

Installation Guide

Installation Kit: 911-6100-10

Swathers:

Case IH		New Holland		MacDon
WD1203	WD2303	H8040	Speedrower 130	M1170
WD1204	WD2304	H8060	Speedrower 160	M1240
WD1504	WD2504	H8080	Speedrower 200	
WD1903	WDX1202	HW325	Speedrower 220	John Deere
WD1904	WDX1902	HW345	Speedrower 240	
WD2104	WDX2302	HW365	Speedrower 260	W170

Combines:

Case IH	New Holland
7010	CR9040 CX8070
7120	CR9060 CX8080
7230*	CR9065 CX8090
8010	CR9070 CX840
8120	CR9080 CX860
8230*	CR9090 CX880
9010	CR940
9120	CR960
9230*	CR970
	CR980

* Deluxe cab models only, see picture on page 6

2WD/MFWD Tractors:

John Deere			New Holland	Versatile
4040	4430	4640	8670	250
4050	4430	4650	8770	280
4055	4440	4755	8870	305
4230	4450	4760	8970	2160
4230	4455	4840		2180
4240	4555	4850		2210
4250	4560	4955		
4255	4630	4960		

Sprayers/Spreaders:

Ag Chem		John Deere
SS874	1194	6500
SS1074	1194H	6600
SSC1074	1254	6700
SS884	1264	
SS1084	1274	
SSC1084	1286C	
884	1386	
984	1396	
984H	6103	
994	8103	Spra Coupe
994H	8104	7450
1084	8144	7650
1184	9103	7655
1184H	9203	7460
		7660

Articulated Tractors:

John Deere		New Holland	Versatile		
8430	8650	9184	9680	340*	2270
8440	8760	9280	9684	375*	2290
8450	8770	9384	9880	400*	2310
8560	8850	9480	9884	435	2335
8570	8870	9484		485	2360
8630	8960			535	2375
8640	8970			575	2425

*First 3 digits of serial # must be 305 or lower,
see picture on page 6

Tracked Tractors:

Challenger
35
45
55

Introduction

The procedures outlined in this guide provide the basic installation procedure for the ESi² on the machines specified on the front cover of this guide. If you do not see your machine listed, contact customer support for further instruction. The kit components and corresponding install instructions are designated for each applicable machine make and model and may not be used on undesignated machine models.

Review Installation Kit Contents

Kit contents are outlined in the ESi² installation section on pages 20 and 21. Read all applicable installation instructions for your machine's model and ensure that all required kit components are present before beginning the installation.

NOTE: Due to manufacturing processes outside of Outback Guidance's control, the installer may have to adapt this kit to your distinct situation.

Read and Follow All Safety Messages

- Refer to the safety manual for the machine that the ESi² is being installed on for operating age and precautions.
- Prior to installing and operating the ESi², read and understand all safety precautions as outlined in this guide
- Store this guide and all related safety information with related machine manuals for future reference.

Safety Information and Warnings*

- ESi² is NOT designed to replace the machine's operator and is designed as a driving aid for use in precision agriculture applications.
- ESi² is NOT intended for use on roadways and should remain disengaged at all times when traveling on roadways.
- ESi² does NOT control the speed of the machine and a human operator is required to manually maintain a safe operating speed.
- ESi² does NOT avoid obstacles. To prevent human, machine and property injury a human operator is required to operate the machine at all times.
- Do NOT allow anyone to operate without instructions.
- At all times the driver is fully responsible for the safe operation of the vehicle.

* The safety warnings contained in this installation guide are not meant to be an exhaustive list of potential hazards.

Introduction

- To ensure peak performance, ESi² should only be installed after a thorough machine inspection has been conducted. The contents of this kit and ESi² are not intended to replace preventative and or needed maintenance. To avoid bodily and machine injury, follow the machine preparation checklist below:
 - ⇒ Inspect steering linkage: Machine should drive in a straight line without manual correction
 - ⇒ Turn off machine and power-off all electronic gauges, monitors and external devices when installing or performing maintenance on the ESi²
 - ⇒ Park machine on a clean and level surface
 - ⇒ Lower all implements and headers to the ground
 - ⇒ Apply the parking break and chock wheels
 - ⇒ Inspect any drilling and/or cutting sites to ensure no electrical wiring damage will be incurred

Install Guide Index

This installation guide covers multiple machine types. Refer to the index below to find the section that applies to your machine.

Install #1

Case IH and New Holland Swathers and Combines

For machine specific installation instructions start at page 7.



Install #2

John Deere 2WD/MFWD, Articulated Tractors, and Sprayers

For machine specific installation instructions start at page 11.



Install #3

New Holland and Versatile MFWD and Articulated Tractors Ag Chem and Spra Coupe Sprayers and Spreaders

For machine specific installation instructions start at page 13.



Install #4

MacDon and John Deere Swathers

For machine specific installation instructions start at page 17.



Install #1

Case IH and New Holland Swathers and Combines

Remove the steering wheel center cap and the nut holding the telescoping actuator knob on the shaft.

SAVE the nut as it will be used later in this installation.



Remove the telescoping actuator knob to gain access to the nut that holds the steering wheel onto the shaft.

Remove and **SAVE** this nut as it will be used later in this installation.

Following the manufacturer's recommended procedure, remove the steering wheel.

NOTE: Consult your equipment dealer if you are unsure of the correct procedure for removing the steering wheel.



Install #1

Case IH and New Holland Swathers and Combines

Remove the upper plastic sleeve from the steering column to gain access to the screws to take the steering column plastic apart. Discard this plastic sleeve.



Remove the screws that hold the steering column plastic halves together and **SAVE** to use later in this installation.



Install #1

Case IH and New Holland Swathers and Combines

Screw the plastic console back together, this will make it easier to cut to the required length.



Mark and draw a circle 60mm (2-3/8") up from the base of the plastic column. The line should be just above the screw holes.



Install #1

Case IH and New Holland Swathers and Combines

Cut the plastic cover at the line.



Refit the cut plastic console back onto the steering column using the screws you removed earlier. The steering column is now ready for ESi² Installation.



Proceed to pages 20 and 21 for ESi² assembly instructions and anti-rotation installation

Install #2

John Deere 2WD/MFWD, Articulated Tractors, and Sprayers

Remove the steering wheel center cap and the nut holding the telescoping actuator knob on the shaft.

SAVE the nut as it will be used later in this installation.



Remove the telescoping actuator knob to gain access to the nut that holds the steering wheel onto the shaft.

Remove and **SAVE** this nut as it will be used later in this installation.

Following the manufacturer's recommended procedure remove the steering wheel.

NOTE: Consult your equipment dealer if you are unsure of the correct procedure for removing the steering wheel.



Install #2

John Deere 2WD/MFWD, Articulated Tractors, and Sprayers

Remove the snap ring that holds the plastic sleeve onto the steering column.



Remove plastic sleeve to gain access to the metal steering column. Discard plastic sleeve. The steering column is now ready for ESi² Installation.



Proceed to pages 20 and 21 for ESi² assembly instructions and anti-rotation installation

Install #3

New Holland and Versatile MFWD and Articulated Tractors
Ag Chem and Spra Coupe Sprayers and Spreaders

Remove the steering wheel center cap and the nut holding the telescoping actuator knob on the shaft.

SAVE the nut as it will be used later in this installation.



Remove the telescoping actuator knob to gain access to the nut that holds the steering wheel onto the shaft.

Remove and **SAVE** this nut as it will be used later in this installation.

Following the manufacturer's recommended procedure remove the steering wheel.

NOTE: Consult your equipment dealer if you are unsure of the correct procedure for removing the steering wheel.



Install #3

New Holland and Versatile MFWD and Articulated Tractors
Ag Chem and Spra Coupe Sprayers and Spreaders

Remove the upper plastic sleeve from the steering column to gain access to the screws to take the steering column plastic apart. Discard plastic sleeve.



Remove the screws that hold the steering column plastic halves together.



Install #3

New Holland and Versatile MFWD and Articulated Tractors
Ag Chem and Spra Coupe Sprayers and Spreaders

Reassemble the two plastic halves to make the cutting procedure easier.



Measure 67mm (2-5/8") from the shoulder of the plastic and mark a line. The line should be just above the screw holes.



Install #3

New Holland and Versatile MFWD and Articulated Tractors
Ag Chem and Spra Coupe Sprayers and Spreaders

Cut the plastic cover at the line.



Reassemble the two plastic halves onto the steering column. The steering column is now ready for ESi² Installation.



Proceed to pages 20 and 21 for ESi² assembly instructions and anti-rotation installation

Install #4

MacDon and John Deere Swathers

Remove the steering wheel center cap and the nut holding the telescoping actuator knob on the shaft.

SAVE the nut as it will be used later in this installation.



Remove the telescoping actuator knob to gain access to the nut that holds the steering wheel onto the shaft.

Remove and **SAVE** this nut as it will be used later in this installation.

Following the manufacturer's recommended procedure remove the steering wheel.



NOTE: Consult your equipment dealer if you are unsure of the correct procedure for removing the steering wheel.

Install #4

MacDon and John Deere Swathers

Remove the rubber column cover by taking the snap ring off and sliding the rubber cover off of the shaft. Discard the rubber cover.



Remove the two screws that hold the plastic cover to the column. Remove and discard the plastic cover.



Install #4

MacDon and John Deere Swathers

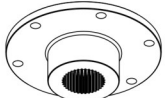
Steering column is ready for ESi² installation.



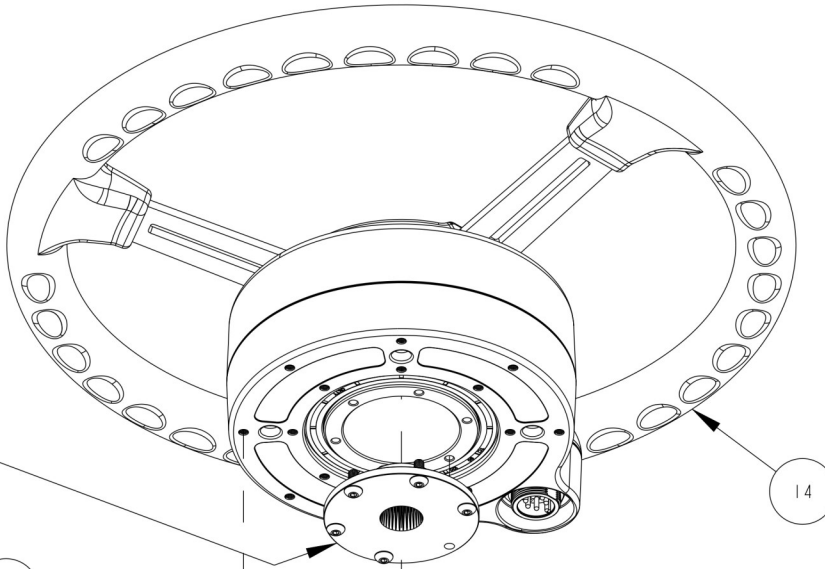
Proceed to pages 20 and 21 for ESi² assembly instructions and anti-rotation installation

ESi² Installation

FOR MACDON & JOHN DEERE
SWATHER MODELS
M1170, M1240, & W170
INSTALL SPLINE ADAPTER
IN THIS ORIENTATION



3



14

INSTALL USING MEDIUM
STRENGTH THREADLOCKER.
TORQUE TO 5 N-m (44 in-lb)
DO NOT OVERTIGHTEN

5

12

7

8

INSTALL USING MEDIUM
STRENGTH THREADLOCKER.
TORQUE TO 5 N-m (44 in-lb)
DO NOT OVERTIGHTEN

INSERT BUSHING INTO SLOT

13

VERIFY THAT BRACKET
DOES NOT ROTATE ON
COLUMN AFTER
TIGHTENING

4

12

11

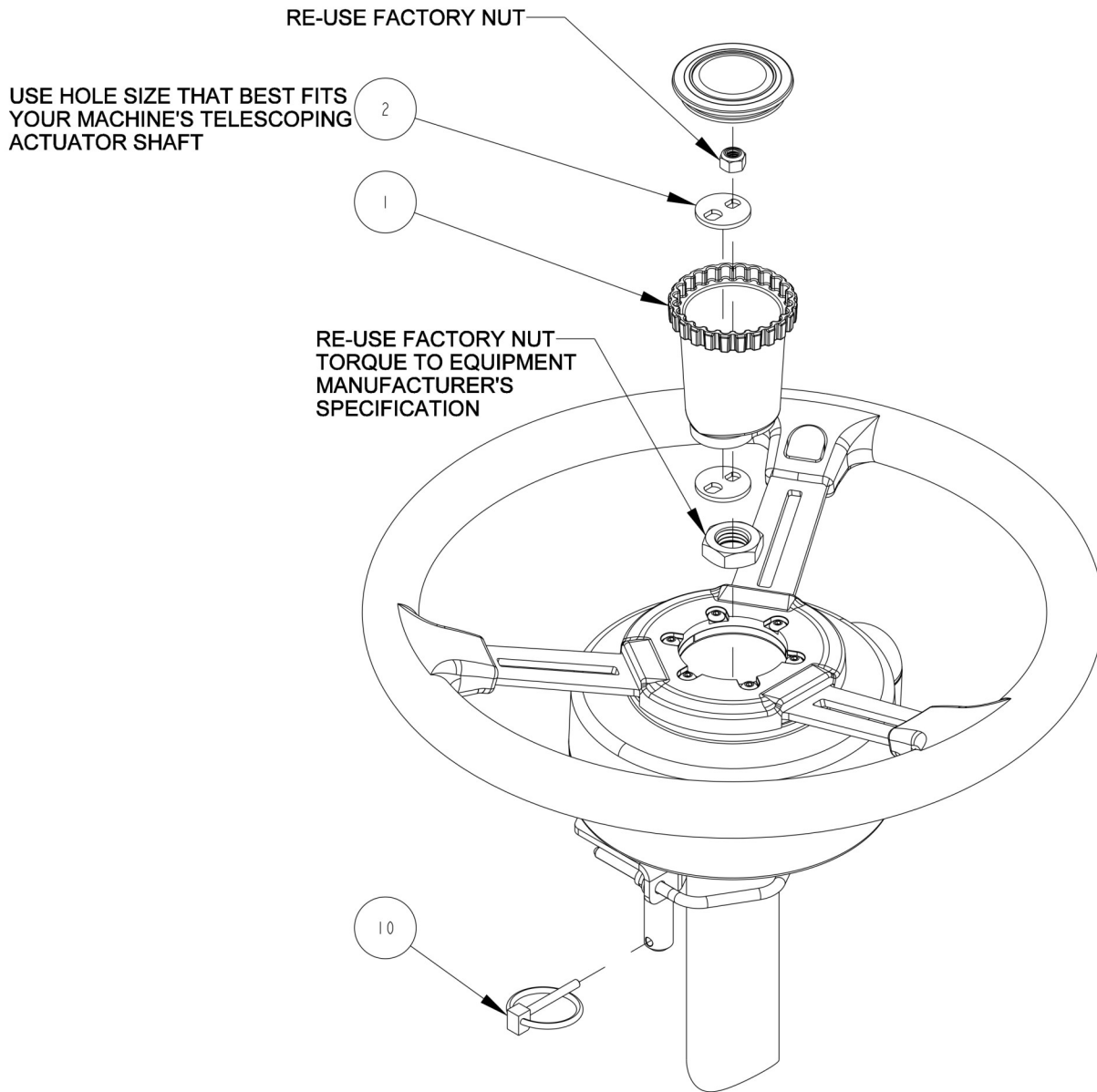
APPLY ANTI-SEIZE
COMPOUND

9

ASSEMBLY INSTRUCTIONS:

1. PRE-ASSEMBLE SPLINE ADAPTER AND T-BAR TO WHEEL MOTOR.
2. ASSEMBLE BRACKET AND CLAMP TO STEERING COLUMN. BRACKET, T-BAR, AND WHEEL MOTOR ORIENTATION MAY VARY TO FIT YOUR APPLICATION.
3. INSERT BUSHING INTO SLOT IN BRACKET.
4. PLACE ASSEMBLY ON STEERING SHAFT AND RE-INSTALL STEERING SHAFT NUT.
5. INSTALL TELESCOPING KNOB COMPONENTS.
6. INSTALL RETAINING PIN IN T-BAR.

ESi² Installation



ITEM	QTY	PART NUMBER	DESCRIPTION	NOTES
1	1	600-1486-01	TELESCOPING ACTUATOR KNOB	
2	2	601-1290-01	TELESCOPING ACTUATOR PLATE	
3	1	604-0074-10	SPLINE ADAPTER- ESI2, 36T x .875 MAJOR x .180/.870 OFFSET	
4	1	640-0182-01	V-CLAMP BRACKET	
5	1	640-0183-01	T-BAR	
6	1	675-0126-000	LOCTITE 242 MEDIUM STRENGTH THREADLOCKER	NOT SHOWN
7	4	675-1348-10	SCREW, M5-0.8 X 16mm, HEX FLANGE	
8	6	675-1351-10	SCREW, M5-0.8 X 12mm, BUTTON HEAD	
9	1	675-2084-01	V-BOLT	
10	1	676-0037-000	RETAINING PIN	
11	2	676-1089-000	LOCKNUT, M6X1.0	
12	6	678-1148-10	WASHER, #12 SAE .250 ID X .562 OD	
13	1	699-0027-01	BUSHING, SPHERICAL	
14	1	910-4024-10	ESI2 ELECTRIC STEERING WHEEL	

Install Completion Checklist

- Ensure steering wheel turns freely and anti-rotation brackets do not contact the spline adapter.
- Check, and if needed, tighten anti-rotation brackets to eliminate excess movement. Loose anti-rotation brackets can cause poor steering performance.
- For steering ECU installation instructions please refer to the ECU installation guide that came with your installation kit.

