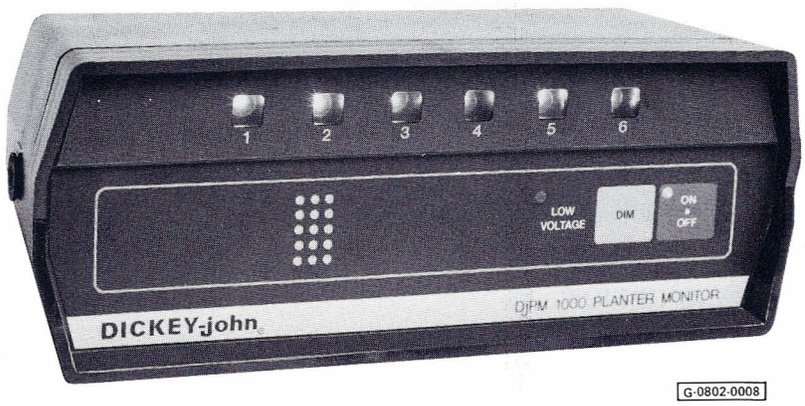
DjPM 1000 PLANTER MONITOR

INTRODUCTION



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Congratulations on your purchase of the DICKEY-john DjPM 1000 PLANTER MONITOR. It was designed to take the guesswork and doubt out of your planting operation. Any time a runner is plugged, or for any reason seed is not going to the ground, the monitor will sound an alarm and will indicate by means of numbered row lamps which planter unit has stopped planting.

The monitor system consists of a console (4, 6, 8, 12 or 16 row), which is mounted on the tractor hood, fender, or within the cab; photoelectric seed sensors, mounted in each planter boot; and a planter harness, which connects the individual seed sensors to the console. The monitor is powered by the tractor battery (requires 12 volts D.C.).

The console receives information from each of the sensors and translates this information for the operator, to let him know whether or not all rows are planting properly. Each time a seed sensor detects a seed, the row indicator lamp on the console corresponding to that row will flash. A steady flow of seed results in a steady flashing of the row indicator lamps. The rate of flashing is proportional to the rate of seed flow. If a planting unit is planting at a slower rate than the others, it will be indicated by a slower rate of flashing on its row indicator lamp. If one of the sensors detects a seed flow stoppage, the console alarm will sound to alert the operator and the row indicator lamp corresponding to the row containing the fault will stop flashing.

The Seed Sensor is a photoelectric device which is installed in each planter runner normally at the lower end of the seed delivery tube. These sensors are located at this point to quickly detect seed flow stoppage to the ground.

The Planter Harness is installed on the planter and connects the seed sensors to the console.

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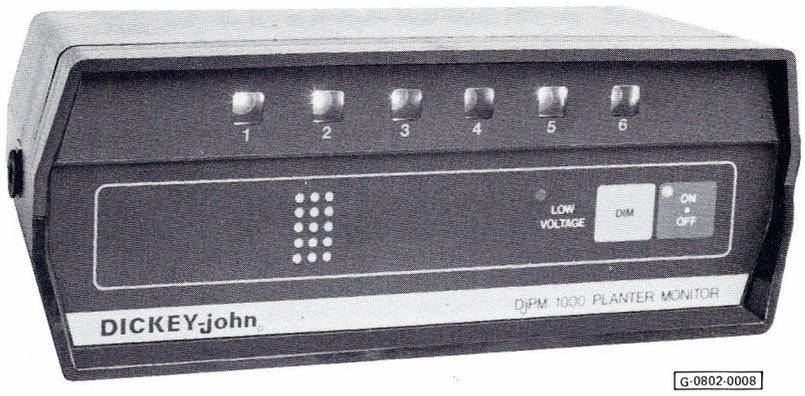
DjPM 1000

DICKEY-john® CORPORATION
PLANTER MONITOR



1. CONSOLE DESCRIPTION

The console front panel contains the Row Indicator Lamps (across the top), two pressure sensitive switches, and two LED (light emitting diode) indicators.

a. Row Indicator Lamps

The Row Indicator Lamps are numbered to correspond to the associated planting unit, starting on the left. When a seed is detected by the sensor, the lamp corresponding to the planter row flashes. A rapid flow of seed produces a steadily flashing light, and the rate of flashing indicates the rate of seed flow. When all planter row units are planting properly, all row indicator lamps will flash at the same rate.

b. Pressure Sensitive Switches

ON/OFF – Applies 12Vdc power to the monitor system. Pressing once turns monitor on, pressing again turns monitor off.

DIM – Controls the intensity of the Row Indicator Lamps. Pressing and holding the switch will cause the intensity of the lamps to decrease to the lowest and then increase. This cycle will continue as long as the switch is depressed. Release the switch at the desired intensity. **NOTE:** When the monitor is turned off and then back on, the intensity of the lamps will return to maximum.

c. LED Indicators

GREEN – Indicates monitor is turned on.

RED – Indicates 6 volt battery connection or very low charged 12-volt battery. **NOTE:** When indicator is off, it does not guarantee sufficient voltage for proper monitor operation (Monitor requires greater than 11.0 volts).

2. PHOTOELECTRIC SEED SENSORS

The photoelectric seed sensors are mounted in each planter shank near the bottom of the seed delivery tubes. As seeds flow through the sensor, they break the light path between the light source and the photodetector. This location enables the sensors to quickly detect plug-ups or absence of seed flow from the seed hoppers.

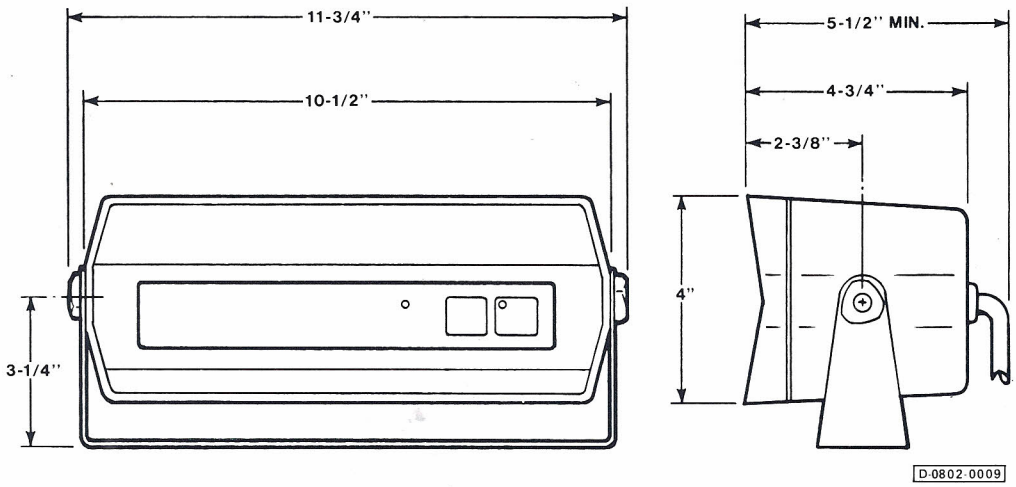
Since planter shanks differ with different planter models, sensors are designed for specific planter models and are not interchangeable between planters. Photoelectric sensors will detect corn, soybeans, cotton (acid de-linted, flamed, machined or gin), beets, sorghum, peanuts and most other seeds normally planted.

INSTALLATION

1. CONSOLE

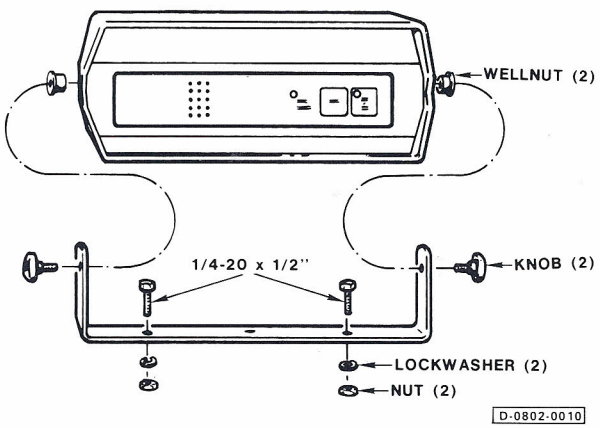
The console should be mounted within easy view and access of the operator without obstructing his normal driving vision. The console can be mounted on the hood, fender (tractors without cabs) or within the cab on a cab frame member.

To install the console proceed as follows:



Refer to the above illustration and select a location (on hood, fender or within cab) where the console can be easily viewed and operated. The console can be mounted two ways: Procedure 1 uses two bolts to secure the mounting bracket and Procedure 2 uses a single bolt to secure the mounting bracket which allows the console to swivel.

PROCEDURE 1



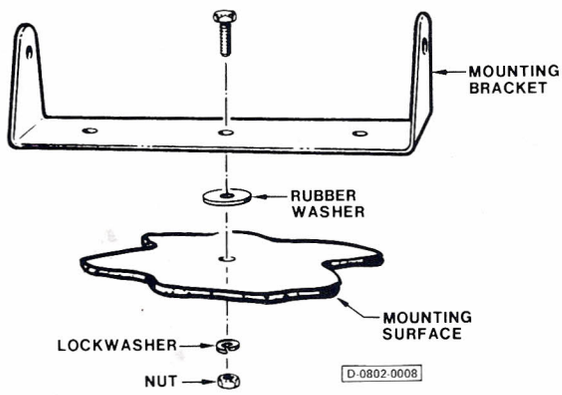
Step 1. Refer to the above illustration and using the U-shaped mounting bracket as a template, mark the location of the two outside bracket mounting holes.

Step 2. Drill two 9/32-inch diameter mounting holes where marked.

CAUTION: Make sure the opposite side of the drilling surface has ample clearance and that it is free of wiring, etc.

Step 3. Attach the mounting bracket to the mounting surface using two 1/4 – 20 x 1/2 inch bolts, lockwashers, and nuts provided.

PROCEDURE 2



Step 1. Refer to the above illustration and using the U-shaped mounting bracket as a template, mark the location of the center bracket mounting hole.

Step 2. Drill a 9/32-inch diameter mounting hole where marked.

CAUTION: Make sure the opposite side of the drilling surface has ample clearance and that it is free of wiring, etc.

Step 3. Attach the mounting bracket to the mounting surface using a 1/4 – 20 x 1/2 inch bolt, lockwasher and nut provided.