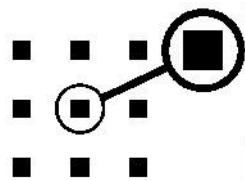


2100 GRAIN LOSS MONITOR

INSTALLATION AND OPERATION INSTRUCTIONS



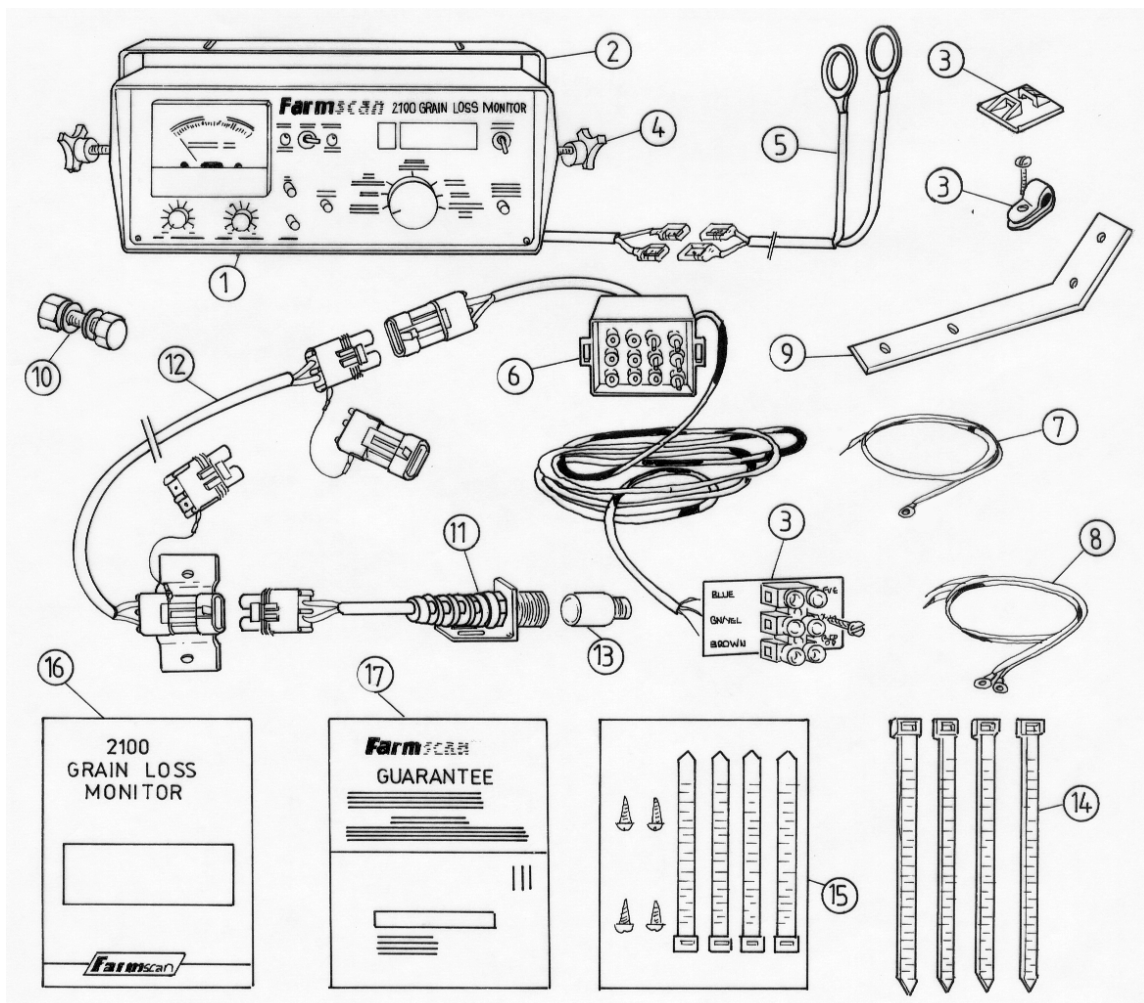
FARMSCAN

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PARTS LIST

REF	PART No.	DESCRIPTION	QTY
1.	A - 2100	GRAIN LOSS / AREA METER	1
2.	AH - 405	MONITOR MOUNTING BRACKET	1
3.	AH - 541	GRAIN LOSS HARDWARE PACKAGE	1
4.	AH - 861	FINGER SCREWS (1/4")	2
5.	AC - 101	8M POWER CABLE	1
6.	AC - 127	GRAIN SENSOR WIRING HARNESS	1
7.	AC - 128	FLEXIBLE SIEVE SENSOR CABLE	1
8.	AC - 129	WALKER/ROTOR SENSOR CABLE	1
9.	AH - 402	GRAIN SENSOR MOUNTING BRACKET	4
10.	AH - 412	BOLT PACK (GRAIN SENSOR PADS)	1
11.	AA - 110P	REED SWITCH SENSOR (PACKARD)	1
12.	AC - 210	10M EXTENSION CABLE	1
13.	AA - 132	WHEEL MAGNET AND NUT	1
14.	HG - 706	CABLE TIES 270 x 5mm	40
15.	AH - 408	UNIVERSAL HARDWARE PACK	1
16.	AM - 2100	2100 INSTRUCTION MANUAL	1
17.	AM - 200	FARMSCAN WARRANTY CARD	1



1.0 GENERAL INFORMATION

The *2100 Grain Loss / Area Meter* is designed to provide an on the go indication of Grain Loss relative to ground speed.

Information readouts include SPEED, HECTARES PER HOUR, TOTAL AREA and nine individual TRIP AREA tallies.

An audible alarm sounds when grain loss becomes "excessive".

GRAIN SENSOR PADS are designed to span the entire width of both sieve and walker discharge areas are available in 1.0 meter (40 inch), 1.3 meter (50 inch) and 1.5 meter (60 inch) sizes to suit most machines.

Shorter 20cm (8 inch) Grain Sensor Pads may be used on rotary machines directly under the last (rear) separator grate to give an early indication of rotor overload (Refer to section 6.0 OPTIONS)

A RUN / HOLD button stops the Area Meter updating when you are travelling to unload.

IMPORTANT: Please read installation and operating instructions thoroughly before commencing to install.

2.0 INSTALLATION

2.1 GRAIN LOSS MONITOR INSTALLATION

Mount Monitor in cab for ease of viewing, avoiding direct sunlight on the display (maximum operating temperature 70 degrees Celsius).

Do not mount Monitor directly above or beneath high powered radio transceivers.

Use the mounting bracket and securing knobs supplied to mount the unit in a convenient location. Use height adjustment holes on the monitor mounting bracket to obtain the best possible viewing angle.

2.2 POWER CONNECTION

Do not connect power until all other installation is complete.

The 8 metre POWER CABLE must be connected DIRECT to 12 volt DC vehicle battery terminals.

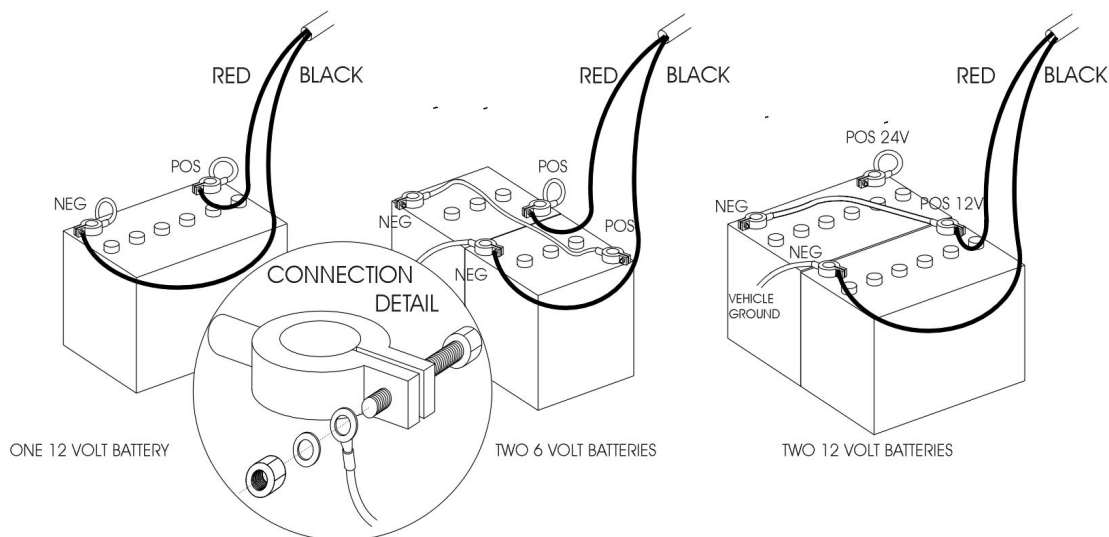
DO NOT join power cable with any other electrical equipment, the vehicle chassis or run the Power Cable in close proximity to or alongside radio antenna lead, this may cause interference.

USE cable ties supplied to secure power cable away from risk of damage.

Connection to battery terminals must be clean and tight.

WARNING - Disconnect power cable from battery when arc welding on machinery as damage to the unit may result.

TYPICAL BATTERY HOOK-UPS



2.3 GRAIN SENSOR PAD INSTALLATION

The standard 1.0 meter (40 inch), 1.3 meter (50 inch) and 1.5 meter (60 inch) Grain Sensor Pads are designed to be mounted across the full width of the sieve and walker discharge areas.

Consult your nearest Farmscan dealer or authorised service agent for Grain Sensor Pad length recommendations on different machines.

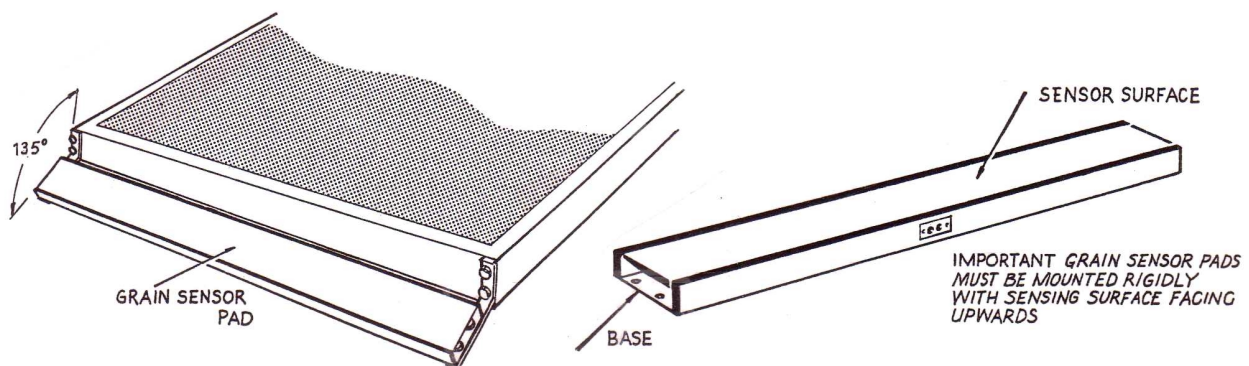
When mounting the grain sensor pads, face rubber side upwards as shown in following diagrams.

Grain sensor pads may be cut down to suit odd machine sizes using a hacksaw or high speed cut-off saw. Rubber ends must be transferred and glued into the cut down section.

Short 20cm (8 inch) grain sensor pads are available for mounting either side of the sieves and walkers in situations where full width sensing is not practical. On rotary (axial flow) machines a 20cm grain sensing pad may be mounted underneath the last (rear) separator grate facing into the direction of rotation.

SIEVE SENSING

The sieve sensing pad should be mounted in the discharge path of the shaking sieve so that lost grain will strike the sensing surface and fall away. Worn paintwork is a good guide to the path of material flow.



The standard GRAIN SENSOR MOUNTING BRACKETS supplied may require some modification to suit different machines.

It is important that the grain sensor pad be positioned at approximately 135 degrees away from the shaking sieve so that debris will not accumulate on the sensing surface.

Take care that the shaking sieve will not strike the grain sensor pad.

NOTE: 1.3 and 1.5 metre grain sensor pads should be supported across the entire width to avoid the possibility of fracture under extreme vibration.

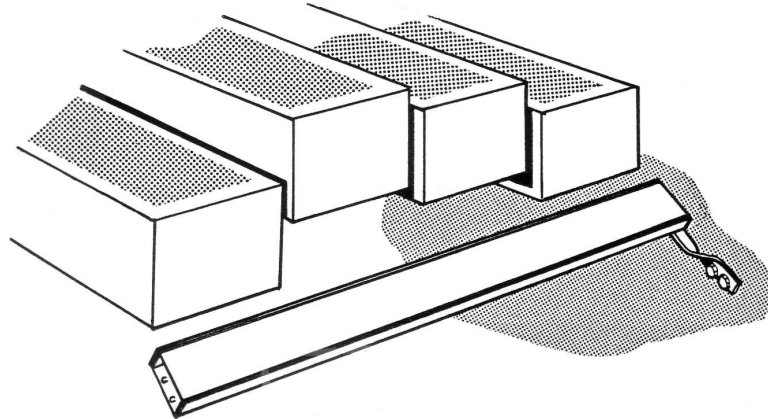
In situations where mounting full width grain sensor pad is not practical, 20cm grain sensor pads may be mounted either side of the sieves.

WALKER SENSING

The walker sensor pad should be mounted below and just behind the most extreme point of walker travel so that grain lost will strike the sensing area of the grain pad.

Mount the walker grain sensor pad off the inside walls of the hood (rubber facing upwards) at approximately 135 degrees facing away from the walkers so that debris will not accumulate on the sensing surface.

FULL WIDTH WALKER SENSOR



Take care that the moving walkers will not strike the grain sensor pad.

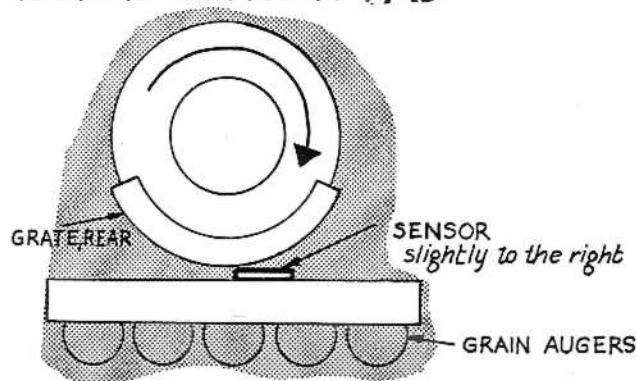
NOTE: 1.3 and 1.5 meter grain sensor pads should be supported across the entire width to avoid the possibility of fracture under extreme vibration.

In situations where mounting full width grain sensor pad is not practical, 20cm grain sensor pads may be mounted either side of the walkers.

ROTOR SENSING

Monitoring of rotor overload is possible by mounting a short 20cm grain sensor pad directly under the last (rear) separator grate facing at approximately 45 degrees into the direction of rotation.

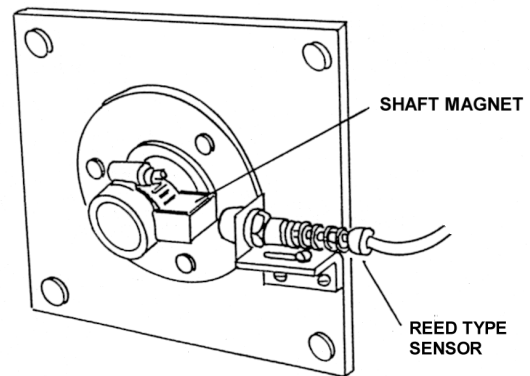
ROTOR SENSOR PAD



2.4 WHEEL SENSOR INSTALLATION

In the case of self propelled headers, mount the wheel sensor onto one of the ground wheels, or as an alternative, a shaft magnet (Part No. AA-117) may be used on the cross shaft driving the front wheels.

The magnet fitted to the shaft must sweep past the sensor once per rotation as shown, with a clearance of 10 - 15mm. Do not use substitute magnets.



On P.T.O. headers the wheel sensor should be fitted to one of the front tractor wheels, or one of the header ground wheels.

The magnet, fitted to the wheel must sweep past the sensor once per rotation as shown, with a clearance of 15-20mm. Do not use substitute magnets.

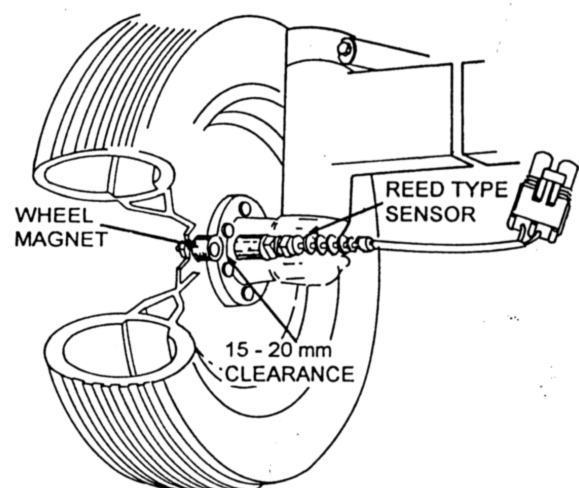
The sensor and magnet must face end to end.

Locate the magnet as near to the hub as possible to gain maximum ground clearance. If unable to bolt magnet through hub, it can be screwed into a 1/2" U.N.F. tapped hole or screwed into the nut brazed onto the hub.

Do not remove sensor from aluminium bracket supplied, damage will result.

If mounted onto a steered wheel be sure the sensor moves on the same axis as the wheel to maintain equal clearance when turning and ensure cable is not pulled tight when turned from lock to lock.

As the sensor is not affected by moisture or mud the main precaution is to protect the sensor and cable from physical damage. As a precaution, keep the wheel sensor cable away from, aerial leads, engine kill switch cable or wires to electronic clutches and solenoid valves. Use cable ties supplied to secure sensor cable and connect into Grain loss monitor Unit.



NOTE: If Grain sensor wiring harness cable will follow same route to cab, do not fully tighten cable ties until both cables are through.

3.0 WIRING PROCEDURE

3.1 GRAIN SENSOR WIRING HARNESS

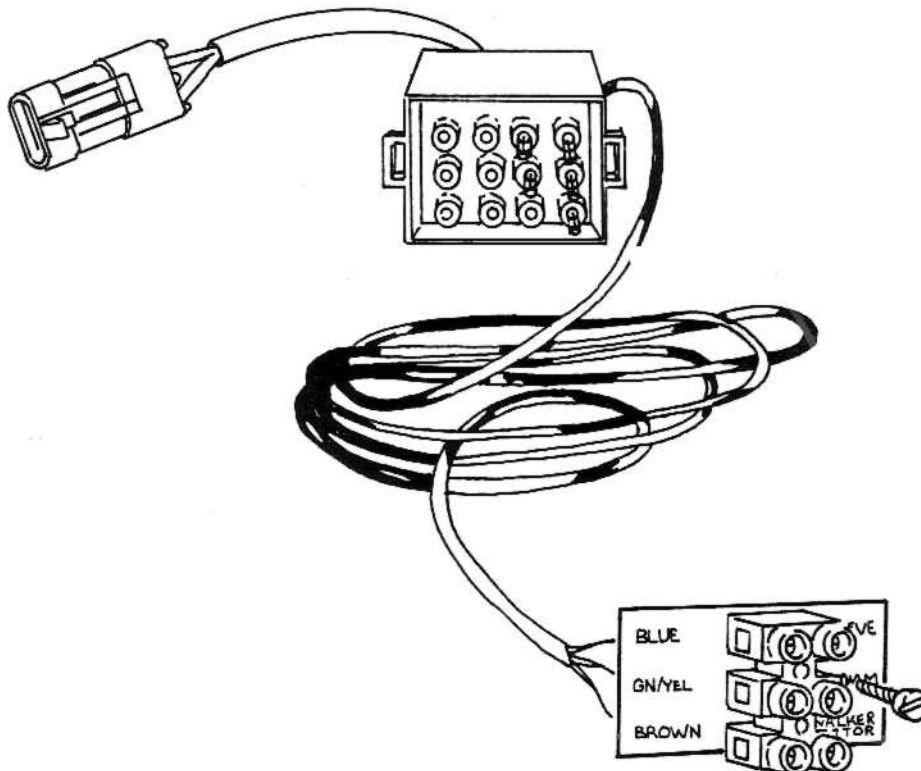
The grain sensor wiring harness is designed to connect the Sieves and Walkers, or Rotor grain sensor pads into the grain loss monitor.

An optional 1069 P.T.O. extension kit with breakaway connections is available for PTO headers.

1. Plug grain sensor wiring harness into socket at rear of grain loss monitor (observing notch guides in plug).
2. Run the grain sensor wiring harness to a point close to either side of the sieve sensor pad and mount Terminal block with ID plate to side paneling of header using self-tapping screws provided. Cable ties should be used to secure cable away from risk of damage.

NOTE: If wheel sensor cable will follow same route to cab, do not fully tighten cable ties until both cables are through.

3. Trim grain sensor wiring harness to required length and connect blue, green/yellow and brown wires into Terminal Block as indicated on ID plate.



3.2 WIRING SIEVE SENSOR

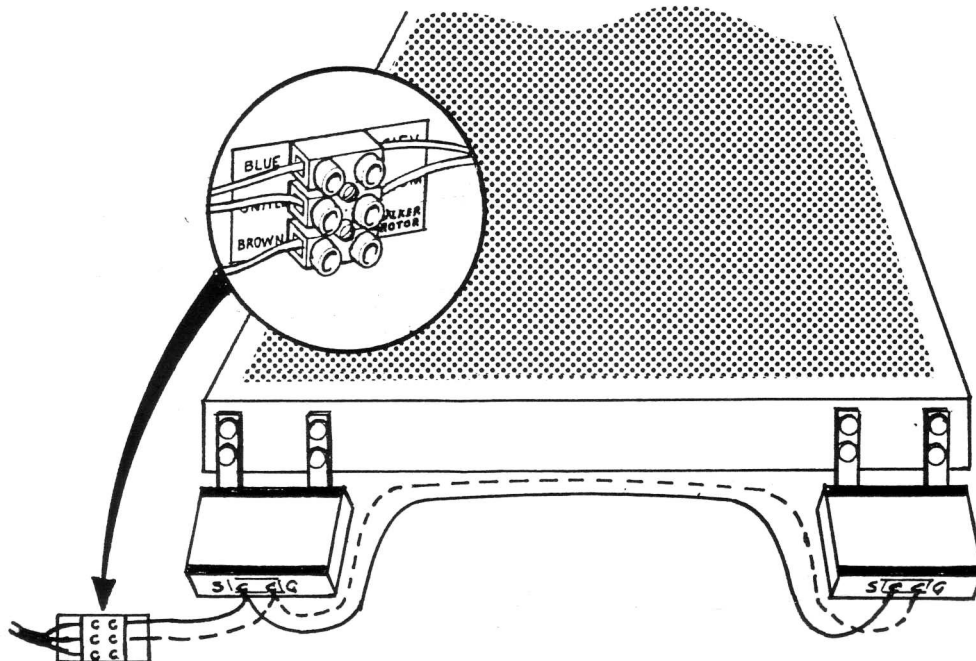
The sieve sensor pad has two terminals, one marked "S" (signal) and the other "G" (ground or common).

1. Cut the flexible SIEVE SENSOR CABLE in half and connect each cable to one of the terminals on the sieve sensor pad.
2. Run the two cables together underneath the grain sensor pad towards the terminal block. Stick plastic cable clips from grain loss hardware pack to underside of grain sensor pad and use cable ties to secure cable.

NOTE: Take care to protect wiring from possible damage and debris buildup.

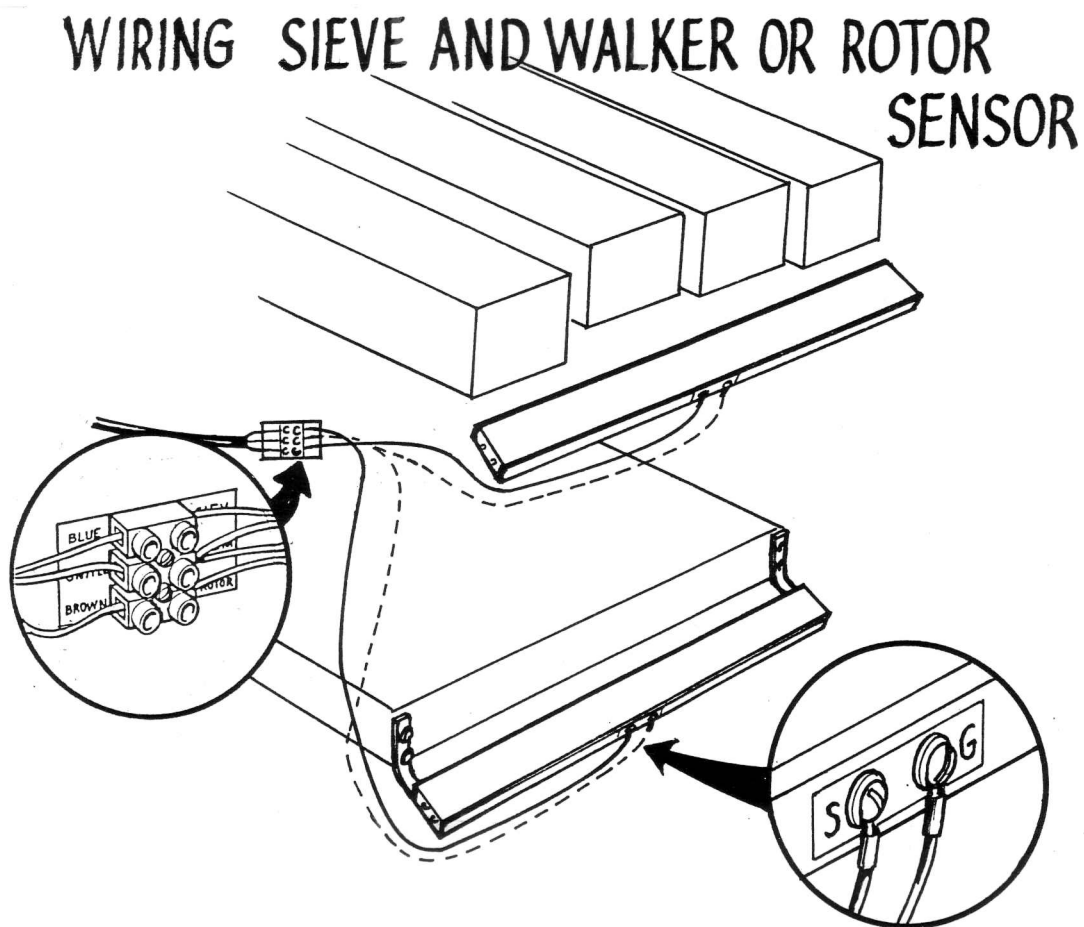
3. Trim sieve sensor cable to correct length and connect the SIGNAL cable to terminal marked SIEVE. Leave the GROUND cable loose until walker sensor wiring is ready for connection to terminal block.
4. Use P clamp from grain loss hardware pack to anchor sieve sensor cables before terminal block.
5. In situations where 2 separate sieve sensor pads are used, interconnect the SIGNAL and GROUND terminals in parallel as shown, before connecting to terminal block.

WIRING TWO SENSORS TOGETHER



3.3 WIRING WALKER/ROTOR SENSOR

1. Connect WALKER/ROTOR CABLE to terminals on walker or rotor sensor and note which wire goes to SIGNAL and GROUND terminals.
2. Run sensor cable underneath walker sensor pad and down to terminal block using cable ties to secure cable away from risk of damage.
3. Connect SIGNAL cable to WALKER/ROTOR terminal and connect GROUND cable into COMMON terminal together with SIEVE GROUND cable.
4. In cases where two separate walker sensor pads are used, interconnect SIGNAL and GROUND terminals in parallel.



3.4 WIRING WHEEL SENSOR

Run WHEEL SENSOR CABLE to grain loss monitor in cab and connect to corresponding plug hanging from grain sensor wiring harness. Use cable ties to secure cable away from risk of damage.

4.0 CALIBRATION PROCEDURE

4.1 GENERAL GUIDELINES

The grain loss monitor calculates SPEED and AREA readouts based on wheel and comb width calibration factors, programmed into memory.

All calibration factors must be measured and entered in METERS.

The large selector knob allows Calibration Factors to be displayed. The UP and DOWN buttons allow you to increase or decrease the calibration factors.

4.2 MEMORY BACK-UP

Whilst the monitor is connected to a 12 Volt battery, all calibration factors and accumulated Total and Trip areas will remain in memory.

When power is disconnected from the monitor, the internal battery backup takes over, this battery will last for approximately 5 years.

4.3 CALIBRATION WARNING

If calibration factors are lost from memory or corrupted due to outside interference, the grain loss monitor will display the word HELP, and you must re-enter your calibration factors.

4.4 WHEEL SENSOR CALIBRATION

The wheel calibration factor is the distance of forward travel achieved per impulse from the wheel sensor, measured in meters. The calibration procedure must be carried out in normal working conditions for best accuracy.

1. Align the wheel magnet and sensor.
2. Mark bottom centre of tyre on which the sensor is fitted and peg ground in corresponding position.
3. Move slowly forward and stop on exactly 10 tyre rotations. (5 Turns is sufficient on large wheels).
4. Measure overall distance travelled and divide by 10 (5) to get an average.

$$\begin{array}{rcl} \text{eg.} & 10 \text{ TURNS} & = & 23.45 \text{ METRES} \\ & 23.45 \div 10 & = & 2.345 \text{ METRES / TURN} \end{array}$$

Therefore distance calibration factor = 2.345 meters.

5. Select WHEEL calibration and use the UP and DOWN buttons to enter wheel calibration factor.

4.5 SHAFT SENSOR CALIBRATION (ALTERNATIVE)

1. Align the shaft magnet and the sensor.
2. Peg the ground at the base of any tractor or implement wheel.
3. Move slowly forward and count exactly 10 rotations of the shaft.
4. Peg the ground again, at the base of the same wheel and measure the distance travelled. Divide the distance travelled by 10 to get an average.

eg. 10 TURNS = 23.45 METRES

23.45 ÷ 10 = 2.345 METRES / TURN

Therefore distance calibration factor = 2.345 meters.

4.6 WIDTH CALIBRATION

1. Measure effective comb width in METERS. You may slightly reduce the width measurement to allow for incomplete comb usage.
2. Select WIDTH calibration and use UP and DOWN buttons to enter width calibration factor.

4.7 TIME/AREA BASE CALIBRATION

TIME/AREA calibration enables you to select between either grain loss relative to time (loss per second) or grain loss relative to area (loss per hectare).

AREA BASE operation takes ground speed into consideration hence the grain loss reading is a true indication of whether grain loss per hectare is increasing or decreasing (ie grains lost per square metre). The monitor should normally remain in AREA mode. Under 3 KPH the grain loss monitor will automatically cease grain loss indication.

TIME BASE operation means the loss indication purely represents an increase or decrease in grain loss per second and takes no account of changes in the amount of area covered per second (ground speed). Time base mode may be useful in light crop conditions when harvesting at high speeds or in heavy crop conditions where very low speeds under 3KPH are required.

To select between TIME and AREA BASE, switch function selector to TIME/AREA BASE and hold down the UP button.

TIME BASE display reads P - 1

AREA BASE display reads P - 2

5.0 OPERATION

5.1 GRAIN SENSOR PAD SELECTOR

Under normal operating conditions the grain sensor pad selector switch should remain in the BOTH position. This displays TOTAL grain lost from both sieves and walker / rotor on the meter scale. Whenever grain loss becomes excessive either the sieve or walker light will illuminate to indicate where the excessive grain loss is occurring. An audible alarm will sound at the same time.

The operator may then switch to sieve or walker/rotor sensor pad to display it's particular level of loss.

5.2 GRAIN SENSITIVITY

GRAIN SENSITIVITY is used to tune the monitor to various sound frequencies generated by the grain hitting the grain sensor pad surface.

The operator is able to adjust the grain sensitivity to achieve maximum needle response for specific grain types.

The heavier the grain the lower the setting and the lighter the grain the higher the setting, as indicated on the grain sensitivity scale (ie. the setting where the reading reads highest).

Some suggested grain sensitivity settings are;

LUPINS / PEAS	SET	1 - 3
WHEAT / RICE	SET	4 - 6
OATS / BARLEY	SET	7 - 9

Once adjusted, there is no need to change the setting until harvesting a different variety of grain.

NOTE: If you have difficulty getting a response, change TIME/AREA BASE calibration to TIME BASE mode (P - 1) and try again.

5.3 LOSS CALIBRATION ADJUSTMENT

LOSS CALIBRATION allows you to adjust the needle reading to stay within the GREEN band when the machine is operating at an acceptable loss situation.

Once the needle moves into the RED band the alarm will sound.

Correct adjustment of the loss calibration knob should be done by trial and error comparing the needle reading with actual grain loss on the ground.

5.4 SET-UP PROCEDURE

1. Make sure TIME/AREA BASE calibration is set to AREA BASE (P - 2).
2. Use screw driver supplied to adjust TRIM CONTROL (located between loss calibration and grain sensitivity knob) in anticlockwise direction at least 20 turns or until faint clicking sound is heard.
3. Select to read Sieve Sensor Only and commence harvesting, then adjust loss calibration knob until needle reads towards top of GREEN band.
4. Without touching loss calibration knob, switch to walker/rotor sensor and watch needle response.
 - a) If needle goes into RED band adjust TRIM CONTROL slowly clockwise until alarm stops and needle reads at the same point as the SIEVE reading.
 - b) If needle stays well within the GREEN band do not adjust the TRIM CONTROL, it just means there is insufficient loss over the walkers to activate the needle.
5. Return the pad selector switch to BOTH and if the needle moves into the RED band, adjust the loss calibration knob back till the needle stays in the GREEN band. Once this balance is achieved, the loss calibration knob will provide adequate overall adjustment for day to day variations.

5.5 RUN / HOLD HECTARES

This button may be pressed at any time to stop or start the area function on headlands or when travelling to unload.

When in HOLD mode the letter H will appear at the left of the main readout together with a short reminder beep every twenty seconds. Press the RUN/HOLD button again to start the area updating.

5.6 SPEED / AREA READOUT

The function selector knob enables on the go display of, SPEED, TOTAL AREA and AREA PER HOUR readouts.

HECTARES PER HOUR - Readout is only active when harvesting as an indication of progress rate.

SPEED - Displays working speed to 1/10th KPH.

TRIP AND TOTAL HECTARES - The TOTAL and TRIP HECTARE readouts operate in a similar way to your car odometer except the grain loss monitor has nine trip area memories. Area will display in hundredths of hectare up to 99.99 HA, then in tenths up to 999.9 HA then in whole hectares up to 9999 HA.

Prior to harvest, the TOTAL HECTARE memory may be reset to zero, which will simultaneously cause all TRIP HECTARE memories to clear.

When harvesting, area worked will accumulate into the TOTAL HECTARE memory and one of the nine TRIP memories selected. eg TRIP 1

The trip memory currently selected may be reset at any time without affecting the overall accumulated total or other trip totals.

Once the next available trip memory is selected eg. TRIP 2, for example when entering a new paddock, the previous current trip total (TRIP 1) will be locked into memory for reviewing at any time.

NOTE: Once a new trip memory is activated, additional area can not be stored into previously active trip memory.

TO RESET TOTAL & TRIPS, select TOTAL HECTARES and hold RESET button until display zeros, this will simultaneously cancel ALL accumulated trip totals.

TO RESET CURRENT TRIP, select TRIP HECTARE memory and hold RESET button until display zeros.

NEXT TRIP, to activate the next available trip memory, select TRIP HECTARES and press both the UP and DOWN buttons together. The next trip number will be indicated to the left of the main readout (1-9).

REVIEW PAST TRIP to review past trip totals locked into memory, hold down the UP key.

NOTE: To Stop/Start AREA meter automatically, optional Mechanical or Electronic standby kits are available.

OPTIONAL: 1036 ELECTRONIC STANDBY connects to any existing switch that is turned on or off when the machine is engaged (eg. Reel Engage) to stop/start meter.

1037 MECHANICAL STANDBY connects to any mechanical device that is moved from one position to another (eg. engage lever) to stop/start meter.

6.0 OPTIONS

6.1 GRAIN SENSOR PAD LENGTHS

OPTIONAL:	1064	0.2M (8 INCH) GRAIN SENSOR PAD
	1066	1.0M (40 INCH) GRAIN SENSOR PAD
	1067	1.3M (50 INCH) GRAIN SENSOR PAD
	1068	1.5M (60 INCH) GRAIN SENSOR PAD
	1069	1069 P.T.O. EXTENSION KIT

6.2 P.T.O. EXTENSION KIT

Kit includes:

1	A - 1069	8m extension cable with plug
1	AH - 407	20 cable ties 270 x 5mm
1	AP - 146	3 way brylite socket
1	AM - 1069	1069 instruction sheet

The PTO extension kit provides a convenient 8m extension to the grain sensor pad terminal block on PTO headers.

1. When installing the PTO extension cable, the header must be hitched to the tractor.
2. Cut the grain sensor wiring harness in a convenient point at the rear of the tractor.
3. Cable tie the extension cable away from hydraulic couplings to avoid contamination.
4. Pull plastic cover away from 3 way brylite plug to determine which coloured wires go to which pins, then wire 3 way brylite socket accordingly(ie. BLUE to BLUE, BROWN to BROWN and GREEN to GREEN), Allow sufficient slack cable for turning.
5. Run extension cable to rear of header using cable ties supplied.
6. Fit end of PTO extension cable into grain sensor pad terminal block and match wires as seen on ID plate.
6. Once satisfied that all connections work properly, replace plastic cover.

7.0 TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE / REMEDY
1. NO RESPONSE FROM ON / OFF SWITCH	<ul style="list-style-type: none"> a) Check that power cable connections at battery are clean and tight. b) Check fuse on back panel of Grain loss monitor (1 AMP MAX). c) Measure voltage from power cable at monitor connection point, is it 13.8 V DC? d) Check that the Red wire goes to Positive (+), and the Black trace wire goes to Negative (-). e) If voltage OK and unit fails, return to your nearest Farmscan dealer or authorised service agent.
2. SPEED AND AREA READOUT INCORRECT / SPEED JUMPY OR AT ZERO	<ul style="list-style-type: none"> a) Check that Wheel and Width calibration factors are measured and set correctly. b) Is the machine overlapping, underlapping, counting headlands? Use RUN/HOLD button. c) Switch to SPEED readout and make sure reading is constant at a constant speed. Could be cable or sensor damage if speed readout is jumpy. d) Is the magnet and sensor facing end to end ? e) Is the proper magnet being used ? f) Is the sensor too far away from the magnet ? (15 - 20mm gap with wheel magnet). g) Is the magnet staying inline with the sensor on corners ? h) Is the wheel lose ? i) If still no response follow SENSOR & CABLE TEST PROCEDURE page 19.
3. GRAIN LOSS METER OVERSENSITIVE	<ul style="list-style-type: none"> a) Check that monitor is calibrated to AREA BASE (P-2) see Section 4.6. b) Turn LOSS CALIBRATION knob down so meter needle is not as close to red scale. c) If Rotor pad is used, turn TRIM CONTROL in clockwise direction for 20 turns, then go back one or two turns. d) Adjust GRAIN SENSITIVITY knob so needle response is less sensitive. e) Ensure wiring between terminal block and grain sensor pad is correct (ie. G to ground and S to sieve/walker).

PROBLEM		POSSIBLE CAUSE / REMEDY
4. NO GRAIN LOSS READING ON METER	<ul style="list-style-type: none"> a) b) c) d) e) f) 	<p>Check that SPEED readout is working as Monitor will not register grain loss if it thinks you are stationary, or on HOLD.</p> <p>Whilst harvesting turn LOSS CALIBRATION knob fully clockwise and adjust GRAIN SENSITIVITY knob through all positions observing if needle responds.</p> <p>If no needle response, switch function selection to TIME/AREA mode and press UP button to TIME BASE mode (P-1). This will give you maximum possible sensitivity which may be necessary if harvesting under 3KPH, or at high speed in very light crop conditions or when harvesting grains that are difficult to detect amongst straw and husks (eg. Oats).</p> <p>Check wiring from Grain sensor pads to terminal block for, break, worn through or loose connection.</p> <p>Check main wiring harness for disconnection, damage and loose / dirty connections.</p> <p>If still no result follow SENSOR & CABLE TEST PROCEDURE page 19.</p>
5. HECTARES COUNT UP ON THEIR OWN WITHOUT MOVING 5a CALIBRATION FIGURES KEEP CHANGING	<ul style="list-style-type: none"> a) b) c) d) e) 	<p>Switch off all other electronics to eliminate electrical interference as the cause.</p> <p>If switching off electronics eliminates the fault, ensure that the Grain loss monitor cables are not running alongside wiring from other electronic devices, and / or physically move the position of the Grain loss monitor in relation to the other equipment.</p> <p>If petrol engine in close proximity, stop engine to see if interference is caused by engine ignition system. NOTE: Carbon ignition leads must be fitted to spark plugs and coil to stop interference.</p> <p>Disconnect sensor from cable at wheel. If problem stops, replace sensor.</p> <p>Make sure Grain loss meter has independent power cable, wired direct to battery +/- terminals.</p> <p>If unit still counts hectares, return unit to your local Farmscan dealer or authorised service agent.</p>
6. "HELP" ON DISPLAY	<ul style="list-style-type: none"> a) b) c) 	<p>When HELP is displayed, calibration factors have been lost from memory and must be re-entered.</p> <p>If HELP displayed regularly, electrical interference may be cause. Follow TROUBLESHOOTING section 5.</p> <p>HELP displayed only when Power switched on. Timekeeper memory's internal battery low, Return to your nearest Farmscan dealer or authorised service agent.</p>

8.0 SENSOR & CABLE TEST PROCEDURE

8.1 GRAIN SENSOR PAD & CABLE

There is to be no voltage or continuity measurement across the sensor pad terminals.

1. Switch function selector to TIME/AREA mode and press UP button to display TIME MODE (P-1). Ensure that the unit is not on hold.
2. Select sensor pad to be tested (Sieve or Walker) with Pad Selector Switch.
3. Set LOSS CALIBRATION to 9 and turn ROTOR TRIM CONTROL fully anticlockwise (about 20 turns). Set GRAIN SENSITIVITY to 5.

NOTE: Rotor Trim Control is small screw between Loss calibration and Grain sensitivity knobs.

4. Rub screwdriver, jangle keys or drop grain onto Grain sensor pad selected and listen for alarm to sound. Response should be within 5 seconds of continuous action.

NOTE: Sensor pads will not respond to tapping with your hand.

5. Switch Pad Selector switch over to other sensor and repeat step 4 above.

If no response from any Grain sensor pad, use a multimeter to check continuity of all three wires. Ensure that all connections are clean and tight.

If only one Grain sensor pad responds eg. Walker, then the Walker Grain Sensor Pad and Walker Wiring Loom are OK.

6. Swap good sensor for bad sensor. ie swap Blue & Brown Sieve & Walker signal wires on terminal block.
7. If fault stays with sensor, then sensor is at fault.

If fault transfers to other sensor (or stays with cable), thoroughly check wiring loom for damage and loose/dirty connection, before returning monitor to your nearest Farmscan dealer or authorised service agent.

8.2 WHEEL SENSOR & CABLE

1. Switch Grain loss monitor ON.
2. Check that calibration factors have been entered correctly.
3. Switch the function selector knob to SPEED. Display should read 0.0
4. Disconnect sensor from cable, at the sensor itself.
5. Use a pair of long nose pliers and intermittently short the pins of the connecting plug on the cable together. The speed readout should show random numbers.
If speed readout responds, then replace sensor.
6. If no response, reconnect sensor and repeat test at tractor breakaway plug (if used). At this point if the speed responds, then the cable between the breakaway plug and the sensor is at fault.

If still no response at tractor breakaway plug, repeat test at connection directly into the Grain loss monitor.
7. If no response directly into Grain loss monitor then return unit to your nearest Farmscan dealer or authorised service agent.