

Power-LockTM Heated Hose

309572ZAP

EN

**For use with plural component proportioners. For professional use only.
Not approved for use in European explosive atmospheres.**

See pages 3-6 for Maximum Fluid Working Pressure and Approvals.

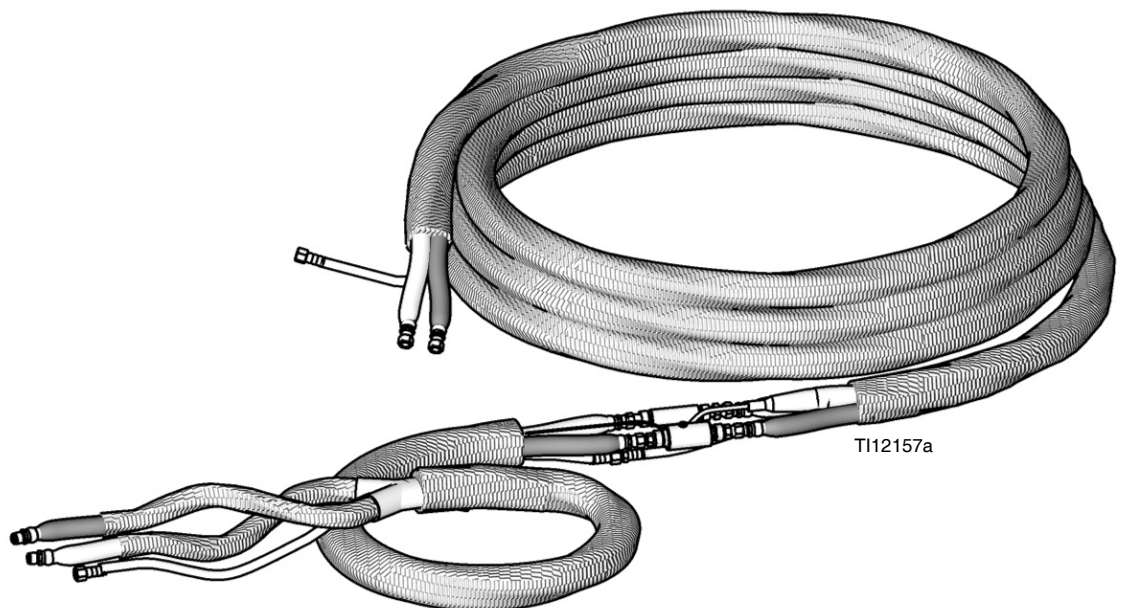
130 psi (0.9 MPa, 9 bar) Maximum Air Working Pressure

180° F (82° C) Maximum Hose Operating Temperature



Important Safety instructions.

Read all warnings and instructions in this manual.
Save these instructions.



Contents

Contents	2	Operation	23
Power-Lock Hose Bundle Part Numbers	3	Maintenance	24
Whip Hoses	3	Instructions for Replacing Individual	
Adapter Fittings	3	A or B Hose	24
Standard 2 Component Hose	5	Parts	25
Airless 2 Component Hose	5	Using 261669 Fluid Temperature Sensor	
RTD 2-Component Hose (for use with GCA		(JIC to JIC fittings)	25
Controlled Reactors)	6	Using 24M943 Fluid Temperature Sensor	
Custom Application 2 Component Hose	6	(NPT to NPT fittings)	26
Fluid Temperature Sensor (FTS) Kits	7	Using 24K207 RTD 2-Component Hose Fluid	
Fluid Temperature Sensor Kits (FTS, RTD;		Temperature Sensor (JIC to JIC fittings) . . .	27
for use with GCA Controlled Systems)	7	Using 24M944 RTD 2-Component Hose Fluid	
Warnings	8	Temperature Sensor (NPT to NPT fittings) .	28
Important Isocyanate (ISO) Information	11	Using 261670 Fluid Temperature Sensor	
Isocyanate Conditions	11	(JIC to NPT fittings)	29
Material Self-ignition	12	15F144 Hose Wire Jumper	30
Keep Components A and B Separate	12	Accessories	32
Moisture Sensitivity of Isocyanates	12	Scuff Guard / Protective Cover	32
Foam Resins with 245 fa Blowing Agents	12	Technical Specifications	33
Changing Materials	12	Graco Standard Warranty	36
Installation	13	Graco Information	36
Description	13		
Connect Whip Hose to Gun or Gun Manifold . .	13		
Connect Heated Hoses	14		
Connect FTS and Heated Dual Whip Hose . . .	18		
Connect FTS with a Non-Heated Whip Hose or			
Remote Mix Manifold	20		
Connect Hoses to Proportioner	21		
Fluid Temperature Sensor (FTS) Calibration			
(Non-RTD Versions)	22		
Check Hoses for Leaks	22		
Protective Covering	22		

Power-Lock Hose Bundle Part Numbers

You need at least one 50 ft (15.2 m) main hose, one fluid temperature sensor (FTS), and one whip hose or one wire harness jumper (part no. 261821) to make a complete heated hose assembly. Be sure the selected hose meets your maximum pressure and hose diameter requirements.

Whip Hoses

Hose Assembly	Length ft (m)	ID in. (mm)	Heated	Xtreme-Wrap Scuff Guard	Hose Fittings		ETL Approval
					“A” inlet (f)/ outlet (m)	“B” inlet (f)/ outlet (m)	
2000 psi (13.8 MPa, 138 bar)							
26C042	20 (6.1)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	RECOGNIZED COMPONENT  Intertek 9902471
246050	10 (3)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	
249586	3 (0.9)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	
25P770	10 (3)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	
25P771	20 (6.1)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	
3500 psi (24.1 MPa, 241 bar)							
26C043	20 (6.1)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	
246055	10 (3)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	
246056	10 (3)	3/8 (10)	✓	✓	-5 JIC	-6 JIC	
25P772	10 (3)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	
25P773	20 (6.1)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	
5000 psi (34.5 MPa, 345 bar)							
258701	10 (3)	1/4 (6)	✓	✓	-5 JIC	-6 JIC	

Adapter Fittings

Use adapter fittings to connect a hose assembly to a fluid manifold and/or a FTS. Use JIC swivel fittings to connect a female FTS to male end hoses and/or npt female ball valves on mix manifold inlets.

Part	Hose Fittings	
	End #1	End #2
4500 psi (31 MPa, 310 bar)		
117833	3/8 npt (m)	-8 JIC (m)
5000 psi (34.5 MPa, 345 bar)		
116702	1/4 npt (m)	-10 JIC (m)
116703	1/4 npt (m)	-8 JIC (m)
116704	1/4 npt (m)	-6 JIC (m)
116765	3/8 npt (m)	-10 JIC (m)
117506	1/4 npt (m)	-6 JIC (f), swivel
117832	3/8 npt (m)	-6 JIC (m)
119998	1/4 npt (m)	-5 JIC (m)
122406	3/8 npt (m)	-5 JIC (m)
126327	3/8 npt (m)	-6 JIC (f), swivel
126328	3/8 npt (m)	-8 JIC (f), swivel
126329	1/2 npt (m)	-8 JIC (f), swivel

Part	Hose Fittings	
	End #1	End #2
126330	1/2 npt (m)	-10 JIC (f), swivel
126339	3/8 npt (m)	-10 JIC (f), swivel
6000 psi (41 MPa, 414 bar)		
117595	1/4 npt (m)	-5 JIC (f), swivel
126431	1/2 npt (m)	-6 JIC (f), swivel
126432	1/2 npt (m)	-6 JIC (f), 45°
7250 psi (50 MPa, 500 bar)		
100206	1/2 npt (m)	1/4 (f)
121433	1/2 npt (m)	3/8 (f)
159841	3/8 npt (m)	1/4 (f)
7400 psi (51 MPa, 510 bar)		
158491	1/2 npt (m)	1/2 (m)
159239	1/2 npt (m)	3/8 (m)
162449	1/2 npt (m)	1/4 (m)

Power-Lock Hose Bundle Part Numbers

Part	Hose Fittings	
	End #1	End #2
7500 psi (52 MPa, 517 bar)		
156971	1/4 npt (m)	1/4 (m)
8000 psi (55 MPa, 552 bar)		
164856	1/4 npt (m)	3/8 (m)

Standard 2 Component Hose

Hose Assembly	Length ft (m)	ID in. (mm)	FTS Cable	Standard Braided Scuff Guard	Xtreme-W rap Scuff Guard	Hose Fittings		“A” Red Hose	“B” Blue Hose	ETL Approval
						“A” inlet (f)/ outlet (m)	“B” inlet (f)/ outlet (m)			
2000 psi (13.8 MPa, 138 bar)										
246045	50 (15.2)	1/4 (6)	✓			-5 JIC	-6 JIC	246059	246060	RECOGNIZED COMPONENT  Intertek 9902471
246046	50 (15.2)	3/8 (10)	✓			-5 JIC	-6 JIC	246061	246062	
246047	50 (15.2)	1/2 (13)	✓			-8 JIC	-10 JIC	246063	246064	
246074	50 (15.2)	1/4 (6)				-5 JIC	-6 JIC	246059	246060	
246075	50 (15.2)	3/8 (10)				-5 JIC	-6 JIC	246061	246062	
246076	50 (15.2)	1/2 (13)				-8 JIC	-10 JIC	246063	246064	
246678	50 (15.2)	3/8 (10)	✓	✓		-5 JIC	-6 JIC	246061	246062	
24Y678	50 (15.2)	3/8 (10)	✓		✓	-5 JIC	-6 JIC	246061	246062	
256549	50 (15.2)	3/8 (10)		✓		-5 JIC	-6 JIC	246061	246062	
24Y549	50 (15.2)	3/8 (10)			✓	-5 JIC	-6 JIC	246061	246062	
249587	25 (7.6)	1/4 (6)				-5 JIC	-6 JIC	246065	246066	
261328	25 (7.6)	3/8 (10)				-5 JIC	-6 JIC	246094	246095	
246048	25 (7.6)	1/4 (6)	✓			-5 JIC	-6 JIC	246065	246066	
246049	25 (7.6)	3/8 (10)	✓	✓		-5 JIC	-6 JIC	246094	246095	
3500 psi (24.1 MPa, 241 bar)										
246052	50 (15.2)	1/4 (6)	✓			-5 JIC	-6 JIC	246067	246068	RECOGNIZED COMPONENT  Intertek 9902471
246053	50 (15.2)	3/8 (10)	✓			-5 JIC	-6 JIC	246069	246070	
246054	50 (15.2)	1/2 (13)	✓			-8 JIC	-10 JIC	246071	246072	
249588	50 (15.2)	3/8 (10)				-5 JIC	-6 JIC	246069	246070	
246679	50 (15.2)	3/8 (10)	✓	✓		-5 JIC	-6 JIC	246069	246070	
24Y679	50 (15.2)	3/8 (10)	✓		✓	-5 JIC	-6 JIC	246069	246070	
256548	50 (15.2)	1/2 (13)	✓	✓		-8 JIC	-10 JIC	246071	246072	
261335	50 (15.2)	1/2 (13)				-8 JIC	-10 JIC	246071	246072	
26C193	25 (7.6)	3/8 (10)				-5 JIC	-6 JIC	246094	246095	
5000 psi (34.5 MPa, 345 bar)										
261332	25 (7.6)	3/8 (10)				-5 JIC	-6 JIC			
262203	50 (15.2)	3/8 (10)	✓			-5 JIC	-6 JIC	15E751	15E752	

Airless 2 Component Hose

Hose Assembly	Length ft (m)	ID in. (mm)		FTS Cable	Standard Braided Scuff Guard	Hose Fittings		“A” Red Hose	“B” Blue Hose
		“A”	“B”			“A” inlet (f)/outlet (m)	“B” inlet (f)/outlet (m)		
5000 psi (34.5 MPa, 345 bar)									
248907	50 (15.2)	1/4 (6)	3/8 (10)	✓		-5 JIC	-6 JIC	15E750	15E752
248908	50 (15.2)	3/8 (10)	3/8 (10)	✓		-5 JIC	-6 JIC	15E751	15E752
262727	50 (15.2)	1/2 (13)	1/4 (6)	✓		-8 JIC	-6 JIC	262719	262718
262728	50 (15.2)	1/2 (13)	3/8 (10)	✓		-8 JIC	-6 JIC	262719	15E752
262730	50 (15.2)	1/2 (13)	1/2 (13)	✓		-8 JIC	-10 JIC	262719	262720

RTD 2-Component Hose (for use with GCA Controlled Reactors)

Hose Assembly	Length ft (m)	ID in. (mm)	RTD Cable	Standard Braided Scuff Guard	Xtreme-Wrap Scuff Guard	CAN Cable	Hose Fittings		“A” Red Hose	“B” Blue Hose	ETL Approval
							“A” inlet (f)/ outlet (m)	“B” inlet (f)/ outlet (m)			
2000 psi (13.8 MPa, 138 bar)											
24K240	50 (15.2)	3/8 (10)	✓	✓			-5 JIC	-6 JIC	246061	246062	RECOGNIZED COMPONENT  Intertek 9902471
24Y240	50 (15.2)	3/8 (10)	✓		✓		-5 JIC	-6 JIC	246061	246062	
24K394	50 (15.2)	3/8 (10)	✓	✓		✓	-5 JIC	-6 JIC	246061	246062	
24T839	50 (15.2)	3/8 (10)	✓				-5 JIC	-6 JIC	246061	246062	
24Y394	50 (15.2)	3/8 (10)	✓		✓	✓	-5 JIC	-6 JIC	246061	246062	
24N000	50 (15.2)	1/2 (13)	✓	✓			-8 JIC	-10 JIC	246063	246064	
24N001	50 (15.2)	1/2 (13)	✓	✓		✓	-8 JIC	-10 JIC	246063	246064	
3500 psi (24.1 MPa, 241 bar)											
24K241	50 (15.2)	3/8 (10)	✓	✓			-5 JIC	-6 JIC	246069	246070	RECOGNIZED COMPONENT  Intertek 9902471
24Y241	50 (15.2)	3/8 (10)	✓		✓		-5 JIC	-6 JIC	246069	246070	
24K395	50 (15.2)	3/8 (10)	✓	✓		✓	-5 JIC	-6 JIC	246069	246070	
24Y395	50 (15.2)	3/8 (10)	✓		✓	✓	-5 JIC	-6 JIC	246069	246070	
24U743	50 (15.2)	3/8 (10)	✓				-5 JIC	-6 JIC	246069	246070	
24N002	50 (15.2)	1/2 (13)	✓	✓			-8 JIC	-10 JIC	246071	246072	
24N003	50 (15.2)	1/2 (13)	✓	✓		✓	-8 JIC	-10 JIC	246071	246072	

Custom Application 2 Component Hose

Hose Assembly	Length ft (m)	ID in. (mm)		FTS Cable	RTD Cable	Standard Braided Scuff Guard	Hose Fittings		“A” Red Hose	“B” Blue Hose	ETL Approval
		“A”	“B”				“A” inlet (f)/ outlet (m)	“B” inlet (f)/ outlet (m)			
2000 psi (13.8 MPa, 138 bar)											RECOGNIZED COMPONENT  Intertek 9902471
255089	50 (15.2)	1/4 (6)	3/8 (10)	✓		✓	-5 JIC	-6 JIC	246059	246062	
25A482	50 (15.2)	1/4 (6)	3/8 (10)		✓	✓	-5 JIC	-6 JIC	246059	246062	
3500 psi (24.1 MPa, 241 bar)											
247164	50 (15.2)	1/4 (6)	3/8 (10)	✓		✓	-5 JIC	-6 JIC	246067	246070	
261336	50 (15.2)	3/8 (10)	1/2 (13)	✓			-5 JIC	-6 JIC	246069	246072	
261337	50 (15.2)	1/4 (6)	3/8 (10)	‡			-5 JIC	-6 JIC	246067	246070	
24N524	50 (15.2)	1/4 (6)	1/2 (13)	✓		✓	-5 JIC	-10 JIC	246067	246072	
25A481	50 (15.2)	1/4 (6)	3/8 (10)		✓	✓	-5 JIC	-6 JIC	246067	246070	
25A484	50 (15.2)	3/8 (10)	1/2 (13)		✓		-5 JIC	-6 JIC	246069	246072	
25A485	50 (15.2)	1/4 (6)	3/8 (10)		‡		-5 JIC	-6 JIC	246067	246070	
25A483	50 (15.2)	1/4 (6)	1/2 (13)		✓	✓	-5 JIC	-6 JIC	246067	246072	

‡ Two FTS cables and two sets of standard wires.

Fluid Temperature Sensor (FTS) Kits

Part Number	“A” Side			“B” Side		
	Inlet	Outlet	FTS Probe	Inlet	Outlet	FTS Probe
5000 psi (34.5 MPa, 345 bar)						
261669	-5 JIC	-5 JIC	✓	-6 JIC	-6 JIC	
261670	-5 JIC	1/4 NPT		-6 JIC	3/8 NPT	✓
7250 psi (50 MPa, 500 bar)						
24M943	1/2 npt (f)	1/2 (npt (f)	✓	1/2 npt (f)	1/2 (npt (f)	

Fluid Temperature Sensor Kits (FTS, RTD; for use with GCA Controlled Systems)

Part Number	“A” Side			“B” Side		
	Inlet	Outlet	RTD Probe	Inlet	Outlet	RTD Probe
5000 psi (34.5 MPa, 345 bar)						
24K207	-5 JIC	-5 JIC	✓	-6 JIC	-6 JIC	
7250 psi (50 MPa, 500 bar)						
24M944	1/2 npt (f)	1/2 (npt (f)	✓	1/2 npt (f)	1/2 (npt (f)	

FTS kits contain:

- FTS Sensor
- FTS coupler fitting (5b) for equal length on other line.
- Adapter fittings as necessary. See **Adapter Fittings**, page 3.
- Foam tube insulation to cover fittings and FTS.
- 3.75 in. (95.25 mm) air line jumper hose (except kit 261670).

Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risk. When these symbols appear in the body of this manual, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

 WARNING	
	ELECTRIC SHOCK HAZARD The hoses must be grounded. Improper grounding, set-up, or usage of hoses can cause electric shock. • Turn off and disconnect power before installing or servicing hoses. • Connect only to grounded power source. • All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations. • Never cut or puncture a hose cover. • Do not expose to rain. Store indoors.
 	SKIN INJECTION HAZARD High-pressure fluid from hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment. • Inspect hose before each use for cuts, bulges, kinks or any other damage. • Replace damaged hose immediately. • Replace hoses proactively at regular intervals based on your operating conditions. • Tighten all fluid connections before operating the equipment. • Keep clear of leaks. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Never exceed hose Maximum Pressure or Temperature ratings. • Only use chemicals that are compatible with hose materials. See Technical Data in this manual. Read Safety Data Sheet (SDS) and fluid and solvent manufacturer's recommendations. • Follow the Pressure Relief Procedure when you stop spraying/dispensing and before cleaning, checking, or servicing equipment.
  	THERMAL EXPANSION HAZARD Fluids subjected to heat in confined spaces, including hoses, can create a rapid rise in pressure due to the thermal expansion. Over-pressurization can result in equipment rupture and serious injury. • Open a valve to relieve the fluid expansion during heating. • Replace hoses proactively at regular intervals based on your operating conditions.
	BURN HAZARD Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns: • Do not touch hot fluid or equipment.

! WARNING

	TOXIC FLUID OR FUMES HAZARD Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled or swallowed. • Read Safety Data Sheet (SDS) for handling instructions and to know the specific hazards of the fluids you are using, including the effects of long-term exposure. • When spraying, servicing equipment, or when in the work area, always keep work area well ventilated and always wear appropriate personal protective equipment. See Personal Protective Equipment warnings in this manual. • Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.
	FIRE AND EXPLOSION HAZARD Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. Paint or solvent flowing through the equipment can cause static sparking. To help prevent fire and explosion: • Use equipment only in well ventilated area. • Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static sparking). • Ground all equipment in the work area. See Grounding instructions. • Never spray or flush solvent at high pressure. • Keep work area free of debris, including solvent, rags and gasoline. • Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present. • Use only grounded hoses. • Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are anti-static or conductive. • Stop operation immediately if static sparking occurs or you feel a shock. Do not use equipment until you identify and correct the problem. • Keep a working fire extinguisher in the work area.
	EQUIPMENT MISUSE HAZARD Misuse can cause death or serious injury. • Do not operate the unit when fatigued or under the influence of drugs or alcohol. • 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. For complete information about your material, request Safety Data Sheet (SDS) from distributor or retailer. • Do not leave the work area while equipment is energized or under pressure. • Turn off all equipment and follow the Pressure Relief Procedure when equipment is not in use. • Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only. • Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards. • Make sure all equipment is rated and approved for the environment in which you are using it. • Use equipment only for its intended purpose. Call your distributor for information. • Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. • Do not kink or over bend hoses or use hoses to pull equipment. • Keep children and animals away from work area. • Comply with all applicable safety regulations.

WARNING



PERSONAL PROTECTIVE EQUIPMENT

Always wear appropriate personal protective equipment and cover all skin when spraying, servicing equipment, or when in the work area. Protective equipment helps prevent serious injury, including long-term exposure; inhalation of toxic fumes, mists or vapors; allergic reaction; burns; eye injury and hearing loss. This protective equipment includes but is not limited to:

- A properly fitting respirator, which may include a supplied-air respirator, chemically impermeable gloves, protective clothing and foot coverings as recommended by the fluid manufacturer and local regulatory authority.
- Protective eyewear and hearing protection.

Important Isocyanate (ISO) Information

Isocyanate Conditions

										
---	---	---	---	--	--	--	--	--	--	--

Spraying or dispensing fluids that contain isocyanates creates potentially harmful mists, vapors, and atomized particulates.

- Read and understand the fluid manufacturer's warnings and Safety Data Sheet (SDS) to know specific hazards and precautions related to isocyanates.
- Use of isocyanates involves potentially hazardous procedures. Do not spray with this equipment unless you are trained, qualified, and have read and understood the information in this manual and in the fluid manufacturer's application instructions and SDS.
- Use of incorrectly maintained or mis-adjusted equipment may result in improperly cured material which could cause off gassing and offensive odors. Equipment must be carefully maintained and adjusted according to instructions in the manual.
- To prevent inhalation of isocyanate mists, vapors and atomized particulates, everyone in the work area must wear appropriate respiratory protection. Always wear a properly fitting respirator, which may include a supplied-air respirator. Ventilate the work area according to instructions in the fluid manufacturer's SDS.
- Avoid all skin contact with isocyanates. Everyone in the work area must wear chemically impermeable gloves, protective clothing and foot coverings as recommended by the fluid manufacturer and local regulatory authority. Follow all fluid manufacturer recommendations, including those regarding handling of contaminated clothing. After spraying, wash hands and face before eating or drinking.
- Hazard from exposure to isocyanates continues after spraying. Anyone without appropriate personal protective equipment must stay out of the work area during application and after application for the time period specified by the fluid manufacturer. Generally this time period is at least 24 hours.
- Warn others who may enter work area of hazard from exposure to isocyanates. Follow the recommendations of the fluid manufacturer and local regulatory authority. Posting a placard such as the following outside the work area is recommended:

! WARNING



**TOXIC FUMES
HAZARD**

**DO NOT ENTER DURING
SPRAY FOAM APPLICATION
OR FOR ____ HOURS AFTER
APPLICATION IS COMPLETE**

DO NOT ENTER UNTIL:

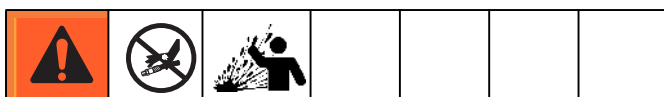
DATE: _____
TIME: _____

Material Self-ignition



Some materials may become self-igniting if applied too thick. Read material manufacturer's warnings and Safety Data Sheet (SDS).

Keep Components A and B Separate



Cross-contamination can result in cured material in fluid lines which could cause serious injury or damage equipment. To prevent cross-contamination:

- **Never** interchange component A and component B wetted parts.
- Never use solvent on one side if it has been contaminated from the other side.

Moisture Sensitivity of Isocyanates

Exposure to moisture (such as humidity) will cause ISO to partially cure, forming small, hard, abrasive crystal that become suspended in the fluid. Eventually a film will form on the surface and the ISO will begin to gel, increasing in viscosity.

NOTICE

Partially cured ISO will reduce performance and the life of all wetted parts.

- Always use a sealed container with a desiccant dryer in the vent, or a nitrogen atmosphere. **Never** store ISO in an open container.
- Keep the ISO pump wet cup or reservoir (if installed) filled with appropriate lubricant. The lubricant creates a barrier between the ISO and the atmosphere.
- Use only moisture-proof hoses compatible with ISO.
- Never use reclaimed solvents, which may contain moisture. Always keep solvent containers closed when not in use.
- Always lubricate threaded parts with an appropriate lubricant when reassembling.

NOTE: The amount of film formation and rate of crystallization varies depending on the blend of ISO, the humidity, and the temperature.

Foam Resins with 245 fa Blowing Agents

Some foam blowing agents will froth at temperatures above 90°F (33°C) when not under pressure, especially if agitated. To reduce frothing, minimize preheating in a circulation system.

Changing Materials

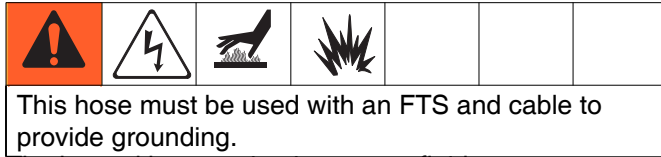
NOTICE

Changing the material types used in your equipment requires special attention to avoid equipment damage and downtime.

- When changing materials, flush the equipment multiple times to ensure it is thoroughly clean.
- Always clean the fluid inlet strainers after flushing.
- Check with your material manufacturer for chemical compatibility.
- When changing between epoxies and urethanes or polyureas, disassemble and clean all fluid components and change hoses. Epoxies often have amines on the B (hardener) side. Polyureas often have amines on the B (resin) side.

Installation

Description



Fluid hoses are marked with red tape for ISO/hardener/minor volume side, blue tape for RES/resin/major volume side. Fittings have different sized threads to prevent incorrect connection, which can cause fluid crossover and permanently damage the hose.

Hoses are 50 ft (15.2 m) or 25 ft (7.6 m) long. The whip hose is 10 ft (3 m) long or less.

NOTE: To heat the major volume hose only in a wide ratio system, see **15F144 Hose Wire Jumper**, page 30.

Connect Whip Hose to Gun or Gun Manifold

NOTE: Install hose in a helix configuration for:

- Easy gun movement
- Large spraying motion
- Ability to spray in tight areas and odd angles
- Reduced operator fatigue
- Maximum hose life

1. Overlap A and B component hoses and assemble to gun or gun manifold fittings as shown in FIG. 1.
2. Tighten fittings to A and B component hoses. Ensure hose remains flat after fittings are tightened. Loosen and retighten fittings as necessary to eliminate any torque on hoses. This will help achieve a flat profile on the hose.

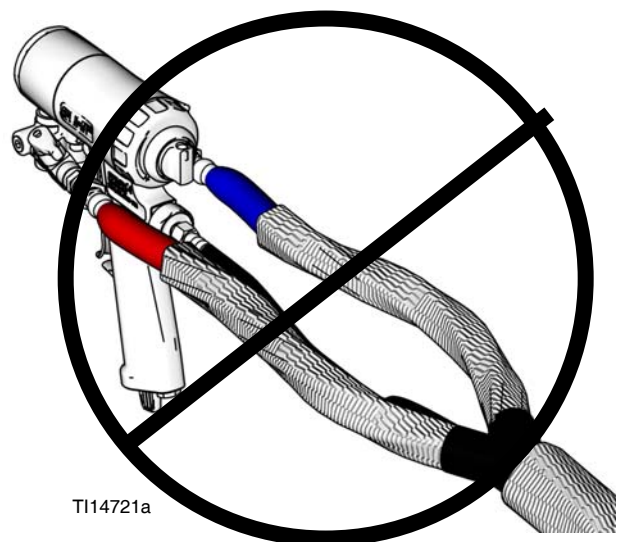
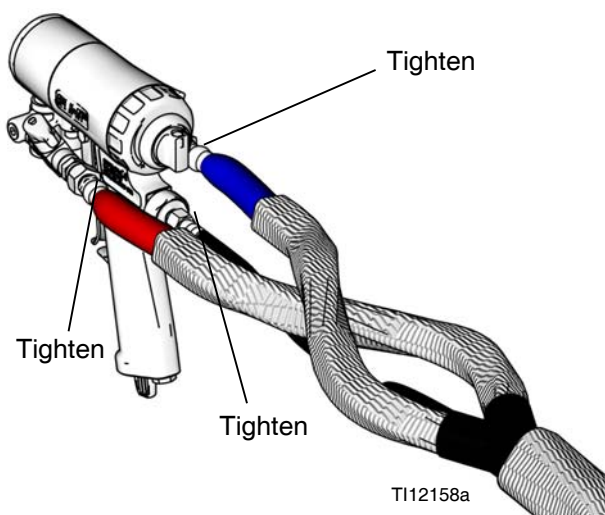


FIG. 1

Connect Heated Hoses



1. Lay heated hoses end to end, matching the color coding. Red for component A (ISO), blue for component B (RES).

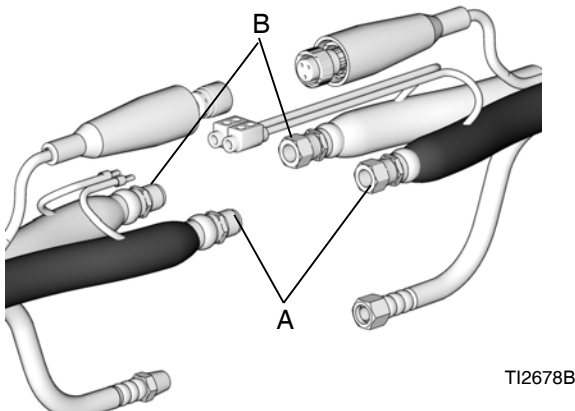


FIG. 2

2. Connect fluid hoses (1, 2) and tighten. See maximum torque specifications below and FIG. 3. Do not over-torque.

Torque 1/4 in. (6.4 mm) and 3/8 in. (9.5 mm) ID hoses to:

- A side to 14 ft-lb (19 N•m).
- B side to 20 ft-lb (27 N•m).

Torque 1/2 in. (13 mm) ID hoses to:

- A side to 43 ft-lb (58 N•m).
- B side to 55 ft-lb (74 N•m).

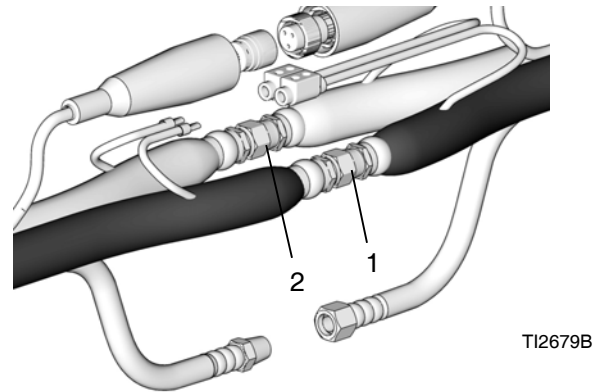


FIG. 3

NOTE: Some insulated heated hoses do not contain an air hose.

3. Connect air hoses (3).

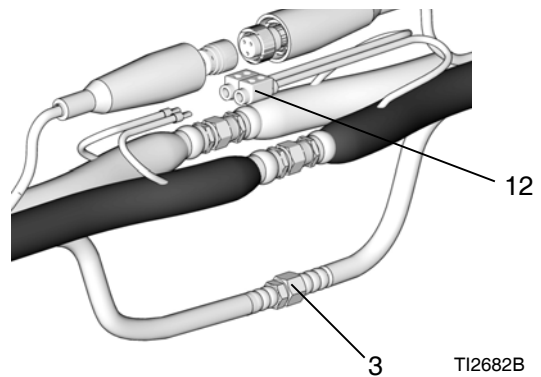


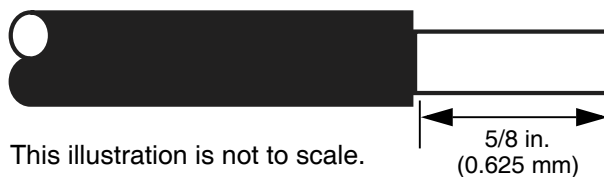
FIG. 4

4. Connect electrical wires.

NOTE: Newer hoses have a pre-crimped ferrule. If using a newer hose, skip to step 5.

- a. Ensure electrical wires ends are 5/8 in. (15.9 mm) long. If they are not, use a sharp scissors to strip all four wire ends to the correct length. See Strip Length Gauge for correct length.

Strip Length



T19733a

FIG. 5

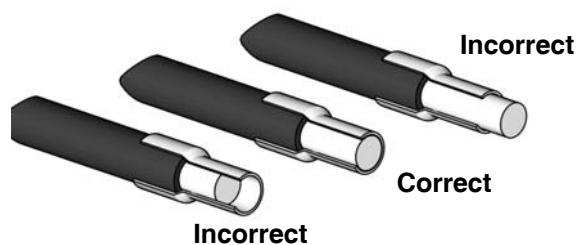
NOTE: Be careful not to cut or nick copper strands. If more than five strands are cut or nicked, trim wire and re-strip.

NOTE: New hoses are pre-stripped at correct length; remove insulation to expose bare wire.

- b. Ensure strip length is correct by fitting ferrule over exposed wire. Ferrule should be flush with wire end. See FIG. 6.

NOTE: On some older heated hoses wire insulation will not fit inside ferrule insulator. In these cases, use scissors to split and remove ferrule insulator.

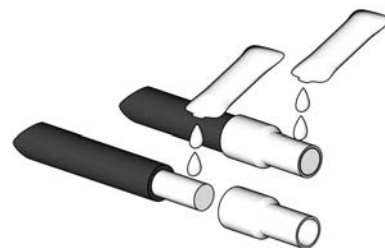
- c. If wire is short of ferrule end, adjust strip length accordingly. If bare wire is protruding from ferrule, trim flush to ferrule end. See FIG. 6.



T19768a

FIG. 6

- d. Remove ferrule and apply oxide inhibitor to bare wire. See FIG. 7.
- e. Reinsert wire in ferrule and apply more oxide inhibitor to ferrule and wire end.



T19769A

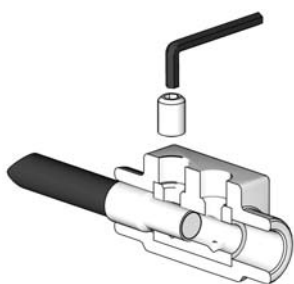
FIG. 7

5. Connect the hoses to each other. Pair electrical wires as follows: A-Hose to A-Hose; B-Hose to B-Hose.

NOTE: When connecting first hose section to proportioner, wire pairing does not make a difference.

NOTE: When connecting hose to the proportioner, always check the hoses for leaks (see page 21).

- a. Insert one wire from heated hose into connector. Ensure that ferrule is mating with connector insert. See FIG. 8.

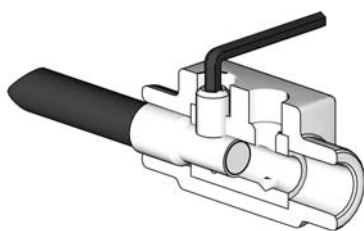


TI9770A

FIG. 8: Insert Wire and Setscrew

- b. Thread in setscrew and use hex wrench to torque setscrew to 60 in-lbs (6.78 N•m)

NOTE: To reach approximately 60 in-lbs (6.78 N•m), complete 4.5 revolutions with hex wrench after setscrew comes in contact with ferrule..



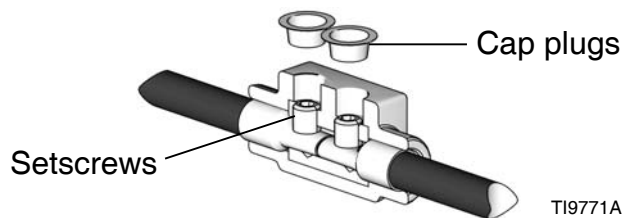
TI9779A

FIG. 9: Torque Setscrew

- c. Insert remaining wire from pair into connector; ensure proper insertion depth. Thread setscrew and torque to 60 in-lbs (6.78 N•m); see sub-step B. See FIG. 8 and FIG. 9.
- d. Repeat sub-steps A through C for remaining wire pair.
- e. Re-torque all four setscrews to 60 in-lbs (6.78 N•m).

NOTE: When torqued to 60 in-lbs (6.78 N•m) setscrews will be approximately flush with connector. See FIG. 10.

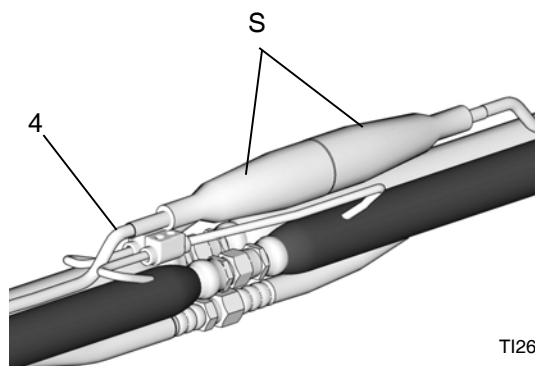
- f. Insert cap plugs over setscrews. See FIG. 10.



TI9771A

FIG. 10

- g. Wrap connector and wire on each side of connector in black electrical tape to help seal out moisture. Ensure 1 in. (25.4 mm) of wire on each side of connector is wrapped.
6. *For non-RTD hoses only*, connect thermocouple cables (4). Slide insulator sleeves (S) over connection. Leave slack in cables as stress relief to prevent cable failure.



TI2683B

FIG. 11

7. For RTD 2-component hoses only, connect RTD cables (4) and CAN cables (5) if present.

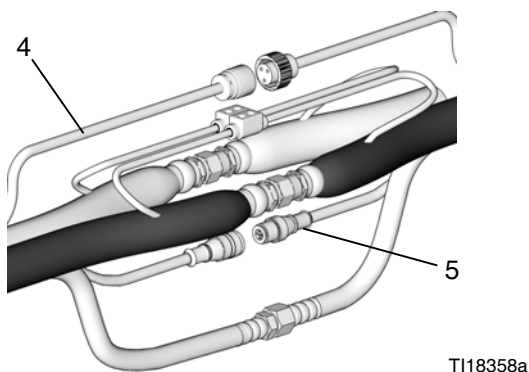


FIG. 12

8. Repeat for additional hoses.
9. See **Connect FTS and Heated Dual Whip Hose**, page 18, or **Connect FTS with a Non-Heated Whip Hose or Remote Mix Manifold**, page 20.

Connect FTS and Heated Dual Whip Hose

NOTICE

To prevent damage to probe, do not kink or excessively bend hose. Do not coil hose tighter than the minimum bend radius of 1.5 ft (0.5 m). Do not subject hose to excessive weight, impact, or other abuse.

NOTE: See FIG. 13 on page 19.

NOTE: For 1/2 in. (13 mm) ID fluid hoses only: Prior to connecting the FTS, remove the adapters from the proportioner fluid manifold and install them on the male ends of the hoses (1 and 2). Torque the A side hose to a maximum of 43 ft-lbs (58 N•m) and the B side hose to a maximum of 55 ft-lbs (74 N•m). Continue on to step 1.

1. Assemble JIC swivel fitting (5e) in female end of temp sensor (5a). Do not bend or kink probe. Torque connection to 14 ft-lbs (19 N•m). Do not over-torque. Assemble JIC swivel fitting (5d) into female end of B hose coupler (5b). Torque to a maximum of 20 ft-lbs (27 N•m). Do not over-torque.
2. Carefully inset FTS probe into the A hose (1) section from the proportioner. Do not bend or kink probe. Connect to A side whip (6a). Torque fitting connections to 14 ft-lbs (19 N•m). Do not over-torque.

NOTICE

To avoid damage to FTS sensor cable, rotate FTS body so the cable lays between both fluid hoses to protect it from abrasive damage during use.

3. Connect the B hose coupler to the B hose section (2) and B side whip (6b). Torque fitting connections to 20 ft-lbs (27 N•m). Do not over-torque.

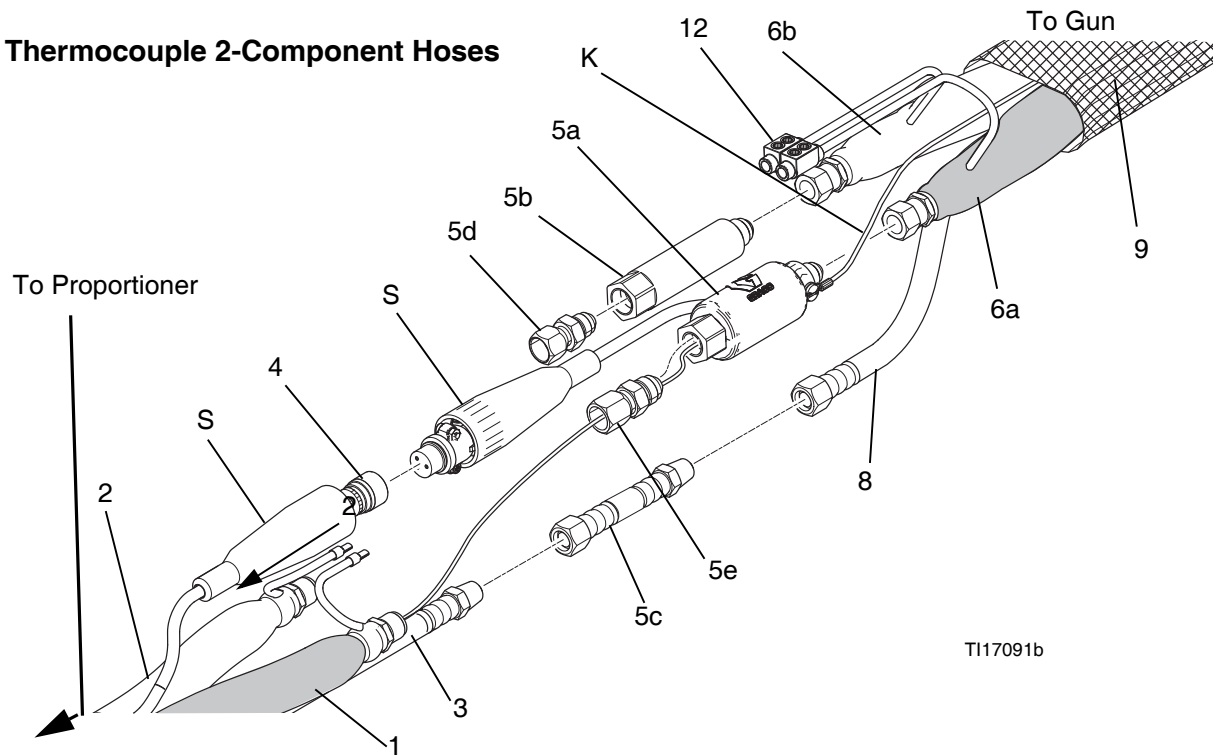
4. Connect ground wire (K) of whip hose to the ground screw on the FTS (5a).



NOTE: Whip hose ground wire (K) must be connected to the ground screw on the FTS (5a) in order to drain static from the gun. If the FTS is not directly connected to the whip hose, a hose that includes a separate ground wire must be used between the FTS and whip hose. Connect ground through a hose marked as not having the FTS cable selected from the “Standard 2 Component Hose” table in the front of this manual.

5. Connect the electrical connectors (12).
6. Connect the FTS air line coupler (5c) between air hoses (3 and 8).
7. Connect the sensor cable of the hose (4) to the sensor cable of the FTS (5a). For non-RTD hoses, slide the insulator sleeves (S) over the connection. Leave slack in the cables to provide stress relief and to prevent cable failure or errors.
8. See **Connect Hoses to Proportioner**, page 21.
9. Cover the FTS and spacer with split foam (provided) and tape closed.

Non-RTD Thermocouple 2-Component Hoses



RTD 2-Component Hoses

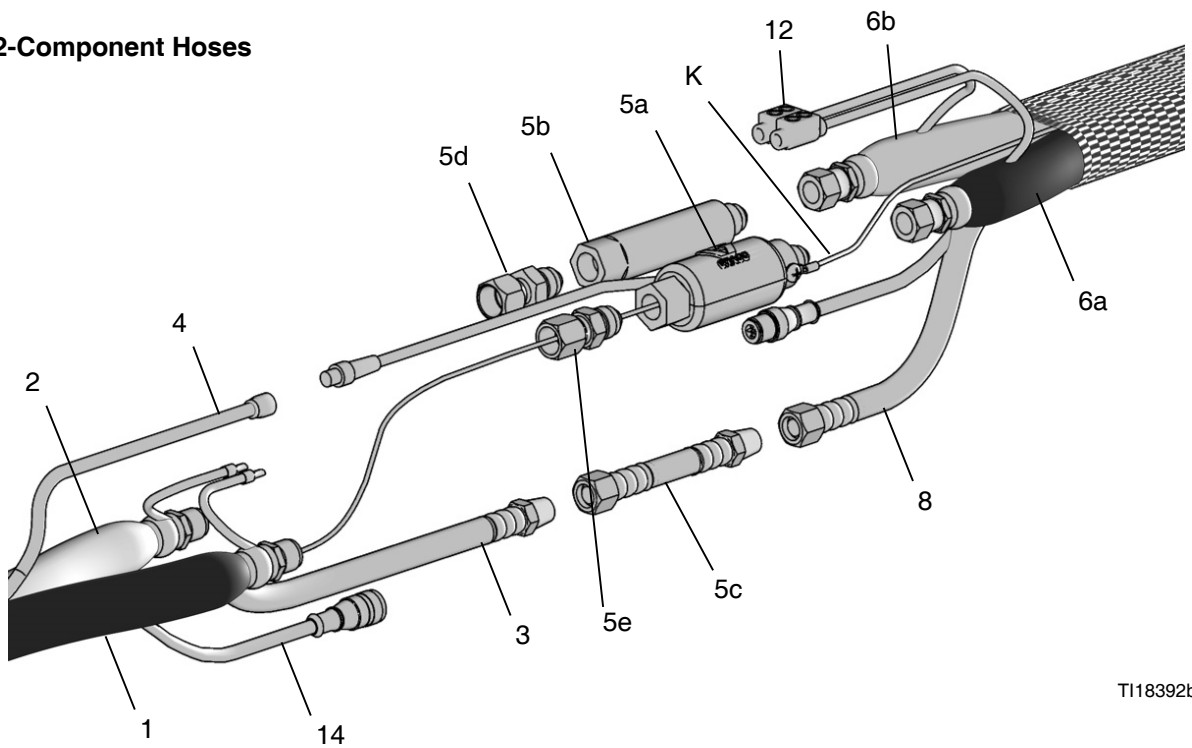


FIG. 13

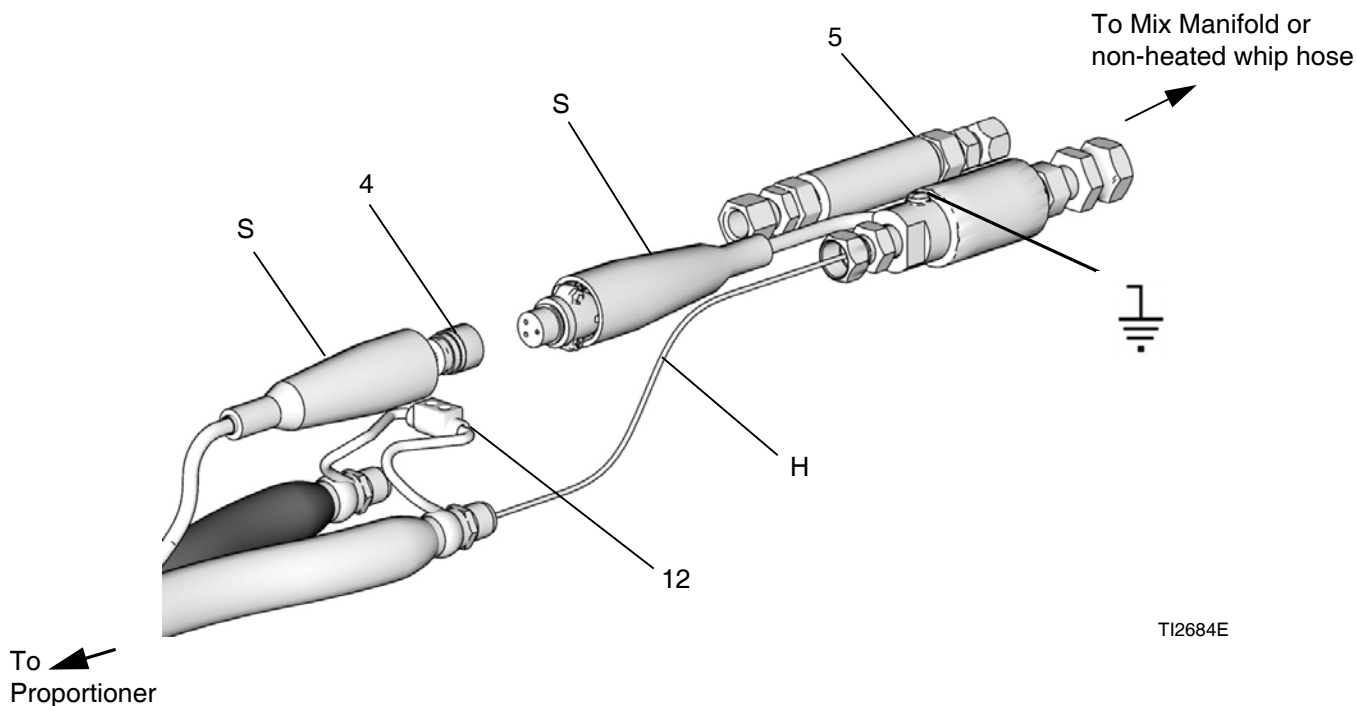
Connect FTS with a Non-Heated Whip Hose or Remote Mix Manifold

NOTICE

To prevent damage to probe, do not kink or excessively bend hose. Do not coil hose tighter than the minimum bend radius of 1.5 ft (0.5 m). Do not subject hose to excessive weight, impact, or other abuse.

1. Carefully extend FTS probe (H) into the hose section from the proportioner. Do not bend or kink probe. **Insert probe in major volume (resin) side on systems which are not 1:1 mix ratio.**
2. Connect FTS (5) to mating assembly.
3. Connect fluid hoses to FTS.

NOTE: To use 1/2 in. (13 mm) ID fluid hoses, remove the adapters from the proportioner fluid manifold and install them in the FTS swivel inlets.
4. Install one connector (12) between wires. Refer to page 14 for instructions.
5. Connect hose assembly cable (4) to FTS cable (part of 5). Slide insulator sleeves (S) over connection. Leave slack in cables as stress relief, to prevent cable failure.
6. Connect appropriate ground wire.
7. See **Connect Hoses to Proportioner**, page 21.



TI2684E

Connect Hoses to Proportioner

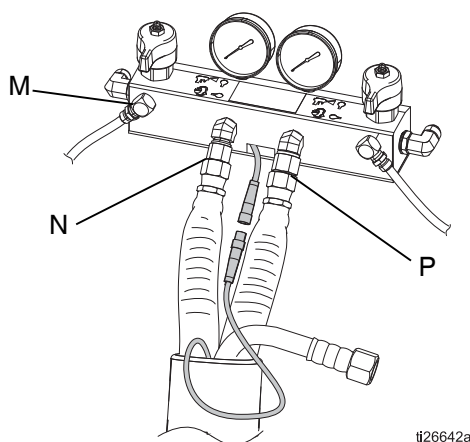
1. Grease with Fusion[®] grease and connect fluid hoses to proportioner fluid manifold (M). Red for hardener (ISO), blue for resin (RES).

NOTE: The manifold hose adapters (N, P) allow use of 1/4 in. (6.4 mm). and 3/8 in. (9.5 mm) ID fluid hoses. To check adapter tightness, torque 1/4 in. and 3/8 in. ID hoses to:

- A side (N) to 14 ft-lb (19 N•m).
- B side (P) to 20 ft-lb (27 N•m).

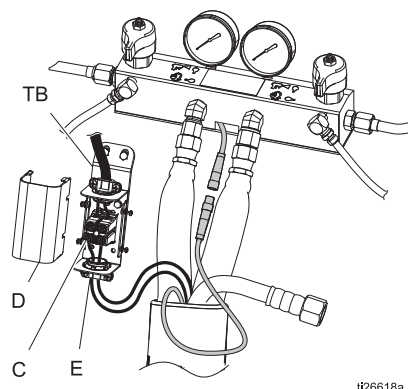
To use 1/2 in. (13 mm) ID fluid hoses, remove the adapters (N, P) from the proportioner fluid manifold and install them in the FTS or 3/8 in. ID hose inlets. Torque 1/2 in. ID hoses to:

- A side (N) to 43 ft-lb (58 N•m).
- B side (P) to 55 ft-lb (74 N•m).

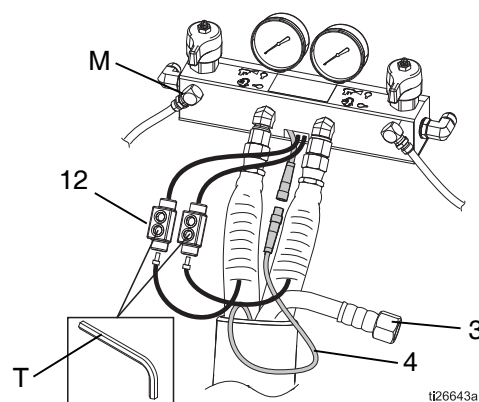


NOTE: For proportioners with termination box (TB), follow step 2, For proportioners with electrical splice connectors (12) follow step 3.

2. Connect hose power wires to terminal block (C) on termination box (TB). Remove box cover (D) and loosen lower strain relief (E). Route wires through strain relief and fully insert into terminal block (A and B hose wire positions are not important). Torque terminal connector screws (C) to 26-30 in-lb (2.9-3.3 N•m). Fully tighten strain relief screws and replace cover.



3. Connect hose power wires to electrical splice connectors (12) from proportioner or accessory control box. See **Connect Heated Hoses**, page 14, step 5. Connect FTS hose cable (4) to cable from proportioner or accessory control box. Wrap connections with electrical tape.



4. Connect FTS cable connectors. Fully tighten RTD connectors, if provided.

If thermocouple (non-RTD) FTS connectors are provided, fully tighten connectors and slide connector covers over the joint.

5. Check that all equipment is properly grounded. See proportioner manual.

Fluid Temperature Sensor (FTS) Calibration (Non-RTD Versions)

NOTE: Calibrate the FTS **ONLY** at initial startup (the first time the unit is operated) and any time the hose length changes.

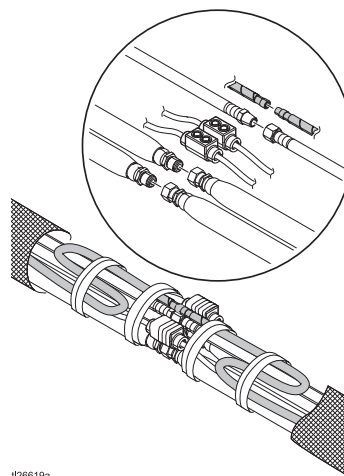
1. Before turning on the unit, ensure all hoses and cables are properly connected. To ensure that the FTS in the hose is at the same temperature as the heaters, keep heat off and store the hose FTS near the machine for several minutes.
2. While holding down the temperature unit button (Fahrenheit - "F" or Celsius - "C") turn the proportioner main power ON.
3. Hold the temperature unit button until temperature is shown on the display. The fluid temperature sensor is now correctly calibrated.

Check Hoses for Leaks

1. Pressure check hose. See proportioner manual for priming instructions.
2. After all lines are free of air, check for leaks. If there are leaks, relieve pressure as instructed in proportioner manual.
3. Tighten connections, then pressurize again to ensure leaks have stopped. Relieve pressure.

Protective Covering

1. Wrap **all** fluid hose connections with electrical tape.
2. Fold FTS cable wire back on hose to ensure adequate strain relief. Wrap **all** electrical connections and cable connections with electrical tape to protect them from pulling apart and abrasion.



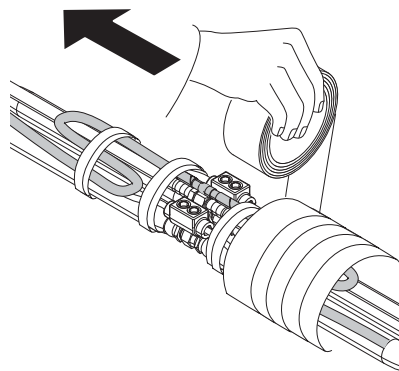
1126619a

FIG. 14

NOTE: Leave CAN cable connector (if used) accessible at whip hose joint for connector to the Remote Display Module Kit (if ordered).

For Non-scuffed Hoses:

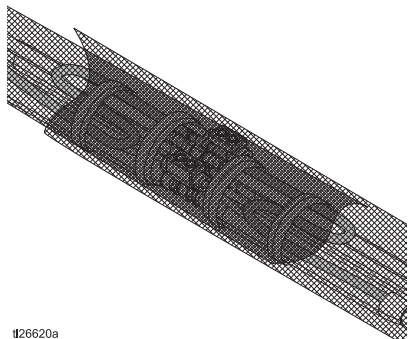
3. Install protective cover (see **Accessories**, page 32), or wrap hose bundle with duct tape to protect foam.



1126620b

FIG. 15

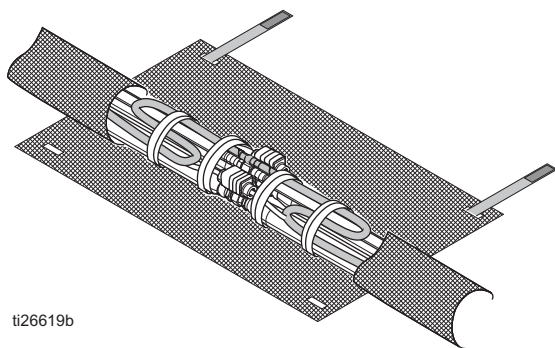
4. For hoses that include the standard braided protective scuff cover, unroll excess cover over hose and electrical connections. Tape securely.



ti26620a

FIG. 16

5. For hoses that include Xtreme-Wrap protective scuff, lay the protector flat and center over the joint. With the straps on each side secured, wrap the sleeve over the joint.



ti26619b

FIG. 17

Operation



Do not operate a coiled hose. A coiled hose creates uneven heat buildup which can result in hose rupture and cause serious injury, including fluid injection.

Maximum hose operating temperature is 180°F (82°C). If using hose without an FTS, measure hose temperature to ensure it does not exceed 180°F (82°C).

Hose must be properly supported to avoid excessive strain due to weight, bending, sharp edges, or stress caused by running over a roof edge.

Fluids subjected to heat in confined spaces, including hoses, can create a rapid rise in pressure due to the thermal expansion. Over-pressurization can result in equipment rupture and serious injury.

- Open a valve to relieve the fluid expansion during heating.
- Replace hoses proactively at regular intervals based on your operating conditions.

1. Connect air hose (3) to main air supply, if equipped.
2. Connect to spray gun.

NOTE: For best handling of gun, see page 13 for proper hose connection.

3. Connect whip air hose to gun air inlet if equipped. See gun manual.
4. Follow setup, startup, and operation procedures in proportioner manual.

Maintenance



1. Before disconnecting or repairing hoses, relieve all fluid pressure and shut off electrical power to proportioner. See proportioner operation manual.
2. Be sure fluid is cool before disconnecting hoses.

Instructions for Replacing Individual A or B Hose

Before disconnecting hoses, relieve all fluid pressure and shut off electrical power to proportioner. See proportioner operation manual.

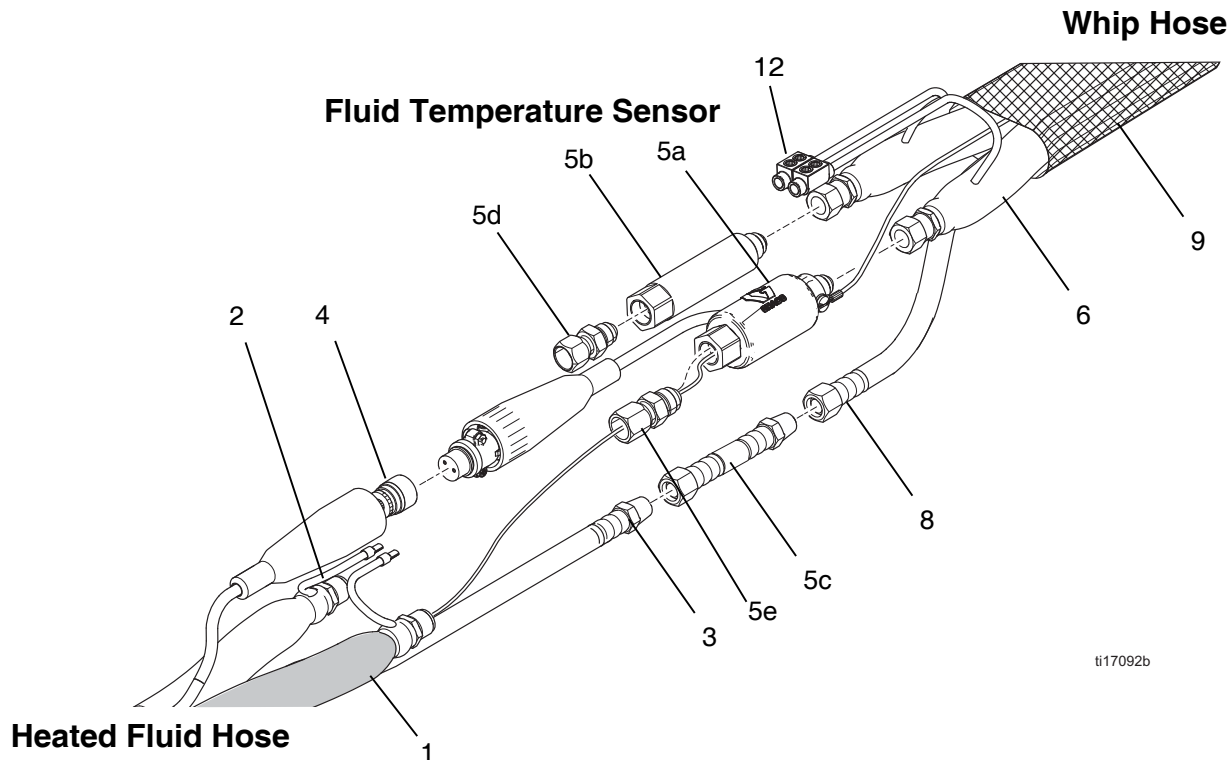
Disconnect electrical wire from connectors (12).
Disconnect fluid hose and remove from bundle.

Install new hose in bundle, wrapping around other fluid hose and air hose. Connect fluid hoses, see page 14.

Wrap all connections with electrical tape, see page 22.

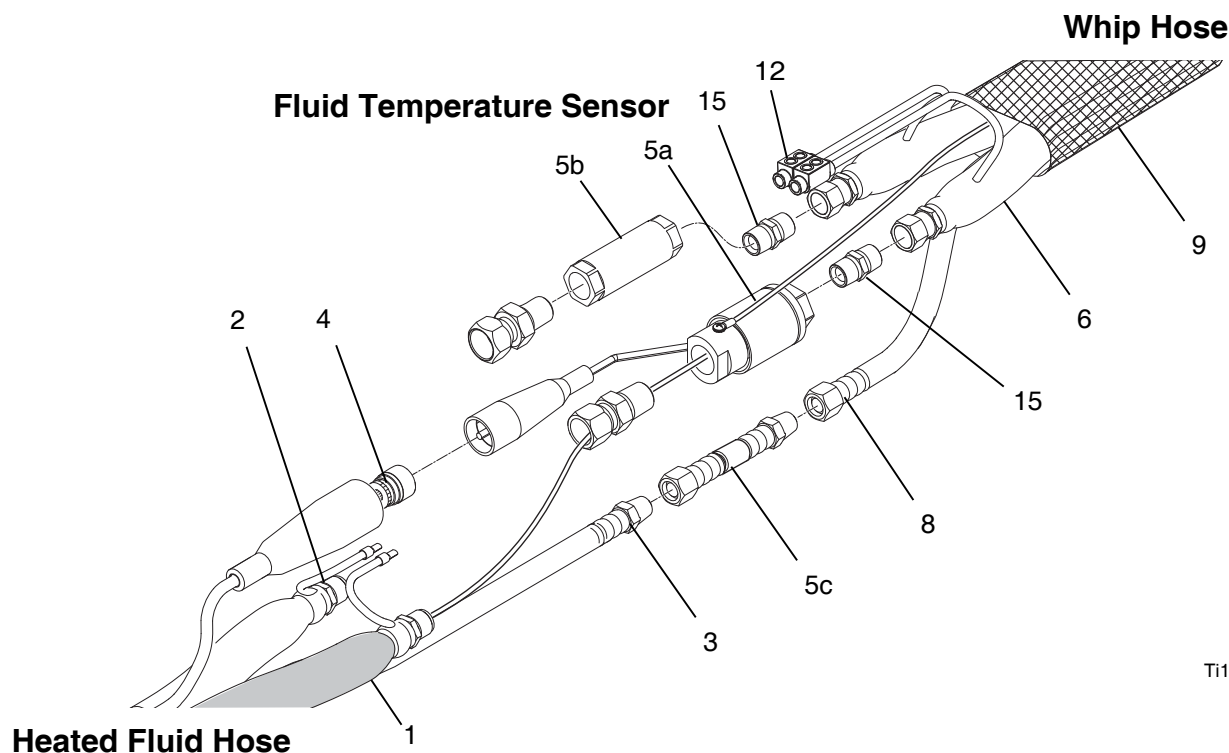
Parts

Using 261669 Fluid Temperature Sensor (JIC to JIC fittings)



Ref. Part	Description	Qty	Ref. Part	Description	Qty
1	----- HOSE, component A (ISO); see tables starting on page 5	1	6	----- HOSE, whip; see Whip Hoses , page 3	1
2	----- HOSE, component B (RES); see tables starting on page 5	1	8	15B280 HOSE, whip, air; 10 ft (3 m)	1
3	15B295 HOSE, air; 50 ft (15.2 m)	1	9	----- SCUFF GUARD; included on some hoses, see Accessories on page 32	1
4	24J523 CABLE, FTS; 50 ft (15.2 m)	1	12	261821 CONNECTOR, electrical; on main hose sections	1
5	24J524 CABLE, FTS; 25 ft (7.6 m)	1	13▲	15B679 LABEL, safety, English; not shown	1
5	261669 KIT, FTS, coupler	1	▲	16M219 LABEL, safety, Spanish/French; not shown	1
5a	----- SENSOR, fluid temperature; -5 JIC	1	▲ <i>Replacement Danger and Warning labels, tags, and cards are available at no cost.</i>		
5b	----- FITTING, FTS coupler; -6 JIC	1			
5c	24V454 HOSE, air; 4.75 in. (120.65 mm)	1			
5d	127596 FITTING, swivel; -6 JIC x -6 JIC, mxf	1			
5e	127597 FITTING, swivel; -5 JIC x -5 JIC, mxf	1			

Using 24M943 Fluid Temperature Sensor (NPT to NPT fittings)



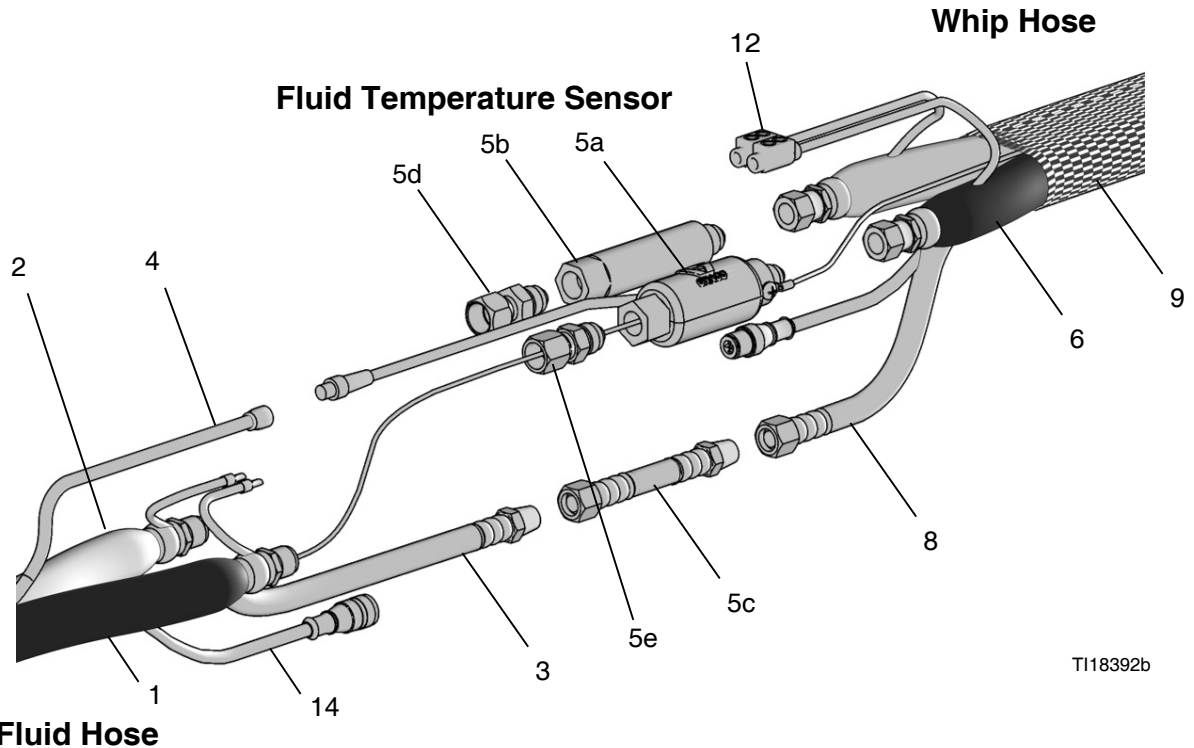
Ti19091b

Ref. Part	Description	Qty
1 -----	HOSE, component A (ISO); see tables starting on page 5	1
2 -----	HOSE, component B (RES); see tables starting on page 5	1
3 15B295	HOSE, air; 50 ft (15.2 m)	1
24F179	HOSE, air; 25 ft (7.6 m)	1
4 24J523	CABLE, FTS; 50 ft (15.2 m)	1
24J524	CABLE, FTS; 25 ft (7.6 m)	1
5 24M943	KIT, FTS, coupler	1
5a -----	SENSOR, fluid temperature; 1/2 npt	1
5b -----	FITTING, FTS coupler; (1/2 npt(f))	1
5c -----	HOSE, air; 3.75 in. (95.3 mm)	-
6 -----	HOSE, whip; see Whip Hoses , page 3	1
8 15B280	HOSE, whip, air; 10 ft (3 m)	1
9	SCUFF GUARD; included on some hoses; see Accessories on page 32	1
12 261821	CONNECTOR, electrical; on main hose sections	1
13▲ 15B679	LABEL, safety, English; not shown	1
▲ 16M219	LABEL, safety, Spanish/French; not shown	1
15★ -----	CONNECTOR, manifold	4

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

★ Not included. Order connector fittings that connect to the A and B component hoses. See **Adapter Fittings**, page 3.

Using 24K207 RTD 2-Component Hose Fluid Temperature Sensor (JIC to JIC fittings)



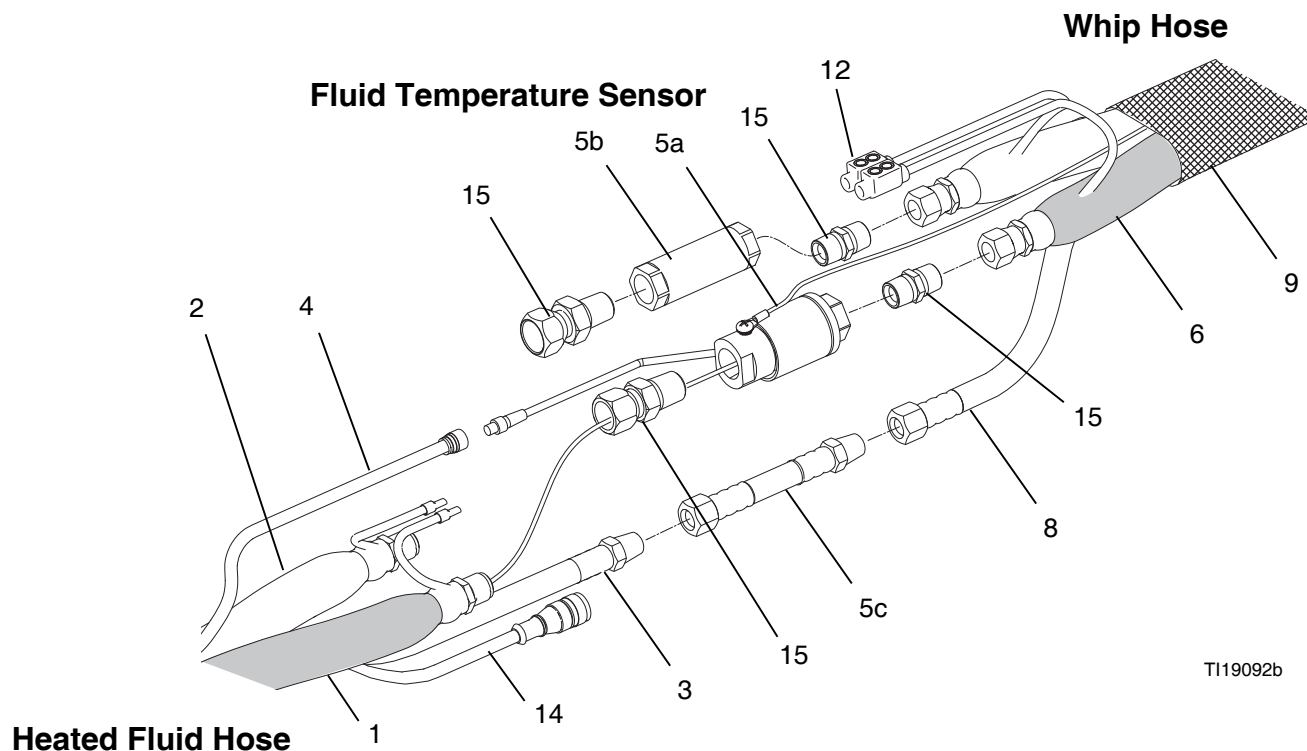
T118392b

Ref. Part	Description	Qty	Ref. Part	Description	Qty
1	HOSE, component A (ISO); see tables starting on page 5	1	6	HOSE, whip; see Whip Hoses , page 3	1
2	HOSE, component B (RES); see tables starting on page 5	1	8	15B280 HOSE, whip, air; 10 ft (3 m)	1
3	15B295 HOSE, air; 50 ft (15.2 m)	1	9	SCUFF GUARD; included on some hoses, see Accessories on page 32	1
4	24N450 CABLE, RTD; 50 ft (15.2 m)	1	12	261821 CONNECTOR, electrical; on main hose sections	1
5	24K207 KIT, FTS, coupler	1	13▲	15B679 LABEL, safety, English; not shown	1
5a	SENSOR, FTS-RTD	1	▲	16M219 LABEL, safety, Spanish/French; not shown	1
5b	COUPLER	1	14*	24N449 CABLE, CAN; 50 ft (15.2 m)	1
5c	24V454 HOSE, air; 4.75 in. (120.65 mm)	1			
5d	127596 FITTING, swivel; -6 JIC x -6 JIC, mxf	1			
5e	127597 FITTING, swivel; -5 JIC x -5 JIC, mxf	1			

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

* Included only in hoses with CAN cable. See **RTD 2-Component Hose (for use with GCA Controlled Reactors)**, page 6.

Using 24M944 RTD 2-Component Hose Fluid Temperature Sensor (NPT to NPT fittings)



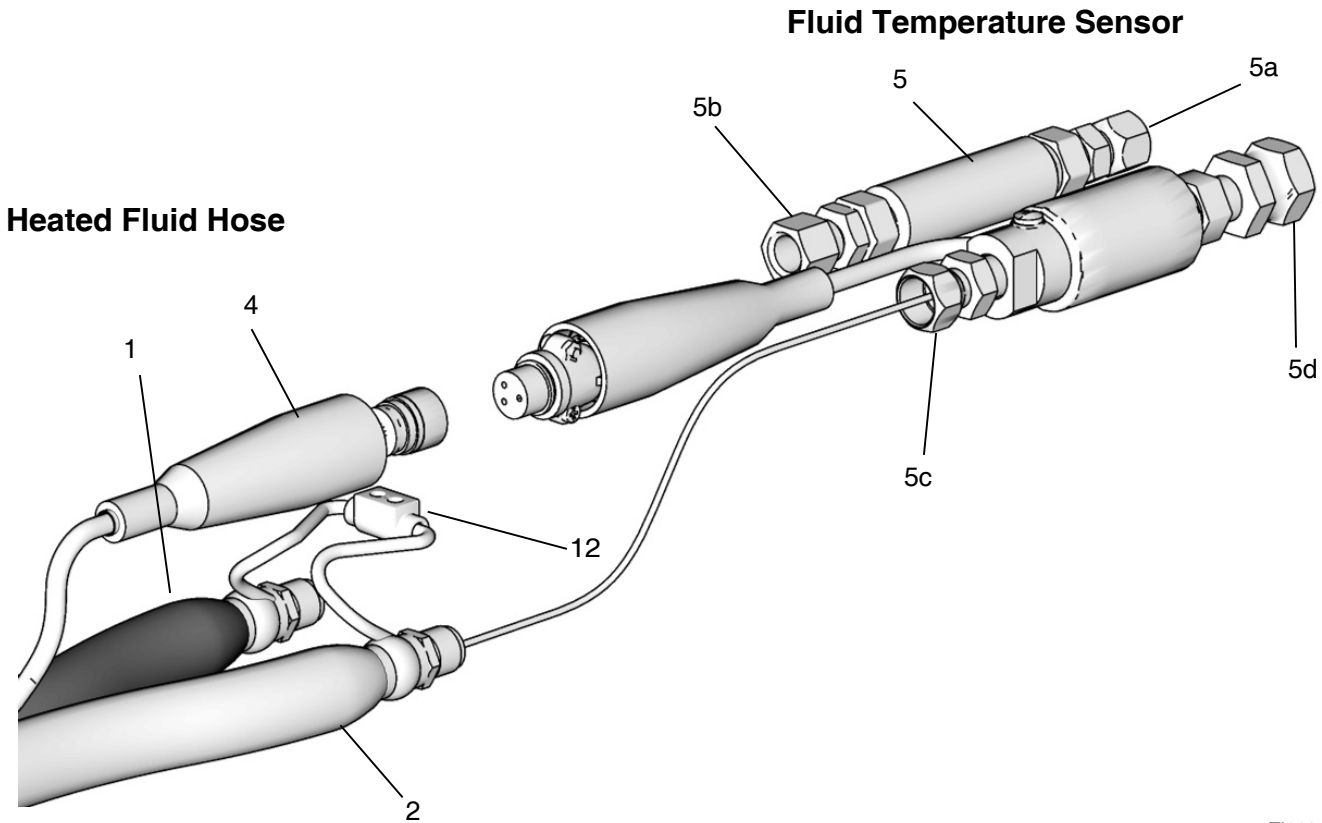
Ref. Part	Description	Qty	Ref. Part	Description	Qty
1	----- HOSE, component A (ISO); see tables starting on page 5	1	8	15B280 HOSE, whip, air; 10 ft (3 m)	1
2	----- HOSE, component B (RES); see tables starting on page 5	1	9	----- SCUFF GUARD; included on some hoses, see Accessories on page 32	1
3	15B295 HOSE, air; 50 ft (15.2 m)	1	12	261821 CONNECTOR, electrical; on main hose sections	1
4	24N450 CABLE, RTD; 50 ft (15.2 m)	1	13▲	15B679 LABEL, safety, English; not shown	1
5	24M944 KIT, FTS, coupler	1	▲ 16M219	LABEL, safety, Spanish/French; not shown	1
5a	----- SENSOR, FTS-RTD	1	14*	24N449 CABLE, CAN; 50 ft (15.2 m)	1
5b	----- COUPLER	1	15★	----- CONNECTOR, manifold	4
5c	----- HOSE, air; 3.75 in. (95.3 mm)	-			
6	----- HOSE, whip; see Whip Hoses , page 3	1			

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

* Included only in hoses with CAN cable. See **RTD 2-Component Hose (for use with GCA Controlled Reactors)**, page 6.

★ Not included. Order connector fittings that connect to the A and B component hoses. See **Adapter Fittings**, page 3.

Using 261670 Fluid Temperature Sensor (JIC to NPT fittings)



TI2684E

Ref.	Part	Description	Qty	Ref.	Part	Description	Qty
1	-----	HOSE, component A (ISO); see tables starting on page 5	1	5c	117506	. SWIVEL; 1/4 npt(m) x -6 JIC (f)	1
2	-----	HOSE, component B (RES); see tables starting on page 5	1	5d	157705	. SWIVEL; 1/4 npt(m) x 3/8 npsm	1
4	24J523	CABLE, FTS; 50 ft (15.2 m)	1	12	261821	CONNECTOR, electrical; on main hose sections	1
	24J524	CABLE, FTS; 25 ft (7.6 m)	1	13▲	15B679	LABEL, safety, English; not shown	1
5	261670	FLUID TEMPERATURE SENSOR; includes items 5a-5d	1	▲	16M219	LABEL, safety, French/Spanish; not shown	1
5a	156823	SWIVEL; 1/4 npt (m x 1/4 npsm	1	▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.			
5b	117595	SWIVEL; 1/4 npt(m) x -5 JIC (f)	1				

15F144 Hose Wire Jumper

Use the 15F144 Hose Wire Jumper to heat only the major volume hose, in a wide ratio system.

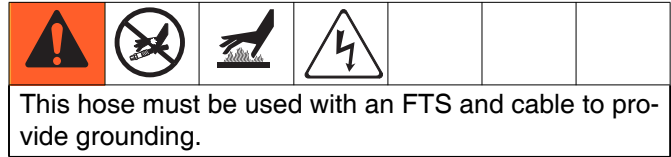
To build one complete 50 ft single side heated hose bundle, order the following parts:

Ref.	Part	Description	Qty.
100	15F144	JUMPER, hose wire	1
101		HOSE, resin, heated; 50 ft (15.2 m) minimum; see tables starting on page 5	1
102	24J523	CABLE, FTS	1
104	261670	FLUID TEMPERATURE SENSOR; see page 25	1
105	*	HOSE, hardener, unheated; 50 ft (15.2 m) minimum; customer supplied	1
106	*	CONNECTORS, fluid; as required to complete assembly; not shown	†

* Purchase locally.

† As required.

Installation:

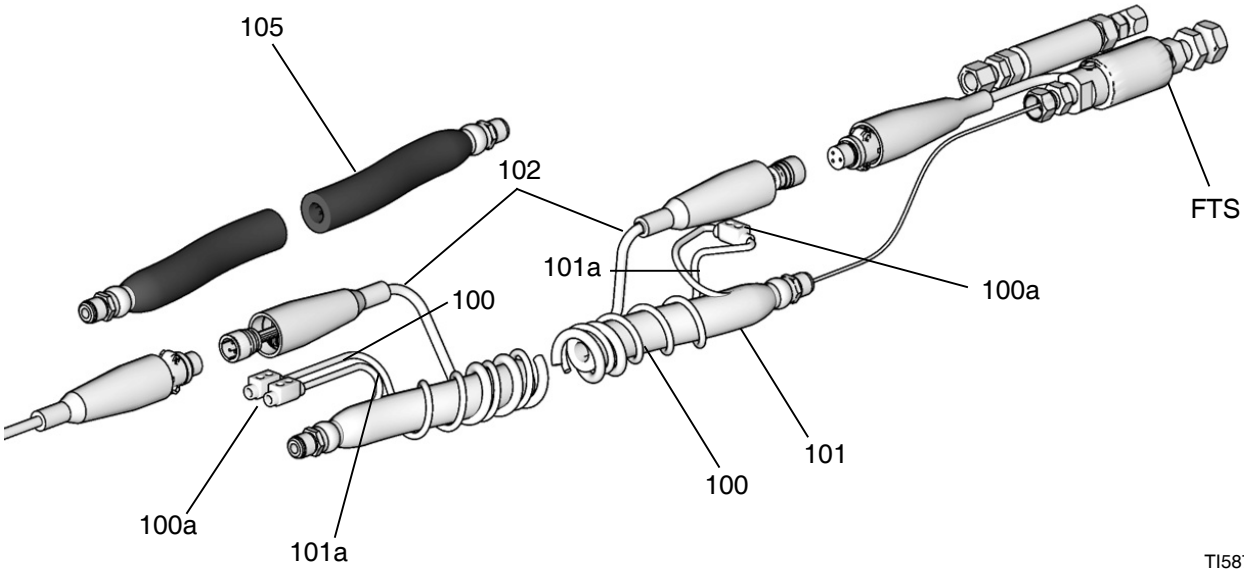


1. Wrap hose wire jumper (100) around resin hose (101) in a spiral fashion.
2. Connect resin hose wire (101a) to other side of Power-Lock connector (100a); see page 14.
3. Wrap FTS cable (102) around resin hose (101) in a spiral fashion.
4. Twist hoses (101 and 105) together to provide strain relief.
5. Repeat steps 1-4 for each length of hose (101). Connect hoses, electrical connectors, and cables; see **Connect Heated Hoses**, page 14.
6. Install one -Lock connector (100a) between wires; see page 14.
7. **Connect FTS with a Non-Heated Whip Hose or Remote Mix Manifold**, page 20.
8. Install whip hose and gun. Ensure that gun is grounded.
9. Connect hoses to proportioner.
10. Insulate and protect hoses. See **Protective Covering**, page 22.

NOTE: Some previous models include transformers with tap settings.

Set transformer wire taps, using the following table. Transformer tap wire connections vary depending on length of heated hose. See proportioner operation manual for further information. Verify that tap wire connections are correct.

Single Side Heated Hose Length, ft (m)	Tap Terminal Label (ft)
50 (15.2)	50
100 (30.5)	50
150 (45.7)	100
200 (61.0)	100
250 (76.2)	150
300 (91.5)	150
350 (106.8)	200
400 (122.0)	200



TI5872D

Accessories

Scuff Guard / Protective Cover

Use to keep hose clean and protect it from damage.

Part	Description
246077	7 ft (2.1 m) braided polyester mesh. For whip hose. Fold back over itself for easy installation.
246805	25 ft (7.6 m) braided polyester mesh. Fold back over itself for easy installation.
246078	50 ft (15.2 m) braided polyester mesh. Fold back over itself for easy installation.
246456	50 ft (15.2 m) polyethylene bag. Inflate with air for easy installation.
25M494	Xtreme-Wrap abrasion-resistant sleeve for 10 ft (3.0 m) whip hose
17E473	Xtreme-Wrap abrasion-resistant sleeve for 20 ft (6.1 m) whip hose
25M493	Xtreme-Wrap abrasion-resistant sleeve for 50 ft (15.2 m) hoses
25M495	3 ft (0.9 m) Joint Cover

Technical Specifications

Power-Lock Heated Hose		
	US	Metric
Maximum Air Working Pressure	130 psi	0.9 MPa, 9 bar
Maximum Fluid Operating Temperature	180°F	82°C
Wetted Parts	Nylon, Zinc-Plated Carbon Steel, 303 Stainless Steel, PTFE	
Total Heating Load (2 Hoses)		
1/4 in. diameter:	11 watts/foot	36 watts/meter
3/8 in. diameter:	13 watts/foot	43 watts/meter
1/2 in. diameter:	15 watts/foot	49 watts/meter
Whip Hose Maximum Fluid Working Pressure		
246050*, 26C042, 25P770*, 25P771*	2000 psi	14 MPa, 138 bar
246055*, 26C043, 25P772*, 25P773*	3500 psi	24 MPa, 241 bar
246056	3500 psi	24 MPa, 241 bar
249586	2000 psi	14 MPa, 138 bar
258701	5000 psi	35 MPa, 345 bar
Standard 2 Component Hose Maximum Fluid Working Pressure		
246045	2000 psi	14 MPa, 138 bar
246046	2000 psi	14 MPa, 138 bar
246047	2000 psi	14 MPa, 138 bar
246048	2000 psi	14 MPa, 138 bar
246049	2000 psi	14 MPa, 138 bar
246052	3500 psi	24 MPa, 241 bar
246053	3500 psi	24 MPa, 241 bar
246054	3500 psi	24 MPa, 241 bar
246074	2000 psi	14 MPa, 138 bar
246075	2000 psi	14 MPa, 138 bar
246076	2000 psi	14 MPa, 138 bar
246678	2000 psi	14 MPa, 138 bar
246679	3500 psi	24 MPa, 241 bar
249587	2000 psi	14 MPa, 138 bar
249588	3500 psi	24 MPa, 241 bar
256548	3500 psi	24 MPa, 241 bar
256549	2000 psi	14 MPa, 138 bar
261328	2000 psi	14 MPa, 138 bar
261332	5000 psi	35 MPa, 345 bar
261335	3500 psi	24 MPa, 241 bar
262203	5000 psi	35 MPa, 345 bar
24Y549*	2000 psi	14 MPa, 138 bar
24Y678*	2000 psi	14 MPa, 138 bar
24Y679*	3500 psi	24 MPa, 241 bar
26C193	3500 psi	24 MPa, 241 bar

Power-Lock Heated Hose		
	US	Metric
RTD 2 Component Hose (For GCA Reactors) Maximum Fluid Working Pressure		
24K240	2000 psi	14 MPa, 138 bar
24K241	3500 psi	24 MPa, 241 bar
24K394	2000 psi	14 MPa, 138 bar
24K395	3500 psi	24 MPa, 241 bar
24N000	2000 psi	14 MPa, 138 bar
24N001	2000 psi	14 MPa, 138 bar
24N002	3500 psi	24 MPa, 241 bar
24N003	3500 psi	24 MPa, 241 bar
24T839	2000 psi	14 MPa, 138 bar
24U743	3500 psi	24 MPa, 241 bar
24Y240*	2000 psi	14 MPa, 138 bar
24Y241*	3500 psi	24 MPa, 241 bar
24Y394*	2000 psi	14 MPa, 138 bar
24Y395*	3500 psi	24 MPa, 241 bar
Airless 2 Component Hose Maximum Fluid Working Pressure		
248907	5000 psi	35 MPa, 345 bar
248908	5000 psi	35 MPa, 345 bar
262727	5000 psi	35 MPa, 345 bar
262728	5000 psi	35 MPa, 345 bar
262730	5000 psi	35 MPa, 345 bar
Custom Application 2 Component Hose Maximum Fluid Working Pressure		
247164	3500 psi	24 MPa, 241 bar
255089	2000 psi	14 MPa, 138 bar
261336	3500 psi	24 MPa, 241 bar
261337	3500 psi	24 MPa, 241 bar
24N524	3500 psi	24 MPa, 241 bar
25A481	3500 psi	24 MPa, 241 bar
25A482	2000 psi	14 MPa, 138 bar
25A483	3500 psi	24 MPa, 241 bar
25A484	3500 psi	24 MPa, 241 bar
25A485	3500 psi	24 MPa, 241 bar
FTS Maximum Fluid Working Pressure		
261669	5000 psi	35 MPa, 345 bar
261670	5000 psi	35 MPa, 345 bar
24M943	7250 psi	50 MPa, 500 bar
FTS (For GCA Systems) Maximum Fluid Working Pressure		
24K207	5000 psi	35 MPa, 345 bar
24M944	7250 psi	50 MPa, 500 bar

* Includes the Xtreme-Wrap Scuff Guard.



A series of horizontal lines for writing, consisting of 25 lines in total. The first line is purple, and the remaining 24 lines are black.

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is 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.

FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Information

For the latest information about Graco products, visit www.graco.com.

For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6921 or Toll Free: 1-800-328-0211 Fax: 612-378-3505

*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.*

Original instructions. This manual contains English. MM 309572

Graco Headquarters: Minneapolis

International Offices: Belgium, China, Japan, Korea

GRACO INC. AND SUBSIDIARIES • P.O. BOX 1441 • MINNEAPOLIS MN 55440-1441 • USA

Copyright 2020, Graco Inc. All Graco manufacturing locations are registered to ISO 9001.

www.graco.com

Revision ZAP, January 2020