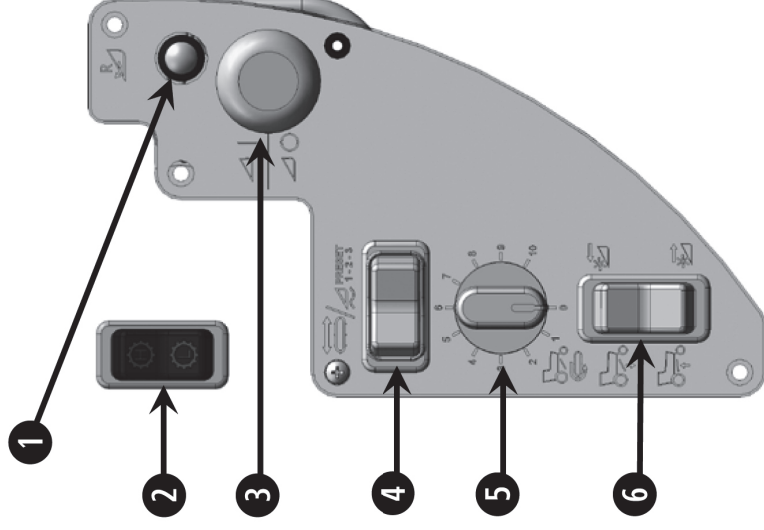


Time	Service
Every 10 Hours or Daily	<ol style="list-style-type: none"> 1. Check tire inflation 2. Check engine oil and engine coolant levels 3. Clean radiator, hydraulic oil cooler, charge air cooler, and A/C condenser 4. Check hydraulic oil level, and inspect hoses/lines for leaks 5. Drain fuel filter water trap 6. Fill fuel tank
Every 50 Hours	<ol style="list-style-type: none"> 1. Grease caster pivots and spindle bearings 2. Grease top lift link pivots 3. Clean cab fresh air intake filter 4. Check engine gearbox/drive wheel lubricant
Every 100 Hours or Annually	<ol style="list-style-type: none"> 1. Clean cab air return filter
NOTE: Refer to M155 Operator's Manual for complete maintenance schedule	

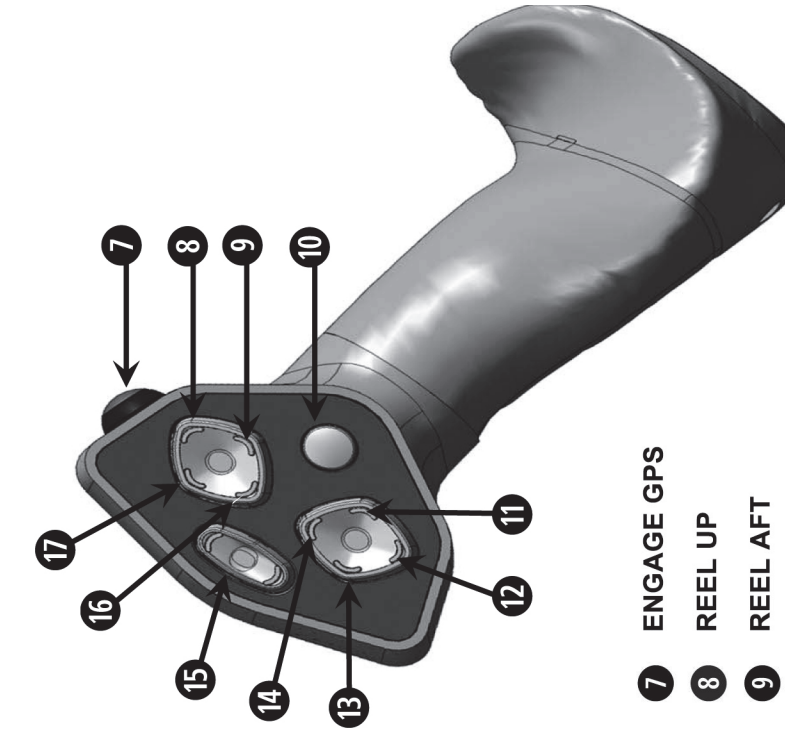
Fluids and Lubricants			
Fluid	Location	Capacity	Description
Diesel fuel	Fuel tank	378 L (97 US gallons)	Sulphur (by weight) 0.5% maximum Water and Sediment (by vol) 0.05% max. Lubricity 520 microns
Antifreeze	Engine cooling system	27.5 L (7.3 US gallons)	Sulphur (by weight) 0.5% pref. 1% max. Water and Sediment (by weight) 0.1% max. Lubricity 460 microns
Grease	As required	---	Use with equal parts water, high quality soft, deionized or distilled water
Engine oil	Engine crankcase	11 L (11.6 US quarts)	1% maximum Molybdenum Disulphide (NLGI Grade 2) lithium base
Hydraulic oil	Hydraulic reservoir	65 L (17.2 US gallons)	Refer to Operator's Manual
Gear lubricant	Engine gearbox	2.1 L (2.2 US quarts)	SAE 15W-40 compliant with SAE specs for API class SJ and CH-4 engine oil
	Wheel drive	1.4 L (1.5 US quarts)	SAE 80W-140, API service class GL-5
A/C refrigerant	A/C system	2.27 kg (5 lb.)	Fully synthetic gear lubricant, SAE J2360 is preferred
A/C refrigerant oil	A/C system total cap.	240 cc (8.1 fluid ounce)	---

Tire Pressures (10-bolt)	
18.4-26 Bar	317 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)
All rear tire pressures: 69 kPa (10 psi)	

Break-In Inspections		
Hours	Item	Check
1	Drive Wheel Nuts	Torque: 510 Nm (375 lbf-ft) dry Refer to Operator's Manual
	A/C Belt	Tension
5	Caster Wheel Nuts	Torque: 163 Nm (120 lbf-ft)
	Caster Wheel Anti-Shimmy Dampener Bolts	Torque Inboard Bolt: 135 Nm (100 lbf-ft) Torque Outboard Bolt: 115 Nm (85 lbf-ft)
	Walking Beam Width Adjustment Bolts	Torque: 448 Nm (330 lbf-ft)
10	Walking Beam Width Adjustment Bolts	Torque: 448 Nm (330 lbf-ft)
	Neutral	Adjusted by Dealer
50	Hose Clamps: Air Intake, Radiator, Heater, Hydraulic	Hand-tighten unless otherwise noted
	Walking Beam Bolts	Torque: 448 Nm (330 lbf-ft)
	Caster Wheel Anti-Shimmy Dampener Bolts	Torque Inboard Bolt: 135 Nm (100 lbf-ft) Torque Outboard Bolt: 115 Nm (85 lbf-ft)
	Main engine Gearbox Oil	Change
	Drive Wheel Oil Lubricant	
	Hydraulic oil filters (except lift)	



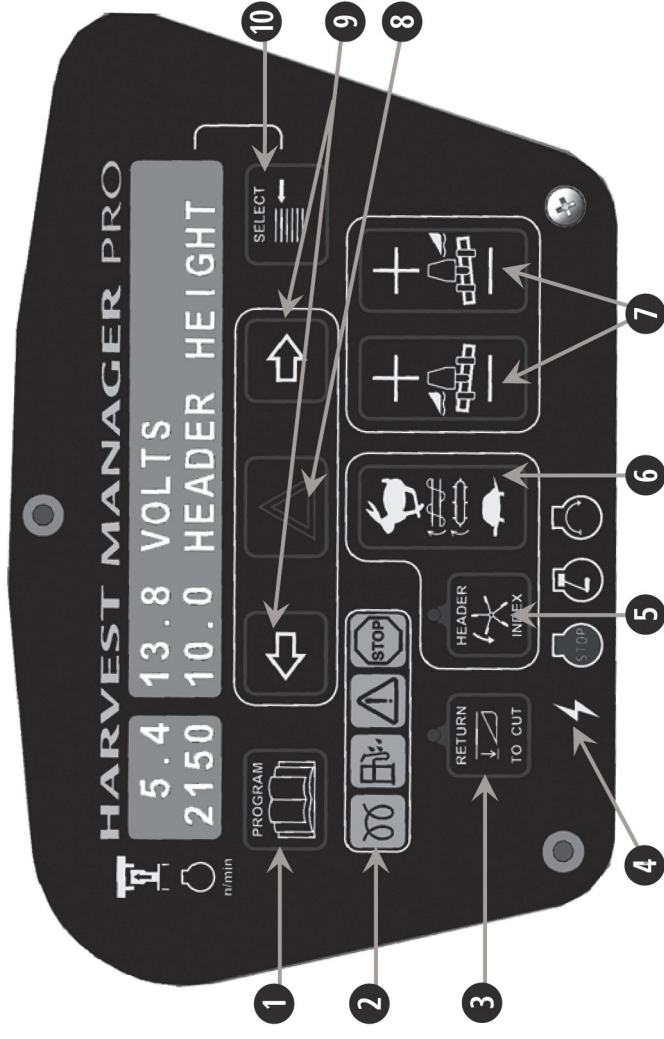
- 1 REVERSER** - To activate, hold down, and engage the header (requires optional hydraulics)
- 2 GROUND SPEED RANGE**
- 3 HEADER ENGAGE**
- 4 DECK SHIFT / FLOAT PRE-SET**
- 5 DWA DRAPER SPEED (Optional)**
- 6 DWA / SWATH COMPRESSOR**



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

Float Presets
A Series, R Series, or D Series - Without Hydraulic Deck Shift
FLOAT PRE-SET/DECK SHIFT switch allows for auto-memory of three different 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. Switch main battery disconnect switch to ON .
2. Place GSL in N-DETENT . Push HEADER DRIVE switch to OFF .
3. Ensure seat is locked in either Cab Fwd or Engine Fwd position.
4. Fasten seat belt. Set throttle to START position - fully back.
5. Sound horn three times.
6. Turn ignition key to RUN position. Single loud tone sounds. Engine warning lights flash in self-test mode, and CDM displays HDR DISENGAGED and IN PARK .
7. Turn ignition key to START position until engine starts. Release key. Allow engine to run at IDLE until temperature reaches 40°C (100°F). CDM displays programmed header data for five seconds (if attached) and then returns to previous display.



- 1 **PROGRAM** - Press to enter and exit set-up modes, and for key shortcuts
- 2 **ENGINE WARNING** - Engine pre-heat, water in fuel, engine malfunction, stop engine
- 3 **RETURN TO CUT** - When the green light is ON, the RETURN TO CUT function is active
- 4 **IGNITION** - Accessory, Stop, Run, Start
- 5 **HEADER INDEX** - When the green light is ON, reel/conveyor speed features are active
- 6 **AUGER / DRAPER SPEED** - Adjusts draper or auger speed, depending on the 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 the turn indicators, and scrolls through the CDM set-up screens
- 10 **SELECT** - Changes bottom line of the display, and works as the ENTER key in program mode

Header Index Mode

Enhanced reel/conveyor speed controls may be desirable in variable crop and terrain conditions.

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. With all bystanders clear, start 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.
3. When operating at grounds speeds faster than the minimum reel speed + header index value, REEL SPEED display will change to REEL INDEX. Using the REEL SPEED switch on the GSL, header index can be adjusted.
4. Reel speed will be equal to the **greater** of the sum of *Ground Speed + Index Value*, OR *Minimum Reel Speed*.

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.

Tips and Shortcuts

Enter Programming Mode	Ignition ON. Press and hold PROGRAM and SELECT at the same time, until the CDM display enters programming mode.
Exit Programming Mode	Press PROGRAM .
Change Language to English	Ignition OFF. Press and hold HEADER INDEX and PROGRAM and SELECT .
Clear 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 behind the batteries, and can be accessed by opening the maintenance platform. Ensure the switch is in the OFF position when servicing electrical components, and when the windrower will not be used for longer than one week.

CDM Programming Mode: Windrower Setup (See M155 Operator's Manual for complete instructions and detailed information)	
SET KNIFE SPEED → SPM	Adjusts knife speed on draper and auger headers. Every header size and type of knife drive will have a different range for the knife speed. Refer your header Quick Card for optimal settings.
KNIFE / DISC OVERLOAD SPD → SPM/RPM	KNIFE OVERLOAD SPEED (Auger / Draper) to be set at 75% of desired knife speed. DISC OVERLOAD SPEED (Rotary) should be set to 1300 rpm.
OVERLOAD PRESSURE → PSI/BAR	Adjusts warning pressure of overload sensor (reel/draper/knife/disc system). See Overload Recommendations Chart below.
HEADER INDEX MODE → Reel+Drapers OR Reel Only	Auger and Draper headers only. Allows the reel and conveyor to be driven by reference to ground speed.
RETURN TO CUT MODE → Height+Tilt OR Height Only	Set functions to be controlled by RETURN TO CUT (RTC) mode.
AUTO RAISE →	Sets header-up height in RETURN TO CUT (RTC) mode. Range is 4.0 (min) to 10.0 (max).
DWA INSTALLED → NO/YES?	Activates electrical controls for Double Windrow Attachment when installed.
SWAP DWA CONTROLS → NO/YES?	If YES is selected, the REEL FORE-AFT buttons on the GSL and the DWA RAISE/LOWER switches on the console will swap functions.
DWA AUTO UP/DOWN → NO/YES?	Enables the express UP and DOWN features in RETURN TO CUT (RTC) mode.
SWATH COMPR INSTALL → NO/YES?	Activates electrical controls for swath compressor when installed.
HEADER CUT WIDTH → ##.# FT/M	Set cut width according to operating width. Calibration of acre counter. Header ID displayed on CDM at top right.
HAY CONDITIONER → NO/YES?	Draper header only. Activates hydraulics for conditioner and feed deck drive systems.
AUGER HDR REEL SPD → RPM or MPH/KMH	Selection will appear only with an auger header attached. Allows REEL SPEED to display in rpm or mph or kph.
SET TIRE SIZE →	Select installed tire size for ground speed and acre counter calibration.
SET ENGINE ISC RPM → NO/YES?	ENGINE INTERMEDIATE SPEED CONTROL. Engine rpm can be limited to a specified value while header is engaged. Scroll to desired rpm value. Use HAZARD key to set.
SET CONTROL LOCKS → NO/YES?	Allows header functions to be locked from Operator control (for example: Locking reel speed and/or reel fore-aft controls from Operator.)
VIEW CONTROL LOCKS → NO/YES?	Allows Operator to view control lock status, and engine hours when status was established (for example: REEL FORE-AFT - 224.5 HRS LOCKED).

Header Model	Application/System	Suggested Overload Warning Setting kPa (psi)	Windrower Pressure Relief Setting kPa (psi)
R Series	Disc Pressure	27,579 (4000)	29,958 (4200)
A Series D Series	Reel / Draper Pressure	20,684 (3000)	22,063 (3200)
	Knife / Conditioner Pressure	27,579 (4000)	28,958 (4200)