

T5e/SS5 IRIS Telemetry Kit



This kit includes the necessary parts to install IRIS telemetry technology on standard T5e/Speed Scrub (SS5) models.

INSTALLATION INSTRUCTIONS:

Installation Time: 2 Hours Special Tools Required: None

NOTE: Numbers in parenthesis () reference the Kit Parts List on page 11.

The IRIS (telemetry module) must be activated to complete this installation. The module <u>will not</u> function until it is activated. Call for assistance (North America - Technical Support / Australia - CCC) activating the module <u>after</u> all telemetry components have been installed. Have machine serial number and IRIS module SIM code number (located on back of IRIS control box assembly) ready when calling for activation.

IMPORTANT INSTALLATION NOTE: When installing the IRIS Telemetry kit with the addition of the AMII upgrade kit, install the two kits simultaneously to prevent rework later. Two telemetry harnesses (20), p/n 1074457, will be provided, one from each kit. Only one harness is required for both kits.

KIT PREPARATION:

- 1. **Machines equipped with ec- H2O only:** Confirm the ec- H2O system is operating properly before installing IRIS system.
- 2. Confirm the hour meter is properly wired and functional before installing IRIS system.
- 3. Drain the solution and recovery tanks.
- 4. Park the machine on level surface, turn off machine, remove the key, and set the parking brake if equipped.
- 5. Evaluate the condition of batteries, cables, and terminal connections. Batteries, cables, terminal connections must all be in safe working condition.
- 6. Disconnect battery cables from the machine (FIG. 1).





FIG. 1

KIT INSTALLATION:

NOTE: Numbers in parenthesis () reference the Kit Parts List on page 11.

- 1. Remove the squeegee lift lever assembly from the machine. Set all removed hardware aside (FIG. 2).
- 2. Remove all parts from the removed squeegee lift bracket and install them onto the new squeegee lift bracket (2). Discard the removed squeegee lift bracket (FIG. 2).



FIG. 2

3. Install the two foam edge seals (8) onto the new squeegee lift bracket as shown (FIG. 3).



FIG. 3

 Remove the additional SIM bar code label from the back of the telemetry module (1) and set label aside in a safe place. The number on the SIM label will be needed to activate the telemetry system. (FIG. 4)



FIG. 4

 Using parts (3, 4, 5, 6), install the telemetry module (1) to the new squeegee lift bracket (2) as shown (FIG. 5).

NOTE: Numbers in parenthesis () reference the Kit Parts List on page 11.





 Reconnect wires to squeegee lift lever assembly (FIG. 6).



FIG. 6

 IMPORTANT: To prevent possible damage to telemetry system during install, remove the in- line fuse from the telemetry harness (20) (FIG. 7)





8. Arrange the telemetry harness assembly (20) as shown and attach the harness assembly to the squeegee lift bracket with cable-ties (FIG. 8). Use the cable-tie holes located in bracket to secure harness.

NOTE: The AM II charger connector is utilized when installing the IRIS AM II Upgrade Kit.



FIG. 8

9. Connect the antenna cable (9) and the telemetry harness (20) to the telemetry module (FIG. 9).



FIG. 9

KIT NO. 9013871-USA, 9013967-INTL

10. Route the telemetry harness, antenna cable and machine harness in the cable channel as shown and attach the new squeegee lift bracket assembly to machine using existing hardware (FIG. 10).





11. Unfasten the drain hose hook bracket and continue to route the telemetry harness and antenna cable as shown. Secure harness and cable to existing harness with cable-tie as shown (FIG. 11). Replace bracket.



FIG. 11

NOTE: If machine is NOT equipped with ec-H2O system, skip to step 20.

12. Remove the vacuum motor cover and vacuum motor from machine to access the cable channel that enters the control console (FIG. 12).



13. Route the telemetry harness, wires 40/TAN and 40A/TAN, through the cable channel and into the control housing (FIG. 13). Secure routed harness with cable-ties.



FIG. 13

 Remove the upper control panel from the control console and locate the routed telemetry harness wires (FIG. 14). Do not disconnect any wiring from control panel components.



FIG. 14

15. Remove the the lower control panel and route the telemetry wires out the opening (FIG. 15).



FIG. 15

 Disconnect wire 30/TAN from the ec-H2O switch and reconnect it to the routed telemetry harness wire 40/TAN (FIG. 16).



FIG. 16

17. Connect the other telemetry harness wire, 40A/TAN, to the ec- H2O switch (FIG. 17).



FIG. 17

- 18. Reinstall the lower and upper control panels.
- 19. Reinstall the vacuum motor and vacuum motor cover.

20. For machines NOT equipped with ec-H2O system, apply electrical tape over the following telemetry harness wire terminals (FIG. 18). Coil the unused harness wires and secure harness with cable- tie near battery compartment.



FIG. 18

21. Route the remainder of the telemetry harness wires and the antenna cable through the same clamps that secure the main wire harness (FIG. 19). DO NOT reattach clamps at this time. If unable to route all cables through clamps, secure the telemetry harness to the main machine harness using cable- ties.





22. Add two cable- tie clips (18) and two cable-ties (19) to shunt bracket as shown (FIG. 20).



FIG. 20

23. Install the shunt bracket (17) to the machine using the two clamp screws as shown (FIG. 21).



FIG. 21 24. Remove cover from circuit breaker box (FIG. 22).



FIG. 22

25. Disconnect the 12/BROWN wire from 25-Amp circuit breaker (CB1) and connect the routed telemetry wires 12A/BROWN and 12/BROWN as shown (FIG. 23).



FIG. 23

26. Reinstall circuit breaker box cover.

27. If machine is equipped with on-board battery charger harness, remove black cable from negative battery terminal (FIG. 24).





28. Using hardware (11,12,13,14,15,16), connect the disconnected battery cables, new cable (21) and telemetry harness (22) to shunt (10) as shown (FIG. 25).

NOTE: Numbers in parenthesis () reference the Kit Parts List on page 11.



Position wire connections as shown and tighten screws.



FIG. 25

29. Slide the heat shrink over the shunt and apply heat. (FIG. 26)



FIG. 26

30. Connect the shunt to the shunt bracket and secure with cable-ties (FIG. 27).



FIG. 27

31. Connect the shunt harness to the telemetry harness (FIG. 28).



FIG. 28

32. Connect the black battery cable (21) to the battery negative terminal. (FIG. 29)



FIG. 29

 Route the antenna cable under bracket and adhere antenna (9) to machine as shown (FIG. 30). Peel masking from antenna to adhere.



FIG. 30

34. Connect the red fuse wire from telemetry harness to the positive battery terminal (FIG. 31). Position the ring terminal on top of the battery cable(s).



FIG. 31

35. Install the FCC label (24) and the SIM bar code label onto the telemetry cover (4). (FIG. 32)



FIG. 32

36. Reinstall fuse into telemetry harness (FIG. 33).



FIG. 33

37. Activate telemetry kit as described in the following section.

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

IRIS TELEMETRY KIT ACTIVATION:

North America Customer Locations: To activate the IRIS (telemetry module), call Technical Support (between hours of 7:00 am and 5:00 pm CST). The IRIS telemetry system must be activated to complete this install. Be sure to have machine serial number and IRIS module SIM code number ready when calling for activation.

Australia Customer Locations: To activate the IRIS (telemetry module), call CCC (between hours of 8:00 am and 5:00 pm AEST) and ask to be routed to the IRIS expert for assistance. The IRIS telemetry system must be activated to complete this install. Be sure to have machine serial number and IRIS module SIM code number ready when calling for activation.

IRIS AM II Upgrade Kit:

If the IRIS AM II upgrade kit was also installed, have battery type information available when calling for activation. Battery type information is required to set the charging profile to properly report battery charging data.

NOTE: When batteries reach end of life and must be replaced, Tennant highly recommends that the same battery type be used to continue to maximize the machine performance. In the event a battery with a different amp hour (AH), type (flooded, AGM, Gel), or manufacturer is selected for replacement please contact Tennant technical support department for assistance in determining the feasibility of the replacement batteries and selecting the correct charging profile.







T5e/SS5 Telemetry Kit Parts List

	Ref.	Tennant Part No.	Description	Qty.
	1	1069467	Controlbox Assy, Telem [USA, 3G] (Kit No. 9013871)	1
	1	1070541	Controlbox Assy, Telem [3G, Intl] (Kit No. 9013967)	1
	2	1216219	Bracket Wldt, Lift, Sqge [SS5]	1
	3	1216841	Guard Wldt, Controlbox	1
	4	1216739	Cover, Guard	1
	5	32483	Washer, Flat, 0.25, SAE	4
	6	06943	Screw, Hex, M6 X 1.00 X 20, 8.8	4
	7	130773	Tie, Cable, Nyl, 11.0l, .14w, 3.0 Max. D	1
	8	1006267	Seal, Edge, Foam, .37, .75w, Bulk	2
	9	1070659	Antenna, Telem, 70 In [GPRS]	1
	10	1217304	Shunt [Empro, 250amp/50mv, Metric]	1
	11	391403	Screw, Pan, Phl, M4 X 0.70 X 8, SS	2
	12	02938	Washer, Lock, Int, 08, SS	2
	13	41578	Washer, Flat, 06, SS	2
	14	15675	Screw, Hex, M8 X 1.25 X 16, SS	2
	15	01685	Washer, Flat, 0.38b 0.88d .08, SS	2
	16	43952	Washer, Lock, Int, 0.31, SS	2
	17	1216629	Bracket, Shunt	1
	18	1202868	Clip, Tie, 0.25d, Plstc	2
	19	130773	Tie, Cable, Nyl, 11.0l, .14w, 3.0 Max. D	7
∇	20	1074457	Harness, Ele, [Telem, SS5]	1
		9009990	Fuse, 002a, 250vdc, Cartridge	1
	21	130364	Cable, 06ga 15.0l Blk .31ring /.38ring	1
	22	1074595	Harness, Ele [Telem, Shunt]	1
	23	1217818	Heatshrink [1.5" Dia., 7.0" Sections]	1
	24	1069580	Label, Machine, Telem, FCC [USA, INTL]	1
	25	55248	Mount, Cable Tie	1
	26	130041	Tie, Cable, Nyl, 11.5l, .19w	1