521F
Tier 4B (Final)
Wheel Loader

OPERATOR'S MANUAL

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CASE CONSTRUCTION

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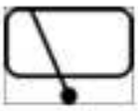
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Switch operations

1. Rear wiper switch



A. Push switch to the center position for ON.
B. Push on the front of switch for washer fluid.



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2. Front wiper/washer switch

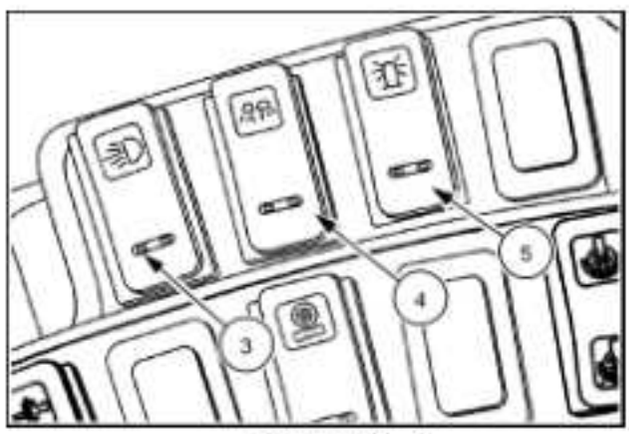


A. OFF - Toggle switch is in the OFF position.
B. INTERMITTENT - Push toggle to the first position. There are six settings for intermittent wiper speeds.
C. LOW - Push toggle ahead until the wiper runs continuously for low wiper speed.
D. HIGH - Push toggle ahead for high wiper speed.
E. WASH - Push down on the front of the switch for washer fluid.

3. Driving light switch



Push on the top of the switch for roading machine. Pushing on the bottom of the switch will turn the lights OFF. The middle position is for marker/position lights.



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4. Work light switch



Push on the top of the switch for front and rear working lights. The middle position is for front work lights only. Pushing on the bottom of the switch will turn the lights OFF.

5. Rotating beacon (optional)



Push on the top of the rotating beacon switch for the ON position. Push the switch bottom for the OFF position.

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Grease machine and attachments

Machine grease fittings

Service specifications	
Grease Specification	**CASE AKCELA MOLY GREASE**

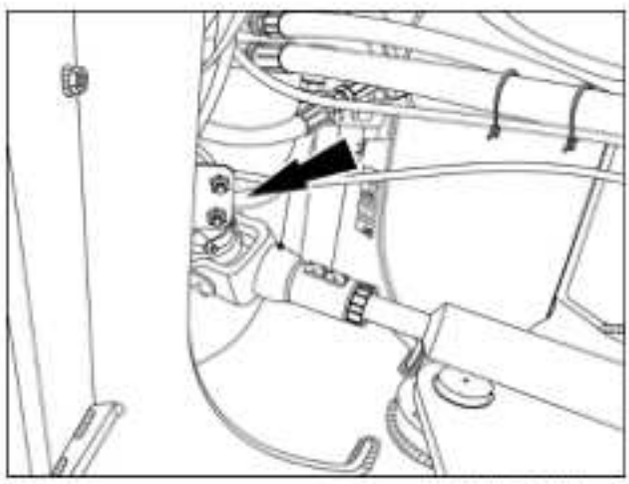
Grease the machine at the remote locations every 50 hours.

Clean around the area to be greased before service.

NOTE: *in severe conditions, such as immersion in water, it may be necessary to reduce the greasing service intervals.*

Drive shaft carrier bearing
Tilt cylinder

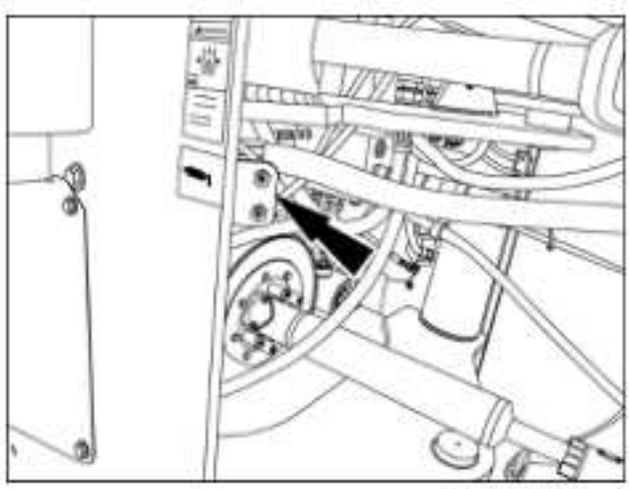
Grease the drive shaft carrier bearing and the tilt cylinder at the remote grease locations. (Front left of machine)



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Rear axle trunnion

Grease the axle oscillation at the remote grease locations. (Rear right-hand of machine)



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Weight adjustments

Weight adjustment Sspecifications

Z-Bar Applications

Tire Option	Operating Weight	Tipping Load Adjustment (straight)	Tipping Load Adjustment (40° turn)
17.5 R25 XHA	**49 kg (108 lb)**	**34 kg (75 lb)**	**31 kg (68 lb)**
17.5 R25 12 ply L2	**-116 kg (-256 lb)**	**-82 kg (-181 lb)**	**-72 kg (-159 lb)**
17.5 R25 12 ply L3	**-22 kg (-48 lb)**	**-16 kg (-35 lb)**	**-13 kg (-29 lb)**
20.5 R25 XHA	**450 kg (992 lb)**	**318 kg (701 lb)**	**281 kg (619 lb)**
20.5 R25 XTLA	**278 kg (612 lb)**	**196 kg (432 lb)**	**173 kg (382 lb)**
20.5 R25 12 ply L2	**232 kg (512 lb)**	**164 kg (362 lb)**	**145 kg (320 lb)**
20.5 R25 16 ply L3	**410 kg (904 lb)**	**269 kg (593 lb)**	**238 kg (525 lb)**
Standard counterweight	**-477 kg (-1052 lb)**	**-1067 kg (-2352 lb)**	**-897 kg (-1978 lb)**
ROPS canopy	**-134 kg (-295 lb)**	**-136 kg (-299 lb)**	**-125 kg (-276 lb)**

NOTE: *unit equipped with* ***1.6 m³ (2.1 yd³)*** *bucket, GP pin on bucket w/bolt-on-edge, ROPS cab with heater and air conditioner, lights, full counterweight, standard batteries, front and rear fenders, full fuel and urea tank, heavy counterweight* ***844 kg (1860 lb)*** *and* ***79 kg (175 lb)*** *operator.*

XR Applications

Tire Option	Operating Weight	Tipping Load Adjustment (straight)	Tipping Load Adjustment (40° turn)
17.5 R25 XHA	**49 kg (108 lb)**	**31 kg (67 lb)**	**27 kg (60 lb)**
17.5 R25 12 ply L2	**-116 kg (-256 lb)**	**-73 kg (-160 lb)**	**-64 kg (-141 lb)**
17.5 R25 12 ply L3	**-22 kg (-48 lb)**	**-14 kg (-30 lb)**	**-12 kg (-26 lb)**
20.5 R25 XHA	**450 kg (992 lb)**	**282 kg (621 lb)**	**249 kg (549 lb)**
20.5 R25 XTLA	**278 kg (612 lb)**	**174 kg (383 lb)**	**154 kg (339 lb)**
20.5 R25 12 ply L2	**232 kg (512 lb)**	**145 kg (320 lb)**	**129 kg (284 lb)**
20.5 R25 16 ply L3	**410 kg (904 lb)**	**257 kg (566 lb)**	**227 kg (500 lb)**
ROPS canopy	**-134 kg (-295 lb)**	**-121 kg (-266 lb)**	**-112 kg (-247 lb)**

NOTE: *unit equipped with* ***1.6 m³ (2.1 yd³)*** *bucket, GP pin on bucket w/bolt-on-edge, ROPS cab with heater and air conditioner, lights, full counterweight, standard batteries, front and rear fenders, full fuel and urea tank, heavy counterweight* ***850 kg (1873 lb)*** *and* ***79 kg (175 lb)*** *operator.*

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CASE

F SERIES WHEEL LOADER
TIER 4 FINAL SCR DEF QUICK REFERENCE GUIDE

DIESEL EXHAUST FLUID (DEF) FACTS & TIPS

- DEF is a non toxic aqueous liquid urea (32.5%) solution and water (67.5%). DEF is neither explosive nor harmful to the environment and is classified under the minimum risk category of transportable fluids.
- DEF quality is defined by ISO 22241-1. The American Petroleum Institute (API) has a voluntary certification program for DEF. To ensure DEF satisfies the requirement of ISO 22241-1, look for the API® DEF Certification Mark.℠
- Do not use anti-gelling or freeze point additive to DEF. This will dilute the urea content having a negative impact with the system's operation.
- Personal Protection Equipment (PPE) is not required under normal conditions. If splashing is likely, wear goggles and gloves.
- DEF shelf life varies with storage ambient temperature. (Storage Guidelines, Fig. 1).

Fig. 1

DEF STORAGE GUIDELINES

Up to 30 °F (0 °C) 36 months
31° to 77 °F (25 °C) 18 months
78° to 86 °F (30 °C) 12 months
87° to 95 °F (35 °C) 6 months

FUEL

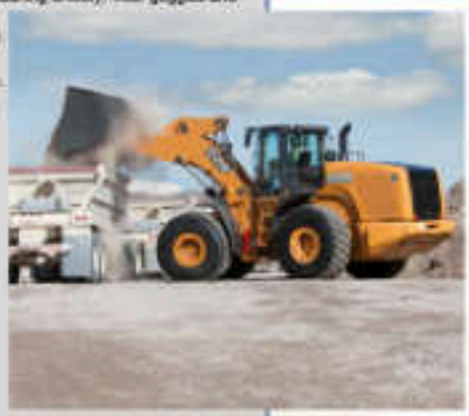
- Use only grade #2D (S15) diesel fuel that meets SAE J313 or D97581 Specification.
- If operating in very cold climates it is acceptable to use a mixture of #1D (S15) and #2D (S15) fuel.

BIO DIESEL

- Use only Biodiesel blends that meet EN14212 or ASTM D6751 Specifications.
- B5, B7 and B20 are approved blends. B100 is NOT approved. Blends over B5 may cause loss of engine power and shorten engine oil filter and fuel filter service intervals.
- Bio Diesel blends that do not meet certification can cause damage to the engine, fuel system and after treatment system.

OIL

- Use CASE AKCELA multi-viscosity engine oil to ensure long life and service in all working conditions. Consult the temperature range chart to determine the proper oil viscosity.
- Engine oil type CJ-4 is an acceptable alternative.
- Low ash oil is not required.

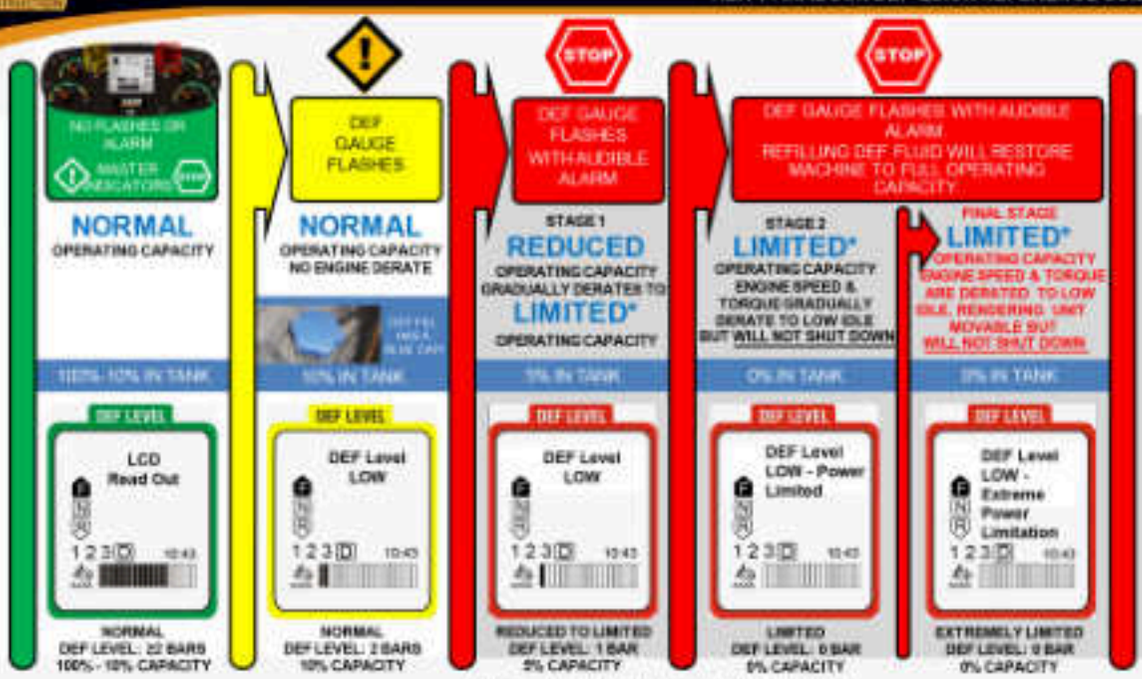


Consult operator's or service manual for specification and operating range details.
Keep this quick reference guide with the operators manual and accessible to the operator at all times.

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