National Vacuum Equipment

■ Part of Atlas Copco Group

MADE IN THE USA



304 HEAVY DUTY VACUUM PUMPS

PRODUCT CATALOG

800-253-5500

www.natvac.com

Challenger Series

VACUUM PUMPS & BLOWERS

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DESIGNED. BUILT. SUPPORTED.

Produced in the USA | Distributed World-Wide

NVE

National Vacuum Equipment

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800-253-5500
sales@natvac.com
2707 Aero Park Dr. | Traverse City, MI 49686

NVE Product Information

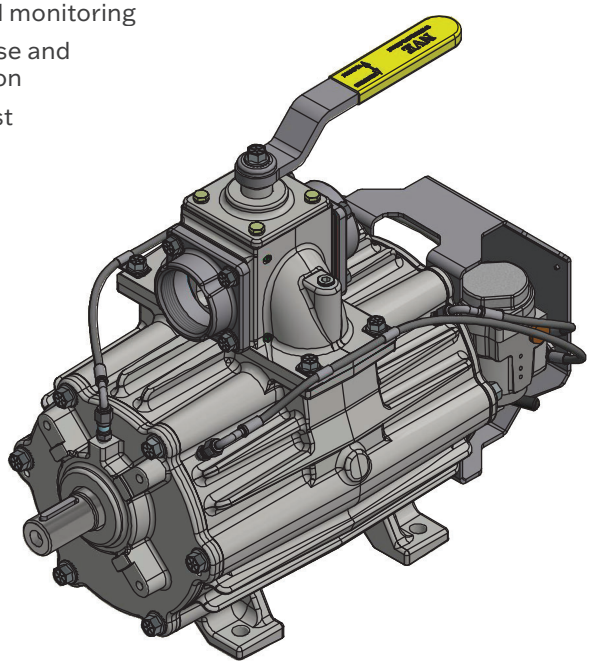
Condition of Sales

304 Heavy Duty Vacuum Pumps

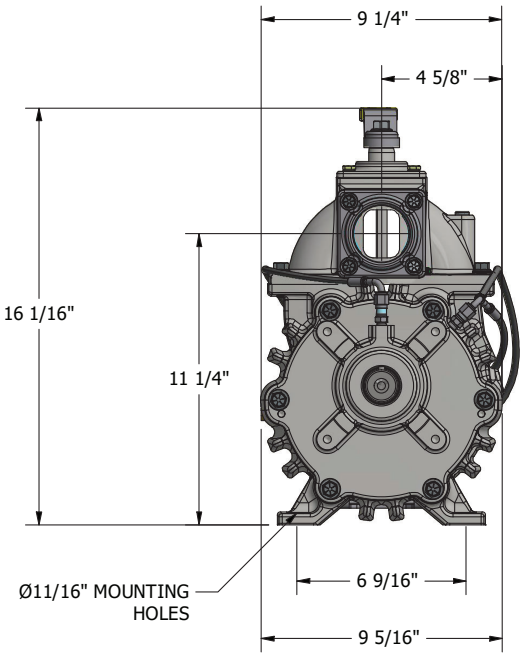
MADE IN THE USA

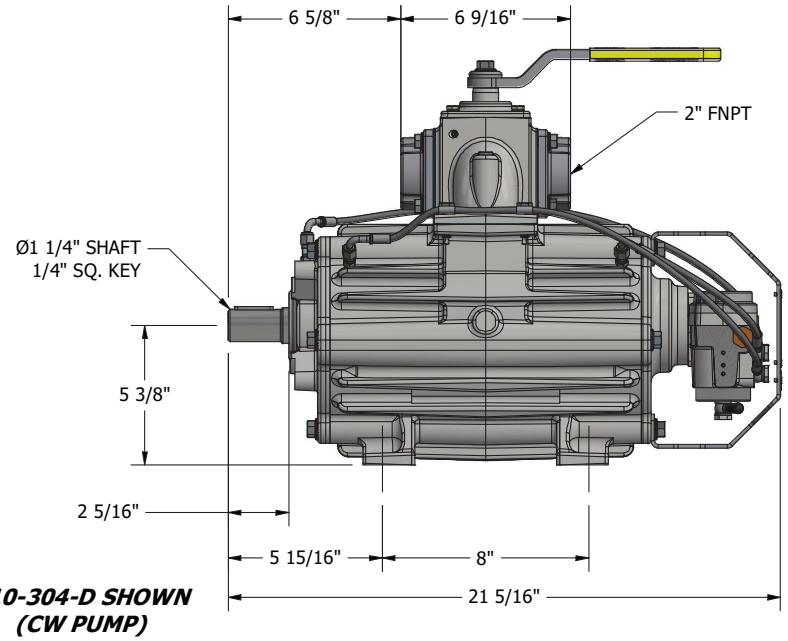
Features

- Exclusive NVE automatic oil pump
- Rugged braided stainless steel oil delivery lines
- Ductile iron housing
- On truck serviceability
- Remote mount 5 quart see through oil tank for constant oil level monitoring
- Available in both clockwise and counter-clockwise rotation
- Two year warranty against manufacturer defect



AIR COOLED 304 CHALLENGER SPECIFICATIONS			
Air Flow - Free Air	210 CFM		
*Full Intermittent Vacuum	**18**″ HG		
Maximum Intermittent Pressure	20 PSI		
*Operating Range - RPM	**1200**	**1300**	**1400**
HP Required @ Full Vacuum	8.35	9.24	10.16
HP Required @ 10 PSI	10.08	11.14	12.24
Porting Size (Optional 1-1/2")	2″		
Shaft Size (1/4" Key)	1 1/4″		





110-304-D SHOWN (CW PUMP)

PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Challenger 304 CW (Pictured Above)	110-304-D	179 lbs
Challenger 304 CCW	110-304-S	179 lbs
Challenger 304 CCW W/HYD Adapter	117-304-HYD-S	182 lbs

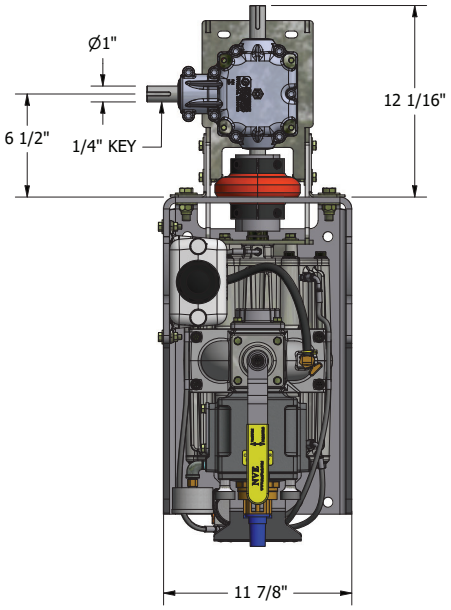
*The maximum allowable operating vacuum will vary depending on R.P.M., ambient temperature, altitude and time running. The basic principle to keep in mind is - faster R.P.M., higher air temperature and longer run time all equal more heat in pump. When installing an NVE 304 pump we recommend a normal R.P.M. of 1200-1400. Other speeds are ok as long as exhaust gas temperatures read on the supplied thermometer do not exceed 380 degrees F.

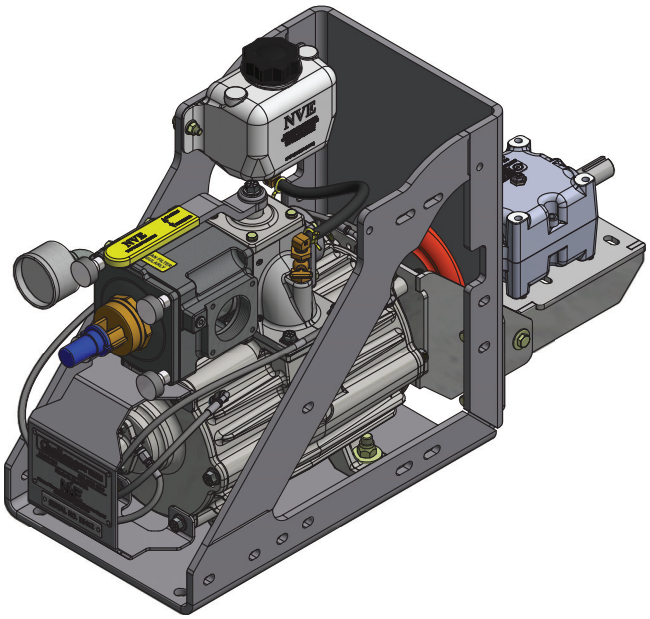
304 Pump Stand Complete Packages

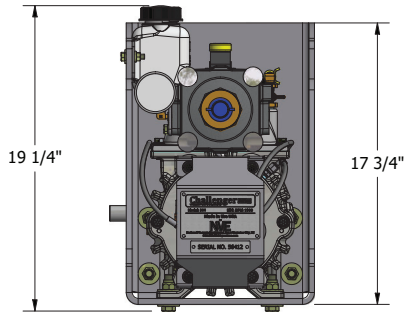
Challenger Series

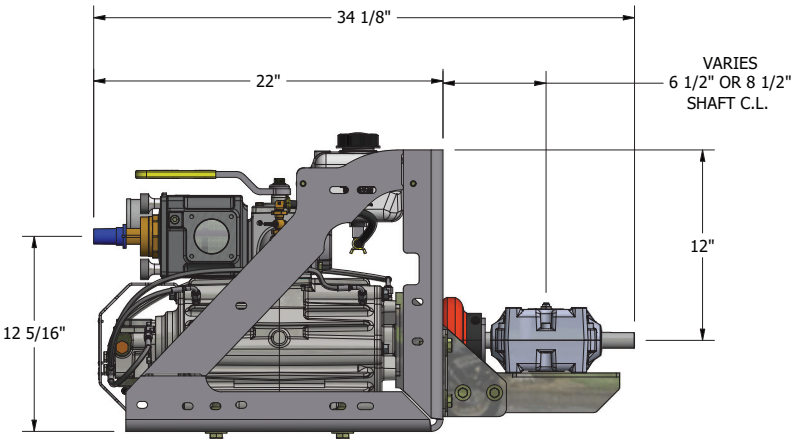
Features

- 304 counter clockwise vacuum pump
- Pre-filter
- Heavy duty 3/8” steel gusseted frame
- Durable powder coat finish
- Lightweight aluminum gearbox for cool operation
- Flushing flush kit included
- Reliable Rexnord E5 Coupler
- Remote mount 5 quart see through oil tank for constant oil level monitoring
- Two year warranty against manufacturer defect









PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Challenger 304 Pump Stand Complete (Pictured Above)	117-304-001-S	297 lbs

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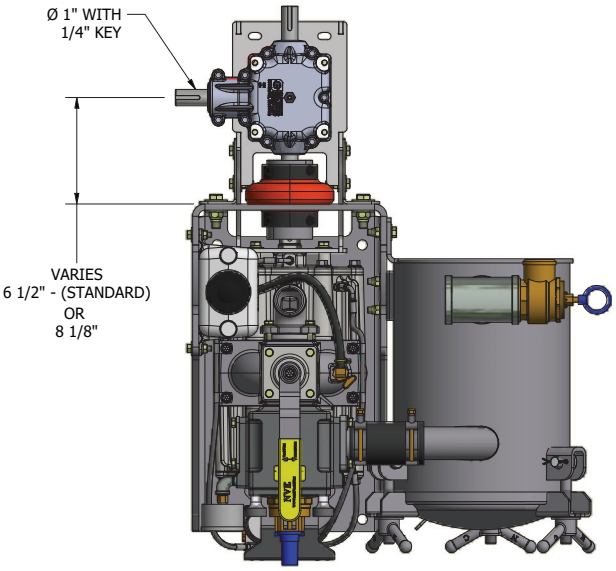
304 Horizontal Packages

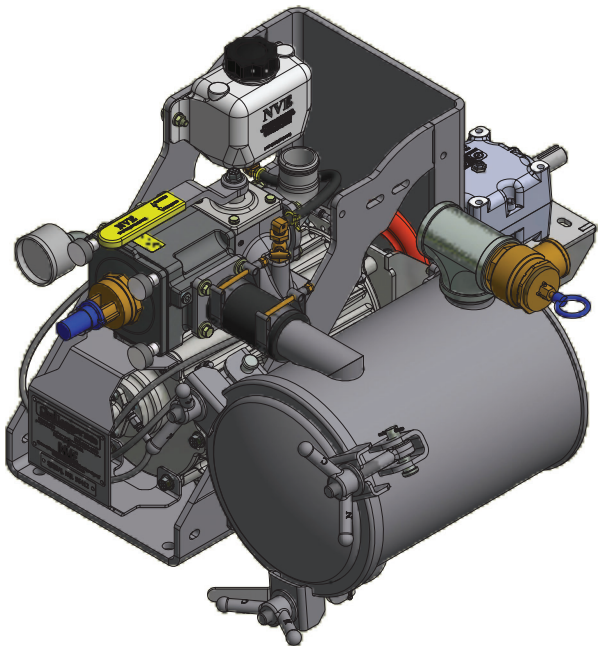
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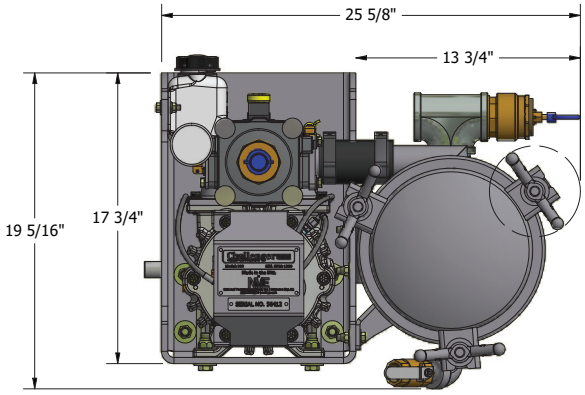
Features

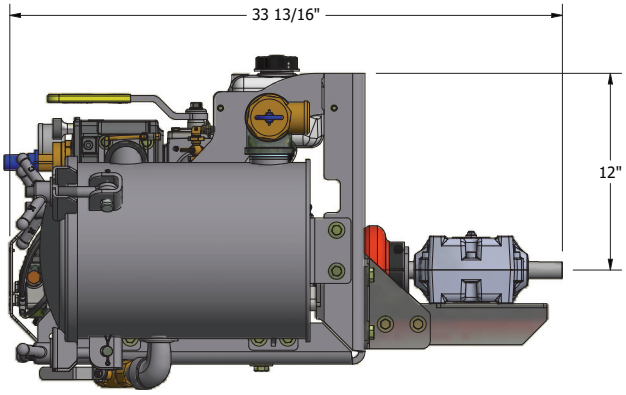
All features included in the pump stand complete plus:

- 304 counter clockwise vacuum pump and stand
- Gearbox or hydraulic adaptor options available
- Pre-filter
- Horizontal moisture trap
- Flushing flush kit included
- Vacuum relief valve and vacuum pressure gauge
- Two year warranty against manufacturer defect









PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Challenger 304 Right Hand Horizontal Package (Pictured Above)	117-304-002-D	392 lbs

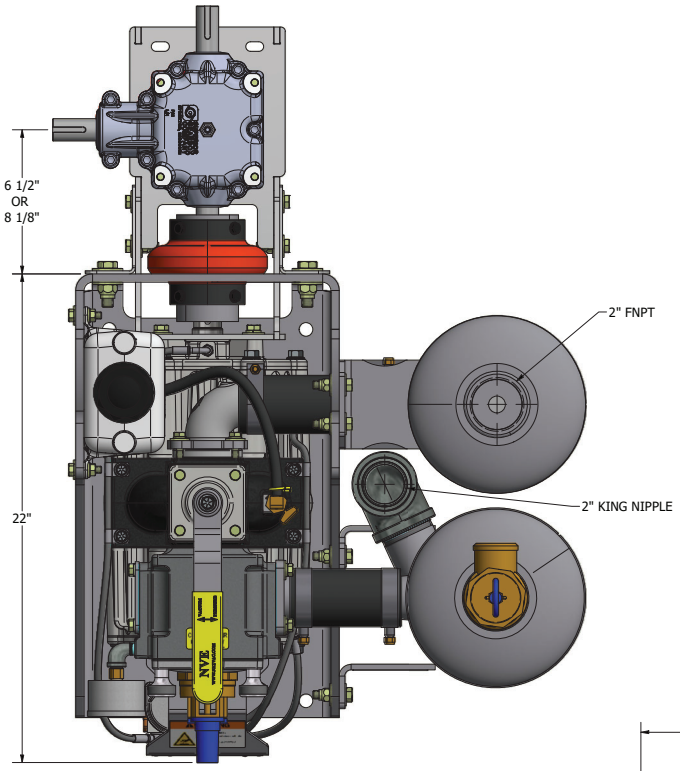
304 Combination Moisture Trap/Muffler Packages

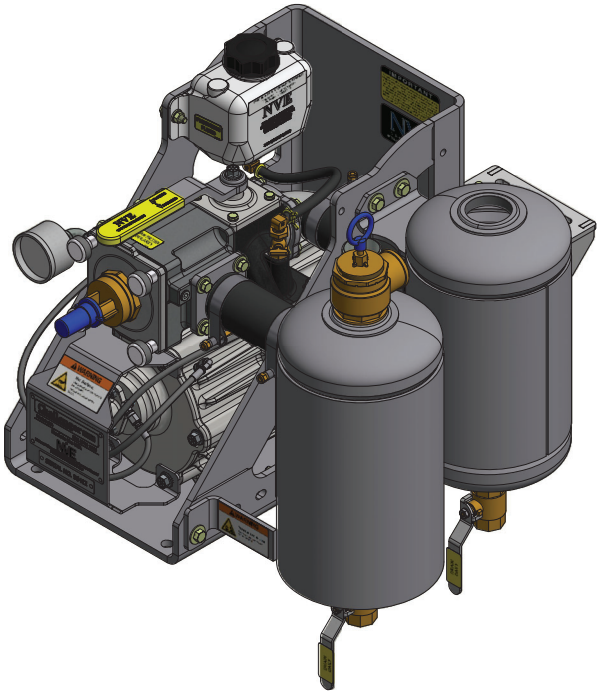
Challenger Series

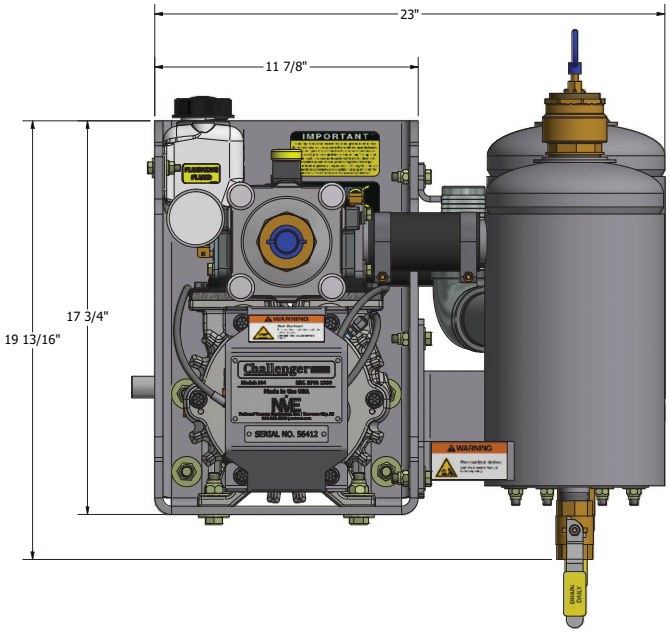
Features

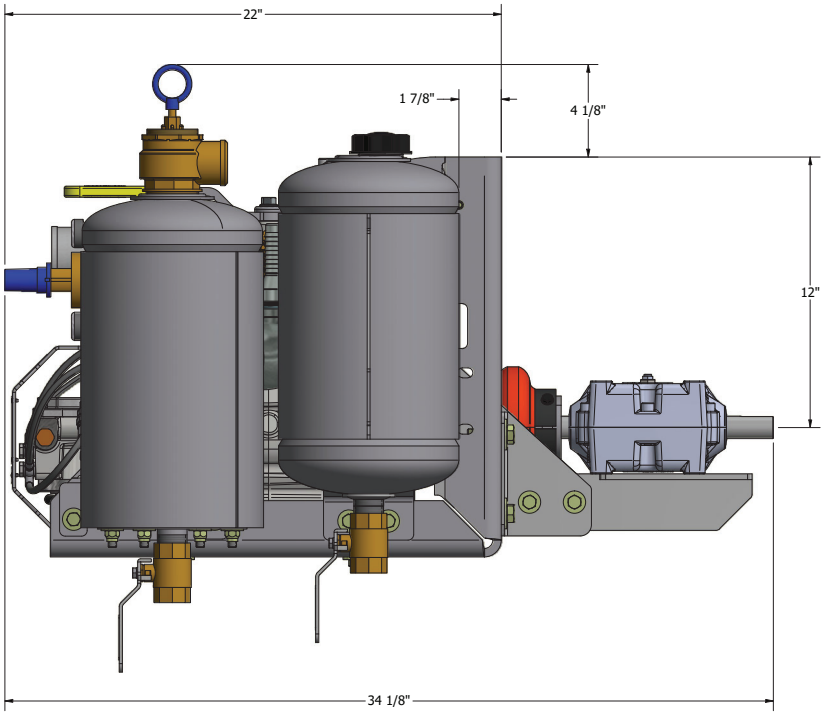
All features included in the pump stand complete plus:

- 304 counter clockwise vacuum pump and stand
- Combination moisture trap and muffler
- Vacuum and pressure relief valves with gauge
- Flushing flush Kit included
- Right or left mounting options
- Two year warranty against manufacturer defect









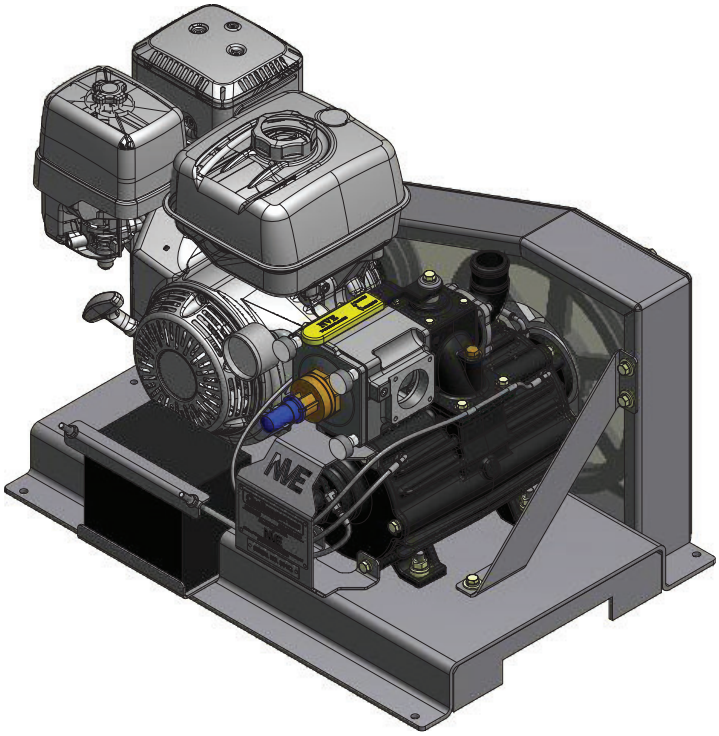
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Challenger 304 Right Hand Combination Moisture Trap/Muffler (Pictured Above)	117-304-007-D	404 lbs

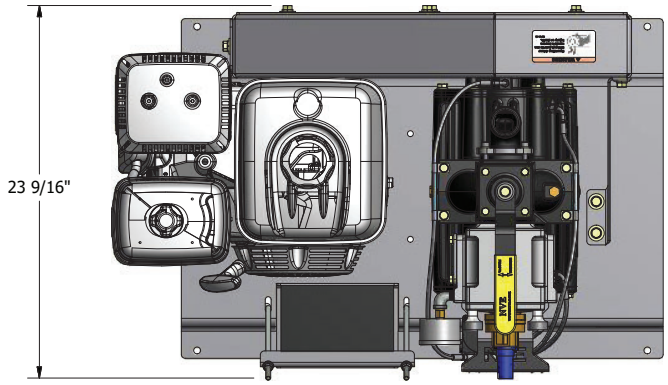
304 Engine Drive Package

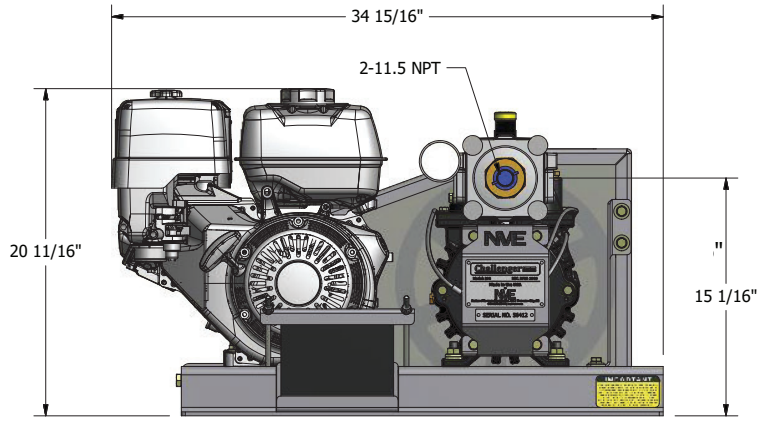
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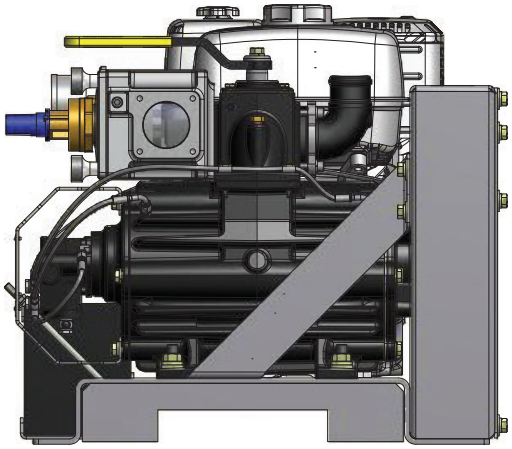
Features

- 304 counter clockwise vacuum pump and stand
- Honda 13 HP Electric Start Motor
- Battery included
- Two year warranty against manufacturer defect

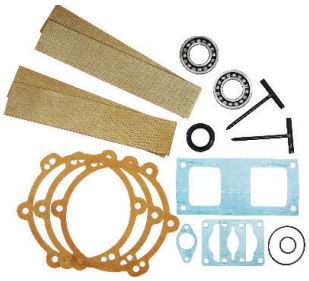








PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Challenger 304 Honda Engine Drive Package	117-EDR-304-1	400 lbs

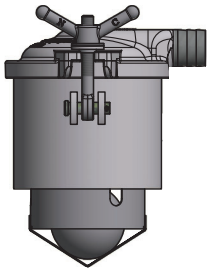


PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Repair Kit 304	115-304-0	3 lbs
Repair Kit 304 (W/O Bearings)	115-304-0B	2 lbs

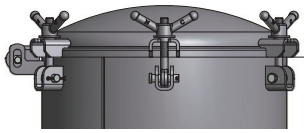


PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Oil Catch Muffler	212-800-2FP-A	12.55 lbs

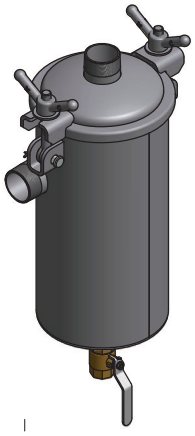
- 8” Aluminum tread plate exterior with 2” NPT.
- Compact Design
- Rated to 250 CFM
- 2” Port
- 1” Drain Valve



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Primary Shutoff 8″ X 6″ Carbon Base Cast 2″ Hb	200-0806-2HB	25 lbs
Primary Shutoff 8″ X 6″ Alu Base Cast Alu Lid 2″ HB	204-0806-2HB	17.25 lbs
Primary Shutoff 8″ X 6″ SS Base Cast Alu Lid 2″ HB	208-0806-2HB	25.35 lbs



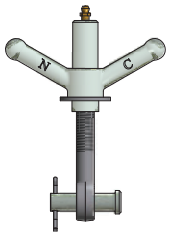
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Portal Carbon 12″ X 6″ GOL	200-1206-C	37 lbs
Portal 12” X 6”, Alu Base SS Lid GOL	204-1206-A	21 lbs
Manway Carbon 17″ X 6″ GOL	202-1706-C	48 lbs
Manway Carbon 20″ X 6″ GOL	202-2006	72 lbs
Manway Alu 20” X 6” W/ Cast Al Lid GOL	206-2006-A	42 lbs



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Secondary Shutoffs Mt 4 Gal Alu 2″ HB	216-400-2NPT-A	23 lbs
Secondary Shutoffs Mt 4 Gal 2″ NPT	216-400-2NPT-C1	30 lbs
Secondary Shutoffs Mt 4 Gal SS Alu Lid 2″ HB	216-400-2NPT-S	30 lbs

304 Components & Accessories

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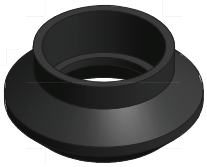
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Wingnut, Eyebolt Clevis & Cotter Pin (Qty 6)	284-KIT-C	1.45 lbs
Lubenut, Eyebolt, Clevis & Cotter Pin (Qty 6)	284-KIT-CLN	1.55 lbs



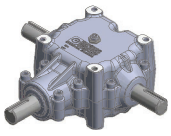
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Float Balls 4” SS	414-400-SS	0.5 lbs



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Gasket 12″ Lid And Neck Buna	286-706-12L	0.65 lbs
Gasket 17″ Lid Buna	286-706-17L	1 lbs
Gasket 19.5″ Lid Buna	286-706-20L	1 lbs



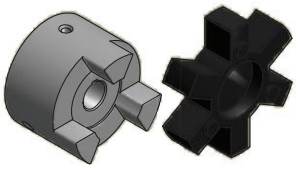
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Ball Seat 3″ Buna	416-200-B	0.55 lbs
Clamp Worm 3″ Ball Seats	416-200-1WC	0.08 lbs



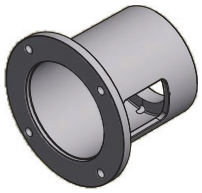
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Gear Boxes	422-200-1	14.3 lbs
- 200 Series 1:1		



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Coupler Hub E5 1″ Bore 1/4″ Key	424-050-100	3 lbs
Coupler Hub E5 1 1/4″ Bore 1/4″ Key	424-050-125	3 lbs
Coupler Flex Element E5	424-050-E5	2 lbs



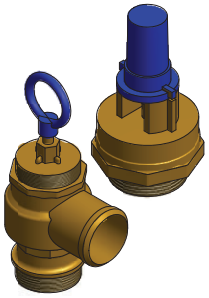
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Spider Lovejoy 100 NBR	424-100-S	0.25 lbs
Coupler Flange Lovejoy 100 - 1.25″ X 1/4″ Key	424-100-125	3 lbs
Coupler Flange Lovejoy 100 - 0.625″ X 5/32″ Key	424-100-0625	3 lbs



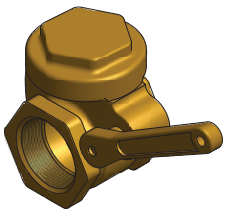
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Hydraulic Adapter	120-400-004	3 lbs



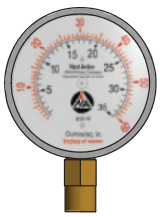
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Flange 2” Adjustable Elbow	280-355-116	0.25 lbs
O-Ring for Elbow	120-064-031	0.01 lbs
Elbow 2” 90 Degree Alum Hose Barb X Hose Barb	803-063-014	0.5 lbs
Elbow 2” 90 Degree Aluminum Hose Barb X Oring	803-063-013	0.5 lbs



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Vacuum Relief 1 1/2” NPT	366-150	1.1 lbs
Pressure Relief 1.50”	364-306-015	1.85 lbs
Pressure Relief 1.25”	364-306-1.25	1.45 lbs
Pressure Relief 2”	364-306-2	2.7 lbs



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Lever Valve 2”	362-301-2	3.9 lbs
Lever Valve 3”	362-301-3	8.7 lbs
Lever Valve 3” TTMA/NPT	362-301-3T	10 lbs
Lever Valve 4”	362-301-4	12 lbs



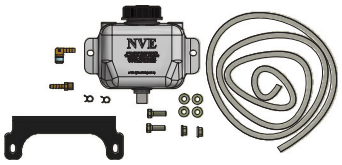
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Gauge 2.5” Vac/Pres Liq Bot Conn 1/4” NPT	408-250-LF	0.45 lbs



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Remote Oil Tank	320-082-001	1.6 lbs
Oil Tank Kit	320-081	2.30 lbs
Oil Tank Cap Black W/Tether	320-083-002	0.10 lbs

304 Components & Accessories

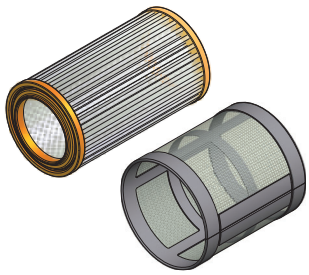
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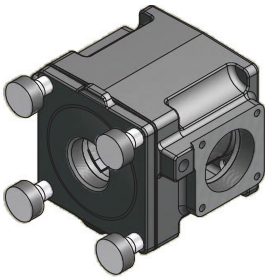
PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Flushing Fluid Kit	320-081-002	1.9 lbs



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Oil Vacuum Pump R&O ISO 150/SAE 40 ND. Price Per Gallon. 6 Gallons Per Case.	150-220-VPOIL-150	7.35 lbs



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Intake Filter 304 - 3.75″ ID x 4.43″	120-314-004	.35 lbs
Intake Filter 304 - 4.44″ OD x 3.0″ ID x 8.125″	120-314	.90 lbs
**Please Verify Size Before Buying*		



PRODUCT DESCRIPTION	PART NUMBER	WEIGHT
Filter Box Assembly 304	120-318-001	5 lbs

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304 INFO