



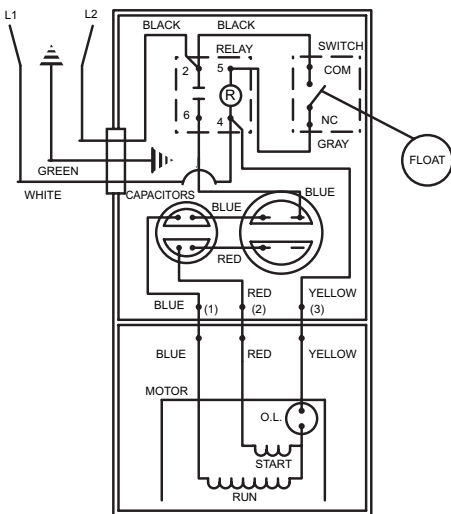
Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

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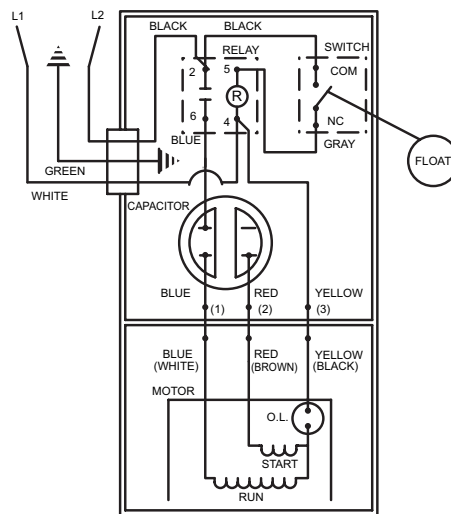
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REPLACEMENT PARTS LIST FOR MODELS: M163 AUTOMATIC 115V D163 AUTOMATIC 230V N163 NONAUTOMATIC 115V E163 NONAUTOMATIC 230V

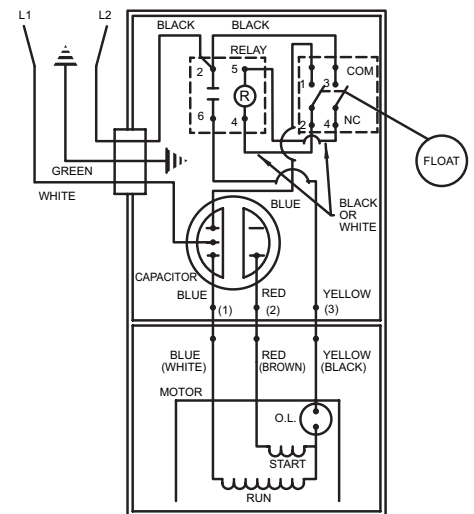
Consult factory for all other Models



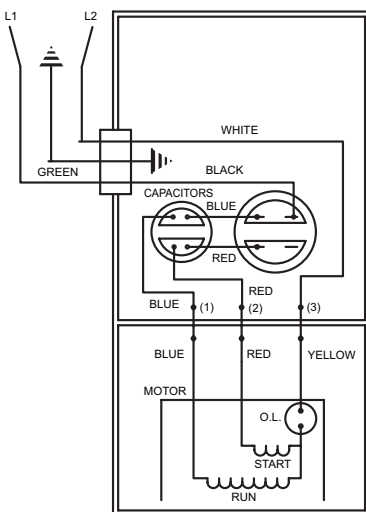
003089A
WIRING DIAGRAM FOR MODELS
"M163-A"
4/81 (PM) thru 12/82 (YN)



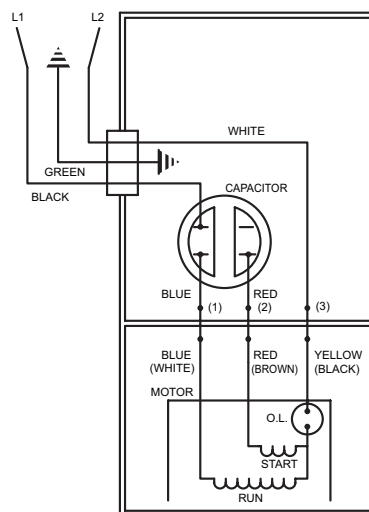
002398B
WIRING DIAGRAM FOR MODELS
"M163-B" and "M163-C"
"D163-A", "D163-B", "D163-C"
1/83 (MO) thru 8/86 (US)



004622
WIRING DIAGRAM FOR MODELS
"M163-D", "M163-E", "M163-F", "M163-G"
"D163-D"
9/86 (VS) to current



003090A
WIRING DIAGRAM FOR MODELS
"N163-A"
"E163-A"
4/81 (PM) thru 12/82 (YN)



002397
WIRING DIAGRAM FOR MODELS
"N163-B", "N163-C", "N163-D", "N163-E", "N163-F", "N163-G"
"E163-B", "E163-C", "E163-D"
1/83 (MD) to current

TO ORDER REPLACEMENT PARTS:

PLEASE FURNISH THE
FOLLOWING INFORMATION:

- Model Number.
- Part Number of Pump.
(If manufactured prior to June 1988, give 2 letter date code following Model No.)
- Part Number and Description of part.

REPLACEMENT PARTS LIST FOR MODELS "M163"

See page 6 for "M163" illustration.

REF. NO.	DESCRIPTION	QTY	NOTES	MODELS: M163-A						
				M163-B	M163-C	M163-D	M163-E	M163-F	M163-G	
				4/81 PM thru 12/82 YN	1/83 MO thru 1/85 MR	2/85 NR thru 8/86 US	9/86 VS thru 7/90	8/90 thru 9/98	10/98 thru 4/03	5/03 thru Current
1	Case, Sw. & Cord	1	3,4	002506	002506	002506	004746	006292	006292	014155
2	• Handle	1		217069	217069	217069	217069	217069	217069	217069
3	Cord, Term & Seal	1	3,4	002507	002507	002507	002507	006290	006290	014168
4	Clamp, Strain Relief	1		001770	001770	001770	001770	NA	NA	013764
5	• Seal, Cord-Asm & Str Rif T&B 14ga	1		094032	094032	094032	094032	004375	004375	015634
6	Case-Mach "189/295"	1	3,4	004746	004746	004746	004614	004633	004633	014154
7	• Guard	1		001023	001023	001023	001023	001023	001023	001023
8	• Arm & Seal Asm "160/180/290"	1		002379	002379	002379	004745	004745	004745	004745
9	• Gasket, Case/Cover	1		001011	001011	001011	001011	001011	001011	001011
10	Switch Asm "160/180/290"	1		002380	002380	002380	004744	004744	004744	004744
⊠	Lead Wire (Gray)	1		002609	002609	002609	NA	NA	NA	NA
11	• Wire Pkg (5) Wires	1		002496	001070	001070	004749	004749	004749	004749
12	Capacitor & Clamp Asm 30uf	1	2	002381	003575	003575	003575	003575	003575	003575
13	Relay	1		217092	217092	217092	217092	217092	217092	217092
14	Float, Plastic	1		094039	094039	094039	094039	094039	094039	094039
15	Guide Asm, Flt Rod	1		001072	001072	001072	001072	001072	001072	001072
16	Rod Asm, Flt	1		003083	003083	003083	003083	003083	003082	003083
17	Housing, Mtr-& Str 1Ph 163	1	1,7	002497	002497	002497	002497	002497	002497	002497
18	Bearing, Sleeve	1		001012	001012	001012	001012	001012	001012	001012
19	• Plug, Test-White	2		034090	034090	034090	034090	034090	034090	034090
20	• Seal, Thru Wall Term	3		003402	003402	003402	003402	003402	003402	003402
21	Rotor & Brg	1	7	002701	002701	002701	002701	002701	002701	002701
22	Bearing, Radial	1		001013	001013	001013	001013	001013	001013	001013
23	• Seal, Mtr Hsg	1		001014	001014	001014	001014	001014	001014	001014
24	• Oil, Dielectric-(38 Oz Can)	1		002383	002383	002383	002383	002383	002383	003168
25	Adapter-Mach 163/165/293	1		001003	001003	001003	001003	001003	001003	001003
26	• Seal, Shaft	1		002430	002430	002430	002430	002430	002430	002430
27	Flange Pkg 2" Npt	1		NA	NA	217024	217024	217024	217024	217024
	Flange Pkg 3" Npt	1		NA	NA	317024	317024	317024	317024	317024
28	Impeller "163"	1		001059	001059	004216	004216	004216	004216	004216
29	Housing,Pump-Mach 163/165	1		001044	001044	004214	004214	004214	004214	004214
30	Strainer Plate	1		137008	137008	137008	137008	137008	137008	137008
⊠	Capacitor & Clp 10uf	1	2	002505	NA	NA	NA	NA	NA	NA
31	• Screw, .25-20 X .75 HHm-SS	4		001916	001916	001916	001916	001916	001916	001916
32	• Screw, .313-18 X 1" HH Cap-SS	4		002608	002608	002608	002608	002608	002608	002608
33	• Screw, #10-24 X.375 RHM-SI SS	2		001883	001883	001883	001883	001883	001883	001883
34	• Screw, #6-32x.438 RhsItlp"1"Stizi	2		001877	001877	001877	004644	004644	004644	004644
35	• Sem, 10-24x.375HH-SI Tc.688 Wash	2		002000	002000	002000	002000	002000	002000	002000
36	• Washer, SS-1.25"Odx.562"Idx.078	2		NA	NA	002115	002115	002115	002115	002115
37	• Screw, .5-13 X 2 HH Cap-SS	2		NA	NA	001909	001909	001909	001909	001909
38	• Screw, #6-32x.25RHM SI Tc Stlgr	4		001877	001877	001877	001877	001877	001877	001877
39	• Screw, .25-20x1" HHm-SS	4		007790	007790	007790	007790	007790	007790	007790
⊠	Rebuild Kit "160/185/293"			002509	002509	002509	004747	004747	004747	016103

• Items included in Rebuild Kit.

⊠ Not shown in illustration.

NOTES:

- Mtr. Hsg., Brg., Stator & Term. (Item 17) is preassembled at the factory and must be replaced as a unit. Stator is permanently attached to the Motor Housing. Plug (Item 19); Seal, Thru Wall Term. (Item 20) and Bearing - Upper (Item 18) are replaceable.
- 115V units, date coded 4/81 (PM) through 12/82 (YN), required two capacitors; (Item 12) P/N 002381, capacitor and clamp assm. 20 uf; and P/N 002505, capacitor and clamp assm. 10 uf. Both can now be replaced by one capacitor P/N 003575, capacitor and clamp assm. 30 uf. 115V units date coded 1/83 (MO) and after require one capacitor, (Item 12), P/N 003575, capacitor and clamp assm. 30 uf. All 230V units require one capacitor, (Item 12), capacitor and clamp assm. 20 uf, P/N 002381.
- When ordering these parts, customer must identify if switch is a General Electric switch.
- If an "X" follows Model No., or Date Mfg. on ID tag, consult factory for ordering of this part.
- See FM0160 Parts Price Sheet for listing of parts prices.
- "NA" indicates, not applicable.
- When ordering specify either GE or Emerson Motor.

DATE CODE OF MANUFACTURE FROM 12/70 to 12/88

1st LETTER MONTH		2nd LETTER YEAR			
M --- JAN.	T --- JULY	A --- 1971	G --- 1977	O --- 1983	
N --- FEB.	U --- AUG.	B --- 1972	H --- 1978	P --- 1984	
O --- MARCH	V --- SEPT.	C --- 1973	I --- 1979	R --- 1985	
P --- APRIL	W --- OCT.	D --- 1974	J --- 1980	S --- 1986	
R --- MAY	X --- NOV.	E --- 1975	M --- 1981	T --- 1987	
S --- JUNE	Y --- DEC.	F --- 1976	N --- 1982	U --- 1988	

NOTE: Four digit (MMYY) date of mfg. used after June, 1988.
IE: MMYY = 0192 = Jan. 1992

REPLACEMENT PARTS LIST FOR MODELS "D163"

See page 6 for "D163" illustration.

REF. NO.	DESCRIPTION	QTY	NOTES	MODELS: D163-A			
				D163-B	D163-C	D163-D	
				4/81 PM thru 12/82 YN	1/83 MO thru 1/85 MR	2/85 NR thru 8/86 US	9/86 VS thru 7/90
1	Case, Sw.& Cord	1	3,4	002378	002378	002378	004748
2	• Handle	1		217069	217069	217069	217069
3	Cord, Term & Seal	1	3,4	002429	002429	002429	002429
4	Clamp, Strain Relief	1		001770	001770	001770	001770
5	• Seal, Cord-Asm & Str Rif T&B 14ga	1		094032	094032	094032	094032
6	Case-Mach "189/295"	1	3,4	004748	004748	004748	004614
7	• Guard	1		001023	001023	001023	001023
8	• Arm & Seal Asm "160/180/290"	1		002379	002379	002379	004745
9	• Gasket, Case/Cover	1		001011	001011	001011	001011
10	Switch Asm "160/180/290"	1		002380	002380	002380	004744
□	Lead Wire (Gray)	1		002609	002609	002609	NA
11	• Wire Pkg (5) Wires	1		002496	001070	001070	004749
12	Capacitor & Clamp Asm 30uf	1	2	002381	002381	002381	002381
13	Relay	1		217093	217093	217093	217093
14	Float, Plastic	1		094039	094039	094039	094039
15	Guide Asm, Fit Rod	1		001072	001072	001072	001072
16	Rod Asm, Fit	1		003083	003083	003083	003083
17	Housing, Mtr & Str 1Ph 163	1	1,7	002504	002504	002504	002504
18	Bearing, Sleeve	1		001012	001012	001012	001012
19	• Plug, Test-White	2		034090	034090	034090	034090
20	• Seal, Thru Wall Term	3		003402	003402	003402	003402
21	Rotor & Brg	1	7	002691	002691	002691	002691
22	Bearing, Radial	1		001013	001013	001013	001013
23	• Seal, Mtr Hsg	1		001014	001014	001014	001014
24	• Oil, Dielectric-(38 Oz Can)	1		002383	002383	002383	002383
25	Adapter-Mach 163/165/293	1		001003	001003	001003	001003
26	• Seal, Shaft	1		002430	002430	002430	002430
27	Flange Pkg 2" Npt	1		NA	NA	217024	217024
	Flange Pkg 3" Npt	1		NA	NA	317024	317024
28	Impeller "163"	1		001059	001059	004216	004216
29	Housing,Pump-Mach 163/165	1		001044	001044	004214	004214
30	Strainer Plate	1		137008	137008	137008	137008
	Capacitor & Clp 10uf	1	2	002505	NA	NA	NA
31	• Screw, .25-20 X .75 HHm-SS	4		001916	001916	001916	001916
32	• Screw, .313-18 X 1" HH Cap-SS	4		002608	002608	002608	002608
33	• Screw, #10-24 X.375 RHM-SI SS	2		001883	001883	001883	001883
34	• Screw, #6-32x.438 Rhstlp1"Stlzi	2		001877	001877	001877	004644
35	• Sem, 10-24x.375HH-SI Tc.688 Wash	2		002000	002000	002000	002000
36	• Washer, SS-1.25"Odx.562"Idx.078	2		NA	NA	002115	002115
37	• Screw, .5-13 X 2 HH Cap-SS	1		NA	NA	001909	001909
38	• Screw, #6-32x.25RHM SI Tc Stlgr	4		001877	001877	001877	001877
39	• Screw, .25-20x1" HHm-SS	4		007790	007790	007790	007790
□	Rebuild Kit "160/185/293"			002509	002509	002509	004747

• Items included in Rebuild Kit.

□ Not shown in illustration.

NOTES:

- 1) Mtr. Hsg., Brg., Stator & Term. (Item 17) is preassembled at the factory and must be replaced as a unit. Stator is permanently attached to the Motor Housing. Plug (Item 19); Seal, Thru Wall Term. (Item 20) and Bearing - Upper (Item 18) are replaceable.
- 2) 115V units, date coded 4/81 (PM) through 12/82 (YN), required two capacitors; (Item 12) P/N 002381, capacitor and clamp assm. 20 uf; and P/N 002505, capacitor and clamp assm. 10 uf. Both can now be replaced by one capacitor P/N 003575, capacitor and clamp assm. 30 uf. 115V units date coded 1/83 (MO) and after require one capacitor, (Item 12), P/N 003575, capacitor and clamp assm. 30 uf. All 230V units require one capacitor, (Item 12), capacitor and clamp assm. 20 uf, P/N 002381.
- 3) When ordering these parts, customer must identify if switch is a General Electric switch.
- 4) If an "X" follows Model No., or Date Mfg. on ID tag, consult factory for ordering of this part.
- 5) See FM0160 Parts Price Sheet for listing of parts prices.
- 6) "NA" indicates, not applicable.
- 7) When ordering specify either GE or Emerson Motor.

REPLACEMENT PARTS LIST FOR MODELS "N163"

See page 6 for "N163" illustration.

REF. NO.	DESCRIPTION	QTY	NOTES	MODELS: N163-A							N163-B	N163-C	N163-D	N163-E	N163-F	N163-G
				4/81 PM thru 12/82 YN	1/83 MO thru 1/85 MR	2/85 NR thru 8/86 US	9/86 VS thru 7/90	8/90 thru 9/98	10/98 thru 4/03	5/03 thru Current						
1	• Handle	1		217069	217069	217069	217069	217069	217069	217069	217069	217069	217069	217069	217069	
2	Cover & Cord	1	2	002499	002499	002499	002499	006293	006293	006293	014158					
3	Cord, Term, & Seal	1	2	002508	002508	002508	002508	006291	006291	006291	014169					
4	Clamp, Strain Relief-Red	1	2	001770	001770	001770	001770	001770	001770	001770	013764					
5	Seal Asm., Cord & Strain Relief	1	2	094032	094032	094032	094032	004375	004375	004375	015634					
6	Cover-Mach 14ga Cd	1		001077	001077	001077	001077	004372	004372	004372	014150					
7	• Gasket, Case/Cover	1		001011	001011	001011	001011	001011	001011	001011	001011					
8	• Wire Pkg (5) Wires	1		002496	001070	001070	004749	004749	004749	004749	004749					
9	Capacitor & Clamp Asm 30uf	1		002381	003575	003575	003575	003575	003575	003575	003575					
10	Housing, Mtr & Str 1Ph 163	1	1,5	002497	002497	002497	002497	002497	002497	002497	002497					
11	Bearing, Sleeve	1		001012	001012	001012	001012	001012	001012	001012	001012					
12	• Plug, Test-White	2		034090	034090	034090	034090	034090	034090	034090	034090					
13	Seal Thru Wall Term	3		003402	003402	003402	003402	003402	003402	003402	003402					
14	Rotor & Brg	1	5	002701	002701	002701	002701	002701	002701	002701	002701					
15	Bearing, Radial	1		001013	001013	001013	001013	001013	001013	001013	001013					
16	• Seal, Mtr Hsg	1		001014	001014	001014	001014	001014	001014	001014	001014					
17	• Oil, Dielectric-(38 Oz Can)	1		002383	002383	002383	002383	002383	002383	002383	003168					
18	Adapter-Mach 163/165/293	1		001003	001003	001003	001003	001003	001003	001003	001003					
19	• Seal, Shaft	1		002430	002430	002430	002430	002430	002430	002430	002430					
20	Flange Pkg 2" Npt	1		NA	NA	217024	217024	217024	217024	217024	217024					
	Flange Pkg 3" Npt	1		NA	NA	317024	317024	317024	317024	317024	317024					
21	Impeller "163"	1		001059	001059	004216	004216	004216	004216	004216	004216					
22	Housing, Pump-Mach 163/165	1		001044	001044	004214	004214	004214	004214	004214	004214					
23	Strainer Plate	1		137008	137008	137008	137008	137008	137008	137008	137008					
24	• Screw, .25-20 X .75 HHm-SS	4		001916	001916	001916	001916	001916	001916	001916	001916					
25	• Screw, .313-18 X 1"HH Cap-SS	4		002608	002608	002608	002608	002608	002608	002608	002608					
26	• Screw, #10-24 X.375 RHM-SI SS	1		001883	001883	001883	001883	001883	001883	001883	001883					
27	• Sem, 10-24x.375HH-SI Tc.688 Wash	2		002000	002000	002000	002000	002000	002000	002000	002000					
28	• Screw, .5-13 X 2 HH Cap-SS	2		NA	NA	001909	001909	001909	001909	001909	001909					
29	• Washer, SS-1.25"Odx.562"ldx.078	2		NA	NA	002115	002115	002115	002115	002115	002115					
30	• Screw, #6-32x.25RHM SI Tc Stgr	3		001877	001877	001877	001877	001877	001877	001877	001877					
31	• Screw, .25-20x1" HHm-SS	4		007790	007790	007790	007790	007790	007790	007790	007790					
▣	Rebuild Kit "160/185/293"			002509	002509	002509	004747	004747	004747	004747	014193					

• Items included in Rebuild Kit.

▣ Not shown in illustration.

NOTES:

- 1) Mtr. Hsg., Brg., Stator & Term. (Item 10) is preassembled at the factory and must be replaced as a unit. Stator is permanently attached to the Motor Housing. Plug (Item 12); Seal, Thru Wall Term. (Item 13) and Bearing - Upper (Item 15) are replaceable.
- 2) If an "X" follows Model No., or Date Mfg. on ID tag, consult factory for ordering of this part.
- 3) See FM0160 Parts Price Sheet for listing of parts prices.
- 4) "NA" indicates, not applicable.
- 5) When ordering specify either GE or Emerson Motor.

REPLACEMENT PARTS LIST FOR MODELS "E163"

See page 6 for "E163" illustration.

REF. NO.	DESCRIPTION	QTY	NOTES	MODELS: E163-A			
				E163-B	E163-C	E163-D	
				4/81 PM thru 12/82 YN	1/83 MO thru 1/85 MR	2/85 NR thru 8/86 US	9/86 VS thru Current
1	• Handle	1		217069	217069	217069	217069
2	Cover & Cord	1	2	002401	002401	002401	002401
3	Cord, Term, & Seal	1	2	002402	002402	002402	002402
4	Clamp, Strain Relief	1	2	001770	001770	001770	001770
5	Seal Asm., Cord & Strain Relief	1	2	094032	094032	094032	094032
6	Cover-Mach 14ga Cd	1		001077	001077	001077	001077
7	• Gasket, Case/Cover	1		001011	001011	001011	001011
8	• Wire Pkg (5) Wires	1		002496	001070	001070	004749
9	Capacitor & Clamp Asm 30uf	1		002381	002381	002381	002381
10	Housing, Mtr-& Str 1Ph 163	1	1,5	002504	002504	002504	002504
11	Bearing, Sleeve	1		001012	001012	001012	001012
12	• Plug, Test-White	2		034090	034090	034090	034090
13	Seal Thru Wall Term	3		003402	003402	003402	003402
14	Rotor & Brg	1	5	002701	002701	002701	002701
15	Bearing, Radial	1		001013	001013	001013	001013
16	• Seal, Mtr Hsg	1		001014	001014	001014	001014
17	• Oil, Dielectric-(38 Oz Can)	1		002383	002383	002383	002383
18	Adapter-Mach 163/165/293	1		001003	001003	001003	001003
19	• Seal, Shaft	1		002430	002430	002430	002430
20	Flange Pkg 2" Npt	1		NA	NA	217024	217024
	Flange Pkg 3" Npt	1		NA	NA	317024	317024
21	Impeller "163"	1		001059	001059	004216	004216
22	Housing, Pump-Mach 163/165	1		001044	001044	004214	004214
23	Strainer Plate	1		137008	137008	137008	137008
24	• Screw, .25-20 X .75 HHm-SS	4		001916	001916	001916	001916
25	• Screw, .313-18 X 1"HH Cap-SS	4		002608	002608	002608	002608
26	• Screw, #10-24 X.375 RHM-SI SS	1		001883	001883	001883	001883
27	• Sem, 10-24x.375HH-SI Tc.688 Wash	2		002000	002000	002000	002000
28	• Screw, .5-13 X 2 HH Cap-SS	2		NA	NA	001909	001909
29	• Washer, SS-1.25"Odx.562"Idx.078	2		NA	NA	002115	002115
30	• Screw, #6-32x.25RHM SI Tc Stlgr	3		001877	001877	001877	001877
31	• Screw, .25-20x1" HHm-SS	4		007790	007790	007790	007790
▣	Rebuild Kit "160/185/293"			002509	002509	002509	004747

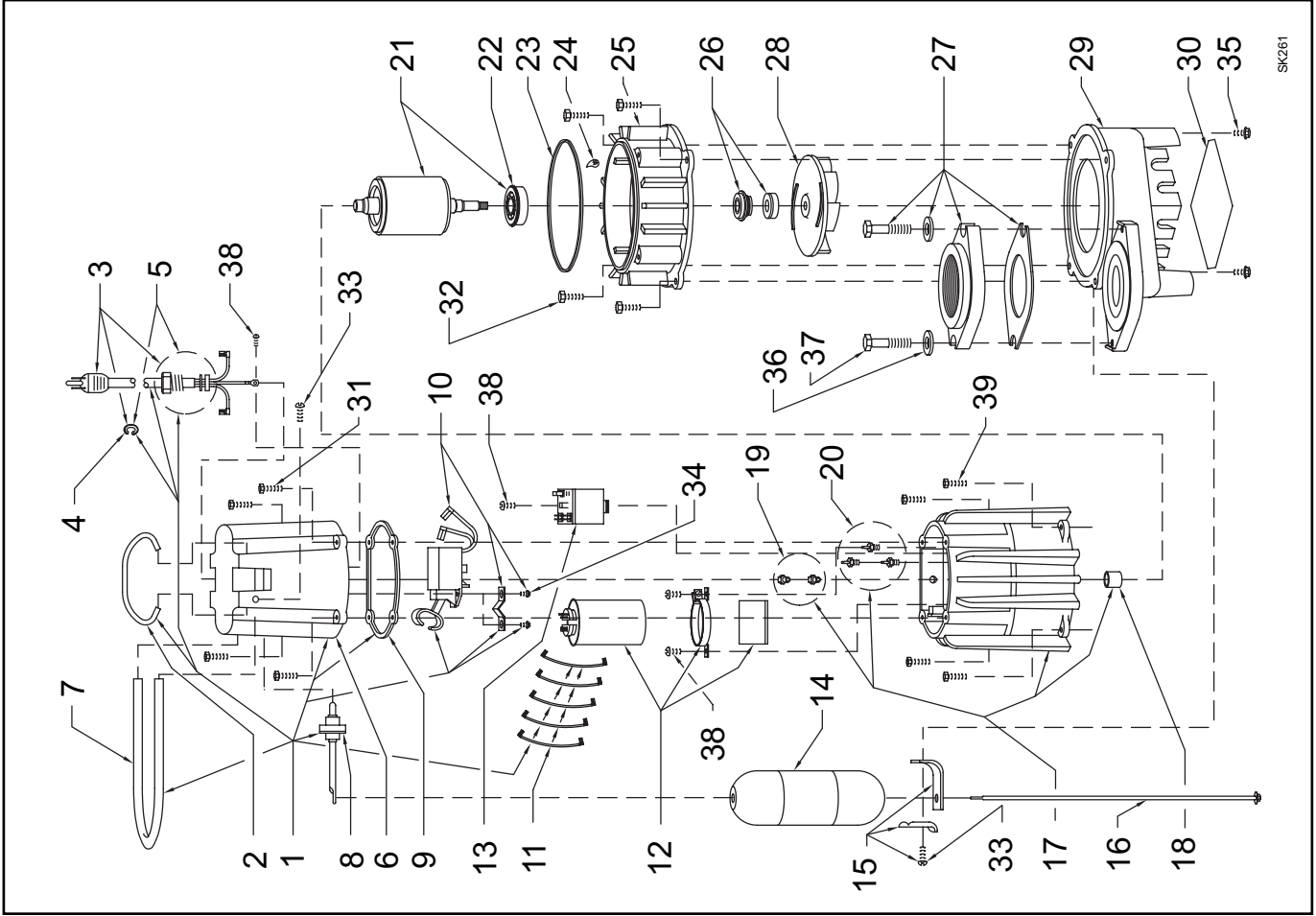
• Items included in Rebuild Kit.

▣ Not shown in illustration.

NOTES:

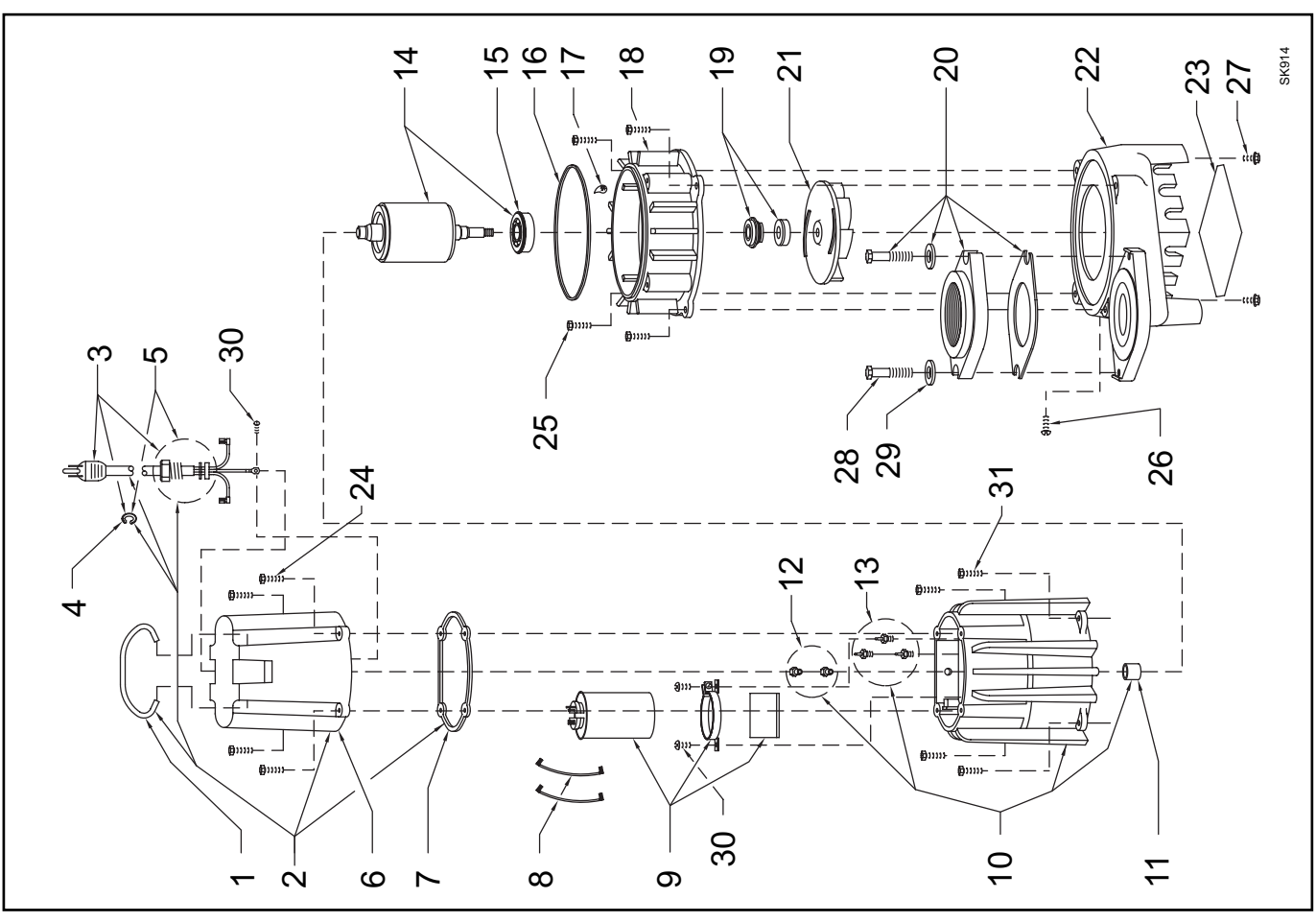
- 1) Mtr. Hsg., Brg., Stator & Term. (Item 10) is preassembled at the factory and must be replaced as a unit. Stator is permanently attached to the Motor Housing. Plug (Item 12); Seal, Thru Wall Term. (Item 13) and Bearing - Upper (Item 15) are replaceable.
- 2) If an "X" follows Model No., or Date Mfg. on ID tag, consult factory for ordering of this part.
- 3) See FM0160 Parts Price Sheet for listing of parts prices.
- 4) "NA" indicates, not applicable.
- 5) When ordering specify either GE or Emerson Motor.

REPLACEMENT PARTS ILLUSTRATION FOR MODELS "M163" AND "D163"



SK261

REPLACEMENT PARTS ILLUSTRATION FOR MODELS "N163" AND "E163"



SK914

NOTES



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