

Telemetry Install Kit

Model: 5680 / 5700



This kit contains the parts needed to install a telemetry kit on 5680 / 5700 machines. Carefully follow the installation instructions as described.

INSTALLATION INSTRUCTIONS:

Installation Time: 2 Hours **Special Tools Required:** None

The IRIS (telemetry module) must be activated to complete this installation. The module will not function until it is activated. Call local IRIS expert for assistance activating the module after all telemetry components have been installed. Have machine serial number and IRIS module SIM number (located on back of IRIS control box assembly) ready when calling for activation.

- 1. Machines equipped with ec-H2O only: Confirm the ec-H2O system is fully functional. The ec-H2O must be fully functional before the IRIS system can be installed.
- 2. Confirm the hour meter is properly wired and functional. The hour meter must be fully functional and wired properly before the IRIS system can be installed.
- 3. Park machine on level surface, turn off machine, remove key, and set parking brake if equipped.

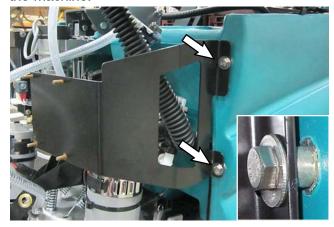
FOR SAFETY: Before installing kit, stop on level surface, turn off machine, remove key, and set parking brake if equipped.

- 4. Evaluate the condition of batteries, cables, and terminal connections. Batteries / cables / terminal connections must all be in safe working condition.
- 5. Disconnect the machine black battery harness from battery pack before installing kit.

6. Remove the front cover from machine to access area where the telemetry module will be installed. Set the cover aside.



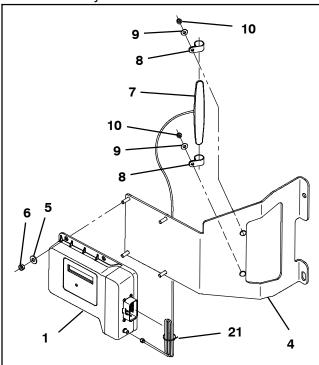
7. Use two M8 hex screws (4) and two flat washers (3) to install the module bracket (2) onto the machine.



9 Remove the additional SIM label from the back of the control box (1) and set label aside in a safe place. The number on the SIM label will be needed for activating the machine.

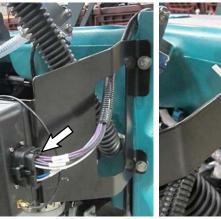


10. Use four M6 hex nuts (6) and four flat washers (5) to mount the telemetry module (1) onto the module bracket (2). Connect the antenna (7) cable to the telemetry module.



11. Use two M5 hex nuts (10), two flat washers (9), and two cable clamps (8) to install the antenna (7) onto the module bracket (2).

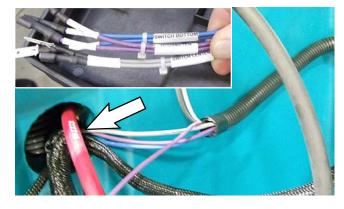
12. Connect the telemetry harness (22) to telemetry module (1) and route harness as shown. Secure harness to bracket with a cable tie (21).



13. Route the telemetry harness (22) along the solution control valve cable and secure with three cable ties (21).

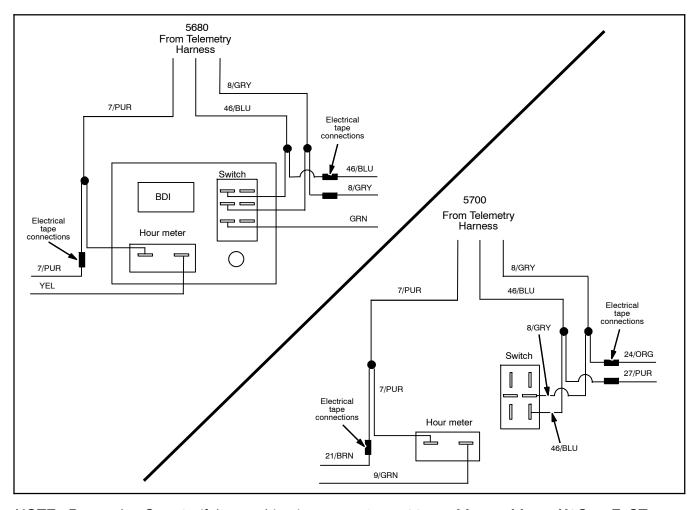


14. Route the blue (SWITCH BOTTOM), gray (SWITCH CENTER), and purple (HOURMETER) telemetry harness (22) wires through hole and into the control console.



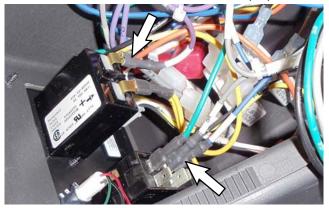
15. Open the control console to access the routed wires from the telemetry harness (22).





NOTE: Proceed to Step 25 if the machine is not equipped with either FaST or ec-H20 options.

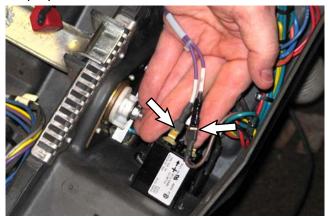
16. **5680 machines with ec-H2O or FaST Only:** Connect the routed wires to the hour meter and to the ec-H2O or FaST switch as shown. Secure wires with cable ties (21).



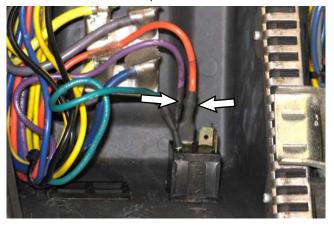
17. **5700 machines with ec-H2O or FaST Only:** Disconnect the brown wire from the hour meter.



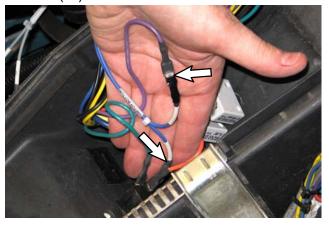
18. **5700 machines with ec-H2O or FaST Only:** Connect the brown wire disconnected from the hour meter to the telemetry harness (22) 7B purple wire.



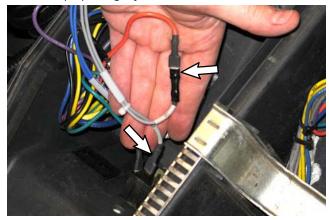
- 19. **5700 machines with ec-H2O or FaST Only:** Connect the telemetry harness (22) 7A purple wire to the hour meter terminal where the brown wire was previously located.
- 20. **5700 machines with ec-H2O or FaST Only:** Disconnect the orange wire and purple wire from the ec-H20 / FaST switch.



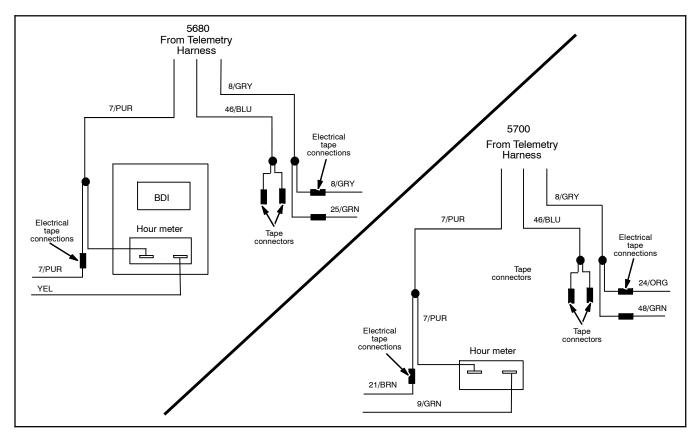
21. **5700 machines with ec-H2O or FaST Only:** Connect the purple wire disconnected from the ec-H20 / FaST switch to the telemetry harness (22) 46B blue wire.



- 22. **5700 machines with ec- H2O or FaST Only:** Connect the telemetry harness (22) 46A blue wire to the ec- H20 / FaST switch terminal where the purple wire was previously located.
- 23. **5700 machines with ec-H2O or FaST Only:** Connect the orange wire disconnected from the ec-H20 / FaST switch to the telemetry harness (22) 8B gray wire.



24. **5700 machines with ec-H2O or FaST Only:** Connect the telemetry harness (22) 8A gray wire to the ec-H2O / FaST switch where the orange wire was previously located.

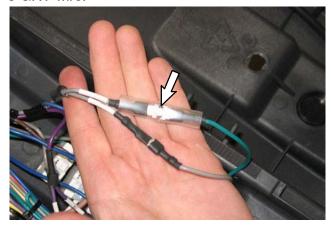


25. 5680 / 5700 machines without ec-H2O or FaST Only: Wrap electrical tape around the connectors on the ends of the 46A / 46B blue wires on the telemetry harness (22). Ends of unused wires must be wrapped with electrical tape to avoid the chance of arcing if the wires come in contact with other electrical components.

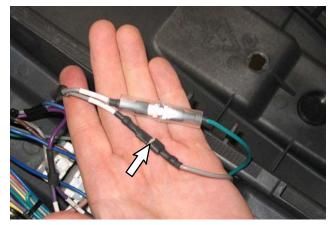
26. **5680 machines without ec-H2O or FaST Only:** Disconnect the the main harness 25 GRN wire from the jumper connector with the 8 GRY wire.



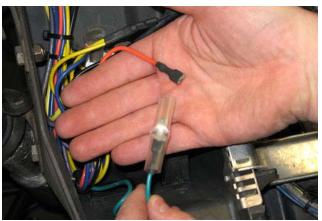
27. **5680 machines without ec-H2O or FaST Only:** Connect the telemetry harness (22) 8A GRY wire to the jumper connector with the 8 GRY wire.



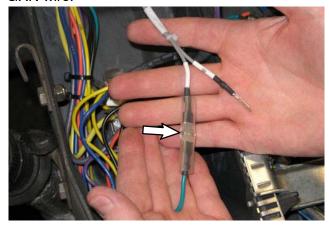
28. **5680 machines without ec-H2O or FaST Only:** Connect the telemetry harness (22) 8B GRY wire to the 25 GRN wire.



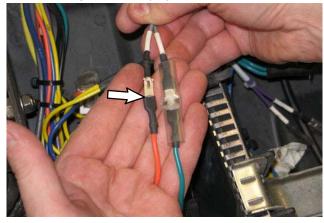
29. **5700 machines without ec-H2O or FaST Only:** Disconnect the main harness 24 ORN wire from the jumper connector with the 48 GRN wire.



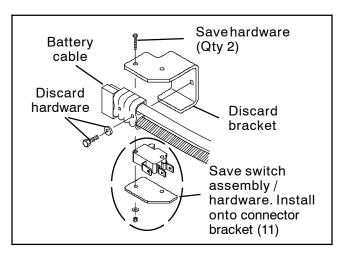
30. **5700 machines without ec- H2O or FaST Only:** Connect the telemetry harness (22) 8A GRY wire to the jumper connector with the 48 GRN wire.



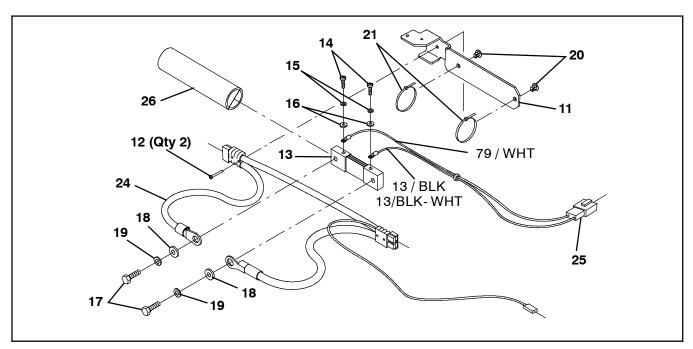
31. **5700 machines without ec- H2O or FaST Only:** Connect the main harness 24 ORN wire to the telemetry harness (22) 8B GRY wire.

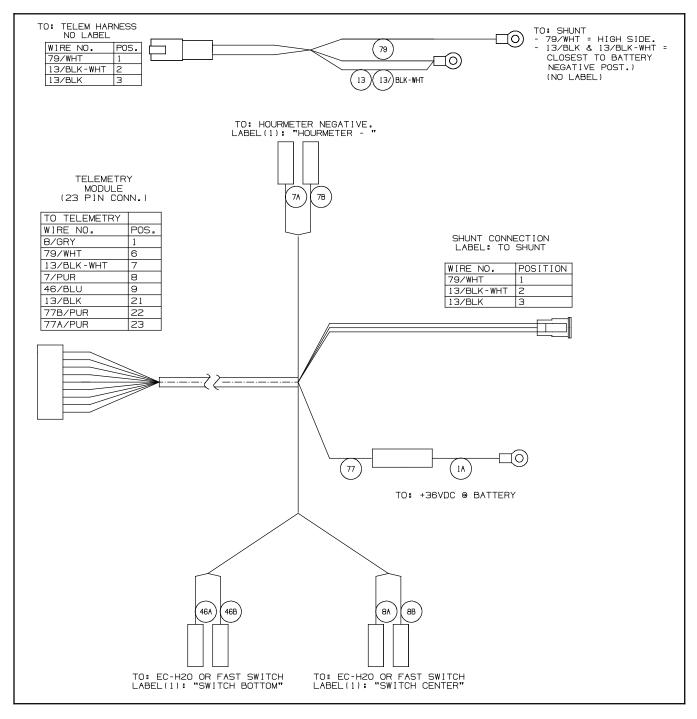


- 32. Disconnect the existing battery cable from the M1 main contactor and the negative ground standoff. Discard the removed battery cable.
- 33. Route battery cable assembly (23) loose cable ends from the battery compartment, into the electrical panel area, and connect the battery cable assembly to the M1 main contactor and negative ground standoff where the removed battery cable was previous installed.
- 34. Close the control console.
- 35. Remove the existing charger connector bracket. Set switch and hardware aside. Discard the removed connector bracket.

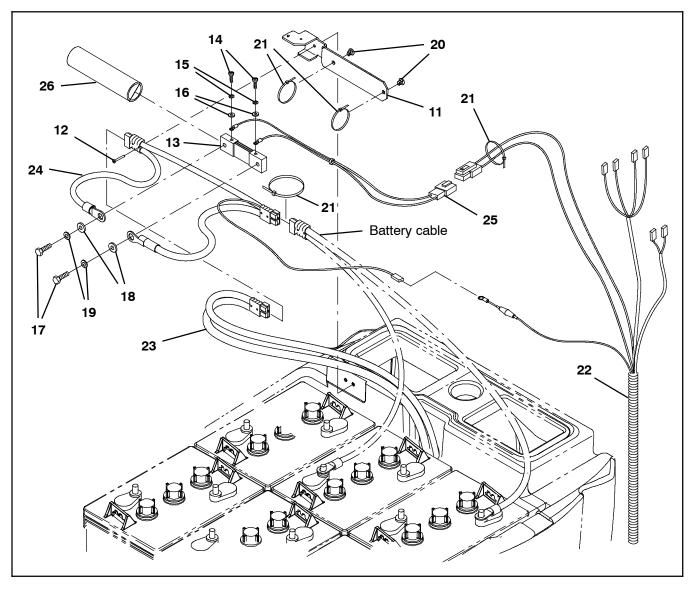


- 36. Use one M4 pan screw (14), one lock washer (15), and one flat washer(16) to connect the shunt harness (25) 79/WHT wire to the shunt.
- 37. Use one M4 pan screw (14), one lock washer (15), and one flat washer(16) to connect the shunt harness (25) 13/BLK 13/BLK-WHT wire to the shunt.
- 38. Slide the 179 mm heat shrink (26) onto one of the ends of the telemetry cable assembly (24) with a ring terminal.
- 39. Use one M8 hex screw (17), one lock washer (19), and one flat washer (18) to connect both ends of the telemetry cable assembly (24) with the ring terminals to the shunt (13).
- 40. Center the 179 mm heat shrink (26) over the shunt (13) and heat shrink the heat shrink over the shunt and all cable connections to the shunt.
- 41. Insert two tie clips (20) into the connector bracket (11).
- 42. Use two cable ties (21) to secure the shunt assembly to the connector bracket (11).
- 43. Install the switch assembly onto the connector bracket (11).
- 44. Use two M3 pan screws (12) to install the shunt assembly / telemetry cable assembly (24) onto the machine.





- 45. Connect the battery cable assembly (23) to the telemetry cable assembly (24).
- 46. Connect the battery cable to the telemetry cable assembly (24).
- 47. Connect the telemetry electrical harness (22) to the shunt harness (25).
- 48. Connect the telemetry electrical harness (22) fused lead to the telemetry cable assembly (24).
- 49. Connect the battery cable assembly (23) to the telemetry cable assembly (24).

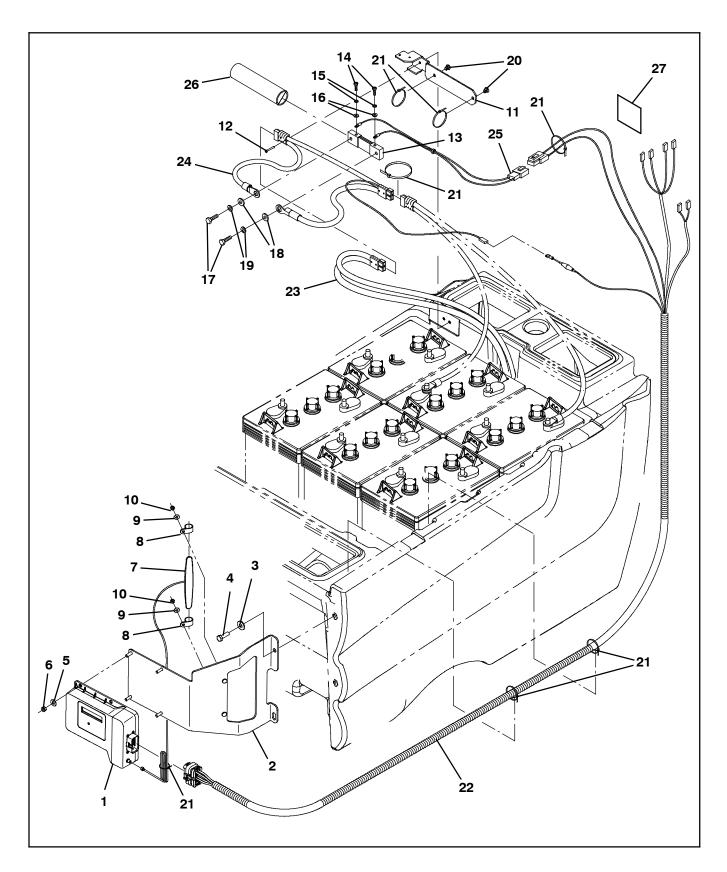


50. Install the telemetry label (27) onto the control console.



- 51. Reinstall the front cover onto the machine.
- 52. Start and test the machine.
- 53. Activate the IRIS (telemetry module): Call local IRIS expert for assistance to activate the module. The IRIS telemetry system must be activated to complete this install.

NOTE: The IRIS (telemetry module) must be activated to complete this installation. The module <u>will not</u> function until it is activated. Call local IRIS expert for assistance activating the module <u>after</u> all telemetry components have been installed.



Bill Of Materials For Telemetry Kit, CI [5680/5700, EU] - 9013944

		Tennant		
	Ref.	Part No.	Description	Qty.
	1	1070541	Controlbox Assy, Telem [3G, Intl]	1
	2	1216199	Bracket, Mtg, Module	1
	3	01685	Washer, Flat, 0.38b 0.88d .08, SS	2
	4	12333	Screw, Hex, M8 X 1.25 X 25, SS, NI	2
	5	32483	Washer, Flat, 0.25, SAE	4
	6	08708	Nut, Hex, Lock, M6 X 1.00, NI	4
	7	315724	CS, Antenna, Telem, 18.0 In [GPRS]	1
	8	140916	Clamp, Cable, Nyl, 0.62d, Nat	2
	9	01683	Washer, Flat, 10, SS	2
	10	06549	Nut, Hex, Lock, M5 X 0.80, NI	2
	11	1216530	Bracket, Connector [5680]	1
	12	06923	Screw, Pan, Phl, M3 X 0.50 X 25, 4.8	2
	13	1217304	Shunt [Empro, 250amp/50mv, Metric]	1
	14	391403	Screw, Pan, Phl, M4 X 0.70 X 8, SS	2
	15	02938	Washer, Lock, Int, 08, SS	2
	16	41578	Washer, Flat, 06, SS	2
	17	15675	Screw, Hex, M8 X 1.25 X 16, SS	2
	18	01685	Washer, Flat, 0.38b 0.88d .08, SS	2
	19	43952	Washer, Lock, Int, 0.31, SS	2
	20	1210807	Wire Tie [w/.25" Fir Tree Clip]	2
	21	130773	Tie, Cable, Nyl, 11.0l, .14w, 3.0 Max. D	15
\triangle	22	1074420	Harness, Ele, [Telem, Iris, 5680/5700]	1
•		9009990	Fuse, 002a, 250vdc, Cartridge	1
▽	23	1074642	Cable Assy, 6Ga [And. Sb50, .31 Rings]	1
A		130155	Connector, Battery, 6Ga 50a, Gray[2cont]	1
\triangle	24	1074573	Cable Assy, Telem [And- And, Sb50]	1
A			Connector, Battery, 6Ga 50a, Gray[2cont]	1
	25	1074595	Harness, Ele [Telem Shunt]	1
	26	1217818	Heatshrink [1.5" Dia., 7.0" Sections]	1
	27	1069580	Label, Machine, Telem [FCC, USA, 2G/3G]	1

TENNANT COMPANY
P. O. Box 1452
Minneapolis, MN 55440-1452