



# INSTRUCTION BULLETIN

No. 3523

Machines: 355;(Std & E),  
385, 800, 810

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**NOTE: DO NOT** discard Parts List from Instruction Bulletin. Place Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you the cost of ordering an entire kit.

## Installation Instructions for Replacement Kits:

59976 for case  
59977 for seals  
59978 for hourmeter

These kits contain parts needed to install an hourmeter, case and seals on the machines listed above. Please follow step-by-step instructions.

## PREPARATION:

**FOR SAFETY:** Before leaving or servicing machine, stop on level surface and set parking brake (if equipped on machine). Then turn off machine and remove key.

1. Disconnect battery cables from machine.



**WARNING:** Always disconnect battery cables from machine before working on electrical components.

2. **FOR CONTACT WITH CIRCUIT BOARD:** Attach ESD grounding strap to your wrist and attach clip to machine frame.

*NOTE: The grounding strap is used to prevent static electricity from damaging the machine's circuit board.*

3. Remove existing sun shield and velcro strips from instrument panel if installed on machine. Retain for installation on new instrument panel
4. Remove four mounting bolts from instrument panel shroud. Retain hardware.
5. Carefully pull instrument panel shroud up and tilt forward, resting assembly on machine frame.
6. Disconnect wire harness from case assembly by removing retaining screw with a 5/32 inch (4 mm) metric Allen wrench.

## **CASE ASSEMBLY INSTALLATION:**

(Refer to Figure 1)

1. Remove existing case assembly from instrument panel shroud by removing four mounting screws. Retain hardware for installation of new parts.
2. Place case assembly face down. Then remove twelve pan screws from case assembly. Retain hardware.
3. Remove four pan screws from center of case box, then remove case box from case assembly. Retain hardware.
4. Remove gasket from contact connector, on circuit board.
5. Install one o-ring (3) in new case cover (1).

*NOTE: Grease may be used to hold o-ring in place for assembly.*

6. Carefully lift circuit board assembly and touch panel assembly from existing case cover and install in new case cover (1).
7. Install one o-ring (3) in new case box (2) and connector gasket (4) on contact connector, aligning mounting holes.
8. Install case box on case cover with twelve existing pan screws.
9. Install four pan screws on center of case box.
10. Install case assembly on instrument panel shroud with four existing mounting screws.
11. Connect wire harness to case assembly and hold in place with existing retaining screw.
12. Install instrument panel assembly on machine frame with existing hardware.

## **SEAL INSTALLATION:**

(Refer to Figure 1)

1. Remove existing case assembly from instrument panel shroud by removing four mounting screws. Retain hardware for installation of new parts.
2. Place case assembly face down. Then remove twelve pan screws from case assembly. Retain hardware.
3. Remove four pan screws from center of case box, then remove case box from case assembly. Retain hardware.
4. Remove one existing o-ring from case box and gasket from contact connector, on circuit board.
5. Carefully lift circuit board assembly and touch panel assembly from case cover. Then remove o-ring from case cover.
6. Install one o-ring (3) in case cover. Then install circuit board assembly and touch panel in case cover.

*NOTE: Grease may be used to hold o-ring in place for assembly.*

7. Install one o-ring (3) in case box and connector gasket (4) on contact connector, aligning mounting holes.
8. Install case box on case cover with twelve existing pan screws.
9. Install four pan screws on center of case box.
10. Install case assembly on instrument panel shroud with four existing mounting screws.
11. Connect wire harness to case assembly and hold in place with existing retaining screw.
12. Install instrument panel assembly on machine frame with existing hardware.

## HOURLMETER INSTALLATION:

(Refer to Figure 1)

1. Remove existing case from instrument panel shroud by removing four mounting screws. Retain hardware for installation of new parts.
2. Place case assembly face down. Then remove twelve pan screws from case assembly. Retain hardware.
3. Remove four pan screws from center of case box, then remove case box from case assembly. Retain hardware.
4. Disconnect hourmeter wires, seven pin connector and ground strip from circuit board.
5. Remove eight pan screws from circuit board, then remove circuit board from touch panel. Retain hardware.
6. Remove hourmeter from circuit board. Retain hardware and spacers.
7. Install new hourmeter (6) on circuit board with existing hardware and spacers. Then install circuit board assembly on touch panel with existing hardware.

*NOTE: Thread seven pin connector and ground strip through slot in circuit board before installing hardware.*

8. Connect hourmeter, seven pin connector and ground strip to circuit board.
9. Install case box on case cover with twelve existing pan screws.
10. Install four pan screws on center of case box.
11. Install case on instrument panel shroud with four existing mounting screws.
12. Connect wire harness to case assembly and hold in place with existing retaining screw.
13. Install instrument panel assembly on machine frame with existing hardware.

## BILL OF MATERIALS FOR REPLACEMENT KITS

Ref.	TENNANT Part No.	Description	Qty.
	59976	Case Replacement Kit	1
1	56314	Case cover	1
2	56315	Case box	1
3	56316	O-ring seal, 5/64" x 12.0"	2
4	56356	Connector gasket	1
5	27964	Grounding strap	1
	59977	Seal Replacement Kit	1
3	56316	O-ring seal, 5/64" x 12.0"	2
4	56356	Connector gasket	1
5	27964	Grounding strap	1
	59978	Hourmeter Replacement Kit	
6	31988	Electronic hourmeter	1
5	27964	Grounding strap	1

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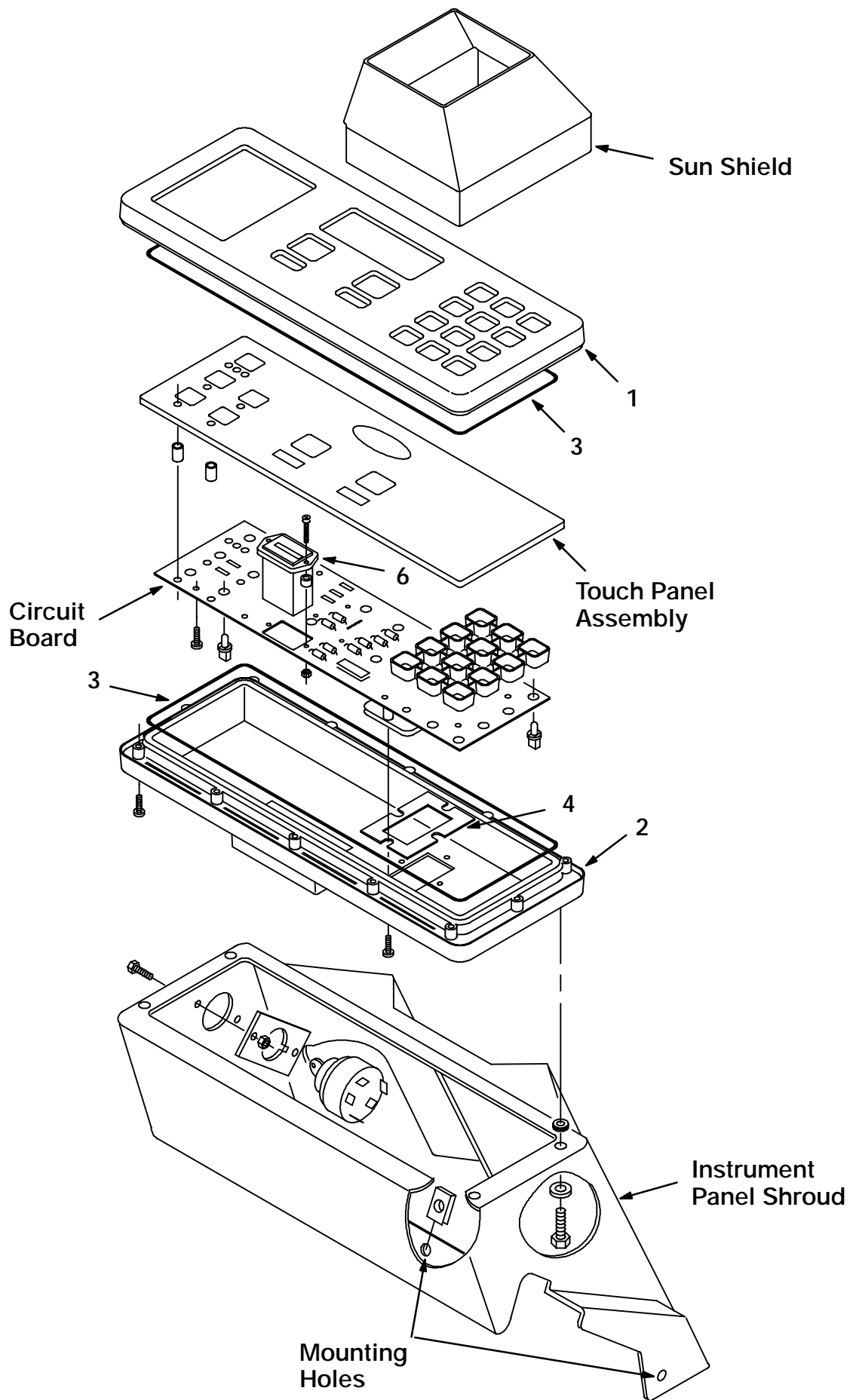


FIG. 1 – Instrument Panel Assembly

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