

# Instructions–Parts List



HIGH PRESSURE FLUID LINE

## Ball Valves, Check Valves, and Swivels

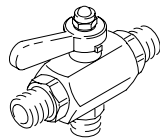
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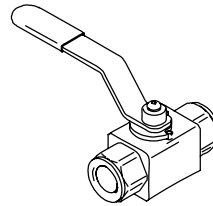


### Important Safety Instructions

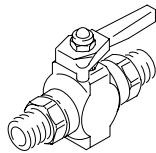
Read all warnings and instructions in this manual.  
Save these instructions. See page 3 for a **List of Models**, including **Maximum Working Pressures**.



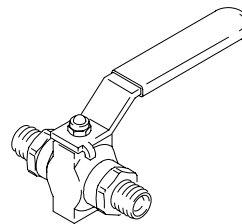
Model 214711



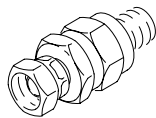
Model 262739



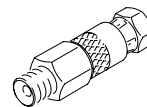
Model 210657



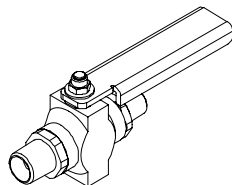
Model 238635



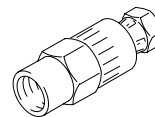
Model 206831



Model 239663



Model 239280



Model 214925

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## List of Models

### Two Way Director Valve

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
214711	A	1/4 npt(mbe)	fluoroelastomer

### One Way Ball Valves

7400 psi (51 MPa, 510 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
237303	A	1/4 npt(mbe)	PTFE with PEEK seat
237304	A	3/8 npt(mbe)	PTFE with PEEK seat
245860	A	3/8 npt(mbe)	PTFE with PEEK seat
245861	A	3/8 npt(mbe)	PTFE with PEEK seat
248875	A	1/4 npt(mbe)	PTFE with PEEK seat
248876	A	3/8 npt(mbe)	PTFE with PEEK seat

### One Way Ball Valves, Heavy Duty, Stainless Steel

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
262739	A	1/2 npt(fbe)	PTFE with PEEK seat
262740	A	1/2 npt(fbe)	PTFE with PEEK seat

### One Way Ball Valves, Heavy Duty

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
235573	B	3/8 npt(m) one end	fluoroelastomer with Carbide seat
237469	A	3/8 npt(m) x 1/4 npt(m)	fluoroelastomer with Carbide seat
238967	C	3/8 npt(m) x 3/8 npt(m)	PTFE with PEEK seat
239280	A	1/4 npt(m) x 1/4 npt(m)	fluoroelastomer with Carbide seat

# List of Models

## One Way Ball Valves

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
210657	B	1/4 npt(mbe)	fluoroelastomer
210658	B	3/8 npt(mbe)	fluoroelastomer
210659	B	3/8 x 1/4 npt(mbe)	fluoroelastomer
214037	B	1/4 npt(mbe)	PTFE
218901	A	1/4 nps(m) x 3/4 unf-2a	PTFE
223959	A	3/8 x 1/4 npt(mbe)	PTFE
223960	A	3/8 npt(mbe)	PTFE
224441	A	3/8 npt(m) one end	fluoroelastomer
235992	A	3/8 x 1/4 npt(mbe)	PTFE, sst
238612	A	3/8 npt(mbe)	fluoroelastomer
238635	A	1/4 npt(mbe)	fluoroelastomer
238694	A	3/8 npt(mbe)	PTFE, sst
239018	A	1/4 npt(mbe)	PTFE, sst
240410	A	3/8 npt(mbe)	PTFE, sst
240411	A	1/4 npt(mbe)	PTFE, sst
248271	A	1/4 npt(mbe)	PTFE, sst
24F607	A	3/8 npt(mbe)	Flouroelastomer

# List of Models

## Swivels

7400 psi (51 MPa, 510 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
236987	B	1/4 npsm(f) x 1/4 npsm(m) swivel	PTFE

## Swivels

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
214925	–	3/8 npt(f) x 1/4 npsm(f) swivel	Leather
214926	–	3/8 npt(f) x 1/2 npsm(f) swivel	Leather

## Check Valves

3000 psi (21 MPa, 210 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
206831	–	3/8 npt(m) x 3/8 npsm(f) swivel	Nitrile rubber
206833	–	3/8 npt(m) x 3/8 npsm(f) 90° swivel	Nitrile rubber
206962	–	3/8 npt(mbe)	Nitrile rubber

## Swivels

3600 psi (25 MPa, 250 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
239663	–	1/4 npt(m) x 1/4 npsm(f) swivel	Leather
223341	B	1/4 npt(m) x 1/4 npsm(f) swivel	PTFE

# Symbols

## Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

## Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

## ! WARNING



INSTRUCTIONS

### EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are not sure, call your Graco distributor.
- Do not alter or modify this equipment.
- Check equipment daily. Repair or replace worn or damaged parts immediately. Do not repair high pressure couplings; you must replace the entire hose.
- Do not exceed the maximum working pressure of the lowest rated system component. Refer to the charts on pages 2 and NO TAG for the maximum working pressure of this equipment.
- Use fluids and solvents which are compatible with the equipment wetted parts. Refer to the **Technical Data** section of all equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.



### SKIN INJECTION HAZARD

Spray from the gun, leaks or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation. Fluid splashed in the eyes or on the skin can also cause serious injury.

- Fluid injected into the skin might look like just a cut, but it is a serious injury. **Get immediate surgical treatment.**
- Keep hands away from the end of the drain valve when opening it.
- Do not stop or deflect leaks with your hand, body, glove or rag.
- Follow the **Pressure Relief Procedure** on page 6, before cleaning, checking or servicing the equipment.
- Tighten all fluid connections before operating the equipment.
- Fluid hoses must have spring guards on both ends, to help protect them from rupture caused by kinks or bends near the couplings.

# Ball Valve Operation/Service

## Pressure Relief Procedure

### WARNING



#### SKIN INJECTION HAZARD

The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** whenever you:

- are instructed to relieve the pressure,
- stop dispensing,
- check or service any of the system equipment,
- or install or clean dispensing devices.

1. Engage the spray gun safety latch and any other equipment safety locks.
2. Turn off the power to the pump.
3. Disengage the gun safety latch and trigger the spray gun to relieve pressure.
4. Engage the spray gun safety latch and slowly open the system drain valve(s). Keep hands away from the end of the drain valve when opening it.
5. Leave the drain valve(s) open until you are ready to use the system again.

### WARNING

Two-way director valves must be used only as ON/OFF valves. Never use them to “throttle” fluid flow, as this causes rapid wear of the valve. A worn valve may leak or fail to stay in the position (operate/drain) that you set it, unexpectedly allowing high pressure fluid into the closed off part of the system. This hazard can result in fluid injection or splashing in the eyes or on the skin.

If the valve leaks fluid into the closed off part of the system, or if the valve handle is loose or does not hold its position firmly, replace the valve immediately.

## Two-Way Director Valve

The two-way director valve is used to direct high pressure fluids in either of two directions. It is commonly used in heated circulating systems to bleed trapped air and to direct unused, heated fluids back to the pump. It can also be used in multiple gun installations.

Connect the fluid line to the 1/4 in. npt(m) inlet (marked “IN”). Direct the fluid to either outlet by turning the lever in the direction desired for flow.

## One-Way Valves

The one-way valves are used as drain valves to relieve fluid pressure in spray systems. To open the valve, turn the lever parallel to the valve housing. To fully stop fluid flow through the valve, turn the lever 90° to the valve housing.

## Valve Service

Follow the **Pressure Relief Procedure** at left. Remove the valve from the line and disassemble it. Clean the parts and inspect them for wear or damage. Replace them as necessary.

### CAUTION

Do not wash fluoroelastomer o-rings in ketone thinners as these thinners cause the o-rings to deteriorate.

Lubricate the o-ring seals and threaded parts with lithium base lubricant. Assemble the valve in the reverse order of disassembly (refer to the parts drawing for your model). When installing the lever on the valve, make sure the hole in the ball is aligned with the direction of the lever.

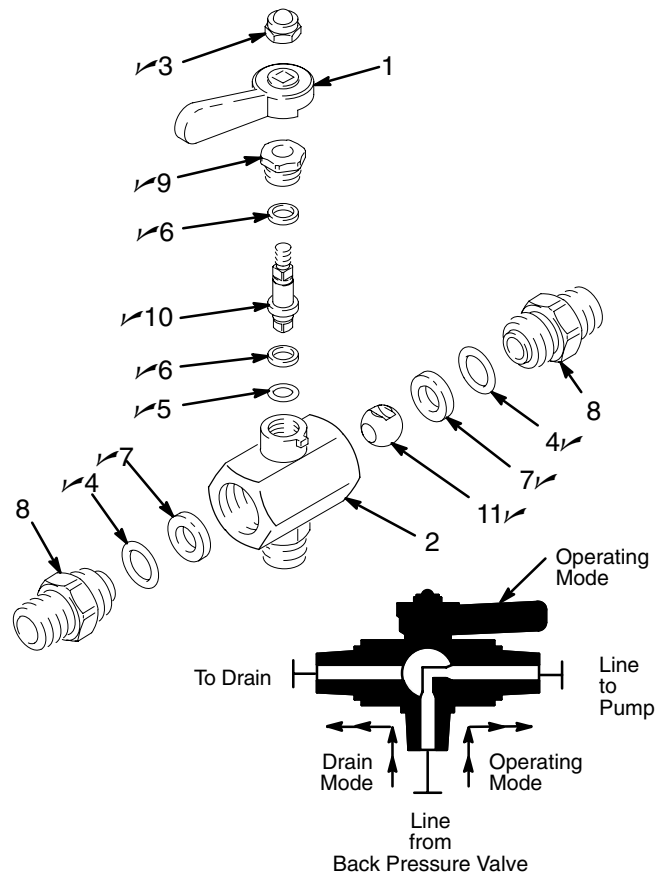
# Two Way Valve Parts

## Model 214711

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/4 npt(mbe), fluoroelastomer seals

REF NO.	PART NO.	DESCRIPTION	QTY
1	206970	LEVER, valve	1
2	214710	HOUSING, valve	1
3✓	102310	NUT, hex; nylon cap; No. 10-32	1
4✓	110241	SEAL, o-ring; fluoroelastomer <i>standard</i>	2
	104892	SEAL, o-ring; PTFE <i>optional</i>	2
5✓	110242	SEAL, o-ring; fluoroelastomer <i>standard</i>	1
	104893	SEAL, o-ring; PTFE <i>optional</i>	1
6✓	164900	WASHER, flat, nylon	2
7✓	172094	SEAT, ball, nylon	2
8	165274	STUD, valve; 1/4 npt(m)	2
9✓	165964	NUT, packing	1
10✓	166696	STEM, valve	1
11✓	167008	BALL, valve	1

✓ Keep these spare parts on hand to reduce down time.



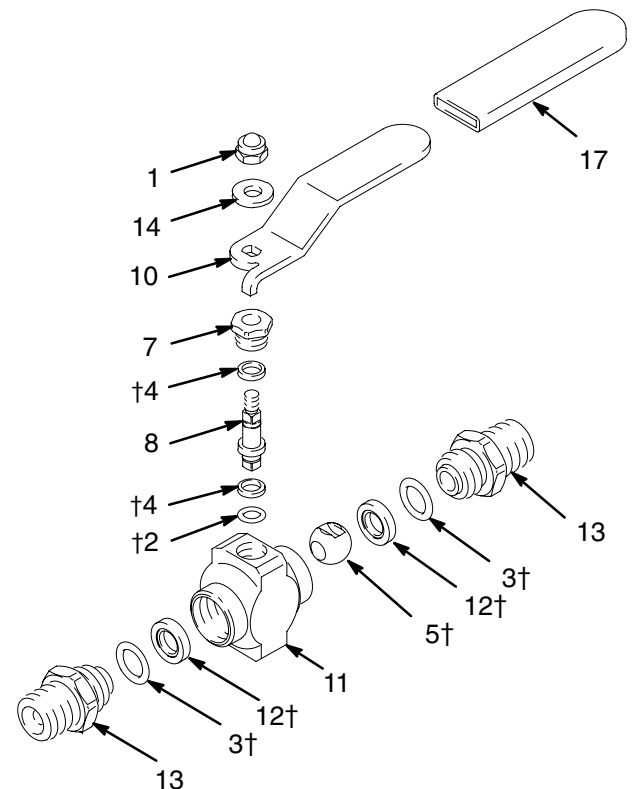
# One Way Valve Parts

## Model 238967, Series C

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(m) x 3/8 npt(m), PTFE seals, PEEK seat

REF NO.	PART NO.	DESCRIPTION	QTY
1	102310	NUT, hex; nylon cap; No. 10-32	1
2†	104893	SEAL, o-ring; PTFE	1
3†	104892	SEAL, o-ring; PTFE	2
4†	164900	WASHER, flat, nylon	2
5†	188745	BALL, valve	1
7	165964	NUT, packing	1
8	188742	STEM, valve	1
10	190180	LEVER, valve	1
11	188828	HOUSING, valve	1
12†	190179	SEAT, ball	2
13	188743	NIPPLE, 3/8 npt(m)	2
14	112776	WASHER, flat	1
17	112907	GRIP, handle	1

† These parts are included in Repair Kit 240147, which may be purchased separately.



# One Way Valve Parts

## Model 237303, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure  
1/4 npt(mbe); PTFE seals, PEEK seat

## Model 237304, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure  
3/8 npt(mbe), PTFE seals, PEEK seat

## Model 245860, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure  
3/8 npt(mbe), PTFE seals, PEEK seat

## Model 245861, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure  
3/8 npt(mbe), PTFE seals, PEEK seat

## Model 248875, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure  
1/4 npt(mbe); PTFE seals, PEEK seat

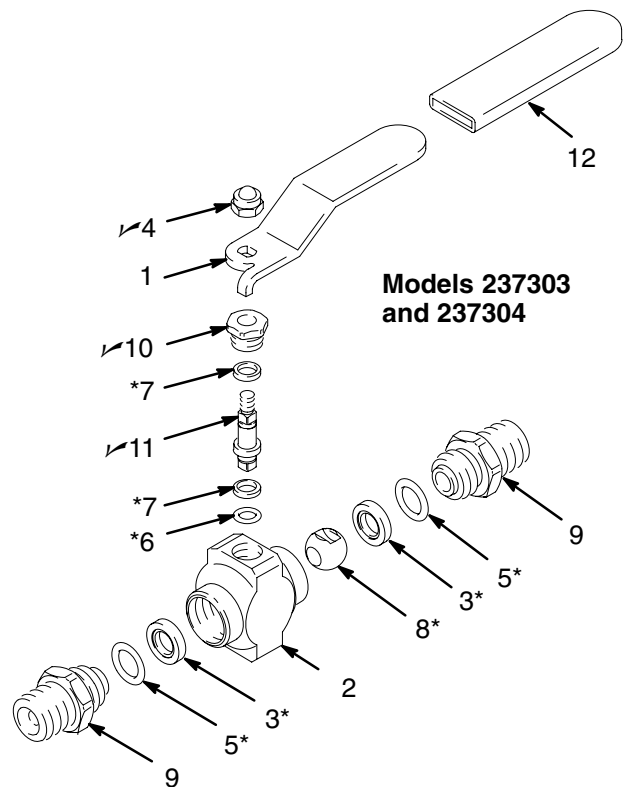
## Model 248876, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure  
3/8 npt(mbe), PTFE seals, PEEK seat, no lever

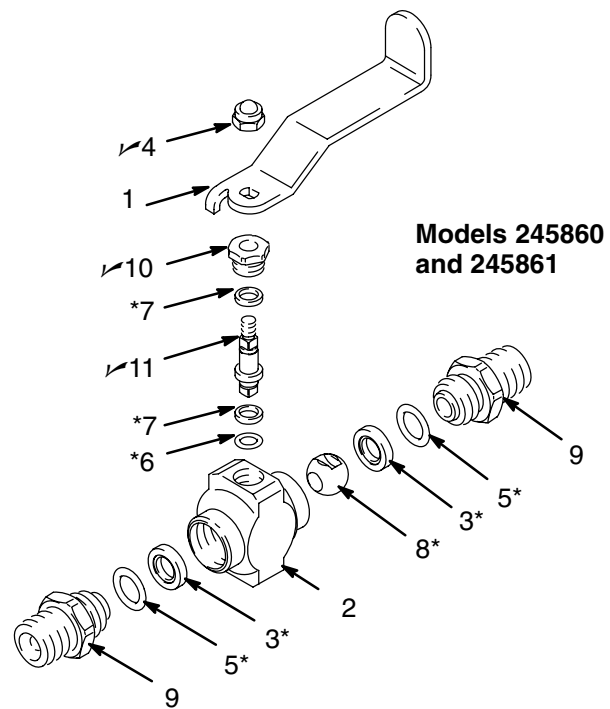
REF NO.	PART NO.	DESCRIPTION	QTY
1	190180	LEVER, valve, (Models 237303 and 237304)	1
	15A881	LEVER, valve, left hand (Model 245860, shown)	1
	15A882	LEVER, valve, right hand	1
	178747	LEVER, valve, (Model 248875)	1
2	178743	HOUSING, valve	1
3*	190179	SEAT, ball, PEEK	2
4✓	102310	NUT, hex; nylon cap; No. 10–32 (not on 248876)	1
5*	104892	SEAL, o-ring; PTFE	2
6*	104893	SEAL, o-ring; PTFE	1
7*	164900	WASHER, flat, nylon	2
8*	178746	BALL, valve	1
9	165274	STUD, valve; 1/4 npt(m) Models 237303 and 248875	2
	165599	STUD, valve; 3/8 npt(m) (Models 237304, 245860, 245861 and 248876)	2
10✓	165964	NUT, packing	1
11✓	178745	STEM, valve	1
12	112907	GRIP, handle (Models 237303 and 237304 only)	1

\* These parts are included in Repair Kit 237917, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



Models 237303  
and 237304

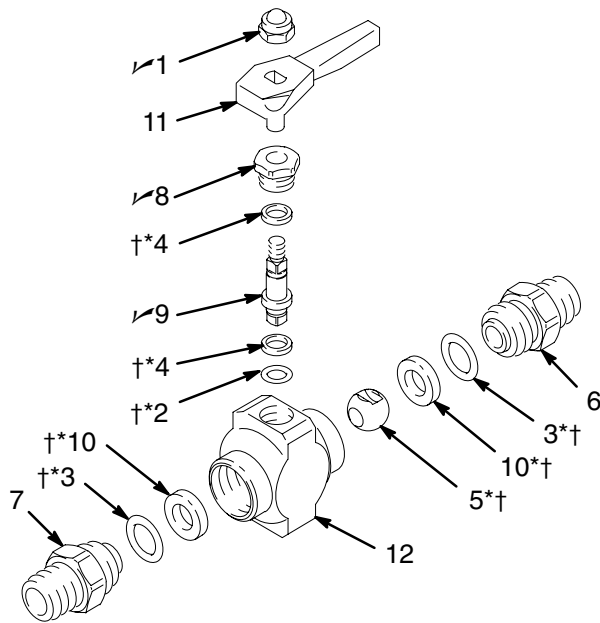


Models 245860  
and 245861

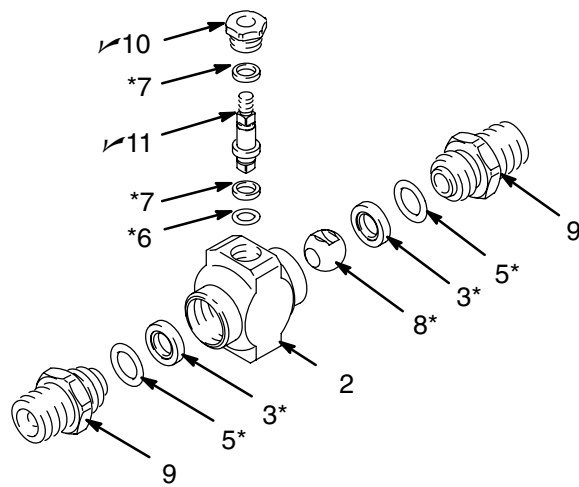


# One Way Valve Parts

Model 248875



Model 248876



# One Way Valve Parts

## Model 238612, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

3/8 npt(mbe), fluoroelastomer seals

## Model 238635, Series A

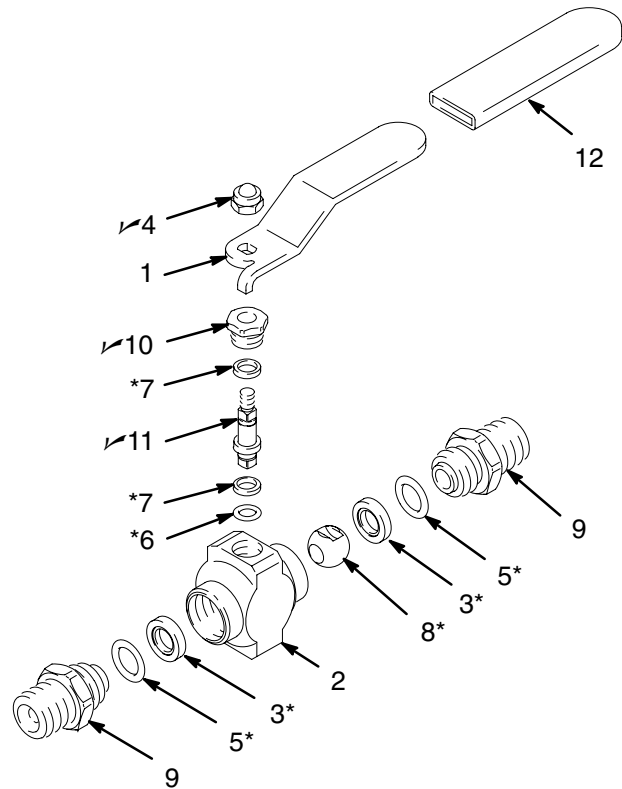
5000 psi (35 MPa, 350 bar) Maximum Working Pressure

1/4 npt(mbe), fluoroelastomer seals

REF NO.	PART NO.	DESCRIPTION	QTY
1	190180	LEVER, valve	1
2	178743	HOUSING, valve	1
3*	172094	SEAT, ball, nylon	2
4✓	102310	NUT, hex; nylon cap; No. 10-32	1
5*	110241	SEAL, o-ring; fluoroelastomer	2
6*	110242	SEAL, o-ring; fluoroelastomer	1
7*	164900	WASHER, flat, nylon	2
8*	178746	BALL, valve	1
9	165599	STUD, valve; 3/8 npt(m) Model 238612	2
	165274	STUD, valve; 1/4 npt(m) Model 238635	2
10✓	165964	NUT, packing	1
11✓	178745	STEM, valve	1
12	112907	GRIP, handle	1

\* These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



## Model 262739, Series A (Includes Handle)

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

1/2 npt (fbe), PTFE seals, PEEK seats, stainless steel

## Model 262740, Series A (No Handle)

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

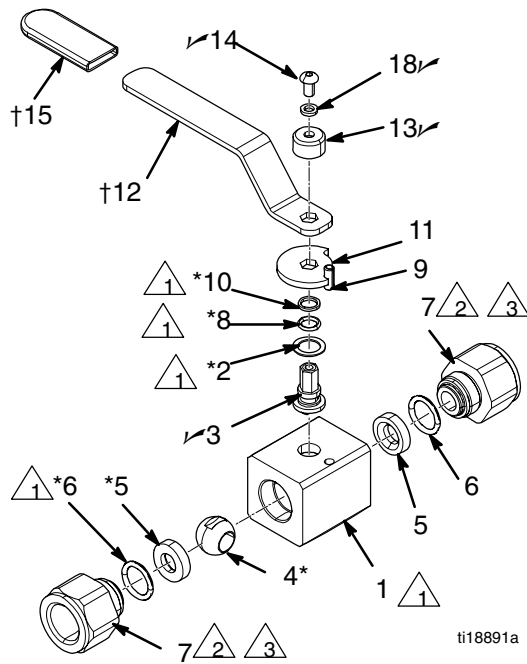
1/2 npt(mbe), PTFE seals, PEEK seats, stainless steel

REF NO.	PART NO.	DESCRIPTION	QTY
1	16K986	HOUSING, ball valve, 1/2 in., sst	1
2*	16M175	RING, packing, valve, acetal	1
3	16M165	STEM, valve, ball, 1/2 npt, sst	1
4*	16M199	BALL, valve, 3/4, sst chrome	1
5*	16M174	SEAT, ball, valve, 1/2 npt, sst	1
6*	867370	O-RING, seal, PTFE, 114	2
7	16M161	CAP, end, valve, 1/2 npt, sst	2
8*	113137	PACKING, o-ring; solvent resistant	2
9	107090	PIN, spring, straight	1
10*	126021	RING, backup; PTFE	1
11	16K988	STOP, handle; sst	1
12†	16K989	HANDLE, 1/2 in. ball valve; sst	1
13	16K987	CAP, locking; sst	1
14	551787	SCREW, 10-32 x 3/8 IN., sst	1
15†	112907	GRIP, handle; yellow	1
18	551788	WASHER, lock, split #10 sst	1

† Included in 262739 only.

\* These parts are included in Repair Kit 24M601, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



- 1 Apply lithium grease.
- 2 Apply blue (medium) threadlocker on threads.
- 3 Torque to 60 ft-lbs (N•m).

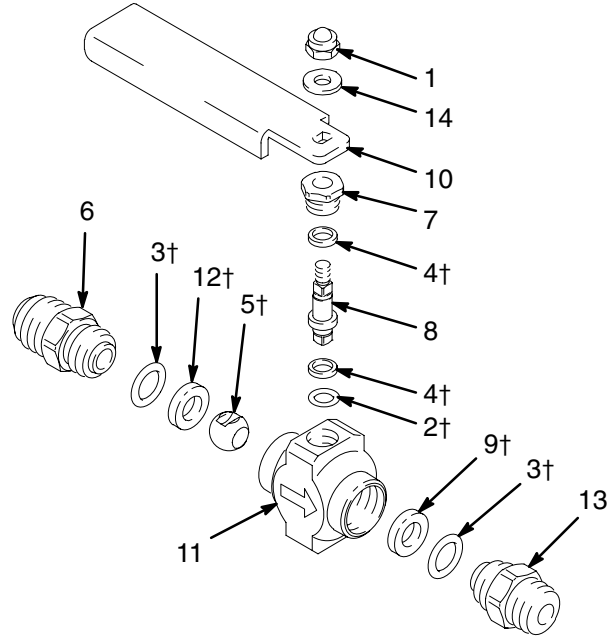
# One Way Valve Parts

## Model 237469, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(m) x 1/4 npt(m), fluoroelastomer seals, carbide seat

REF NO.	PART NO.	DESCRIPTION	QTY
1	102310	NUT, hex; nylon cap; No. 10-32	1
2†	110242	SEAL, o-ring; fluoroelastomer	1
3†	110241	SEAL, o-ring; fluoroelastomer	2
4†	164900	WASHER, flat, nylon	2
5†	190079	BALL, valve	1
6	190081	STUD, valve; 3/8 npt(m)	1
7	165964	NUT, packing	1
8	187163	STEM, valve	1
9†	223521	SEAT, ball, carbide	1
10	190083	LEVER, valve	1
11	178743	HOUSING, valve	1
12†	172094	SEAT, ball	1
13	190338	NIPPLE, 1/4 npt(m)	1
14	112776	WASHER, flat	1

† These parts are included in Repair Kit 237693, which may be purchased separately.



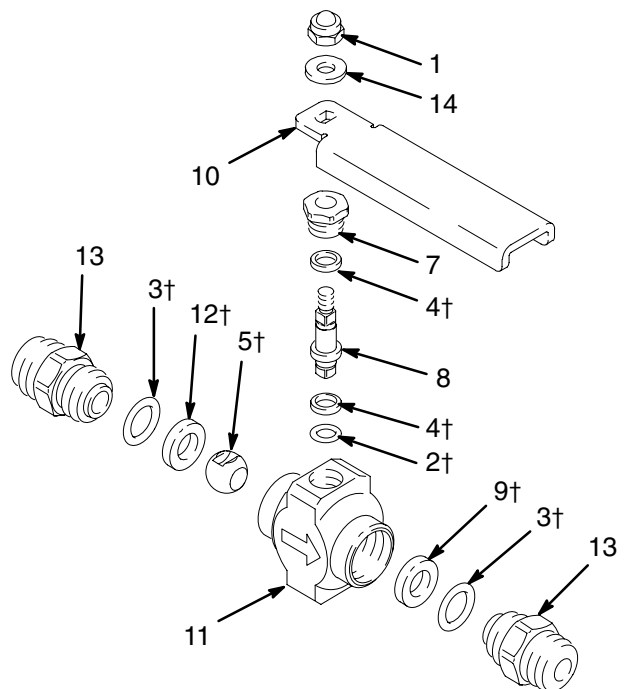
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## Model 239280, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/4 npt(m) x 1/4 npt(m), fluoroelastomer seals, carbide seat

REF NO.	PART NO.	DESCRIPTION	QTY
1	102310	NUT, hex; nylon cap; No. 10-32	1
2†	110242	SEAL, o-ring; fluoroelastomer	1
3†	110241	SEAL, o-ring; fluoroelastomer	2
4†	164900	WASHER, flat, nylon	2
5†	190079	BALL, valve	1
7	165964	NUT, packing	1
8	187163	STEM, valve	1
9†	223521	SEAT, ball, carbide	1
10	190083	LEVER, valve	1
11	178743	HOUSING, valve	1
12†	172094	SEAT, ball	1
13	190338	NIPPLE, 1/4 npt(m)	2
14	112776	WASHER, flat	1

† These parts are included in Repair Kit 237693, which may be purchased separately.



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# One Way Valve Parts

## Model 210657, Series B

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/4 npt(mbe), fluoroelastomer seals

## Model 210658, Series B; Model 24F607, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(mbe), fluoroelastomer seals

## Model 223960, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(mbe), PTFE seals

## Model 210659, Series B

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(m) x 1/4 npt(m), fluoroelastomer seals

## Model 223959, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(m) x 1/4 npt(m), PTFE seals

REF NO.	PART NO.	DESCRIPTION	QTY
1	102310✓	NUT, hex; nylon cap; No. 10–32	1
2	110242†	SEAL, o-ring; fluoroelastomer <i>Models 210658 &amp; 210657</i>	1
	104893*	SEAL, o-ring; PTFE <i>Model 223960</i>	1
3	110241†	SEAL, o-ring; fluoroelastomer <i>Models 210658 &amp; 210657</i>	2
	104892*	SEAL, o-ring; PTFE <i>Model 223960</i>	2
4	164900*†	WASHER, flat, nylon	2
5	178746*†	BALL, valve	1
6	165274	STUD, valve; 1/4 npt(m)	2
	165599	STUD, valve; 3/8 npt(m) <i>Model 210657</i>	2
	16F448	STUD, valve, 3/8 npt(m) nickel plated <i>Model 24F607</i>	2
7	165964✓	NUT, packing	2
8	178745✓	STEM, valve	1
9	172094*†	SEAT, ball, nylon	2
10	178747	LEVER, valve	1
11	178743	HOUSING, valve <i>Models 210657, 210658, 223960</i>	1
	16F447	HOUSING, valve, nickel plated <i>Model 24F607</i>	2

\* These parts are included in Repair Kit 217560, which may be purchased separately.

† These parts are included in Repair Kit 217559, which may be purchased separately.

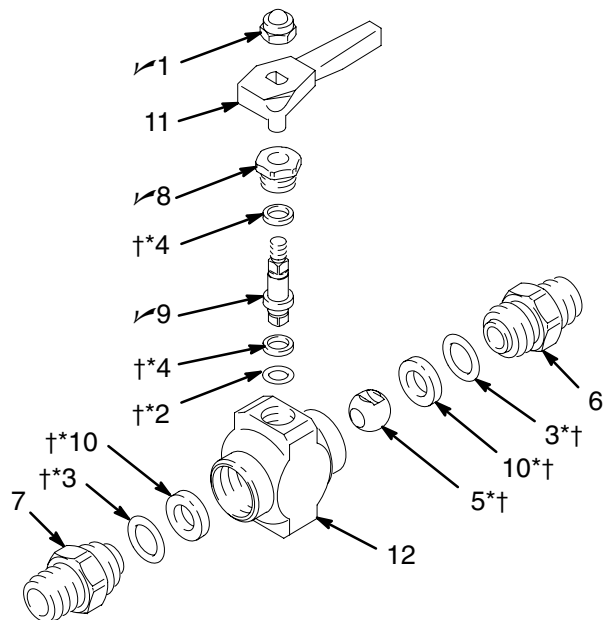
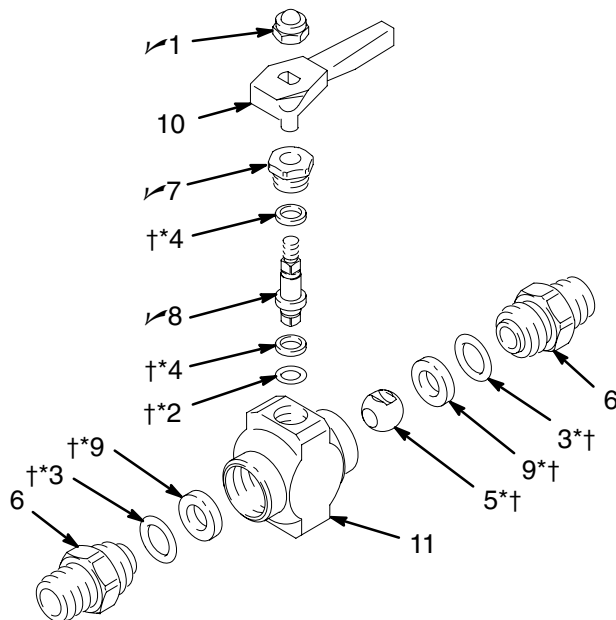
✓ Keep these spare parts on hand to reduce down time.

REF NO.	PART NO.	DESCRIPTION	QTY
1	102310✓	NUT, hex; nylon cap; No. 10–32	1
2	110242†	SEAL, o-ring; fluoroelastomer <i>Model 210659</i>	1
	104893*	SEAL, o-ring; PTFE <i>Model 223959</i>	1
3	110241†	SEAL, o-ring; fluoroelastomer <i>Model 210659</i>	2
	104892*	SEAL, o-ring; PTFE <i>Model 223959</i>	2
4	164900*†	WASHER, flat, nylon	2
5	178746*†	BALL, valve	1
6	165274	STUD, valve; 1/4 npt(m)	1
7	165599	STUD, valve; 3/8 npt(m)	1
8	165964✓	NUT, packing	1
9	178745✓	STEM, valve	1
10	172094*†	SEAT, ball, nylon	2
11	178747	LEVER, valve	1
12	178743	HOUSING, valve	1

\* These parts are included in Repair Kit 217560, which may be purchased separately.

† These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



# One Way Valve Parts

## Model 238694, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(mbe), PTFE seals, stainless steel

## Model 235992, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(m) x 1/4 npt(m), PTFE seals, stainless steel

## Model 248271, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/4 npt(mbe), PTFE seals, stainless steel

### REF

REF NO.	PART NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10-32	1
2	104893*†	SEAL, o-ring; PTFE	1
3	104892*†	SEAL, o-ring; PTFE	2
4	164900*†	WASHER, flat, nylon	2
5	188745*†	BALL, valve	1
6		STUD, valve	
	188743	3/8 npt(m), Model 238694	1
	188744	1/4 npt(m), Model 235992, 248271	1
7		STUD, valve	
	188743	3/8 npt(m) Model 238694	1
	188744	1/4 npt(m) Model 235992, 248271	1
8✓	165964	NUT, packing	1
9✓	188742	STEM, valve	1
10		SEAT, ball, nylon	
	190179†	Model 238694	2
	172094*	Model 235992, 248271	2
11	178747	LEVER, valve	1
12	188828	HOUSING, valve	1

\* These parts are included in Repair Kit 236593, which may be purchased separately.

† These parts are included in Repair Kit 240147, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.

## Model 239018, Series A

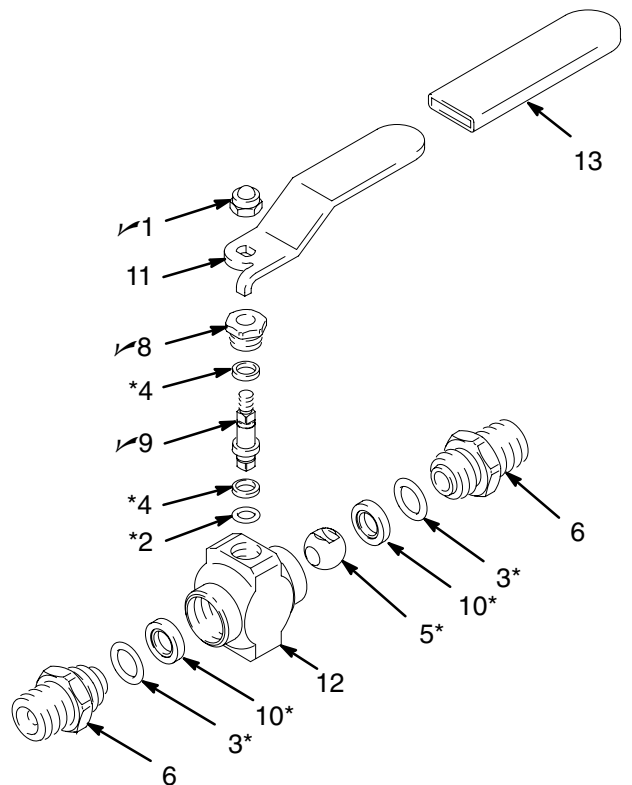
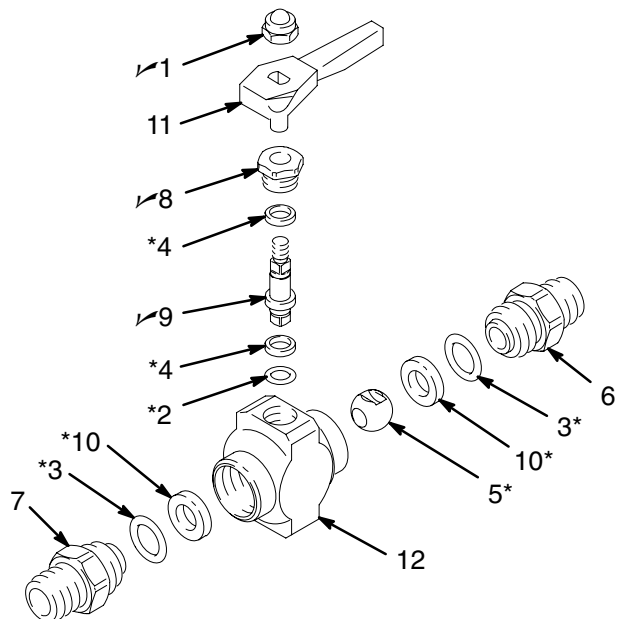
5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/4 npt(mbe), PTFE seals, stainless steel

### REF

REF NO.	PART NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10-32	1
2*	104893	SEAL, o-ring; PTFE	1
3*	104892	SEAL, o-ring; PTFE	2
4*	164900	WASHER, flat, nylon	2
5*	188745	BALL, valve	1
6	188744	STUD, valve; 1/4 npt(m)	2
8✓	165964	NUT, packing	1
9✓	188742	STEM, valve	1
10*	172094	SEAT, ball, nylon	2
11	190180	LEVER, valve	1
12	188828	HOUSING, valve	1
13	112907	GRIP, handle	1

\* These parts are included in Repair Kit 236593, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



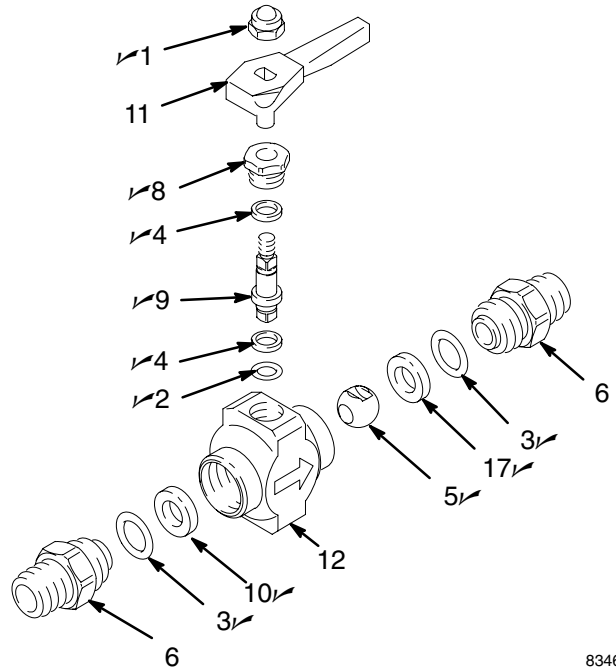
# One Way Valve Parts

## Model 240410, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(mbe), PTFE seals, carbide and PEEK seats, stainless steel

REF NO.	PART NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10-32	1
2✓	104893	SEAL, o-ring; PTFE	1
3✓	104892	SEAL, o-ring; PTFE	2
4✓	164900	WASHER, flat, nylon	2
5✓	193797	BALL, valve	1
6✓	188743	STUD, valve; 3/8 npt(m)	2
8✓	165964	NUT, packing	1
9✓	193798	STEM, valve	1
10✓	190179	SEAT, ball, PEEK	1
11	178747	LEVER, valve	1
12	188828	HOUSING, valve	1
17✓	223521	SEAT, ball, carbide	1

✓ Keep these spare parts on hand to reduce down time.



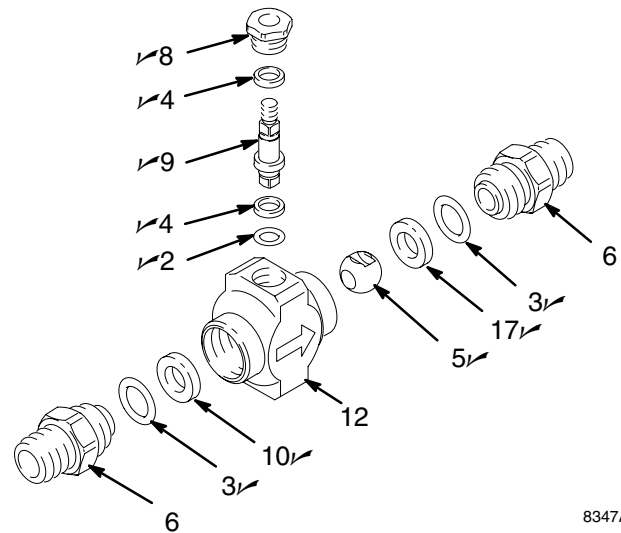
8346A

## Model 240411, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/4 npt(mbe), PTFE seals, carbide and PEEK seats, stainless steel, without handle

REF NO.	PART NO.	DESCRIPTION	QTY
2✓	104893	SEAL, o-ring; PTFE	1
3✓	104892	SEAL, o-ring; PTFE	2
4✓	164900	WASHER, flat, nylon	2
5✓	193797	BALL, valve	1
6✓	188744	STUD, valve; 1/4 npt(m)	2
8✓	165964	NUT, packing	1
9✓	193798	STEM, valve	1
10✓	190179	SEAT, ball, PEEK	1
12	188828	HOUSING, valve	1
17✓	223521	SEAT, ball, carbide	1

✓ Keep these spare parts on hand to reduce down time.



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# One Way Valve Parts

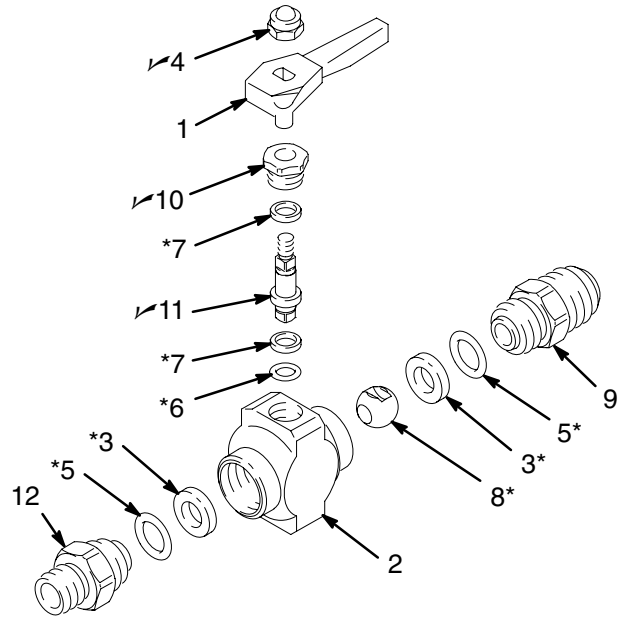
## Model 218901, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/4 npsm(m) x 3/4-16 unf-2a, PTFE seals

REF NO.	PART NO.	DESCRIPTION	QTY
1	178747	LEVER, valve	1
2	178743	HOUSING, valve	1
3*	172094	SEAT, ball, nylon	2
4✓	102310	NUT, hex; nylon cap; No. 10-32	1
5*	104892	SEAL, o-ring; PTFE	2
6*	104893	SEAL, o-ring; PTFE	1
7*	164900	WASHER, flat, nylon	2
8*	178746	BALL, valve	1
9	181038	NIPPLE, adapter; 3/4-16 unf-2a(m)	1
10✓	165964	NUT, packing	1
11✓	178745	STEM, valve	1
12	181037	NIPPLE, adapter; 1/4-18 npsm(m)	1

\* These parts are included in Repair Kit 217560, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



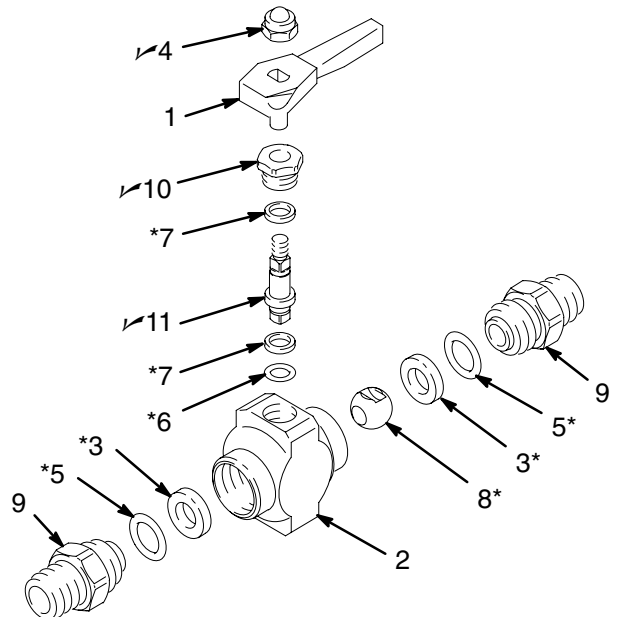
## Model 214037, Series B

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/4 npt(mbe), PTFE seals

REF NO.	PART NO.	DESCRIPTION	QTY
1	178747	LEVER, valve	1
2	178743	HOUSING, valve	1
3*	172094	SEAT, ball, nylon	2
4✓	102310	NUT, hex; nylon cap; No. 10-32	1
5*	104892	SEAL, o-ring; PTFE	2
6*	104893	SEAL, o-ring; PTFE	1
7*	164900	WASHER, flat, nylon	2
8*	178746	BALL, valve	1
9	165274	STUD, valve; 1/4 npt(m)	2
10✓	165964	NUT, packing	1
11✓	178745	STEM, valve	1

\* These parts are included in Repair Kit 217560, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



# One Way Valve Parts

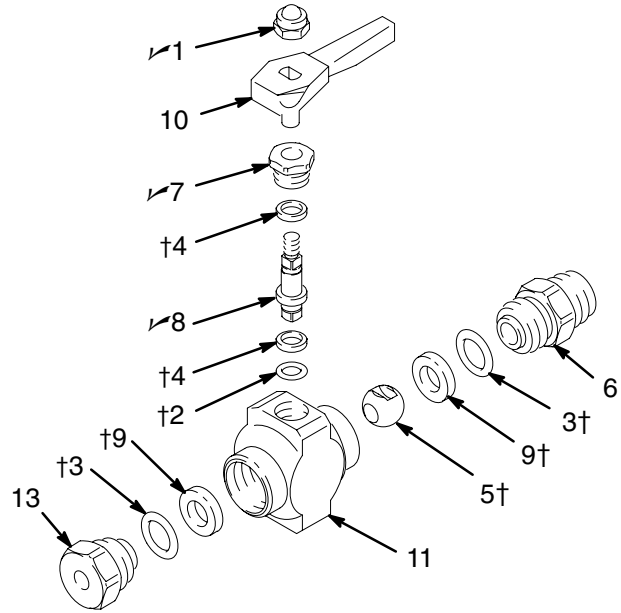
## Model 224441

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(m) one end, fluoroelastomer seals

REF NO.	PART NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10-32	1
2†	110242	SEAL, o-ring; fluoroelastomer	1
3†	110241	SEAL, o-ring; fluoroelastomer	2
4†	164900	WASHER, flat, nylon	2
5†	178746	BALL, valve	1
6	165599	STUD, valve; 3/8 npt(m)	1
7✓	165964	NUT, packing	1
8✓	178745	STEM, valve	1
9†	172094	SEAT, ball, nylon	2
10	178747	LEVER, valve	1
11	178743	HOUSING, valve	1
13	186170	ADAPTER	1

† These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



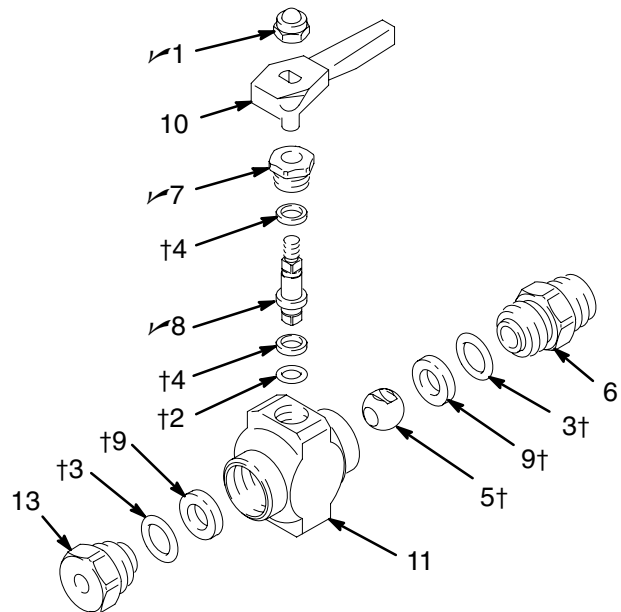
## Model 235573

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
3/8 npt(m) one end, fluoroelastomer seals, carbide seat

REF NO.	PART NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10-32	1
2†	110242	SEAL, o-ring; fluoroelastomer	1
3†	110241	SEAL, o-ring; fluoroelastomer	2
4†	164900	WASHER, flat, nylon	2
5†	165273	BALL, valve	1
6	165274	STUD, valve; 3/8 npt(m)	1
7✓	165964	NUT, packing	1
8✓	187163	STEM, valve	1
9†	172094	SEAT, ball, nylon	2
10	178747	LEVER, valve	1
11	178743	HOUSING, valve	1
13	186170	ADAPTER	1

† These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.





# Check Valve Parts

**NOTE:** To operate properly, the valve must be mounted in an upright position with the housing (Ref No. 3, below) facing up.

<b>⚠ CAUTION</b>
Do not wash nitrile o-rings in aromatic thinners as these thinners cause the o-rings to deteriorate.

## Model 206831

3000 psi (21 MPa, 210 bar) Maximum Working Pressure  
3/8 npt(m) x 3/8 npsm(f) swivel

REF NO.	PART NO.	DESCRIPTION	QTY
1	206830	HOUSING, valve	1
2	101874	BALL, sst; 0.5 in. (13 mm) dia.	1
3	166700	HOUSING, adapter	1
4	166701	PIN	1
5✓	166702	O-RING; nitrile rubber	1

✓ Keep these spare parts on hand to reduce down time.

## Model 206833

3000 psi (21 MPa, 210 bar) Maximum Working Pressure  
3/8 npt(m) x 3/8 npsm(f) 90° swivel

REF NO.	PART NO.	DESCRIPTION	QTY
1	206832	HOUSING, valve	1
2	101874	BALL, sst; 0.5 in. (13 mm) dia.	1
3	166700	HOUSING, adapter	1
4	166701	PIN	1
5✓	166702	O-RING; nitrile rubber	1

✓ Keep these spare parts on hand to reduce down time.

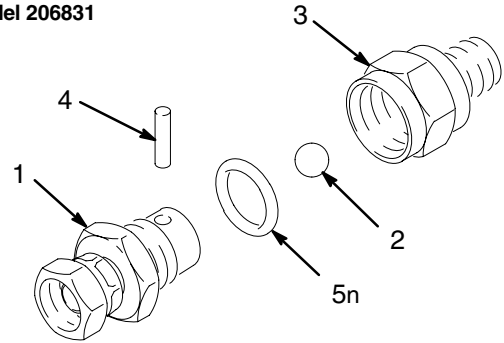
## Model 206962

3000 psi (21 MPa, 210 bar) Maximum Working Pressure  
3/8 npt(mbe)

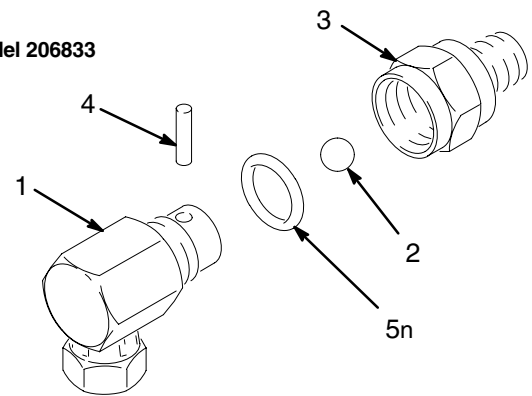
REF NO.	PART NO.	DESCRIPTION	QTY
1	206961	HOUSING, valve	1
2	101874	BALL, sst; 0.5 in. (13 mm) dia.	1
3	166700	HOUSING, adapter	1
4	166701	PIN	1
5✓	166702	O-RING; nitrile rubber	1

✓ Keep these spare parts on hand to reduce down time.

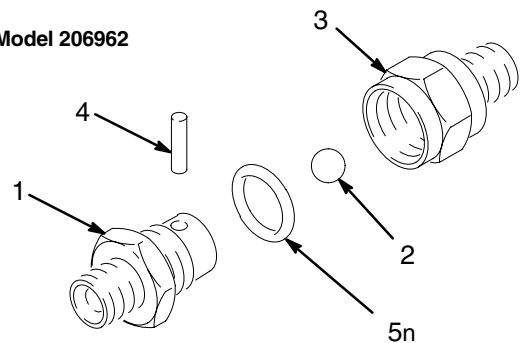
Model 206831



Model 206833



Model 206962



# Swivel Parts

**NOTE:** For other high pressure swivels, see instruction manual 307005.

## Model 239663

3600 psi (25 MPa, 250 bar) Maximum Working Pressure  
1/4 npt(m) x 1/4 npsm(f) swivel, leather packings

## Model 223341

3600 psi (25 MPa, 250 bar) Maximum Working Pressure  
1/4 npt(m) x 1/4 npsm(f) swivel, PTFE packings

### REF

REF NO.	PART NO.	DESCRIPTION	QTY
2	150516*†	GLAND, male	1
3	150522	SPRING	1
4	157894*†	GLAND, female	1
5	188986	HOUSING, swivel	1
6	162694*	V-PACKING, leather (Model 239663)	4
	183978†	V-PACKING, PTFE (Model 223341)	4
7		BODY <i>not sold separately</i>	1

\* These parts are included in Repair Kit 207839, which may be purchased separately.

† These parts are included in Repair Kit 223342, which may be purchased separately.

## Model 214926 *This swivel is not repairable*

5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/2 npsm(f) x 3/8 npt(f), leather packings.

## Model 214925 *This swivel is not repairable*

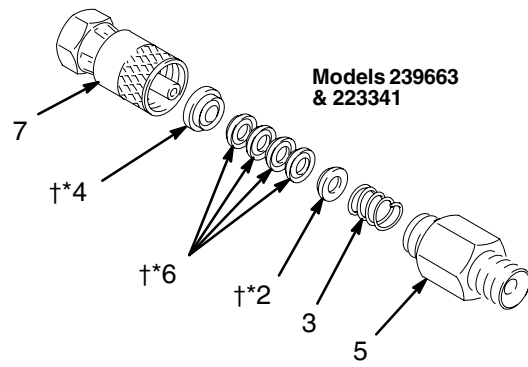
5000 psi (35 MPa, 350 bar) Maximum Working Pressure  
1/4 npsm(f) x 3/8 npt(f), leather packings.

## Model 236987

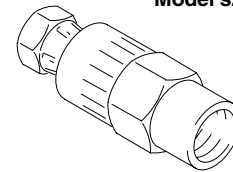
7400 psi (51 MPa, 510 bar) Maximum Working Pressure  
1/4 npsm(f) x 1/4 npsm(m), PTFE seal

### REF

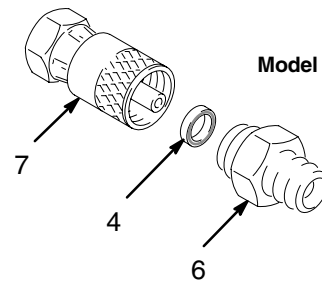
REF NO.	PART NO.	DESCRIPTION	QTY
4	112725	SEAL; PTFE	1
6	189966	HOUSING, swivel	1
7		BODY <i>not sold separately</i>	1



Models 239663  
& 223341



Model s214925 and 214926



Model 236987



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Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

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Original Instructions. This manual contains English. MM 306861

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**International Offices:** Belgium, China, Japan, Korea

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Revised April 2012