



This manual contains important warnings and information.
READ AND KEEP FOR REFERENCE.

INSTRUCTIONS

First choice when quality counts.™

Ratio Check Kit 233415

Ref. No.	Part No.	Description	Qty.
1*	100361	PLUG, 1/2" npt	1
2*	158581	COUPLING, 1/2" X 1/2" npt(f)	1
3*	100122	NIPPLE, 1/2" X 1/2" npt(m)	1
4	164799	NOZZLE, catalyst dispense, 1/8" npt(m)	1
5	196862	ADAPTER	1
6	206819	REGULATOR, back pressure	1
7	156823	SWIVEL, 1/4"(f) swivel X 1/4"npt(m)	1
8	602885	NOZZLE, resin dispense 1/4"npt(f)	1
9	217374	OIL, ISO pump, 1/8 gal. (not shown)	1

*Items 1–3 assembled, create a protective shroud to prevent moisture sensitive material from crystallizing. Between ratio checks, keep the shroud filled with ISO pump oil (item 9) and assemble to adapter (5).

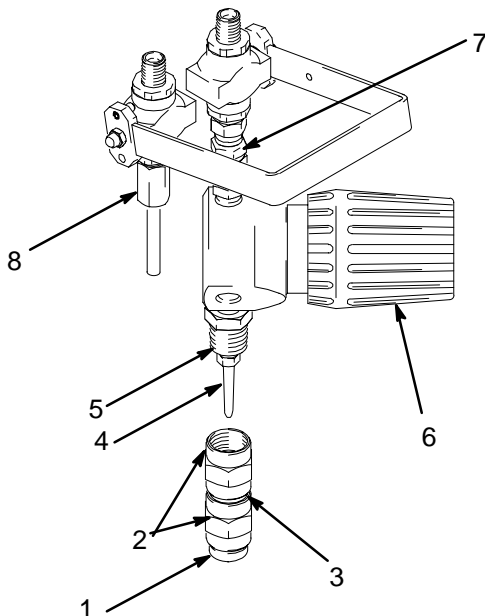


Fig. 1

T10500

Catalyst Linkage Adjustment

NOTE: Volume ratio and weight ratio are not the same. You may need to convert a weight ratio into a volume ratio by using the specific gravity or density of your materials.

- Using the ratio adjustment chart for your proportioner and the desired mix ratio **by volume** provided by the material supplier, select a scale setting.
- Examine the system for signs of wear or malfunction before adjusting the catalyst linkage due to unexpected changes in ratio. After successfully completing the ratio check procedure, the catalyst linkage should not require adjustment unless changes are made to the components of the system or new materials are being dispensed.

Ratio Check Procedure

- Make sure the hand gun is in the OFF position and that the catalyst bypass valve is closed. Material must flow only through the ratio check valves during the ratio check procedure.
- If used, remove the protective shroud from the catalyst nozzle.

⚠ WARNING

To reduce the risk of serious injury, never open the ratio check valve handle with the back pressure regulator fully engaged.

- Rotate the back pressure regulator (BPR) (6) counter-clockwise to decrease the fluid pressure of the catalyst.
- Using a bucket or pail below the dispense nozzles, Open the ratio check valve handle to dispense material.

5. Rotate the BPR (6) clockwise until the catalyst pressure is equal to the resin pressure. The catalyst pressure should be **at least** 4 times the input feed pressure to the catalyst cylinder. Use the lowest feed pressure necessary for operation. Over pressurizing the inlet can push material through the catalyst cylinder and disrupt its dispense volume.

NOTE: The ratio check pressure does not need to be the same as operating pressure in order to verify the resin to catalyst ratio. The cycle rate of the machine should be similar to the rate used when dispensing mixed material through the hand gun. Adjust the motor air pressure regulator if necessary.

6. With the ratio check valve handle open, simultaneously collect a sample of the resin and catalyst while the materials are flowing. **Do not** start the flow directly into the measurement containers. Measurement error can be introduced when the valves are opened, as the hoses depressurize and the system reaches equilibrium. Take a sample of at least two pump cycles. Larger samples will have less measurement error.
7. Weigh each sample and compare the ratio **by weight** to the desired result. Remember to subtract the weight of the container.

8. If necessary, adjust the catalyst linkage accordingly (refer to **Catalyst Linkage Adjustment**). This procedure verifies the ratio being dispensed by the proportioner.

IMPORTANT

NOTE: Due to pressure losses through hoses and the dispense device, the final mix quality **must** be checked by testing the mixed material at the point of exit. Proper selection of hose sizes and lengths and catalyst injectors may be required in order to maintain the proper mix ratio at the dispense point.

9. Depressurize the system. Shut off the air supply to the proportioner and open the ratio check valve handle. Open the catalyst bypass valve to purge the pressure upstream of the BPR. Check the outlet gauges of the resin and catalyst to verify that the system has been successfully depressurized.
10. Close the ratio check valve handle.
11. Fill the protective shroud with ISO pump oil and replace the shroud on the catalyst nozzle. This will prevent the catalyst material from drying or crystallizing from moisture in the air.

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.

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