



JCB LUBRICANTS | NO COMPROMISE



JCB LUBRICANTS PERFORMANCE AND QUALITY.

TO ENSURE THAT JCB OILS CAN OFFER THE HIGHEST LEVELS OF PERFORMANCE AND QUALITY MATCHED TO YOUR MACHINE WHATEVER ITS MANUFACTURER, JCB HAVE INTRODUCED A RANGE OF OILS OFFERING ALTERNATIVE LEVELS OF PERFORMANCE AND QUALITY.

JCB PERFORMANCE LEVELS ARE DIFFERENTIATED BY DIFFERENT COLOR LABELS:

JCB ULTRA PERFORMANCE (UP)



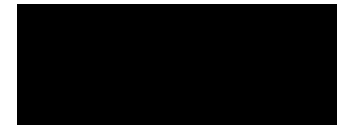
Silver

JCB OPTIMUM PERFORMANCE (OP)



Grey

JCB EXTREME PERFORMANCE (EP)



Black

JCB HIGH PERFORMANCE (HP)



JCB Yellow

Increasing level of quality and performance ↑

The comprehensive range of JCB lubricants has been recommended by JCB engineers to ensure that your engine, transmission, hydraulic system and other key components receive the optimum level of protection, lengthening component life and keeping down your costs of ownership.

Industry standard approvals are also quoted to allow JCB oils to be used in other non JCB machines.



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HYDRAULIC FLUID.

TOP QUALITY HYDRAULIC FLUID MATCHED TO YOUR MACHINE'S HYDRAULIC SYSTEM. MAXIMIZES EFFICIENCY AND HELPS MINIMIZE DOWNTIME. GENUINE JCB HYDRAULIC FLUIDS FEATURE HIGH QUALITY BASE OIL AND SOPHISTICATED ADDITIVES, WHICH HELP TO MAXIMIZE COMPONENT LIFE.

Choosing anything other than the recommended JCB oil is a false economy which can lead to inefficient machine operation, component wear and ultimately premature component failure.

Hydraulic fluid testing

JCB hydraulic fluids undergo a rigorous program of testing to ensure that they provide the maximum performance and protection for your JCB machine and its hydraulic system.

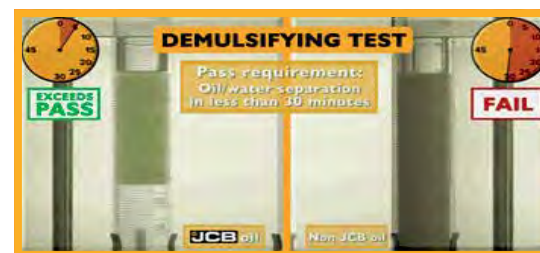
Below are examples of how JCB hydraulic fluids outperform other hydraulic fluids that claim to be the same.

Demulsifying test:

JCB hydraulic fluid is designed to help prevent water contamination.

In the Demulsifying test the industry standard requirement is for hydraulic fluid and water to separate, at the latest, 30 minutes after being mixed together, so the water can be filtered out of the system. If water is not removed quickly from the hydraulic system it can cause:

- General reduction in the efficiency of the hydraulic fluid.
- Component corrosion.
- Reduction in viscosity and subsequent premature component wear.
- Reduction in cooling properties within the hydraulic fluid.



JCB oil separates from water in just 5 minutes! - Some low cost, poor quality oils fail to separate, even after 30 minutes. **In this test the JCB product clearly outperformed both the low cost alternative and the industry standard requirement.**

Foam test:

This is a simple test where air is bubbled through a heated hydraulic fluid to ascertain its resistance to foaming.

Minimizing air bubbles in your hydraulic fluid caused by foam is essential as air bubbles cause cavitation which in turn can cause:

- Spongy hydraulic control response.
- Heat retention (overheating) in the hydraulic fluid tank.
- Poor oil flow around the hydraulic system.
- Component wear, (due to an inconsistent film of oil on components).
- Ultimately premature failure.



It can be clearly seen that poor quality low cost oils do not contain the same level of anti-foam additives. **In this test the JCB product clearly outperformed the low cost alternative.**



JCB STANDARD:
4002/2800

JCB HYDRAULIC FLUID UP 32

JCB Ultra Performance Hydraulic Fluid 32 is specifically developed for construction equipment operated under wide extremes of temperature. The product provides outstanding low and high temperature viscosity characteristics. JCB UP Hydraulic Fluid 32 is also a long term stable fluid with optimum anti-wear performance.

BENEFITS

- Ultra anti-wear performance, based on ash-less anti-wear additive technology.
- Suitable for arctic conditions due to outstanding low temperature viscosity.
- Long term stable fluid viscosity through excellent shear stability characteristics of the selected viscosity index improver.
- JCB UP32 surpassed the ISO 11158 HV requirements.
- An ideal cold climate hydraulic fluid.
- Ideal for JCB machines in extreme cold climate conditions.

PERFORMANCE CLASSIFICATION

DIN 51524 PART 3 CATEGORY HVLP, JCB UP32 SURPASSED THE ISO 11158 HV REQUIREMENTS.

MANUFACTURERS' STANDARDS

SWEDISH DEFENCE FSD 8401, VOLVO STD 1286 07, SS 155434 CATEGORY AV.

Description	Pack Size	Part Number
JCB Hydraulic Fluid UP 32	5 Gallon/18.9L	4002/2805



JCB STANDARD:
4002/2000

JCB HYDRAULIC FLUID OP 46

JCB Optimum Performance Hydraulic Fluid 46 is a shear stable top tier hydraulic oil, designed to give the best possible response and performance for machines that require a high performing hydraulic fluid. In addition it has been developed for off-highway equipment and other hydraulic systems exposed to wide temperature fluctuations. This is a Maximum Efficiency Hydraulic Fluid (MEHF).

BENEFITS

- Very stable viscosity behavior, due to the use of a very shear stable viscosity modifier.
- Optimum anti-wear performance, based on a zinc dialkyldithiophosphate additive.
- Wide application temperature range through low pour point and outstanding low and high temperature viscosity characteristics.
- Trouble-free operation due to the unique combination of outstanding demulsibility, foam, air release, hydrolytic stability and filterability.

PERFORMANCE CLASSIFICATION

DIN 51524 PART 3 CATEGORY HVLP.

MANUFACTURERS' STANDARDS

ISO 11158 CATEGORY HV, SS 155434 CATEGORY AV, DENISON HF-0, HF-1, HF-2, AFNOR 48-603 CATEGORY HV.

Description	Pack Size	Part Number
JCB Hydraulic Fluid OP 46	1 Gallon/3.7L	4002/2001
JCB Hydraulic Fluid OP 46	5 Gallon/18.9L	4002/2005



JCB STANDARD:
4002/2700

JCB HYDRAULIC FLUID OP 68

JCB Optimum Performance Hydraulic Fluid 68 is a shear stable top tier hydraulic oil, designed to give the best possible response and performance for machines that require a high performing hydraulic fluid. In addition it has been developed for off-highway equipment and other hydraulic systems exposed to wide temperature fluctuations. This is a Maximum Efficiency Hydraulic Fluid (MEHF).

BENEFITS

- Very stable viscosity behavior, due to the use of a very shear stable viscosity modifier.
- Optimum anti-wear performance, based on a zinc dialkyldithiophosphate additive.
- Wide application temperature range through low pour point and outstanding low and high temperature viscosity characteristics.
- Trouble-free operation due to the unique combination of outstanding demulsibility, foam, air release, hydrolytic stability and filterability.

PERFORMANCE CLASSIFICATION

DIN 51524 PART 3 CATEGORY HVLP.

MANUFACTURERS' STANDARDS

ISO 11158 CATEGORY HV, SS 155434 CATEGORY AV, DENISON HF-0, HF-1, HF-2, AFNOR 48-603 CATEGORY HV.

Description	Pack Size	Part Number
JCB Hydraulic Fluid OP 68	5 Gallon/18.9L	4002/2705

HYDRAULIC FLUID.



JCB HYDRAULIC FLUID HP 15

A premium, shear stable anti-wear ISO 15 mineral hydraulic fluid, formulated for good flow characteristics at low ambient temperatures.

JCB STANDARD:
4002/0500

BENEFITS

- Wide application temperature range (through outstanding low and high temperature viscosity characteristics).
- Trouble-free operation due to the unique combination of outstanding demulsibility, foam, air release, hydrolytic stability and filterability.
- Long term stable fluid viscosity through excellent shear stability characteristics of the selected viscosity index improver.
- JCB HP 15 Hydraulic fluid meets the requirements of most off highway equipment manufacturers.

PERFORMANCE CLASSIFICATION

DIN 51524 PART 3 CATEGORY HVLP.

MANUFACTURERS' STANDARDS

ISO 6743-4, HV, DENISON HF-0, BOSCH REXROTH, VICKERS, US STEEL, CINCINNATI MILACRON.

Description	Pack Size	Part Number
JCB Hydraulic Fluid HP 15	1 Gallon/3.7L	4002/0503



JCB HYDRAULIC FLUID HP 32

A high quality hydraulic fluid, combining anti-wear performance with excellent filterability in both wet and dry conditions. Specially formulated from solvent refined base oil, containing a superior additive package, which not only provides outstanding performance but also reduces pump, motor and valve wear. JCB Hydraulic Fluid HP 32 provides excellent protection against corrosion and metal fatigue, combined with superb filterability characteristics ensuring quality throughout service life.

JCB STANDARD:
4002/1000

BENEFITS

- Lasts throughout its prescribed service life (due to high thermal and oxidation stability for high temperature applications).
- Trouble-free operation due to the unique combination of outstanding demulsibility, foam, air release, hydrolytic stability and filterability characteristics.
- Can also be applied in other industrial equipment such as screw-air compressors and lightly loaded gears.

PERFORMANCE CLASSIFICATION

DIN 51524-2: HLP, ISO 6743-4: HM.

MANUFACTURERS' STANDARDS

DENISON HF-1, HF-2, HF-0, VICKERS I 286-S, M 2950-S, CINCINNATI MACHINE P68, P69, P70 US STEEL I27, I36, BOSCH REXROTH, SAUER DANFOSS.

Description	Pack Size	Part Number
JCB Hydraulic Fluid HP 32	5 Gallon/18.9L	4002/1025



JCB HYDRAULIC FLUID HP 46

A top quality hydraulic fluid combining anti-wear performance with excellent filterability in both wet and dry conditions. Specially formulated from solvent refined base oil, containing a superior additive package, which not only provides outstanding performance but also reduces pump, motor and valve wear. JCB Hydraulic Fluid HP 46 provides excellent protection against corrosion and metal fatigue, combined with superb filterability characteristics ensuring quality throughout service life.

JCB STANDARD:
4002/0800

BENEFITS

- Lasts throughout its prescribed service life (due to high thermal and oxidation stability for high temperature applications).
- Suitable for use in both JCB and non-JCB machines.
- Trouble-free operation due to the unique combination of outstanding demulsibility, foam, air release, hydrolytic stability and filterability characteristics.
- Can also be applied in other industrial equipment such as screw-air compressors and lightly loaded gears.

PERFORMANCE CLASSIFICATION

DIN 51524-2: HLP, ISO 6743-4: HM.

MANUFACTURERS' STANDARDS

DENISON HF-1, HF-2, HF-0, VICKERS I 286-S, M 2950-S, CINCINNATI MACHINE P68, P69, P70, US STEEL I27, I36, BOSCH REXROTH, SAUER DANFOSS.

Description	Pack Size	Part Number
JCB Hydraulic Fluid HP 46	1 Gallon/3.7L	4002/0801
JCB Hydraulic Fluid HP 46	5 Gallon/18.9L	4002/0805
JCB Hydraulic Fluid HP 46	55 Gallon/208L	4002/0803
JCB Hydraulic Fluid HP 46	258 Gallon/977L	4002/0845



JCB HYDRAULIC FLUID HP 68

A top quality anti-wear hydraulic oil, specially designed to meet the stringent filterability requirements of modern tools and electro-hydraulic systems, for use in machines where accurate indexing, positioning and sequencing depends on oil quality. Manufactured from the highest quality solvent refined base stocks and special additives. It is fully inhibited to keep systems free of corrosion and sludging and is highly resistant to foaming.

JCB STANDARD:
4002/0700

BENEFITS

- Lasts throughout its prescribed service life (due to high thermal and oxidation stability for high temperature applications).
- Suitable for use in JCB and many non-JCB machines.
- Trouble-free operation due to the unique combination of outstanding demulsibility, foam, air release, hydrolytic stability and filterability characteristics.
- Can also be applied in other industrial equipment such as screw-air compressors and lightly loaded gears.

PERFORMANCE CLASSIFICATION

DIN 51524-2: HLP, ISO 6743-4: HM.

MANUFACTURERS' STANDARDS

DENISON HF-1, HF-2, HF-0, VICKERS I 286-S, M 2950-S, CINCINNATI MACHINE P68, P69, P70, US STEEL 127, 136, BOSCH REXROTH, SAUER DANFOSS.

Description	Pack Size	Part Number
JCB Hydraulic Fluid HP 68	5 Gallon/18.9L	4002/0705
JCB Hydraulic Fluid HP 68	55 Gallon/208L	4002/0701



ENGINE OIL.

YOU CAN BE SURE OF THE PERFORMANCE AND CONFIDENT OF THE PROTECTION OFFERED BY JCB ENGINE OILS. THE HIGH QUALITY BASE OILS AND CAREFULLY SELECTED ADDITIVES ENSURE JCB ENGINE OILS MEET OR EXCEED ALL INTERNATIONAL SPECIFICATIONS.

Choosing anything other than the recommended JCB oil is a false economy which can lead to inefficient machine operation, component wear and ultimately premature component failure.

Engine oil testing

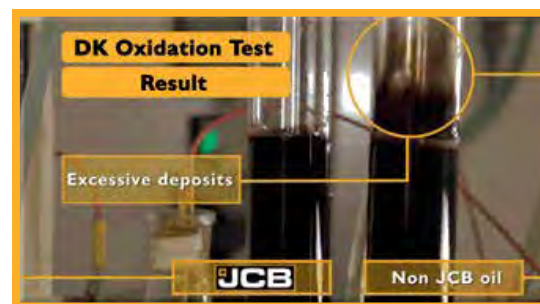
JCB engine oils undergo a rigorous program of testing to ensure that they provide the maximum performance and protection for your JCB machine and its engine.

The DK Oxidation Test is a typical example of how JCB engine oils outperform other engine oils that claim to be the same.

DK Oxidation test:

JCB Engine oil is blended to ensure that the oil continues to provide efficient lubrication throughout its designated service interval life. Some poor quality, low cost oils begin to breakdown leading to excessive deposits which cause reduced lubrication and subsequently increased wear.

The DK Oxidation test is an industry standard test and shows how oxidation can form within engine oil. The image below is after 192 hours and shows excessive deposits forming with poor quality low cost engine oil, while there are no deposits from the JCB oil.



In this test the JCB product clearly outperformed both the low cost alternative and the industry standard requirement.



**JCB STANDARD:
4001/2900**

JCB ENGINE OIL UP 15W40

JCB UP 15W40 is aimed at Tier 4i and T4 Final Diesel engines that utilize DOC (Diesel Oxidation Catalyst), DPF (Diesel Particulate Filter) and SCR (Selective Catalytic Reduction) aftertreatment technology to meet emissions legislation. JCB UP 15W40 is an Ultra High Performance Diesel Engine Lubricant designed for the lubrication of the latest high performance USA EPA and EURO diesel engines, in particular where these engines are equipped with after treatment systems (such as DOC, DPF & SCR) operating on low sulphur diesel fuel (50 ppm or below) and under severe heavy duty conditions.

BENEFITS

- A Tier 4i and Tier 4F engine oil.
- Specially developed formulation for ACEA E9 and API CJ-4 applications.
- Minimizes diesel particulate filter (DPF/CRT) plugging.
- Protects catalytic after treatment systems (SCR).
- Excellent protection against borepolishing and cam wear.
- Provides quick lubrication after cold starting thus limiting engine wear.
- Prevents engine fouling due to combustion soot.

PERFORMANCE CLASSIFICATION

API CK-4/CJ-4/CI-4 PLUS/CI-4, ACEA E9.

MANUFACTURERS' STANDARDS

CAT ECF-2/ECF-3, JASO DH-2, CUMMINS CES 20081, DEUTZ DQC III-10 LA, DETROIT DIESEL 93K218, MACK EO-O PREMIUM PLUS, MAN M 3275-1/3575, MB 228.31, MTU DDC TYPE 2.1, RENAULT RLD-3, VOLVO VDS-4, ALLISON C-4.

Description	Pack Size	Part Number
JCB Engine Oil UP 15W40	1 Gallon/ 3.7 L	4001/2901
JCB Engine Oil UP 15W40	5 Gallon/18.9L	4001/2905



JCB ENGINE OIL UP 5W40

A full synthetic oil that is designed to protect your engine against the harshest of environments. The full synthetic base fluid combined with a unique additive system also delivers low viscosity fuel savings performance with no compromise in durability. Ideal for Tier 4 and Tier 4 F exhaust emission regulations.

**JCB STANDARD:
4001/3400**

BENEFITS

- Protects exhaust gas treatment systems.
- Excellent wear protection, even under constant full load.
- Durable protection against aggressive acids and corrosion during the whole oil drain interval.
- Reduced contaminant emissions.
- Outstanding soot handling.
- Beneficial for older diesel engines independently of the emission level.

PERFORMANCE CLASSIFICATION

API CK-4/CJ-4, ACEA E9/E7.

MANUFACTURERS' STANDARDS

CAT ECF-2/ECF-3, CUMMINS CES 2008I, DETROIT DIESEL 93K214, 93K215, 93K218, DEUTZ DQC II-10 LA, FAWDE Q/XC 3135-2007, MACK EO-O PREMIUM PLUS, MAN M 3575, MB 228.31, RENAULT RLD-3, VOLVO VDS-4.

Description	Pack Size	Part Number
JCB Engine Oil UP 5W40	1 Gallon/3.7L	4001/3401
JCB Engine Oil UP 5W40	5 Gallon/18.9L	4001/3405
JCB Engine Oil UP 5W40	258 Gallon/977L	4001/3445



JCB ENGINE OIL UP 10W30

JCB Engine Oil UP 10W-30 is an Ultra High Performance Diesel Engine Lubricant with Medium Sulphated Ash, Phosphorus and Sulphur content (Mid SAPS) designed for the lubrication of the latest USA EPA 2007 and EURO 5, T4i, T4F diesel engines. It is a low viscosity SAE 10W-30 grade which offers fuel economy improvement.

**JCB STANDARD:
4001/3000**

BENEFITS

- A Tier 4i and Tier 4F engine oil.
- Specially developed formulation for ACEA E9 and API CJ-4 applications.
- Minimises diesel particulate filter (DPF/CRT) plugging.
- Protects catalytic after treatment systems (SCR).
- Excellent protection against bore polishing and cam wear.
- Provides quick lubrication after cold starting thus limiting engine wear.
- Prevents engine fouling due to combustion soot.

PERFORMANCE CLASSIFICATION

API CK-4/CJ-4/SN, ACEA E9.

MANUFACTURERS' STANDARDS

CAT ECF1 -a/ECF-2/ECF-3, CUMMINS CES 2008I, DEUTZ DQC III-10 LA, MACK EO-O PREMIUM PLUS, MAN M 3575, MTU DDC TYPE 2.1, MB 228.31, RENAULT RLD-3, VOLVO VDS-4.

Description	Pack Size	Part Number
JCB Engine Oil UP10W30	5 Gallon/18.9L	4001/3005



JCB UNIVERSAL AGRICULTURAL OIL

A truly multipurpose oil which is suitable for naturally aspirated, turbocharged engines, transmissions (including wet brake systems) and hydraulics. JCB Universal Agricultural Oil can also be used in power steering and power take-offs where an engine oil is specified. This SAE 10W30 viscosity product has good fluidity, ensuring easy starting and rapid hydraulic response even in the most severe weather conditions.

**JCB STANDARD:
4004/0300**

BENEFITS

- Truly universal application oil.
- Suitable for engines, transmissions and hydraulic systems.
- Excellent fluidity, ensuring easy starting and rapid hydraulic response.
- Rationalization reduces storage and handling costs and eliminates risk of incorrect application.
- Excellent wear rate protection extends engine and component life.
- Can be used for power steering and PTOs where an engine oil is specified.

PERFORMANCE CLASSIFICATION

API CI-4, API GL-4, ACEA E7.

MANUFACTURERS' STANDARDS

DEUTZ DQC I-02, ZF TE-ML 06A, 06B, 06C, 06F, 07B, AFNOR NFE 48603 HV, ALLISON C-4, CASE MS 1207, 1209, 1210, 1230, CNH MAT 3505, 3509, 3525, 3526, FORD M2C48-C3, M2C86-B, M2C134-D, M2C159-B/C, JOHN DEERE JDM J20C, NEW HOLLAND 82009201/2/3, NH 410B, 420A, MASSEY FERGUSON CMS M 1145, 1144, 1143, 1139, 1135, SAE J306: SAE 75W-80.

Description	Pack Size	Part Number
JCB Universal Agricultural Oil	5.2 Gallon/20L	4004/0305

GEAR OIL.

GENUINE JCB GEAR OILS OFFER IMPROVED PERFORMANCE AND HIGH LEVELS OF WEAR PROTECTION. THEY ARE SUITABLE FOR A WIDE RANGE OF APPLICATIONS.

Gear and Transmission oil testing

JCB gear and transmission oils undergo a rigorous program of testing to ensure that they provide the maximum performance and protection for your JCB machine and its gear and transmission systems.

JCB Engineering standards lay down performance levels and criteria for JCB Gear and Transmission oil which EXCEED OIL INDUSTRY STANDARDS. The Copper Strip Test is just an example of how JCB Gear and Transmission oils outperform other gear and transmission fluids that claim to be the same.

Copper strip test:

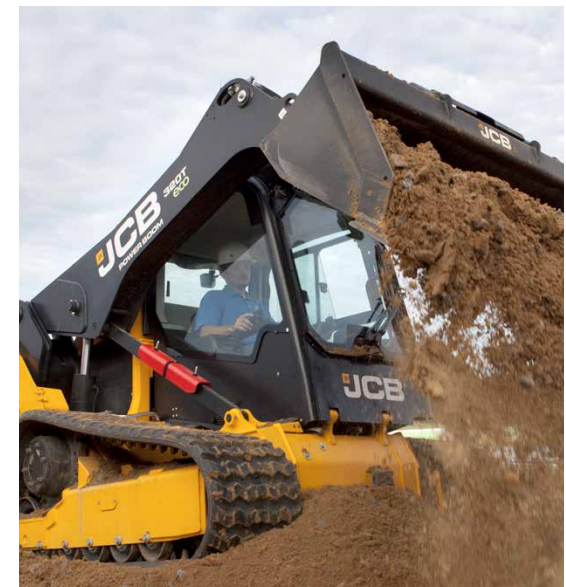
This is a test to evaluate how an oil will corrode copper containing materials.

Minimizing corrosion is key to preventing premature wear and tear or even failure of gears and transmissions.

As you can see from the discoloring on the copper strip below, poor quality low cost oils will corrode copper components far quicker than JCB oils.



In this test the JCB product clearly outperformed the low cost alternative.





JCB STANDARD:
4000/3900

JCB GEAR OIL HP LS PLUS

An SAE 80W90 multipurpose limited slip gear oil designed for use in hypoid gears, axles and final drives. It is especially suited for those with wet brake plates and limited slip (LS) differentials. This oil also offers reduced 'Brake Chatter' and improved mechanical transmission component life along with excellent extreme pressure protection. JCB Gear Oil LS Plus can be used for both on and off-highway equipment.

BENEFITS

- GL-5 gear oil performance in combination with wet brake and limited slip differential capabilities offering excellent wear protection.
- Excellent dynamic braking performance for smooth and safe brake operation.
- Significant reduction in brake chatter improving mechanical transmission component life.
- Excellent extreme pressure protection.
- Can be used in LSD applications.
- Compatible with seal materials.

PERFORMANCE CLASSIFICATION

API GL-5.

MANUFACTURERS' STANDARDS

ZF TE-ML 05C, 12C, 16E, 21C, MIL-L-2105 D, FORD M2C104-A, JOHN DEERE JDM J 11 F, LIEBHERR, NH 520 B, VOLVO 97310.

Description	Pack Size	Part Number
JCB Gear Oil HP LS Plus	5 Gallon/18.9L	4000/3905



GEAR OIL.



JCB STANDARD:
4000/2200

JCB GEAR OIL HP PLUS

A high performance gear oil specifically developed for the JCB axle and transmission, no other product will provide the chatter control and brake performance in the JCB manufactured powertrain that JCB Gear Oil plus will. Its unique enhanced viscosity stability provides consistent protection throughout its prescribed service interval. Its unique JCB formulation offers outstanding squawk and chatter control in oil immersed brake systems.

BENEFITS

- JCB Gear Oil HP Plus has been designed and developed specifically to provide optimum performance of the wet brake mechanism incorporated into the axle/transmission systems manufactured by JCB.
- Provides excellent chatter control, preventing brake noise in JCB axles.
- Maintains braking efficiency in wet brake systems, with reduction in noise and friction plate wear.
- Extends equipment life by protecting against rust and corrosion.
- Contains rust and corrosion inhibitors.
- Contains a very effective anti-foam agent.
- Compatible with all conventional seal materials.

PERFORMANCE CLASSIFICATION

JCB STANDARD 4000/2200.

MANUFACTURERS' STANDARDS

JCB STANDARD 4000/2200 UNIQUE TO JCB.

Description	Pack Size	Part Number
JCB Gear Oil HP Plus	1.3 Gallon/5L	4000/2202
JCB Gear Oil HP Plus	5.2Gallon/20L	4000/2205
JCB Gear Oil HP Plus	55.2 Gallon/209L	4000/2203
JCB Gear Oil HP Plus	258 Gallon/978L	4000/2245



JCB STANDARD:
4000/0300

JCB GEAR OIL HP 90

A heavy duty multipurpose gear oil, formulated for gear type transmissions, spiral bevelled and hypoid drive axles, operating within a very wide oil temperature range and worm gear final drives. It contains extreme pressure additives to give high level wear protection under high speed, high torque and shock loading conditions.

BENEFITS

- Helps extend drive-train component life.
- Good protection against wear and scoring even under heavy duty and shock loading conditions.
- High resistance to thermal and chemical degradation during use.
- Protects against rust and corrosion.
- Very shear stable formulation.
- Proven oxidation stability.
- Compatible with seal materials.

PERFORMANCE CLASSIFICATION

API GL-5.

MANUFACTURERS' STANDARDS

MAN 342 Type M1, MB 235.0, ZF TE-ML 07, 08, 16C, 17B, 19B, 21A, FORD M2C9102-A, JOHN DEERE JDM J11E, VOLVO 97310.

Description	Pack Size	Part Number
JCB Gear Oil HP 90	5 Gallon/18.9L	4000/0305



JCB STANDARD:
4000/4800

JCB GEAR OIL OP 75W140

JCB Optimum Performance Gear Oil 75W140 is a synthetic automotive gear lubricant. JCB Optimum Performance Gear Oil 75W140 is recommended for heavy duty drive-line components such as rear-axes, final drives and selected manual transmissions, requiring special low temperature fluidity to reduce fuel consumption or facilitate gear shifting.

BENEFITS

- Provides excellent low temperature fluidity.
- Facilitates gear shifting at low temperatures.
- Reduces drive-line operating temperatures.
- Reduces internal friction.
- Provides good wear protection under heavy duty condition.
- Extends drive-line component life.
- Prohibits corrosion.
- Protects against rust.

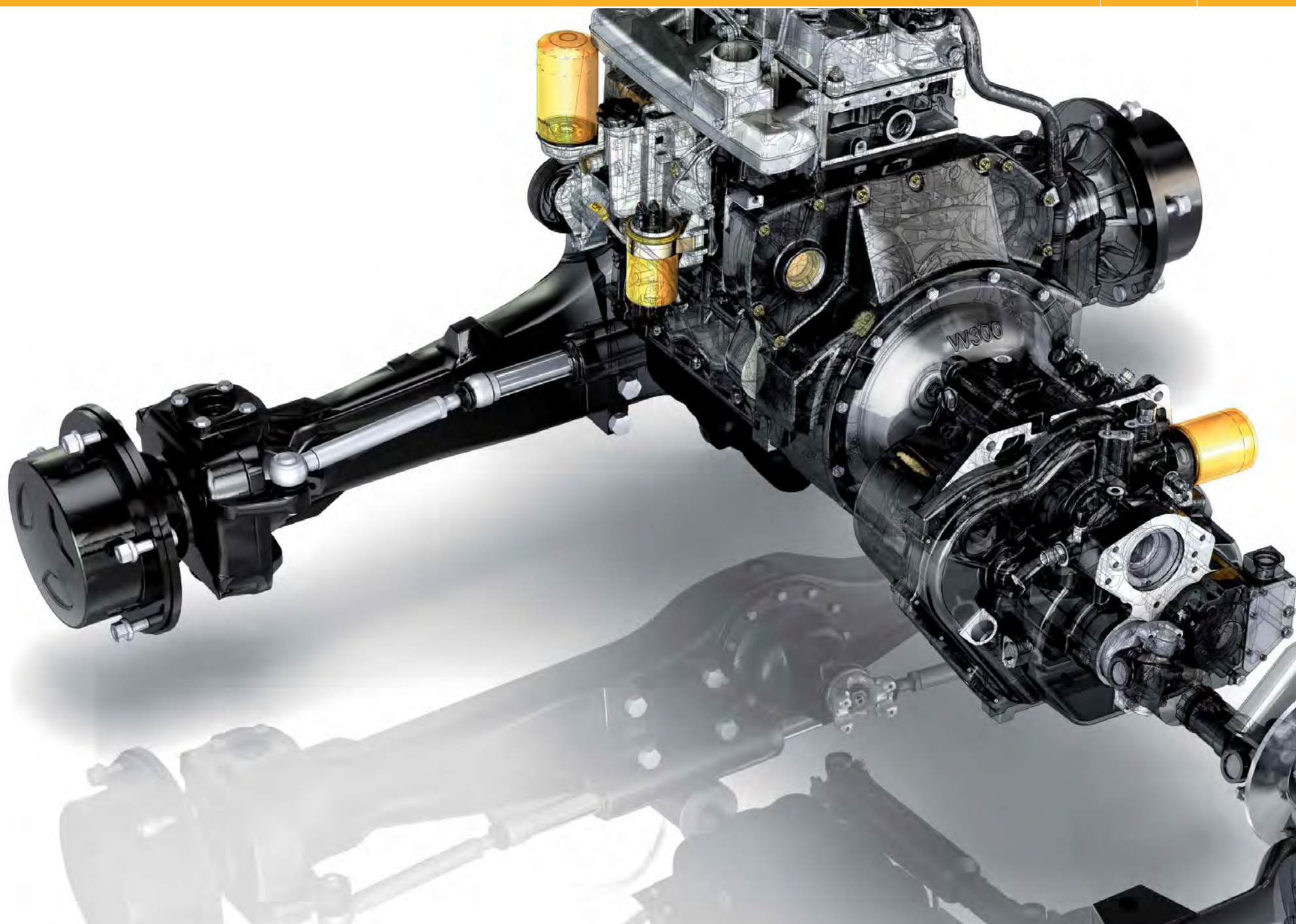
PERFORMANCE CLASSIFICATION

API GL-4, GL-5.

MANUFACTURERS' STANDARDS

MIL-PRF-2105-E, MB 235.8, Scania STO 1:0, ZF TE-ML 02B, ZF TE-ML 05B, ZF TE-ML 12B, MAN 3343 Typ S, MAN 341 Typ E3.

Description	Pack Size	Part Number
JCB Gear Oil OP 75W140	5 L/1.3 Gallon	4000/4801



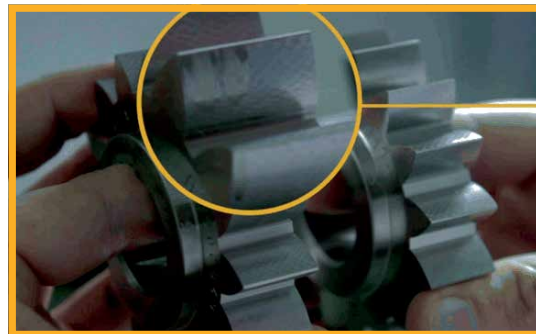
TRANSMISSION FLUIDS.

GENUINE JCB HIGH QUALITY TRANSMISSION FLUIDS PROVIDE A HIGH LEVEL OF WEAR PROTECTION AND ARE SUITABLE FOR A WIDE RANGE OF APPLICATIONS.

Gear and Transmission oil testing

JCB gear and transmission oils undergo a rigorous program of testing to ensure that they provide the maximum performance and protection for your JCB machine and its gear and transmission systems.

JCB Engineering standards lay down performance levels and criteria for JCB Gear and Transmission oil. Below is just an example of how wear and tear caused by poor quality oil can manifest itself.



In tests the JCB product clearly outperformed the lower cost alternatives.

Choosing anything other than the recommended JCB oil is a false economy which can lead to inefficient machine operation, component wear and ultimately premature component failure.



**JCB STANDARD:
4004/6300**

JCB TRANSMISSION FLUID OP

A high quality transmission fluid uniquely designed for use on JCB Fastrac machines fitted with V-Tronic transmissions. Its universal properties make it suitable for use in engines, wet brake systems, final drives and hydraulic systems.

BENEFITS

- Suitable for diesel and gasoline engines fitted in tractors and off-highway/ construction equipment.
- Avoids IPTO (independent power take off) clutch slippage.
- Limits wet brake noise, thus maintains brake capacity while limiting friction plate wear.
- Provides good transmission lubrication.
- Helps prevent equipment component rust and corrosion.
- Low viscosity grade will provide quick response.

PERFORMANCE CLASSIFICATION

API CF-4, API GL-4.

MANUFACTURERS' STANDARDS

FENDT KDM 17/2012, ACEA E2, CNH MAT 3525, 3526, DIN 51524 : HLP (-D), FNHA 200.00, 201.00, FORD M2C134-D, M2C159-B/C, JOHN DEERE JDM J20C, MASSEY FERGUSON CMS M 1145, 1144, 1143, 1139, 1135, NEW HOLLAND 82009201/2/3, NH 420A, SDFG OU 1391, OT 1891, STEYR D-401, ZF TE-ML 06A, 06B, 06C, 07B.

Description	Pack Size	Part Number
JCB Transmission Fluid OP	5.2 Gallon/20L	4004/6305



JCB TRANSMISSION FLUID EP 10W

A high quality transmission lubricant recommended for off-highway, construction and agricultural equipment. Its primary use is in powershift transmissions, final drives, hydrostatic transmissions, torque converters and hydraulic systems.

JCB STANDARD:
4000/2500

BENEFITS

- An excellent multi-purpose transmission fluid.
- Optimal friction characteristics, even at low temperatures.
- Provides good wear protection under heavy duty conditions.
- Gear protection, even under shock load conditions.
- Helps maximize drive line component life.
- Protects against rust and prevents corrosion.
- Provides good transmission lubrication.

PERFORMANCE CLASSIFICATION

API GL-4.

MANUFACTURERS' STANDARDS

CAT TO-4, KOMATSU KES 07.868.1, ALLISON C-4, ALLISON TES-439, DANA, EATON.

Description	Pack Size	Part Number
JCB Transmission Fluid EP 10W	1 Gallon/3.7L	4000/2501
JCB Transmission Fluid EP 10W	5 Gallon/18.9L	4000/2505



JCB TRANSMISSION FLUID EP SAE 30

A high quality transmission lubricant recommended for off-highway, construction and agricultural equipment. Its primary use is in powershift transmissions, final drives, hydrostatic transmissions, torque converters and hydraulic systems.

JCB STANDARD:
4000/2600

BENEFITS

- An excellent multi-purpose transmission fluid.
- Optimal friction characteristics even at low temperatures.
- Provides good wear protection also under heavy duty conditions.
- Gear protection, even under shock load conditions.
- Designed to extend drive line component life.
- Protects against rust and prevents corrosion.
- Provides good transmission lubrication.

PERFORMANCE CLASSIFICATION

API GL-4.

MANUFACTURERS' STANDARDS

CAT TO-4, KOMATSU KES 07.868.1, ZF TE-ML 03C, 07F, ALLISON C-4, ALLISON TES-439, DANA, EATON.

Description	Pack Size	Part Number
JCB Transmission Fluid EP SAE 30	5 Gallon/18.9L	4000/2605



TRANSMISSION FLUIDS.



JCB UNIVERSAL ATF HP

A versatile product recommended for automatic transmissions and power steering systems, where Dexron IIE and III approved products are acceptable. It is suitable for a variety of applications including trucks and off-highway equipment.

JCB STANDARD:
4000/2300

BENEFITS

- Transmission life protected.
- Immediate circulation in cold weather.
- Trouble free operation with smooth gear changing.
- Permits rationalization, reducing product storage and handling costs and eliminates wrong ATF choice.
- Provides smooth power-steering

PERFORMANCE CLASSIFICATION

DEXRON III.

MANUFACTURERS' STANDARDS

ALLISON C-4, ALLISON TES 389, DEXRON III (H), MAN 339 TYPE VI, MAN 339 TYPE Z1, MB 236.1, MB 236.9, VOITH 55.6335.xx, VOLVO 97341, CAT TO-2, FORD MERCON, ZF TE-ML 02F, 04D, 03D, 09, 11B, 14A, 17C.

Description	Pack Size	Part Number
JCB Universal ATF HP	5 Gallon/18.9L	4000/2305



ANCILLARY PRODUCTS.



JCB HIGH PERFORMANCE ANTI-SQUAWK FLUID

A performance supplement for gear oils designed to suppress brake shudder and squawk.

JCB STANDARD:
4004/3900

BENEFITS

- Fully approved for use on JCB machines.
- Specially developed for machines fitted with oil immersed brakes.

Description	Pack Size	Part Number
JCB High Performance Anti-Squawk Fluid	4x 1L/1Qt	4004/3904



JCB HYDRAULIC ANTI-STICK ADDITIVE

JCB Anti Stick Additive is specially designed to relieve the 'stick slip' phenomena that can occur with most hydraulic systems. Its friction modifier properties are designed to aid the flow characteristics of the hydraulic system and help relieve the hydraulic cylinder noise that often accompanies 'stick slip'. It is designed for hydraulic systems only and should NOT be used in common hydraulic, brake and transmission systems.

JCB STANDARD:
4004/6700

Description	Pack Size	Part Number
JCB Hydraulic Anti-Stick Additive	4x 1L/1 Qt	4004/6704



JCB ANTIFREEZE AND ENGINE COOLANT

An ethylene glycol based engine coolant concentrate, tested and proven in heavy duty applications, using established inhibitor technology. The sophisticated silicate stabilisation technology eliminates the formulation of silica gel, whilst other additives ensure excellent compatibility with hard water, preventing the build-up of scale. Antifreeze and coolant used in JCB T2 and T3 machines must conform to ASTM D6210 standard.

JCB STANDARD:
4006/1100

BENEFITS

- Manufactured to off highway standard ASTM D6210.
- Maximises engine performance.
- Superior freeze protect to -37°C/-34°F (at 50% dilution).
- Guaranteed to be compatible with your JCB radiator and cooling pack.

MANUFACTURERS' STANDARDS

ASTM D6210.

Description	Pack Size	Part Number
JCB Antifreeze And Engine Coolant	1 Gallon/3.7L	4006/1101



BOOMTEC

JCB BoomTec is a formulated wax product specifically developed for application on JCB machines to provide lubrication and corrosion protection

BENEFITS

- Provides lubrication and corrosion protection.
- Environmentally friendly due to reduction in VOCs content.
- Packaging design to reduce waste, including a carry handle and seal-able lid for transportation.

Description	Pack Size	Part Number
JCB BoomTec	5kg / 11lb	4003/4005



JCB 50:50 ANTIFREEZE AND ENGINE COOLANT

JCB 50:50 antifreeze and engine coolant is an ethylene glycol based solution which combines superior antifreeze and coolant technology with de-mineralised water to provide a quick, easy and efficient solution to your antifreeze and coolant requirements. Ideal in helping prevent the build up of scale where the quality of water supply cannot be guaranteed.

JCB STANDARD:
4006/1100

BENEFITS

- Manufactured to off highway standard ASTM D6210.
- Maximises engine performance.
- Superior freeze protect to -37°C /-34°F.
- Guaranteed to be compatible with your JCB radiator and cooling pack.

MANUFACTURERS' STANDARDS

ASTM D6210.

Description	Pack Size	Part Number
JCB 50:50 Antifreeze And Engine Coolant	1 Gallon/3.7L	4006/1101

GREASE.

JCB GREASES PROVIDE LONG LIFE PROTECTION TO HARD WORKING MACHINERY UNDER EXTREME CONDITIONS. THE COMPREHENSIVE RANGE OPTIMIZES MAINTENANCE SCHEDULES HELPING TO REDUCE COSTS IN ALL APPLICATIONS.

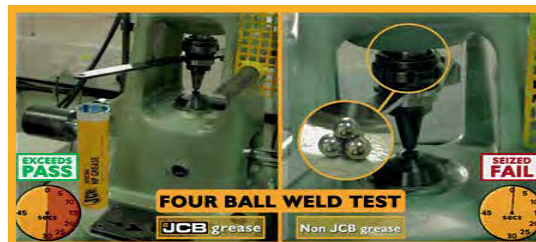


Grease testing

JCB grease undergoes a rigorous program of testing to ensure it provides the maximum performance and protection for your JCB machine. JCB Engineering standards lay down performance levels and criteria for JCB grease which EXCEED INDUSTRY STANDARDS. The Four Ball Weld Test is a typical example of how JCB Grease outperforms other grease that claim to be the same.

Four ball weld test:

For this industry standard test grease is put under rotating speed and then a 450KG/992lb load is applied. To pass the test the ball bearings have to last for 15 seconds before they 'fail' (seize) and weld together. You can see below that the non JCB 'equivalent' grease fails immediately while the JCB HP Grease continues well past the required time. JCB grease is manufactured to provide significant load protection for your JCB and other off-highway machinery.



In tests the JCB product clearly outperformed the lower cost alternatives.

Choosing anything else but the recommended JCB grease is a false economy which can lead to inefficient machine operation, component wear and ultimately premature component failure.

JCB SPECIAL HP GREASE

JCB Special HP Grease is a premium quality, extreme pressure grease, recommended for use in arduous operating conditions, such as high temperatures, excessive loading and extensive exposure to water. The sophisticated additive package combines with excellent adhesive properties to give high performance protection to hard working automotive, industrial, agricultural and earthmoving equipment, all year round.

JCB STANDARD:	4003/2000
COLOR:	BLUE
SOAP TYPE:	LITHIUM COMPLEX
NLGI:	2
DROP POINT (IP132):	473°F/245°C
WORKING TEMPERATURE RANGE:	-4°F TO 300°F/-20°C TO 150°C
FOUR BALL WELD:	992LB/450KG

Description	Pack Size	Part Number
JCB Special HP Grease	24x400g/14oz	4003/2017
JCB Special HP Grease	12x500g/16oz	4003/2020
JCB Special HP Grease	12.5Kg/27.5lb	4003/2006
JCB Special HP Grease	18Kg/39.7lb	4003/2009
JCB Special HP Grease	50Kg/110lb	4003/2005

GREASE GUN

- Designed to suit 400gm/14oz grease cartridges.

Description	Part Number
Grease Gun - Standard Grip (5 per pack)	992/11300



JCB EXTREME PERFORMANCE MOLY GREASE

JCB Extreme Performance Moly Grease is an advanced performance, multipurpose grease, recommended for heavily loaded bearing surfaces and in particular where limited or oscillating motion causes fretting. The addition of molybdenum disulphide provides extra protection against scoring and wear, making it ideal for automotive, industrial, agricultural and earthmoving equipment.

JCB STANDARD: 4003/I300
COLOR: GREY BLACK
SOAP TYPE: LITHIUM
NLGI: 2
DROP POINT (IP132): 365°F/185°C
WORKING TEMPERATURE RANGE: -4°F TO 245°F/-20°C TO 120°C
FOUR BALL WELD: 694LB/315KG

Description	Pack Size	Part Number
JCB Extreme Performance Moly Grease	24x400g/14oz	4003/1327
JCB Extreme Performance Moly Grease	12.5Kg/27.5lb	4003/1326

JCB EXTREME PERFORMANCE HAMMER GREASE

JCB Extreme Hammer Grease is a unique formulation aluminium complex grease for use where extremes of pressure and temperature are likely to be encountered. Particularly suited to hammer applications where resistance to water washing and migration may be critical.

JCB STANDARD: 4003/2100
COLOR: BLACK
SOAP TYPE: ALUMINIUM COMPLEX
NLGI: 2
DROP POINT (IP132): 482°F/250°C
WORKING TEMPERATURE RANGE: -4°F TO 632°F/-20°C TO 160°C
FOUR BALL WELD: 1763LB/800KG

Description	Pack Size	Part Number
JCB Extreme Performance Hammer Grease	24x400g/14oz	4003/2107
JCB Extreme Performance Hammer Grease	12.5Kg/27.5lb	4003/2106

JCB SPECIAL BOOM GREASE

JCB Special Boom Grease is a premium quality, high performance grease, recommended for use in a wide range of automotive, industrial, agricultural and construction applications including sliding surfaces and guide tracks, bearings and swivel joints.

JCB STANDARD: 4003/3900
COLOR: OFF - WHITE
SOAP TYPE: LITHIUM COMPLEX
NLGI: 2.5
DROP POINT (IP132): 500°F/260°C
WORKING TEMPERATURE RANGE: -22°F TO 302°F/-30°C TO 150°C
FOUR BALL WELD: 1102LB/500KG

Description	Pack Size	Part Number
JCB Special Boom Grease	24x400g/14oz	4003/3901

JCB SPECIAL HAMMER GREASE

JCB Special Hammer Grease provides a highly effective lubricant on slow moving slides, along with an excellent corrosion resistant property. It combines the "self healing" action of oils with the resistance to drip of viscous compounds.

JCB STANDARD: 4003/1100
COLOR: DARK GREY
SOAP TYPE: LITHIUM
NLGI: 2
DROP POINT (IP132): 365°F/185°C
WORKING TEMPERATURE RANGE: 5°F TO 245°F/-15°C TO 120°C
FOUR BALL WELD: 1543LB/700KG

Description	Pack Size	Part Number
JCB Special Hammer Grease	24x400g/14oz	4003/1119

JCB AUTOGREASE

JCB AUTOGREASE is for use with the JCB AUTOGREASE system, used on JCB's large breaker range. This mineral oil based paste, containing an aluminium complex soap and solid lubricants, is suitable for use under water, or in high ambient temperatures. The specially designed cartridges screw into the AUTOGREASE system fitted to the breaker housing. The clear cartridge allows the operator to easily monitor the grease usage from within the cab.

JCB STANDARD: 4003/2300
COLOR: BLACK
SOAP TYPE: ALUMINIUM COMPLEX, SOLID LUBRICANTS
NLGI: 2
DROP POINT (IP132): 500°F/260°C
WORKING TEMPERATURE RANGE: -4°F TO 230°F/-20°C TO 110°C
FOUR BALL WELD: 760LB/345KG

Description	Pack Size	Part Number
JCB Autogrease	30x500g/17.6oz	4003/2305

JCB SPECIAL SLEW PINION GREASE

JCB Special Slew Pinion Grease is a soft, black, tenacious grease designed specifically for the lubrication of large and heavy-duty open gears. Excellent corrosion protection and load carrying properties throughout a large temperature range.

JCB STANDARD: 4003/1600
COLOR: BLACK
SOAP TYPE: ORGANICALLY MODIFIED CLAY
NLGI: 2
DROP POINT (IP132): N/A
WORKING TEMPERATURE RANGE: -40°F TO 200°F/-40°C TO 100°C

Description	Pack Size	Part Number
JCB Autogrease	24x400g/14oz	4003/1619

THE RANGE.

JCB ENGINE OIL	1 Quart / 1 Litre	1 US Gallon / 3.7 Litres	5 US Gallon / 18.9 Litres	55 US Gallon / 208 Litres
JCB Ultra Performance Engine Oil 5W40 API: CJ-4	-	4001/3401	4001/3405	-
JCB Ultra Performance Engine Oil 15W40 API: CJ-4	-	4001/2905	4001/2905	-
JCB Ultra Performance Engine Oil 10W30 API: CJ-4	-	-	4001/3005	-
JCB High Performance Universal Agricultural Oil	-	-	4004/0305	-
-	-	-	-	-

JCB HYDRAULIC FLUID	1 Quart / 1 Litre	1 US Gallon / 3.7 Litres	5 US Gallon / 18.9 Litres	55 US Gallon / 208 Litres
JCB Ultra Performance Hydraulic Fluid 32	-	-	4002/2805	-
JCB Optimum Performance Hydraulic Fluid 68	-	-	4002/2705	-
JCB Optimum Performance Hydraulic Fluid 46	-	4002/2001	4002/2005	-
JCB High Performance Hydraulic Fluid 68	-	-	4002/0705	4002/0701
JCB High Performance Hydraulic Fluid 46	-	4002/0801	4002/0805	4002/0803
JCB High Performance Hydraulic Fluid 32	-	-	4002/1025	-
JCB High Performance Hydraulic Fluid 15	-	4002/0503	-	-

JCB GEAR OIL	5 Litre / 1.3 US Gallon	1 US Gallon / 3.7 Litres	5 US Gallon / 18.9 Litres	55 US Gallon / 208 Litres
JCB Optimum Performance Gear Oil 75W140	4000/4801	-	-	-
JCB High Performance Gear Oil Plus	-	4000/2202	4000/2205	4000/2203
JCB High Performance Gear Oil 90	-	-	4000/0305	-
JCB High Performance Gear Oil LS (Limited Slip) Plus	-	-	4000/3905	-

JCB TRANSMISSION FLUID	1 Quart / 1 Litre	1 US Gallon / 3.7 Litres	5 US Gallon / 18.9 Litres	55 US Gallon / 208 Litres
JCB Optimum Performance Transmission Fluid	-	-	4004/6305	-
JCB Extreme Performance Transmission Fluid 10W	-	4000/2501	4000/2505	-
JCB Extreme Performance Transmission Fluid SAE30	-	-	4000/2605	-
JCB High Performance Universal ATF	-	-	4000/2305	-

JCB ANCILLARY PRODUCTS	1 Quart / 1 Litre	1 US Gallon / 3.7 Litres	5 US Gallon / 18.9 Litres	55 US Gallon / 208 Litres
JCB High Performance Anti Squawk Fluid	4004/3904	-	-	-
JCB Hydraulic Anti-Stick Additive	4004/6704	-	-	-
JCB Antifreeze And Engine Coolant - Concentrate	-	4006/1101	-	-
JCB 50:50 Antifreeze And Engine Coolant - Readymix	-	4006/1110	-	-
	5 kg/ 11lb	-		
BoomTec	4003/4005	-		
	2.5 US Gallon / 9.4 Litres	55 US Gallon / 208 Litres	330 US Gallon / 1250 Litres	
JCB Diesel Exhaust Fluid (DEF)	4007/1019L	4007/1013L	4007/1045L	

JCB GREASE	14oz / 400g	17.6oz / 500g	27.5lb / 12.5Kg	39.7lb / 18Kg	110lb / 50Kg
JCB Special High Performance Grease	4003/2017	4003/2020	4003/2006	4003/2009	4003/2005
JCB Special Slew Pinion Grease	4003/1619	-	-	-	-
JCB Extreme Performance Moly Grease	4003/1327	-	4003/1326	-	-
JCB Special Boom Grease	4003/3901	-	-	-	-
JCB Special Hammer Grease	4003/1119	-	-	-	-
JCB Extreme Performance Hammer Grease	4003/2107	-	4003/2106	-	-
JCB Autogrease (500g Screw thread)	-	4003/2305	-	-	-



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