



# **Installation Guide**

Installation Kit: 911-6108-10

### **Articulated Tractors:**

9110 Cougar III ST-251 Panther III ST-310 9110	835 836 846
9130 Cougar III ST-270 Panther III ST-320 9130   9150 Cougar III ST-280 Panther III ST-325 9150   9170 Cougar IV CM-250 Panther III ST-350 9170   9180 Cougar IV CM-280 Panther III ST-350 9170   9190 Cougar IV CS-280 Panther IV CM-325 9180   9190 Cougar IV KM-280 Panther IV CS-325 9210   Bearcat 1000 Cougar IV KS-280 Panther IV CS-360 9230   Bearcat III ST-220 Cougar KR-1225 Panther IV KM-325 9250   Bearcat III ST-220 Cougar KR-1225 Panther IV KM-325 9250   Bearcat III ST-225 Cougar KR-1280 Panther IV KM-325 9250   Bearcat IV CM-225 CU-280 Panther IV KM-325 9260   Bearcat IV KM-225 CU-380 Panther IV KS-325 9280   CA-280 CU-360 Panther IV KS-325 9310   CA-325 Lion 1000 Panther KP-1325 9330   CA-360 Panther CP-1325 Panther KP-1400 9370   Cou	855 856 875 876 895 936 945 946 955 956 976 1150 1156

Track Tracto	ors:		
САТ			
65C			
65D			
65E			
70C			
75C			
75D			
75E			
85C			
85D			
85E			
95E			

## Introduction

The procedures outlined in this guide provide the basic installation procedure for the ESi<sup>2</sup> 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 ESi<sup>2</sup> installation section on pages 8 and 9. 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 ESi<sup>2</sup> is being installed on for operating age and precautions.
- Prior to installing and operating the ESi<sup>2</sup>, 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\*

- ESi<sup>2</sup> is NOT designed to replace the machine's operator and is designed as a driving aid for use in precision agriculture applications.
- ESi<sup>2</sup> is NOT intended for use on roadways and should remain disengaged at all times when traveling on roadways.
- ESi<sup>2</sup> does NOT control the speed of the machine and a human operator is required to manually maintain a safe operating speed.
- ESi<sup>2</sup> 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, ESi<sup>2</sup> should only be installed after a thorough machine inspection has been conducted. The contents of this kit and ESi<sup>2</sup> 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
  - $\Rightarrow$  Turn off machine and power-off all electronic gauges, monitors and external devices when installing or performing maintenance on the ESi<sup>2</sup>
  - $\Rightarrow$  Park machine on a clean and level surface
  - $\Rightarrow$  Lower all implements and headers to the ground
  - $\Rightarrow$  Apply the parking break and chock wheels
  - ⇒ Inspect any drilling and/or cutting sites to ensure no electrical wiring damage will be incurred

Push in on the center cap and rotate it either right or left to remove.





Remove the 3 screws that hold the round metal disc to the steering wheel.

**Discard** the metal disc and the screws.

Remove and **Discard** the 2 screws and the telescoping actuator from the center of the wheel.



Remove and **Discard** the telescoping adjustment lever by sliding it out of the slot on the side of the steering column.



## **Machine Preparation**

Remove the nut holding the steering wheel onto the shaft.

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

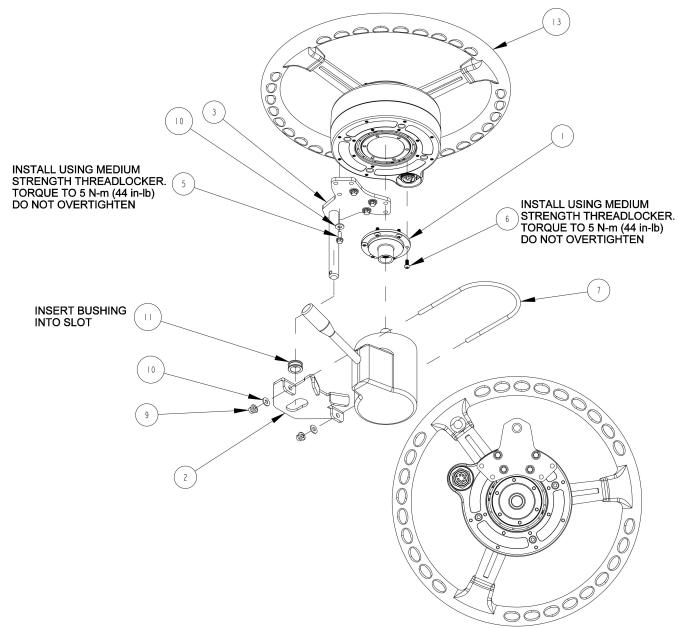
Following the manufacturer's recommended procedure remove the steering wheel.

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



Steering column is ready for ESi<sup>2</sup> Installation.



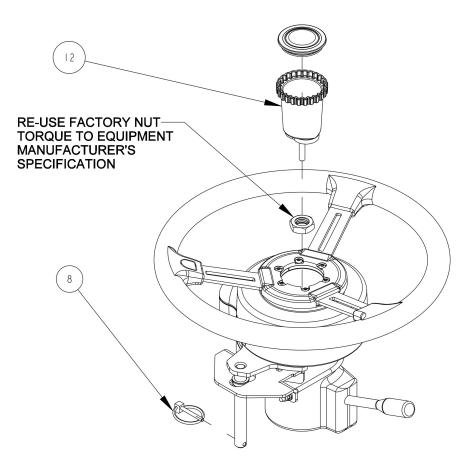


ASSEMBLY INSTRUCTIONS:

T-BAR INSTALLATION ORIENTATION

- 1. PRE-ASSEMBLE SPLINE ADAPTER AND T-BAR TO WHEEL MOTOR.
- 2. ASSEMBLE THE BRACKET AND U-BOLT TO THE STEERING COLUMN.
- 3. INSERT BUSHING INTO SLOT IN BRACKET.
- 4. APPLY ANTI-SIEZE COMPOUND TO STEERING SHAFT SPLINES.
- 5. PLACE ASSEMBLY ON STEERING SHAFT AND RE-INSTALL STEERING SHAFT NUT.
- 6. INSTALL TELESCOPING ACTUATOR KNOB.
- 7. INSTALL RETAINING PIN IN T-BAR.
- 8. ROTATE THE WHEEL A FULL TURN TO ENSURE THAT THERE IS NO INTERFERENCE BETWEEN THE BRACKETS AND SPLINE ADAPTER, OR ANY MOVING PARTS AND MACHINE CONTROLS.

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ITEM	QTY	PART NUMBER	DESCRIPTION	NOTES
1	1	604-0072-10	SPLINE ADAPTER- ESI2, 36T x .701 MAJOR x 1.270 OFFSET	
2	1	640-0186-10	BRACKET, ESI2, U-BOLT, 4.00 ID	
3	1	640-0187-10	T-BAR, EXTENDED, ESI2	
4	1	675-0126-000	LOCTITE 242 MEDIUM STRENGTH THREADLOCKER	NOT SHOWN
5	4	675-1348-10	SCREW, M5-0.8 X 16mm, HEX FLANGE	
6	6	675-1351-10	SCREW, M5-0.8 X 12mm, BUTTON HEAD	
7	1	675-2074-000	U-BOLT, 4.31"	
8	1	676-0037-000	RETAINING PIN	
9	2	676-1089-000	LOCKNUT, M6X1.0	
10	6	678-1148-10	WASHER, #12 SAE .250 ID X .562 OD	
11	1	699-0027-01	BUSHING, SPHERICAL	
12	1	720-0081-10	TELESCOPING ACTUATOR KNOB ASSEMBLY, 5/16", ESI2	
13	1	910-4024-10	ESI2 ELECTRIC STEERING WHEEL	

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ESi<sup>2</sup> wheel successfully installed

## **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.