

# INSTALLATION INSTRUCTIONS

## REPLACEMENT AIR PRESSURE SWITCH (PRS30000 - PRS30004)

### FOR MODELS: PB/PF 501/502 - 2001

#### ⚠ WARNING

For an appliance already installed, you must turn off gas supply, turn off power and allow appliance to cool before proceeding. Components may be **HOT!** Failure to comply could result in severe personal injury, death, or substantial property damage.

#### Recommended tools:

- Screw Gun with both 5/16" and 1/4" Drivers
- Pliers
- 5/8" Combo Wrench
- 9/16" Combo Wrench
- 1/2" Combo Wrench

#### List of kit components

Model Number	Kit Number	Part Number	Description
PF 501 - 1300 "M9"	PRS30000	PRS20007	Air Pressure Switch
		LUG7017	Male Disconnect Terminal
		BLT7404	10-16 x .50 IND HEX WHR HD Screw (2)
		JKH60027	Pressure Switch Mounting Bracket
		MSC2933	Aluminum Tubing .25 x .031 (.667 ft.)
		MSC2979	Compression Fitting
PF 502 - 1302 "M9" Excluding PFL 502 (LP)	PRS30001	PRS20006	Air Pressure Switch
		BLT7404	10-16 x .50 IND HEX WHR HD Screw (2)
		JKH60027	Pressure Switch Mounting Bracket
		MSC2933	Aluminum Tubing .25 x .031 (.667 ft.)
		MSC2979	Compression Fitting
PFL 502 (LP) & PF 1501 - 2001 "M9"	PRS30002	PRS20008	Air Pressure Switch
		BLT7404	10-16 x .50 IND HEX WHR HD Screw (2)
		JKH60027	Pressure Switch Mounting Bracket
PF 1501 & 2001 "B9"	PRS30003	PRS20009	Air Pressure Switch
		BLT7404	10-16 x .50 IND HEX WHR HD Screw (2)
		JKH60027	Pressure Switch Mounting Bracket
PF 1701 "B9"	PRS30004	PRS20012	Air Pressure Switch
		BLT7404	10-16 x .50 IND HEX WHR HD Screw (2)
		JKH60027	Pressure Switch Mounting Bracket

#### To gain access to the interior of the appliance

1. Turn OFF the main electrical power to the appliance.
2. Turn OFF the main manual gas shutoff to the appliance.
3. Remove the left front cabinet access cover (loosen the thumbscrew on the front of the cover).

#### Identify replacement switch:

1. Locate the air pressure switch on the left side of the cabinet.
2. On Models 501 - 1300 remove the orange/black and tan wires from the switch, all other models remove the blue and tan wires (include purple wire if Models 501 - 1300).
3. Identify the switch type:
  - a. If metal switch - follow the metal body switch replacement instructions.
  - b. If plastic switch - follow the plastic body switch replacement instructions.
4. Follow the replacement procedure in this instruction sheet to install the replacement air pressure switch.

### POWER-FIN 501/502 THRU 1300/1302 "M9" MODELS - ALUMINUM TUBING

#### Metal body switch replacement instructions (FIG.'s 1A & 1B):

1. Disconnect the two (2) aluminum tubes from the air pressure switch taking note as to which is on the high side and which is on the low side -- temporary labeling is recommended.
2. Cut the compression fitting off the high pressure combustion chamber tubing, taking care not to remove too much of the aluminum tubing. Remove and replace the low pressure combustion chamber tubing and compression fitting with the aluminum tubing and compression fitting provided in the kit.
3. Remove the existing air pressure switch by removing the two (2) 5/16" lock nuts or screws used to mount the switch.
4. Install the replacement air pressure switch by attaching it to the mounting bracket (provided in the kit) using the two (2) enclosed sheet metal screws (see FIG. 1B for switch orientation on bracket). Place the replacement air pressure switch over the studs used to support the original switch. Secure with the two (2) 5/16" lock nuts.
5. Using the nylon compression fittings supplied with the replacement switch, re-install the high and low tubes on the replacement switch. Again, take note that the high tube goes to the high side of the switch and the low tube goes to the low side of the switch.  
**Note:** The orientation of the high side and low side are opposite from their position on the original switch.

**CAUTION**

You **MUST USE** the nylon compression fittings provided in the kit. Failure to use the nylon compression fittings could result in damage to the air pressure switch. Hand-tighten only, **DO NOT** use a wrench.

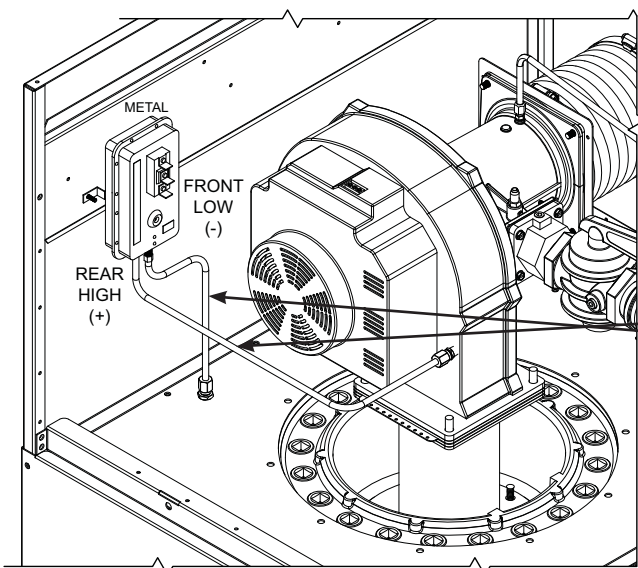
Failure to comply with the above will result in breakage of the switch housing.

6. Reconnect the blue (orange/black for Models 501 - 1300) wire to the COM terminal and the tan wire to the N.O. terminal on the replacement air pressure switch. On Models 501 - 1301 cap off the purple wire with the insulated male terminal provided in the kit.
7. Replace the left front cabinet access cover (tighten the thumbscrew on the front of the cover).
8. Turn on the main electrical power and gas shutoff to the appliance and cycle to ensure proper operation.
9. Resume operation.

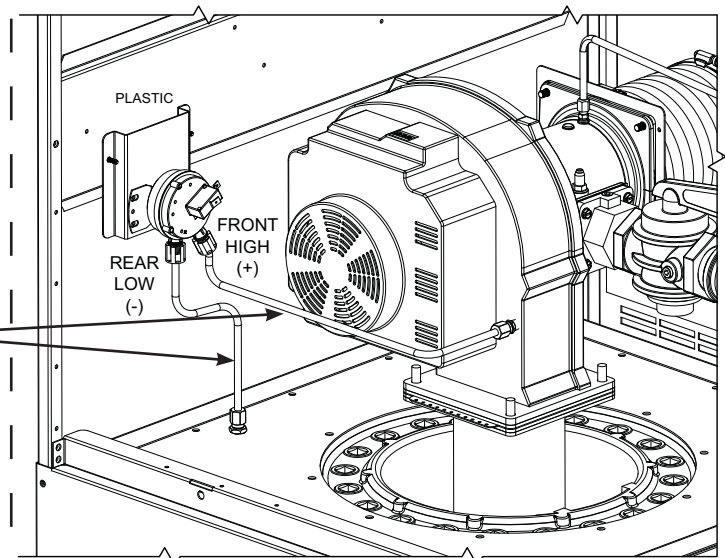
Plastic body switch replacement instructions (reference FIG.'s 1A & 1B):

1. Remove the two (2) aluminum tubes from the air pressure switch, taking note as to which is on the high side and which is on the low side -- temporary labeling is recommended.
2. Remove the existing air pressure switch by removing the two (2) 5/16" lock nuts or screws used to mount the switch.
3. Install the replacement air pressure switch in the same location as the original switch. Reuse the fasteners taken out when removing the original switch.
4. Re-install the high and low tubes on the replacement air pressure switch. Again, take note that the high tube goes to the high side of the switch and the low tube goes to the low side of the switch.
5. Reconnect the blue (orange/black for Models 501 - 1300) wire to the COM terminal and the tan wire to the N.O. terminal on the replacement air pressure switch. On Models 501 - 1301 cap off the purple wire with the insulated male terminal provided in the kit.
6. Replace the left front cabinet access cover (tighten the thumbscrew on the front of the cover).
7. Turn on the main electrical power and gas shutoff to the appliance and cycle to ensure proper operation.
8. Resume operation.

**Figure 1A\_Metal Body Switch**



**Figure 1B\_Plastic Body Switch**



**Note:** Replacement switch may have reversed high (+) and low (-) connections. Failure to connect tubing to the correct connection pressure point will result in an inoperative unit.

## POWER-FIN 1501 THRU 2001 "M9/B9" MODELS - SILICONE AND ALUMINUM TUBING

### Metal body switch replacement instructions (reference FIG.'s 2A & 2B on back):

1. Disconnect the silicone rubber and aluminum tubes, taking note as to which is on the high side and which is on the low side -- temporary labeling is recommended.
2. Cut the compression fitting off the aluminum tubing, taking care not to remove too much of the aluminum tubing.
3. Remove the existing air pressure switch by removing the two (2) 5/16" lock nuts or screws used to mount the switch.
4. Install the replacement air pressure switch by attaching it to the mounting bracket (provided in the kit) using two (2) of the enclosed sheet metal screws (see FIG. 2B for switch orientation on bracket). Place the replacement air pressure switch over the studs used to support the original switch. Secure with the two (2) 5/16" lock nuts.
5. Using the nylon compression fitting supplied with the replacement switch, re-install the high and low tubes on the replacement switch. Again, take note that the high tube goes to the high side of the switch and the low tube goes to the low side of the switch.  
**Note:** The orientation of the high side and low side are opposite from their position on the original switch.

### CAUTION

You **MUST USE** the nylon compression fittings provided in the kit. Failure to use the nylon compression fittings could result in damage to the air pressure switch. Hand-tighten only, DO NOT use a wrench.

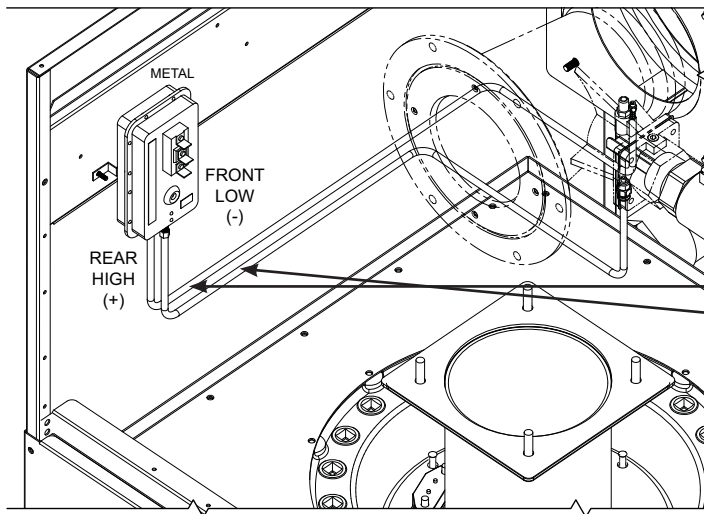
Failure to comply with the above will result in breakage of the switch housing.

6. Reconnect the blue wire to the COM terminal and the tan wire to the N.O. terminal on the replacement air pressure switch.
7. Replace the left front cabinet access cover (tighten the thumbscrew on the front of the cover).
8. Turn on the main electrical power and gas shutoff to the appliance and cycle to ensure proper operation.
9. Resume operation.

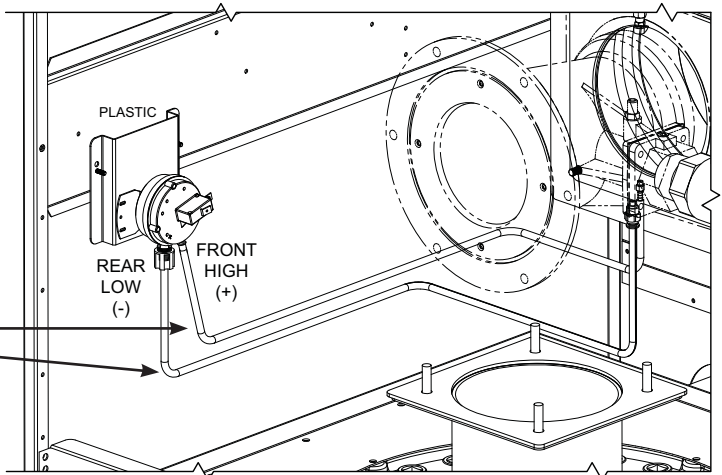
### Plastic body switch replacement instructions (reference FIG.'s 2A & 2B on back):

1. Disconnect the silicone rubber and aluminum tubes, taking note as to which is on the high side and which is on the low side -- temporary labeling is recommended.
2. Remove the existing air pressure switch by removing the two (2) 5/16" lock nuts or screws used to mount the switch.
3. Install the replacement air pressure switch in the same location as the original switch. Reuse the fasteners taken out when removing the original switch.
4. Re-install the high and low tubes on the replacement air pressure switch. Again, take note that the high tube goes to the high side of the switch and the low tube goes to the low side of the switch.
5. Reconnect the blue wire to the COM terminal and the tan wire to the N.O. terminal on the replacement air pressure switch.
6. Replace the left front cabinet access cover (tighten the thumbscrew on the front of the cover).
7. Turn on the main electrical power and gas shutoff to the appliance and cycle to ensure proper operation.
8. Resume operation.

**Figure 2A\_Metal Body Switch**



**Figure 2B\_Plastic Body Switch**



**Note:** Replacement switch may have reversed high (+) and low (-) connections. Failure to connect tubing to the correct connection pressure point will result in an inoperative unit.

**Revision Notes:** Revision B (INS70008 Rev B) reflects the addition of a fitting, tubing, LP Kit, and PRS30004 Kit to the list of components.

Revision C (INS70008 Rev C) reflects the replacing of part number TUB2004 with MSC2933.

Revision D (ECO C09011) reflects the addition of the general warning on page 1 and reformatting of instruction sheet.