



ROTARY VANE VACUUM PUMP

NRV SERIES

Pumps. Systems. Service. Support. — One Source.

SINGLE STAGE OIL-FLOODED ROTARY VANE VACUUM PUMP

MODELS: NRV06, NRV08, NRV10, NRV16, NRV20, NRV31, NRV41, NRV64, NRV161, NRV201, NRV251, NRV301, NRV400, NRV630



Single stage oil-flooded rotary vane vacuum pumps — reliable medium vacuum for smaller capacity applications.

— VACUUM

Reliable medium vacuum with consistent vacuum levels in myriad applications.

— OPERATION

Quiet operation with low noise and low vibration levels.

— DESIGN

Compact design with diminutive dimensions that save space in your facility.

— WARRANTY

One-year warranty against manufacturer's defects; factory performance tested.

Small capacity. Medium vacuum, quietly delivered.

NES Company Inc. is proud to present the NRV Series single stage oil flooded rotary vane vacuum pumps.

CAPACITY RANGE

4.2–447

CFM capacity range

POWER RANGE

0.5–25 HP

Power range

ULTIMATE VACUUM

0.5 mbara

With float valve

MODELS

14 Models

NRV06 through NRV630

SPECIFICATION SUMMARY

Type	Single Stage, Oil-Flooded Rotary Vane
Models	NRV06, NRV08, NRV10, NRV16, NRV20, NRV31, NRV41, NRV64, NRV161, NRV201, NRV251, NRV301, NRV400, NRV630
Power Range	0.5–25 HP
Capacity Range	4.2–447 CFM
Ultimate Vacuum	0.5 mbara (w/ float valve)

DESCRIPTION

NRV series pumps are a line of single stage oil circulated rotary vane vacuum pumps, perfect for smaller capacity applications. The pumps function by the combination of spring-loaded rotor vanes and lubricating/sealing oil to seal incoming gases and perform compression through positive displacement by an eccentrically placed rotor.

FEATURES

- ▶ **Reliable Medium Vacuum Performance** — Achieve consistent vacuum levels with our rotary vane pumps, ensuring efficient and reliable operation in myriad applications.
- ▶ **Quiet Operation** — Engineered for low noise levels, our rotary vane pumps provide a quieter working environment without compromising on performance, maintaining stability with low vibration as well.
- ▶ **Compact Design** — The NRV Series rotary vane pumps are designed with diminutive dimensions, saving valuable space in your facility.
- ▶ **Easy Installation and Operation** — Designed for user-friendly installation and operation, our rotary vane pumps come with clear instructions and intuitive controls.

NOTES

NES Company Inc. presents the NRV Series Single Stage Oil Flooded Rotary Vane Vacuum Pumps. NES Company Inc. NRV Series vacuum pumps are factory performance tested and include a one-year warranty against manufacturer’s defects.

FULL TECHNICAL DATA

The following pages cover technical data for every model, the application table, dimensions, exploded views, and full parts lists. **Contact NES** at info@nescompany.com or 800-297-3550 for application support.

Technical Data

Parameter		Units	NRV-06	NRV-08	NRV-10	NRV-16	NRV-20	NRV-31	NRV-41	NRV-64
Exhaust Vol.		CFM	4.24	5.65	7.06	11.18	14.13	21.19	28.25	44.73
Ultimate Vacuum	W/ float valve	mbar	2	0.5		2		0.5		
	W/O float valve	mbar	20							
Motor Specs	φ, V	φ, V	3, 230/460 / 1, 230						3, 230/460	3, 230/460 / 1, to order
	φ /Hz/HP	φ /Hz/HP	3/60/0.5 / 1/60/0.5	3/60/0.5 / 1/60/0.5	3/60/0.75 / 1/60/0.75	3/60/0.75 / 1/60/0.75	3/60/1 / 1/60/1.5	3/60/1.5 / 1/60/2	3/6/2	3/60/5
	RPM	RPM	1800	1800	1500	3600	3600	1800	1800	1800
Operating Temperature		°F	104	104	104	104	104	104	104	104
Oil Volume		qt	0.24	0.32	0.42	0.32	0.42	1.06	1.06	2.11
Weight		lbs.	26.5	40	44	40	44	75	84	141.1
Sound Level		dBA	50	59	58	60	61	64	67	68
Parameter		Units	NRV-101	NRV-161	NRV-201	NRV-251	NRV-301	NRV-400	NRV-630	
Exhaust Vol.		CFM	70.63	111.83	141.26	176.57	211.89	282.52	447.32	
Ultimate Vacuum	W/ float valve	mbar	0.5							
	W/O float valve	mbar	20							
Motor Specs	φ, V	φ, V	3, 220/380 / 1, to order	3, 230/460				3, to order		
	φ /Hz/HP	φ /Hz/HP	3/60/5	3/60/7.5	3/60/7.5	3/60/10	3/60/15	3/60/20	3/60/25	
	RPM	RPM	1800	1800	1800	1800	1800	1200	1200	
Operating Temperature		°F	104	104	104	104	104	104	104	
Oil Volume		qt	2.11	7.25	7.25	7.25	7.25	13.7	15.85	
Weight		lbs.	165.4	385	408	445	480	1210	1474	
Sound Level		dB	70	72	74	74	76	72	74	

Application Table

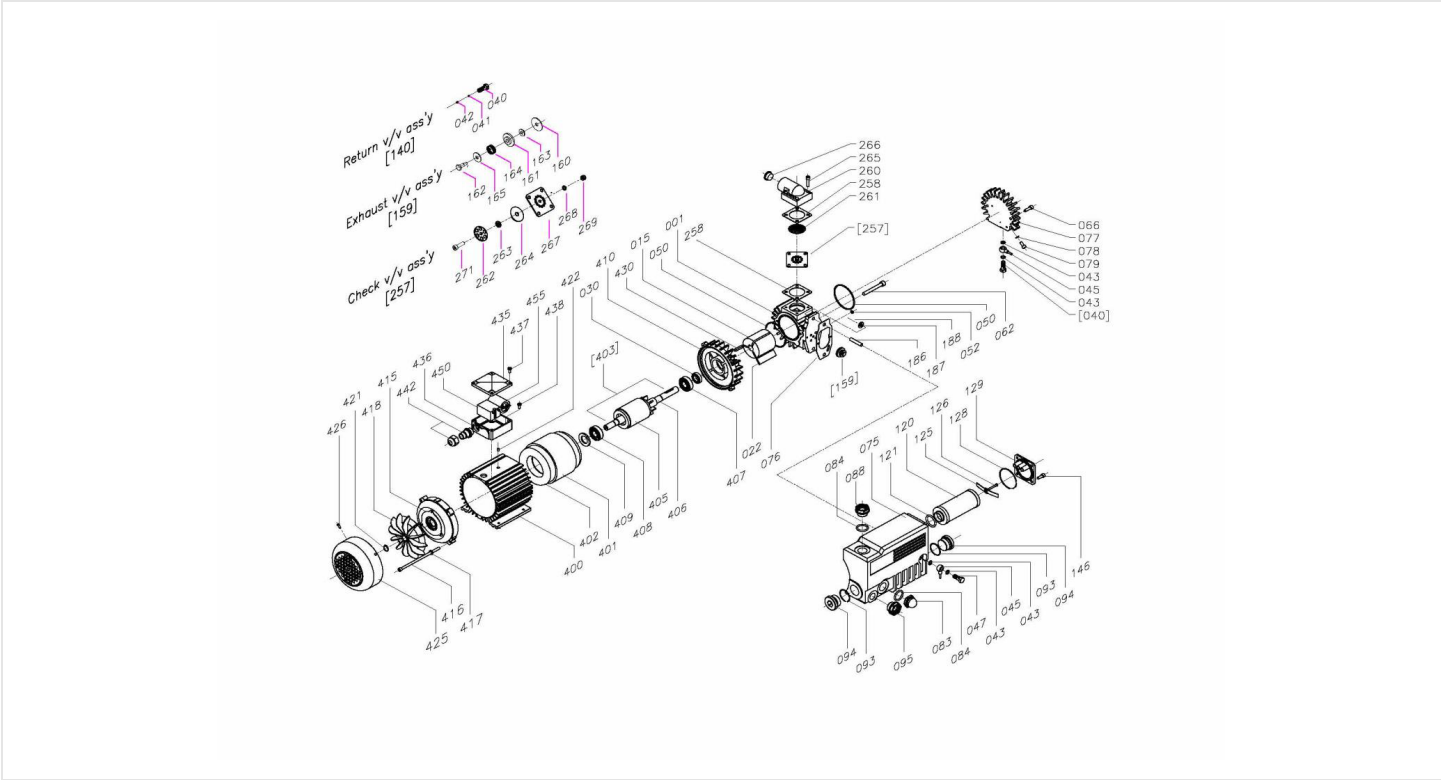
Applications	
Adhesion & Exposure	
Automotive	
Food Packaging	
Nuclear	
Research	
Semiconductor	
Adsorption	
Conveying	
Deaeration	
Deposition	
Drying	
Lyophilization	
Impregnation	
Pressing	
... and more!	

Dimensions / Pump Length, Height & Breadth

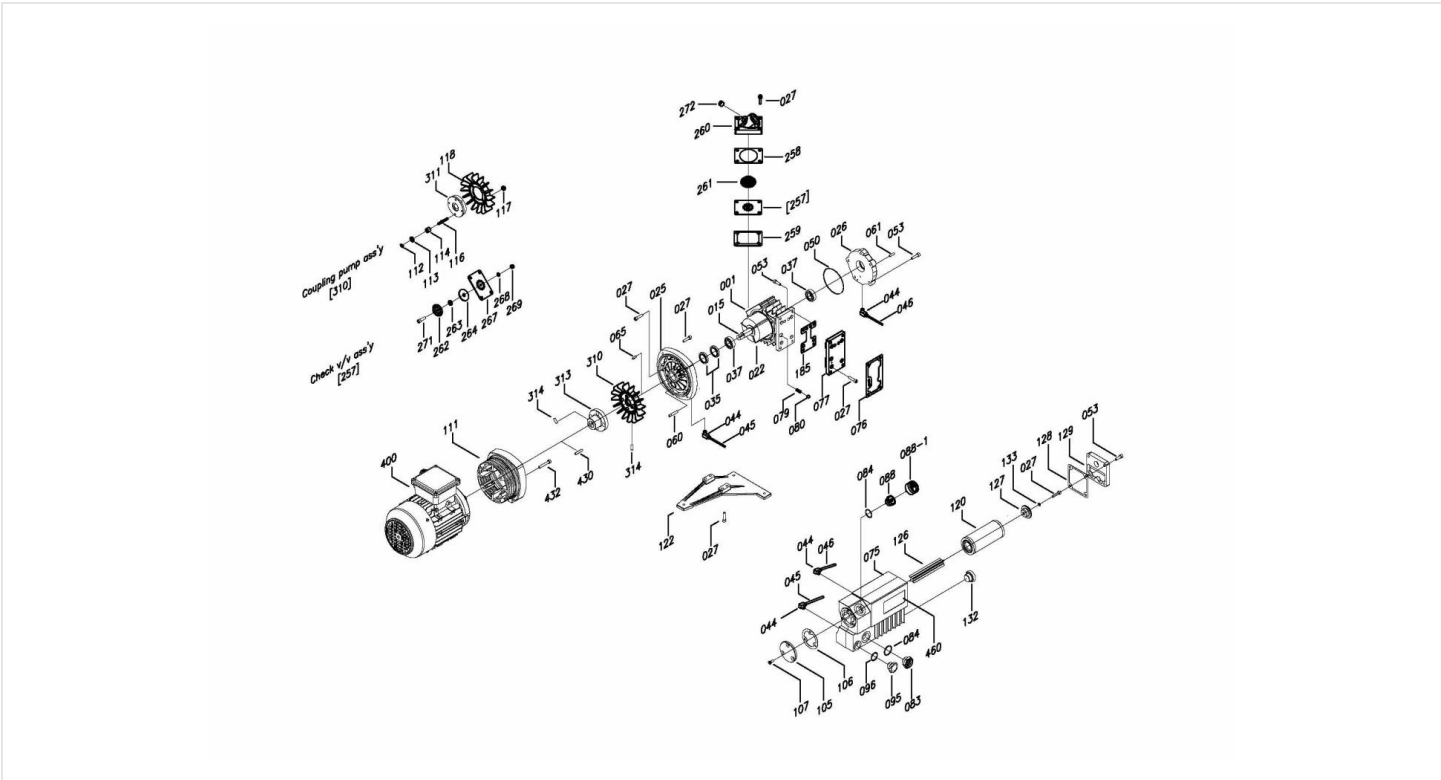
Series Model	Length (Inches)		Height (Inches)	Width (Inches)
	With Motor	Bare Shaft		
NRV-06	13.25	8.25	7.4	6.3
NRV-08	12	8	6.3	9.2
NRV-10	16	10	8.5	9
NRV-16	12	8	6.3	9.2
NRV-20	16	10.5	8.5	9
NRV-31	24	17.5	10	9
NRV-41	25.5	18	10	9
NRV-64	28.5	21.5	12	16.5
NRV-101	—	29	12	16.5
NRV-161	35	32	16.5	23
NRV-201	36.5	34	16.5	24.5
NRV-251	39.5	32	16.5	23
NRV-301	42	34	16.5	24.5
NRV-400	58.5	41.25	26.3	32.9
NRV-630	67	49	26.3	32.9

Exploded Views / By Model

EXPLODED VIEW — NRV-08 & NRV-16

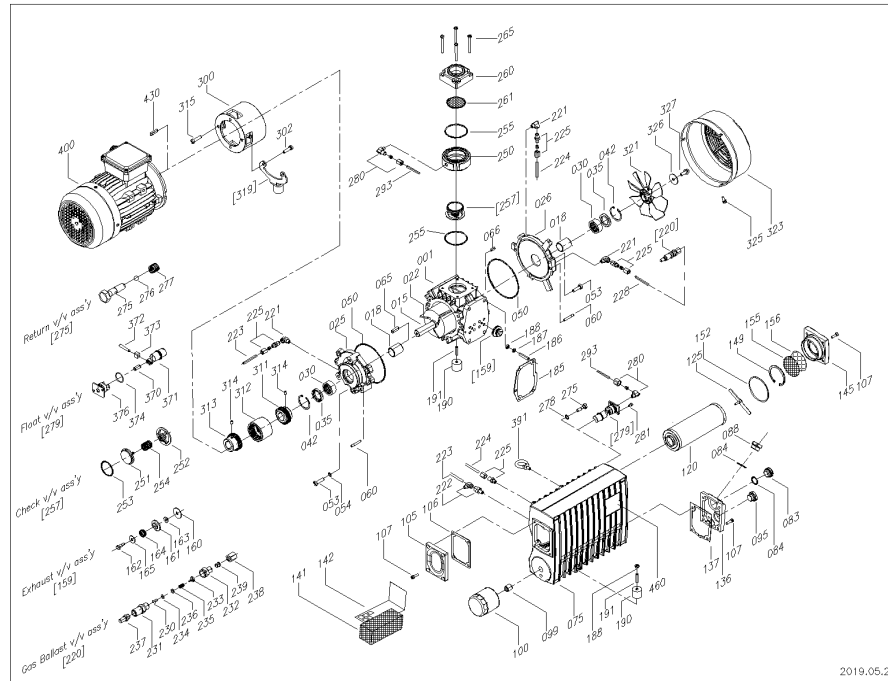


EXPLODED VIEW — NRV-10 & NRV-20

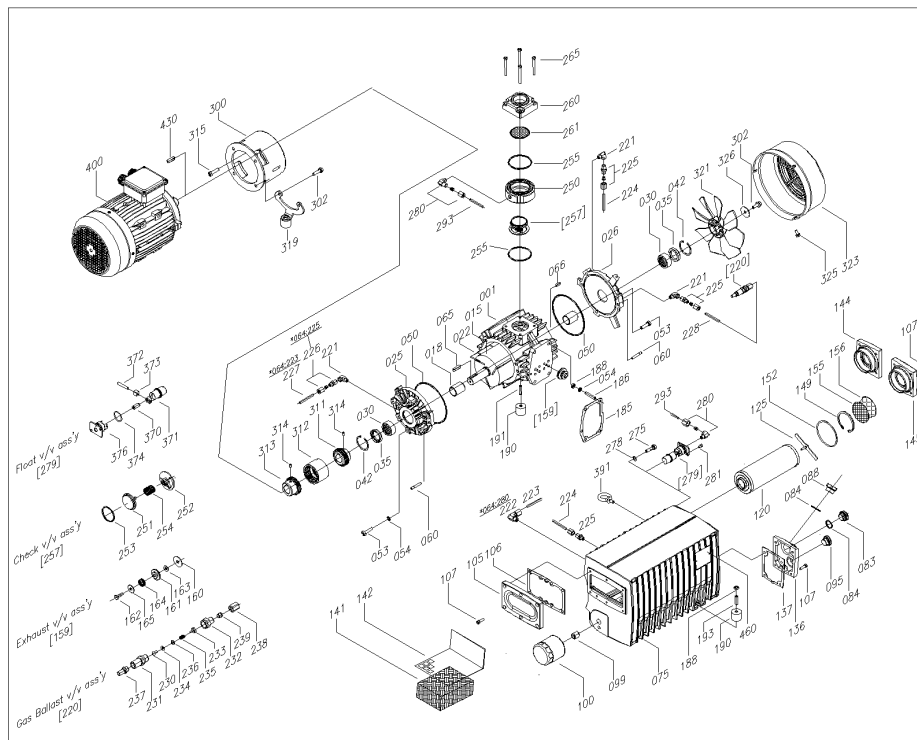


Exploded Views / By Model

EXPLODED VIEW — NRV-31 & NRV-41

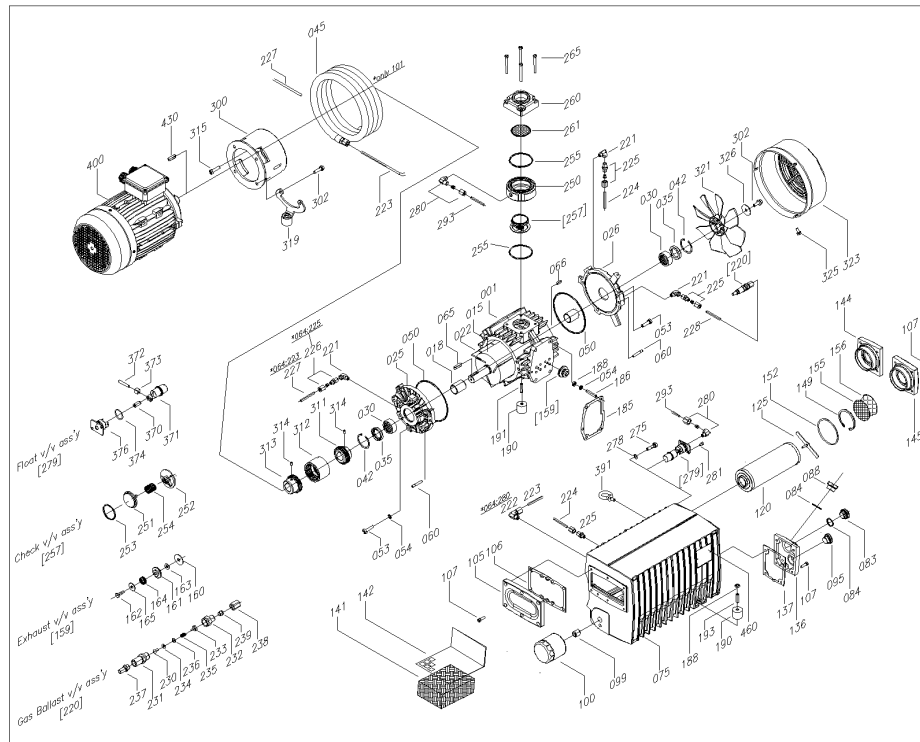


EXPLODED VIEW — NRV-64

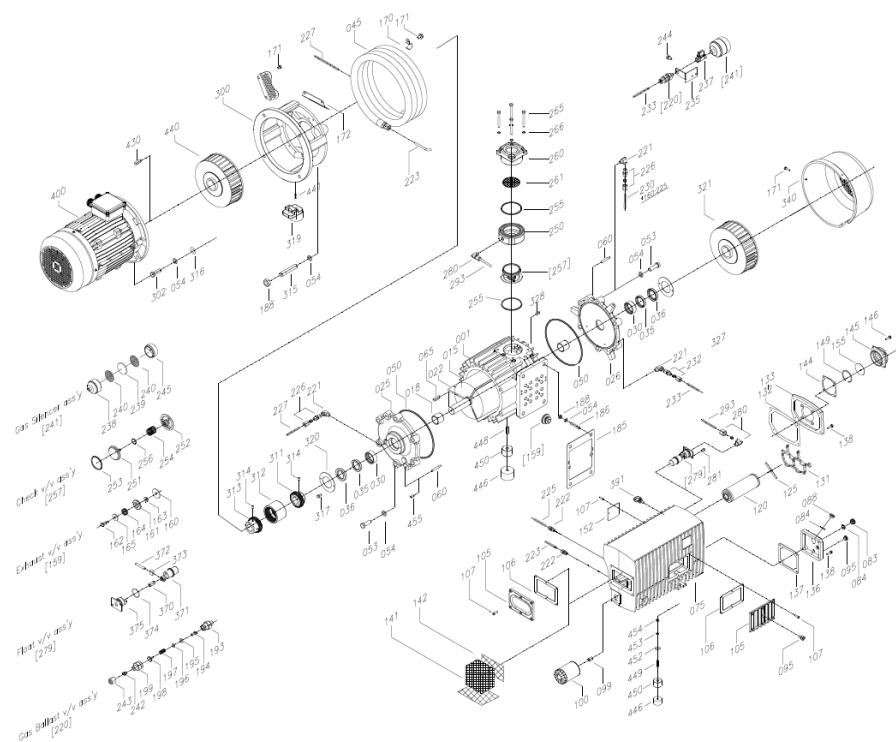


Exploded Views / By Model

EXPLODED VIEW — NRV-101

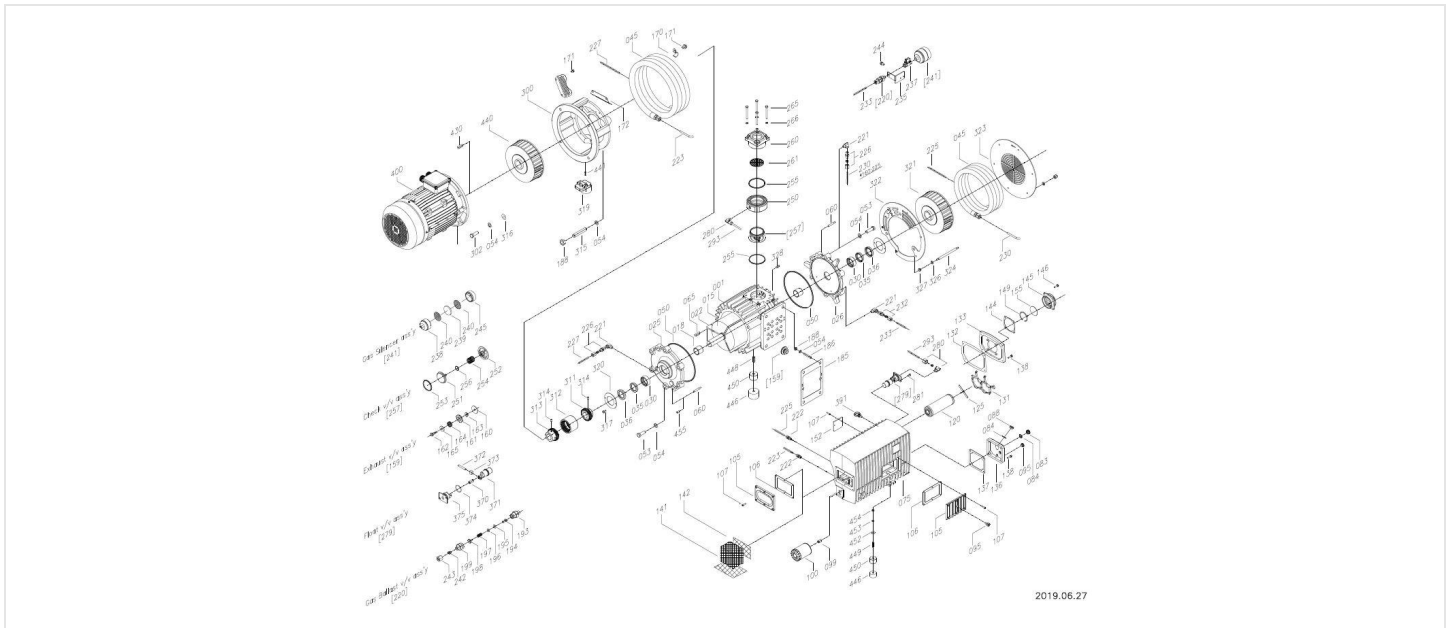


EXPLODED VIEW — NRV-161

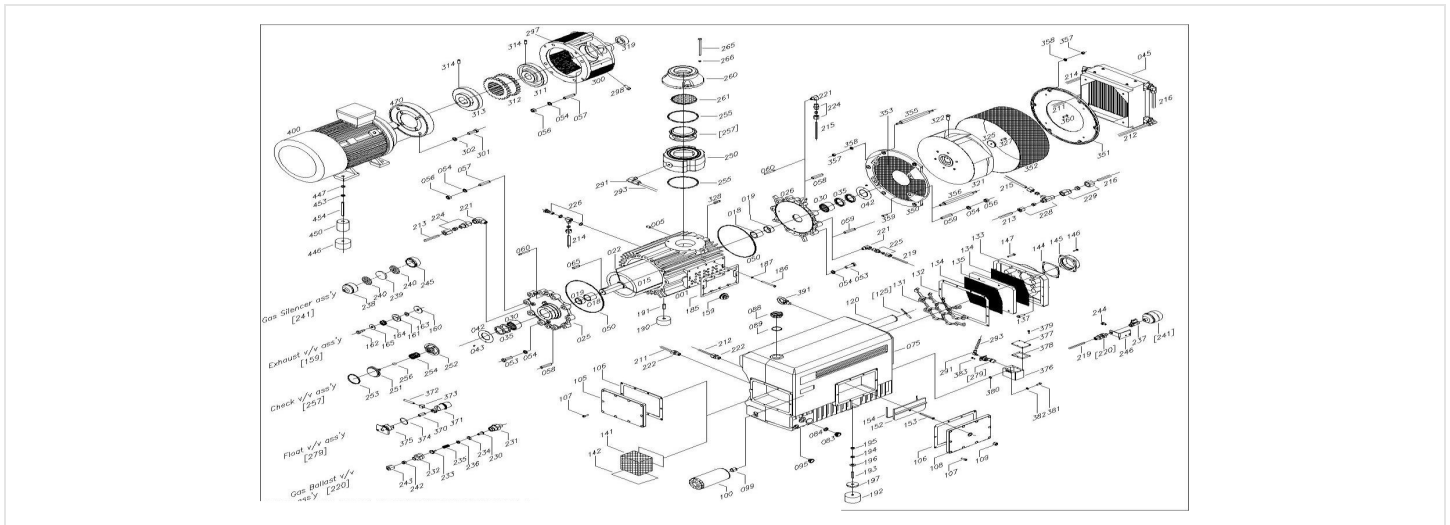


Exploded Views / By Model

EXPLODED VIEW — NRV-251



EXPLODED VIEW — NRV-400 & NRV-630



*For more information, please contact your NES representative.



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