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 A/C Condenser. 5. Check Hydraulic Oil Level. 6. Drain Fuel Filter Water Trap. 7. Fill Fuel Tank. 8. Check Hydraulic Hoses and Lines For Leaks.
50 Hours	1. Grease Caster Pivots. 2. Grease Walking Beam Center and 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 Operator's Manual for 250, 500, 1000, 1500, 2000, 5000 Hour and Annual Maintenance.

BREAK-IN INSPECTIONS

HRS	ITEM	CHECK
Every 0.25 Road or 1 Field	Drive Wheel Nuts	Torque: 170 ft·lbf (230 N·m) dry. Refer to M155 Operator's Manual
5	A/C Belt	Tension
	Caster Wheel Nuts	Torque: 120 ft·lbf (163 N·m)
	Caster Wheel Anti-Shimmy Dampener Bolts	Torque Inboard Bolt: 100 ft·lbf (135 N·m) Outboard Bolt: 85 ft·lbf (115 N·m)
	Walking Beam Width Adjustment Bolts	Torque: 330 ft·lbf (448 N·m)
10	Walking Beam Width Adjustment Bolts	Torque: 330 ft·lbf (448 N·m)
	Neutral	Adjusted by Dealer
50	Hose Clamps: Air Intake, Radiator, Heater and Hydraulic	Hand-tighten unless otherwise noted
	Walking Beam Bolts	Torque: 330 ft-lbf (448 N·m)
	Caster Wheel Anti-Shimmy Dampener Bolts	Torque Inboard: 100 ft-lbf (135 N·m) Torque Outboard: 85 ft-lbf (115 N·m)
	Main Gearbox Oil	Change
	Drive Wheel Oil Lubricant	
	Charge System & Hydraulic Oil Filters (except lift)	
	Manifold Oil Filter	

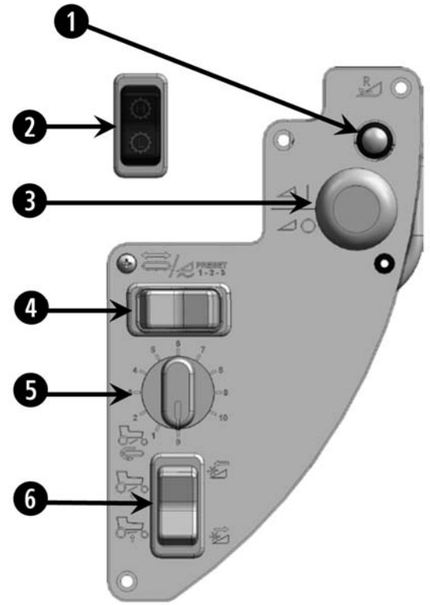
FLUIDS AND LUBRICANTS

FLUID	VOL	SPEC	DESCRIPTION / INFORMATION
Fuel: Diesel No.2	97 US Gallons (367 L)	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	97 US Gallons (367 L)	n/a	Sulphur (by weight) 0.5% pref. 1% max. Water and Sediment (by weight) 0.1% max. Lubricity 460 microns
Engine Coolant (Anti Freeze)	6.6 US Gallons (25 L)	ASTM D-6120 and Fleetguard ES Compleat	Refer to M155 Operator's Manual
Drive Wheel Lubricant	1.5 US Quarts (1.4 L)	SAE 75W-90 API service Class GL-5	Fully synthetic gear lubricant (SAE J2360 preferred)
Grease	N/A	SAE Multi-Purpose	High Temperature Extreme Pressure EP2. Maximum 1% molybdenum disulphide, Lithium base. Use as required unless otherwise noted
Engine Oil	11.6 US Quarts (11 L)	SAE 15W-40 for API Class SJ and CH-4	Engine Oil Pan
Hydraulic Oil	17.2 US Gallons (65 L)	SAE 15W-40 for API Class CJ-4. Refer to Operator's Manual	Windrower Drive and Header Drive
Gear Box Lube	2.2 US Quarts (2.1 L)	SAE 75W-90 API service Class GL-5 (SAE J2360 preferred)	Fully synthetic gear lubricant for Engine Gearbox
A/C Refrigerant	5 lb. (2.27 kg)	R134A	Cab A/C System
A/C Compressor Oil	8.1 fl. oz (240 cc)	SP-15 PAG	Cab A/C Compressor Lubricant

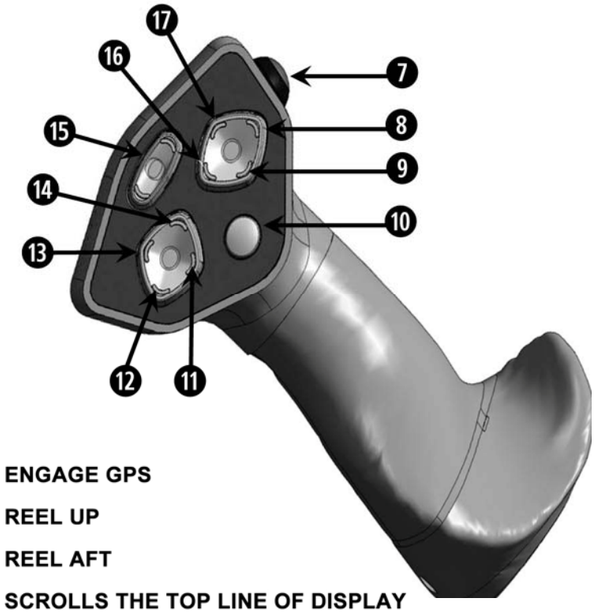
TIRE PRESSURES

Drive Tires	18 - 26 BAR 32 psi (221 kPa)	600 - 65 R28 BAR 26 psi (179 kPa)	580 / 70 R26 TURF 24 psi (165 kPa)
	18.4 - 26 TURF 35 psi (241 kPa)	23.1 - 26 TURF 20 psi (138 kPa)	
Rear Tires	All Rear Tire Pressures are 10 psi (69 kPa)		

M155 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 RAISE / LOWER**



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 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 60°F (16°C)

1. Main battery disconnect switch - POWER **ON**.
2. GSL in **N-DETENT.** HEADER DRIVE switch **OFF.**
3. Seat Belt **ON**. Set throttle to **START** position - "fully back".
4. Sound horn three times.
5. Turn ignition key to **RUN** position. Single loud tone sounds. Engine warning lights flash in self-test mode, and CDM displays "HEADER DISENGAGED" and "IN PARK".
6. Turn ignition key to **START** position until engine starts. Release key. Allow engine to run at IDLE until temperature reaches 100°F (40°C).
7. CDM displays programmed header data for 5 seconds, and then returns to previous display.

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Programming the CDM

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", activates the RETURN TO CUT programmable function.
4. **IGNITION** - Accessory, Stop, Run, Start.
5. **HEADER INDEX** - When the green light is "ON", activates the reel/conveyor speed features.
6. **AUGER / DRAPER SPEED** - Adjusts draper or auger speed, depending on the header that is attached.
7. **FLOAT** - Provides in-cab adjustments for header flotation system. Left and right cylinders adjust independently.
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" button 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 will speed up and slow down as ground speed changes.

Operation of Header Index for REEL SPEED:
(A 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 GSL REEL SPEED switch, Header Index can be adjusted.
4. Reel speed will be equal to the **greater** 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".

CDM PROGRAMMING MODE: TRACTOR 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	Calibration 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. References and operates 'Reel Only' or 'Reel and Drapers' in relation 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 → YES/NO?	Activates electrical controls for Double Windrow Attachment when installed.
SWAP DWA CONTROLS→ NO/YES?	If "YES" selected, REEL FORE-AFT and DWA RAISE / LOWER switches will swap functions.
DWA AUTO UP/DOWN YES/NO?	Enables the express UP and DOWN features in RETURN TO CUT (RTC) mode.
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 → YES/NO?	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 / 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 psi (kPa)	WINDROWER PRESSURE RELIEF SETTING psi (kPa)
R Series	Disc Pressure	4000 (27579)	4200 (28958)
A Series D Series	Reel / Draper Pressure	3000 (20684)	3200 (22063)
	Knife / Conditioner Pressure	4000 (27579)	4200 (28958)

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