

Instructions – Parts List

Air Dryer

307548 rev.G

Model 217341

150 psi (1.03 MPa, 10.3 bar) Maximum Air Inlet Working Pressure

Removes oil and other contaminants from compressed air, then dries the air to -45° F (-42.8° C) atmospheric dewpoint to provide clean, dry air over the material in two drums of polyurethane chemicals.



Read warnings and instructions.
See page 2 for **Table of Contents**.

WARNING

To reduce the risk of container rupture, which could result in serious injury, including injury to the eyes, and substantial property damage, follow these precautions:

Never pressurize a drum or container that will not withstand 7 psi (48 kPa, 0.4 bar) working pressure.

Never use a damaged drum of isocyanate or resin with the Air Dryer.

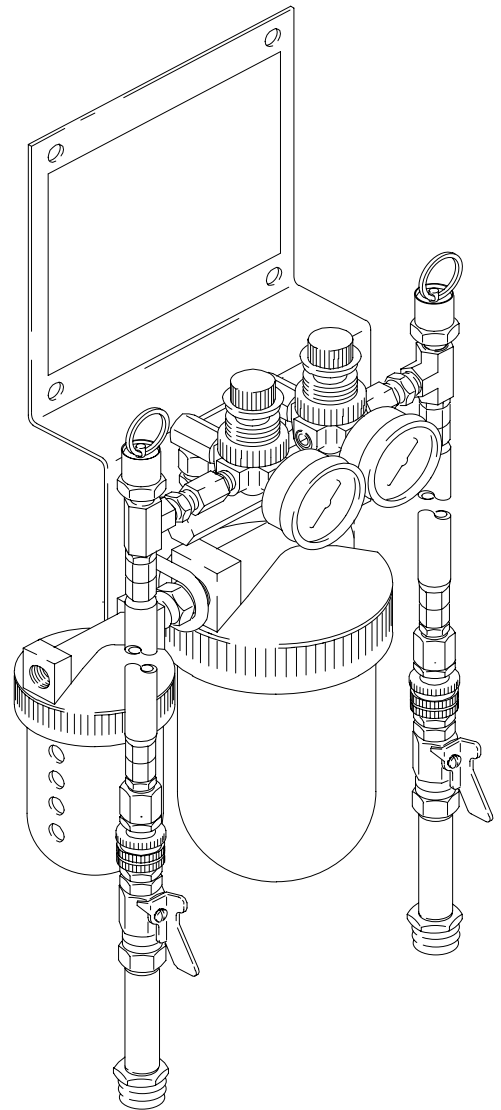


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Symbols

Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the corresponding instructions.

WARNING



INSTRUCTIONS

EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.

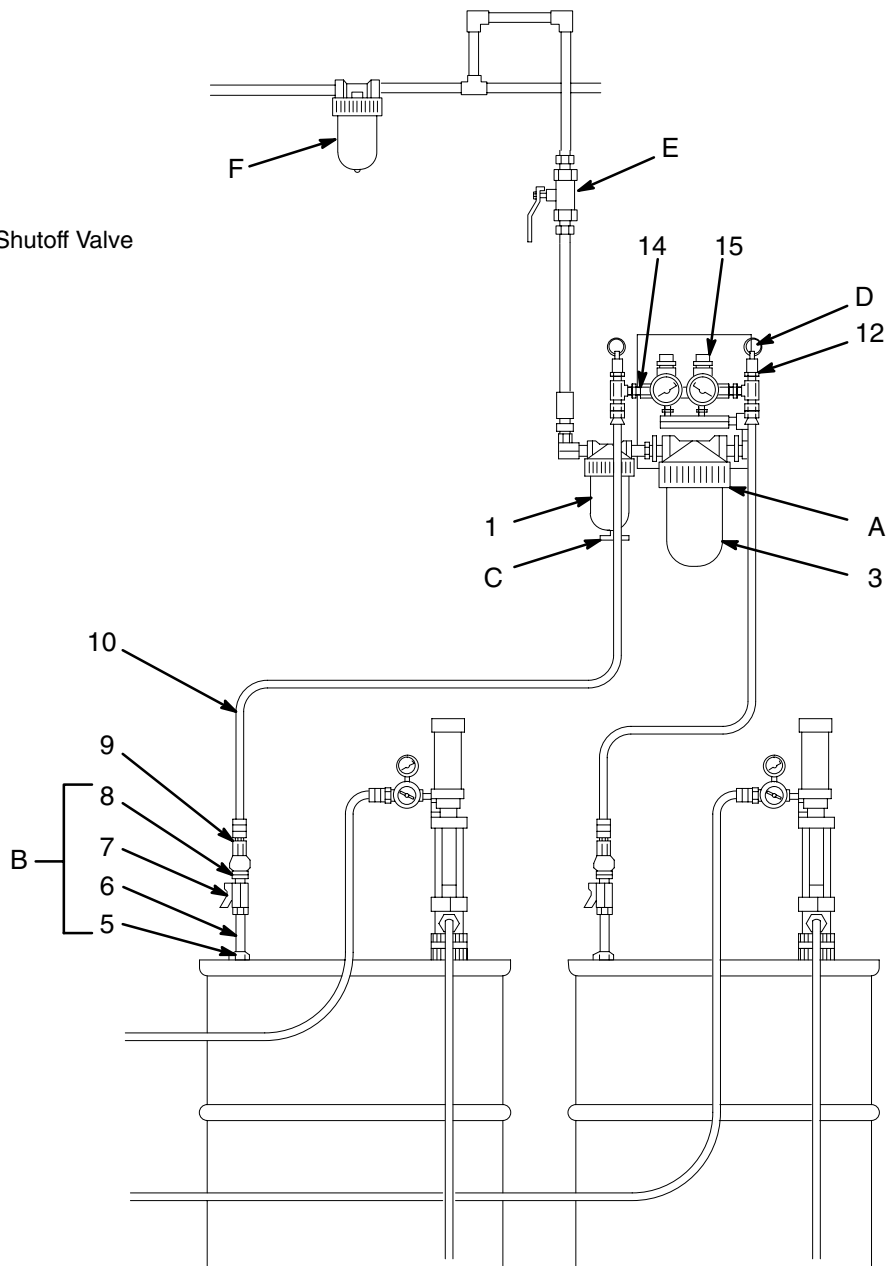
- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are uncertain about usage, call your Graco distributor.
- Do not alter or modify this equipment. Use only genuine Graco parts and accessories.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure of the lowest rated system component. Refer to the **Technical Data** on page 10 for the maximum working pressure of this equipment.
- Use fluids and solvents which are compatible with the equipment wetted parts. Refer to the **Technical Data** section of all equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Do not exceed the maximum working pressure of the lowest rated system component. This equipment has a **150 psi (1.03 MPa, 10.3 bar) maximum air inlet working pressure**.
- Do not use hoses to pull equipment.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose Graco hoses to temperatures above 82°C (180°F) or below -40°C (-40°F).
- Do not lift pressurized equipment.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.

Installation

Typical Installation

KEY

- A** Dryer Ring
- B** Drum Fittings
- C** Drain Valve
- D** Main Relief Ring
- E** Bleed-Type Master Air Shutoff Valve
- F** Airline Filter
- 1** Oil Filter
- 3** Dryer
- 5** Bushing
- 6** Nipple
- 7** Shutoff Valve
- 8** Special Pin Fitting
- 9** Special Coupler
- 10** Hose
- 12** Relief Valve
- 14** Check Valve
- 15** Air Regulator



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Installation

NOTE: The terms ISO and RES refer to polyurethane foam chemicals, Isocyanate, and Resin, respectively.

NOTE: Reference numbers and letters in parentheses in the text correspond to the **Typical Installation** on page 3.

Graco recommends installing a bleed-type master air shutoff valve (E) and a main air line air filter (F) ahead of the Air Dryer. The shutoff valve is to isolate the Air Dryer for maintenance. The main line filter removes excess oil and moisture from the compressed air supply which increases the efficiency of the Air Dryer and extends the time between recharging or replacing the desiccant used in the dryer.

1. Mount the air dryer in any suitable location. The hoses are 10 ft (3.1 m) long. Refer to the back page for the mounting hole diagram.
2. Fill the desiccant bowl. Unscrew the ring (A) to remove the bowl. Fill the bowl with the desiccant, provided. Reinstall the filter and bowl.

CAUTION

One end of each air hose (10) and each drum nipple (6) of the drum fittings (B) is labeled ISO or RES. Make only ISO to ISO and RES to RES connections to avoid fluid crossover which can permanently damage the hoses and drum fittings (B).

3. Install the drum fittings. The drum fittings include a pin fitting (8), shutoff valve (7), nipple (6) and bushing (5) for each drum. Install the fittings in the 3/4 in. vent port of the proper drum.
4. Connect the air hoses (10) to the identically labeled drum fittings using only the special pin fitting (8) and coupler (9).

CAUTION

Never leave the pump or hoses filled with water or air. To help prevent corrosion, flush the water and all air out of the system and leave it filled with mineral spirits or an oil-based solvent. Be sure to **relieve the pressure** after flushing.

Operation

WARNING

To prevent overpressurizing the supply drum or container, which could rupture the drum and cause serious injury and property damage, do not operate the Air Dryer with any part removed.

Do not operate with either restrictor nipple (14) removed. These nipples limit the volume of air to the Air Dryer.

Do not operate with either pressure relief valve (12) removed. These valves relieve the air pressure to the drums if they exceed 5.5 psi (38 kPa, 0.38 bar).

Do not operate the oil filter (1) with the metal bowl guards removed.

Do not substitute a different air line fitting (8) and coupler (9) for those supplied with the Air Dryer. These are special fittings designed to prevent accidentally coupling an unregulated air supply hose to the drum. Use only original Graco parts as replacements.

1. Open the main air shutoff valve.
2. Set both air regulators (15) to the lowest pressure needed to provide enough dry air to the drums. Refer to the **Typical Installation** on page 3. A setting of 2 psi (14 kPa, 0.14 bar) normally provides enough dry air to the drums.
3. Open the drum shutoff valves (7).

NOTE: A minimum pressure of 1 psi (7 kPa, 0.07 bar) is needed to open the check valves (14).

The air regulators (15) are a non-relieving type. To lower the pressure on the gauge, turn the regulator knob counterclockwise, pull up on the pressure relief valve ring (D) until the pressure on the gauge is just below the desired setpoint. Release the ring. Turn the knob to the desired pressure.

Operation

Changing or Recharging the Desiccant

As the desiccant in the dryer (3) becomes saturated with moisture, it turns from blue to pink, starting at the top of the bowl and moving down. How often the desiccant needs to be changed depends on how clean the compressed air supply is and how often the equipment is used.

Change the desiccant just before most of it turns pink. To change it, unscrew the ring (A) at the top of the dryer bowl and remove the filter element. If recharging the desiccant, empty the bowl into a container and cover it. Fill the bowl with fresh desiccant, reinstall the bowl filter, and connect the bowl to the ring. Contact your Graco distributor to order desiccant.

To recharge the desiccant, spread it in a shallow baking pan and bake for 1–1/2 hours at 450° F (237° C) or 3 hours at 250° F (126° C).

NOTE: Each time the desiccant is recharged, some effectiveness is lost.

Check the Pressure Relief Valve Daily

WARNING

If either pressure relief valve is not operating properly, or if the drum pressure ever exceeds 5.5 psi (38 kPa, 0.38 bar), replace the valve immediately. Do not attempt to repair a valve. A malfunctioning relief valve can allow the drum to overpressurize and rupture, resulting in injury and property damage.

Close the shutoff valves (7) and uncouple the air hoses (10) from the drum. Increase the air pressure setting slowly. The pressure relief valves (12) should relieve pressure by 5.5 psi (38 kPa, 0.38 bar); if not, replace the defective valve.

Whenever you are changing drums, check the operation of the pressure relief valves.

Changing Drums

1. Check the operation of the pressure relief valves (12). See the paragraph above.
2. Uncouple the air hoses (10) from the pin fitting (8).
3. Open the shutoff valve (7) to relieve the air pressure in the drum.
4. Close the shutoff valve.
5. Remove the feed pump and drum fittings (B) from one drum and install in the new drum.
6. Repeat this procedure for the other type of material.

CAUTION

Be very careful to avoid crossing the ISO and RES hoses which will permanently damage the hoses. To avoid any chance of fluid crossing, complete the changing of one type of material before starting the other.

Maintenance

Maintenance

Before removing any part of the Air Dryer for maintenance, follow this procedure to avoid contaminating the material in the drums.

1. Close the main airline shutoff valve.
2. Close the drum shutoff valve (7).
3. Uncouple the hoses (10) from the pin fitting (8).
4. Open the manual drain valve (C) on the bottom of the oil filter bowl (1) to drain the air.

5. See the procedure to the right for changing drums.

The oil filter and the desiccant dryer have clear plastic bowls that can be damaged by some solvents. If the plastic bowl becomes cracked, crazed, or otherwise damaged, replace it.

Drain the oil and water (1) often by opening the manual drain valve (C). Before long term shutdowns and during general maintenance of the system, remove the porous bronze filter element from the oil filter bowl and clean the filter element in solvent. Dry the element thoroughly before reinstalling it in the oil filter.

Parts



Parts

Model 217341

Ref No.	Part No.	Description	Qty.	Ref No.	Part No.	Description	Qty.
1	106494	FILTER, oil	1	17	156971	NIPPLE, short, 1/4 npt	2
2	156877	NIPPLE, long; 1/2 npt(m)	1	18	100030	BUSHING, 1/8 npt(f) x 1/4 npt(m)	2
3**	106493	DRYER, air, desiccant	1	19	102730	GAUGE, air pressure	2
4	106285	U-BOLT, includes 2, 1/4 npt nuts	2	20	158683	ELBOW, 90° street, 1/2 npt (m x f)	1
5	100505	BUSHING, pipe, 3/4(m) to 3/8(f)	2	21	158212	BUSHING; 1/2 npt(m) x 3/8 npt(f)	1
6	100195	NIPPLE, pipe, 3/8 npt	2	22	159084	MANIFOLD, air; (1) 3/8 npt(m); (2) 1.4 npt(f)	1
7	208392	BALL VALVE, 1/4 npt(m) x 3/8 npt(f)	2	24	178495	BRACKET, mounting	1
8	106496	FITTING, pin	2	25	100016	LOCKWASHER, 1/4"	4
9	106497	COUPLER, quick disconnect	2	26	178514	LABEL, "ISO"	2
10	200991	HOSE, 10 ft (3.1 m), Neoprene, 1/4" ID, cpd 1/4 npt(f)	2	27	178515	LABEL, "RES"	2
11	103696	TEE, 1/4 npt	2	28*	178494	LABEL, warning	1
12	106492	VALVE, pressure relief	2	29	155470	SWIVEL; 1/2 npt(m) x 1/2 npsm(f)	1
13	106495	CHECK VALVE	2				
14	178496	NIPPLE, restrictor	2				
15	106491	REGULATOR, air, 1/4 npt(f) x 1/8 npt(f)	2				
16	155541	UNION, 90° swivel, 1/4 nps(f) x 1/4 npt(m)	2				

* Extra warning labels are available at no charge.

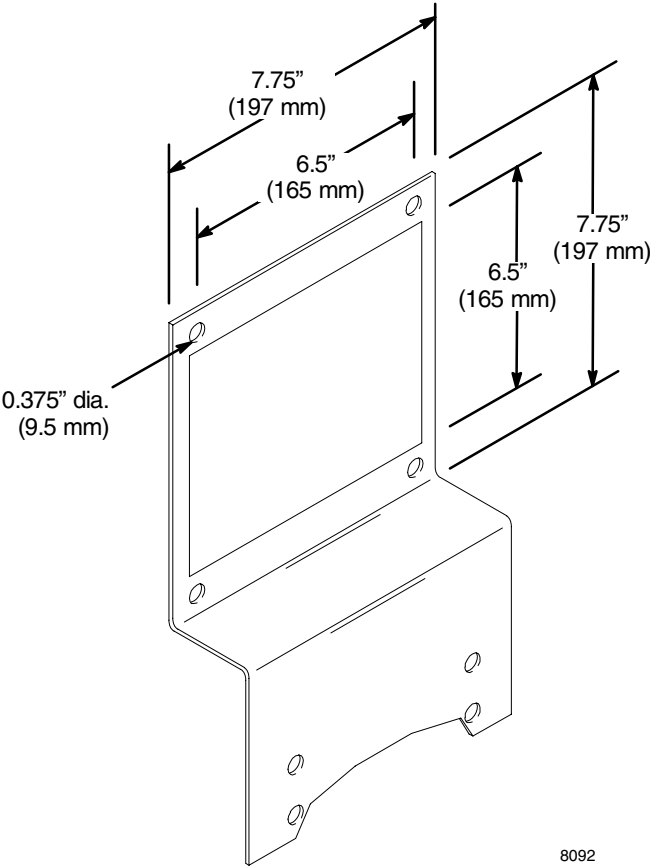
** Repair kits for 106493 are 15C063, 15C064,
15C065, 15C066, 15C067 and 15C068

Technical Data

Category	Data
Maximum Air Outlet Working Pressure	7 psi (48 kPa, 0.4 bar)
Maximum Air Inlet Working Pressure	150 psi (1.03 MPa, 10.3 bar)
Maximum Temperature	150° F (76° C)
Materials	Die Cast Aluminum, Zinc Plated Carbon Steel, Steel, Brass, Bronze, Stainless Steel, Viton®, Polycarbonate

Viton® is a registered trademark of the DuPont Company.

Mounting Hole Layout & Dimensions



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Notes

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Graco Standard Warranty

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, materials or components sold but not manufactured by Graco. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

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Graco Information

TO PLACE AN ORDER, contact your Graco distributor, or call one of the following numbers to identify the distributor closest to you:

1-800-367-4023 Toll Free

612-623-6921

612-378-3505 Fax

All written and visual data contained in this document reflects the latest product information available at the time of publication.

Graco reserves the right to make changes at any time without notice.

Sales Offices: Minneapolis, Detroit

International Offices: Belgium, Korea, Hong Kong, Japan

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