

HITACHI

Reliable solutions

FLUIDS AND LUBRICANTS

POCKET GUIDE • TRUE QUALITY GOES A LONG WAY



70th
Anniversary



SUPPORT CHAIN

Welcome to Hitachi Construction Machinery
pocket guide of superior lubricants designed to
prolong the life of your equipment.

CONTENTS

▶ ENGINES	4
15W40 DH-1 ENGINE OIL	
15W40 DH-1 PREMIUM ORANGE	
▶ HYDRAULICS	6
HYDRAULIC OIL TP46	
GENUINE MULTI HYDRAULIC	
▶ TRANSMISSION OIL	8
ZW TRANSMISSION OIL 10W	
▶ COOLANTS	10
ES COMPLEAT™	
HITACHI GENUINE LONG-LIFE COOLANT -37°C:	
▶ GEAR OIL	12
GEAR OIL GL-4 90	
▶ PINS AND BUSHES	13
HITACHI GREASE EP-2	
▶ STRUTS	13
NEOCON™	
▶ AXLES	14
TKTT15150-4 TH	
▶ GREASE PUMPS	15



ENGINES

FEATURES:

Our engine oil is blended to ensure the optimum performance of your machine and tailored to suit its specification. Hitachi Genuine Engine Oil DH-1 has been designed especially for use in Hitachi Construction Machinery engines, with or without muffler filters. It is ideal for the latest emission standard engines installed in our ZX-6 and ZW-6 machines. For Zaxis-3 and older models, Hitachi Genuine Engine Oil DH-1 is recommended.

BENEFITS:

15W40 DH-1 ENGINE OIL:

A high performance Diesel Engine Oil ensures a clean engine, free movement of mechanical parts, offers excellent protection in continuous high-speed operations.

- ▶ Long engine life
- ▶ Reduces sludge
- ▶ Reduces environmental load
- ▶ Actual tests done at Hitachi Japan confirmed exceptional performance



15W40 DH-1 PREMIUM ORANGE:

- ▶ Superior diesel engine oil for mining machines that ensures reduced maintenance and longer engine life
- ▶ Most suitable engine oil for Hitachi Mining Machines
- ▶ Specially designed engine oil for large excavators and rigid dump trucks
- ▶ Certified to meet both the Cummins CES20077 and the MTU category 2 standards

Both Genuine oils meet strict JASO (Japanese Automobile Standard Organisation) criteria. These are standards for engines manufactured in Japan and used in large excavators with continuous high-speed operation.

Due to the harsh conditions in which your construction machinery operates, it is vital to use the correct oil and replace it periodically – even the highest quality engine oil deteriorates over time.



HYDRAULICS

FEATURES:

By using Hitachi Genuine Hydraulic Oil, specially designed for use in Hitachi Construction Machinery, it will keep your equipment functioning at peak levels, will protect hydraulic components from wear and will reduce your oil cost, thanks to its long life span (4,000 hours*). **If not mixed with other brands.*

Hydraulic Oil gives superior low-temperature performance, greater fuel efficiency and is more environmentally friendly than other oils. Changing attachments frequently, particularly in dusty environments, can lead to oil contamination.

Hitachi Genuine Hydraulic Oil TP46 was developed especially for machines using multiple attachments, including breakers. And thanks to its high viscosity index, it is also perfectly suitable for hot climates.

The recommended oil change interval for breaker attachments is 1,500 hours and 2,000 hours for other attachments.

BENEFITS:

HYDRAULIC OIL TP46:

- ▶ Hitachi Genuine Hydraulic Oil TP46 is so advanced, it improves performance, provides increased protection even under high load conditions
- ▶ Superior sludge control that protects equipment from wear
- ▶ Superior resistance to heat and reduces operating temperatures
- ▶ Better fuel efficiency and environment friendly

- ▶ Hydro-cracked base oil through advanced refining technology + Zinc free additives = 4,000-hour superior performance
- ▶ Hitachi Genuine Hydraulic Oil TP46 is so advanced, it improves performance, provides increased protection even under high load conditions

GENUINE HYDRAULIC OIL MULTI

- ▶ High performance lubricant dedicated to high pressure hydraulic circuits
- ▶ Drain intervals of 2000 hours
- ▶ Protects the hydraulic components
- ▶ Suitable under all extreme temperature variations



TRANSMISSION OIL

FEATURES:

Hitachi Genuine Transmission Oil is designed specifically for optimum performance. When your Hitachi machine is operating 24 hours a day in their harsh environment. Using Hitachi Genuine Transmission Oil will ensure optimum performance from your machine. Our Transmission Oils help maintain a smooth gear operation due to its excellent lubricity. It contributes to reduced downtime caused by rising oil viscosity and preventing internal parts from degrading and corroding.

Highly compatible for use with rubber seals, this product will not cause them to deteriorate, which results in reduced maintenance costs.

BENEFITS:

ZW TRANSMISSION OIL 10W

- ▶ Extends driveline component life
- ▶ Very fluid at low temperatures, immediately active after the start
- ▶ Excellent anti-wear and anti-corrosion properties, increasing the durability of the lubricated components
- ▶ Ensures smooth shifting of gears
- ▶ Prevents oil seal deterioration
- ▶ Anti-foaming agent prevents air bubbles and foam, therefore improving lubrication





COOLANTS

FEATURES:

Hitachi Genuine Coolants have been developed to increase reliability and productivity in your machines. If your machine works in extreme temperatures, using Hitachi Genuine Long-Life Coolant will protect it against rust and corrosion.

BENEFITS:

ES COMPLEAT™:

- ▶ Extended service coolant
- ▶ Provided antifreeze and anti-boil protection
- ▶ Superior liner pitting and corrosion protection
- ▶ Superior aluminium and solder protection
- ▶ Capable with gaskets, elastomers and other non-metallics in the engine
- ▶ Optimise cooling system performance and water pump life
- ▶ Contains proprietary scale inhibitors

- ▶ Compatible with all other antifreeze/coolants
- ▶ For all heavy-duty diesel and gas engines
- ▶ Additive levels easily maintained via DCA4 liquid, or DCA chemical filters
- ▶ Easy to use test strips monitor glycol and additive levels providing protection against coolant dilution

HITACHI GENUINE LONG-LIFE COOLANT -37°C:

Hitachi Genuine Long-Life Coolant -37°C is a long life, ready-to-use coolant based on monoethylene and organic inhibitors of corrosion. This coolant can be used in all cooling systems of Hitachi Construction Machinery, even working under extreme temperature variations. Fully approved by Hitachi Construction Machinery after extensive testing was carried out in the most severe conditions. Formulated with Organic additives, it ensures a long-term action and offers maximum protection against any type of corrosion, erosion and cavitations, even at high temperatures.

- ▶ Excellent anti-freezing performance ensuring maximum protection against freezing, up to -37°C
- ▶ Excellent protection against rust and corrosion
- ▶ Increases lifetime of water pumps
- ▶ Compatible with elastomeric seals and paints
- ▶ Contains no silicates, phosphates, chromates, nitrates or boron

GEAR OIL

FEATURES:

Using Hitachi Genuine Gear Oil can help to significantly reduce your maintenance costs. Our Genuine Gear Oil is now 25% more cost effective than other OE competitors and although being more expensive than generic oil, using Hitachi Genuine Gear Oil will reduce wear of gears and bearings. With original LW (Low wax) base oil, special friction modifiers, detergent dispersants, antioxidants and viscosity index improvers, Hitachi Genuine Gear Oil is highly adaptable to changes in temperature. It provides protection at high temperatures and saves on maintenance cost and fuel consumption.

BENEFITS:

GEAR OIL GL-4 90

- ▶ High Quality Gear Oil that protects gears working at heavy loads against any damage, provides protection at high temperature and saves on maintenance cost and fuel consumption
- ▶ Excellent low-temperature specifications to prevent problems at low temperatures
- ▶ Superior protection against premature wear and tear of all moving parts
- ▶ Significant improvement in fuel consumption performance
- ▶ Ensures smooth and positive shifting under severe working conditions

PINS & BUSHES

FEATURES:

High Quality Lithium Base Grease is specially formulated to provide outstanding lubrication performance in Hitachi Construction Machinery and heavy-duty machinery, designed to use in all Hitachi Construction Equipment.

BENEFITS:

HITACHI GREASE EP-2

- ▶ Usage temperature range: -20°C to 130°C
- ▶ Suitable for all types of Hitachi Construction and Mining equipment.
- ▶ Specially formulated with highly refined mineral oil with various additives such as anti-rust agent and extreme pressure (E.P.) agent.

STRUTS

HITACHI NEOCON™

Hitachi's NEOCON™ suspension design uses propriety silicone-based fluid and helium gas. Together with the more flexible suspension cylinders, that are shock absorbent, this is the smoother and more stable way to operate. Improved isolation means reduced impact loading on the structural members of the machine resulting in longer equipment life and productivity.

- ▶ Improve isolation, stability and control
- ▶ Provide necessary viscosity and stability over wide range of temperatures
- ▶ Non-corrosive properties protect equipment





GREASE PUMPS

Our high-pressure portable Grease Pump gives quick and effortless greasing in everyday lubrication such as greasing of excavators and other earth moving equipment, agricultural and automotive equipment. Hitachi Grease Pumps offer hands free and fatigue free operation. The pump operates using the foot lever, which greatly reduces effort and allows high pressure greasing with the highest comfort. It can also be operated by hand when under low machinery.

BENEFITS:

- ▶ The pump holds up to 10 kg of grease, which is 25% more than most other pumps in the market
- ▶ The pump is operated by a single person
- ▶ It has been designed with all moving parts submerged in the same grease, thereby staying lubricated at all times
- ▶ Moving parts create a wave action in grease, auto removing air pockets and eliminating the use of a follower plate
- ▶ The pump delivers 2 gms of grease per stroke & has a working pressure of 8,700 PSI (600 BAR)
- ▶ The pump is capable of developing 10,000 PSI (690 BAR)
- ▶ The pump comes complete with the new revolutionary QUICK LOCK that is designed for quick & convenient disengagement of the coupler from the grease fitting under high pressure

AXLES

TKTT15150-4TH

Hitachi's new Hitachi's Genuine Axle oil is designed specifically for use in our wheel loader axles. The lubricant is exclusively developed for lubrication of our axles equipped with torque proportional or limited slip differentials and wet disc brakes. With the benefits to wet brake durability, anti-break shudder noise reduction, fuel economy and optimal gear and bearing protection. Hitachi's Genuine Axle oil is the best value for money.

BENEFITS:

- ▶ Wet brake durability
- ▶ Anti wet brake judder noise
- ▶ Fuel economy
- ▶ Optimal gear and bearing protection

HITACHI

Reliable solutions

www.hitachicm.co.za

