

Instructions



Drum Separation

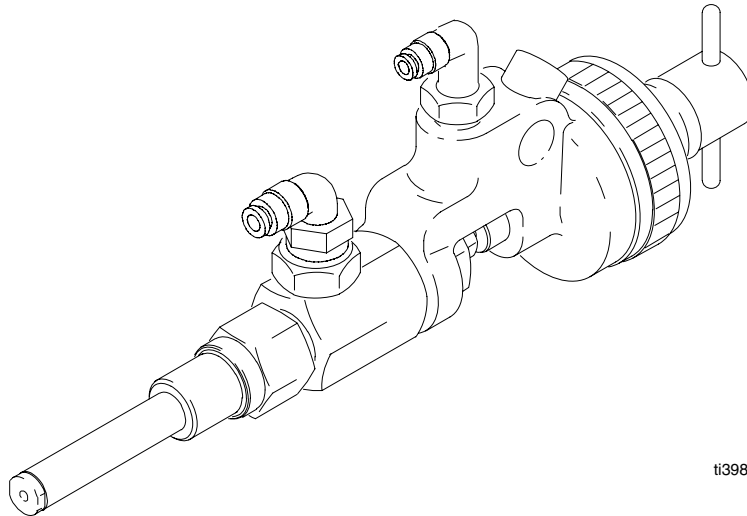
Air Blow-Off Valve

309906 rev.B

For use with Therm-O-Flow 200 as air-assist to lift ram plate from drum.

100 psi (0.68 MPa, 6.8 bar) Maximum Working Air Pressure

Model No. 246501, Series A



ti3980



Important Safety Instructions.

Read all warnings and instructions in this manual.
Save these instructions. See page 2 for table of contents.

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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

CAUTION

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

Misuse can cause death or serious injury.

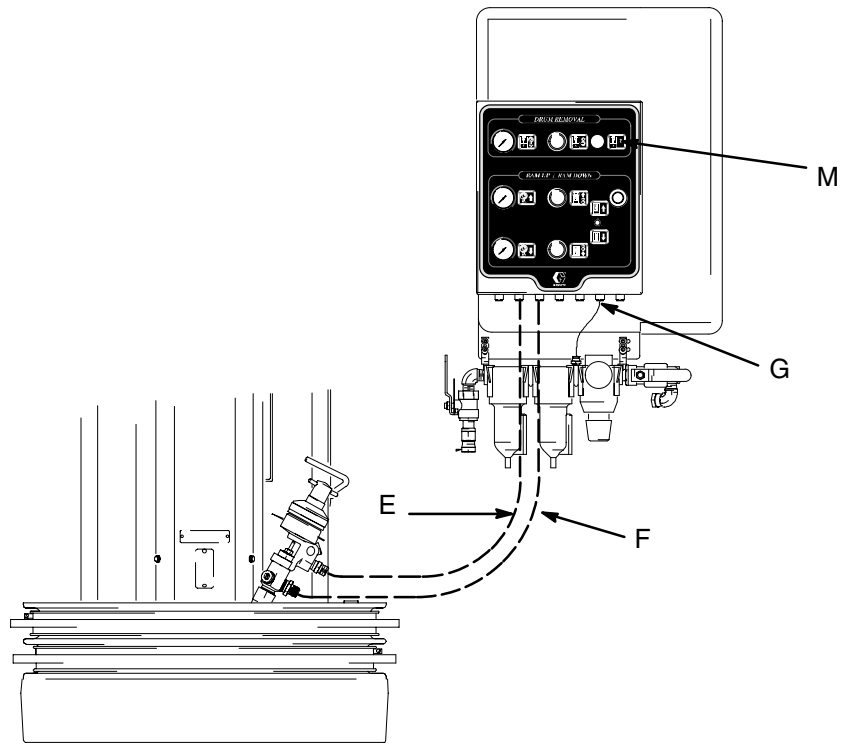
- Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See **Technical Data** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Data** in all equipment manuals. Read fluid and solvent manufacturer's warnings.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not alter or modify this equipment.
- For professional use only.
- Use equipment only for its intended purpose. Call your Graco distributor for information.
- Route the hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not use hoses to pull equipment.
- Keep children and animals away from work area.
- Comply with all applicable safety regulations.

Installation

Typical Installation

Key

- E Air Pilot Line
- F Blow Off Air Supply Line
- G On/Off air line
- M Follower Blow-off Push Button Valve



General Information

NOTE: Reference numbers and letters in parentheses in the text refer to the callouts in the figures and the parts drawing.

NOTE: Always use Genuine Graco Parts and Accessories, available from your Graco distributor.

Connect the Air Lines

The Therm-O-Flow Plus ram air control panel controls the on/off, pilot, and blow-off air to the air valve. Reference Therm-O-Flow Plus manual 309085 for details of operation. .

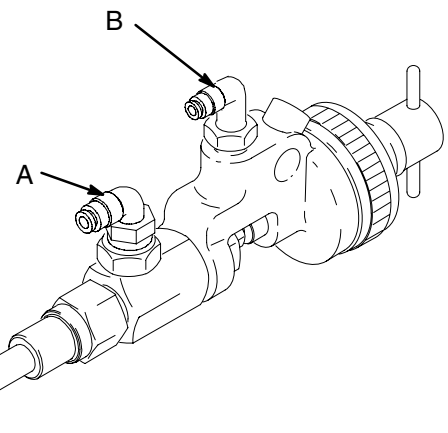


Fig. 1

ti3980

1. Connect the blow-off air supply line (F) to the fitting (A) on the valve. See Fig. 1.
2. Connect the pilot line (E) to fitting (B) on the valve.

Operation

Settings and Adjustments

1. Before each day's operation, lubricate the exposed portion of the needle (22) and the piston (16) with a lubricant compatible with the fluid being dispensed. See Fig. 2.
2. After lubrication, cover the exposed portions of the needle and piston with a piece of plastic to prevent fluid buildup on these parts. Any buildup could damage the valve packing (9 or 20). See Fig. 3 on page 7.
3. Set the actuating air to at least 50 psi (345 kPa, 3.4 bar).
4. To decrease needle travel, turn the adjusting screw (12) clockwise; to increase, turn counterclockwise.
5. If the valve leaks from the outlet after it is closed, turn the adjusting screw clockwise until the valve stops leaking.

 Lubricate Daily

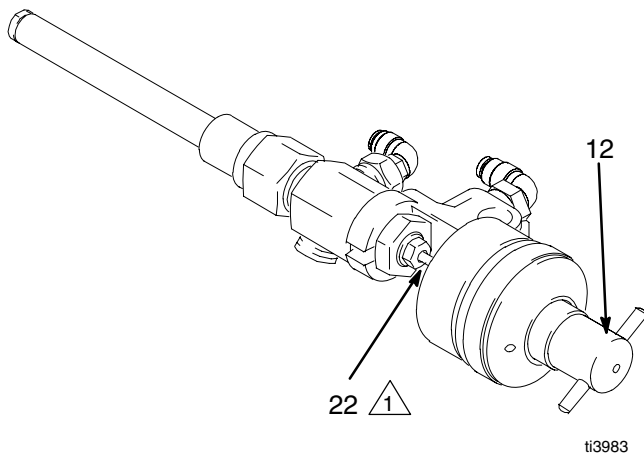


Fig. 2

Pressure Relief Procedure

WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always perform the following **Pressure Relief Procedure**.

1. Relieve all pressure in the system. See system manual 309085.
2. Shut off the blow-off air supply to the valve.
3. To relieve inside pressure by actuating the blow-off valve, press the follower blow-off button (M) on the ram air control panel.

Maintenance

Clean the Dispensing Valve Regularly

WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 4.

1. Clean the outside surfaces of the valve by wiping with a soft cloth dampened with a compatible solvent.
2. Keep the blow-off valve nozzle clean and free of dried or cured materials.
3. Inspect the front of the blow-off valve nozzle weekly, and clean as required to ensure proper operation. If plugging persists, clean more frequently.
4. To remove a hardened particle from the orifice, blow air through the orifice from the front.

CAUTION

Never immerse the entire dispensing valve in solvent. Immersing in solvent removes lubricants and tends to damage packings.

Troubleshooting

WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 4.

Before servicing this equipment always make sure to **relieve the pressure** on page 4.

NOTE: Check all possible causes and solutions before disassembling.

| Problem | Cause | Solution |
|----------------------------------|------------------------------------|-------------------------|
| Valve will not stop flowing air. | Fluid needle binding. | Clean, repair. |
| | Piston packing binding. | Repair. |
| | Obstructed or worn needle or seat. | Clean or replace. |
| Valve will not dispense. | Air line clogged. | Clear. |
| | Air valve closed. | Open. |
| | Clogged orifice or needle seat. | Clean. |
| | No trigger or actuator pressure. | Check, clean all lines. |
| | Worn or dry piston packings. | Replace. |


Service


Needle, Seat, and Packings

WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 4.

1. Relieve pressure, page 4.
2. Screw the locknut (8) off the outlet housing (17). See Fig. 3.
3. Align the slot in the air piston (16) with the slot in the valve housing (18).
4. Swing the outlet housing (17) out of the valve housing (18) and slide the needle (22) out of the socket in the air piston (16).
5. Unscrew the packing nut (10).
6. Remove the packings (9 and 20), gland (24), and needle (22).
7. Unscrew the seat (23) out of the outlet housing (17). See Fig. 3. Handle the needle and seat carefully and inspect them closely for wear or damage.
8. Reassemble the valve using new parts as necessary. Torque the seat (23) to 23–27 ft-lb (31–37 N•m).
9. Soak a new leather packing (20) in light, compatible oil before installing it.

 1 Torque to 23–27 ft-lb (31–37 N•m)

 2 Lubricate

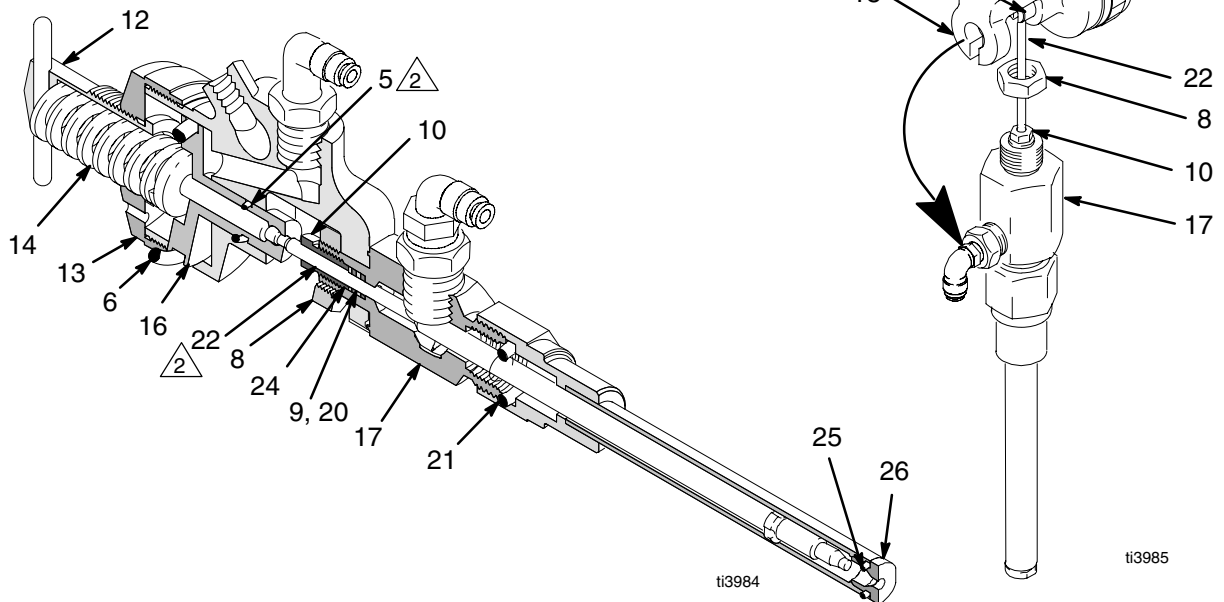


Fig. 3

Service

Air Piston, Spring, and Seals

WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 4.

1. Relieve pressure, page 4.
2. Complete the steps on page 7.
3. Remove the air cylinder cap (13).
4. Pull out the spring (14) and piston (16). Clean and inspect all parts.

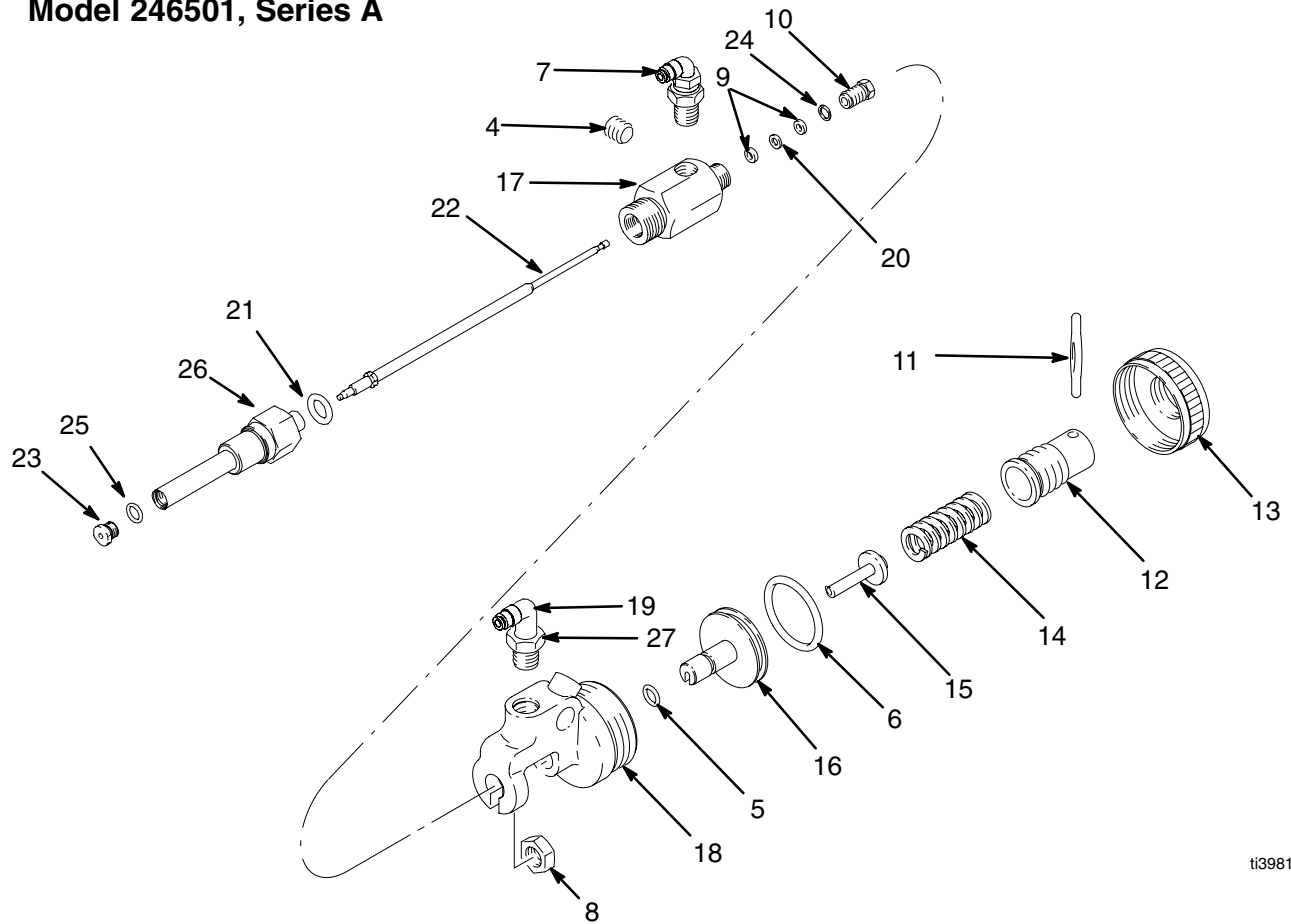
5. Check the piston o-rings (5 and 6) carefully.
6. Lubricate all parts with a light waterproof grease and reassemble the valve using new parts as necessary.

Packing Configurations

| Model No. | Standard Packings | Optional Packings |
|-----------|--|--------------------|
| 246501 | (2) 181523 UHMWPE and (1) 166258 leather | (3) 166258 leather |

Parts

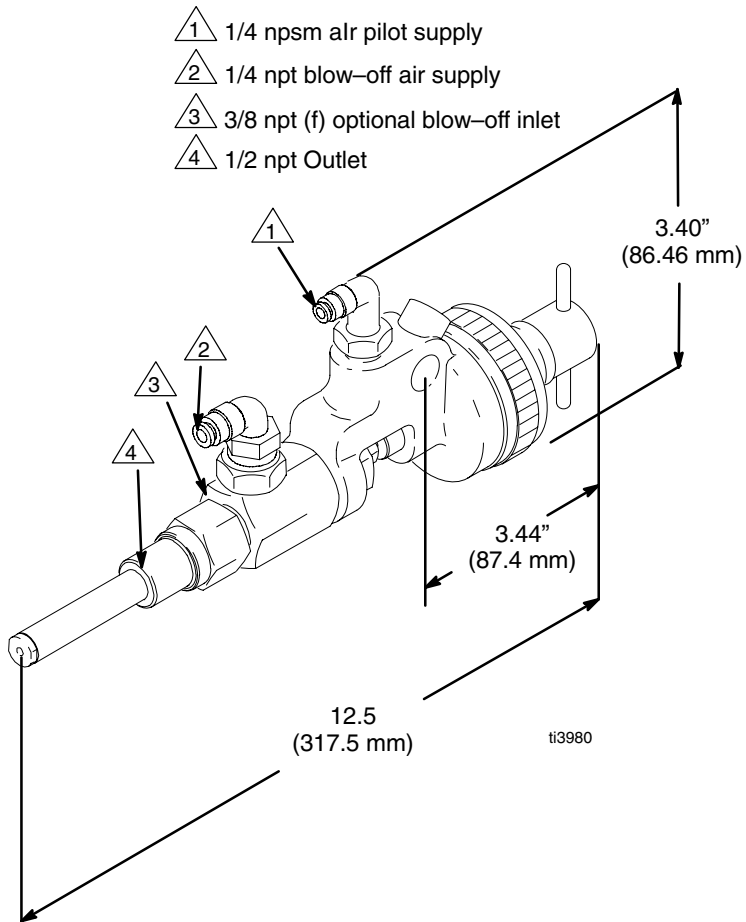
Model 246501, Series A



ti3981

| Ref No. | Part No. | Description | Qty. | Ref No. | Part No. | Description | Qty. |
|---------|----------|-------------------------------|------|---------|----------|-------------------------------|------|
| 4 | 101748 | PLUG, pipe; 3/8 npt | 1 | 16 | 164741 | PISTON, air | 1 |
| 5 | 155685 | O-RING; nitrile rubber | 1 | 17 | 15C288 | HOUSING, outlet | 1 |
| 6 | 156593 | O-RING; nitrile rubber | 1 | 18 | 164745 | HOUSING, valve | 1 |
| 7 | 115948 | FITTING, elbow 1/4 npt x 5/16 | 1 | 19 | 115949 | FITTING, elbow 1/4 npt x 5/32 | 1 |
| 8 | 102300 | NUT, hex; 9/16-18 | 1 | 20 | 166258 | PACKING, flat; leather | 1 |
| 9 | 181523 | PACKING, flat; UHMWPE | 2 | 21 | C20178 | O-RING | 1 |
| 10 | 164313 | NUT, packing | 1 | 22 | 15C049 | NEEDLE, valve | 1 |
| 11 | 164736 | PIN, adjusting screw | 1 | 23 | 15C061 | SEAT, valve | 1 |
| 12 | 164737 | SCREW, adjusting | 1 | 24 | 166255 | GLAND; stainless steel | 1 |
| 13 | 164738 | CAP, air cylinder | 1 | 25 | 112085 | O-RING | 1 |
| 14 | 164739 | SPRING, helical compression | 1 | 26 | 246747 | ADAPTER | 1 |
| 15 | 164740 | GUIDE, spring | 1 | 27 | 100176 | BUSHING, hex | 1 |

Dimensions



Technical Data

| Category | Data |
|--|--|
| Maximum Working Pressure | 100 psi (0.68 MPa, 6.8 bar) |
| Minimum Operating Pressure of Air Actuated Trigger | 50 psi (345 kPa, 3.4 bar) |
| Air and Fluid Connections | 1/4 npt(m) blow-off air inlet, 1/2 npt(m) outlet, 1/4 npsm(m) pilot air inlet, 3/8 npt(f) optional blow-off inlet |
| Wetted Parts | 300 Series Stainless Steel, Chrome, Copper, Acetal Homopolymer, UHMWPE, Leather |

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 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:

1-800-328-0211 Toll Free

612-623-6921

612-378-3505 Fax

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