



Standard Pump Operating Instructions and Parts Manual AdBlue / Urea 9100 Series Pump Packages

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Standard Pump

AdBlue / Urea 9100 Series Pump Package

Description

In recent years, the European Union has issued directives such as Euro 4 & 5 which require significant reductions in Nitrous Oxide (NOx) emission from diesel engines. Beginning in 2010, the EPA will institute similar regulations for the North American market. To assure compliance with these new standards, several diesel engine manufacturers have implemented Selective Catalytic Reduction Systems (SCR) which injects AdBlue (AUS 32) to the vehicles emissions.

Standard Pump's unique Pump Packages are engineered to transfer AdBlue (AUS32) directly from barrels and Tote™ tanks. Each Pump Package meets stringent North American and European safety standards to insure the consumer receives a safe and quality product. Extensive testing has concluded that AdBlue reacts negatively to non-ferrous metals such as Copper, Zinc, and related alloys therefore each Standard Pump is constructed with ISO compatible materials.

Unpacking

Cartons should be handled with care to avoid damage from dropping, etc. After unpacking, inspect carefully for any damage that may have occurred during transit. Check for loose, damaged or missing parts.

General Safety Information

The responsibility for safe assembly, installation, and operation ultimately rests with the operator. Read and understand ALL safety precautions and operating instructions before operation. Careless pump operation can result in serious injury.

▲ WARNING *Do not use these pumps for the transfer of flammable or combustible products or in an environment where flammable or combustible fumes are present. Doing so could cause serious injury or death.*

1. Before operating the pump, read and understand these operating instructions.
2. The operator should wear suitable protective clothing including the following: face mask, safety shield or goggles, gloves, apron, and safety shoes.
3. All Federal, State, and local safety codes should be followed.
4. Verify that the motor voltage corresponds to proper electrical supply.
5. Before plugging motor into power supply, make sure the motor switch is in the OFF position.
6. Before operation, confirm all pump connections are properly tightened.
7. First pump clean de-mineralized water in order to familiarize yourself with the pump's operation, flow rate, discharge pressure and motor speed.

▲ WARNING *Only de-mineralized water should be used to clean AdBlue / Urea Pump Tubes. Using anything other than de-mineralized water could potentially contaminate the pump and/or the vehicles's catalytic system.*

8. Before starting the pump, confirm the discharge hose is securely fastened to the receiving vessel in order to prevent splashing.
9. Never leave pump unattended during operation.
10. Do not submerge the motor in any liquid.
11. Never carry the motor by the power cord.

P/N	HP	Voltage	Watts	Phase	Air Inlet	Flow Meter	Wetted Components	Length	Hose Assembly
9120	1	115	825	1	N/A	No	Polypropylene, Stainless Steel, Carbon	47"	3/4"(19mm), 8ft.(2.4m)
9121	1	230	825	1	N/A	No	Polypropylene, Stainless Steel, Carbon	47"	3/4"(19mm), 8ft.(2.4m)
9130	1	115	825	1	N/A	No	Polypropylene, Stainless Steel, Carbon, Polyethylene	47"	3/4"(19mm), 8ft.(2.4m)
9131	1	230	825	1	N/A	No	Polypropylene, Stainless Steel, Carbon, Polyethylene	47"	3/4"(19mm), 8ft.(2.4m)
9140	1	115	825	1	N/A	Yes	Polypropylene, Stainless Steel, Carbon, Polyamide	47"	3/4"(19mm), 8ft.(2.4m)
9141	1	230	825	1	N/A	Yes	Polypropylene, Stainless Steel, Carbon, Polyamide	47"	3/4"(19mm), 8ft.(2.4m)
9150	0.5	N/A	370	N/A	1/4"	No	Polypropylene, Stainless Steel, Carbon	47"	3/4"(19mm), 8ft.(2.4m)
9160	0.5	N/A	370	N/A	1/4"	No	Polypropylene, Stainless Steel, Carbon, Polyethylene	47"	3/4"(19mm), 8ft.(2.4m)
9170	0.5	N/A	370	N/A	1/4"	Yes	Polypropylene, Stainless Steel, Carbon, Polyamide	47"	3/4"(19mm), 8ft.(2.4m)

Assembly

1. Remove the pump and motor from packaging.
2. Inspect all contents for damage.
3. Couple the motor to the pump tube by using the Hand Wheel. (See figure 3, page 3).

▲ WARNING *When using an SP-A1 Series motor, Standard Pump recommends the use of a Filter Lubricator Regulator (FLR) in order to ensure a moisture free supply of air to the motor.*

General Operation Guide

1. Once the pump is fully assembled and all connections are securely fastened, insert the pump into the drum or tank.
2. Turn the motor switch to the "ON" position.
3. If your package contains a flow meter (Package numbers 9140, 9141 & 9170) please reference the factory operating instructions which are located in your carton.
4. After use, clean the pump and store vertically.

Disassembly / Cleaning Procedures

1. In order to clean a majority of the residue from the pump tube, immerse the pump into a 55 Gallon Drum of de-mineralized water. Allow the pump to circulate the water for 3 minutes.

▲ WARNING *Only de-mineralized water should be used to clean AdBlue / Urea Pump Tubes. Using anything other than de-mineralized water could potentially contaminate the pump and/or the vehicle's catalytic system.*

2. For a more thorough cleaning remove the motor from the pump tube by loosening the hand wheel (see Figure 3).
3. Remove the pump foot. (see Figure 1)
4. While holding the drive shaft with pliers (Factory suggests Grip-Locks to avoid scarring shafts) remove the impeller (see Figure 4).
5. Remove the Pump Housing (see Figure 2).
6. Remove outer tube and inner tube from discharge housing (P/N: 1028) by turning clockwise.
7. Remove pump coupling (P/N: 1004) from drive shaft (P/N: 2028) by turning counterclockwise. Pull drive shaft straight down removing it from the discharge housing.

▲ WARNING *When replacing the drive shaft in the bearing unit (PIN1038) during reassembly, make sure the drive shaft is inserted through the spacer in between the bearings inside the bearing unit. Failure to do so could cause the bearing unit to prematurely fail.*

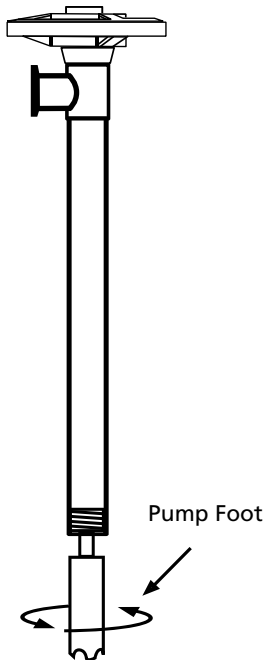


Figure 1

NOTE: Remove pump foot by turning clockwise.

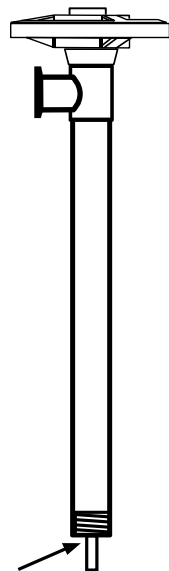


Figure 2

NOTE: Remove pump housing by turning clockwise.

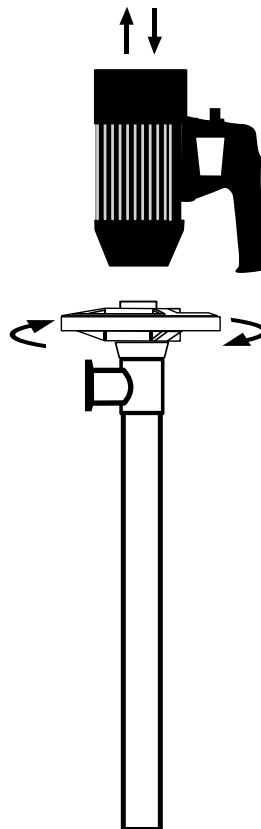


Figure 3

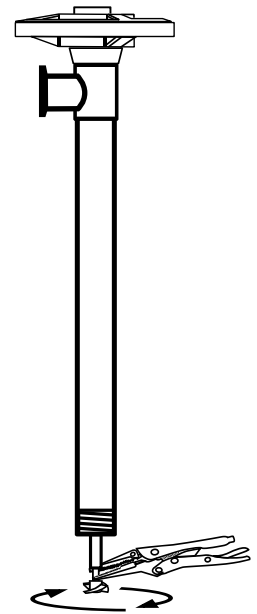
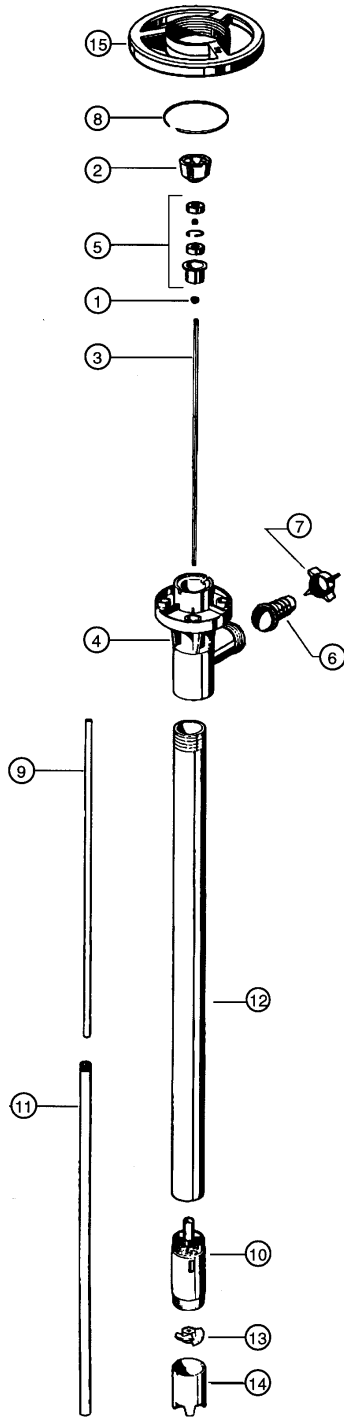


Figure 4

NOTE: Use grip lock pliers to hold shaft while removing impeller.

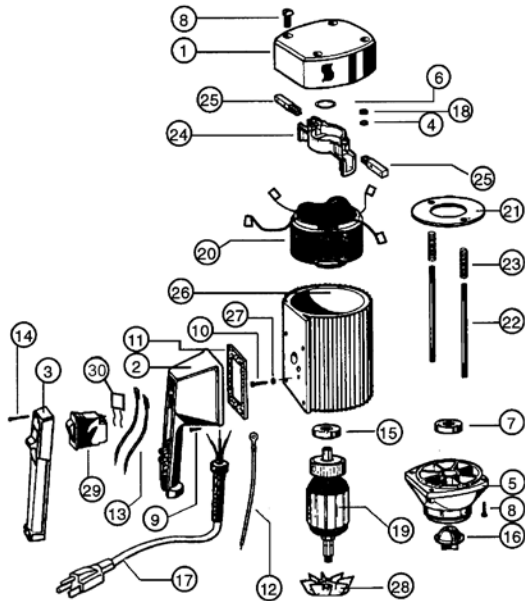
9100 & 9102 Pump Tube Spare Parts



ITEM NUMBER	DESCRIPTION	PART NUMBER
1	V-seal - Viton	1000
2	Pump coupling	1004
3	Drive shaft	39" (1000 mm) 2028 47" (1200 mm) 2029
4	Discharge housing	1028
5	Bearing unit assembled - 2 each	1038
	Viton shielded bearings, spacer, snap ring, bearing can	
6	Hose barb, 3/4" (19 mm)	1051
7	Wing nut	1106
8	Snap ring	1508
9	Guide sleeve - TFE	39" (1000 mm), 47" (1200 mm) 1514
10	Pump housing includes carbon bushing	1524
11	Inner tube,	39" (1000 mm) 1601 47" (1200 mm) 1602
12	Outer tube,	39" (1000 mm) 1603 47" (1200 mm) 1605
13	High pressure impeller	4608 HH
14	High pressure pump foot	1609 HH
15	Hand wheel	1842

! Polypropylene pumps should not be used to pump flammables.

SP-280P SERIES MOTOR SPARE PARTS

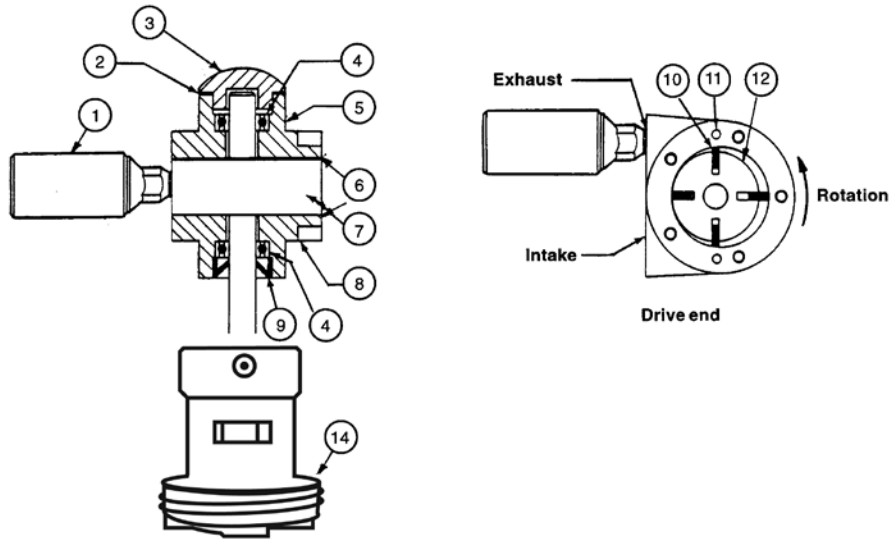


ITEM NUMBER	DESCRIPTION	PART NUMBER
1	Motor cover	8000
2*	Switch housing	8001
2A*	Switch housing for variable speed, includes potentiometer	
	110-120V	8004
	220-240V	8005
2B*	Switch housing for batch control, includes potentiometer and BCS port connection	
	110-120V	8006
	220-240V	8007
3*	Switch cover	8002
4*	Lock washer	8071
5*	Lower housing	8100
6*	Wave washer	8125
7	Ball bearing	8126
8A	Screw for plastic housing	8130P
9A*	Screw for 110-120V	8131
9B*	Screw for 220-240V	8131LVR
10*	Ground screw	8162
11*	Gasket	8167
	Low voltage release (for 220-240V)	8167LVR
12	Earthing Lead	8183
13*	Lead	8185
14*	Screw	8220
15	Ball bearing	8331
16*	Motor coupling	8333
17*	Power cord w/strain relief & plug	
	110-120V	8360
	220-240V	8705
18*	Hexagon nut	8448
19	Armature	
	110-120V	8502
	220-240V	8701
20	Stator	
	110-120V	8503
	220-240V	8702
21	Guide disc	8504
22	Rod connector	8506
23	Pressure spring	8507
24*	Brush holder	8508
25*	Carbon brush	
	110-120V	8509
	220-240V	8703
26	Motor housing, plastic	8510P
27	Star washer	8511
28	Fan	8512
29*	Overload switch,	
	8.5 amp 110-120V	8611
	5 amp 220-240V low voltage release	8704LVR
30	EMI Filter	8003

*Parts interchange with all Standard electric motors

! SP-280P open motor should not be used to pump flammables.

SP-A1 SERIES MOTOR SPARE PARTS



ITEM NUMBER	DESCRIPTION	PART NUMBER
1	Muffler	SAF350
2 *	Gasket	SAC229
3	Dead end cap	SAC228A
4 *	Bearing (2 required)	SAG549
5	Dead end plate	SAC617
6 *	Gasket (2 required)	SAC527
7	Body	SAE899
8	Drive end plate	SAC616
9 *	Shaft seal	SAC190A
10 *	Vane (4 required)	SAE893
11	Dowel pin (4 required)	SD324A
12	Impeller	SAE896
13	Repair kit*	SK285
	Includes item numbers 2, 4, 6, 9 and 10	
14	A1 adapter	9007

WARRANTY

Declarations

Declaration of Conformity	When this unit is used as a stand alone unit it complies with: Machinery Directive 98/37/EC EN60204, EN60335-2-41, EN60335-1, Low Voltage Directive 73/23/Eec EN61010-1, EMC Directive 89/336/Eec EN55014, EN 550104, EN50081-1, EN50082-1
Declaration of Incorporation	When this pump unit is to be installed into machine or is to be assembled with other machines for installations, it must not be put into service until the relevant machinery has been declared in conformity with Machine Directive 98/37/EC EN60204, EN60335-2-41, EN60335-1.

Responsible person: Donald M. Murphy, Managing Director, Standard Pump, Inc.
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Three year limited warranty

Standard Pump, Inc. warrants, subject to the conditions below, through either Standard Pump, Inc., its subsidiaries, or its authorized distributors, to repair or replace free of charge, including labor, any part of this equipment which fails within three years of delivery of the product to the end user. Such failure must have occurred because of defect in material or workmanship and not as a result of operation of the equipment other than in accordance with the instructions given in this material. Specific exceptions include:

- Consumable items such as motor brushes, bearings, couplings and impellers.

Conditions of exceptions include:

- Equipment must be returned by prepaid carriage to Standard Pump, Inc., its subsidiary or authorized distributor.
- All repairs, modifications must have been made by or with express written permission by Standard Pump, Inc., its subsidiary or authorized distributor.
- Equipment which have been abused, misused, or subject to malicious or accidental damage or electrical surge are excluded.

Warranties purporting to be on behalf of Standard Pump, Inc. made by any person, including representatives of Standard Pump, Inc, its subsidiaries, or its distributors, which do not fall within the terms of this warranty shall not be binding upon Standard Pump, Inc. unless expressly approved in writing by a Director or Manager of Standard Pump, Inc. Information for returning pumps Equipment which has been contaminated with, or exposed to, bodily fluids, toxic chemicals or any other substance hazardous to health must be decontaminated before it is returned to Standard Pump, Inc, or its distributor. A returned goods authorization number (RGA #) issued by Standard Pump, Inc., its subsidiary or authorized distributor, must be included with the returned equipment. The RGA # is required if the equipment has been used. If the equipment has been used, the fluids that have been in contact with the pump and the cleaning procedure must be specified along with a statement that the equipment has been decontaminated.

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