

QUANTM™ Pumps, Hygienic Models

3A9287H

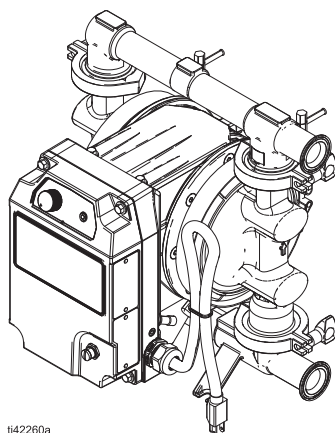
EN

Electric-operated diaphragm (EODD) pumps with an integral electric drive for fluid transfer applications. Not for use with gasoline. For professional use only.



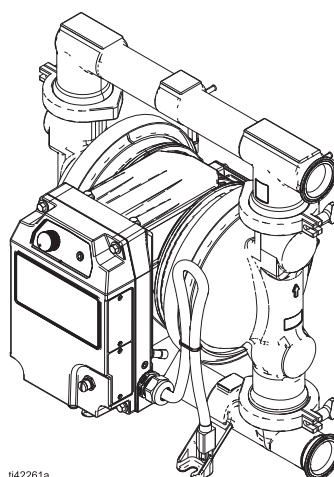
Important Safety Instructions

Read all warnings and instructions in this manual and related manuals before using the equipment. Save these instructions.



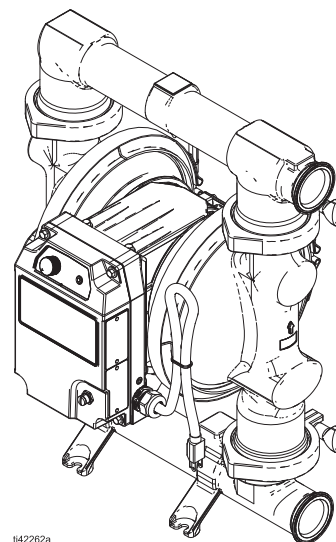
ti42260a

h30 (QHC) Model



ti42261a

h80 (QHD) Model



ti42262a

h120 (QHE) Model

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Related Manuals

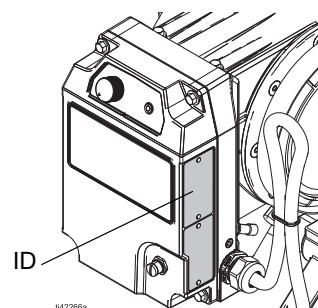
English Manual Number	Description	Reference
3A7637	QUANTM Electric Motor, Repair-Parts	Motor Manual
3A9286	QUANTM Pumps, Hygienic Models, Instructions	Pump Manual

Configuration Matrix

Record the model part number and configuration sequence found on your equipment identification plate (ID) to assist you when ordering replacement parts.

Model Part Number:

Configuration Sequence:



Sample Configuration Sequence: QHC-FGFF1ACACBNBNA10021

Q	H	C	FG	FF1	AC	AC	BN	BN	A1	00	21
Brand	Application	Model	Wetted Section Material	Motor	Seat Material	Check Material	Diaphragm Material	Manifold Seal Material	Connection	Options	Material Certifications

NOTE: Some combinations are not possible. Check with your local distributor.

Brand		Application		Model		Wetted Section Material	
Q	QUANTM	H	Hygienic (h)	C	30 (1 in. port)	FG	Food Grade, Stainless Steel, 125 micro finish (cast CF8M)
				D	80 (1-1/2 in. port)	HS	Hygienic, Stainless Steel, 32 micro finish
				E	120 (2 in. port)	PH	Pharmaceutical, Stainless Steel, 20 micro finish
				F	120 (3 in. port)	3A	3-A Hygienic, Stainless Steel, 32 micro finish

Motor						
	Drive	Coat	Input Voltage	Phase	Location	Cord/Cable Termination
FF1	Aluminum Direct Drive	Fluorinated ethylene propylene (FEP) coat	200–240 V	3-Phase	Hygienic, Ordinary Locations	Cord with plug
FF2	Aluminum Direct Drive	FEP coat	200–240 V	Single-Phase	Hygienic, Ordinary Locations	Cord with plug
FF3	Aluminum Direct Drive	FEP coat	200–240 V	3-Phase	Hygienic, Hazardous (Classified) Locations	Cable with flying leads
FF4	Aluminum Direct Drive	FEP coat	200–240 V	Single-Phase	Hygienic, Explosive Atmospheres	Cable with flying leads
FF5	Aluminum Direct Drive	FEP coat	100–120 V	Single-Phase	Hygienic, Ordinary Locations	Cord with plug
FF6	Aluminum Direct Drive	FEP coat	100–120 V	Single-Phase	Hygienic, Hazardous (Classified) Locations	Cable with flying leads
FF7	Aluminum Direct Drive	FEP coat	380–480 V	3-Phase	Hygienic, Ordinary Locations (NA)	Cable with flying leads

Motor						
	Drive	Coat	Input Voltage	Phase	Location	Cord/Cable Termination
FF8	Aluminum Direct Drive	FEP coat	380–480 V	3-Phase	Hygienic, Ordinary Locations (WW)	Cable with flying leads
FF9	Aluminum Direct Drive	FEP coat	380–480 V	3-Phase	Hygienic, Hazardous (Classified) Locations (NA)	Cable with flying leads
FFA	Aluminum Direct Drive	FEP coat	380–480 V	3-Phase	Hygienic, Explosive Atmospheres (WW)	Cable with flying leads

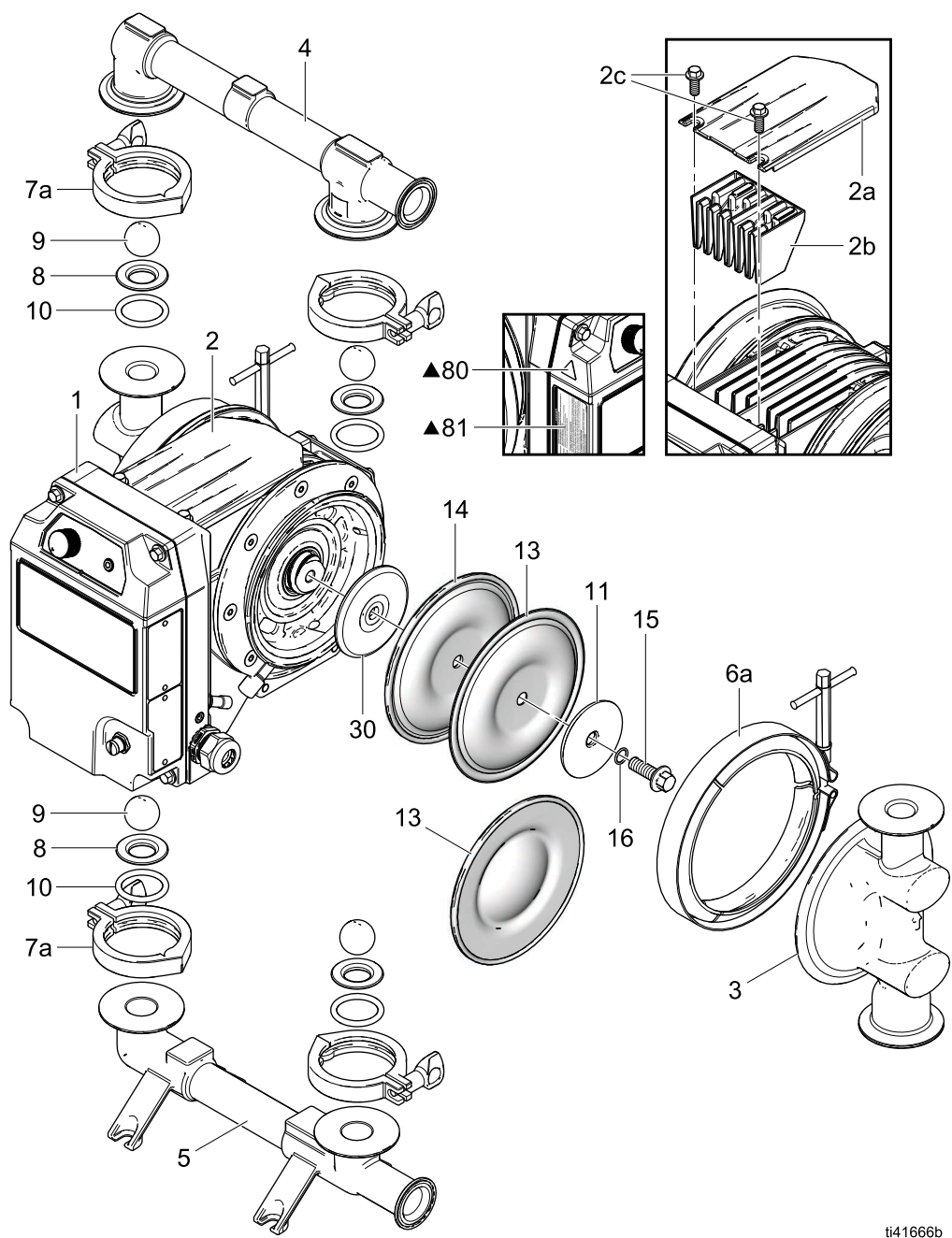
Seat Material		Check Material		Diaphragm Material		Manifold Seal Material	
FL	Flapper, for hygienic models only	BN	Buna-N, ball	BN	Buna-N	--	None
SS	316 Stainless Steel	CW	Polychloroprene, weighted, ball	EO	EPDM Overmold	BN	Buna-N
		EP	EPDM, ball	FK	Fluoroelastomer	EP	EPDM
		FK	Fluoroelastomer, ball	PO	PTFE/EPDM Overmold	FK	Fluoroelastomer
		FL	Flapper, Stainless Steel	PS	PTFE/Santoprene, two-piece	PT	PTFE
		PT	PTFE, ball	SP	Santoprene		
		SP	Santoprene, ball				

Connection		Options		Material Certifications	
S13	Stainless Steel, standard ports, hygienic clamp	00	Standard	21	EN 10204 type 2.1
S14	Stainless Steel, standard ports, DIN	SF	Sanitary Flapper	31	EN 10204 type 3.1
SSA	Center-ported tri-clamp				
SSB	Center-ported DIN				
SSE	Horizontal Wye Manifold Tri-Clamp				
SSG	Horizontal No Manifold				

Motor Drive Selection			
Hygienic - North America			
Model	Ordinary Location (NEMA Plug)	Hazardous Location (Flying Leads)	Voltage range/phase count
h30 (QHC)	FF1, FF5	FF3, FF6	200–240 V/3-Phase 100–120 V/Single-Phase
h80 (QHD)	FF1	FF3	200–240 V/3-Phase
h120 (QHE/QHF)	FF1	FF3	200–240 V/3-Phase
h30 (QHC), h80 (QHD), h120 (QHE)	FF7 (Flying leads)	FF9	380–480 V/3-Phase
Hygienic - International			
Model	Ordinary Location (IEC Plug)	Hazardous Location (Flying Leads)	Voltage range/phase count
h30 (QHC)	FF2	FF4	200–240 V/Single-Phase
h80 (QHD)	FF2	FF4	200–240 V/Single-Phase
h120 (QHE/QHF)	FF2	FF4	200–240 V/Single-Phase
h30 (QHC), h80 (QHD), h120 (QHE)	FF8 (Flying leads)	FFA	380–480 V/3-Phase

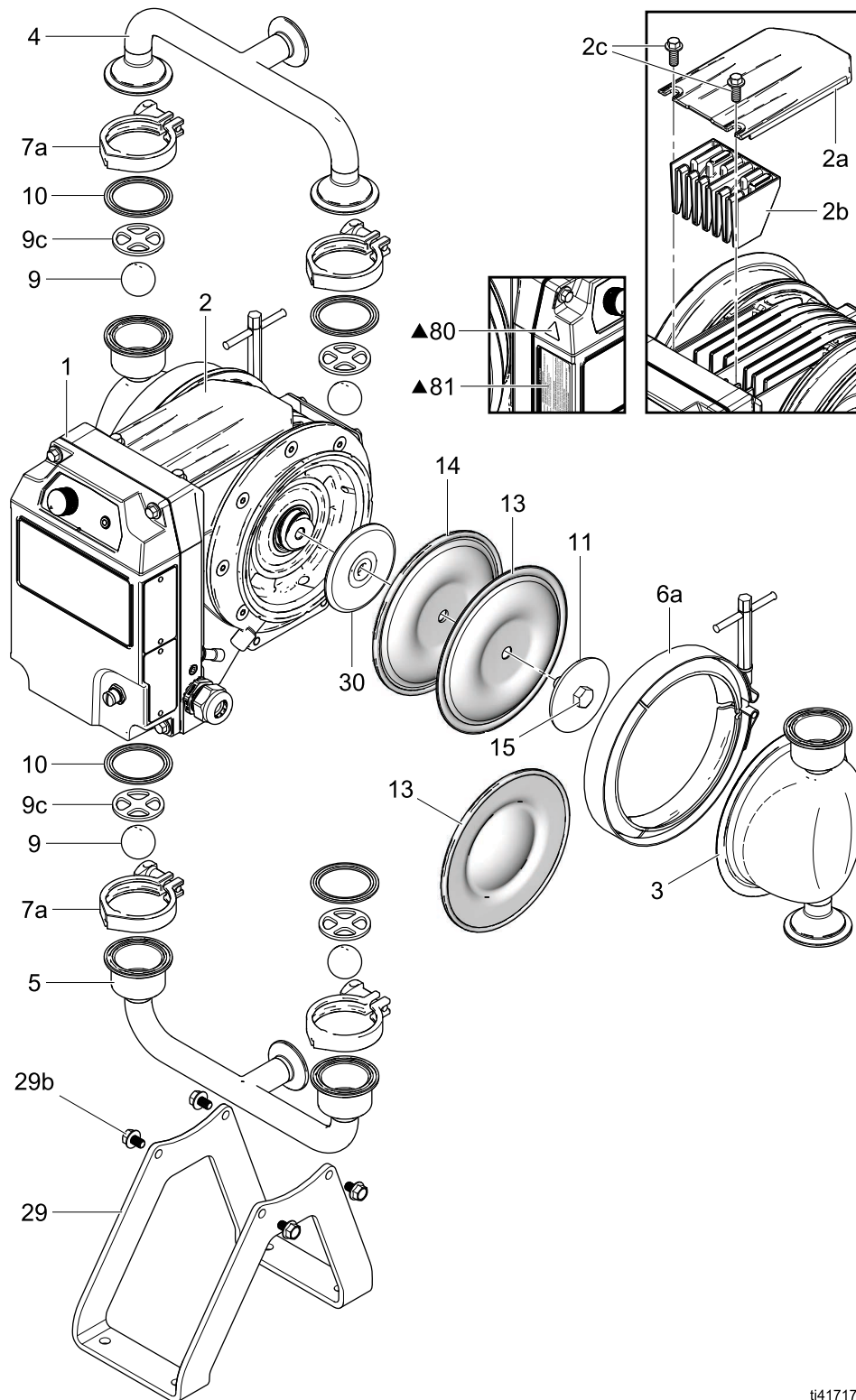
Parts

h30 (QHC) Models



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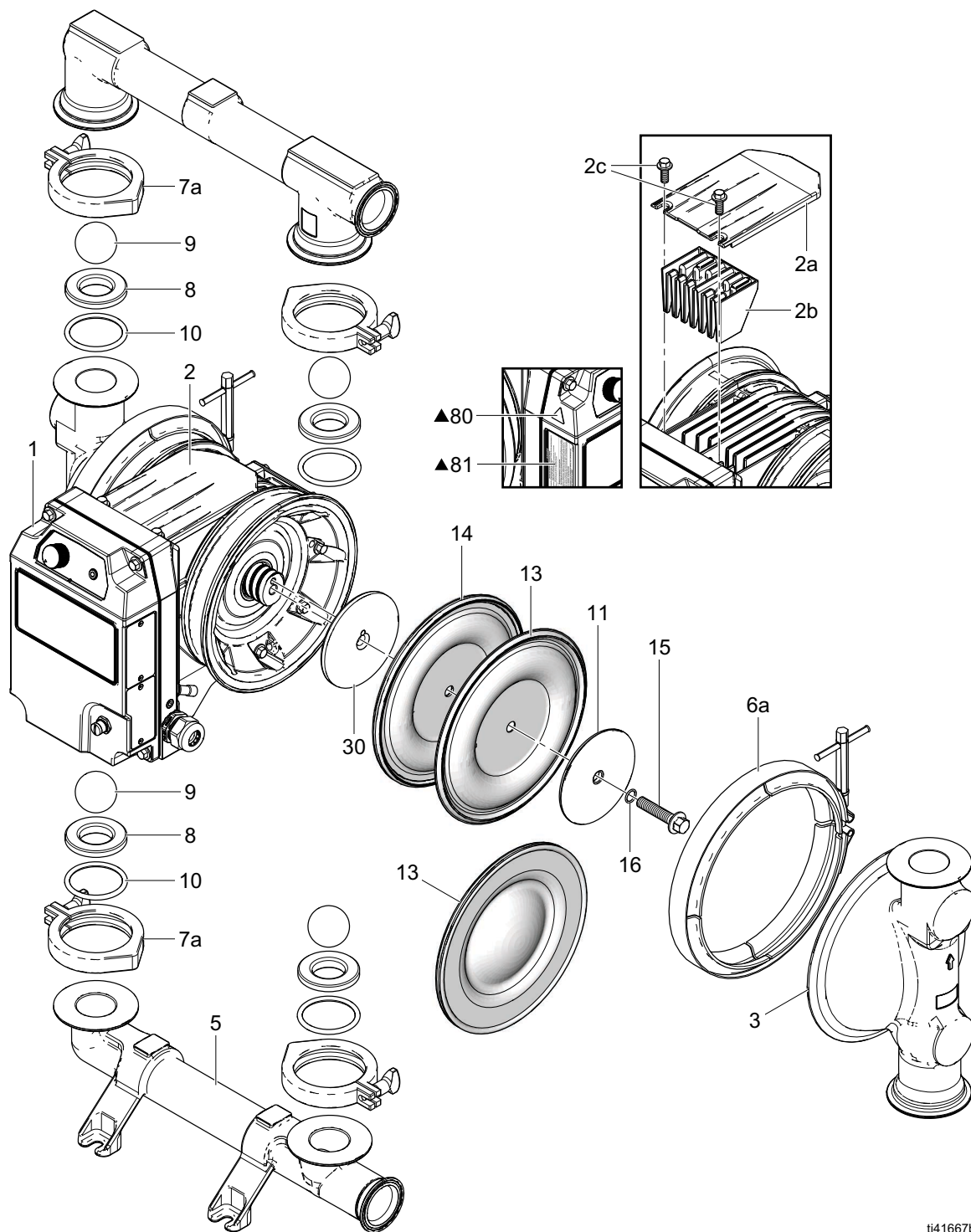
h30 (QHC) Food Grade (FG) model shown



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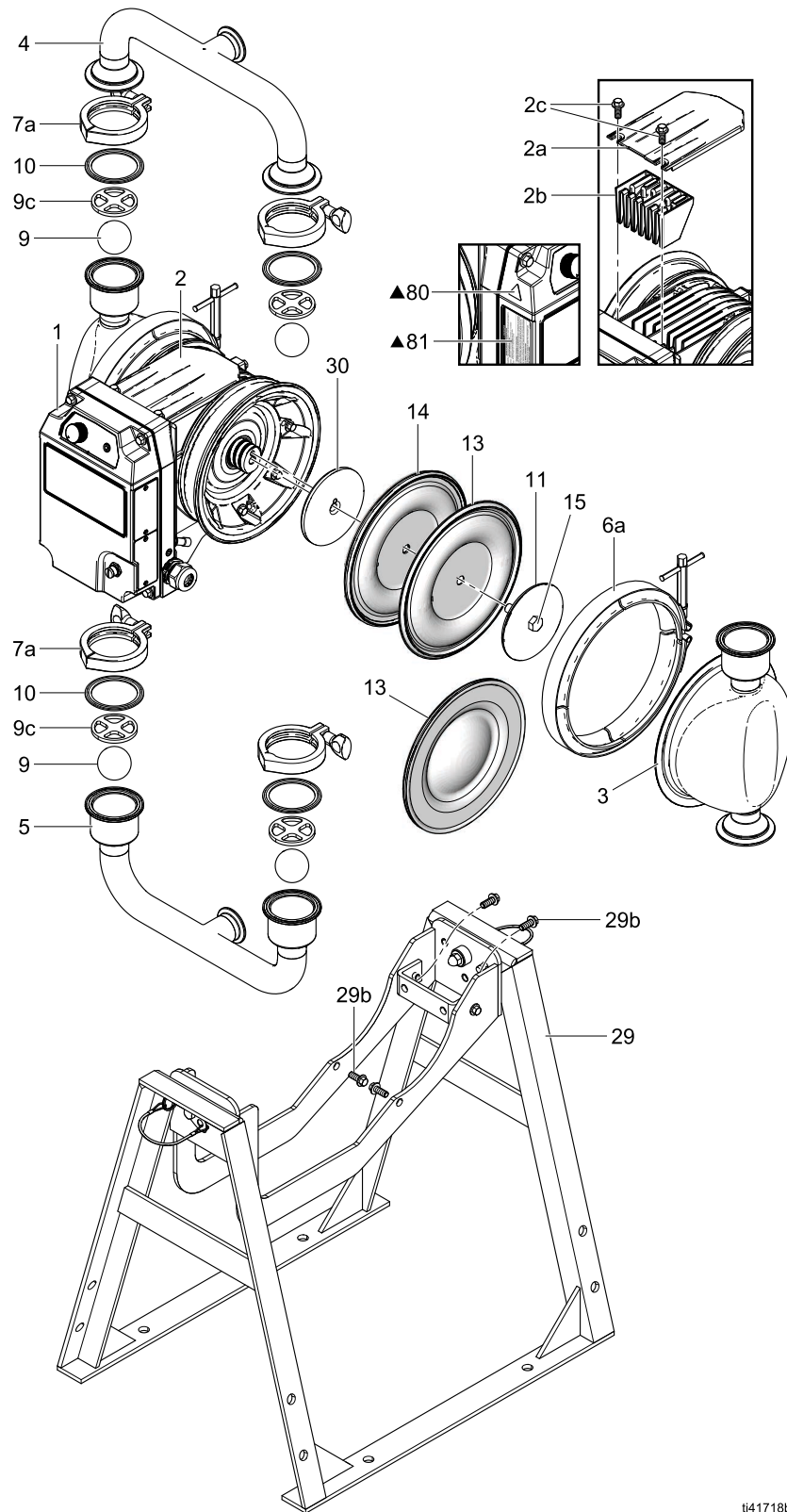
h30 (QHC) High Sanitation (HS, PH, 3A) model shown

h80 (QHD) Models



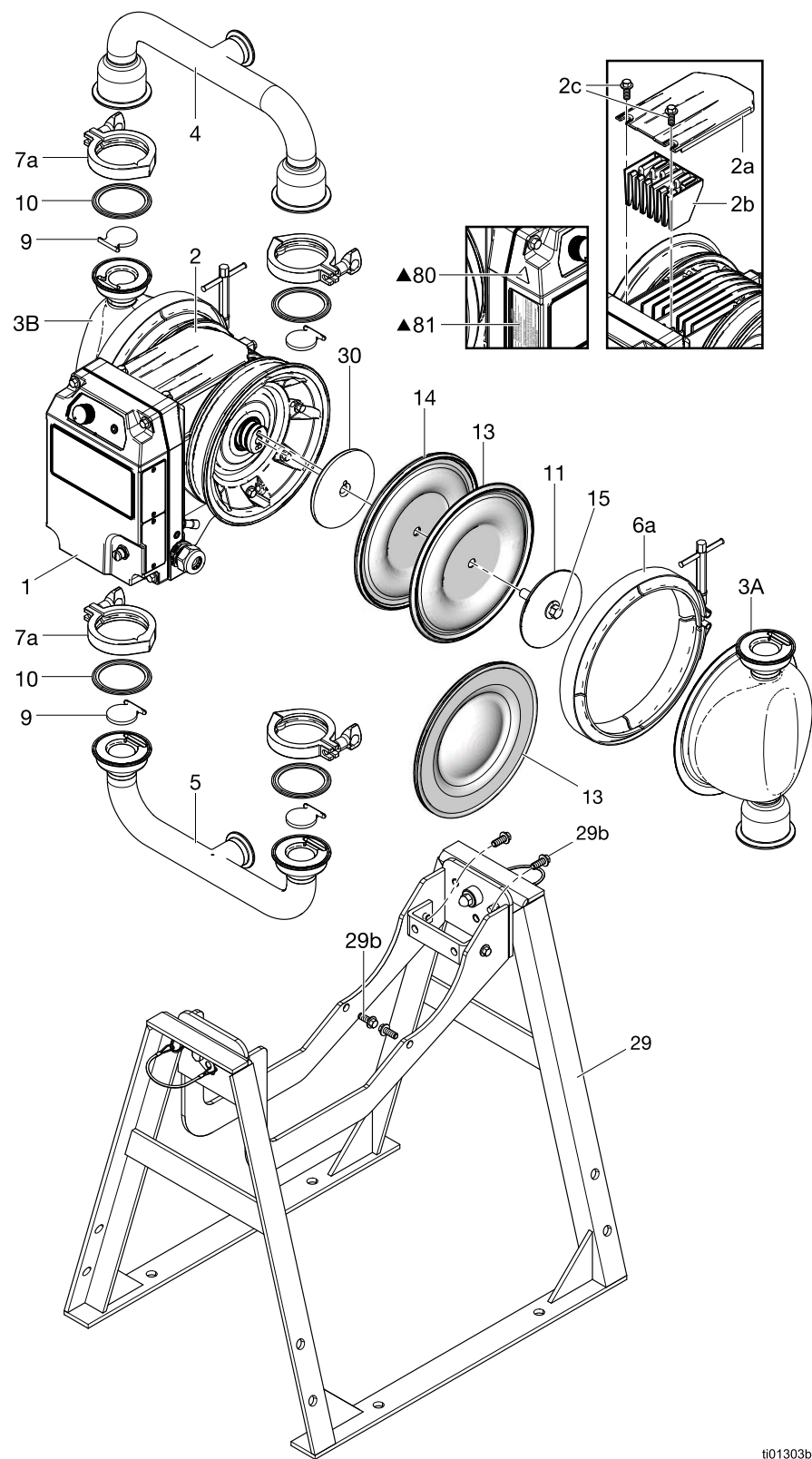
ti41667b

h80 (QHD) Food Grade (FG) model shown



ti41718b

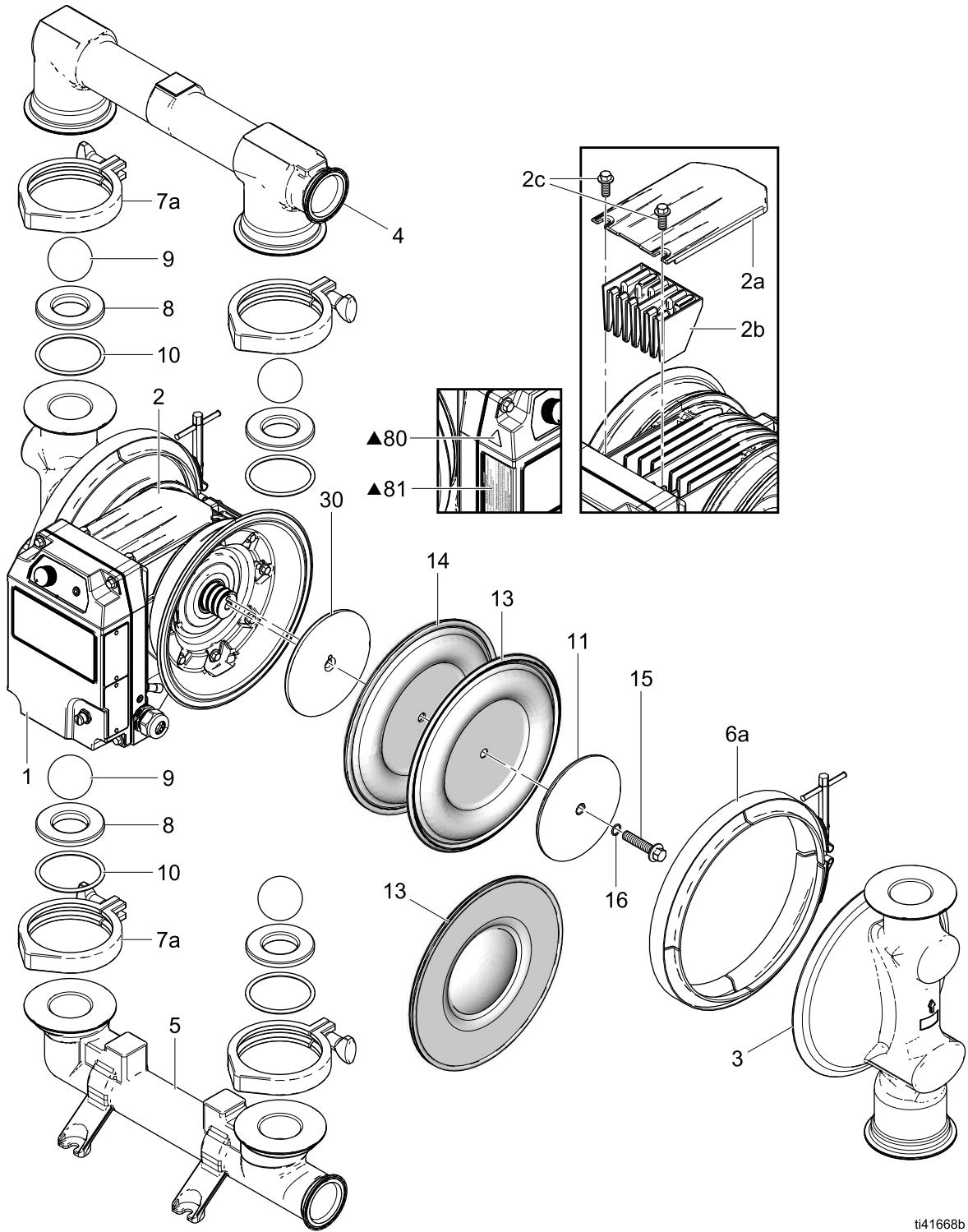
h80 (QHD) High Sanitation (HS, PH, 3A) Ball model shown



ti01303b

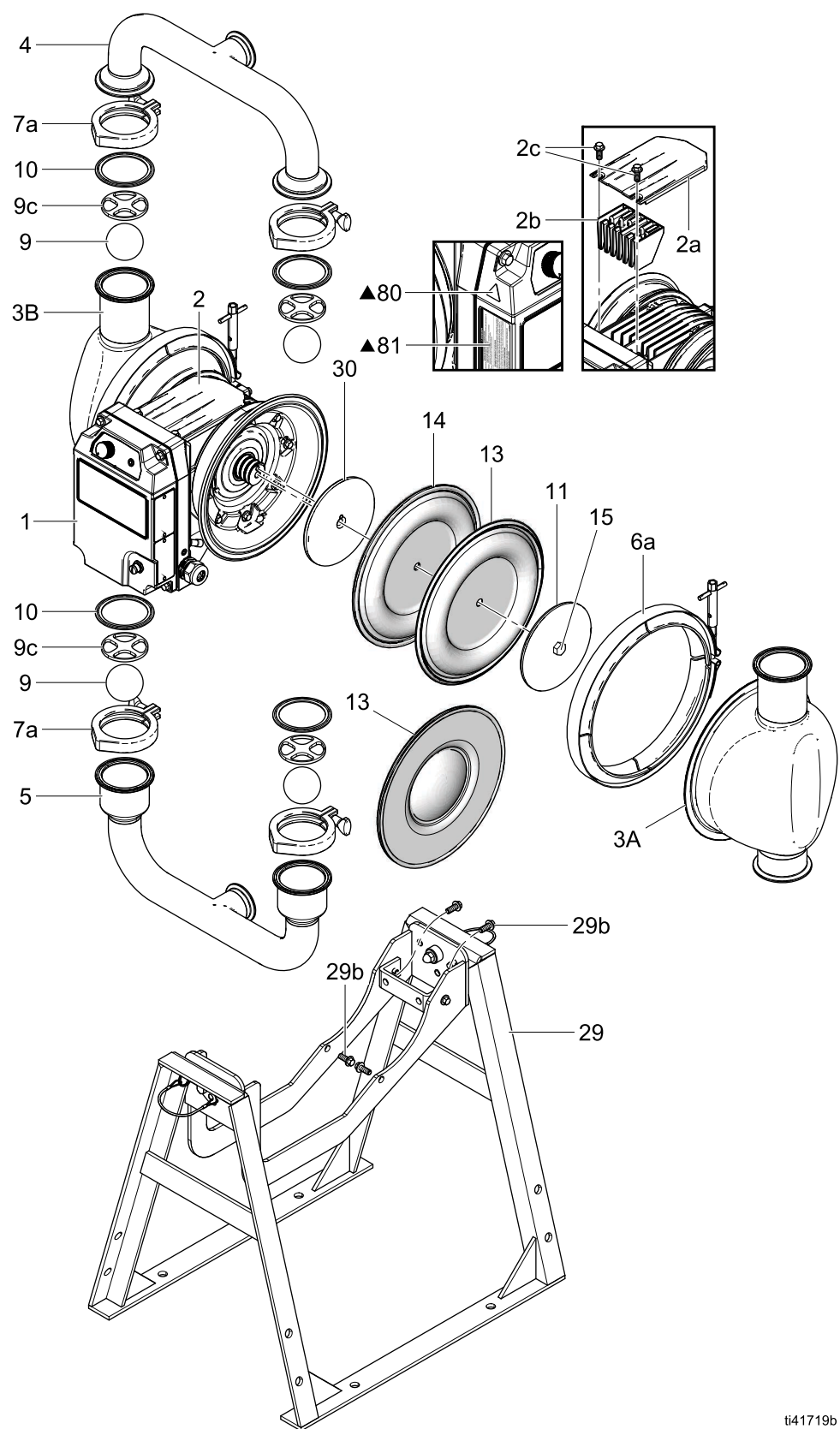
h80 (QHD) High Sanitation (HS) Flapper model shown

h120 (QHE) Models



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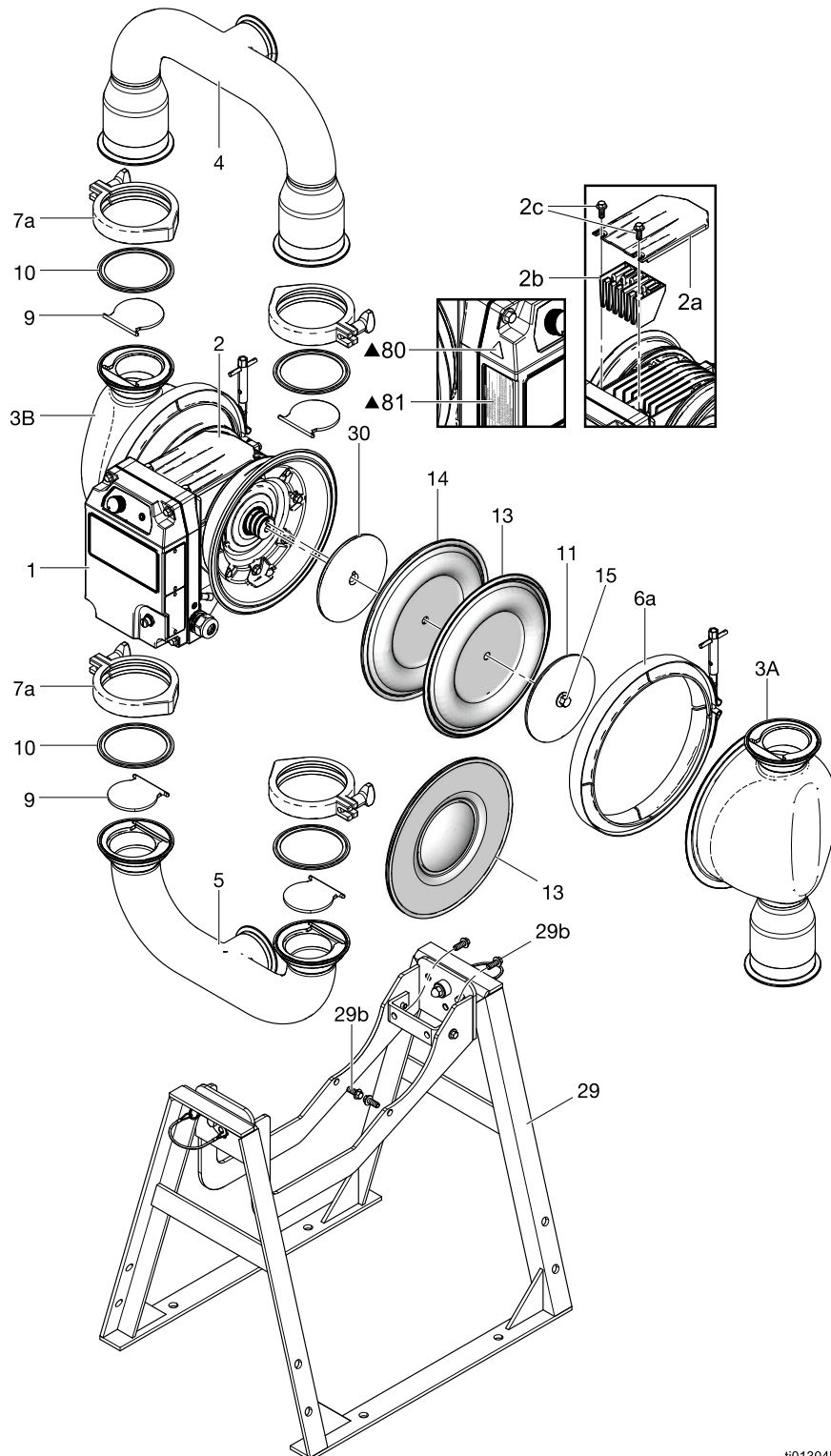
h120 (QHE) Food Grade (FG) model shown



ti41719b

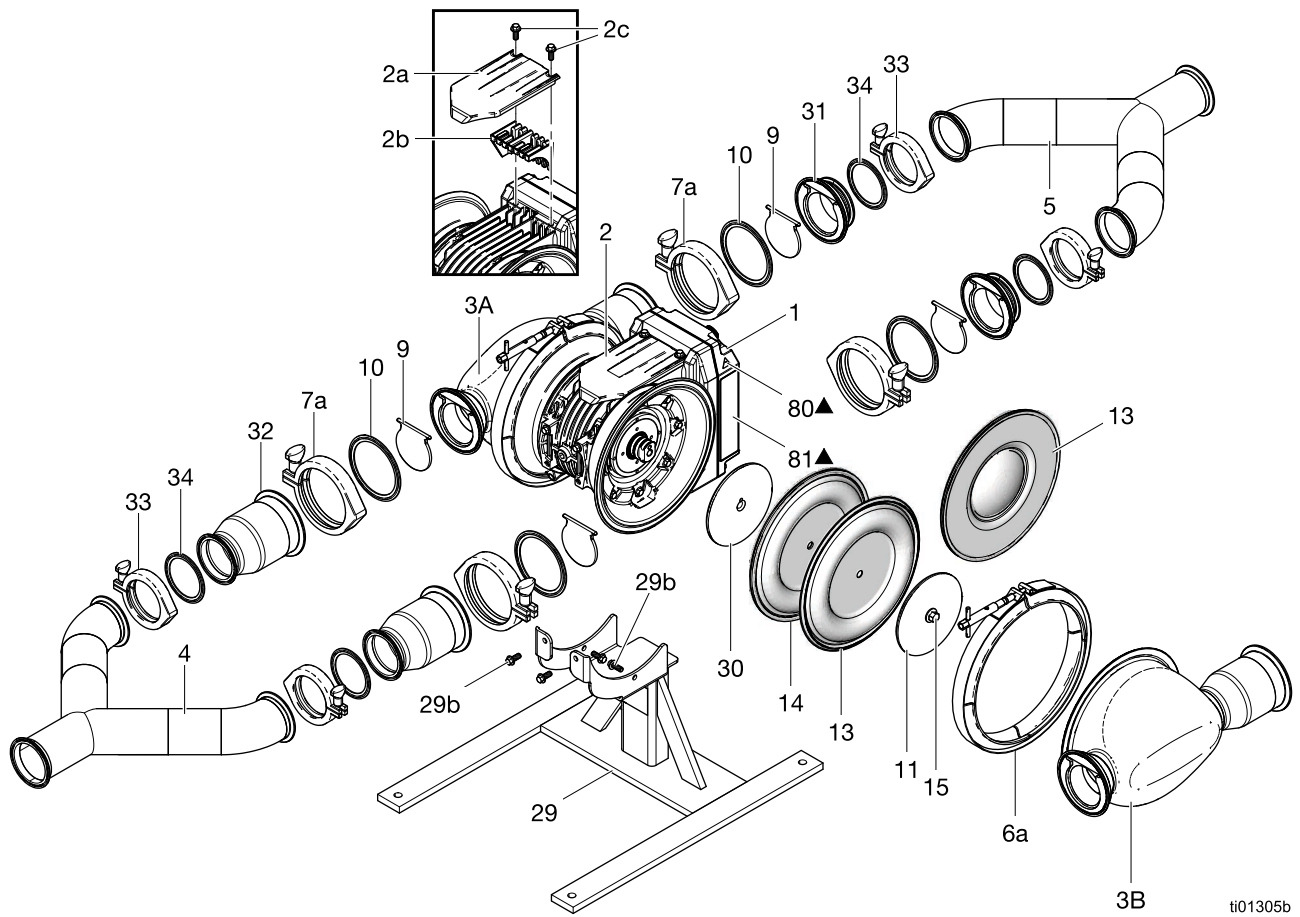
h120 (QHE) High Sanitation (HS, PH, 3A) model shown

h120 (QHF) Models



ti01304b

h120 (QHF) High Sanitation (HS) Vertical Flapper model shown (SSA/SSB)



ti01305b

h120 (QHF) High Sanitation (HS) Horizontal Flapper model shown (SSE/SSG)

Parts List

Parts are sold individually unless otherwise indicated.

Ref.	Part	Description	Qty.
1 [†]	---	MODULE, motor	1
2		MODULE, stator shield, see page 16	1
	25V114	for FG models	
	25V115	for HS, PH, and 3A models	
2a	---	SHIELD, stator	1
2b	---	BAFFLE; not used in 480 V models	1
2c	---	FASTENER; stator shield	2
3A, 3B	---	COVER, fluid; see page 15	1 each
4	---	MANIFOLD, outlet; see page 16	1
4b [†]	---	PLUG, outlet manifold; supplied with Ref. 4	0 or 1
5	---	MANIFOLD, inlet; see page 16	1
5b [†]	---	PLUG, inlet manifold; supplied with Ref. 5	0 or 1
6a [†]	---	CLAMP, fluid cover; see page 18	0 or 2
7a [†]	---	CLAMP, manifold; see page 18	0 or 4
8	---	SEAT, ball or flapper; see page 26	4
9	---	CHECK, ball or flapper; see page 26	4
9c [†]	---	STOP, ball; for select models only; not shown; see page 19	0 or 4
10 [†]	---	SEAL, packing, manifold; see page 20	0 or 4 or 8
11	---	PLATE, diaphragm, fluid side; see page 21	2
13	---	DIAPHRAGM	2
14 [†]	---	DIAPHRAGM, backer	0 or 2
15	---	FASTENER; see page 22	2
16 [†]	---	SEAL, packing; see page 26	0 or 2
29 [†]	---	STAND, frame, assembly; for select models only; includes Ref. 29b; see page 22	0 or 1
29b [†]	---	FASTENER, stand, assembly; for select models only; included with Ref. 29	0 or 6
30		PLATE, diaphragm, air side	2
	16D326	for h30 (QHC) models	
	2003133	for h80 (QHD) flapper models	
	19D142	for h80 (QHD) models	
	2001442	for h120 (QHF) flapper models	
	19D143	for h120 (QHE)	

Additional parts for horizontal flapper pumps (i120 (QTF) SSE/SSG:

Ref.	Part	Description	Qty.
31	25P084	SEAT, inlet	2
32	25P082	CHAMBER, outlet	2
10, 34	25P065	GASKET, pkg of 4 & 4	0 or 8
33	15D475	CLAMPS, manifold	0 or 4
34	25P063	GASKET, pkg of 4	0 or 4

--- Not available separately or part number varies.

[†] Not included in all models.

[‡] See your motor manual for specific motor models. See **Related Manuals**, page 2.

* Part not included in model.

NOTE: Replacement safety labels, tags, and cards are available at no cost.

Fluid Covers

Fluid Covers					
Ref.	Wetted Section Material		Part		
			h30 (QHC)	h80 (QHD)	h120 (QHE/F)
3A	Metal	FG	277262	277263	277264 (QHE)
		HS	25N995	25N996 25N997 (for HS models with FL checks)	25E575 (QHE) 25E576 (QHF)
		PH	25P040	25P041	25P042 (QHE)
		3A	---	25N996	25E575 (QHE)
3B	Metal	FG	277262	277263	277264 (QHE)
		HS	25N995	25N996 25N997(FL)	25E575 (QHE) 25E577 (QHF)
		PH	25P040	25P041	25P042 (QHE)
		3A	---	25N996	25E575 (QHE)

Stator Shield

Carts		
Ref.	Part	Description
2	25V114	KIT,QH HYGIENIC SHIELD
2	25V115	KIT,QH HYGIENIC SHIELD

◆ *Item is a kit.*

Kits include:

- 1 stator shield
- 1 cooling fin baffle (not used in 480 V models)
- 6 fasteners (25V114)
- 4 fasteners (25V115)

Manifolds

Outlet Manifolds

Outlet Manifolds							
Ref.	Wetted Section Material	Connection	Check	Part			
				h30 (QHC)	h80 (QHD)	h120 (QHE)	h120 (QHF)
4	FG	S13	Ball	277266	277268	277270	---
		S14	Ball	24U581	24U583	24U585	---
	HS	SSA	Ball	25P019	25P021	25E578	---
			FL (Flapper)	---	25P023	---	25E579
		SSB	Ball	19B035	19B037	19B031	---
			FL (Flapper)	---	19B041	---	19B028
		SSE	FL (Flapper)	---	---	---	25P028
	PH	SSA	Ball	17Z575	25P049	25P053	---
		SSB	Ball	---	---	---	---
	3A	SSA	Ball	---	25P021	25E578	---
		SSB	Ball	---	19B037	19B031	---

Inlet Manifolds

Inlet Manifolds							
Ref.	Wetted Section Material	Connection	Check	Part			
				h30 (QHC)	h80 (QHD)	h120 (QHE)	h120 (QHF)
5	FG	S13	Ball	277265	277267	277269	---
		S14	Ball	24U580	24U582	24U584	---
	HS	SSA	Ball	25P018	25P020	25E580	---
			FL (Flapper)	---	25P022	---	25E581
		SSB	Ball	19B034	19B036	19B030	---
			FL (Flapper)	---	19B040	---	19B029
		SSE	FL (Flapper)	---	---	---	25P028
	PH	SSA	Ball	25P044	25P048	25P052	---
		SSB	Ball	---	---	---	---
	3A	SSA	Ball	---	25P020	25E580	---
		SSB	Ball	---	19B036	19B030	---

Clamps for Fluid Covers

Clamps for Fluid Covers								
Ref.	Wetted Section Material		h30 (QHC)		h80 (QHD)		h120 (QHE)	
			Part	Qty.	Part	Qty.	Part	Qty.
6a	Metal	FG	18F507	2	15G699	2	26C048	2
		HS	18F507	2	15H341	2	25P107	2
		PH	18F507	2	15H341	2	25P107	2
		3A	---	0	15H341	2	25P107	2

Clamps for Manifolds

Clamps for Manifolds										
Ref.	Wetted Section Material		h30 (QHC)		h80 (QHD)		h120 (QHE)		h120 (QHF)	
			Part	Qty.	Part	Qty.	Part	Qty.	Part	Qty.
7a	Metal	FG	620223	4	15D475	4	510490	4	---	---
		HS	500984	4	620223	4	15D475	4	510490	4
		PH	500984	4	620223	4	15D475	4	---	---
		3A	---	0	620223	4	15D475	4	---	---

Seats

Seats					
Ref.	Wetted Section Material	Seat Material	Part		
			h30 (QHC)	h80 (QHD)	h120 (QHE)
8	FG	SS	25A276♦	26B430♦	26C568♦
	HS*	---	---	---	---
	PH*	---	---	---	---
	3A*	---	---	---	---

* Seat (8) included with the manifold (4, 5) or fluid cover (3).

♦ Item is a kit.

Kits include:

- 4 seats (8)

Checks

Checks						
Ref.	Check Material		Part			
			h30 (QHC)	h80 (QHD)	h120 (QHE)	h120 (QHF)
9	Plastic	BN	D07070♦	D0B070♦	D0F070♦	---
		EP	26B165♦	25R607♦	26B350♦	---
		FK	D07080♦	24W230♦	D0F080♦	-----
		PT	D07010♦	D0B010♦	D0F010♦	---
		SP	D07060♦	D0B060♦	D0F060♦	---
	Metal	FL	---	25P088♦	---	25E582♦
	Plastic and Metal	CW	25A299♦	26B431♦	D0F0H0♦	---

♦ Item is a kit.

Kits include:

- 4 checks (9)

Check Stops (Ball Models Only)

Check Stops				
Ref.	Wetted Section Material	Part		
		h30 (QHC)	h80 (QHD)	h120 (QHE)
9c	FG	---	---	---
	HS	25P089♦	25P100♦	25E584♦
	PH	25P089♦	25P100♦	25E584♦
	3A	25P089♦	25P100♦	25E584♦

♦ Item is a kit.

Kits include:

- 4 check stops (9c)

Manifold Seals

Manifold Seals						
Ref.	Manifold Seal Material	Wetted Section Material	Part			
			h30 (QHC)	h80 (QHD)	h120 (QHE)	h120 (QHF)
10	BN	FG	25V081♦	---	---	---
		HS	25R600♦	25R601♦	25R602♦	25R603♦
		PH	25R600♦	25R601♦	25R602♦	---
		3A	25R600♦	25R601♦	25R602♦	---
	EP	FG	26B689♦	---	26B355♦	---
		HS	25P060♦	25P061♦	25P063♦	25P064♦
		PH	25P060♦	25P061♦	25P063♦	---
		3A	25P060♦	25P061♦	25P063♦	---
	FK	FG	24Z915♦	---	26B356♦	---
		HS	26A890♦	26A891♦	26A892♦	26A893♦
		PH	26A890♦	26A891♦	26A892♦	---
		3A	26A890♦	26A891♦	26A892♦	---
	PT	FG	26B690♦	26B255♦	26B354♦	---
		HS	---	26A914†♦	---	26A916†♦
		PH	---	26A914†♦	---	---
		3A	---	26A914†♦	---	---

♦ Item is a kit.

† PTFE/EPDM bonded.

Kits include:

- 4 or 8 seals (10), as applicable

Fluid Plates

Fluid Plates				
Ref.	Wetted Section Material	h30 (QHC)	h80 (QHD)	h120 (QHE, QHF)
11	FG	15C039	189309	189299
	HS	25P117	15K288	189299
	PH	25P117	15K288	189299
	3A	---	15K288	189299

Diaphragms

Diaphragms					
Ref.	Diaphragm Material	Wetted Section Material	Part		
			h30 (QHC)	h80 (QHD)	h120 (QHE, QHF)
13, 14	BN	FG	25V216♦	25V200♦	25V207♦
		HS			
		PH			
		3A	---		
	EO	FG	---	25V228♦	25V215♦
		HS	---		
		PH	---		
		3A	---		
	FK	FG	25V217♦	25V201♦	25V208♦
		HS			
		PH			
		3A	---		
	PO	FG	25V219♦	25V205♦	25V214♦
		HS			
		PH			
		3A	---		
	PS	FG	25P131♦	25P207♦	25P266♦
		HS			
		PH			
		3A	---	---	---
	SP	FG	25V218♦	25V203♦	25V209♦
		HS			
		PH			
		3A	---		

♦ Item is a kit.

Kits include:

- 2 diaphragms (13)
- 2 diaphragm backers (14, if applicable)
- 2 seals (16, if applicable)
- 1 packet anaerobic adhesive

Diaphragm Fasteners

Diaphragm Fasteners			
Ref.	Part		
	h30	h80	h120
15	189044	189410	189410

Stands

Stands						
Ref.	Wetted Section Material	Part				
		h30 (QHC) 1-inch ports	h80 (QHD) 2-inch ports	h120 (QHE) 2- & 3-inch ports	h120 (QHF) 2- & 3-inch ports Vertical (SSA/SSB)	h120 (QHF) 2- & 3-inch ports Horizontal (SSE/SSG)
29	FG	---	2008444	2008444	---	---
	HS	19C461	---	2008444	2008444	25V102
	PH	19C461	---	2008444	---	---
	3A	19C461	---	2008444	---	---

Cart

Carts			
Ref.	Part		
	h30 (QHC)	h80 (QHD)	h120 (QHE)
	25U599	25U599	25U599
	FDA, HS, PH,3A	FDA only	FDA only

Maintenance Bracket Stand

Maintenance Bracket Stand		
Ref.	Part	Description
31	18F978	STAND, Maintenance Bracket

Fluid Repair Kits

See **Configuration Matrix** on page 3 for definitions of the seat, check, diaphragm, and seals materials.

As applicable, all Fluid Repair Kits include:

- 4 seats
- 4-8 manifold gaskets
- 4 checks
- 2 diaphragms
- 2 diaphragm backers
- 2 diaphragm bolts
- 2 diaphragm bolt O-rings
- 1 adhesive

h30 (QHC)

h30 (QHC)	
Part	Seat, Check, Diaphragm, Seals Materials
Wetted Section: FG	
25V230	SS,CW,PO,PT
25V231	SS,CW,PO,EP
25V232	SS,CW,PS,EP
25V233	SS,CW,PS,PT
25V234	SS,CW,SP,PT
25V235	SS,CW,SP,EP
25V236	SS,FK,FK,FK
25V237	SS,PT,PO,PT
25V238	SS,PT,PO,EP
25V239	SS,PT,PS,PT
25V240	SS,PT,PS,EP
25V242	SS,SP,SP,PT
25V243	SS,SP,SP,EP
25V244	SS,BN,BN,BN
Wetted Section: HS, PH, 3A	
25V246	--,CW,PO,EP
25V247	--,CW,PS,EP
25V250	--,CW,SP,EP
25V251	--,FK,FK,FK
25V253	--,PT,PO,EP

h30 (QHC)	
Part	Seat, Check, Diaphragm, Seals Materials
25V255	--,PT,PS,EP
25V257	--,SP,SP,EP
25V258	--,BN,BN,BN

h80 (QHD)

h80 (QHD)	
Part	Seat, Check, Diaphragm, Seals Materials
Wetted Section: FG	
25V323	SS,CW,PO,PT
25V324	SS,CW,PS,PT
25V325	SS,CW,SP,PT
25V326	SS,CW,SP,EP
25V327	SS,FK,FK,FK
25V328	SS,PT,PO,PT
2009557	SS,PT,PO,EP
25V329	SS,PT,PS,PT
25V330	SS,SP,SP,EP
25V331	SS,BN,BN,EP
25V332	SS,EP,EO,EP
25V333	SS,PT,EO,EP
25V334	SS,CW,EO,EP
Wetted Section: HS, PH, 3A	
25V335	--,CW,PO,EP
25V336	--,CW,PS,EP
25V337	--,CW,SP,EP
25V338	--,FK,FK,FK
25V339	--,PT,PO,EP
25V340	--,PT,PS,EP
25V341	--,SP,SP,EP
25V342	--,BN,BN,BN

h80 (QHD)	
Part	Seat, Check, Diaphragm, Seals Materials
25V343	--,EP,EO,EP
25V344	--,PT,EO,EP
25V345	--,CW,EO,EP
25V346	FL,--,PO,EP
25V347	FL,--,PS,EP
25V348	FL,--,SP,EP
25V349	FL,--,FK,FK
2009558	FL,--,BN,EP

h120 (QHE)

h120 (QHE)	
Part	Seat, Check, Diaphragm, Seals Materials
Wetted Section: FG	
25V375	SS,CW,PO,PT
25V376	SS,CW,PS,PT
25V377	SS,CW,SP,PT
25V378	SS,CW,SP,EP
25V379	SS,FK,FK,FK
25V380	SS,PT,PO,PT
2009559	SS,PT,PO,EP
25V381	SS,PT,PS,PT
25V382	SS,SP,SP,EP
25V383	SS,BN,BN,EP
25V384	SS,EP,EO,EP
25V385	SS,PT,EO,EP
25V386	SS,CW,EO,EP
Wetted Section: HS, PH, 3A	
25V387	--,CW,PO,EP
25V388	--,CW,PS,EP
25V389	--,CW,SP,EP
25V390	--,FK,FK,FK
25V391	--,PT,PO,EP

h120 (QHE)	
Part	Seat, Check, Diaphragm, Seals Materials
25V392	--,PT,PS,EP
25V394	--,SP,SP,EP
25V395	--,BN,BN,BN
25V396	--,EP,EO,EP
25V397	--,PT,EO,EP
25V399	--,CW,EO,EP

h120 (QHF)

h120 (QHF)	
Part	Seat, Check, Diaphragm, Seals Materials
Wetted Section: HS	
2002683	FL, --, PO, EP
2002693	FL, --, PS, EP
2002694	FL, --, SP, EP
2002695	FL, --, FK, EP
2002696	FL, --, BN, EP

[illegible]

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

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

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Original instructions. This manual contains English. MM 3A9287

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Revision H, November 2024