PROVEN QUALITY. LEADING TECHNOLOGY.

Displacement Pump

For professional use only.

3300 psi (22.7 MPa, 227 bar) Maximum Working Pressure

Model 16X414, Series A UltraMax II and Ultimate MX II 695/795 **GMAX II 3900**

Model 16X418, Series A TexSpray Mark IV

Model 16X419, Series A UltraMax II and Ultimate MX II 1095/1595 **GMAX II 5900**

Model 16X420, Series A UltraMax II and Ultimate MX II 1095/1595 IronMan GMAX 5900 IronMan

Model 16X421, Series A TexSpray Mark V and 5900 HD

Model 16Y602, Series A TexSpray Mark VII

Model 16X426, Series A **GMAX II 7900**

Model 16X427, Series A TexSpray Mark X and 7900HD

Model 16Y599, Series A TexSpray Mark V and IronMan

Model 17N693, Series A APX 6200 (MaxLife)

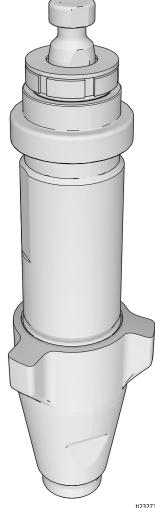
Model 17R044, Series A APX 6200 (Chrome)

Model 17N694, Series A APX 8200 (MaxLife)

Model 17R042, Series A APX 8200 (Chrome)

Important Safety Instructions

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





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Contents

Parts - Pump 16X420, 16Y59913
Parts - Pump 16X419, 16X421, 16Y602
Parts - Pump 16X426, 16X427 15
Parts - Pump 17N693, 17R044 16
Parts - Pump 17N694, 17R042 17
Notes
Technical Data 19
Graco Standard Warranty

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 symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, 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
 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. For complete information about your material, request MSDS from distributor or retailer. 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. Use equipment only for its intended purpose. Call your distributor for information. Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents. Comply with all applicable safety regulations.
 MOVING PARTS HAZARD Moving parts can pinch, cut or amputate fingers and other body parts. Keep clear of moving parts. Do not operate equipment with protective guards or covers removed. Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the Pressure Relief Procedure and disconnect all power sources.
 SKIN INJECTION HAZARD High-pressure spray is able to inject toxins into the body and cause serious bodily injury. In the event that injection occurs, get immediate surgical treatment. Do not aim the gun at, or spray any person or animal. Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body. Always use the nozzle tip guard. Do not spray without nozzle tip guard in place. Do not leave the unit energized or under pressure while unattended. When the unit is not in use, turn off the unit and follow the Pressure Relief Procedure for turning off the unit. Always engage the trigger lock when not spraying. Verify the trigger lock is functioning properly.

Service

Pressure Relief Procedure



Follow the Pressure Relief Procedure whenever you see this symbol.



This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop spraying and before cleaning, checking, or servicing the equipment.

- 1. Engage trigger lock.
- 2. Turn ON/OFF switch to OFF.
- 3. Unplug power cord.
- 4. Disengage trigger lock. Hold metal part of gun against grounded metal pail and trigger gun into pail to relieve pressure.
- 5. Engage the trigger lock.
- 6. Open all fluid drain valves in the system, having a waste container ready to catch drainage. Leave drain valve(s) open until you are ready to spray again.
- 7. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen tip guard retaining nut or hose end coupling to relieve pressure gradually, then loosen completely. Clear hose or tip obstruction.

Pump Repair Kits

Pump	Repair Kit
16X414	248212
16X419	248213 (stainless steel check balls) 249189 (ceramic check balls)
16X426	249123 (stainless steel check balls) 17A578 (ceramic check balls)
16X427, 17N694	17A578 (ceramic check balls)
16X418	24V063
16X421	249189
16Y602	24M830
16X420	17K162 (stainless steel check balls)
16Y599	17K475 (ceramic check balls)
17N693	17N703 (ceramic check balls)
17R042	17R119 (ceramic S <mark>I-N c</mark> heck balls)
17R044	17R114 (ceramic SI-N check balls)

Tools Needed

- Vise
- 12 in. adjustable, open-end wrench (2)
- Hammer (20 oz maximum)
- Small screwdriver
- Throat Seal Liquid
- Pick or long small screwdriver

Cleaning and Inspecting Parts

Clean and inspect parts. Pay particular attention to the ball seats in the intake valve and piston, which must have no nicks or wear, and to the inside of the sleeve and the outside of the piston rod, which must not be worn or scratched. Replace worn or damaged parts.



COMPONENT RUPTURE HAZARD

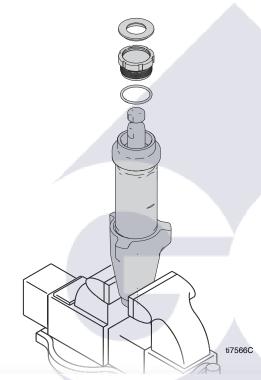
To reduce the risk of serious injury from pressurized fluid, never use sharp or pointed tools to remove sleeve. If the sleeve cannot be removed easily, return the sleeve and cylinder to a Graco distributor for removal.

NOTE: Remove and clean sleeve when repacking pump.

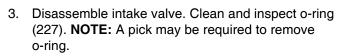
Repair When Pump is Separated From Sprayer

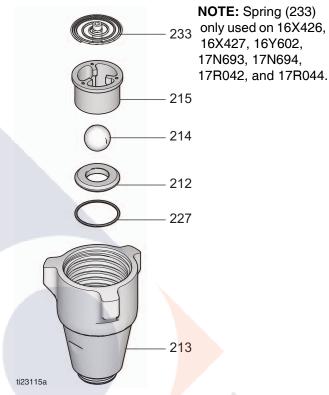
Disassembling the Pump

1. Remove packing nut (202) and o-ring (228).



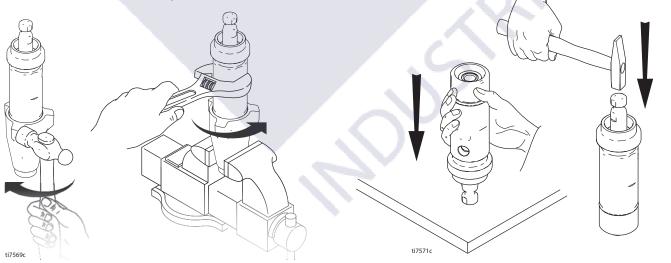
2. Unscrew intake valve from cylinder.



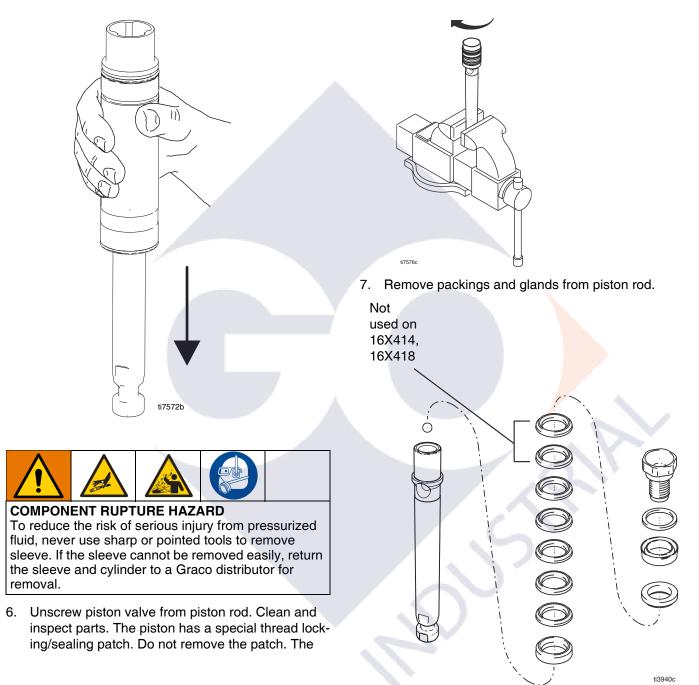


4. Tap piston rod out of cylinder with a hammer or flip over and tap piston rod out against a bench.

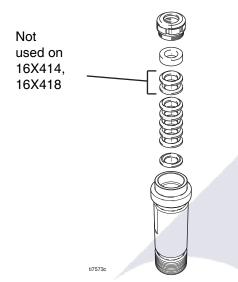
NOTE: Sleeve may come out of cylinder with piston rod.



 Remove piston rod from sleeve, or remove sleeve from cylinder. Mark IV, Mark VII, and APX 6200 models: Remove sleeve spacer (230) from sleeve. patch allows four disassembly/assembly procedures before it is necessary to apply thread sealant to the threads.

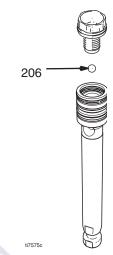


8. Remove throat packings and glands from cylinder. Discard throat packings and glands.



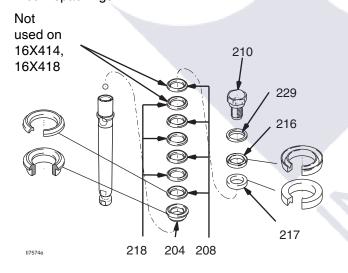
Assembling the Pump

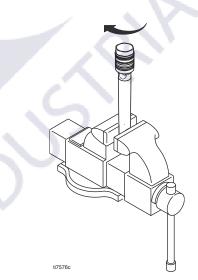
 Soak all leather packings in SAE 30W oil for 1 hour minimum prior to assembly. Stack male gland (204) on piston rod. Alternately stack UHMWPE (208) and leather (218) packings (note orientation) on piston rod. Install female gland (217). Install piston wiper (216) (note orientation) and backup washer (229) on piston valve, threads are good for four repackings. Use thread sealant on piston valve threads after four repackings. 2. Install ball (206) in piston rod. If thread sealant is applied to piston valve threads, make sure that none gets on ball.



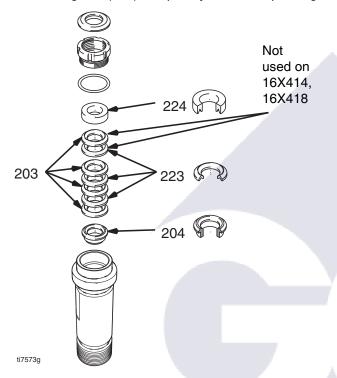
3. Tighten piston valve to piston rod as specified:

Models	Torque
16X414, 16X418	<mark>27 ±</mark> 3 ft-lb. (<mark>36.1 ±</mark> 4.1 N•m)
16X419, 16X420, 16X421, 16Y602, 16Y599,17N693, 17R044	
16X426, 16X427, 17N694, 17R042	100 ± 5 ft-lb. (136 ± 7 №m)

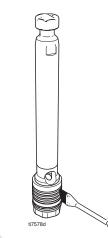




4. Soak all leather packings in SAE 30W oil for one hour minimum prior to assembly. Place male gland (204) in cylinder. Alternately stack UHMWPE (203) and leather packings (223) (note orientation). Place female gland (224) in top of cylinder seat packings.



6. Grease piston packings.

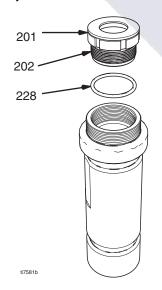


NOTICE

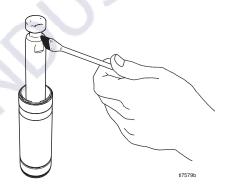
Do not slide piston assembly into top of sleeve as this may damage piston packing.

7. Slide piston assembly into bottom of sleeve.

5. Install seal (201) into packing nut (202). Install o-ring (228) onto packing nut. Loosely install packing nut into cylinder.

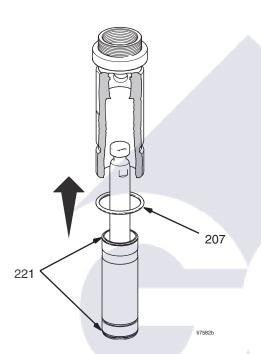


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- 8. Grease top inch or two of piston rod that will go through the cylinder throat packings.

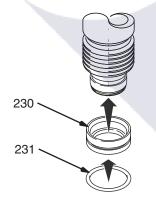


 Grease o-rings (221) and place on sleeve. Slide sleeve/piston rod assembly into bottom of cylinder. Replace o-ring (207) if desired.

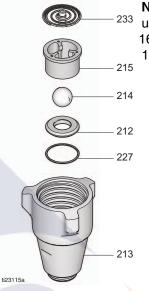
NOTE: O-ring (207) is not required for safe pump operation.



10. Mark IV, Mark VII, and APX6200 models: Install o-ring (231) on sleeve spacer (230) and install sleeve spacer on sleeve.



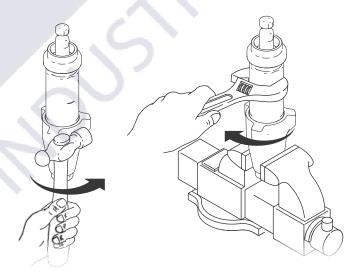
11. Reassemble intake valve with new o-ring (227), seat (212) and ball (214). Seat may be flipped over and used on other side. Clean seat thoroughly.



NOTE: Spring (233) only used on 16X426, 16X427, 16Y602, 17N693, 17N694, 17R042, and 17R044.

12. Install intake valve on cylinder. If a wrench is used torque as follows:

Models	Torque
16X414, 16X418	67 ± 5 <mark>ft-lb</mark> (90.8 ± 6.8 N•m)
16X419, 16X420,	80 ± 5 <mark>ft-l</mark> b (108.5 ± 6.8 №m)
16X421, 16Y602,	
16Y599	
16X426, 16X427,	200 ± 15 ft-lb (271.2 ± 20.3 N•m)
17N693, 17N694,	
17R041, 17R044	

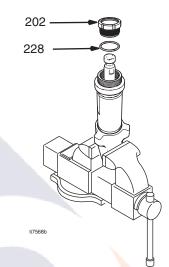


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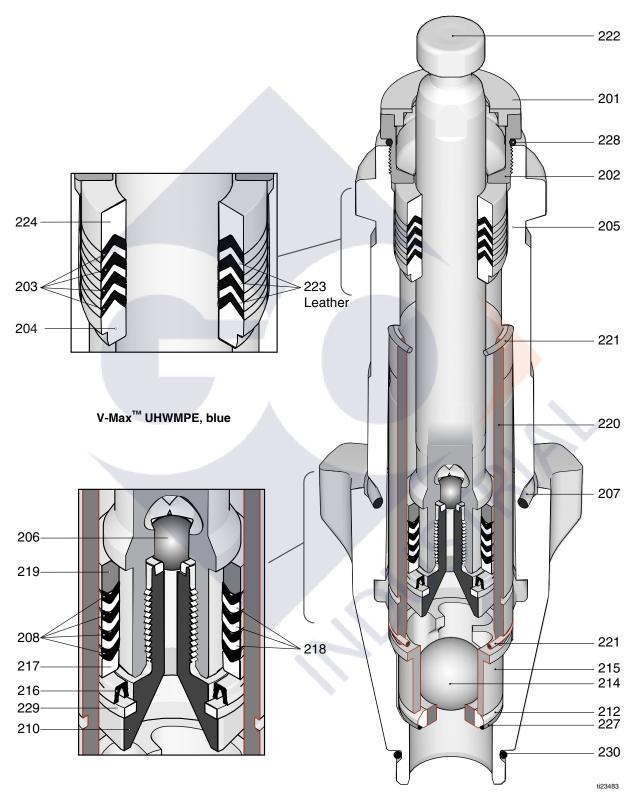
13. Torque packing nut (202) as follows:

Models	Torque
	100 ± 10 in-lb (11.3 ± 1.1 №m)
	140 ± 10 in-lb (15.8 ± 1.1 №m)

14. Remove o-ring (228) when pump packings begin to leak after extended use. Then tighten packing nut down until leakage stops or lessens. This allows approximately 100 gallons of additional operation before a repacking is required.



Cross-Section Reference



Pump 16X419, 16X420

Parts - Pump 16X414, 16X418

Ref.	Part	Description	Qty.		
201*†	179810	SEAL, throat	1		
	193046	NUT, packing	1		
203*†	192692	V-PACKING, throat, V-Max,	3		
•		UHMWPE, blue			O -221
204*†	15C987	GLAND, male, throat,	1	201-0	
205		CYLINDER, pump	- 1 · · ·		
	16X450	Model 16X414		202-0	222
	16X456	Model 16X418			g
206		BALL check	1		
	105444*	Model 16X414 (Stainless steel)		228—	
	119259†	Model 16X418 (Ceramic)		224-0	219
207*†	156593	PACKING, o-ring	1		208
208*†	192693	V-PACKING, piston, V-MAX,	3	203	208 218
		UHMWPE, blue			
210	287877	VALVE, piston	1		$\backslash \aleph$
212		KIT, seat, carbide	1		
	239922	Model 16X414,			
		includes 214, 215, 227			<u></u> 217
	244571	Model 16X418			O- 216
		includes 214, 227			
213		VALVE, intake (foot)	- N /	204	<u> </u>
	15C785	Model 16X414			c 206
	287878	Model 16X418		222 —	
214		BALL, check, inlet	1		210
	105445*	Model 16X414 (Stainless steel)			210
	111453†	Model 16X418 (Ceramic)			-231
	102972	Model 16X418 (Stainless steel)		205	
215		GUIDE, ball	1	205	
	192624	Model 16X414			-232
	196967	Model 16X418			
216*†	118503	WIPER, piston	1		63
217*†	178969	GLAND, female, piston	1		215
218*†	178939	V-PACKING, leather, piston	2		
219*†	196880	GLAND, male, piston	1		O-214
	248209	SLEEVE, cylinder	1		@ —212
221*†	108526	O-RING, ptfe	1	207 — 🔿	
222		ROD, piston	1		O —227
	16X434	Model 16X414		221	
	16X440	Model 16X418	_	221	
	178940	V-PACKING, leather, throat	2		
	15C988	GLAND, female, throat	1		
227	4070701	O-RING, ptfe	1	220	-213
	107079*	Model 16X414		220	
	108526†	Model 16X418			
	158776	O-RING			
	15C997	WASHER, backup	4	(Not an O-ring groove)	O ⁻²³⁰
230*	118494	O-RING, fluoroelastomer	I		ti23511a
0011	107000	(Model 16X414)	4		123511
	107098	O-RING (Model 16X418 only)	1		
232	15G494	SPACER, sleeve	I		
		(Model 16X418 only)			

* These parts are also included in Repair Kit 248212, which may be purchased separately.

† These parts are also included in Repair Kit 24V063, which may be purchased separately.

Parts - Pump 16X420, 16Y599

	Qty						
Ref.	Part	Description					
201*†	183171	SEAL, throat	1	201	222		
202	193032	NUT, packing	1 4		<u>e</u>		
203*†	193124	V-PACKING, throat, V-Max, UHMWPE, blue	4	202			
204*†	15C989	GLAND, male, throat	1		2 19		
205		CYLINDER, pump	1		208		
	16X452 16X461	Model 16X420		228—			
206	107401	Model 16Y599 BALL, check	1	224			
200	101947*	Model 16X420 (Stainless steel)					
	116327†	Model 16Y599 (Ceramic)		203			
207	1 = 0 0 0 0 + 1	PACKING, o-ring	1				
208*†	156633* <i>1</i> 128779	⁴ Model 16X420, 16Y599 V-PACKING, piston, UHMWPE, blue	4		Q 217		
200 /	120//9	Model 16X420, 16Y599	4				
210	24U993	VALVE, piston	1				
212		KIT, seat, carbide	1		O —216		
	244199	Model 16X420 includes 214, 227			O 229		
213	244571	Model 16Y599 <i>includes 214, 227</i> VALVE, intake (foot)	4				
210	15E654	Model 16X420		Ó	210		
	196753	Model 16Y599					
214	4000-01	BALL, check, inlet	1	204	221		
	102972* 111453 <i>†</i>	Model 16X420 (Stainless steel) Model 16Y599 (Ceramic)					
215	1114557	GUIDE, ball	1	222 —			
	193027	Model 16X420		222	232		
	196967	Model 16Y599					
216*†	118504	WIPER, piston	1		233		
217*† 218*†	183185 128296	GLAND, female, piston V-PACKING, brown poly seal	1		200		
210 7	120200	Model 16X420, 16Y599	Ŭ	205			
219*†	183178	GLAND, male, piston	1		215		
220	057004	SLEEVE, cylinder	1		214		
221*†	257031 107098	Model 16X420, 16Y599 O-RING, ptfe	2				
222	107000	ROD, piston	1		212		
	16X436	Model 16X420			O 227		
000*+	16X441	Model 16Y599	0				
223*† 224*†	183175 15C990	V-PACKING, leather, throat GLAND, female, throat	3 1				
227	100330	O-RING, ptfe	i	207			
		Model 16X420, 16Y599					
228*†	C20987	O-RING	_1	221 — 🔿	213		
229* <i>†</i> 230*	15C998 118494	WASHER, backup O-RING, fluoroelastomer	1				
230	110494	(Model 16X419, 16X420 only)					
					O—230		
		also included in Repair Kit 17K162 (stail	n-	220 — (No	ot an O-ring groove)		
		which may be purchased separately.	mio				
		also included in Repair Kit 17K475 (cera y be purchased separately.	IIIC				
2410)	,	,		۱ <u>ــــ</u> ـ	ti23510a		

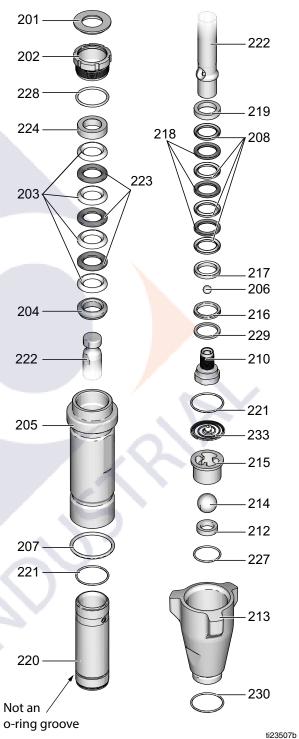
Parts - Pump 16X419, 16X421, 16Y602

Ref.	Part	Description	Qty.		
201* <i>†</i> *	183171	SEAL, throat	1		
202	193032	NUT, packing	1	201	222
203* <i>†</i> *	193124	V-PACKING, throat, V-Max,	4		
		UHMWPE, blue			
204* <i>†</i> *	15C989	GLAND, male, throat	1	202	
205	101/151	CYLINDER, pump	1		219
	16X451	Model 16X419			213
	16X457	Model 16X421			208
000	17A033	Model 16Y602		228—	
206	101047*	BALL, check	1		
	101947*	Model 16X419 (Stainless steel)		224	
007	116327 <i>†</i> *		4		
207	156600*+	PACKING, o-ring	1	203	
	156633*†	Model 16X419, 16X421		200	i S
000* + *	160325* 102125	Model 16Y602 V-PACKING, piston, V-MAX,	4		
208* <i>†</i> *	193125	UHMWPE, blue	4		O 217
210	24U993	VALVE, piston	1		206
212	240000	KIT, seat, carbide	1		200
	244199	Model 16X419 <i>includes 214, 227</i>			— 216
	244571	Model 16X421 <i>includes</i> 214, 227			
	24N013	Model 16Y602 <i>includes 214, 227, 233</i>			— 229
213		VALVE, intake (foot)	1		
2.0	15E654	Model 16X419			210
	196753	Model 16X421		(\bigcirc)	
	15A303	Model 16Y602			
214		BALL, check, inlet	1	204 — 💮	221
	102972*	Model 16X419 (Stainless steel)			\leq
	1114537	Model 16X421 (Ceramic)			231
	118602*	Model 16Y602(Ceramic)			
	107167	Model 16Y602 (Stainless steel)		222 —	232
215		GUIDE, ball	1	in the second	232
	193027	Model 16X419, 16X420			
	196967	Model 16X421, 16Y599			233
	16M658	Model 16Y602			233
216* <i>†</i> ≉	118504	WIPER, piston	1	205	
217* <i>†</i> *	183185	GLAND, female, piston	1		045
218* <i>†</i> *	15E329	V-PACKING, leather, piston	3		215
219* <i>†</i> *	183178	GLAND, male, piston	1		214
220		SLEEVE, cylinder	1	/	214
	248210	Model 16X419, 16X421, 16Y602	-		
221*#	107098	O-RING, ptfe	2		212
222	101/105	ROD, piston	1		
	16X435	Model 16X419			227
	16X441	Model 16X421, 16Y602	0		
223* <i>†</i> *	183175	V-PACKING, leather, throat GLAND, female, throat	3 1		
224* <i>†</i> * 227	15C990		1	207	
221	108526*†	O-RING, ptfe Model 16X419, 16X421	1	207 —	
	107098*	Model 16Y602			
228*†	C20987	O-RING	1	221 — 🔿	213
220 / 229* <i>†</i> *	15C998	WASHER, backup			215
229 /* 230*	118494	O-RING. fluoroelastomer	1		
200	110-10-1	(Model 16X419 only)	'		230
231*	108822	O-RING (Model 16Y602 only)	1		
232*	16M291	SPACER, sleeve (Model 16Y602 only)	1	220 — (Not	an O-ring groove)
233	24E027	SPRING, intake, ball (Model 16Y602 only)) 1		
		· · · · · · · · · · · · · · · · · · ·			
* These	parts are als	so included in Repair Kit 248213 (stainless s	steel		
		be purchased separately.			ti23510a
† These	parts are als	so included in Repair Kit 249189 (ceramic b	alls),	</td <td>1200.0U</td>	1200.0U

balls), which may be purchased separately.
† These parts are also included in Repair Kit 249189 (ceramic balls), which may be purchased separately.
* These parts are also included in Repair Kit 24M830, which may be purchased separately.

Parts - Pump 16X426, 16X427

	_		Qty	
Ref.	Part	Description	•	
201**	112590	SEAL, throat	1	
202	16X768	NUT, packing	1	20
203**	193722	V-PACKING, throat, V-Max, UHMWPE, blue	4	_
204**	15G658	GLAND, male, throat	1	20
205		CYLINDER, pump	1	_
	16X455	Model 16X426		
	16X460	Model 16X427		22
206		BALL, check	1	
	107203*	Model 16X426 (Stainless steel)		22
	118601*	Model 16X427 (Ceramic)		~
207**	160325	PACKING, o-ring	1	
208**	193722	V-PACKING, piston, V-MAX,	4	
		UHMWPE, blue		
210	249177	VALVE, piston	1	20
212	040040	KIT, seat, carbide	1	
	240918	Model 16X426 <i>includes 214, 227</i>		
	101/407	(stainless steel check ball)		
	16X467	Model 16X426 <i>includes 214, 227, 233</i>		
	24N013	(ceramic check ball) Model 16X427, <i>includes 214, 227,</i>		
	2411013	233		
213		VALVE, intake (foot)	1	
210	15E655	Model 16X426	1	~
	15A303	Model 16X427		20
214	10/1000	BALL, check, inlet	1	
	107167*	Model 16X426 (Stainless steel)	·	
	118602*			22
215		GUIDE, ball	1	
	198505	Model 16X426		
	193391	Model 16X427		
216**	119636	WIPER, piston	1	
217**	189588	GLAND, female, piston	1	20
218		V-PACKING, leather, piston	3	
		16X426, 16X427		
	189585	GLAND, male, piston	1	
220	249121	SLEEVE, cylinder, MaxLife	1	
221**	108822	O-RING, ptfe	2	
222	4.01/400	ROD, piston	1	
	16X439	Model 16X426		
223**	16X443 112591	Model 16X427 V-PACKING, leather, throat	3	2
223 * 224**	15G657	GLAND, female, throat	1	21
227**	107098	O-RING, ptfe	1	2
228**	156593	O-RING	- i	
229**	15J800	WASHER, backup	1	
230	118494	O-RING, fluoroelastomer	i 🗨	
		(Model 16X426 only)	- é N	
233		SPRING, intake, ball	1	
	249770	Model 16X426		2
	24E027	Model 16X427		22



* These parts are also included in Repair Kit 249123 (stainless steel balls), which may be purchased separately.

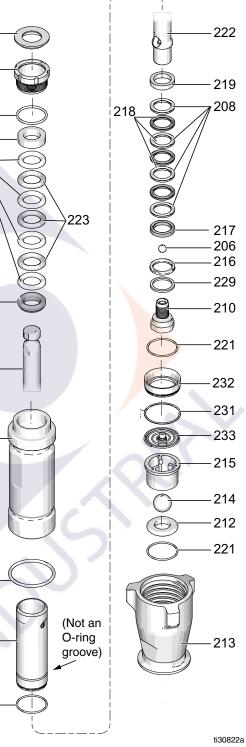
* These parts are also included in Repair Kit 17A578 (ceramic balls), which may be purchased separately.

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Parts - Pump 17N693, 17R044

			Qty	
Ref.	Part	Description		
201*	183171	SEAL, throat	1	
202	193032	NUT, packing	1	201-0
203*	193124	V-PACKING, throat, V-Max,	4	
		UHMWPE, blue		202
204*	15C989	GLAND, male, throat	1	202
205		CYLINDER, pump	1	
	17N697	Model 17N693 (Maxlife)		-
	17R115	Model 17R044 (Chrome)		228 — ()
206		BALL, check	1	
	101947	Stainless steel		224 — 🕑
		Ceramic, SI-N		203
207*	160325	PACKING, o-ring	1	200
208*	193125	V-PACKING, piston, V-MAX,	4	$\ \setminus \mathbb{Q} \ $
		UHMWPE, blue		
210	24U993	VALVE, piston	1	
212	17N703	KIT, seat, carbide includes 214, 227,	1	110-
		233		10
213	17N698	VALVE, intake (foot)	1	
214		BALL, check, inlet	1	
		Ceramic, SI-N		\bigcirc
0 /5	107167	Stainless steel		
215	16M658	GUIDE, ball	1	204
216*	118504	WIPER, piston	1	
217*	183185	GLAND, female, piston	1	\square
218* 010**	15E329	V-PACKING, piston, brown	3	
219*	183178	GLAND, male, piston	1 1	000
220	257031	SLEEVE, cylinder	I	222 ———
	237031	Model 17N693 (Maxlife) Model 17R044 (Chrome)		
221*	107098	O-RING, ptfe	3	
221	107098	ROD, piston	1	
222	16X436	Model 17N693 (Maxlife)		
	17R146	Model 17R044 (Chrome)		205 —
223*	183175	V-PACKING, leather, throat	3	
223 224 *	15C990	GLAND, female, throat	1	
228	C20987	O-RING	1	
229*	15C998	WASHER, backup	1	
231*	108822	O-RING	1	
232*	16M291	SPACER, sleeve	1	
233	24E027	SPRING, intake, ball	1	
200				

* These parts are also included in Repair Kit 17R114 (ceramic balls SI-N), which may be purchased separately.



207

220

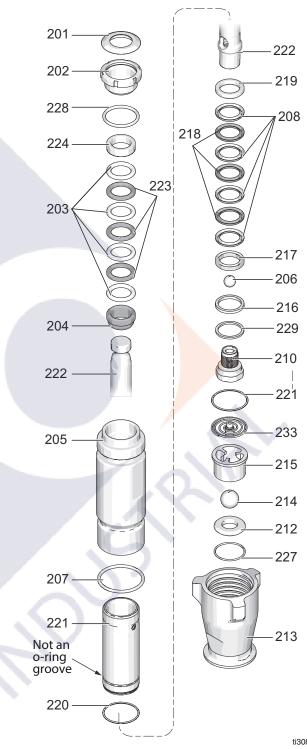
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221

Parts - Pump 17N694, 17R042

			Qty	
Ref.	Part	Description	•	
201*	112590	SEAL, throat	1	
202	16X768	NUT, packing	1	
203*	193722	V-PACKING, throat, V-Max,	4	
		UHMWPE, blue		
204*	15G658	GLAND, male, throat	1	
205		CYLINDER, pump	1	
	17R116	Model 17R042 (Chrome)		
	17N695	Model 17N694 (Maxlife)		
206		BALL, check		
		Ceramic SI-N	1	
	107203	Stainless steel(1	
207*	160325	PACKING, o-ring	1	
208*	193722	V-PACKING, piston, V-MAX,	4	
		UHMWPE, blue		
210	249177	VALVE, piston	1	
212	17N703	KIT, seat, carbide includes 214,	1	
		ceramic SI-N check ball 227, 233		
213	17N698	VALVE, intake (foot)	1	
214		BALL, check, inlet		
		Ceramic SI-N	4	
	107167	Stainless steel(1	
215	193391	GUIDE, ball	1	
216*	119636	WIPER, piston	1	
217*	189588	GLAND, female, piston	1	
218		V-PACKING, piston, brown	3	
219 *	189585	GLAND, male, piston	1 1	
220	040070	SLEEVE, cylinder, Chrome	I	
	248979 249121	Model 17R042 (Chrome)		
221*	108822	Model 17N694 (Maxlife) O-RING, ptfe	0	
221æ 222	100022	ROD, piston	2	
222	17R147	Model 17R042 (Chrome)		
	16X439	Model 17N694 (MaxLife)		
223*	112591	V-PACKING, leather, throat	3	
223* 224*	15G657	GLAND, female, throat	1	
22 7 *	107098	O-RING, ptfe	1	
228*	156593	O-RING	1	
229*	15J800	WASHER, backup	1	
233	24E027	SPRING, intake, ball	1	
200				

* These parts are also included in Repair Kit 17R119 (ceramic SI-N balls), which may be purchased separately.



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Notes

Technical Data

	U.S.	Metric	
Maximum Working Pressure	3300 psi	227 bar, 22.7 MPa	
Fluid Inlet Size	1-5/16-12 un(m)	1-5/16-12 un(m)	
Fluid Outlet Size			
16X414, 16X418, 16X419, 16X420, 16X421, 16Y602, 16Y599, 17N693, 17R044	3/8 npt(f)	3/8 npt(f)	
16X426, 16X427, 17N694, 17R042	1/2 npt(f)	1/2 npt(f)	
Wetted Parts	stainless steel, PTFE, leather, nylon, zinc-plated carbon steel, tung- sten carbide, chrome plating, fluoroelastomer, acetal, polyethylene		

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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.

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Original instructions. This manual contains English. MM 332922

Graco Headquarters: Minneapolis International Offices: Belgium, China, Japan, Korea

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