

# Lubricants Guide



JOHN DEERE



THE BEST LUBRICANTS  
WEREN'T  
**TOUGH**  
ENOUGH!



SO WE DEVELOPED  
OUR OWN.

## MYTH #1

There's no difference between on-road and off-road lubricants.

### Fact

Short-term savings on cheaper products can end up costing more in the long run due to faster wearing of parts and associated downtime. While high quality, genuine John Deere lubricants may cost more initially, they save you money in the long run by reducing wear and avoiding downtime and as a result prolonging the life of your equipment.

### Fact

On-road (highway) vehicles put 40–50% less load factor on parts, have more airflow (speed) and run on cleaner surfaces. Off-road (on-farm, on-construction, and on-forestry) site vehicles put 70–80% load factors on parts, have less airflow which increases heat and they run on dusty, dirty and rough terrain. Genuine John Deere lubricants are specifically developed for equipment that are used in much harsher conditions under increased stress, heat and exposure to contaminants. So in fact there is a big difference.

## MYTH #2

High quality lubricants cost more for no real benefit.

## MYTH #3

All lubricant brands give your engine the same protection.

### Fact

The best lubricants weren't tough enough, so we developed our own. Only John Deere lubricants are specifically designed to prolong service intervals, ensure peak performance and increase the lifespan of parts in John Deere equipment. They meet and in most cases exceed the latest industry standards for lubricants.

### Fact

These minimum industry standards are not the best way of judging the quality of one brand against another. There are many oils that only just meet these standards, many that exceed them, and some that don't even meet the standards claimed on the label. With high quality, genuine John Deere lubricants you can be confident that they meet, and in most cases exceed, the highest industry standards

## MYTH #4

Oils with the same API, ACEA or JASO specifications are all the same quality.

## MYTH #5

Putting additives in cheaper oil makes it as good as high quality oil.

### Fact

Lubricant formulations are designed by engineers and are, or at least should be, a very well designed balance of the right additives and base oils. Using the wrong additive or calculating the wrong additive amounts can completely upset this balance and may well reduce its ability to protect. Only John Deere lubricants are specifically formulated for John Deere equipment to prolong service intervals, ensure peak performance and increase the lifespan of parts, without the need for additives.

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Discover what makes our genuine oils  
engineered for performance and built  
to last in the toughest conditions.



# Engine Oil



## Plus-50™ II

Plus-50 II Premium Engine Oil has been developed to meet the needs of John Deere engines, both modern and heritage. It is recommended for all 4-stroke naturally aspirated, turbocharged, and supercharged diesel engines, including those with Diesel Particulate Filter (DPF), Selective Catalytic Reduction (SCR), Diesel Oxidation Catalyst (DOC), and Exhaust Gas Recirculation (EGR).

### Applications

- For use in heavy-duty off-road applications, on-road trucks, marine engines, natural gas engines, pickups and automobiles
- Backwards compatible for use in all legacy diesel engine applications where Plus-50 may have been applied
- For use in John Deere Tier 4 engines and all diesel engines requiring API CK-4 oil

### Performance Specifications

- Mack EOS-4.5, EO-O Premium Plus 07, EO-O Premium Plus 03
- Cummins CES 20086, CES 20081, CES 20077, 20076, 20075
- Volvo VDS-4.5, VDS-4.0, VDS-3, VDS-2
- Mercedes Benz 228.31
- Renault RLD, RXD, RD
- Detroit Diesel 93K222, 93K218, 93K214
- MAN M3275
- MTU Type 2.1
- Caterpillar ECF-3, ECF-2, ECF-1a, TO-2

### Features/Benefits

- Exceeds API CK-4 performance level for diesel engines
- Exceeds API SN performance level for gasoline engines
- Reduces maintenance costs and downtime
- Formulated specifically to inhibit oxidation, deposits, corrosion and engine wear as well as providing superior soot control
- Provides maximum sludge and varnish control
- Excellent low-temperature fluidity reduces engine wear in cold weather
- Low ash technology to support diesel particulate filter service life
- Drain intervals may be extended up to 500 or 750 hours when used with John Deere filters in John Deere engines (review Operator Manual or consult with dealer for details)

### Specifications

SAE 15W-40, API CK-4/CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4/API SN, ACEA E9, E7, JASO DH-2

AU part no.	NZ part no.	Description	Size
CP6657	CP6657NZ	Plus-50 II	5L
CP6658	CP6658NZ	Plus-50 II	20L
CP6659	CP6659NZ	Plus-50 II	205L
CP6660	CP6660NZ	Plus-50 II	1000L
TY26665	TY26665	Plus-50 II full synthetic 0W/40	946ML
TY26664	TY26664	Plus-50 II full synthetic 0W/40	3.78L
TY26667	TY26667	Plus-50 II full synthetic 0W/40	18.9L
TY27741	TY27741	Plus-50 II synthetic 5W/40	18.9L





## Plus-50™ II Product Testing and Development

In the development of Plus-50 II, John Deere engineers tested the oil under the most extreme conditions. John Deere engines were run for 500 hours non-stop at full load and high heat to thoroughly test the capabilities of the oil. At the end of the test we evaluated the engine parts and the oil to determine how well the oil protects the engine and how long it will last under such extreme conditions.

## Engine Oil Warranty

John Deere guarantees Plus-50 II Premium Engine Oil will meet or exceed the performance needs of diesel engines.

Regardless of hours or kilometres, John Deere Limited will pay for any damages (parts and labour) to your engine which are caused by an oil defect so long as:

- The oil defect is verified by oil analysis
- The engine oil used is confirmed to be unadulterated and non-contaminated Plus-50 II
- Plus-50 II meets the engine manufacturer's specifications for the service and application
- The engine is used under normal operating conditions and maintained according to manufacturer's recommendations

Plus-50 II is the best oil for your John Deere equipment because it's developed right alongside John Deere engines.

Other features and benefits include:

- Superior protection for current and older engines
- Extended drain intervals up to 500 or 750\* hours when using Plus-50 II and John Deere filters in a John Deere engine
- Formulated specifically to inhibit wear, corrosion, sludge, soot, varnish and oxidation
- Delivers excellent low-temperature performance
- Proven performance in low-emission engines
- Full-fleet solution

**To make a claim under this warranty, it will be necessary to provide the following as part of the technical investigation:**

- Records showing that the engine was serviced according to the manufacturer's recommendations
- Submit an oil sample from the failed engine for analysis to determine if oil is defective
- Make available the failed engine

\*Extended drain interval time of 500 or 750 hours should be confirmed by checking the Operators Manual. 1. Tier 4 engines should be equipped with an extended drain interval oil pan. 2. Machine operates with Plus-50 II engine oil API CK-4. 3. Machine uses a John Deere engine oil filter. 4. Machine uses only ultra low sulphur diesel fuel.

# JDQ6068 Severe Off-Road Dyno Engine Test

In the development of Plus-50™ II, John Deere engineers tested the oil under the most extreme conditions using this severe dyno test. The severe dyno test is a John Deere engine that runs at full load and high heat to thoroughly test the capabilities of the oil. At the end of the test, we evaluate the engine parts and the oil to determine how well the oil protects the engine and how long it will last under such extreme conditions.

## Pistons from the Severe Off-Road Dyno Engine Test

Competitive oil leaves spot and more piston deposits in the piston and groove area and the under crown area of the piston which can cause the rings to not perform as designed. Plus-50 II formulated for hotter off-road conditions to reduce piston deposits so the engine will perform optimally for a long time.

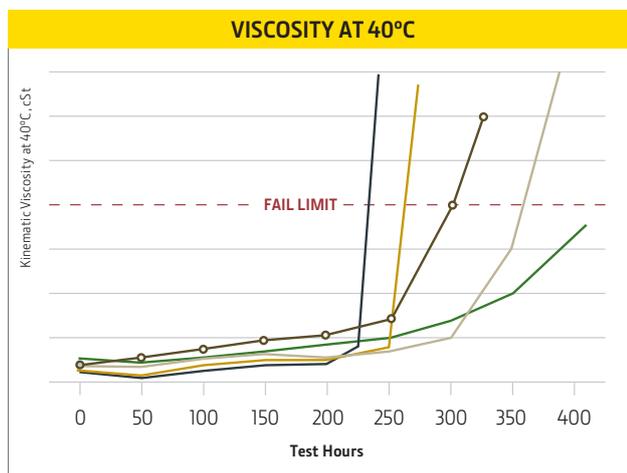
## Minimises Piston and Deposited Formulation

- Help reduce high friction and wear
- Help prevent excessive oil consumption and blowby
- Increase engine performance

### Plus-50 II Premium Oil



### Competitor Premium Oil



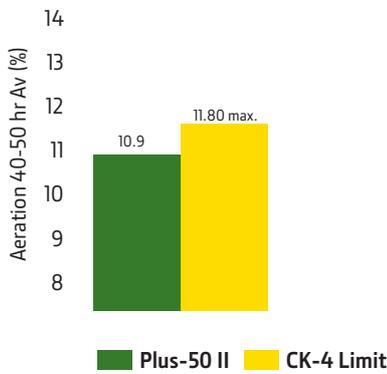
## Severe Dyno Engine Test

- Plus-50 II
- Competitor Oil A
- Competitor Oil B
- Competitor Oil C
- Competitor Oil D

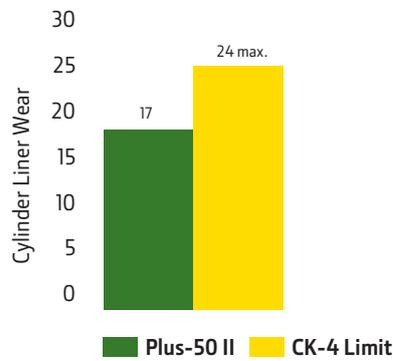
# Other Engine Tests for CK-4 Minimums

In addition to our own extensive testing, we also participate with engine tests that define the minimum requirements of API CK-4 oil. These graphs demonstrate the magnitude of performance Plus-50™ II has when compared to these minimum specifications. Note that lower is better.

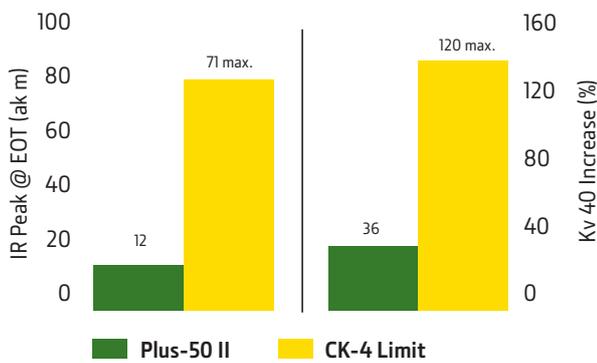
**Coat**



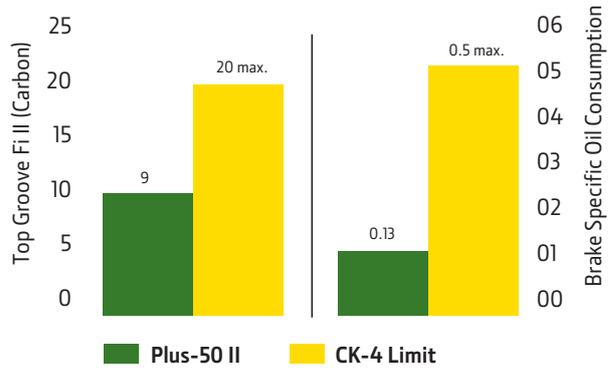
**Mack T-12**



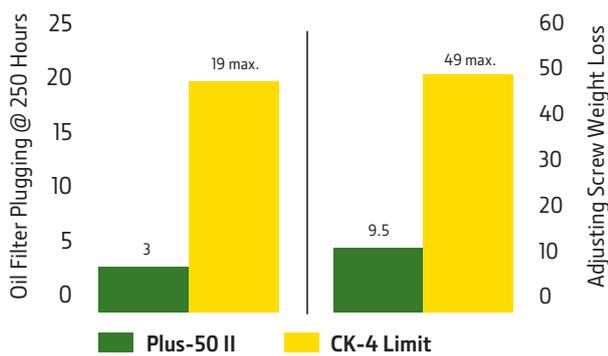
**Volvo T-13**



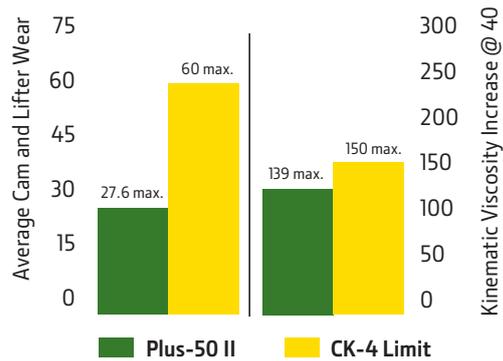
**Caterpillar 1N**



**Cummins ISM**



**General Motors III G**





# Torq-Gard™

Torq-Gard is a premium specification, high performance engine oil specially developed for four stroke diesel and petrol engines. Designed to be used in a wide variety of commercial heavy-duty applications, it provides for excellent fuel economy, very high engine cleanliness, whilst having excellent oxidation resistance to ensure the best performance over its service life, even in the toughest of conditions. It is a good choice where standard manufacturer drain intervals are to be observed. Suitable for mixed fleets and backwards compatible on many models of machinery, as well as trucks and other on highway equipment.

## Applications

- Suitable for latest or older generation engines
- Also suitable for turbo or non-turbo engines
- For use in diesel or petrol engines
- Ideal for mixed commercial fleets

## Features/Benefits

- Neutralises acid to reduce corrosion
- Provides sludge control for cleaner engines
- Multiple viscosity grades to cover a wide variety of application temperature ranges
- Low-temperature fluidity for reduced engine startup wear
- Standard drain-interval performance

## Specifications

SAE 15W-40, API CJ-4, CI-4, CI-4 PLUS, CH-4, CG-4, CF-4/API SM, ACEA E9, E7, JASO DH-2

## Performance Specifications

- Cummins CES 20086
- Detroit Diesel 93K222
- Deutz DQCIII-18LA
- MACK EOS-4.5
- MAN M3755
- Mercedes Benz 228.31
- MTU DDC Type 2.1
- Renault RLD-3
- Volvo WDS-4.5
- JASO DHD-2
- MB-228.31
- Caterpillar ECF-3

AU part no.	NZ part no.	Description	Size
CP8205	CP8205NZ	Torq-Gard 15W/40 CJ-4	5L
CP8206	CP8206NZ	Torq-Gard 15W/40 CJ-4	20L
CP8207	CP8207NZ	Torq-Gard 15W/40 CJ-4	205L
CP8208	CP8208NZ	Torq-Gard 15W/40 CJ-4	1000L
CP8165	CP8165NZ	Torq-Gard 10W/30 CJ-4	20L
CP8166	CP8166NZ	Torq-Gard 10W/30 CJ-4	205L





# Turf-Gard™

Turf-Gard is an automotive grade engine oil designed to provide year-round protection for lawn and garden equipment.

## Applications

- Lawn mowers
- Garden tractors
- Later model vehicles operating on LRP (Lead Replacement Petrol) or unleaded petrol
- Older diesel four wheel drive commercial vehicles
- Turbocharged petrol engines and vehicles running on LPG

## Features/Benefits

- Ensures quick starts
- Provides outstanding protection against corrosion and wear
- Ensures rapid oil circulation
- Provides excellent engine cleanliness
- Recommended for a wide range of John Deere Turf & Lawn equipment and meets or exceeds manufacturers' engine warranty requirements

## Specifications

SAE 10W-30, API SN/CF

AU part no.	NZ part no.	Description	Size
CP8201	CP8201NZ	Turf-Gard 10W/30	1L
CP8202	CP8202NZ	Turf-Gard 10W/30	5L
CP8203	CP8203NZ	Turf-Gard 10W/30	20L
CP8204	CP8204NZ	Turf-Gard 10W/30	205L



# Break-In™ Plus

Break-In Plus is a special-purpose engine oil developed to be used in rebuilt or remanufactured engines and new John Deere engines during the initial break-in period.

## Applications

- Suitable for effective running-in of a rebuilt or remanufactured engine
- Used to establish protective anti-wear films and to prevent components from suffering excessive wear
- To be used only in accordance with the manufacturer's instructions

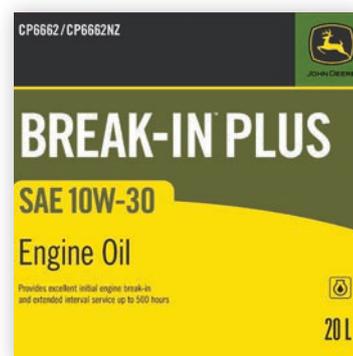
## Features/Benefits

- Protects up to 500 hours in, rebuilt, or remanufactured engines (always follow Operator's Manual)
- Should be used for at least the first 100 hours to ensure rings and liners set correctly
- Provides a controlled environment for piston rings and cylinder liners to establish good wear patterns for a long engine life
- Contains special anti-wear additive to protect valves, bearings and gears during the break-in period
- Helps prevent excessive oil consumption
- Meets the oil requirements for Tier 4 engines

## Specifications

SAE 10W-30

AU part no.	NZ part no.	Description	Size
CP6661	CP6661NZ	Break-In Plus	5L
CP6662	CP6662NZ	Break-In Plus	20L
CP6663	CP6663NZ	Break-In Plus	205L



# Hydraulic Oil

## Hy-Gard™

### Transmission & Hydraulic Oil

Hy-Gard is a multi-function hydraulic and transmission oil formulated to protect heavily loaded gears, wet brakes, wet clutches, and hydraulic systems. John Deere Hy-Gard is the only fluid in the world designed to meet the John Deere factory fill standard “RES 10060”. Hy-Gard is the original tractor hydraulic fluid in your John Deere machine when new, and there is no true substitute available anywhere else.

#### Applications

- Suitable for a wide range of operating conditions
- Transmissions and differential units with immersed wet brakes
- Gearboxes with hydraulic brakes
- Gearboxes with hydraulic drive systems

#### Features/Benefits

- Multi-viscosity formula for a wide range of operating temperatures
- Prevents wear on high-torque heavy-loaded gears and bearings
- Prevents wear and corrosion in hydraulic pumps
- Provides proper friction for wet brakes and clutches, reducing slippage, wear and chatter
- Prevents final drive wear due to anti-wear additives for gears

#### Specifications

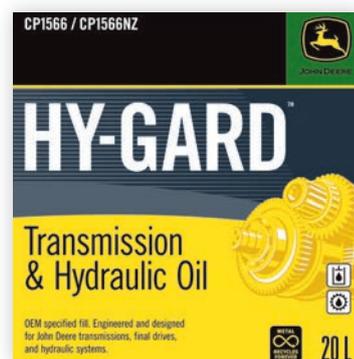
SAE 10W-30, ISO 46-68, JDM J20C, JDQ 95 WEAR TEST

AU part no.	NZ part no.	Description	Size
CP1565	CP1565NZ	Hy-Gard JDM J20C	5L
CP1566	CP1566NZ	Hy-Gard JDM J20C	20L
CP1567	CP1567NZ	Hy-Gard JDM J20C	205L
CP2103	CP2103NZ	Hy-Gard JDM J20C	1000L

#### Functions

Because some systems have combined transmission and hydraulic oil reservoirs, the oil must perform many different tasks at the same time. There is very little margin for error. Robust balanced properties are essential. To understand the complexity of transmission hydraulic oil, let's review its functions.

- Prevents wear of heavily loaded gears and bearings
- Provides wear and corrosion protection for the hydraulic pump
- Provides proper friction for clutches to engage and absorb shock loads without excessive slipping or abrupt shifts
- Withstands extreme pressures in the hydraulic system without breaking down
- Prevents the formation of deposits on all internal parts
- Prevents foam and water damage to all internal parts
- Provides proper friction for brakes to ensure low chatter, long life and high capacity



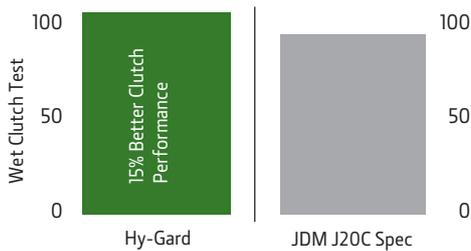
# Product Testing and Development

## Wet Clutch Test

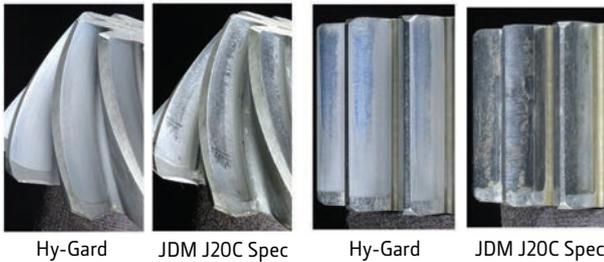


### Result

Customers can expect better clutch performance (smoother equipment, less slippage, and reduced wear) when using John Deere Hy-Gard™ Transmission and Hydraulic Oil.

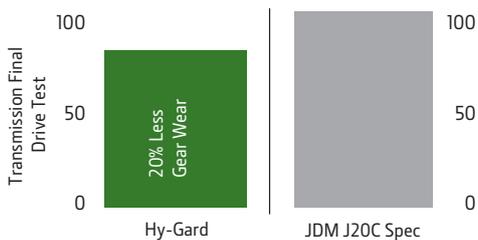


## Gear Test



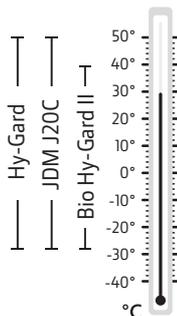
### Result

Wear in the JDQ 95B final drive test with Hy-Gard was shown to be less than the wear of a minimum performance JDM J20C fluid.

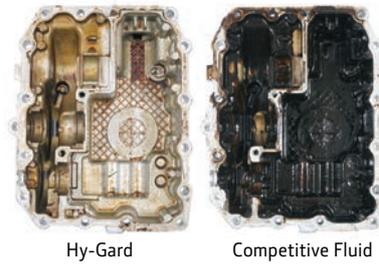


## Air Temperature Chart

Use the oil viscosity based on the expected air-temperature range during the period between changes. Always check the Operator's Manual for specific applications. Some applications may be restricted at the upper or lower limits of the temperature range.



## TZT Oxidation Test



The difference in performance of Hy-Gard and a competitor's oil. The competitor oil has left heavy deposits on the pan and the viscosity has increased dramatically. This can cause valve sticking and the oil may be corrosive. Hy-Gard parts look like new, it leaves no sludge of deposits for longer equipment life.

### Test runs

- At 160 °C (320 °F)
- 400 hours continuous test with air injection

## Slow-Cool Fluidity Test



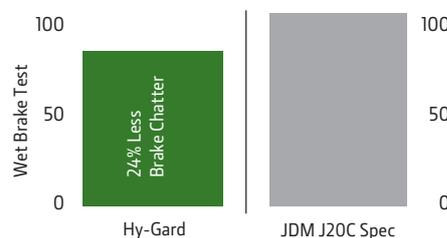
Hy-Gard and Low Viscosity Hy-Gard are checked for proper viscosities using the slow-cool fluidity test in addition to industry-standard tests. The slow-cool fluidity test (developed by John Deere engineers and recognised by the oil industry as a valid testing procedure) ensures Hy-Gard's proper viscosity performance, which reduces downtime and lowers the cost of operation. Few competitive hydraulic transmission oils are tested for this type of low-temperature viscosity performance.

Oil needs to flow properly at low temperature to ensure lubricant gets to where it is needed. The cold temperature flow of Hy-Gard can be much better than oils that claim they meet JDM J20C (tested after aging).

## Wet Brake Test

### Result

Customers can expect better brake-chatter control using John Deere Hy-Gard compared to oils meeting the minimum performance JDM J20 specification.





# Bio Hy-Gard™ II

Bio Hy-Gard II protects your land and your equipment. It is formulated for multi-functional systems including transmissions, axles, hydraulics, wet brakes, and wet clutches. It is recommended when biodegradable tractor hydraulic fluid or hydraulic oils are desired.

## Applications

- Forestry, turf care (golf courses/cemeteries), construction, city services (garbage collection/street services), waterway operations, orchards, and farming operations

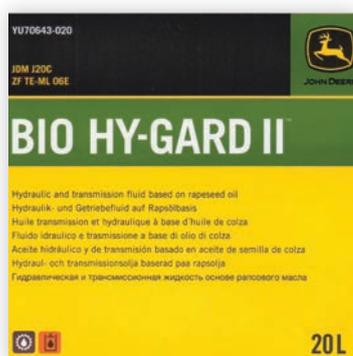
## Features/Benefits

- Base oil from farm-grown products
- Formulated from canola-based oil
- 94% biodegradable
- Exceed environmental ecotoxicity performance requirements
- Brake chatter suppressed while superior brake performance maintained
- Excellent corrosion protection
- Over 13,000 hours of trouble-free field-testing
- Compatible with mineral-based oils

## Specifications

SAE 10W-30, ISO 46-68, JDM J20C, JDQ 95 WEAR TEST

AU part no.	NZ part no.	Description	Size
YU70643-020	YU70643-020NZ	Bio Hy-Gard	20L



# ISO 68

ISO 68 is a premium, HVI type, hydraulic oil that provides sustained performance in high demand hydraulic systems where exceptional shear stability and wear protection is required.

## Applications

- Suitable for sugar cane harvesters, construction, forestry, mining and industrial equipment and many farming implements

## Features/Benefits

- Low friction capabilities that help to reduce wear and energy consumption at start up
- High Viscosity Index that ensures the oil maintains the correct viscosity under temperature stress
- Advanced additive pack that provides excellent shear stability
- High resistant to oxidation and improved age stability
- Compatibility with a wide range of sealing material
- Rapid demulsification properties that prevent the creation of water and oil sludge

## Specifications

Bosch Rexroth RE07075/RE90220, US Steel 126 and 127, Cincinnati Milacron P 68-69-70, Vickers, DIN 54 524-3 HVLP, ISO 6743-4HV1

AU part no.	NZ part no.	Description	Size
CP6938	CP6938NZ	ISO 68 hydraulic oil	20L
CP6939	CP6939 NZ	ISO 68 hydraulic oil	205L
CP6952	—	ISO 68 hydraulic oil	1000L
CP1231	CP1231NZ	J21A ATF	20L





# Hydrau™

Hydrau is a premium, all-season, anti-wear hydraulic oil specifically designed for use in the hydraulic and hydrostatic systems of construction and forestry equipment.

The anti-wear additive technology used in Hydrau provides necessary protection against wear and scuffing in gear, piston, and vane pumps even in severe-service, high-pressure applications. Due to the additional exposure to moisture and contaminants found in construction and forestry environments, Hydrau is designed to provide enhanced demulsibility performance and increased oxidation stability. This provides increased productivity also and reduced operating costs through extended change intervals.

## Features/Benefits

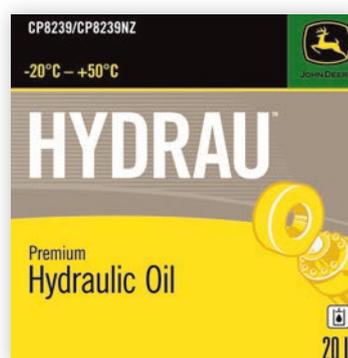
- Exceed the highest industry ISO 11158 category HV performance standard
- Compatible with older equipment
- Excellent cold-temperature flow characteristics
- Superior high-temperature viscosity
- Superior oxidation and thermal stability
- Excellent anti-foam and air-release properties
- Protect against rust and corrosion
- Extended change intervals up to 4000 hrs\*
- ISO 68 compliance
- All-season capability in ambient temperatures of -20 to 50° C (-4 to 122° F)
- Factory-fill fluid
- Exceptional shear stability under severe operating conditions

\*Check the machine specific operators manual

## Applications

- John Deere Performance Specification DTW 3488
- ISO 6743-4 (L-HV) = Hydrau
- DIN 51524-3 (part 3 HVLHP)
- ISO 11158 (L-HV)
- ASTM D6158-HV
- Denison HF-0, HF-1, HF-2:
- Denison P-46 piston pump test
- T6C vane pump test
- Eaton Vickers I-286-S (industrial)
- Eaton Vickers M-2950-S (mobile)
- Bosch Rexroth
- MAG Cincinnati and Cincinnati Milacron P-68, P-69 and P-70
- US Steel 126, 127 and 136

AU part no.	NZ part no.	Description	Size
CP8239	CP8239NZ	JD Hydrau	20L
CP8240	CP8240NZ	JD Hydrau	205L
CP8261	CP8261NZ	JD Hydrau	1000L



# Gear Oil

## GL-5

GL-5 is the preferred oil in John Deere compartments when gear oils are recommended. API GL-5 is for service similar to GL-4, but for more severe conditions. It applies to conditions encountered in hypoid gears. Other equipment operated under high-speed, shock-load; high-speed, low-torque; and low-speed, high-torque conditions may specify API GL-5.

### Applications

- Can be used in any application requiring API, GL-5; SAE 80, 90, 80W-90, or 85W-140 gear lubricants
- For many applications John Deere specifies their own standard of JDM J11E. This standard is the combination of GL5, API MT-1 and an SAE J2360 approved status. John Deere GL5 80W-90 and 85W-140 complies to these standards and meets JDM J11E with an approval # PRI GL1258 for SAE J2360

### Features/Benefits

Designed for gears, particularly hypoid which operate under conditions of high-speed, low-torque and low-speed, high-torque

### Specifications

API, GL5, MT-1 SAE J2360 Approval. (PRI GL1258) JDM J11E, Recommend for (80W-90) Mack GO-J, Meritor O-76D, MIL-PRF-2105 E, ZF TE ML-07/ ML-08(85W-140) MIL-L-2105 D, Volvo 97310, ZF TE-ML 05A, 12E,16D, 21A (ZF000650)

AU part no.	NZ part no.	Description	Size
CP1093	CP1093NZ	GL-5 80W/90	5L
CP1228	CP1228NZ	GL-5 80W/90	20L
CP8221	CP8221NZ	GL-5 80W/90	205L
CP8222	CP8222NZ	GL-5 80W/90	1000L

AU part no.	NZ part no.	Description	Size
CP1092	CP1092NZ	GL-5 85W/140	5L
CP1226	CP1226NZ	GL-5 85W/140	20L
CP8232	CP8232NZ	GL-5 85W/140	205L
CP6798	—	GL-5 85W/140	1000L



# Synthetic Gear Lubricant

Synthetic HD460 Gear Lubricant for combine feeder house drives is specifically designed for lubricating heavy-duty gears under high load-carrying capacity. Due to its anti-friction characteristics, this gear lube also withstands high thermal loading and resists the formation of sludge and other harmful by-products of oxidation.



## Applications

- Recommended for higher performing gear drives and heavier load conditions
- This product can replace 80W-90 GL-5 gear lube for the combine feeder house reverser gear case ONLY
- All 70 Series and newer combines with variable-speed feeder house drives are factory filled with HD460 Gear Lubricant
- HD460 protects and maintains the service life of a wide variety of enclosed industrial gearing, including spur, bevel, herringbone, and many worm gears

AU part no.	NZ part no.	Description	Size
TY26408	TY26408	Synthetic Gear Lubricant	946ml

Physical Properties	Test Method	HD460
Viscosity @ 40° C	ASTMD445	455
Viscosity @ 100° C	ASTMD445	51.7
Viscosity Index	ASTMD2270	178
Flash Point °F (°C)	ASTMD92 545	(285)
Pour Point °F (°C)	ASTMD97 – 39	(–38)
Brookfield, cP	ASTMD2983	4,250 @ –25 °C (–13 °F)
Brookfield, cP	ASTMD2983	218,500 @ –35 °C (–31 °F)

## SAE 80W-90 with Limited Slip (LS)

Hypoid mineral-based Gear oil for stressed Limited Slip type differentials in a variety of normal and heavy duty machinery. Excellent protection against wear, maintaining a stable lubricating film under high loads with minimal foaming at higher speeds.

AU part no.	NZ part no.	Description	Size
CP8167	CP8167NZ	GL-5 80W/90 LS	5L
CP8168	CP8168NZ	GL-5 80W/90 LS	20L



## SAE 80W-140 Synthetic

Synthetic based extreme performance gear oil. This product is recommended for applications where heat and load present major problems. The performance in highly stressed situations exceeds conventional GL5 85W-140 gear oils. for example in final drive units.

AU part no.	NZ part no.	Description	Size
CP8216	CP8216NZ	GL-5 80W/140 synthetic	5L
CP8217	CP8217NZ	GL-5 80W/140 synthetic	20L



# Coolant

## Cool-Gard™ II

Cool-Gard II is a high-performance anti-freeze/summer coolant designed to meet and exceed today's heavy-duty engine requirements. You can avoid most system failures by simply using the right coolant.

### Applications

- Developed specifically for John Deere engines
- Engineered for heavy-duty applications where automotive grade products do not always provide high enough levels of protection
- Suitable for many liquid cooled engines, petrol or diesel, such as those found in other farm machinery, cars and trucks
- Made for on and off highway vehicles
- Used for irrigation pumps, generators, and compressors

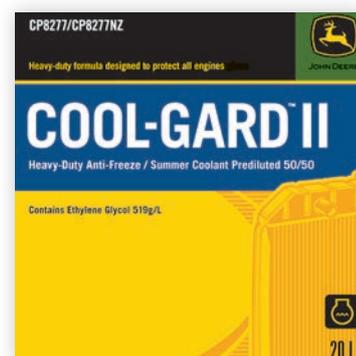
### Features/Benefits

- 6 year/6000 hour service life to reduce downtime and lower operating costs
- High thermal and oxidative stability required by engines equipped with cooled exhaust gas recirculation (EGR)
- Provides excellent protection against corrosion and deposits, extends water pump life and prevents cylinder liner cavitation
- Ready to use premix formulation, for top up or refill and guarantees water quality and coolant performance

### Specifications

ASTM D6210 for diesel engines, ASTM D3306 for petrol engine

AU part no.	NZ part no.	Description	Size
CP8275	CP8275NZ	Cool-Gard II premix	5L
CP8276	CP8276NZ	Cool-Gard II premix	10L
CP8277	CP8277NZ	Cool-Gard II premix	20L
CP8278	CP8278NZ	Cool-Gard II premix	205L
CP8279	CP8279NZ	Cool-Gard II concentrate	5L



# Proven Protection for your Cooling System

Cool-Gard™ II engineers see the challenges engine cooling systems face every day in test cells and in field tests. Due to modern engines experiencing higher temperatures, and to make sure John Deere develop the best coolant to protect against these conditions, we've put Cool-Gard II to very aggressive high-heat tests comparing how other coolants protect under the same conditions. The metals protected by Cool-Gard II lost considerably less mass than those protected by other coolants. See for yourself!

## Thermal oxidative stability comparison

Metal Type	Cool-Gard II	Comparative market coolant type		
		Heavy Duty Universal	Long Life	Passenger Car Automotive
Copper	28	269	205	240
Solder	5	24	32	26
Brass	17	68	123	151
Steel	6	86	29	173
Cast Iron	5	386	160	361
Aluminium	0	371	342	34

## Nitrite Free

John Deere promotes the use of Nitrite free products.

Nitrite chemicals are found in many coolants, especially those designed for heavy duty applications. These Nitrites will react in a negative way to your John Deere cooling system. This can cause and promote the formation of Aluminium Hydroxide based deposits. Using a Nitrite compound in your John Deere engine can completely block a radiator in under 75 hours of operation.

Please refer to your machines operational manual and instructions which recommend using a Nitrite free coolant.

Cool-Gard II safely protects wet sleeves from cavitation and pitting, without the use of Nitrite. As cylinder liner cavitation is devastating to any engine and a very costly repair, John Deere mandates using Nitrite free coolants in all John Deere Engines.

Cool-Gard II extends the life of your water pump. Moving components in the cooling system, such as water pump impellers are also subject to cavitation problems. Incorrect coolant promotes erosion of the water pump impeller and the surrounding areas. You can prevent this type of problem by using Cool-Gard II.



Cool-Gard II



Incorrect Coolant



Plain Water

# ALS Oil Analysis and Testing

For more than 40 years, ALS have been a leading testing, inspection, certification and verification company, servicing numerous industries globally. ALS takes oil analysis to the next level by looking at both equipment and oil integrity, ensuring the root cause is targeted for predictive and proactive maintenance.

## Oil analysis provides early detection and trending of:

- Wear metals of components
- Contamination (dirt, water, coolant, fuel, soot)
- Monitoring of Additive Packs (anti-wear, Extreme Pressure (EP), detergents, antifoam)
- ISO cleanliness of Oil
- Physical properties of the Oil (viscosity, oxidation)
- The source of the part's excessive wear

Part no.	Description
CM23882	Oil and coolant test kit
CM23882NZ	Oil and coolant test kit
CM23882WA	Oil and coolant test kit
CM81020	Aluminium sampling pump



# Filters

Unplanned downtime because of a filter problem? That is never OK. Our products are too big an investment to allow that kind of thing to happen. Use John Deere Filters to keep the dirt out. We offer top-of-the-line filters to help deliver superior performance season after season.

**A part of the whole. The important parts.** John Deere Oil Filters. Fuel Filters. Air Filters. Hydraulic Fluid Filters. Take a good look at our filter options. We've got you covered. You'll find that simply choosing John Deere Filters can up your productivity, reduce maintenance costs and extend the life of your equipment.



## JOHN DEERE OIL FILTERS. SEE THE **BENEFITS** FOR YOURSELF.

**Rubber gaskets specifically designed for each application.**

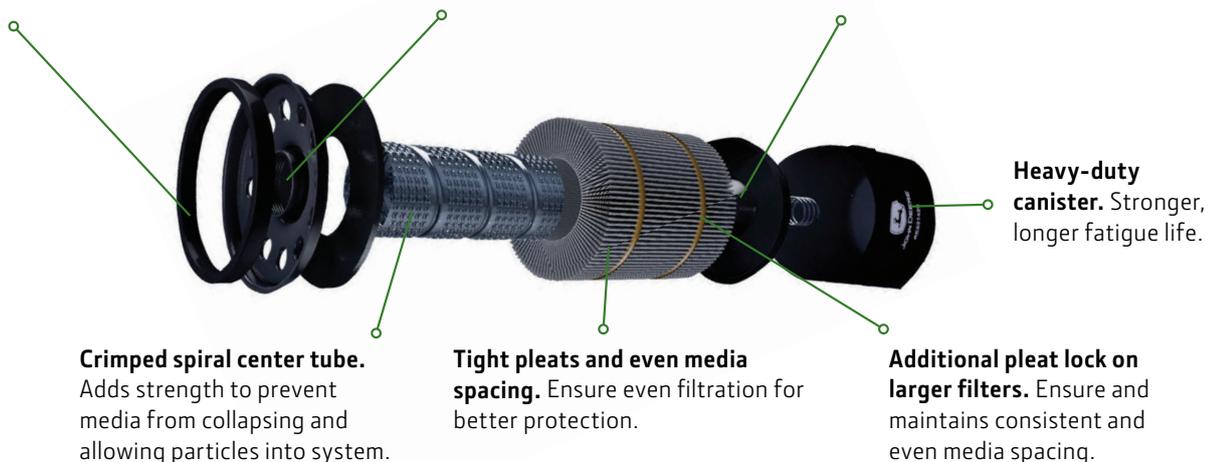
Tighter seal than cork or plastic gaskets used by most competitors.

**Nut plate with rolled threads.**

Rolled threads prevent metal contamination vs. traditionally machined threads.

**Heavy-duty one-piece metal end caps.**

Rolled threads prevent metal contamination vs. traditionally machined threads.



## PLUS-50™ II ENGINE OIL + JOHN DEERE OIL FILTERS. **STILL BETTER.**

**Plus-50 II engine oil is designed, developed and tested specifically for John Deere engines.**

When used with a John Deere oil filter, it reduces downtime and increase drain intervals, performing up to an amazing 500 hours<sup>^</sup>.

Take the test below to see how much you are saving with John Deere engine oils.

<https://www.deere.com.au/en/tools/parts/oil-cost-calculator/>



<sup>^</sup>Extended drain interval time of 500 or 750 hours should be confirmed by checking the Operators Manual. 1. Tier 4 engines should be equipped with an extended drain interval oil pan. 2. Machine operates with Plus-50 II engine oil API CK-4. 3. Machine uses a John Deere engine oil filter. 4. Machine uses only ultra low sulphur diesel fuel.

# Spindle Grease

There are over **4200 moving parts** in your spindle system that John Deere picking unit grease needs to protect.



## John Deere Spindle Grease protects your investment...

A lower price, lesser-quality spindle grease costs more than you expect —especially if it doesn't stand up to the harmful effects of extreme temperatures, high-speed operation, rust, and corrosion.

### John Deere Spindle Grease

- Minimises wear for optimum performance in the field and minimal consumption
- When using John Deere grease and cleaner, row units can last 1,500 fan hours (5 years) before needing major overhaul
- Reduces operating and maintenance costs and prolongs the life of your picker heads
- Minimises your downtime for maintenance and protects against unexpected breakdowns

AU part no.	NZ part no.	Description	Size
CP2108	—	Spindle Grease	175KG
CP6688	—	Spindle Grease	850KG

John Deere

Brand X



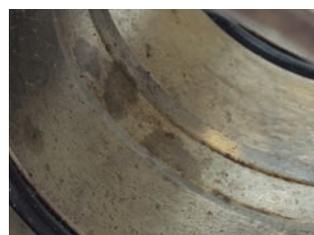
Spindle Bushing



Drive Shaft Gear



Repair Sleeve



Bar Journal

# Spindle Cleaner

The row unit cleaning system in your picker is highly advanced. **Your cleaner should be too!**



## John Deere Spindle Cleaner delivers superior results...

Soap and water are not enough. Using dishwashing or other soap instead of a quality spindle cleaner doesn't protect your machinery and parts. Even worse, industrial detergents and water based soap mixtures actually washes away the lubricating spindle grease from the spindle bushings and attachments leaving them unprotected.

### The Right Formula And Benefits

- Uniquely formulated, oil-in-water emulsion that incorporates tiny droplets of oil to both clean and protect spindles, bushings, doffers and moisture pads
- Oil droplets provide protection against rust and oxidation of bushings and spindles
- Cleans spindles effectively—even when working with extremely hard water
- Applies easily through small nozzles, reducing consumption
- Mixes with water at a ratio of 20 L of cleaner to 1000 L of water
- Meets JDN354 specifications

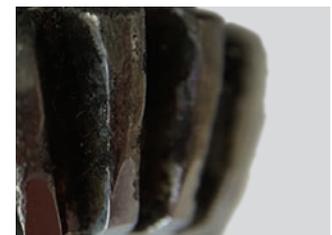
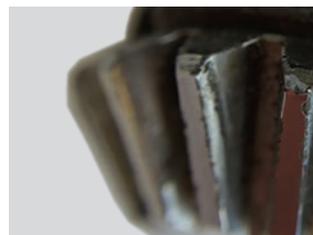
### John Deere



### Brand X



The spindle on the right, cleaned with a lesser-quality product, shows excessive wear, pitting, rust, corrosion and bacteria, versus the parts on the left.



Poor quality spindle cleaner and spindle grease caused excessive corrosion and wear to the spindle gear on the right.



The doffer pad on the right was exposed to a lesser quality product, making it brittle and prone to wear and chinking.

AU part no.	NZ part no.	Description	Size
CP4530	—	Spindle Cleaner	20L
CP4531	—	Spindle Cleaner	205L
CP6740	—	Spindle Cleaner	1000L

# Grease

John Deere's range of greases has been specifically developed to protect, lubricate and improve the efficiency and productivity of a wide range of machinery. Industrial strength grease guns are designed to easily handle punishing day-in, day-out applications.

## Special Purpose Grease



### Corn Head Grease NLGI 0

#### Applications

- Corn-head gear cases
- Reel mowers
- Gear cases running up to 1,000 rpm

#### Benefits

- Thins to a heavy gear oil when hard at work, then thickens to a grease when at rest; will not leak from slow-moving gearboxes

AU part no.	NZ part no.	Description	Size
AN102562	AN102562NZ	Cartridge	375g
AH80490	AH80490NZ	Pail	15.9kg



### HD Lithium Complex 3% MOLY NLGI 2, GC-LB Certified

#### Applications

- Construction, mining, and heavy industrial equipment
- Pivot pins, bushings, ball joints, and track rollers
- Not to be used in wheel and roller bearings

#### Benefits

- Excellent protection when shock loads and sliding pressures are severe
- Protects against extreme pressure

AU part no.	NZ part no.	Description	Size
TY6341	TY6341NZ	Cartridge	375g
TY24421	TY24421NZ	Pail	15.9kg



### HD Water Resistant NLGI 2

#### Applications

- Wet environments
- Resists rust and corrosion
- Pins, bushings, and anti-friction bearings

#### Benefits

- Protects against water washout and spray-off

AU part no.	NZ part no.	Description	Size
TY24425	TY24425NZ	Cartridge	375g
TY24427	TY24427NZ	Pail	15.9kg

## Multi Purpose Grease



### Lithium Grease NLGI 2, Standard

#### Applications

- General-purpose grease
- Pins, bushings, and anti-friction bearings

#### Benefits

- Moderate speeds, loads, and temperatures

AU part no.	NZ part no.	Description	Size
PT507	PT507NZ	Cartridge	375g
PT575	PT575NZ	Pail	15.9kg



### SD Polyurea Grease NLGI 2, GC-LB Certified, Premium

#### Applications

- Agricultural equipment
- On- and off-road equipment
- Ride-on Mowers, trucks, and trailers
- Universal joints, bearings, and suspensions

#### Benefits

- Performs in severe applications
- Minimises wear at high speeds or under heavy loads
- Resistant to heat degradation

AU part no.	NZ part no.	Description	Size
TY6341	TY6341NZ	Cartridge	375g
TY24421	TY24421NZ	Pail	15.9kg



### HD Lithium Complex Grease NLGI 2, GC-LB Certified, Better

#### Applications

- Agricultural equipment
- On- and off-road equipment
- Ride-on Mowers, trucks, and trailers
- Universal joints, bearings, and suspensions

#### Benefits

- Stable high-operating temperatures
- Minimises wear at high speeds or under heavy loads

AU part no.	NZ part no.	Description	Size
TY24416	TY24416NZ	Cartridge	375g
TY24417	TY24417NZ	Pail	15.9kg



### Multi-Purpose Extreme-Duty Synthetic Grease

#### Applications

- Tolerates extremely high and cold operating temperatures (-42.7 to 232°C)
- Farm, construction and commercial equipment—universal joints, wheel bearings, suspension systems and brake calipers
- General-purpose—windows, garage doors, hinges, bicycles, shop tools, locks and many other applications

#### Benefits

- Synthetic with Teflon™; no silicone
- NSF certified food-grade, rated H-1, non-toxic, odourless
- Dielectric grease ideal for sealing, protecting, and insulating electrical components and connectors

AU part no.	NZ part no.	Description	Size
TY25744	TY25744NZ	Cartridge	375g

# Grease Guns



## John Deere Black Pistol Grip



### Applications

- Contoured fixed handle for better grip
- Non-slip textured powder coated finish
- Improved plunger rod design – locks with the rubber follower for purging the trapped air in grease
- Standard-duty 3-jaw hydraulic coupler with hardened coupler jaws and body. Withstands pressures up to 5,000 PSI without deformation; hexagon nut for easy tightening design.

Part no.  
TY26517

## John Deere Black Lever Action



### Applications

- Longer lever handle for better leverage
- Stronger grease gun head for pressures up to 10,000 PSI
- Extra space b/w lever handle and grease barrel in fully closed position for larger hands
- Non-slip textured powder coated finish

Part no.  
TY26518

## Air-Operated Continuous-Flow



### Applications

- Delivers 1.75 L (60 oz.) per each 40 strokes
- Maximum of 4,000 PSI
- Heavy-duty aluminium die cast head

Part no.  
TY26519

## Heavy-Duty Silver Pistol Grip



### Applications

- Pistol-grip gun dual-leverage design allows choice between high-pressure or high-volume output
- Develops 7,500 PSI
- Ergonomic rugged cast aluminium handle
- Rigid extension and coupler standard

Part no.  
TY26689

ONE  
ENGINE  
OIL

ON THE FARM.  
ON THE SITE.  
AND EVEN ON  
THE HIGHWAY.



JOHN DEERE



## ONE ENGINE OIL FOR ALL.

Not everybody realizes it, but it takes a special breed of oil to keep engines running in off-road conditions. In fact, it takes John Deere Plus-50™ II Engine Oil. That's because Plus-50 II Oil is specially formulated to keep engine running smoothly and efficiently in extreme off-road conditions. Combines. UVs. Trucks. You name it. Off the road? No problem. On the highway? You betcha. Let John Deere Plus-50 II Oil be the one oil on your farm. **Talk to your dealer today.**

**JOHN DEERE PLUS-50 II OIL. KEEP RUNNING.**

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