FITTING THE 485-SB-OPTIC (OPTICAL SENSOR KIT) TO A ROUND OR SMALL SQUARE BALER

This kit will stop the flow of preservative when there is no hay present at the pickup and turn the pump back on when hay enters the pickup. **(PLEASE NOTE: THE LENS OF THE OPTICAL SENSORS MUST BE REGULARLY CLEANED TO ENSURE CORRECT OPERATION)**

SECTION 1: SMALL SQUARE BALERS

Step 1a. OPTICAL SENSOR FITMENT AGCO 1840

Fit the optical sensors to give a clear line of sight between both sides of the baler pickup. Fig's 1 & 2 below indicate suitable positions for mounting the optical emitter & receiver. It does not matter which side either is mounted. Use the self-driving screws provided or fasteners of your choice.

Fig.1

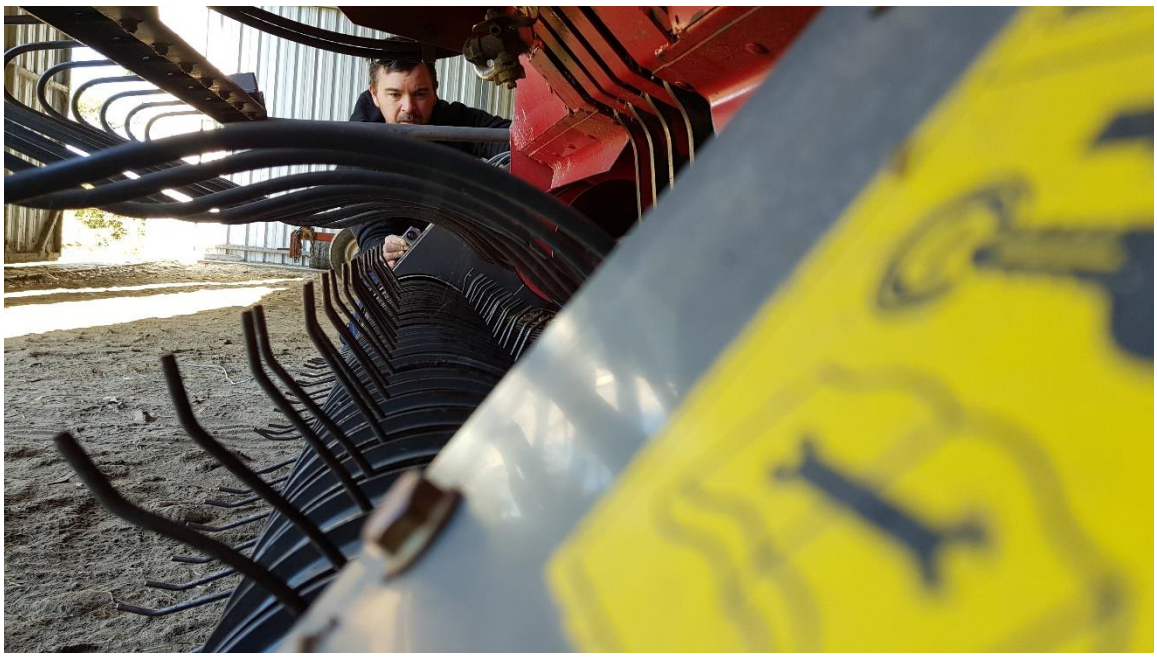


Fig. 2

Step 1b: OPTICAL SENSOR FITMENT TO A NEW HOLLAND BC5060 OR SIMILAR

For side pickup baler types the optical sensors are supplied without the die cast mounting box.
One sensor is mounted as shown in Fig 3. This requires an 18mm hole to be drilled.
The other sensor is mounted on the other side of the pickup as shown in figure 4.
A steel bracket such as that shown in in Fig 4 will need to be fabricated.

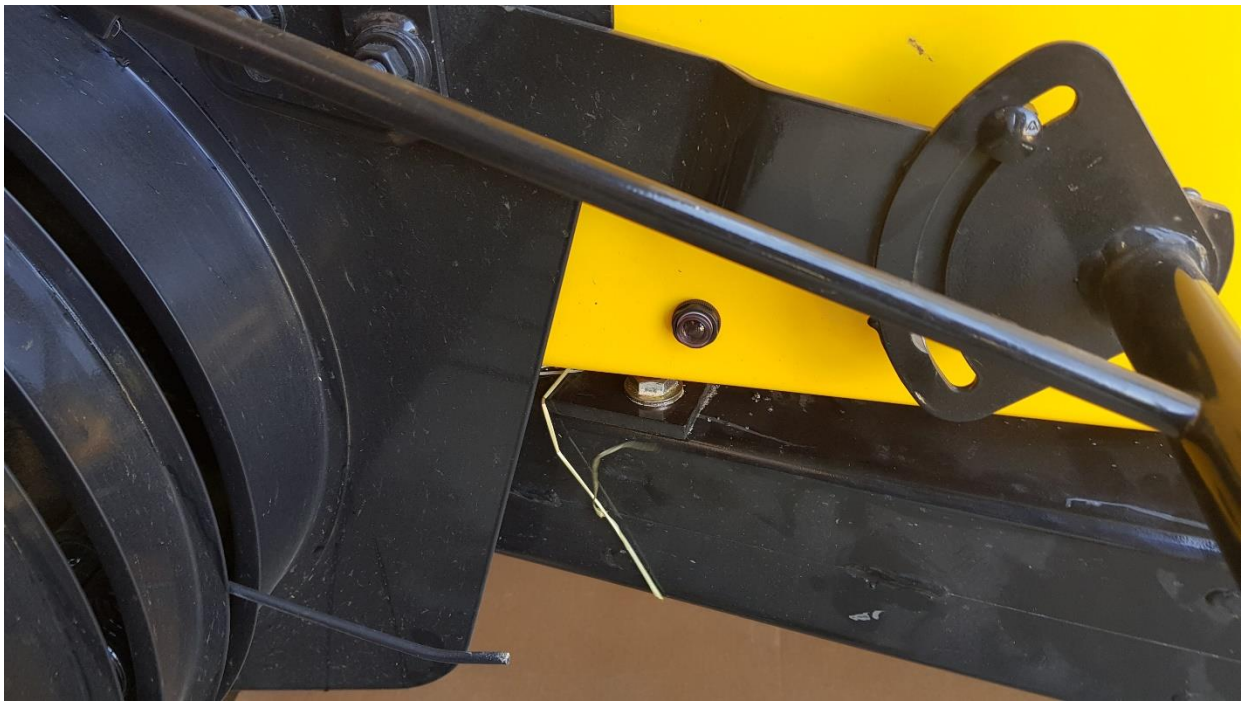


Fig. 3

Fig.4

SECTION 2: ROUND BALERS

Step 2a: OPTICAL SENSOR FITMENT TO ROUND BALER

Figures 5 & 6 illustrate a typical sensor fitment to a round baler. The sensors should have a clear line of sight between them when no hay is present in the pickup but be in a position where the beam will be interrupted when hay is present. The illustrations show what type of bracket will be required for the sensor mounting but the exact size will vary between baler types.

Fig 5

Fig 6

SECTION 3: CONNECTING THE 485-SB-OPTIC SYSTEM

Carefully route the cables from each optical sensor unit back to the optical control box mounted on the applicator. Avoid any areas where moving parts might impact the cable looms.

Step 3a.

Connect each cable loom as shown in figure 7. (Refer to drawing 1 schematic for wiring details)

1. 2 pin connector (J5) from Optical Emitter
2. 3 pin connector (J4) from Optical Receiver
3. Power input connector (J1) from Tractor Cab
4. Loom to LED warning lamp. (J3) The lamp is to be secured in an area that will be visible to the operator and when flashing indicates the pump is operating.
5. The output connector (J2) is connected to the pump

The system is now ready for operation, following instructions as per the applicable applicator manual.

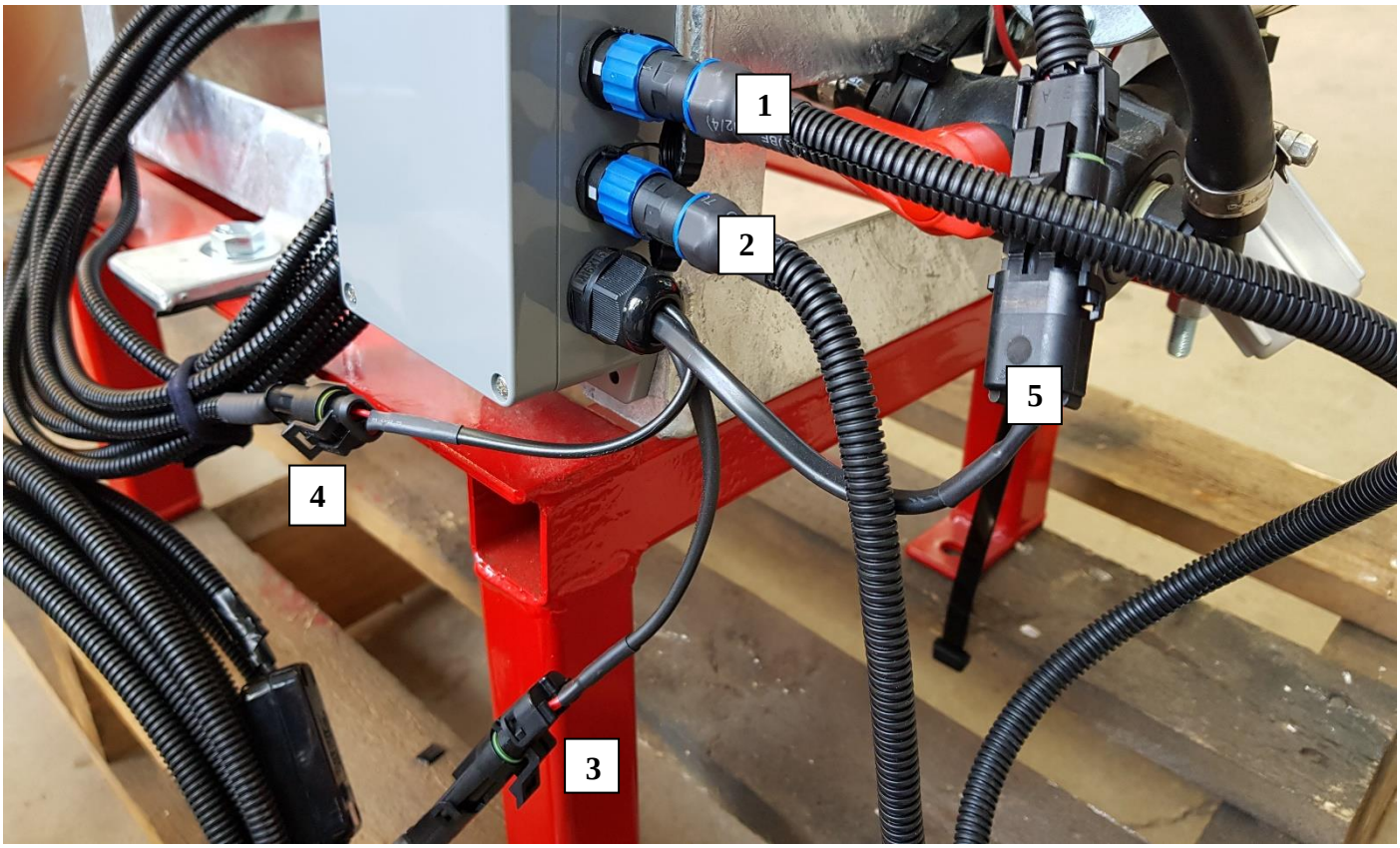
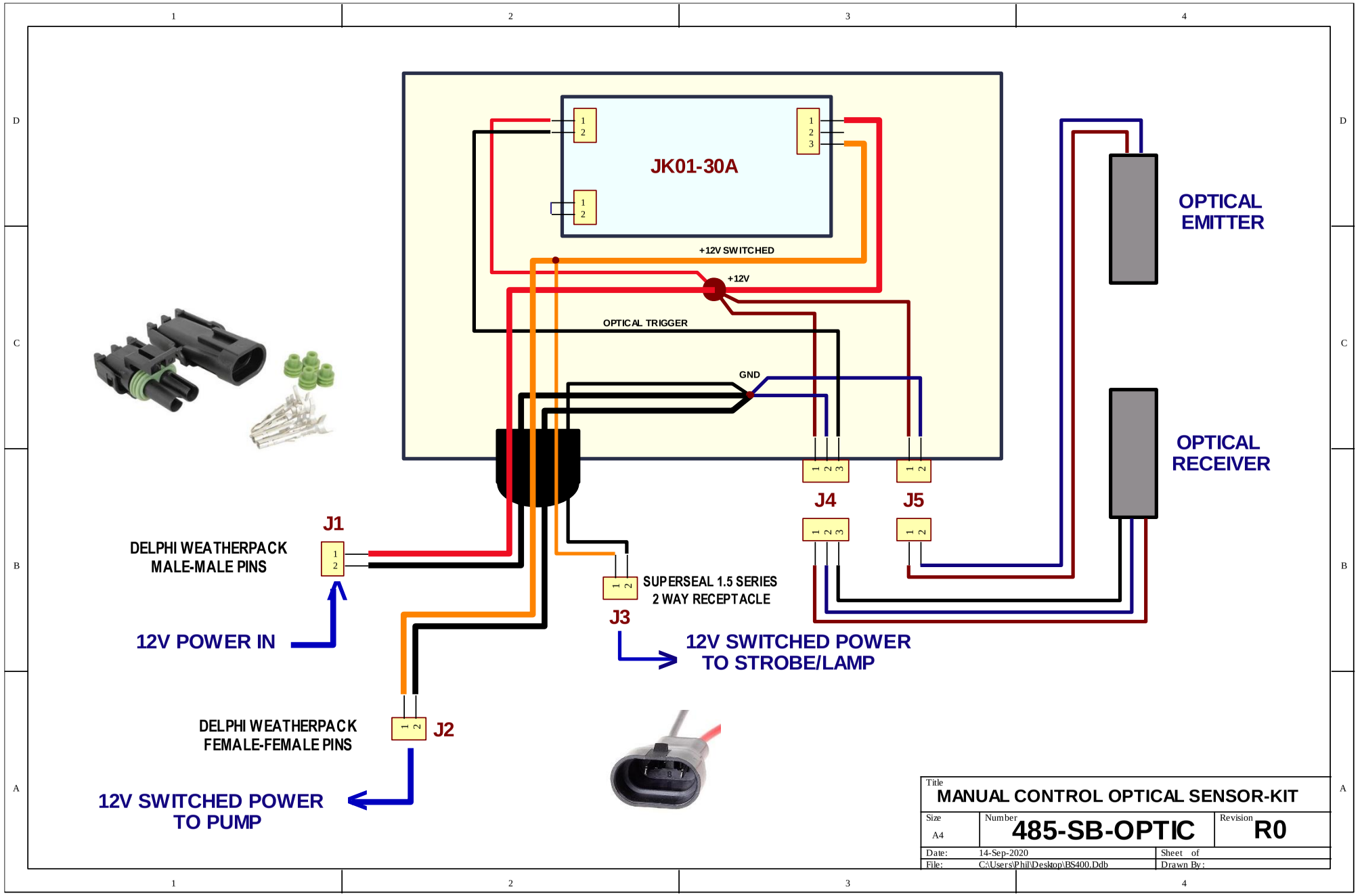


Fig 7

Step 3b.

Testing the optic system:

1. Turn on the power to the applicator using the cab ON/OFF switch
2. Place an object in front of one of the optical sensors which will turn on the pump and the LED warning lamp (the LED flashes when the pump is running)
3. Remove the object and after a 2 second delay the pump will stop running and the LED lamp will switch off.


JK01-30A
+12V SWITCHED
+12V
OPTICAL TRIGGER
GND
OPTICAL EMITTER
OPTICAL RECEIVER
J1
DELPHI WEATHERPACK MALE-MALE PINS
12V POWER IN
J2
DELPHI WEATHERPACK FEMALE-FEMALE PINS
12V SWITCHED POWER TO PUMP
J3
SUPERSEAL 1.5 SERIES 2 WAY RECEPTACLE
12V SWITCHED POWER TO STROBE/LAMP
J4
J5
Title
MANUAL CONTROL OPTICAL SENSOR-KIT
Size
A4
Number
485-SB-OPTIC
Revision
R0
Date:
14-Sep-2020
Sheet of
File:
C:\Users\Phil\Desktop\BS400.Ddb
Drawn By:

Drawing 1