



# INSTRUCTION BULLETIN

No. 3611  
Machine: 8400  
Published: 12-93/00

**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.

*NOTE: Numbers in parenthesis ( ) are reference numbers for parts listed in Bill of Materials.*

Installation Instructions for Replacement Kits:

73229 for instrument panel

73231 for touch panel

73232 for circuit board

These kits contain parts needed to install instrument panels, touch panels and circuit boards 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 three mounting bolts from instrument panel assembly. Retain hardware.
4. Carefully pull instrument panel assembly up and tilt forward, resting assembly on machine frame.
5. Disconnect wire harness from case assembly by removing retaining screw with a 5/32 inch (4 mm) metric Allen wrench.
6. Remove existing instrument panel from instrument panel shroud by removing four mounting screws. Retain hardware for installation of new parts.

## **INSTRUMENT PANEL ASSEMBLY INSTALLATION:**

(Refer to Figure 1)

1. Connect wire harness to instrument panel and hold in place with existing retaining screw.
2. Install instrument panel on instrument panel assembly (1) with four existing mounting screws.
3. Install instrument panel assembly (1) on machine frame with existing hardware.

## **TOUCH PANEL ASSEMBLY INSTALLATION:**

(Refer to Figure 1)

1. Place instrument panel face down. Then remove twelve pan head screws from case assembly. Retain hardware.
2. Remove four pan head screws from center of case box, then remove case box from case assembly. Retain hardware.
3. Disconnect seven pin connector and ground strip from circuit board.
4. Remove eight pan head screws from circuit board, then remove circuit board and light tray from touch panel assembly. Retain circuit board, light tray and hardware.
5. Remove touch panel assembly from case cover.
6. Install new touch panel assembly (2) and new plastic sleeves (3) in case cover.
7. Install circuit board assembly and light tray on touch panel assembly with existing hardware.

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

8. Connect seven pin connector and ground strip to circuit board.
9. Install case box on case cover with twelve existing pan head screws.
10. Install four pan head screws on center of case box.
11. Install instrument panel on 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.

## CIRCUIT BOARD INSTALLATION:

(Refer to Figure 1)

1. Place instrument panel face down. Then remove twelve pan head screws from case assembly. Retain hardware.
2. Remove four pan head screws from center of case box, then remove case box from case assembly. Retain hardware.
3. Remove one existing o-ring from case box and gasket from contact connector, on circuit board.
4. Disconnect seven pin connector and ground strip from circuit board.
5. Remove eight pan head screws from circuit board, then remove circuit board from touch panel assembly. Retain hardware.
6. Remove touch panel assembly from case cover. Then remove o-ring from case cover.
7. Install one o-ring (6) in case cover. Then install touch panel assembly in case cover.

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

8. Install new circuit board (5) on touch panel assembly with existing hardware.

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

9. Connect seven pin connector and ground strip to circuit board.
10. Install one o-ring (6) in case box and connector gasket (7) on contact connector, aligning mounting holes.

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

11. Install case box on case cover with twelve existing pan head screws.
12. Install four pan head screws on center of case box.
13. Install instrument panel on shroud with four existing mounting screws.
14. Connect wire harness to case assembly and hold in place with existing retaining screw.
15. Install instrument panel assembly on machine frame with existing hardware.

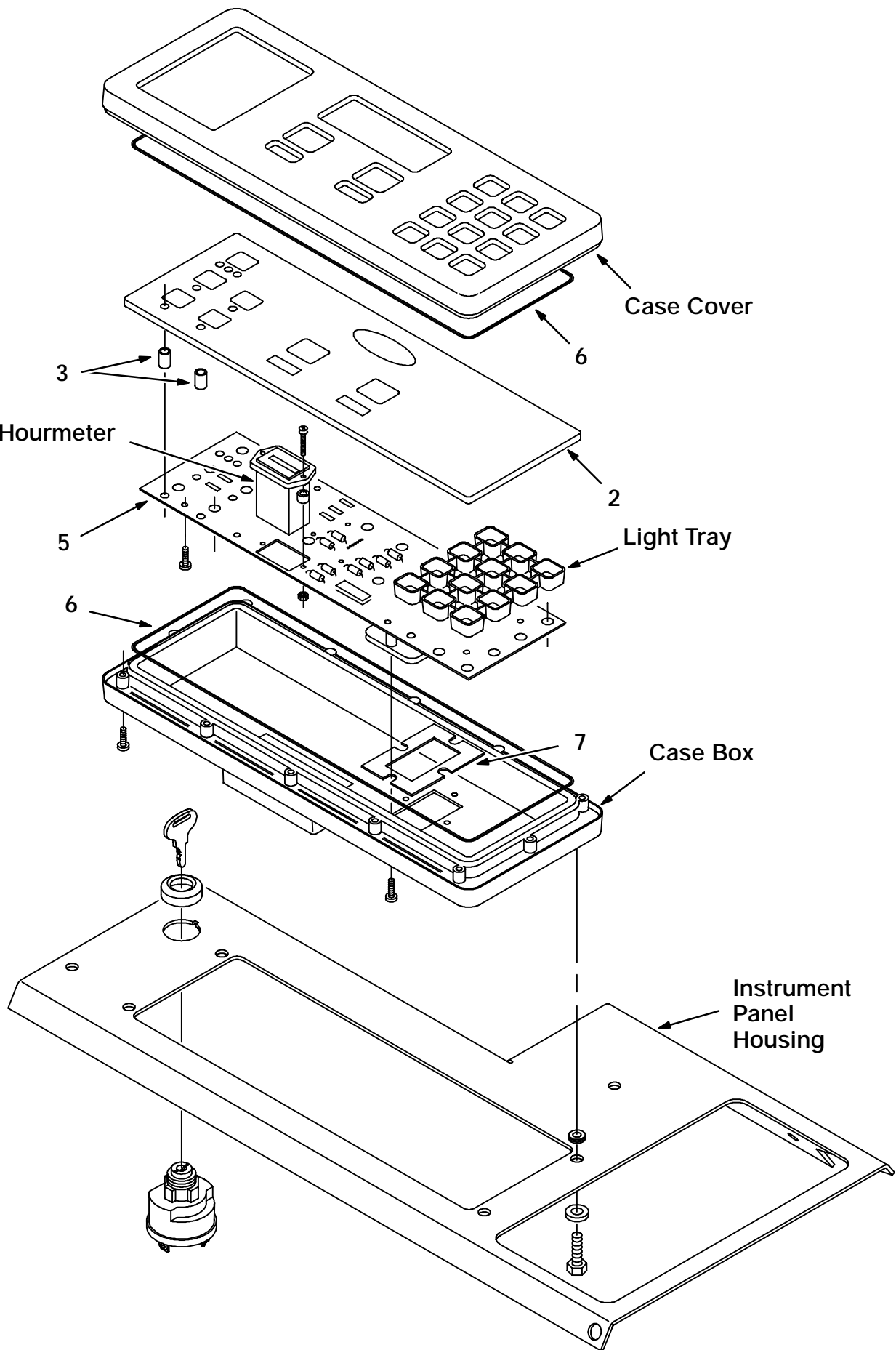


FIG. 1 – Instrument Panel Assembly

08990

**BILL OF MATERIALS FOR INSTRUMENT PANEL REPLACEMENT KIT 73229**

| <b>Ref.</b> | <b>TENNANT<br/>Part No.</b> | <b>Description</b>        | <b>Qty.</b> |
|-------------|-----------------------------|---------------------------|-------------|
| 1           | 73225                       | Instrument panel assembly | 1           |

**BILL OF MATERIALS FOR TOUCH PANEL REPLACEMENT KIT 73231**

| <b>Ref.</b> | <b>TENNANT<br/>Part No.</b> | <b>Description</b>                      | <b>Qty.</b> |
|-------------|-----------------------------|---|-------------|
| 2           | 73237                       | Touch panel assembly                    | 1           |
| 3           | 56228                       | Plastic sleeve, 1/4" B, 5/16" Dia, 1/2" | 8           |
| 4           | 27964                       | Grounding strap                         | 1           |

**BILL OF MATERIALS FOR CIRCUIT BOARD REPLACEMENT KIT 73232**

| <b>Ref.</b> | <b>TENNANT<br/>Part No.</b> | <b>Description</b>         | <b>Qty.</b> |
|-------------|-----------------------------|----------------------------|-------------|
| 5           | 73226                       | Circuit board assembly     | 1           |
| 6           | 56316                       | O-ring seal, 5/64" x 12.0" | 2           |
| 7           | 56356                       | Connector gasket           | 1           |
| 4           | 27964                       | Grounding strap            | 1           |

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