Maintenance and Servicing

Subject to change without notice

Ongoing Maintenance Intervals

Time	Service
10 Hours or Daily	1. Check tire inflation. 2. Check engine oil level. 3. Check engine coolant level at reserve tank. 4. Clean radiator, hydraulic oil cooler, charge air cooler, and air conditioning condenser. 5. Check hydraulic oil level. 6. Drain fuel filter water trap. 7. Fill fuel tank. 8. Check hydraulic hoses and lines for leaks. 9. Check diesel exhaust fluid (DEF) level.
50 Hours	1. Grease caster pivots. 2. Grease top lift link pivots. 3. Grease forked caster spindle bearings. 4. Clean cab fresh air intake filter. 5. Check gear box oil level.
100 Hours or Annually	1. Clean cab air return filter.

NOTE: Refer to M155*E4* Operator's Manual for 250, 500, 1000, 1500, 2000, 4500, 5000 hour, and annual maintenance.

Break-In Inspections

Hr(s)	Item	Check
1	Drive wheel nuts	Torque: 510 N·m (375 ft·lbf) dry Refer to M155*E4* Operator's Manual
5	A/C compressor belt	Tension
	Caster wheel nuts	Torque: 163 N·m (120 ft·lbf)
	Caster wheel anti-shimmy dampener bolts	Torque: Inboard bolt: 135 N·m (100 ft·lbf) Outboard bolt: 115 N·m (85 ft·lbf)
	Walking beam width adjustment bolts	Torque: 448 N·m (330 ft·lbf)
10	Walking beam width adjustment bolts	Torque: 448 N·m (330 ft·lbf)
	Neutral	Adjusted by Dealer
50	Hose clamps: air intake, radiator, heater and hydraulic	Hand-tighten unless otherwise noted
	Walking beam width adjustment bolts	Torque: 448 N·m (330 ft·lbf)
	Caster wheel anti-shimmy dampener bolts	Torque inboard: 135 N·m (100 ft·lbf) Torque outboard: 115 N·m (85 ft·lbf)
	Main gearbox oil	Change
	Drive wheel oil lubricant	
	Charge system oil filter	
	Return oil filter	

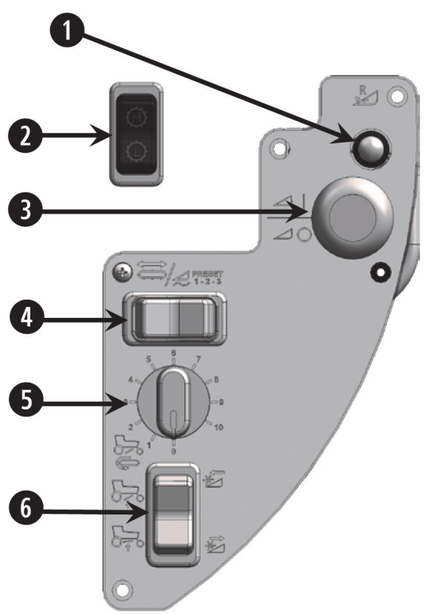
Fluids and Lubricants

Fluid	Vol	Spec	Description / Information
Diesel exhaust fluid (DEF)	29 liters (7.5 US gal)	Must meet ISO 22241 requirements	Diesel exhaust system
Fuel: diesel No.2	367 liters (97 US gal)	ASTM D-975 Grade S15	Sulphur (by weight) 0.5% max. Water and sediment (by vol) 0.05% max. Lubricity 520 microns
Fuel: diesel no.1 and no. 2 mix	367 liters (97 US gal)	n/a	Sulphur (by weight) 0.5% pref. 1% max. Water and sediment(by weight) 0.1% max. Lubricity 460 microns
Engine coolant (antifreeze)	27.5 liters (7.3 US gal)	ASTM D-6120 and Fleetguard ES Compleat®	Refer to M155*E4* Operator's Manual
Drive wheel lubricant	1.4 liters (1.5 US qt.)	SAE 75W-90 API service class GL-5	Fully synthetic gear lubricant (SAE J2360 preferred)
Grease	As required	SAE multi-purpose	High temperature extreme pressure EP2 max 1% molybdenum disulphide, lithium base. Use as required unless otherwise noted
Engine oil	11 liters (11.6 US qt.)	SAE 15W-40 for API class SJ and CJ-4	Engine oil pan
Hydraulic oil	65 liters (17.2 US gal)	SAE 15W-40 for API class SJ and CH-4. Refer to Operator's manual	Windrower drive and header drive
Gear box lube	2.1 liters (2.2 US qt.)	SAE 75W-90 API service class GL-5 (SAE J2360 preferred)	Fully synthetic gear lubricant for engine gearbox
A/C refrigerant	2.27 kg (5 lb.)	R134A	Cab A/C system
A/C compressor oil	240 cc (8.1 fl. oz)	SP-15 PAG	Cab A/C compressor lubricant

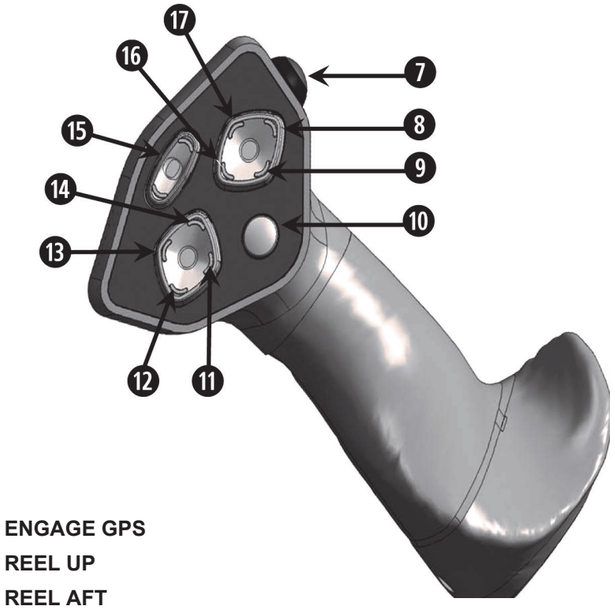
Tire Pressures

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)	

M155*E4* Windrower Operator's Station Features



1 **REVERSER** - To activate, hold down and engage the header (requires optional hydraulics)
2 **GROUND SPEED RANGE**
3 **HEADER ENGAGE**
4 **DECK SHIFT / FLOAT PRE-SET**
5 **DWA DRAPER SPEED** (optional)
6 **DWA and SWATH COMPRESSOR RAISE / LOWER** (optional)



7 **ENGAGE GPS**
8 **REEL UP**
9 **REEL AFT**
10 **SCROLLS THE TOP LINE OF DISPLAY**
11 **HEADER TILT UP** (retracts center-link)
12 **HEADER DOWN**
13 **HEADER TILT DOWN (**extends center-link)
14 **HEADER UP**
15 **REEL** (D65/A40) **/ DISC SPEEDS** (R-Series)
16 **REEL DOWN**
17 **REEL FORE**

Float Presets

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

FLOAT PRE-SET / 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)

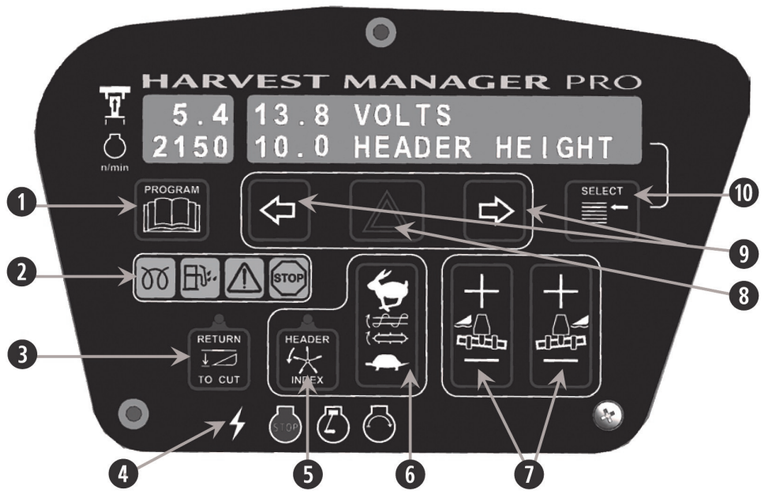
1. Main battery disconnect switch – POWER **ON**.
2. GSL in **N-DETENT.** HEADER DRIVE switch **OFF.**
3. Seat Belt **ON**. Set throttle to low idle position (fully back).
4. Sound horn three times.
5. Turn ignition key to **RUN** position. Single loud tone sounds. Engine warning lights flash (self-test 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 five seconds, then returns to previous display.

Programming the CDM

Subject to change without notice

Fuel and Diesel Exhaust Fluid (DEF) Display Module



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.

1 **PROGRAM** - Press to enter/exit set-up modes and for key shortcuts.

2 **ENGINE WARNING** - Engine preheat, water in fuel, engine malfunction, and stop engine.

3 **RETURN TO CUT** - When green light is ON, RETURN TO CUT function is active.

4 **IGNITION** - Accessory, Stop, Run, Start.

5 **HEADER INDEX** - When green light is ON, reel/conveyor speed features are active.

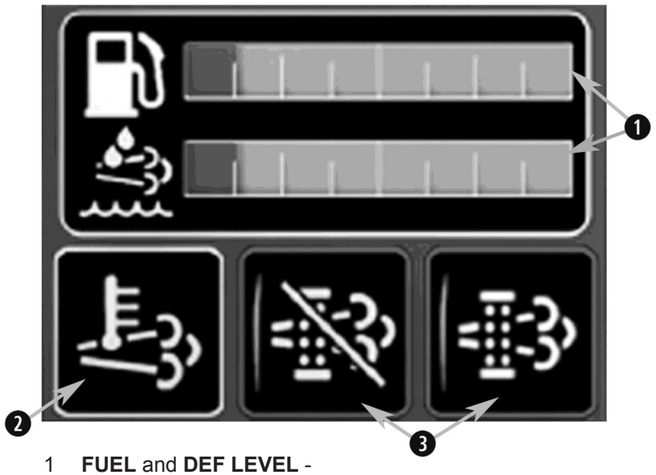
6 **AUGER / DRAPER SPEED** - Adjusts draper or auger speed depending on header.

7 **FLOAT** - Provides in-cab adjustments for independent left/right header flotation.

8 **HAZARD WARNING LIGHT** - Flashing amber lights operate in both cab-forward and engine-forward positions.

9 **TURN SIGNAL** - Activates turn indicators and scrolls through CDM set-up screens.

10 **SELECT** - Changes bottom line of display and works as the ENTER button in program mode.



1 **FUEL** and **DEF LEVEL** -
Amber light blinks when tank level reaches 1/16.

2 **HIGH EXHAUST SYSTEM TEMPERATURE (HEST)** -
When active, icon is black with amber background.
When inactive, icon not visible.

3 **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 psi (kPa)
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 three 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 two 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 five 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 programming 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 M155*E4* Operator's manual for complete instructions and detailed information	