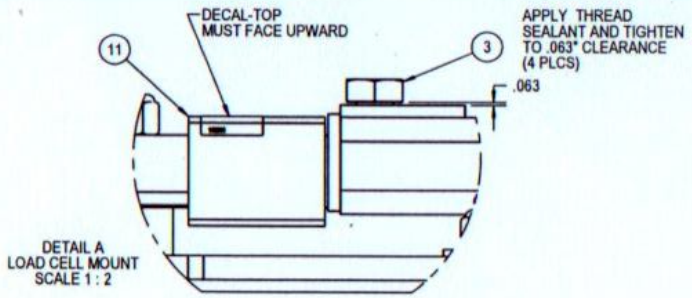
16027 Hwy 64 East – Anamosa, Iowa 52205
Phone: 319-462-2344 or 888-962-2344
Email: scaletec@scale-tec.com

John Deere 1990 40 Foot and 44 Foot - 1690 CCS Scale System

Instruction Booklet

This product application is covered by U.S. Patents;
PATENTS: 6,732,667—7,059,258—7,273,017—7,357,087—7,448,335—7,523,710
PATENT PENDING: 12/427,915

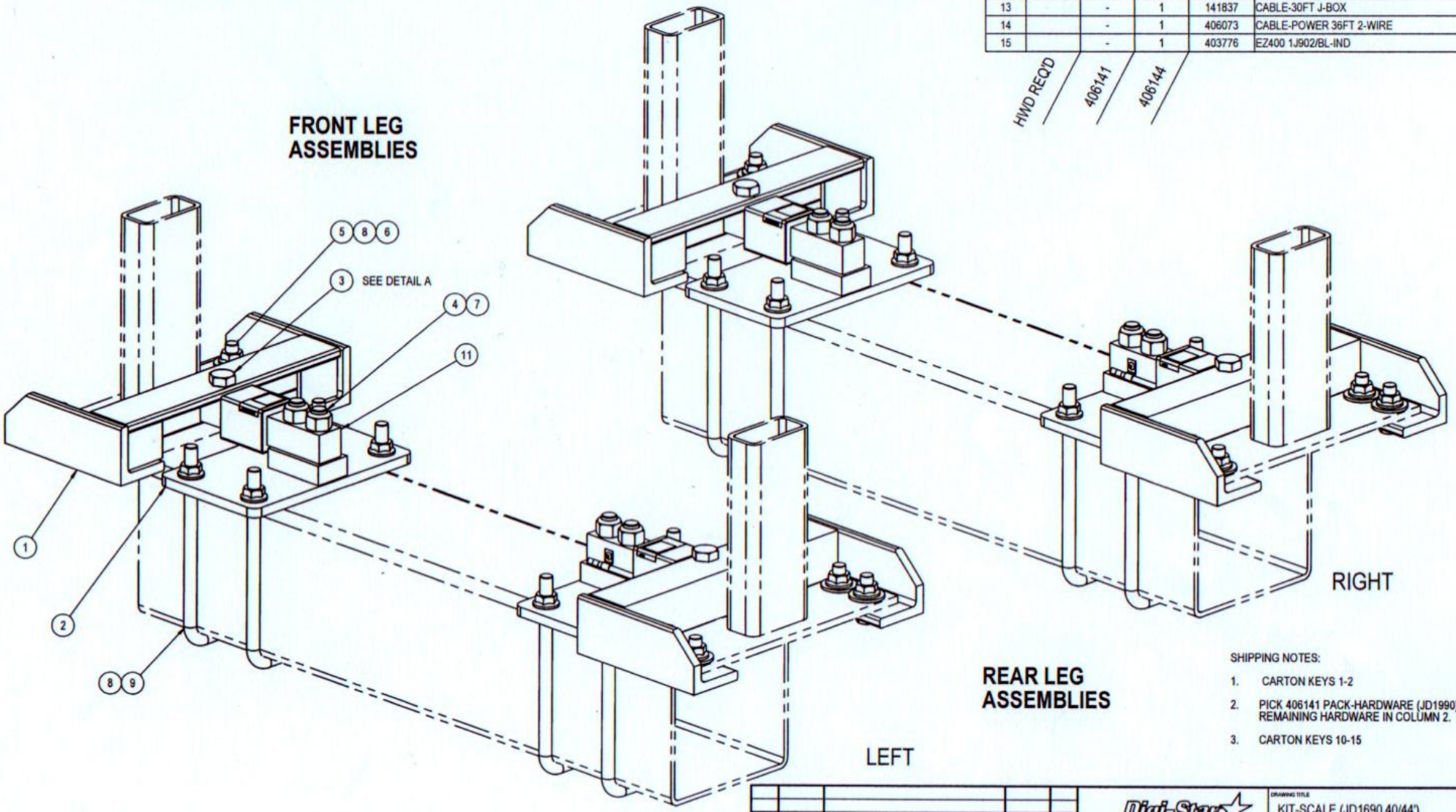


KEYS 3-9 ARE COMPONENTS OF P/N 406141 PACK-HARDWARE (JD1990)

KEY	COL 2 QTY	COL 1 QTY.	QTY	PART NO	DESCRIPTION
1		-	4	406031	WELD-TOP REAR BRKT (JD1990-03)
2		-	4	406024	WELD-BASE REAR PLATE (JD1990-07)
3	-	4	4	406067	SCR - 3/4-16 X 2.0 HHCS ZP GRD 5
4	-	8	8	406068	SCR-3/4-10 X 3.5 HHCS GRD 8 ZP
5	8	8	16	405896	SCR -5/8-11 X 2.0 HHCS ZP GRD 5
6	8	8	16	405858	WASH-5/8 FLAT WIDE ZP
7	-	8	8	405921	NUT-3/4-10 TOP LOCK ZP
8	18	14	32	406070	NUT-5/8-11 TOP-LOCK FLANGE ZP
9		-	8	406025	BOLT-U 5/8-11 x 8.75W x 10.0L GRD 8 ZP
10		-	1	406081	PACK-ROBO SWIVEL MOUNT
11		-	4	404284	CELL-1.5 SQ DB-21 FT
12		-	1	404254	ASSY J-BOX 3P/4PT MOBILE
13		-	1	141837	CABLE-30FT J-BOX
14		-	1	406073	CABLE-POWER 36FT 2-WIRE
15		-	1	403776	EZ400 1J902/BL-IND

HW'D REQ'D / 406141 / 406144

FRONT LEG ASSEMBLIES



REAR LEG ASSEMBLIES

SHIPPING NOTES:

1. CARTON KEYS 1-2
2. PICK 406141 PACK-HARDWARE (JD1990) AND REMAINING HARDWARE IN COLUMN 2.
3. CARTON KEYS 10-15

REV	NUMBER	DESCRIPTION	DATE	DR'D
A	09-022	RELEASED	08/06/09	TJS

Digi-Star
W5527 STATE HWY 106, FORT ATKINSON, WI 53538

DRAWING TITLE: KIT-SCALE (JD1690,40/44')

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMAL ± .062, HOLE DIAMETER ± .010, ANGLE ± 1°

DO NOT SCALE DRAWING

DATE: 08/06/09 | MATERIAL: - | SCALE: 1:3.5 | DRAWN BY: TJS | FINISH: - | SHEET: 1 OF 1 | SIZE: C | DRAWING NUMBER: 406144

John Deere 1990 40 Foot and 44 Foot -1690 CCS
Scale Installation

1. Loosen the frame bolts on the front legs.

2. Disassemble the rear legs and remove the angle bracket mounted to the leg and the main frame.

3. Jack up one of the rear legs approximately 1 in.

4. Using the same bolts install the top bracket to the rear leg. Tighten these bolts at this time.

5. Assemble load cell to the rear base bracket by using the ¾ x 3 ½ in. bolts. Do not tighten bolts completely. You may have to slide load cell while aligning the base and top brackets. **TOP STICKER NEEDS TO BE ON TOP OF LOAD CELL!**

6. Bolt the rear base bracket to the main frame using the original frame bolts. The load cell is held to the rear top bracket with ¾ x 2 in. bolts. The 2 in. bolts need to have thread lock applied to threads. **THIS BOLT CAN NOT BE COMPLETELY TIGHTENED DOWN, LEAVE 1/16 in. BETWEEN BOTTOM OF BOLT HEAD AND TOP BRACKET!**

7. Install brackets on other side. Do not tighten mounting bolts on rear legs until front legs are installed.

8. Disassemble the front legs from base plates. Jack up front leg and remove the base plate bolted to the main frame.

9. Using the 2”x5/8” bolts, install the top brackets to the front legs.

10. Assemble load cell to the front base bracket by using ¾ x 3 ½ in. bolts. Do not tighten bolts completely. You may have to slide load cell while aligning base and top brackets. **TOP STICKER NEEDS TO BE ON TOP OF LOAD CELL!**

11. Using the same frame bolts, bolt the front base plate to the main frame with the frame plates on the bottom. (Refer to picture)

12. The load cell is held to the front top bracket with ¾ x by 2 in. bolts. The 2 in. bolts need to have thread lock applied to the threads. **THIS BOLT CAN NOT BE COMPLETELY TIGHTENED DOWN, LEAVE 1/16 in. BETWEEN BOTTOM OF BOLT HEAD AND TOP BRACKET!**

13. Install brackets on the other front leg. When all brackets are installed tighten all of the frame bolts.

Load Cell Connection:

The indicator is designed to operate with strain gage load cells. The load cells are connected to the terminal board inside the Junction Box. The indicator can be mounted on the railing on the rear of the seeder. Use parts H151618 (two each) and H136110 (two each) and bolt it to the indicator mounting bracket. This will allow you to swivel to the rear while filling and swivel to the front for planting.

Power Cord:

Red and white wire positive, black wire is negative.

Cab Mounting:

A 45 foot cable can be added to the junction box if cables are too short to reach tractor cab.

If you have any questions regarding the installation or the product, give us a call at (319)-462-2344 or toll-free +1-888-962-2344.

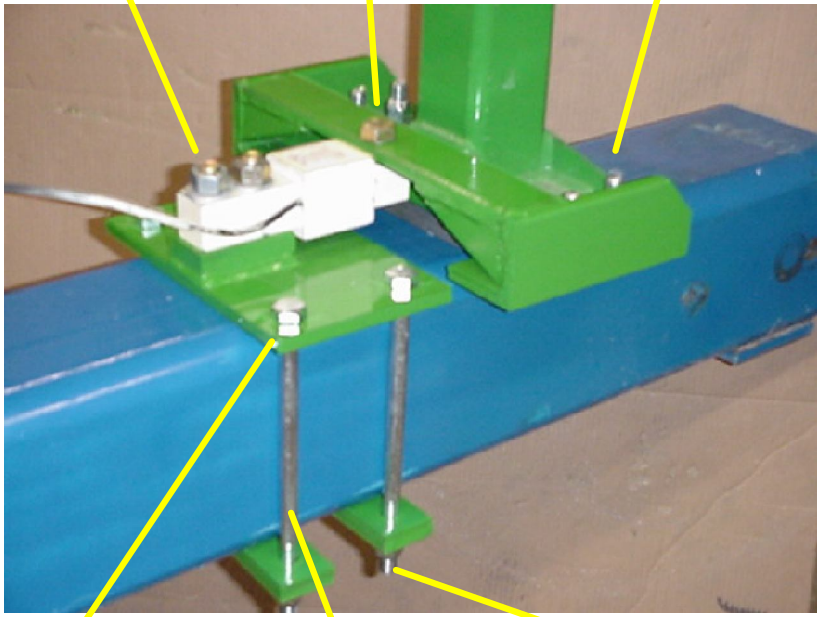
See the following pages for pictures, and for instructions on wiring and scale use.

Leg Hardware

¾” x 3 ½” Bolts
and ¾” Locknuts

2” x 5/8” Bolts

¾” x 2” Fine Threaded

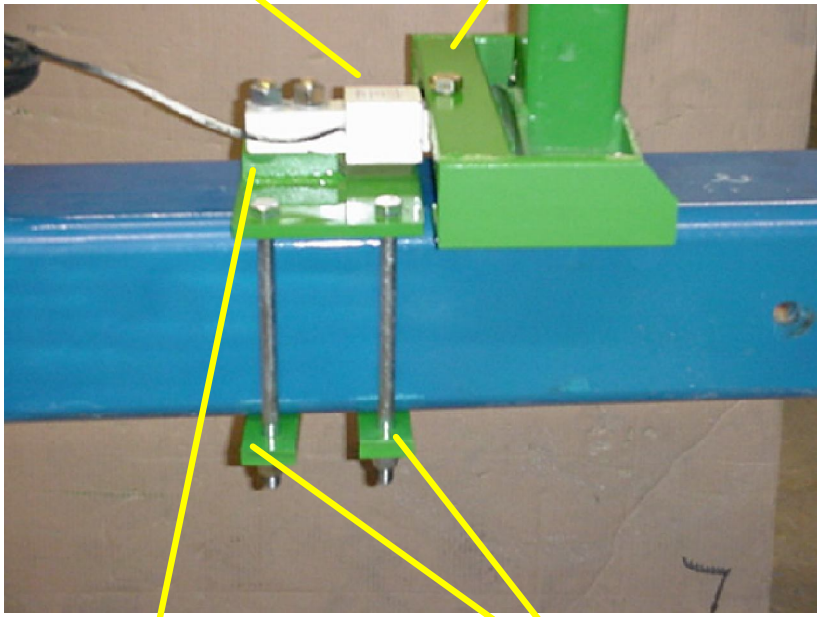


5/8” Washers

5/8” Flange
Locknut

5/8” x 11” Bolt
or 5/8" x 10 1/2" x 8" U-bolt

Leg Bracket Assembly



Power Connection:
The power cable should be connected directly to a vehicle battery or regulated power supply. The scale end of the power cable is attached to the J901 connector located on the bottom panel of the scale.
Connect the RED wire from the power cable to +12 VDC and the BLACK wire to GROUND. The indicator is fused internally at 4 amps.

Power Cable Connections:

Wire color	**Wire Function**
Red	*Battery (+12 VDC)*
Black	*GROUND*

Load Cell Connection:
The indicator is designed to operate with strain gage load cells. The indicator will normally be supplied with a "J-BOX" cable going between the scale and the load cell junction box. Extension kits are available from your dealer in various lengths.
To connect the load cells, attach the junction box cable to the J902 or J903 connector on the bottom panel of the scale.

How to use Drill Scale with a Digi-Star GT460 or GT400 Indicator

1. Turn indicator on.
2. Push the "ZERO" button to zero out the scale.
   The arrow will be pointing towards "GROSS" on the display.
3. Fill the drill with seed. The GROSS weight is your inventory of seed in the drill.
4. To set population rate, stop in a level location with the drill row units up.
5. Check your acre counter.
6. Push the "START" button on the display.
   The display will show zero.
   An arrow will be pointing towards "TARE" on the display.
7. Drill 3 acres and stop in a level location with the drill row units up.
8. Divide the acres planted the amount of seed used.
   This gives the pounds per acre of seed.
9. Press "STOP", the indicator will go back to displaying the inventory of seed in the drill.
   The arrow will be pointing towards "GROSS" on the display.