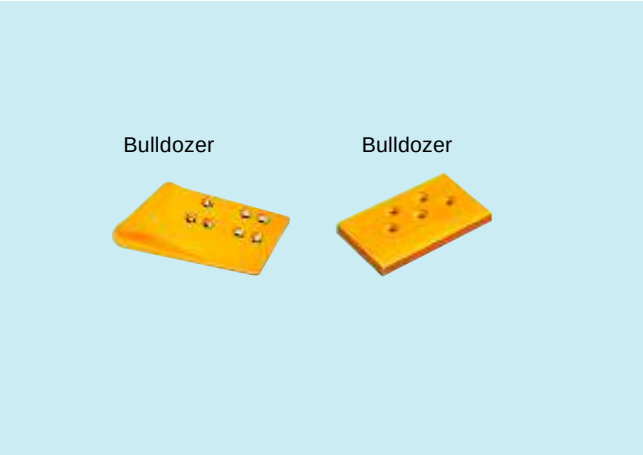
• Komatsu genuine GET parts are long-life, high economy parts with superb wear/breakage resistance.



1. Cutting Edges and End Bits



Cutting edges



End bits

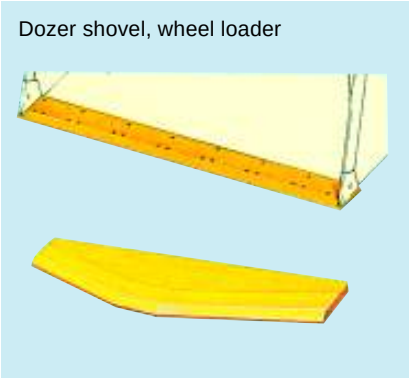
High-Silicon steel edge with high wear resistance

Komatsu genuine cutting edges are tough cutting edges made of high-silicon steel, rolled and subjected to excellent heat treatment. In addition, the combination of cutting edges and end bits provides excellent cutting quality. The high wear resistance and impact resistance of Komatsu genuine cutting edges make them superb cutting edges which are suitable for any kind of operation. Moreover, the rear of the edge is chamfered to prevent loosening, wear, or breakage of mounting bolts.

Cutting edges are doubly economical

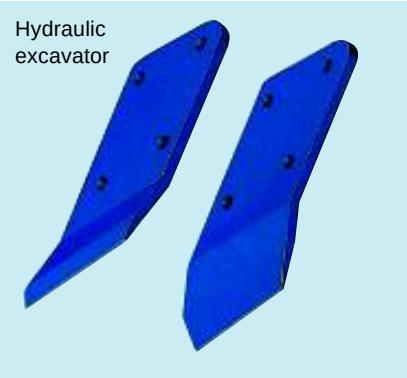
Komatsu cutting edges are economical because they can be turned over, thereby providing double the wear life. (Not applicable to cutting edges for motor graders.)

2. Edges, Side Corners and Side Cutters



Edges

Side corners



Side cutters

Excellent cutting quality

The combination of Komatsu **genuine** side cutter and bucket teeth ensures a sharp digging force which will increase your production output.

Excellent bucket life

Komatsu genuine side cutters protect the side face of the bucket and extend bucket life. In addition, they increase the bucket width and capacity, and at the same time, reduce the maintenance cost and operating costs of the bucket.

Edges

Dozer shovels

Remarks *1: Large bucket *2: 2500 mm width
*3: 2630 mm width

Model	Serial No.	Edge	Q'ty	Side corner	Q'ty
D20/D21S-7	61001-	103-70-22121	1	-	
D20/D21Q-7	61001-	10K-70-11120	1	-	
D31S-20	41001-	113-70-32120	1	113-70-22130	2
		113-Y02-1120*1			
D31Q-20	41001-	11K-70-32120	1	113-70-22130	2
D57S-1	6501-	135-70-32210	1	135-70-33230	1
				135-70-33240	1
D66S-1	1400-	142-70-12520	1	142-923-1140	1
				142-923-1150	1
D75S-5	7001-	145-70-43122*2	1	145-70-43140	1
		145-70-43331*3	1	145-70-43150	1

4. Ripper Points

Short points

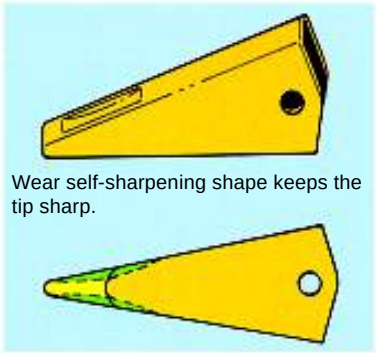
Short points have high breakage resistance and can display substantial power in heavy-duty operations such as on hard rock or hard gravel.

Long points

Long points have a large wear tolerance and are suitable for use in operations where there is no risk of breakage.

Selection of points to match the specific job

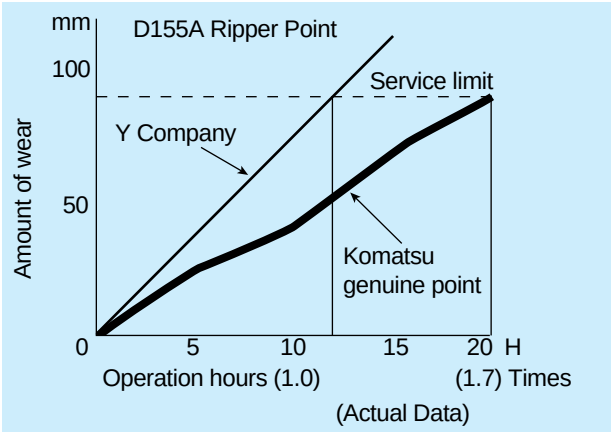
Komatsu **genuine** ripper points are economical and can be selected to match the specific operation.



Excellent penetration

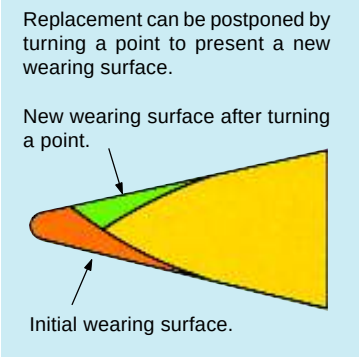
Komatsu **genuine** ripper points features the Komatsu exclusive self-sharpening profile, ensuring that they always remain sharp and provide unchanging penetration. These points are long-life points made of high-silicon steel with excellent wear and impact resistance.

Comparative wear



Reversible points

Komatsu **genuine** ripper points are economical because they are reversible, thereby providing double the wear life.



Tough, reliable Komatsu genuine undercarriage parts

State-of-the-art technology

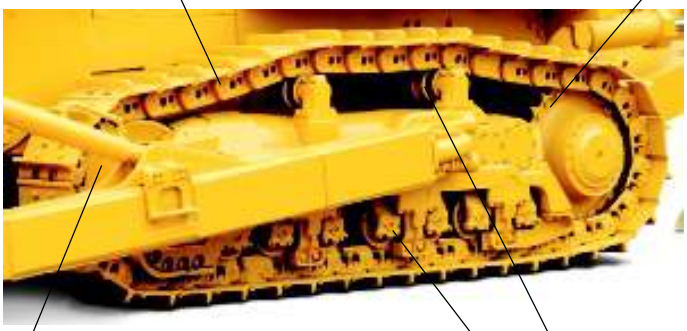
Integration of years of technological advancement along with Komatsu's manufacturing expertise combine to provide a high level of quality without equal.

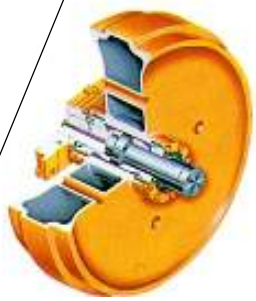
Proven durability

Computer selection of undercarriage materials and treatment assures superior wear performance.

Track links

The hardness of the track link tread and side-surface improves durability and increases strength against impact load. Dust seals are equipped to prevent sand and soil from entering the gap between track links and bushing. Lubricated track link assemblies are also available.





Idlers

The hardened tread increases strength against wear, which results in greater durability.

Sprocket teeth

The sprocket teeth are hardened through a unique heat treatment method for added strength. Deep hardening enhances durability and increases strength against impact load.

Track shoes

Various track shoes are available to meet any working condition. The grouser hardness strengthens the track shoes against wear and impact load. Excellent ground penetration guarantees a large drawbar pull.

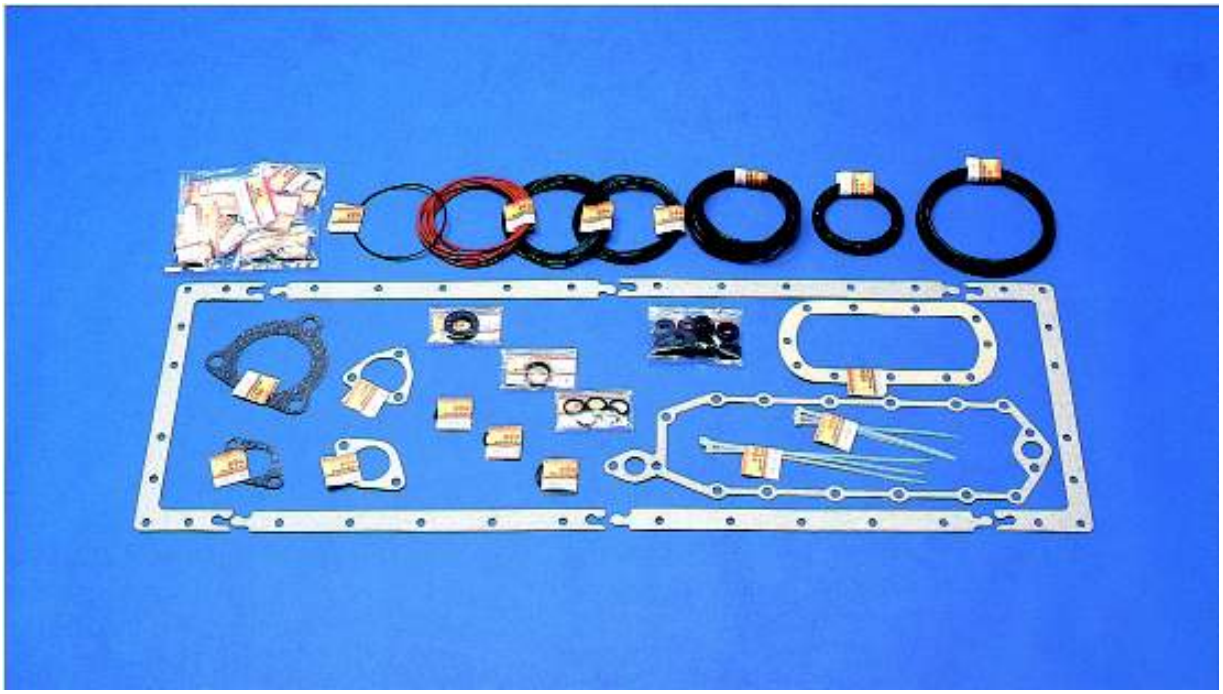
Rollers

The track/carrier rollers have superior durability due to a special heat treatment process. Floating seals prevent sand and soil from entering.

Engine Maintenance Parts

1. Gasket KIT

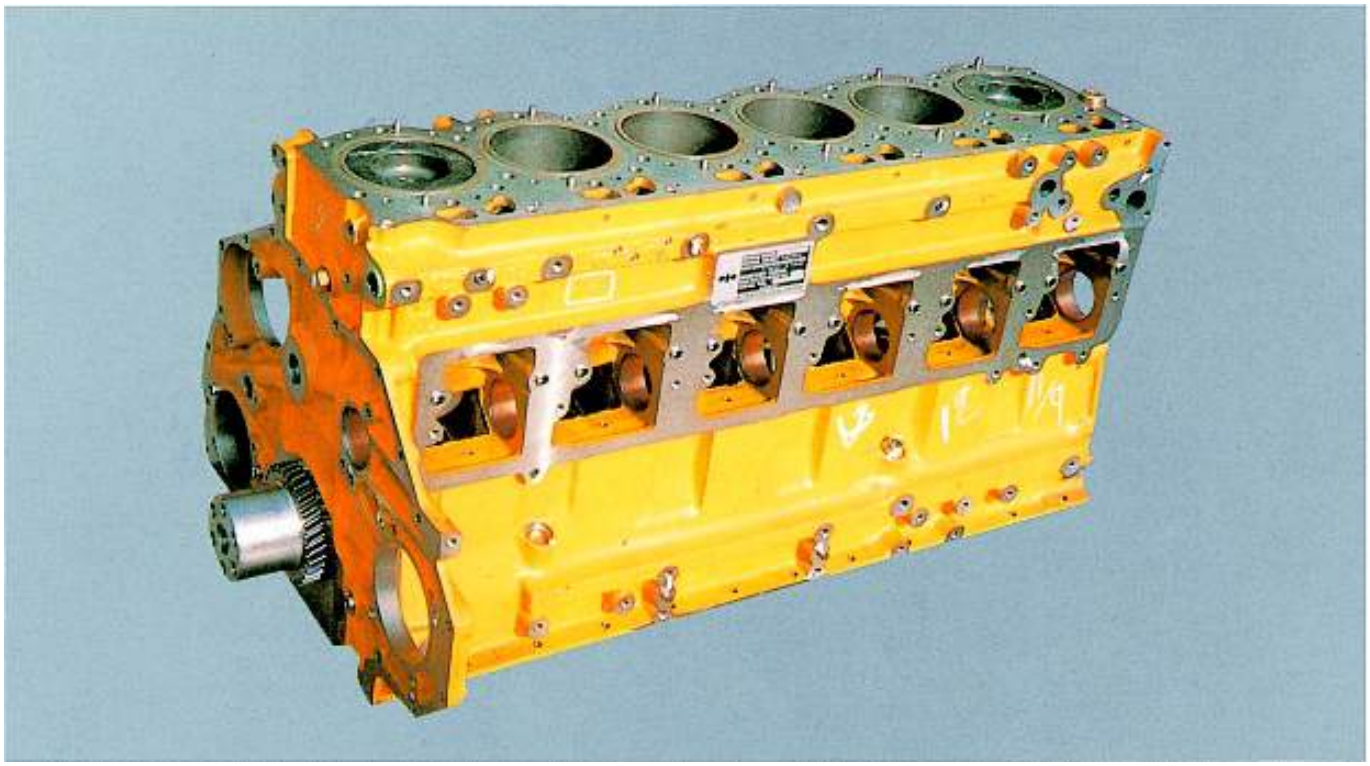
For cylinder head



For cylinder block

This kit includes the O-rings, seals, and gaskets needed when repairing the cylinder head and block.

2. Short Blocks



Features

- All assemblies contain crankshaft with gear, cylinder block, oil cooler, pistons, liners, connecting rods, piston rings and bearings.
- Standard new parts warranty is 6 months, from date of purchase by initial user.
- Special packaging film is used which insures cleanness during shipping.

Customer’s benefits

- Reduce repair time and machine down time for engine overhauls.
- Wide product coverage reduces inventory requirements.
- Cost effective. Assembly is less expensive than sum of the individual parts.
- Eliminate confusion due to improper parts.

1. Hydraulic Cylinder Seal KIT

The seal kit consists of all the O-rings and seals needed when rebuilding hydraulic cylinders.

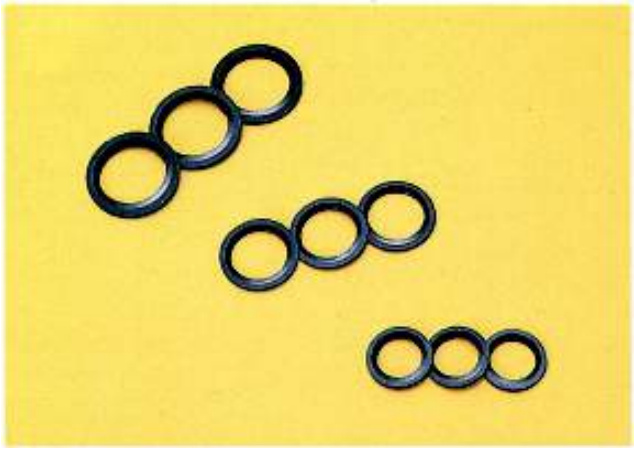
Benefits:

- It is cheaper to purchase a seal kit than to buy individual parts.
- Furthermore, it is more convenient for ordering and inventory control purposes, to use only one part number.

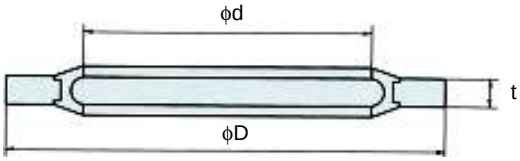
2. O-rings

Available size	
Diameter (D)	**Thickness (W)**
2.8 - 499.4 mm	1.78 - 6.9 mm

3. Seal Washers



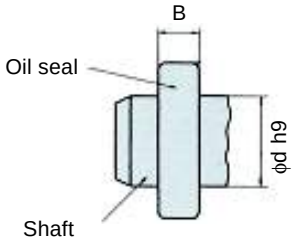
These are mainly used for the joints of hoses in the fuel system.
Operating pressure: Max. 20kg/cm^2
Operating temperature range: -60 to +120°C

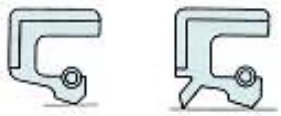


Available size	
Diameter (ϕd)	**Thickness (t)**
5.8 - 29.75 mm	1.2 - 1.6 mm

4. Oil Seals

These are used to prevent oil from leaking around rotating shafts.
They cannot be used on sliding surfaces.



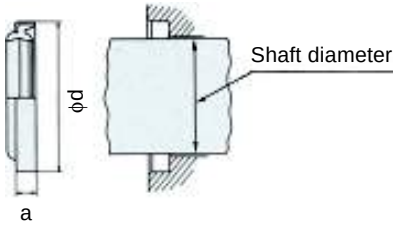


Single and double lip are available

Available size	
Diameter (ϕd)	**Thickness (B)**
20 - 150 mm	10 - 14 mm

5. Dust Seals

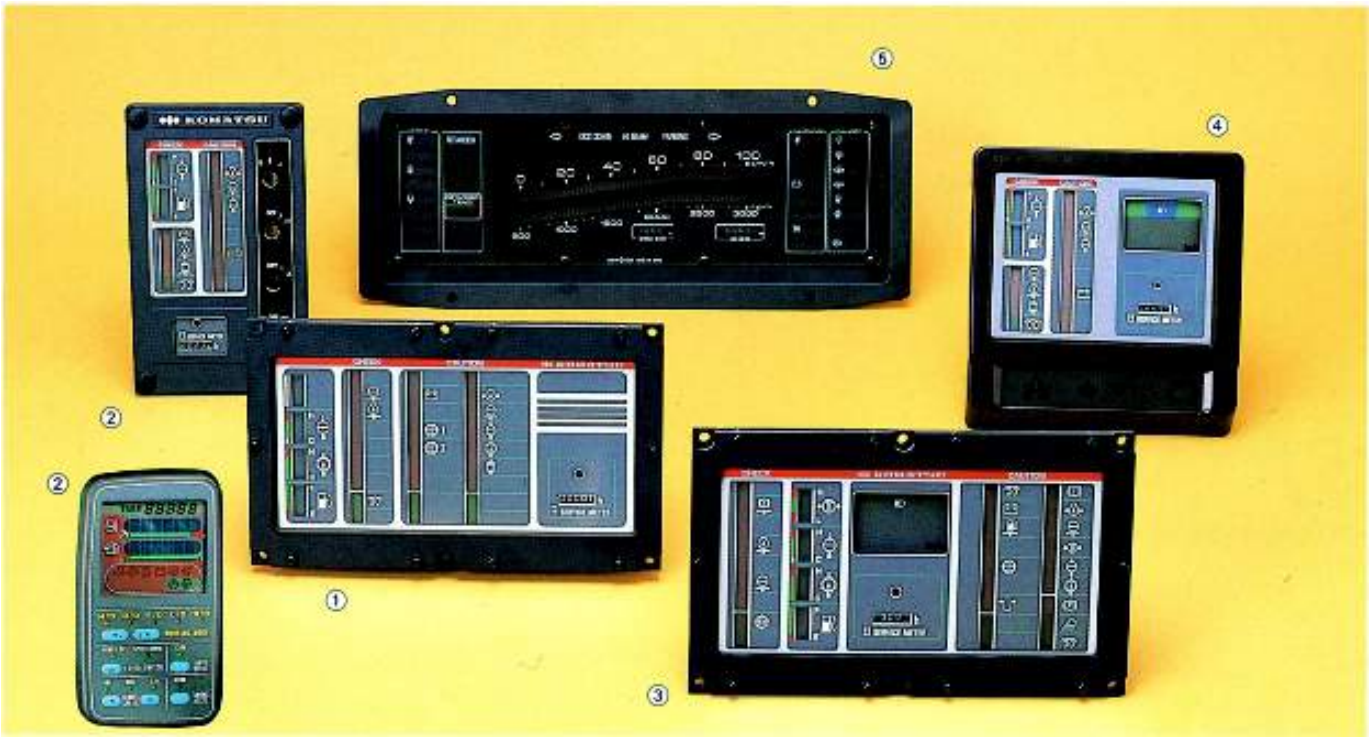
These are used to prevent dust from entering around sliding shafts.



Available size		
Diameter (ϕd)	**Thickness (t)**	**Shaft diameter**
32 - 255 mm	6 - 12 mm	20 - 230 mm

Meters and Gauges

1. Monitor Panels



- The electronic vehicle monitoring system is a system to inform the operator of the condition of the machine. It consists of sensors installed in various parts of the machine, and observes the condition of the machine and processes the information speedily, then displays the condition on the monitor panel.
- The electronic vehicle monitoring system consists of the monitor panel, sensors, controller, warning buzzer, warning lamp and power source.
- Gauges can be supplied as individual parts.

Index No.	Product	Model	Part No.
①	Bulldozer Dozer Shovel	D135A-2	**7831-61-2000**
		D155A-2	**7831-63-2000**
		D155A-3	**7831-68-1100**
		D155AX-3	**7831-68-2102**
		D155AX-5	**7831-68-3000**
		D275A-2	**7831-64-2001**
		D375A-2	**7831-64-2001**
		D375A-3	**7831-64-2001**
		D475A-2	**7831-64-2001**
		D475A-3	**7831-67-4000***2
			7831-64-4000*3
		D575A-2	**7831-64-2001**
		D66S-1	**7861-01-1000**
②	Hydraulic Excavator	PC60-7	**7834-73-2101**
		PC100-6	**7824-70-4100**
		PC120-6	**7824-70-4100**
		PC128US-2	**7834-75-2002**
		PC200-6	**7824-72-4100**
		PC220-6	**7824-72-4100**
		PC228USLC-1	**7824-88-7001**
		PC300, LC-5	**7824-72-3100**
		PC400, LC-5	**7824-72-3100**
		PC600-6	**7834-76-5000**
		PC650-5	**7861-29-1100**
		PC1000, LC-1	**7831-76-2000**
		PC1600-1	**7831-79-2000**

Index No.	Product	Model	Part No.
③	Wheel Loader	WA250-1	**7831-51-5000***1**, 6000***1
		WA320-1	
		WA380-1	**7831-51-5100***1**, 6100***1
		WA420-1	
		WA470-1	
		WA500-1	
		WA600-1	
		WA700-1	
		WA800-2	
④	Motor Grader	GD525A-1C	**7831-71-6100***1
		GD625A-1C	**7831-71-6100***1
		GD725A-1	**7831-71-6100***1
		GD825A-2	**7861-51-1600***1 **235-06-00010**
⑤	Dump Truck	HD325-6	**7831-32-2000**
		HD465-5	**7831-32-2000**
		HD785-3	**7831-32-2000**

*1: Individual part
*2: With shoe slip control
*3: Without shoe slip control

For details, please contact your Komatsu Distributor.

Brakes

For brakes which ensures the safety of your operators and the protection of your vehicles, use genuine Komatsu brake replacement parts which have excellent heat, abrasion, and wear resistance.

1. Brake Bands, Linings and Rivets

Machine model	Brake band ass'y	Q'ty	Lining	Q'ty	Rivet	Q'ty
D20/D21-7	**103-33-31321**	2	**103-33-31330**	4	**103-33-31160**	64
D31-20	**113-33-43112**	2	**113-33-05013**	2	**04412-00514**	64
D37-5	**113-33-43112**	2	**113-33-05013**	2	**04412-00514**	64
D40/D41-3	**120-33-31112**	2	**120-33-31131**	14	**04412-00512**	112
D50/D53-17	**130-33-72103**	2	**130-33-72122**	10	**04412-00512**	120
D57S-1	**135-33-31101**	2	**130-809-5223**	20	**04412-00512**	120
D58-1	**130-33-72103**	2	**130-33-72122**	10	**04412-00512**	120
D75A-1	**144-33-52111**	2	**144-33-51610**	8	**04412-00512**	128
D75S-5	**145-33-51200**	2	**145-33-51220**	10	**04412-00512**	120
D85-21	**154-33-13100**	2	**142-33-13110**	12	**04412-10511**	120
D135A-2	**15A-33-12100** **15A-33-12200**	1 1	**15A-33-12110** **15A-33-12120** **15A-33-12130**	20 2 2	**04412-00514**	168
D155A-2	**175-33-00082** **175-33-00092**	1 1	**175-33-29310** **175-33-29320** **175-33-29330**	2 6 2	**04412-00514**	198
D155C-1	**175-33-00021**	2	**170-33-12132** **178-33-12130**	4 6	**04412-00514**	198
D355A-3	**195-33-12501** **195-33-12601**	1 1	**195-33-12531**	20	**04412-00518**	260
D355C-3	**195-33-11303**	2	**195-33-11192**	10	**04412-00519**	260
D355A-5	**195-33-00100** **195-33-00200**	1 1	**195-33-11163**	10	**04412-00518**	260