

Recommended Fluids and Lubricants

Fluids and Lubricants	Specification	Use	Capacities
Compressor oil	SP-15 PAG	Cab A/C compressor	240 cc (8.1 fl. oz)
Diesel exhaust fluid (DEF)	Must meet ISO 22241 requirements	Diesel exhaust system	29 liters (7.5 US gal)
Engine coolant	ASTM D-6120 and Fleetguard ES Compleat®. Refer to operator's manual	Engine cooling system	27.5 liters (7.3 US gal)
Engine oil	SAE 15W-40 for API class SJ and CH-4	Engine oil pan	11 liters (11.6 US qt.)
Fuel: diesel no. 1 and no. 2 mix	Sulphur (by weight) 0.5% preferably 1% max water and sediment (by weight) 0.1% max. Lubricity 460 microns	Fuel tank	367 liters (97 US gal)
Fuel: diesel no. 2	ASTM D-975 Grade S15 Sulphur (by weight) 0.5% max. Water and sediment (by vol) 0.05% max Lubricity 520 microns		
Grease	SAE multi-purpose High temperature extreme pressure EP2 max 1% molybdenum disulphide, lithium base. Use as required unless otherwise noted	As required unless otherwise specified	As required
Hydraulic oil	SAE 15W-40 for API class SJ and CH-4. Refer to operator's manual.	Windrower drive and header drive	65 liters (17.2 US gal)
Gear lubricant	SAE 75W-90 API service class GL-5 Fully synthetic gear lubricant (SAE J2360 preferred)	Drive wheel	1.4 liters (1.5 US qt.)
		Engine gearbox	2.1 liters (2.2 US qt.)
Refrigerant	R134A	Cab A/C system	2.27 kg (5 lb.)

Break-In Inspections

To help avoid major component service or replacement, perform break-in inspections on your machine for the first 50 hours of operation. Refer to your operator's manual for complete break-in inspection and adjustment procedures.

Inspection Instance	Item
1 Hour	Check drive wheel nuts, and torque to 510 Nm (375 lbf-ft) dry.
5 Hours	Tension A/C compressor belt.
	Torque caster wheels nuts to 163 Nm (120 lbf-ft).
	Torque caster wheel anti-shimmy dampener bolts to: inboard bolt 135 Nm (100 lbf-ft) and outboard bolt 115 Nm (85 lbf-ft).
10 Hours	Torque walking beam width adjustment bolts to 448 Nm (330 lbf-ft)
	The Dealer will adjust the neutral.
50 Hours	Hand tighten the following hose clamps: air intake, radiator, heater, and hydraulic.
	Torque walking beam width adjustment bolts to 448 Nm (330 lbf-ft)
	Torque caster wheel anti-shimmy dampener bolts to: inboard bolt 135 Nm (100 lbf-ft) and outboard bolt 115 Nm (85 lbf-ft).
	Change main gearbox oil, drive wheel oil lubricant, charge system oil filter, and return oil filter.

Tire Pressures

Drive Tires	18.4 - 26 bar 371 kPa (46 psi)	600 - 65 R28 bar 241 kPa (35 psi)
	18.4 - 26 turf 317 kPa (46 psi)	23.1 - 26 turf 234 kPa (34 psi)
Rear Tires	All rear tire pressures are 69 kPa (10 psi)	

Ongoing Maintenance Intervals

Refer to the operator's manual for a comprehensive maintenance schedule and record. Log hours of operation, use the maintenance record, and keep copies of your maintenance records.

Following the maintenance schedule will increase your machine's life.

Subject to change without notice

M155E4 SP Windrower: Quick Card

MacDon

Operator's Station Features

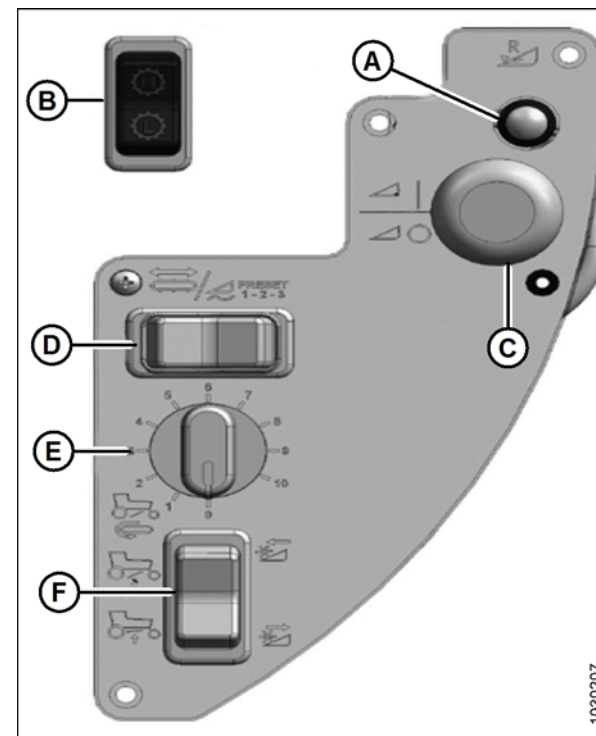


Figure 1: In-Cab Controls

- A. **REVERSER** - To activate, hold down and engage the header (requires optional hydraulics)
- B. **GROUND SPEED RANGE**
- C. **HEADER ENGAGE**
- D. **DECK SHIFT / FLOAT PRESET**
- E. **DWA DRAPER SPEED** (optional)
- F. **DWA and SWATH COMPRESSOR RAISE / LOWER** (optional)

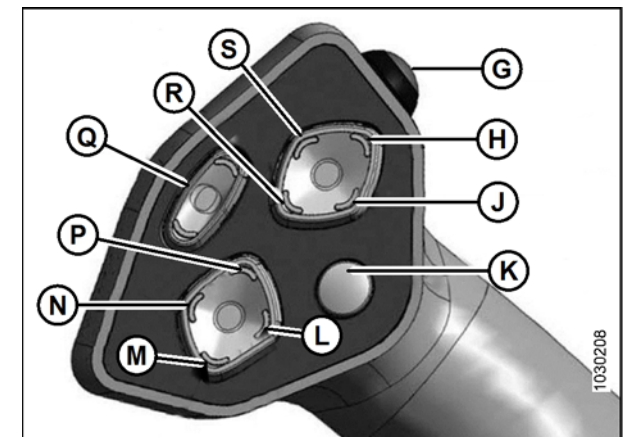


Figure 2: Ground Speed Lever (GSL)

- G. **ENGAGE AUTOSTEER**
- H. **REEL UP**
- J. **REEL AFT**
- K. **DISPLAY SELECTOR SWITCH**
- L. **HEADER TILT UP** (retracts center-link)
- M. **HEADER DOWN**
- N. **HEADER TILT DOWN** (extends center-link)
- P. **HEADER UP**
- Q. **REEL / DISC SPEEDS**
- R. **REEL DOWN**
- S. **REEL FORE**

Float Presets

A Series, R Series, or D Series without Hydraulic Deck Shift

FLOAT PRESET / DECK SHIFT switch allows for memory of three trim cylinder positions.

For example:

- #1 - Border width LH 5.0, RH 6.5
- #2 - Normal width LH 5.0, RH 5.0
- #3 - Rocky width LH 6.5, RH 6.5

D Series with Hydraulic Deck Shift

DECK SHIFT switch activates hydraulic deck shifting when the header is engaged, and allows for auto-memory of trim cylinder adjustments in each delivery opening position. Allows for compensation of weight shifts to the float springs.

Normal Start – Engine Temp above 16°C (60°F)

1. Main battery disconnect switch – power **ON**.
 2. GSL in **N-DETENT**. Header Drive switch **OFF**.
 3. Seat belt **ON**. Set throttle to low idle position (fully back).
 4. Sound horn three times.
 5. Turn ignition key to **RUN** position, a single loud tone sounds, engine warning lights flash (self-test mode), and cab display module (CDM) displays HEADER DISENGAGED and IN PARK.
 6. Turn ignition key to **START** position until engine starts then release key.
 7. Run engine at idle until temperature reaches 40°C (100°F).
- NOTE:** CDM displays programmed header data for 5 seconds, then returns to previous display.

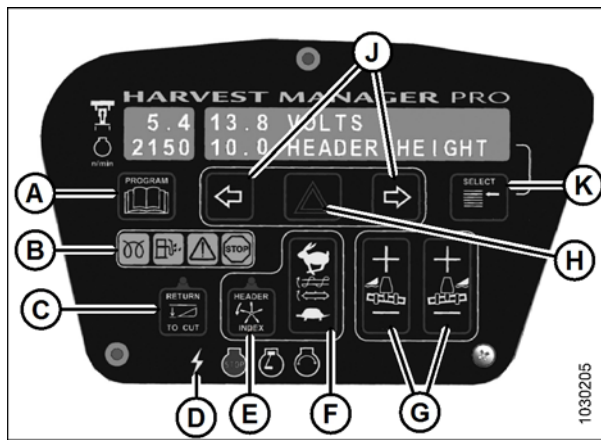


Figure 3: Cab Display Module (CDM)

- A. **PROGRAM** - Press to enter/exit set-up modes and for key shortcuts.
- B. **ENGINE WARNING** - Includes engine preheat, water in fuel, engine malfunction, and stop engine.

- C. **RETURN TO CUT** - When green light is ON, RETURN TO CUT function is active.
- D. **IGNITION** - Includes Accessory, Stop, Run, Start.
- E. **HEADER INDEX** - When green light is ON, reel/conveyor speed features are active.
- F. **AUGER / DRAPER SPEED** - Adjusts draper or auger speed depending on header.
- G. **FLOAT** - Provides in-cab adjustments for independent left/right header flotation.
- H. **HAZARD WARNING LIGHT** - Flashing amber lights operate in both cab-forward and engine-forward positions.
- J. **TURN SIGNAL** - Activates turn indicators and scrolls through CDM set-up screens.
- K. **SELECT** - Changes bottom line of display and works as the ENTER button in program mode.

Header Index Mode

Header index mode is desirable in some crop and terrain conditions because it allows the reel and conveyor to be driven by reference to ground speed, so that header systems speed up and slow down as ground speed changes.

Operation of Header Index for REEL SPEED: A Series and D Series

1. Clear all bystanders, start the windrower, and engage the header.
2. While stationary with the GSL in PARK, use the REEL SPEED control switch to set a minimum reel speed.

When operating at a ground speeds faster than the minimum reel speed + header index value, REEL SPEED display will change to REEL INDEX.
3. Adjust the header index value using the GSL REEL SPEED switch.

Reel speed will be equal to Ground Speed + Index Value or Minimum Reel Speed (whichever is greater).

Operation of Header Index for DRAPER SPEED: D Series Only

Follow instructions above, using the CDM AUGER/DRAPER speed control, rather than the GSL REEL SPEED switch.



Figure 4: Diesel Exhaust Fluid (DEF) Display Monitor

- A. **FUEL and DEF LEVEL** - Amber light blinks when tank level reaches 1/16.
- B. **HIGH EXHAUST SYSTEM TEMPERATURE (HEST)** - When active, icon is black with amber background. When inactive, icon not visible.
- C. **SCR SYSTEM CLEANING INHIBIT and FORCED** - When active, icons are black with amber background. When inactive, icons are gray.

Header Model	Application/System	Suggested Overload Warning Setting kPa (psi)	Windrower Pressure Relief Setting kPa (psi)
R Series	Disc pressure	27,579 (4000)	28,958 (4200)
A Series D Series	Reel / draper pressure	20,684 (3000)	22,063 (3200)
	Knife / conditioner pressure	27,579 (4000)	28,958 (4200)

Alarm Tone	Reason	Duration
Ongoing intermittent moderate tone until the condition is corrected	When DEF or fuel level amber light first starts to blink (1/16th tank)	5 seconds
	When the SCR system cleaning INHIBIT is active and system calls for a passive SCR system cleaning	5 seconds, repeat every 30 minutes
Single moderate tone	At the end of the delay for entering the brightness/tools menu	—
	At the end of the delay when switch (icon) is activated	—

Operation		
SCR system cleaning INHIBIT	Should only be activated when the environment is unsafe to allow high exhaust temperatures (e.g., in a building).	To activate function, press and hold the icon for 3 seconds. The fuel gauge display is replaced with red text HOLD 3 SECONDS.
SCR system cleaning FORCED	Allows a manual (parked) exhaust system cleaning. It is used infrequently for unusual duty cycles. If required, it will illuminate amber. Should NOT be performed indoors.	
HEST lamp	Do NOT park vehicle indoors when lamp is on.	Appears when the engine enters a SCR system cleaning. This will not hinder normal vehicle operation.
Overriding engine shutdown	This should only be done in an emergency situation (e.g., clearing a railroad) as engine damage may occur.	Press the PRESS HERE TO OVERRIDE message that alternate with SHUTDOWN IN message. The countdown timer for shutdown will reset to 30 seconds.
Tools menu	Accessible through the fuel icon and gauge. Press and hold the fuel icon and gauge display for 2 seconds, tools and brightness symbols come up. Pressing the brightness symbol will display the backlighting control function, adjust if necessary.	NOTE: Display will revert back to fuel icon and gauge if backlighting control function is not pressed for 5 seconds, or if the DEF icon and gauge are pressed. Pressing the tools symbol brings up the languages menu and software version.

Tips and Shortcuts	
Entering Programming Mode	Ignition ON. Press and hold PROGRAM and SELECT at the same time, until the CDM display enters programing mode.
Exiting Programming Mode	Press PROGRAM .
Changing Language to English	Ignition OFF. Press and hold HEADER INDEX and PROGRAM and SELECT .
Clearing Sub-Acres	Cab-Forward position. Ignition ON. Press SELECT until SUB-ACRES is viewed on the bottom line of the display. Press and hold PROGRAM until SUB-ACRES changes to 0.0.
Disconnecting Batteries	The battery disconnect switch is located just behind the batteries and can be accessed by opening the maintenance platform. Ensure the switch is in the OFF position when servicing electrical components, or when the windrower will not be used for periods longer than one week.
NOTE: See M155E4 Self-Propelled Operator's Manual for complete instructions and detailed information	