

INSTRUCTIONS—PARTS LIST

This manual contains IMPORTANT
WARNINGS AND INSTRUCTIONS
READ AND RETAIN FOR REFERENCE



308-075

Rev. A

Grounded Gun AIR SUPPLY HOSE ADAPTER

Part No. 185-493

For use with the electrostatic spray gun grounded air supply hoses. Allows conductive air hoses to be coupled while maintaining the continuity that is necessary between the hoses.

NOTE: This adapter has not been tested by the Canadian Standards Association or Factory Mutual. Installing this adaptor voids previous CSA certification and/or FM approval.

WARNING

Grounding

To reduce the risk of fire, explosion, or electric shock, which may result from electrical discharge, it is essential that all parts of the electrostatic system are properly grounded. Static electricity can be generated by the flow of fluid through the pump, hose, gun, and nozzle, but it is dissipated through proper grounding as described in the spray gun instruction manual.

The electrostatic spray gun is grounded through connection to a properly grounded air supply hose. Use only the Graco Electrically Conductive Air Supply Hose. Connect the air hose ground wire to a true earth ground.

If you experience any arcing or feel even a slight shock, **STOP SPRAYING IMMEDIATELY**. Check for proper grounding of the entire system. Be sure you have corrected the problem before starting to spray again.

Relieving Fluid & Air Pressures

To reduce the risk of serious bodily injury, including splashing in the eyes or on the skin, fluid injection (*air-assisted airless system*), injury from moving parts or electric shock, follow the **Pressure Relief Procedure** as instructed in your electrostatic spray gun manual.

INSTALLATION

1. Connect the hose adapter between the ends of the air hoses as shown in Fig 1.

NOTE: The recommended maximum total length of air hose is 100 ft (30.5 m). The pressure drop through longer lengths may lower the voltage from the power supply. A minimum of 2.8 bar (40 psi) air supply pressure is required to ensure full voltage from the power supply.

2. On all but the last air hose (the one closest to the air supply), trim the grounding wire to approximately 4 inches (102 mm). Secure the grounding wire to the air hose outer jacket with electrical tape. Keep the extra wires and clamp(s).
3. Connect the grounding clamp of the last air hose to a true earth ground.

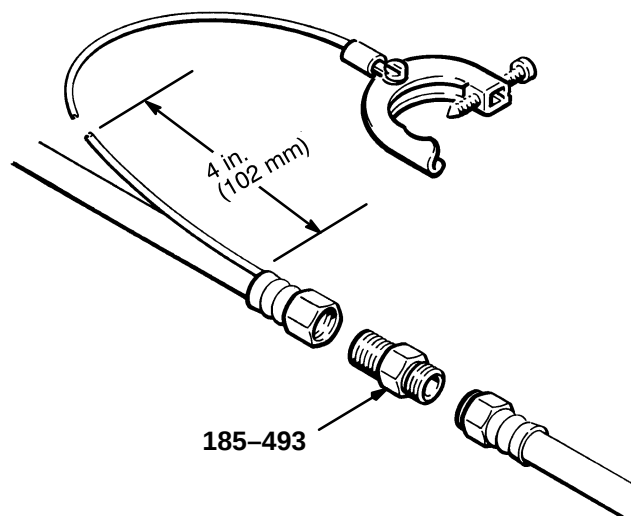


Fig 1

INSTALLATION

Check the Electrical Grounding (See Fig 1)

WARNING

Proper electrical grounding of every part of your system is essential. For your safety, ground the system as explained in your electrostatic gun manual. Then check your system as explained below.

1. Make sure the electrostatics are off.

Manual Spray Gun: Turn ES ON-OFF Lever to OFF.

Automatic Spray Gun: Turn off the turbine air.

2. Have a qualified electrician check the electrical grounding continuity of the spray gun and air hose.

- With the electrically conductive air hose connected and properly grounded, use a megohmmeter to measure the resistance between the gun handle and a true earth ground. Use an applied voltage of 500 minimum to 1000 volts maximum. See Fig 2.
- If the resistance is greater than 2 megohms, check the tightness of the ground connections, and be sure the air supply hose ground wire is connected to a true earth ground. If the resistance is still greater than 2 megohms, replace the air supply hose.

Using the Air Hose As A Single Hose Again

If an air hose with a trimmed ground wire is going to be used as a single hose again, have a qualified electrician splice the ground wire and grounding clamp back onto the air hose ground wire.

If the original ground wire and clamp are not available, order grounding clamp 103-538 and ground wire 208-950 and splice them onto the air hose ground wire. Refer to Fig 3.

Connect the grounding clamp to a true earth ground. Check the electrical grounding as instructed above.

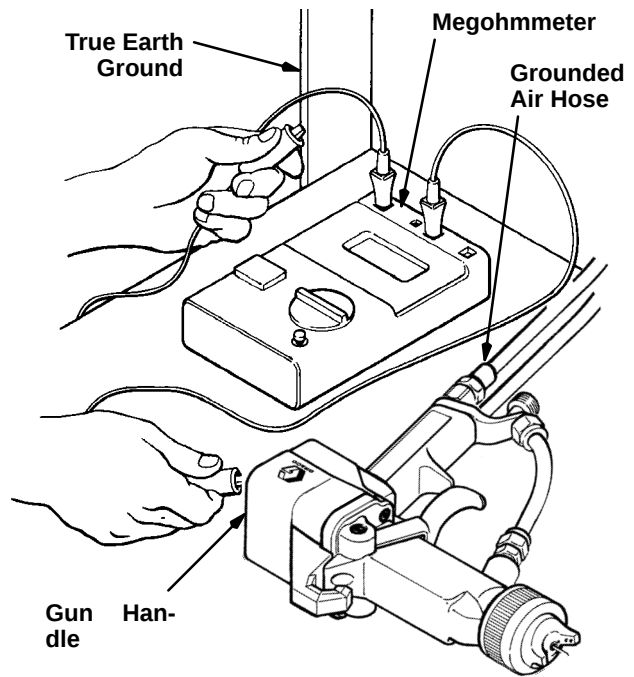


Fig 2

Grounding Clamp 103-538

Ground Wire 208-950

25 ft. (7.6 m) long, 12 ga. (1.5 mm²)

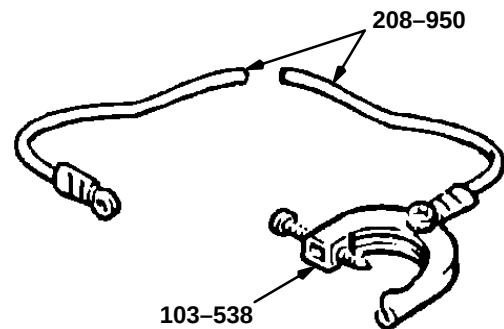
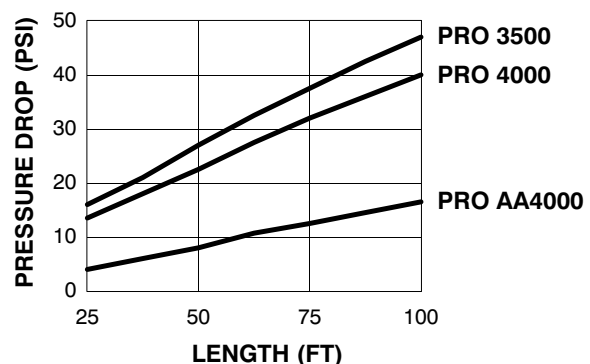


Fig 3

TECHNICAL DATA

Pressure Drop Analysis Graph

This graph shows the pressure drop versus the hose length for the Pro Series of electrostatic spray guns at a 2.8 bar (40 psi) gun inlet pressure.



Factory Branches: Atlanta, Chicago, Dallas, Detroit, Los Angeles, West Caldwell (N.J.)

Subsidiary and Affiliate Companies: Canada; England; Switzerland; France; Germany; Hong Kong; Japan

GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441

PRINTED IN U.S.A. 308-075 8/90