

Installation Instructions



3-Section Folding No-Till Precision Seeding System Monitor System Option

Used with:

- 3N - 3010P & 3020P



When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

General Information

These instructions explain how to install the monitor system option.

These instructions apply to:

- 196-300A 30P-48 Row 7.5" Row Spacing
- 196-301A 30P-36 Row 10" Row Spacing
- 196-302A 30P-24 Row 15" Row Spacing
 and Twin Row only Machines

Refer to pages 9 and 10 for templates if there are no predrilled holes.

Definitions

Right-hand and left-hand as used in this manual are determined by facing the direction the drill will travel while in use.

Refer to the drill operator's manual for detailed information on safely operating, adjusting, troubleshooting and maintaining the drill. Refer to the parts manual for part identification.

Manual Part Numbers

- 196-248M 3N-3010P and 3020P Operator's Manual
- 196-248P 3N-3010P and 3020P Parts Manual

DJ Manual-Supplied in Option Bundles

Refer to this manual for instructions regarding the console assembly, speed sensor, and other schematic illustrations.

NOTE: Be sure you have the correct instructions for the monitor system you are using.

196-300A	30P-48 Row 7.5" Row Spacing	Begin on page 2
196-301A	30P-36 Row 10" Row Spacing	Begin on page 4
196-302A	30P-24 Row 15" Row Spacing and Twin Row only Machines	Begin on page 6

2 | Monitor System Option

Assembly Instructions for 196-300A 7 1/2 Row Spacing

Refer to Figures 1 and 2

1. Mount one each of the material flow modules to the wing frame as shown in figure 1. Mount two each, of the material flow modules, on the right-hand and left-hand side of the center frame using 1/4" x 1 1/2" bolts and 1/4" lock nuts as shown.

NOTE: If there are no predrilled holes in the frame use the templates provided, mark and drill 5/16" holes for mounting modules. (Template is on pages 9 & 10)

2. Place the harness wire bundle on the frame by the material flow module. Connect the wire extensions to the openers starting at the left side of the drill in numerical order. Wire extension number 1 with first opener on the left. Continue in the same manner until all wire extensions are connected. Fasten the harness to the frame with cable ties.
3. Connect black and gray colored leads into the material flow modules. Inlets are color coded. Black to black and gray to gray.

Refer to Figure 3

4. Attach sensor lead marked IN from the left-hand wing frame harness to the 15' smart sensor extension wire. Route the 15' extension using the same path as the opener lift hoses allowing the same slack at the drill toolbar pivots as the other hoses. Connect this extension to the center frame harness lead marked OUT. Use cable ties to secure the wires in place. Mark these extensions P-1, left-hand and P-2, right-hand for further reference. Put a cable plug in the OUT lead of the left-hand frame harness.
5. Attach sensor lead marked IN from the center frame harness to the 30' smart sensor extension wire. Route the 30' extension using the same path as the opener lift hoses allowing the same slack at the drill toolbar pivots as the other hoses. Connect this extension to the right-hand wing frame harness lead marked OUT. Use ties to secure the wires in place.
6. Attach a 40' extension to the IN from the right-hand wing frame harness and route it back to the center frame and through the tongue tube to the tractor once again using the same routing as the hydraulic hoses and allowing the same slack. It is connected to the P1 port of the cab harness at the tractor hitch. Put a cable plug in the P2 port of the cab harness.

NOTE: Left-hand side of drill is shown in figures. Left-hand and Right-hand sides on the Drill are done in the same manner. The left side will go to port 1 and the right side to port 2.

7. Refer to page 3 for a detailed listing of parts and schematics for this particular monitor system.

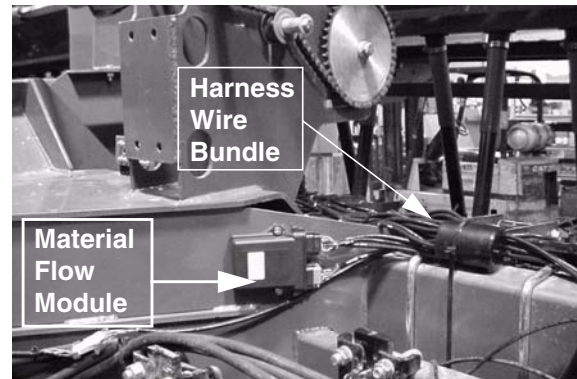


Figure 1
Wing Frame

19217

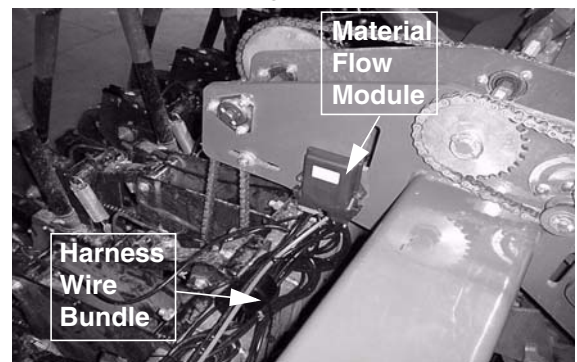


Figure 2
Center Drive System Frame

19218

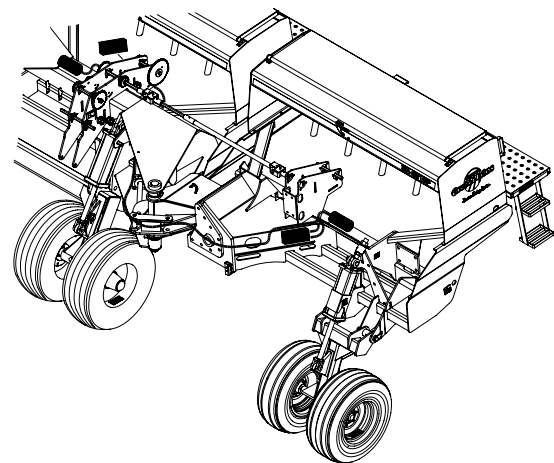


Figure 3
Routing for wire Harness

19255

8. For console assembly, speed sensor and other schematics illustrations refer to the DJ manual found in the monitor system package.
9. Refer to page 8 for speed sensor instructions if sensor is being used.

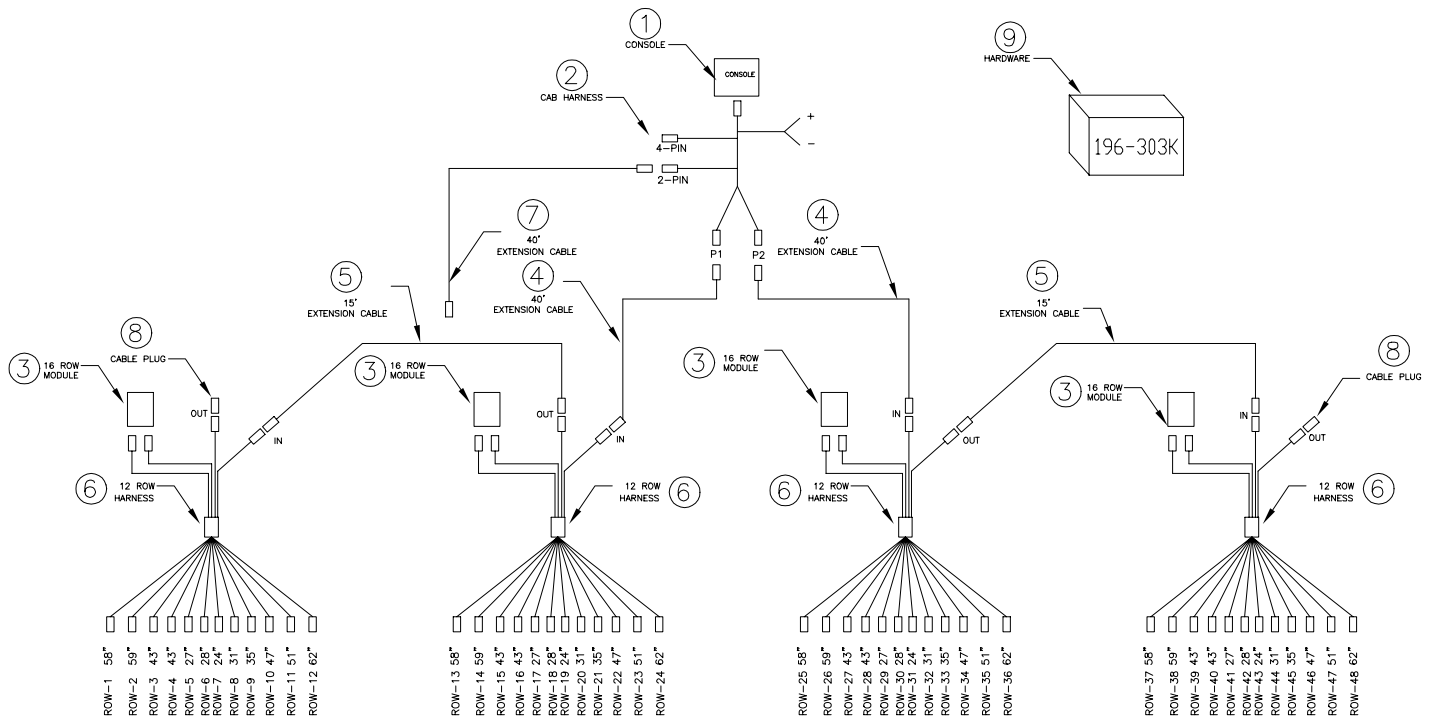
NOTE: J1 accessory harness and 40' extension is not used if speed sensor on drills is not used.

196-300A cont.

Ref #	Qty	Part Number	Description
1.	1	466822000S1	Seed Manager Console*
2.	1	466820134S1	Seed Manager 4WD Cab Harness
3.	4	467751130S1	16-Row Module
4.	2	467751207S1	Seed Manager 485 Module Extension 40'
5.	2	467751203S1	Seed Manager 485 Module Extension 15'
6.	4	467751437S1	12-Row Harness 30P 10
7.	1	466820834S1	Speed Sensor Extension Cable 40'
8.	2	464211340	Seed Manager Module Cable Plug
9.	1	196-303K	Hardware Bundle

*NOTE: Refer to DJ manual for Console installation.

30P 48 Row 7.5" Spacing Monitor System Schematics



20230

Note: For further schematic illustration, refer to the DJ manual supplied in the Monitor System Package.

4 Monitor System Option

Assembly Instructions for 196-301A 10 inch Row Spacing

Refer to Figures 4 and 5

1. Mount one each of the material flow modules to the wing frame as shown in figure 1. Mount two each, of the material flow modules, on the right-hand and left-hand side of the center frame using 1/4" x 1 1/2" bolts and 1/4" lock nuts as shown.

NOTE: If there are no predrilled holes in the frame use the templates provided, mark and drill 5/16" holes for mounting modules. (Template is on pages 9 & 10)

2. Place the harness wire bundle on the frame by the material flow module. Connect the wire extensions to the openers starting at the left side of the drill in numerical order. Wire extension number 1 with first opener on the left. Continue in the same manner until all wire extensions are connected. Fasten the harness to the frame with cable ties.
3. Connect black and gray colored leads into the material flow modules. Inlets are color coded. Black to black and gray to gray.

Refer to Figure 6

4. Attach sensor lead marked IN from the left-hand wing frame harness to the 15' smart sensor extension wire. Route the 15' extension using the same path as the opener lift hoses allowing the same slack at the drill toolbar pivots as the other hoses. Connect this extension to the center frame harness lead marked OUT. Use cable ties to secure the wires in place. Mark these extensions P-1, left-hand and P-2, right-hand for further reference. Put a cable plug in the OUT lead of the left-hand frame harness.
5. Attach sensor lead marked IN from the center frame harness to the 30' smart sensor extension wire. Route the 30' extension using the same path as the opener lift hoses allowing the same slack at the drill toolbar pivots as the other hoses. Connect this extension to the right-hand wing frame harness lead marked OUT. Use ties to secure the wires in place.
6. Attach a 40' extension to the IN from the right-hand wing frame harness and route it back to the center frame and through the tongue tube to the tractor once again using the same routing as the hydraulic hoses and allowing the same slack. It is connected to the P1 port of the cab harness at the tractor hitch. Put a cable plug in the P2 port of the cab harness.

NOTE: Left-hand side of drill is shown in figures. Left-hand and Right-hand sides on the Drill are done in the same manner. The left side will go to port 1 and the right side to port 2.

7. Refer to page 5 for a detailed listing of parts and schematics for this particular monitor system.

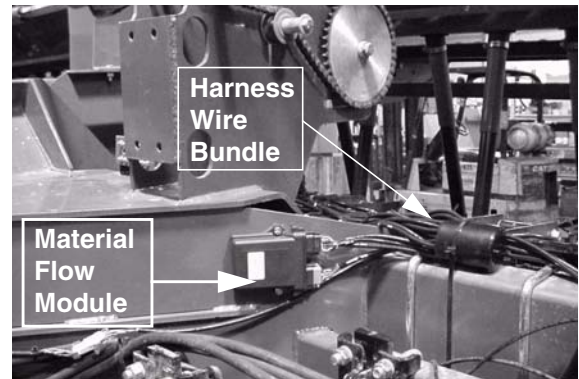


Figure 4
Wing Frame 19217

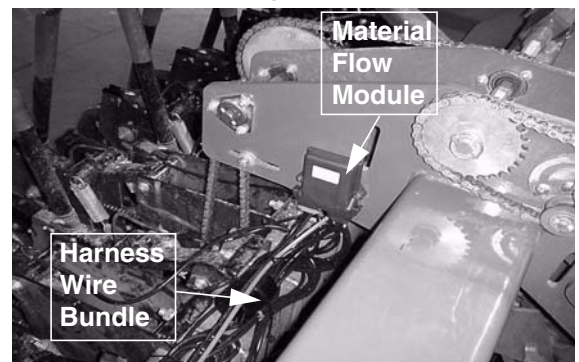


Figure 5
Center Drive System Frame 19218

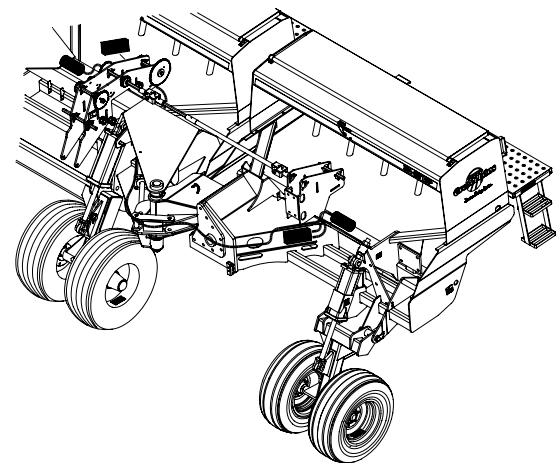


Figure 6
Routing for wire Harness 19255

8. For console assembly, speed sensor and other schematics illustrations refer to the DJ manual found in the monitor system package.
9. Refer to page 8 for speed sensor instructions if sensor is being used.

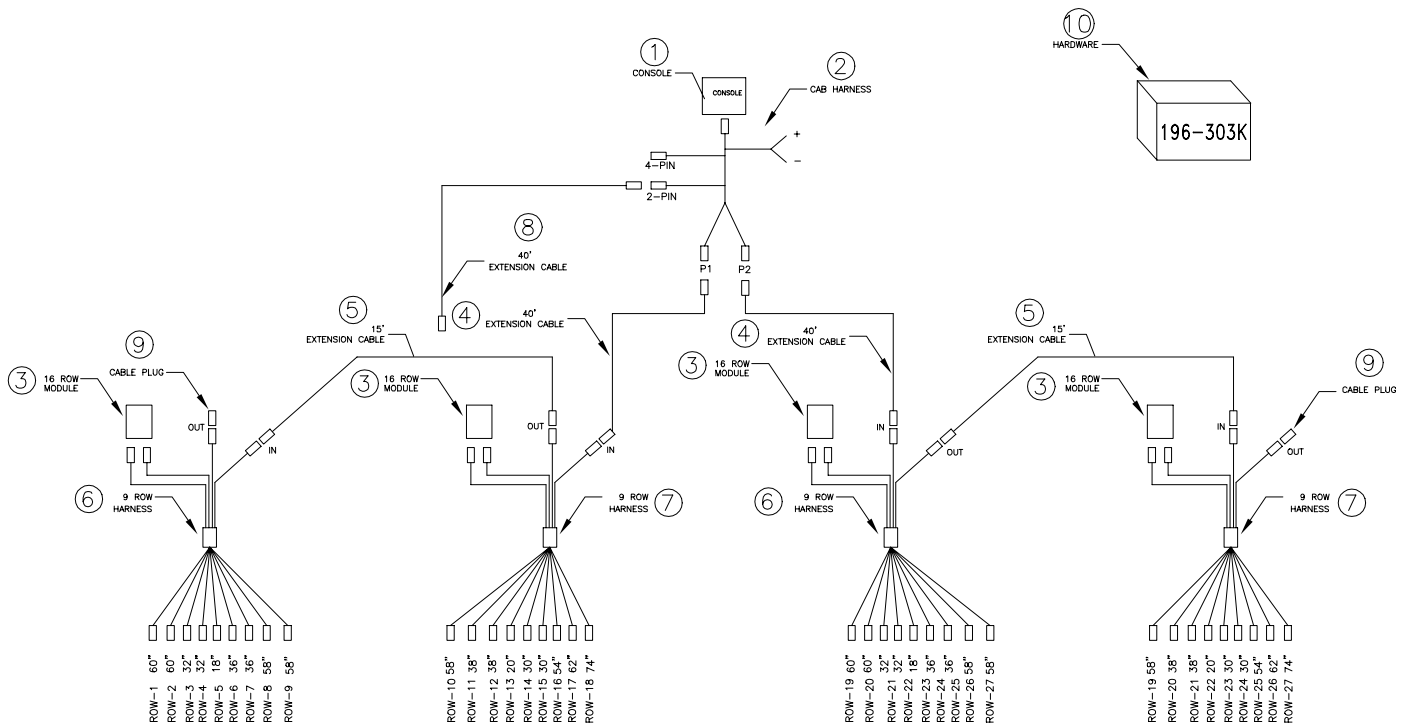
NOTE: J1 accessory harness and 40' extension is not used if speed sensor on drills is not used.

196-301A cont.

Ref #	Qty	Part Number	Description
1.	1	466822000S1	Seed Manager Console*
2.	1	466820134S1	Seed Manager 4WD Cab Harness
3.	4	467751130S1	16-Row Module
4.	2	467751207S1	Seed Manager 485 Module Extension 40'
5.	2	467751203S1	Seed Manager 485 Module Extension 15'
6.	2	467751412S1	9-R Harness 30P 7.5 LH
7.	2	467751413S1	9-R Harness 30P 7.5 CTR-LH
8.	1	466820834S1	Speed Sensor Extension Cable 40'
9.	2	464211340	Seed Manager Module Cable Plug
10.	1	196-303K	Hardware Bundle

*NOTE: Refer to DJ manual for Console installation.

30P 36 Row 10" Spacing Monitor System Schematics



Note: For further schematic illustration, refer to the DJ manual supplied in the Monitor System Package.

6 Monitor System Option

Assembly Instructions for 196-302A 15 inch and Twin Row Spacing

Refer to Figures 7 and 8

1. Mount one each of the material flow modules to the wing frame as shown in figure 1. Mount one material flow module, on the left-hand side of the center frame using 1/4" x 1 1/2" bolts and 1/4" lock nuts as shown.

NOTE: If there are no predrilled holes in the frame use the templates provided, mark and drill 5/16" holes for mounting the module. (Template on pages 9 & 10)

2. Place the harness wire bundle on the frame by the material flow module. Connect the wire extensions to the openers starting at the left side of the drill in numerical order. Wire extension number 1 with first opener on the left. Continue in the same manner until all wire extensions are connected. Fasten the harness to the frame with cable ties.
3. Connect black and gray colored leads into the material flow modules. Inlets are color coded. Black to black and gray to gray.

Refer to Figure 9

4. Attach sensor lead marked IN from the wing frame harness to the 15' smart sensor extension wire. Route the 15' extension using the same path as the opener lift hoses allowing the same slack at the drill toolbar pivots as the other hoses. Connect this extension to the center frame harness lead marked OUT. Use cable ties to secure the wires in place.
5. Attach the 40' seed smart extension to the center frame harness sensor lead marked IN. Put cable plugs in the OUT leads of the wire cable harness. Route the 40' extensions through the tongue tube up to the tractor. A 40' extension is used from P1 to the right-hand wing module. Only the P1 port is used. A 30' extension connects the right-hand wing to the center frame module and a 15' extension connects the center module to the left-hand wing module.

NOTE: Left-hand side of drill is shown in figures.

6. Refer to page 7 for a detailed listing of parts and schematics for this particular monitor system.
7. For console assembly, speed sensor and other schematics illustrations refer to the DJ manual found in the monitor system package.
8. Refer to page 8 for speed sensor instructions if sensor is being used.

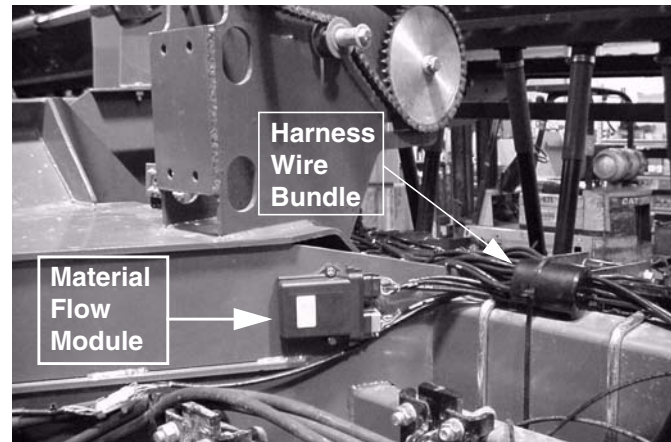


Figure 7
Wing Frame

19217

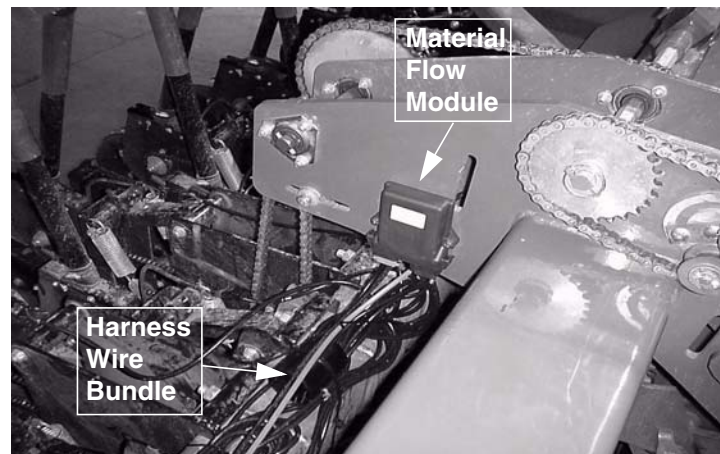


Figure 8
Center Drive System Frame

19218

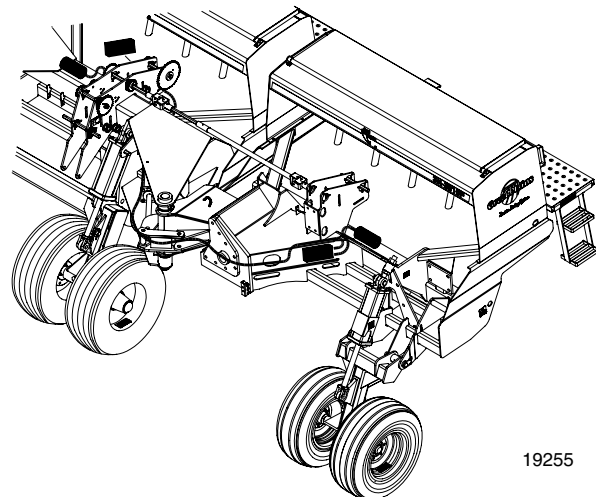


Figure 9
Routing for wire Harness

19255

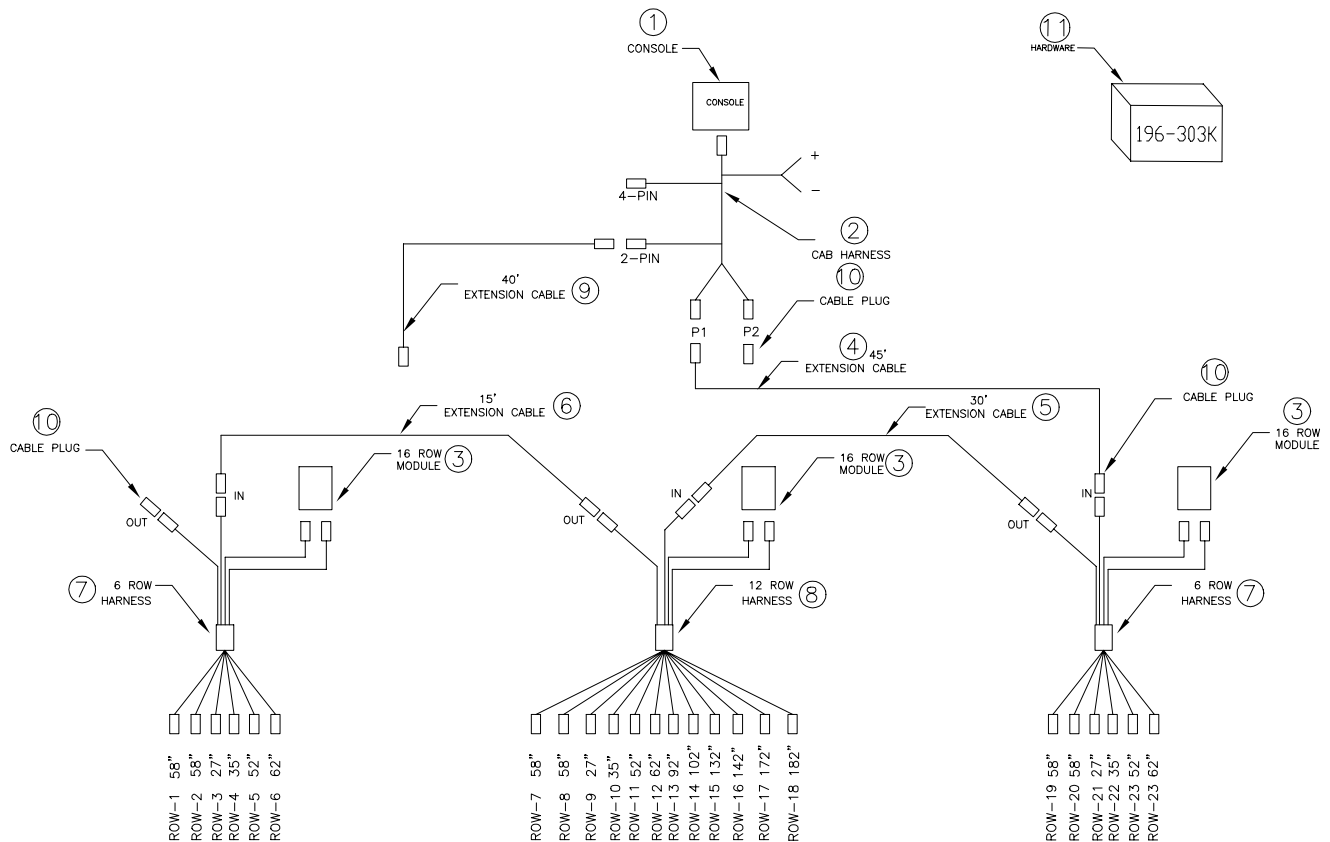
NOTE: J1 accessory harness and 40' extension are not used if speed sensor on drills is not used.

196-302A cont.

Ref#	Qty	Part Number	Description
1.	1	466822000S1	Seed Manager Console*
2.	1	466820134S1	Seed Manager 4WD Cab Harness
3.	3	467751130S1	16-Row Module
4.	1	467751208S1	Seed Manager 485 Module Extension 45'
5.	1	467751203S1	Seed Manager 485 Module Extension 15'
6.	1	467751206S1	Seed Manager 485 Module Extension 30'
7.	2	467751400S1	6-R Harness 30P 15 Wings
8.	1	467751436S1	12-R Harness 30P 15 Center
9.	1	466820834S1	Speed Sensor Extension Cable 40'
10.	2	464211340	Seed Manager Module Cable Plug
11.	1	196-303K	Hardware Bundle

*NOTE: Refer to DJ manual for Console installation.

30P 24 Row 15/TR Monitor Harness Schematics



20232

Note: For further schematic illustration, refer to the DJ manual supplied in the Monitor System Package.

8 Monitor System Option

Speed Sensor

Refer to Figure 10

1. Assemble mounting bracket (1) and sensor bracket (2) together using hardware supplied in kit. Assemble mounting bracket to the inside of the plate on the left gauge wheel. Install the Dickey-john magnetic pickup sensor (3) to the sensor mounting bracket.
2. Loosen fasteners at bearings (4) on either side of the contact wheel pivot shaft (5). Slide pickup disk (6) onto shaft using lock collars (7) on either side to hold in place. Tighten bearings back down.

Refer to Figure 11

3. Align sensor and pickup disk with centerline. Be sure to tighten set screws in the lock collars after alignment is done.
4. Connect sensor to wire harness sensor extension.
5. Set initial distance between sensor and pickup disk at 0.040 inch. This may need to be adjusted up or down as necessary.
6. Route the wire harness along the tongue to the tractor. The sensor is connected to the 2-pin connector on the cab harness at the hitch.

Refer to the DICKEY-john Installation and Operating Manual for further instructions.

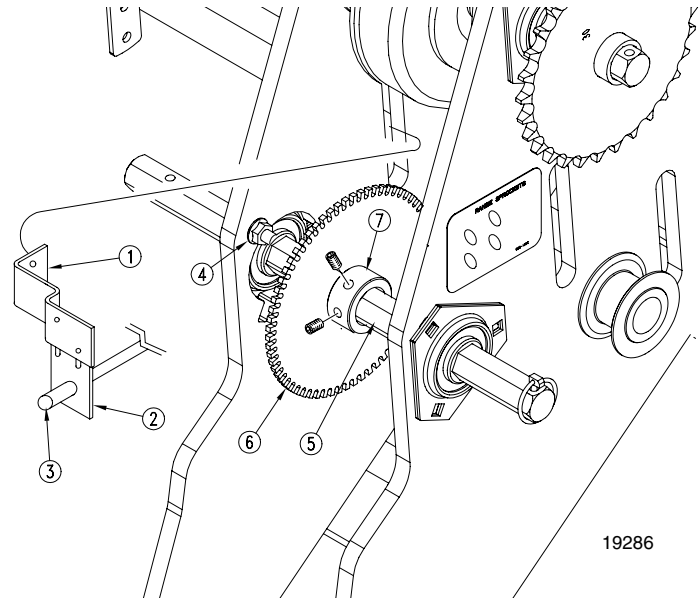


Figure 10
Mounting Bracket

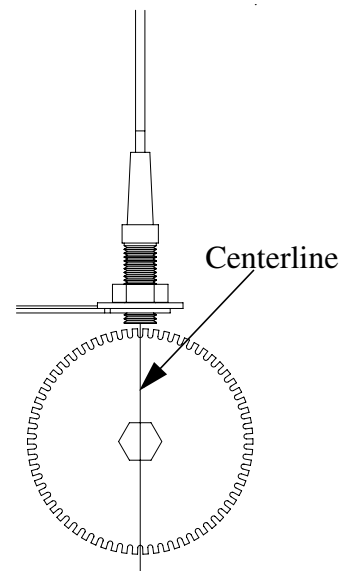
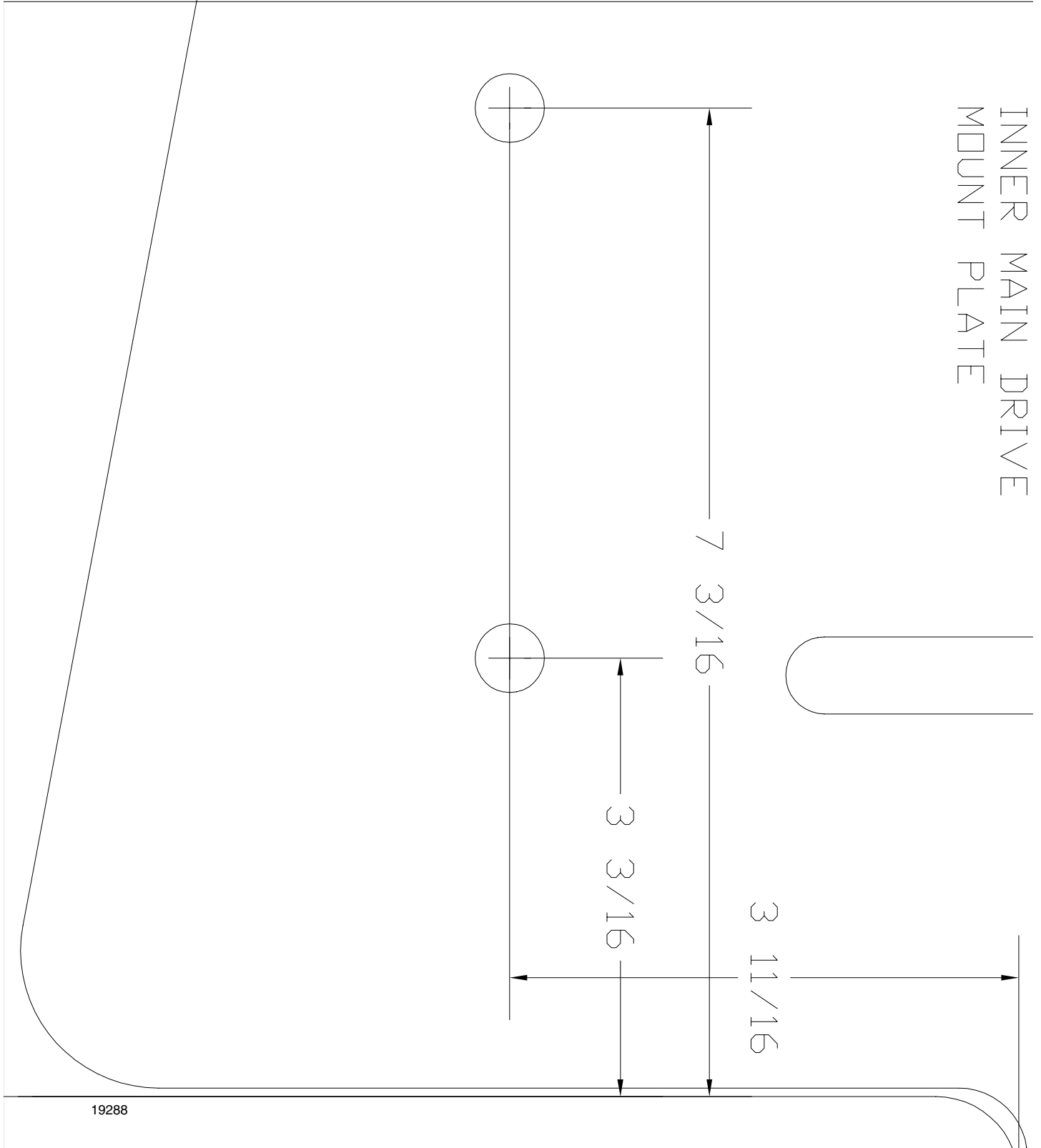
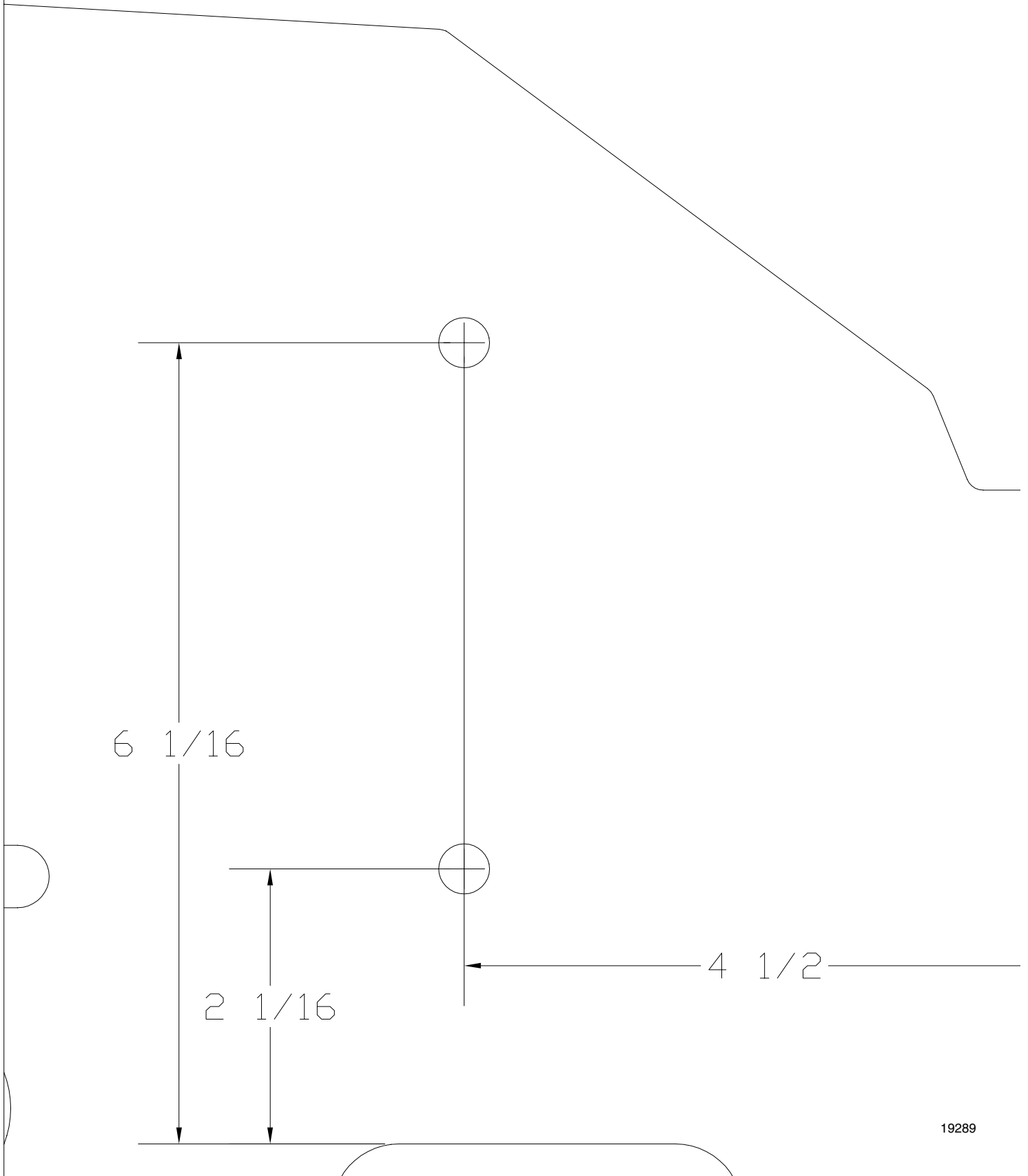


Figure 11
Sensor

Templates for 833-232C 7 1/2 Row Spacing Material Flow Module



Templates for 833-232C 7 1/2 Row Spacing Material Flow Module



19289