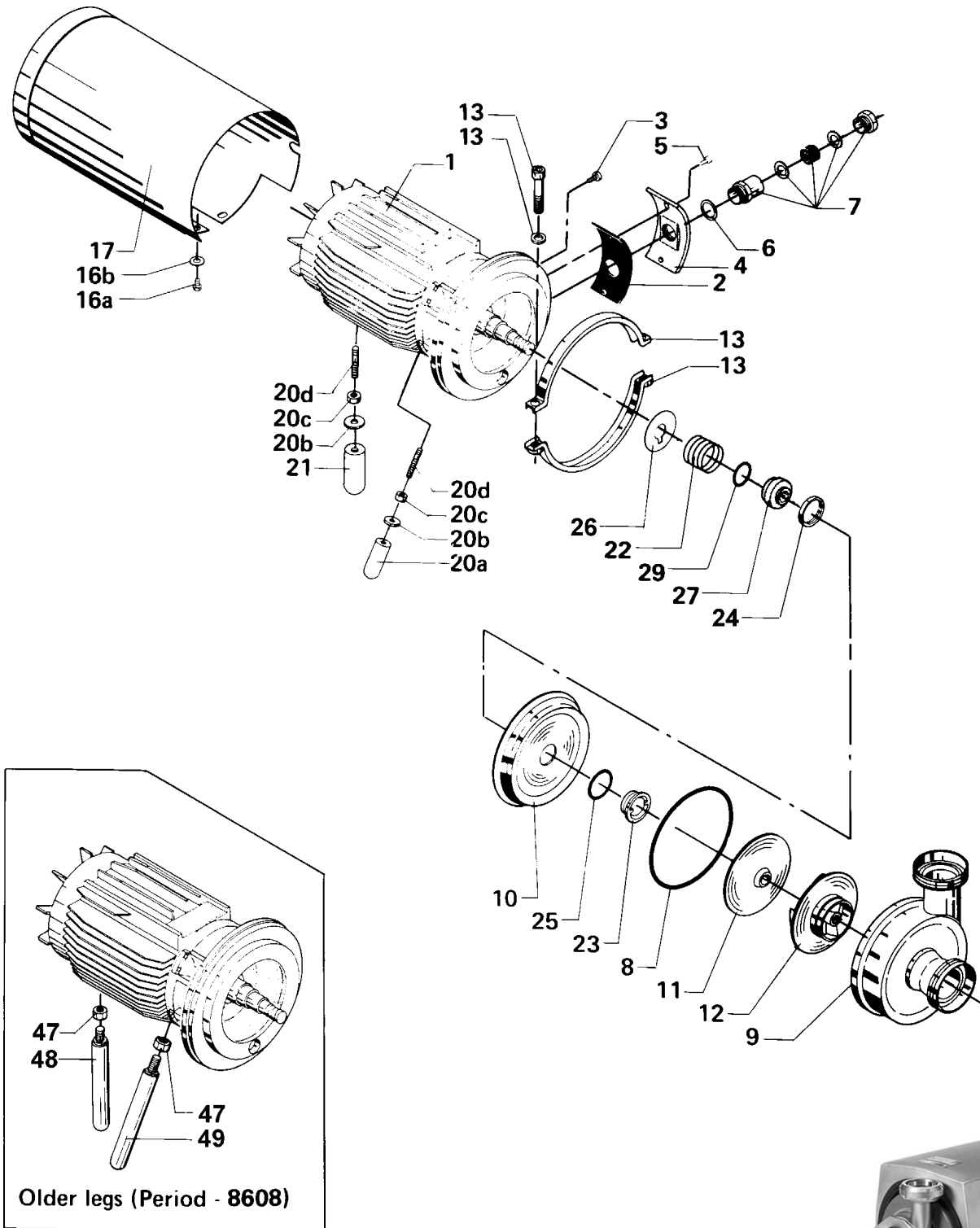
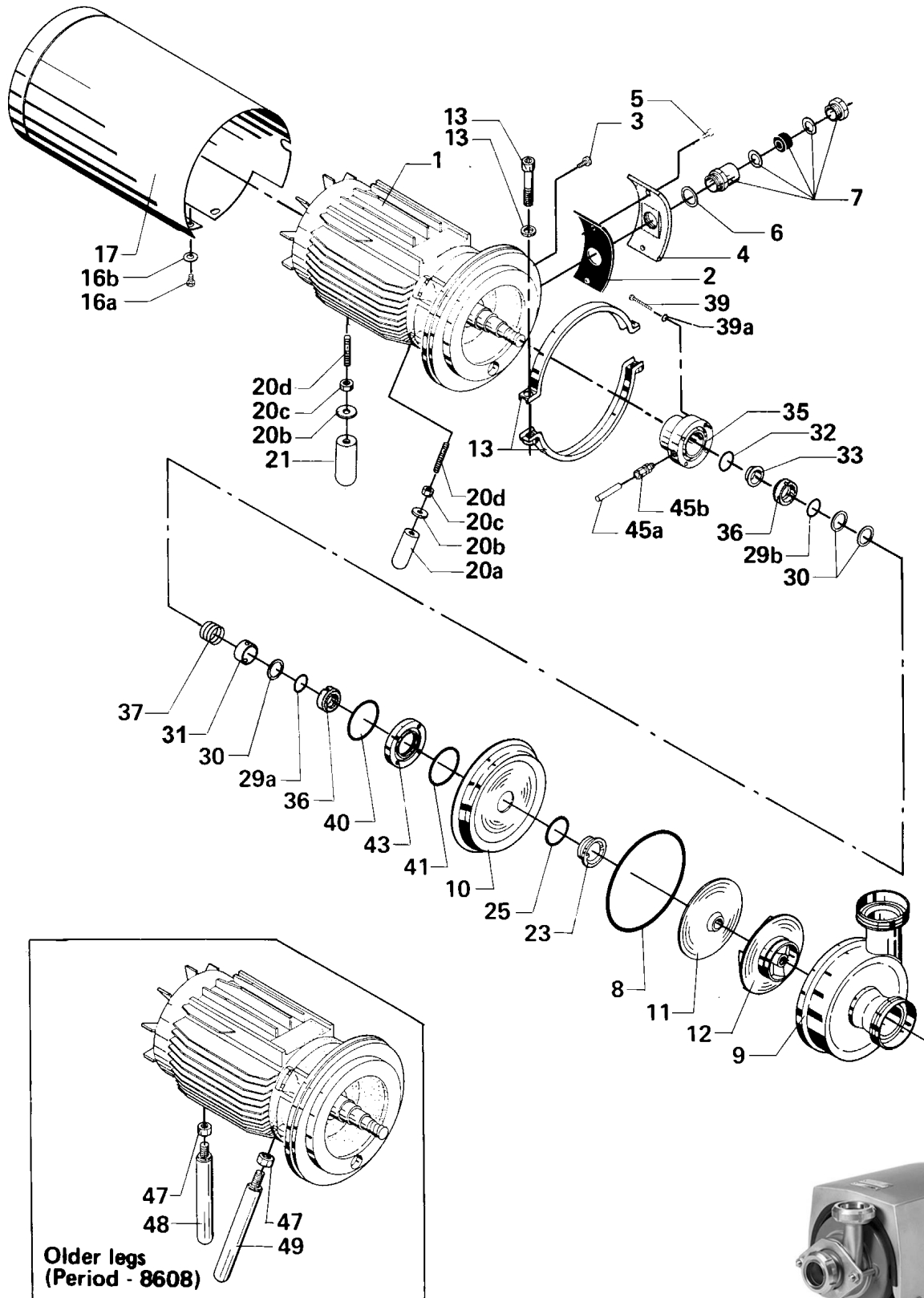


**Centrifugal Pumps – Single Shaft Seal  
Types FM-1A & FM-2A**





Centrifugal Pumps – Flushed Shaft Seal  
Types FM-1A & FM-2A



## Centrifugal Pumps – Flushed Shaft Seal Types FM-1A & FM-2A



Pos.	Qty.	Denomination	FM-1A/FM-2A		Pos.	Qty.	Denomination	FM-1A/FM-2A		Pos.	Qty.	Denomination	FM-1A/FM-2A	
2	1	Packing .....	31439-0015-1		Δ Shaft seal, complete, NBR (Standard) .....	9612-4393-01				<b>Alternatives</b>				
3	1	Set screw for earth wire .....	221533-02		23 1 Stationary seal ring SiC .....	31437-0225-1				Shaft seal, complete, NBR (Standard) .....	9612-4393-05			
4	1	Cover .....	31439-0007-1		25 1 Seal .....	31437-0121-1				23 1 Stationary seal ring SiC .....	31437-0225-1			
5	2	Screw .....	221125-22		29a 1 O-ring, front .....	31439-0168-1				25 1 Seal .....	31437-0121-3			
6	1	Packing .....	31439-0049-1		29b 1 O-ring, back .....	31439-0168-1				29a 1 O-ring, front .....	31439-0168-1			
7	1	Compression gland, 22.5 mm .....	31801-0154-4		30 3 Washer .....	104125				29b 1 O-ring, back .....	31439-0168-1			
10	1	Back plate .....	31439-0101-1		31 1 Spacer .....	31437-0212-1				30 3 Washer .....	104125			
11	1	Impeller cover .....	31439-0099-1		32 1 O-ring .....	223406-51				31 1 Spacer .....	31437-0212-1			
13	1	Clamp set .....	9611-92-1001		33 1 Stationary seal ring .....	31450-0007-1				32 1 O-ring .....	223406-51			
16a	4	Screw .....	2210938-23		36 2 Rotating seal ring .....	31437-0211-1				33 1 Stationary seal ring .....	31450-0007-1			
16b	4	Washer .....	9611-99-1831		37 1 Spring .....	104154				36a 1 Rotating seal ring SiC .....	31437-0211-4			
17	1	Shroud .....	31439-0169-1		40 1 O-ring .....	223406-60				36b 1 Rotating seal ring .....	31437-0211-1			
20a	2	Front leg .....	31460-1248-1		41 1 O-ring .....	223406-58				37 1 Spring .....	104154			
20b	3	Washer .....	31460-0104-1		Δ Shaft seal, complete, EPDM .....	9612-4393-03				40 1 O-ring .....	223406-60			
20c	3	Nut .....	9611-92-1829		23 1 Stationary seal ring SiC .....	31437-0225-1				41 1 O-ring .....	223406-58			
20d	3	Stud bolt .....	31458-0077-1		25 1 Seal .....	31437-0121-3				Shaft seal, complete, EPDM .....	9612-4393-07			
21	1	Back leg .....	31460-1248-3		29a 1 O-ring, front .....	31439-0168-4				23 1 Stationary seal ring SiC .....	31437-0225-1			
35	1	Seal housing .....	31439-0114-1		29b 1 O-ring, back .....	31439-0168-4				25 1 Seal .....	31437-0121-3			
39	4	Screw .....	9611-99-0208		30 3 Washer .....	104125				29a 1 O-ring, front .....	31439-0168-4			
39a	4	Washer .....	9611-99-0800		31 1 Spacer .....	31437-0212-1				29b 1 O-ring, back .....	31439-0168-4			
43	1	Fastening ring .....	31439-0113-1		32 1 O-ring .....	223406-51				30 3 Washer .....	104125			
45a	2	Flushing tube .....	31439-0122-5		33 1 Stationary seal ring .....	31450-0007-1				31 1 Spacer .....	31437-0212-1			
45b	2	Fitting .....	2525524-02		36 2 Rotating seal ring .....	31437-0211-1				32 1 O-ring .....	223406-51			
46	1	Assembly mandrel(not shown) .....	31439-0118-1		37 1 Spring .....	104154				33 1 Stationary seal ring .....	31450-0007-1			
			(Period From 8608)	(Period to 8608)	40 1 O-ring .....	223406-60				36a 1 Rotating seal ring SiC .....	31437-0211-4			
			FM-1A	FM-1A	41 1 O-ring .....	223406-58				36b 1 Rotating seal ring .....	31437-0211-1			
					Δ Shaft seal, complete, FPM .....	9612-4393-04				37 1 Spring .....	104154			
					23 1 Stationary seal ring SiC .....	31437-0225-1				40 1 O-ring .....	223406-60			
					25 1 Seal .....	31437-0121-3				41 1 O-ring .....	223406-58			
					29a 1 O-ring, front .....	31439-0168-5				Shaft seal, complete, FPM .....	9612-4393-08			
					29b 1 O-ring, back .....	31439-0168-5				23 1 Stationary seal ring SiC .....	31437-0225-1			
					30 3 Washer .....	104125				25 1 Seal .....	31437-0121-3			
					31 1 Spacer .....	31437-0212-1				29a 1 O-ring, front .....	31439-0168-5			
					32 1 O-ring .....	223406-51				29b 1 O-ring, back .....	31439-0168-5			
					33 1 Stationary seal ring .....	31450-0007-1				30 3 Washer .....	104125			
					36 2 Rotating seal ring .....	31437-0211-1				31 1 Spacer .....	31437-0212-1			
					37 1 Spring .....	104154				32 1 O-ring .....	223406-51			
					40 1 O-ring .....	223406-60				33 1 Stationary seal ring .....	31450-0007-1			
					41 1 O-ring .....	223406-58				36a 1 Rotating seal ring SiC .....	31437-0211-4			
					Δ Shaft seal, complete, PTFE .....	9612-4393-02				36b 1 Rotating seal ring .....	31437-0211-1			
					23 1 Stationary seal ring SiC .....	31437-0225-1				37 1 Spring .....	104154			
					25 1 Seal .....	31437-0121-3				40 1 O-ring .....	223406-60			
					29a 1 O-ring, front .....	31439-0168-3				41 1 O-ring .....	223406-58			
					29b 1 O-ring, back .....	31439-0168-3				Shaft seal, complete, PTFE .....	9612-4393-06			
					30 3 Washer .....	104125				23 1 Stationary seal ring SiC .....	31437-0225-1			
					31 1 Spacer .....	31437-0212-1				25 1 Seal .....	31437-0121-3			
					32 1 O-ring .....	223406-51				29a 1 O-ring, front .....	31439-0168-3			
					33 1 Stationary seal ring .....	31450-0007-1				29b 1 O-ring, back .....	31439-0168-3			
					36 2 Rotating seal ring .....	31437-0211-1				30 3 Washer .....	104125			
					37 1 Spring .....	104154				31 1 Spacer .....	31437-0212-1			
					40 1 O-ring .....	223406-60				32 1 O-ring .....	223406-51			
					41 1 O-ring .....	223406-58				33 1 Stationary seal ring .....	31450-0007-1			
					Δ Shaft seal, complete, PTFE .....	9612-4393-02				36a 1 Rotating seal ring SiC .....	31437-0211-4			
					23 1 Stationary seal ring SiC .....	31437-0225-1				36b 1 Rotating seal ring .....	31437-0211-1			
					25 1 Seal .....	31437-0121-3				37 1 Spring .....	104154			
					29a 1 O-ring, front .....	31439-0168-3				40 1 O-ring .....	223406-60			
					29b 1 O-ring, back .....	31439-0168-3				41 1 O-ring .....	223406-58			
					30 3 Washer .....	104125				Shaft seal, complete, PTFE .....	9612-4393-06			
					31 1 Spacer .....	31437-0212-1				23 1 Stationary seal ring SiC .....	31437-0225-1			
					32 1 O-ring .....	223406-51				25 1 Seal .....	31437-0121-3			
					33 1 Stationary seal ring .....	31450-0007-1				29a 1 O-ring, front .....	31439-0168-3			
					36 2 Rotating seal ring .....	31437-0211-1				29b 1 O-ring, back .....	31439-0168-3			
					37 1 Spring .....	104154				30 3 Washer .....	104125			
					40 1 O-ring .....	223406-60				31 1 Spacer .....	31437-0212-1			
					41 1 O-ring .....	223406-58				32 1 O-ring .....	223406-51			
					Δ Shaft seal, complete, PTFE .....	9612-4393-02				33 1 Stationary seal ring .....	31450-0007-1			
					23 1 Stationary seal ring SiC .....	31437-0225-1				36a 1 Rotating seal ring SiC .....	31437-0211-4			
					25 1 Seal .....	31437-0121-3				36b 1 Rotating seal ring .....	31437-0211-1			
					29a 1 O-ring, front .....	31439-0168-3				37 1 Spring .....	104154			
					29b 1 O-ring, back .....	31439-0168-3				40 1 O-ring .....	223406-60			
					30 3 Washer .....	104125				41 1 O-ring .....	223406-58			
					31 1 Spacer .....	31437-0212-1				Older legs (Period -8608)				
					32 1 O-ring .....	223406-51				47 3 Lock nut .....	2218043-18			
					33 1 Stationary seal ring .....	31450-0007-1				48 1 Back leg .....	31439-0146-1			
					36 2 Rotating seal ring .....	31437-0211-1				49 2 Front leg .....	31439-0146-2			
					37 1 Spring .....	104154								
					40 1 O-ring .....	223406-60								
					41 1 O-ring .....	223406-58								
					Δ Shaft seal, complete, PTFE .....	9612-4393-02								
					23 1 Stationary seal ring SiC .....	31437-0225-1								
					25 1 Seal .....	31437-0121-3								
					29a 1 O-ring, front .....	31439-0168-3								
					29b 1 O-ring, back .....	31439-0168-3								
					30 3 Washer .....	104125								
					31 1 Spacer .....	31437-0212-1								
					32 1 O-ring .....	223406-51								
					33 1 Stationary seal ring .....	31450-0007-1								
					36 2 Rotating seal ring .....	31437-0211-1								
					37 1 Spring .....	104154								
					40 1 O-ring .....	223406-60								
					41 1 O-ring .....	223406-58								
					Δ Shaft seal, complete, PTFE .....	9612-4393-02								
					23 1 Stationary seal ring SiC .....	31437-0225-1								
					25 1 Seal .....	31437-0121-3								
					29a 1 O-ring, front .....	31439-0168-3								
					29b 1 O-ring, back ..									